



Engineering Catalog Number 15

- *Electrical and mechanical supports*
- *Lighting suspension products*
- *Racks and conveyor frames*
- *Instrumentation framing*
- *Architectural products*
- *Concrete inserts*
- *Display frames*
- *Beam clamps*
- *Fasteners*

Manufactured in the U.S.A. By:
VERSABAR CORPORATION

Natl: 1-800-228-3772

Fax: 1-973-942-8282

Email: versaquote@gmail.com

<http://www.versabar.com>



OUR PRODUCT:

The **VERSABAR** system of metal framing is based on the use of a continuous slotted channel, and a series of brackets and fittings, which can be fastened to it at any point by means of a special sliding locknut.

With **VERSABAR** channel and components, racks, supports for pipe, wiring, and electrical equipment, machine frames, and a limitless variety of structures can be built rapidly, simply, and economically.

Standard finishes of **VERSABAR** channels are mill galvanized (G-90Grade), or green powder coated thermosetting epoxy. In addition, most components can be supplied in unfinished steel (H.R.P.O.), aluminum, hot dip galvanized after fabrication, or stainless types 304 & 316.

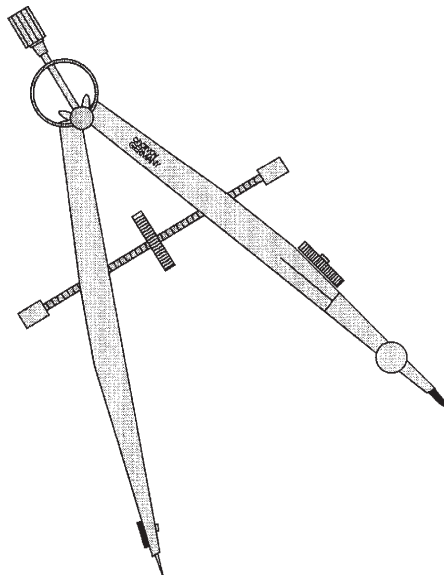
Complete product specifications can be found at the beginning of sections as well as in section H.

DISTRIBUTION:

VERSABAR products are sold exclusively through franchised distributors in the U.S.A., within N.A.F.T.A., and overseas. Dealers maintain adequate stock of fast moving parts, enabling them to fill most orders immediately. Dealer orders for non-stock items will be placed by phone or fax to the factory, or stocking agency warehouse. Shipments will usually be made within 24 hours; however, it is advised to consult your distributor about specific delivery requirements. The factory will always have a qualified representative on hand to answer any additional questions you may have.

ENGINEERING:

VERSABAR maintains a professional engineering staff. A qualified representative is available to assist in the solution of construction considerations which involve our products.



VERSABAR CORPORATION
GENERAL PRODUCT and DATA INDEX



| | | |
|---|---|---|
| | <p>Channel</p> | <p>Welded Channel Perforated Channel Knock out Channel Slotted Channel Closure Strip and End Caps</p> <p>A</p> |
| | <p>Threaded Fasteners</p> | <p>Lateral Locking Nuts Stud Nuts Concrete Insert Nuts Common Fasteners & Threaded Rod</p> <p>B</p> |
| | <p>Framing Fittings</p> | <p>Channel Connection Fittings Brackets Trolley Systems Conveyor Application Fittings</p> <p>C</p> |
| | <p>Mechanical Devices</p> | <p>Pipe Clamps and Hangers Pipe Rollers and Brackets Beam Clamps</p> <p>D</p> |
| | <p>Electrical Fittings</p> | <p>Underground Cable Racking System Porcelain Clamps and Saddles Maple Clamps and Saddles</p> <p>E</p> |
| | <p>Lighting Supports and Raceway</p> | <p>Surface Metal Raceway Fixture Supports Light Brackets</p> <p>F</p> |
| | <p>Concrete Inserts</p> | <p>Continuous Concrete Inserts Economy Spot Inserts Insert Nuts Accessories</p> <p>G</p> |
| <p>Application Engineering Data Product Specifications Parts Index</p> | | <p>H</p> |



VERSABAR CORPORATION

ASSEMBLY TECHNIQUES, SAFE DESIGN & ECONOMY

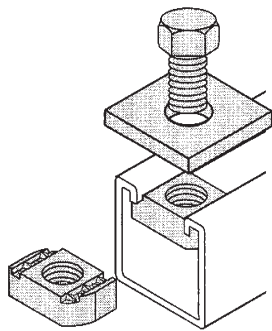
Since its inception over seventy years ago, bolted metal framing has evolved into a highly complex structural system with diverse applications for all construction trades, plant maintenance, materials handling, and multiple other purposes. **The original structural concept, illustrated and described below, is still the basis of safe assembly with reliance on published loading data.**

- (1.) Framing fittings, or other devices to create the same effect, are mounted on the slot surface of the channel.
- (2.) A rectangular, serrated, hardened nut with binding teeth is inserted into the channel slot, and turned 90 degrees to lock into position.
- (3.) The fitting is bound in a vise like grip when the interior nut is tightened with an acceptable grade fastener at the torque value corresponding to its thread diameter.
- (4.) Such connections reinforce the channel shape at load connection points and guarantee the validity of load, pull-out, and slip resistance ratings provided herein.

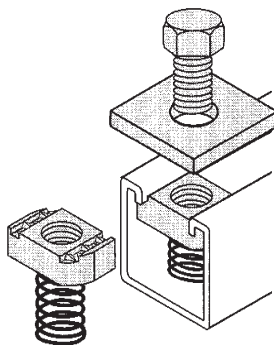
Note: Methods in use which promulgate the assembly of framing fittings by bolting connectors through holes perforated in the back and sides of channels compromise the strength of said structures in varying degrees.

ALL PERFORMANCE DATA PUBLISHED IN THIS CATALOG PRESUMES THE USE OF THE PRODUCTS AS ILLUSTRATED BELOW AND DESCRIBED ABOVE IN STEPS #1 THROUGH #4.

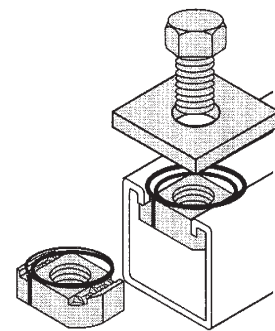
Throughout the catalog many illustrations show 1/2"-13 diameter hardware being used on fittings, brackets, clamps, etc.. **Since most accessory devices are perforated with 9/16" (14.3mm) holes, it is recommended that 1/2"-13 diameter fasteners be used.** Channel nuts are also available in other U.S. coarse thread sizes from 1010-0832 to 3/4"-10. Additionally, metric size thread diameters can be supplied on special order.



Nuts without springs, (VN-series), are the most economical. Nuts & bolts may be pre-assembled on fittings, prior to channel connection. Easy and accurate fitting placement can then be accomplished without reliance upon retaining springs.



Nuts with springs, (VSN-series), will remain in place prior to fitting connection. Springs hold tight, independent of channel angle. Springs also allow nuts to slide laterally within the channel.

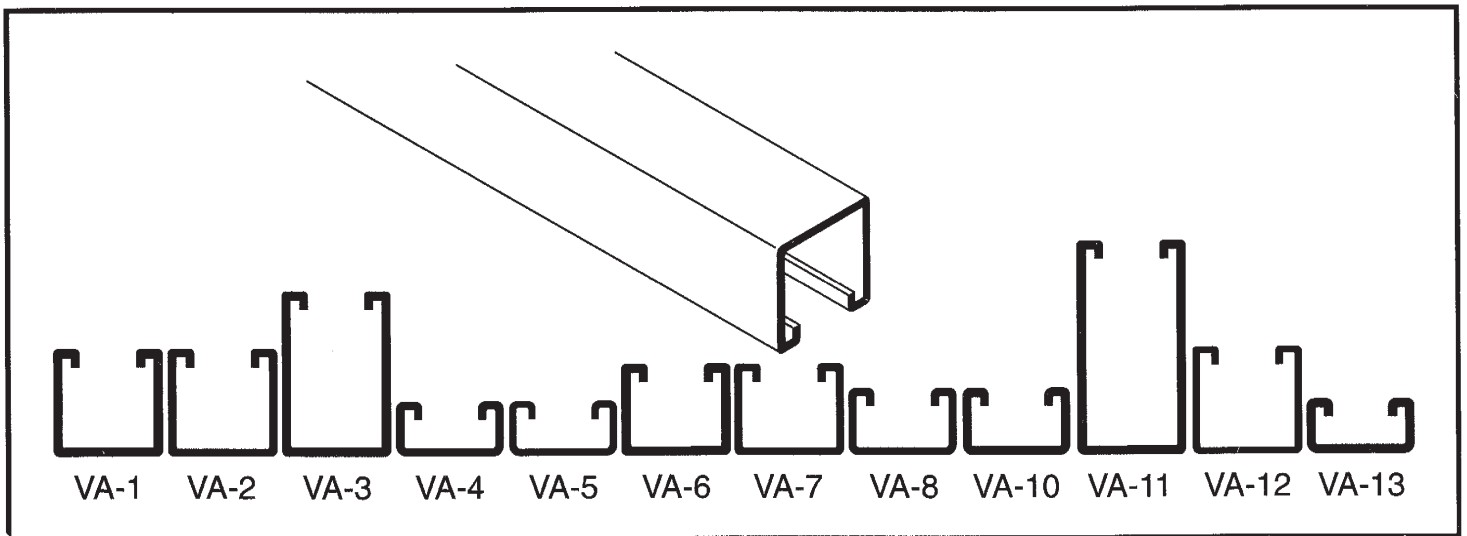


Nuts with top mounted springs, (VSN-TMS series), are intended to fit a broader range of channels than the VSN series. Since spring length is not an issue, a single TMS nut will fit more types of channel.

Note: All manufacturers nuts with top mounted retaining devices are generally priced 50% to 75% above standard style nuts. Using "VN" or "VSN" type nuts can provide a substantial cost savings over "TMS" nuts.



12 *basic channels*



Product Identification Markings

VERSABAR channels contain markings on both the interior and exterior surfaces of the web. This feature eases and speeds identification. The interior markings are: (1.) A scored continuous center line. (2.) The Channel series part number. (3.) The trademark "VERSABAR".

Manufacturing Practices

Pre-Galvanized channel is cold roll formed from coated carbon steel and conforms to ASTM A653, Structural Quality Grade 33. Hot-Rolled channel is cold roll formed from carbon steel and conforms to ASTM A570 Grade 33. Many channels can also be formed from stainless types AISI 304 & 316 as well as aluminum. Standard channel width is 1-5/8" (41.3).

Available Finishes

Standard finish of galvanized channel is G-90 Grade conforming to ASTM A653 GR 33. Green painted channels are powder coated with AK30 Bell Green Thermosetting Epoxy. Certain channels are also available from stock hot dip galvanized after fabrication "HDGA", unfinished H.R.P.O., aluminum "AL", and stainless steel types 304 "SS304", and 316 "SS316".

Available Lengths

Stock lengths are 10' (3.05m), 20' (6.1m) and 24' (7.32m). Lengths other than standard are available by saw cutting or special mill production. Handling and/or scrap charges may apply to special length orders. Standard lengths are nominal, and are subject to tolerances of +/- 1/8" (3.18mm). Non standard lengths which have to be saw cut are subject to tolerances of plus or minus 1/4" (6.35mm). For availability of lengths longer than 24' (7.32m) please contact factory.

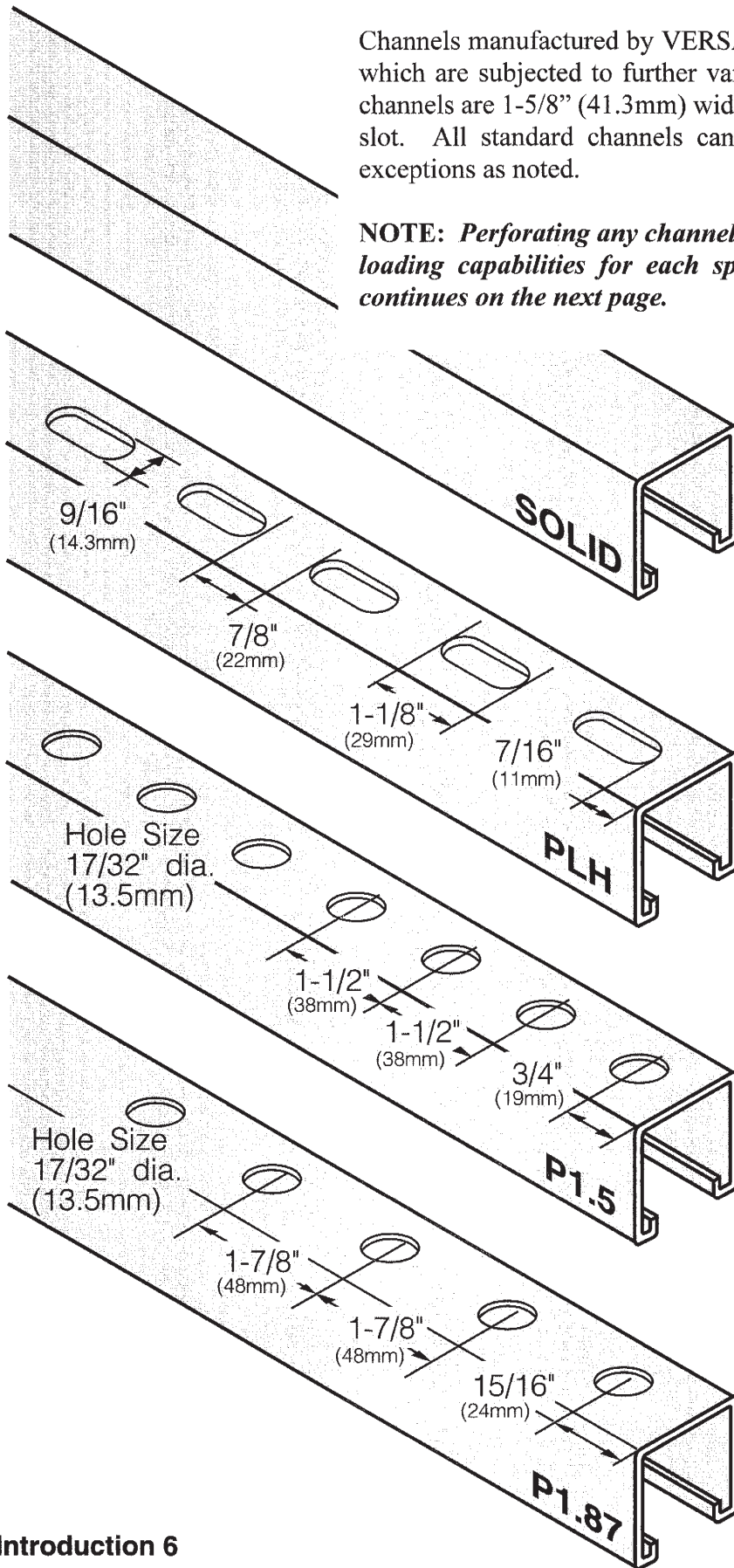


VERSABAR CORPORATION

SOLID & PERFORATED STYLES OF CHANNEL

Channels manufactured by VERSABAR are available in 12 different basic sizes which are subjected to further variation in gauge and depth. All standard size channels are 1-5/8" (41.3mm) wide, and have a .875" (22.2mm) wide continuous slot. All standard channels can be perforated as shown below with a few exceptions as noted.

NOTE: *Perforating any channel modifies its section modulus. A reduction in loading capabilities for each specific configuration is provided below and continues on the next page.*



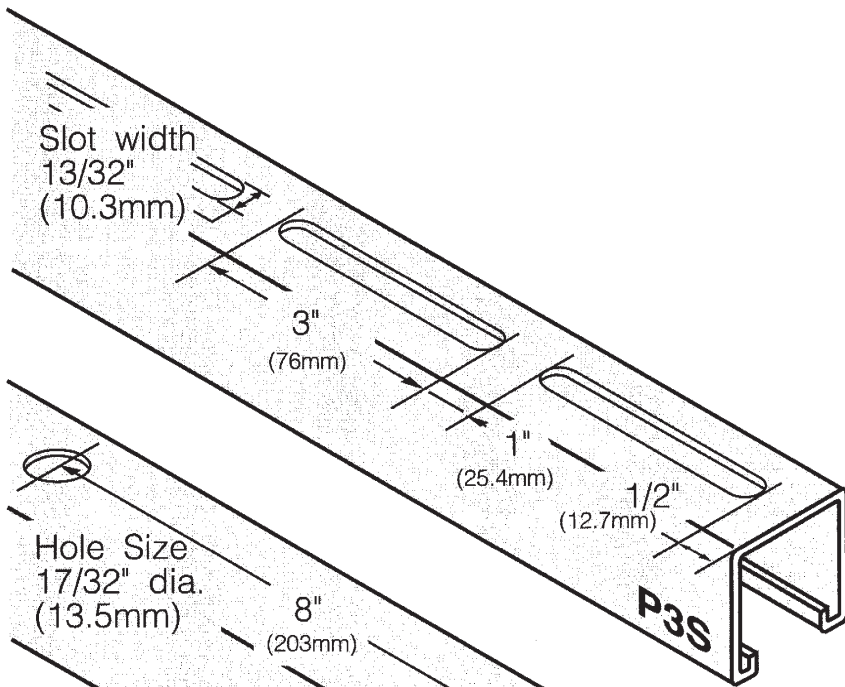
"Solid Back" Channels:
Perform at **100%** of published loading capacity

"PLH" Channels:
Require a **15% reduction** in published loading capacity.

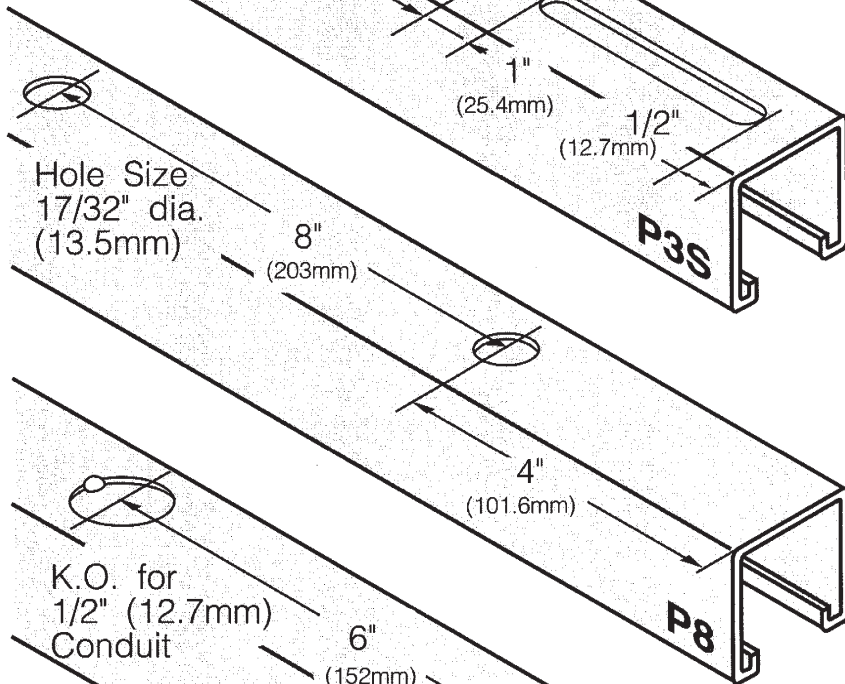
"P1.5" Channels:
Require a **12% reduction** in published loading capacity.

"P1.87" Channels:
Require a **10% reduction** in published loading capacity.

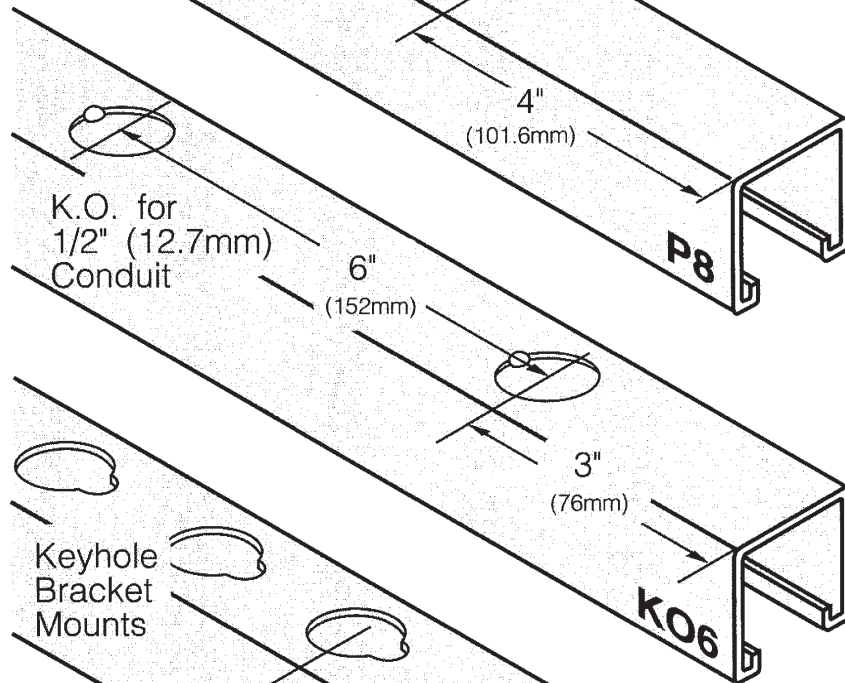
VERSABAR CORPORATION
PERFORATED STYLES OF CHANNEL



“P3S” Channels:
 Require A **15% reduction** in published loading capacity.

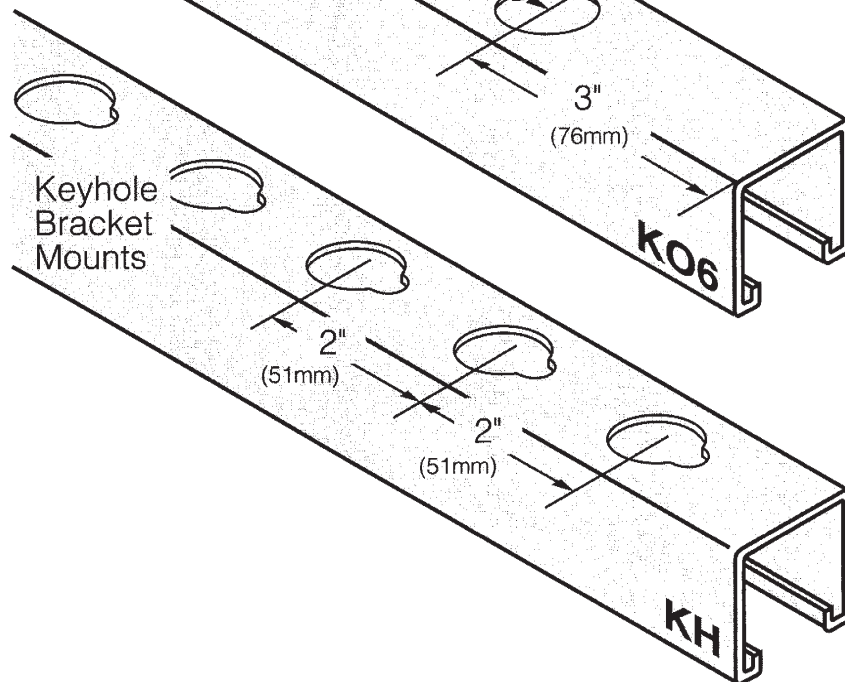


“P8” Channels:
 Require a **5% reduction** in published loading capacity.



“KO6” Channels:
 Require a **5% reduction** in published loading capacity.

Not available on channels which are 1" (25.4mm) deep or under.



“KH” Channels:
 Require a **17% reduction** in published loading capacity.

Available on VA-1, 6, & 10 only



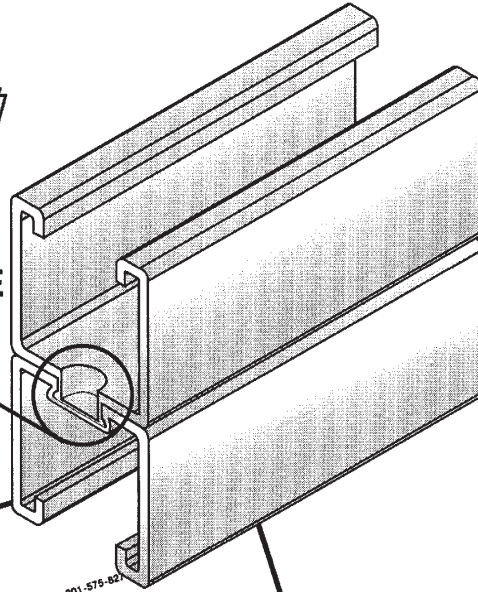
VERSABAR CORPORATION

TOGGLE-LOCKED CHANNEL - CERTIFIED SUPERIOR!

NEW

VERSABAR EXCLUSIVE "TOGGLE-LOCKED" BACK TO BACK CHANNEL

**NON WELDED
BRIGHT FINISH
EVEN SPACING
SUPERIOR STRENGTH**



"Toggle-Lock" mechanical joining provides resistance to separation in excess of 12,000 # (54kN) per L.F.. High strength connection points on 1" (25.4) centers eliminate weld shear concerns which are characteristic of conventional welded sections.

Testing Company, Inc.
201 FAIRFIELD AVENUE • FAIRFIELD, NEW JERSEY 07004 • 201-575-5252 • FAX 201-575-5271

REPORT OF TEST

Engineering Services

CLIENT: Versabar Corp.
33-41 Bergen Street
Paterson, N.J. 07522

SUBJECT: Physical Properties

REFERENCE: Purchase Order No. G050-594-1
Versabar Corp.,
Samples Received: May 10, 1994

SAMPLE IDENTIFICATION:
Six (6) samples of material were submitted and identified by the Client as follows:
VERSABAR VA-1201, 18" Long
Joined together with parent metal rivets.

TEST PERFORMED:
The submitted samples were tested for Tensile Breaking Strength in accordance with the Client's instructions.

TEST RESULTS

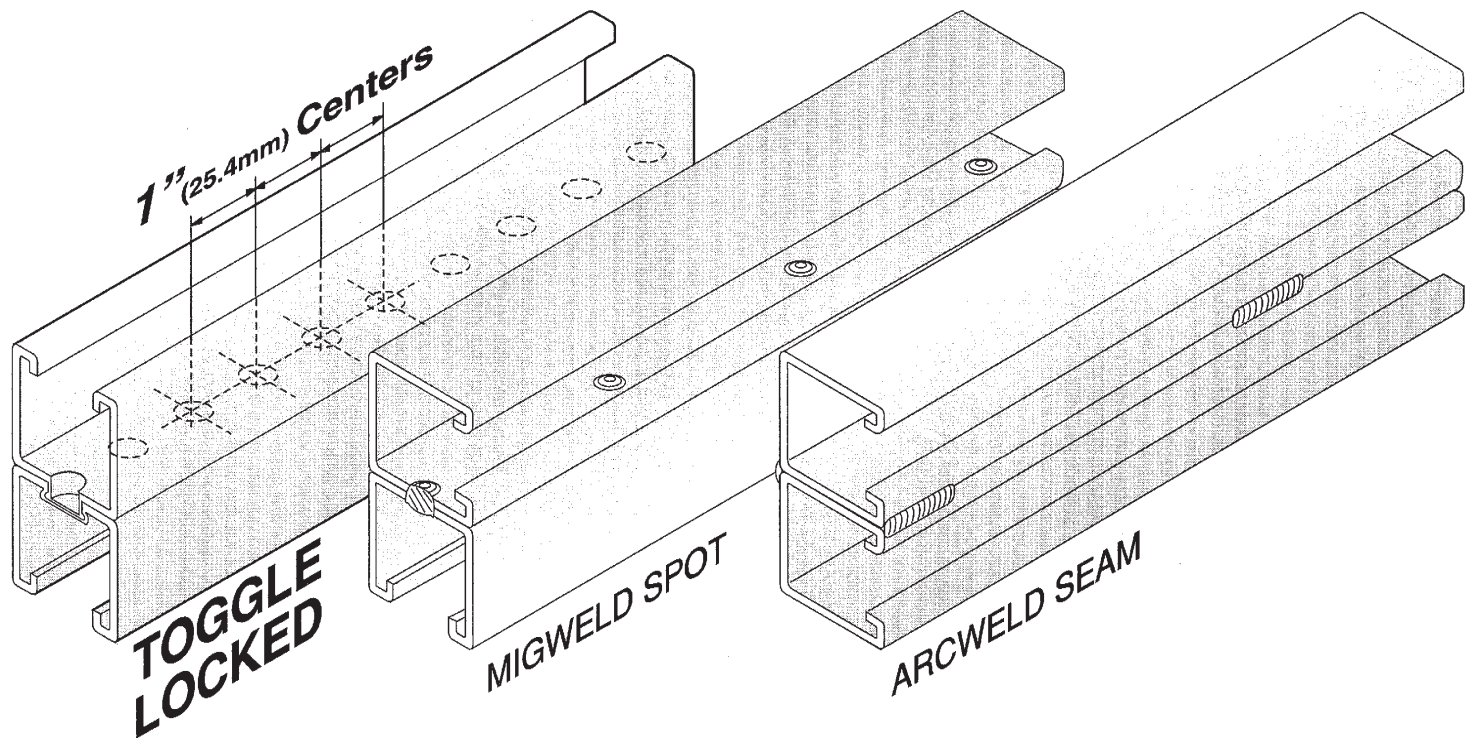
| Sample | Tensile Breaking Strength, LBS |
|--------|--------------------------------|
| #1 | 20,100 |
| #2 | 18,800 |
| #3 | 19,200 |
| #4 | 18,800 |
| #5 | 18,500 |
| #6 | 18,700 |

Testing Supervised By:
Frank Savino
Frank Savino, Manager
Materials Engineering Section

SIGNED FOR THE COMPANY
By *Frank Pope*
Frank Pope
Vice President

NUMBER: 111261
May 13, 1994

Original copies on file



TOGGLE LOCKED CHANNEL

“Toggle-Locked” back to back channels are produced by forming deep drawn, anvil coined hollow rivets on 1" (25.4mm) centers from the parent metal. This method produces the most uniform and consistent spot connection available in the industry today. Problems due to cold welds and improper weld spacing are not a factor with VERSABAR exclusive “Toggle-Locked” channels. Superior pullout loading of Toggle-Locked channels and their uniform appearance make them the choice for today’s installations.

MIGWELD SPOT

Although Versabar back-to-back channels will usually be produced as described above, certain combinations will be manufactured by spot welding. This technique applies in situations where the welding electrode has access to at least one interior channel web. Weld spacing will be maintained at 2" (50.8mm) to 3" (76.2mm) centers. Spot welding is accomplished by the metal inert gas (MIG) method. Welded channels will, upon separation testing, withdraw a plug from the connected channel of the diameter specified by the American Welding Society.

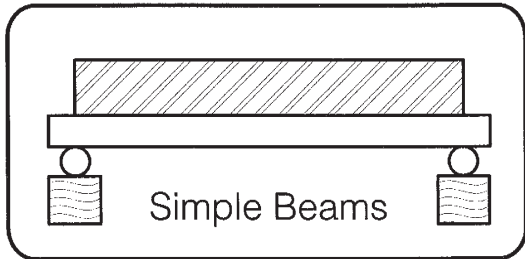
ARCWELD SEAM

Arcweld seam is the method used when the above methods are impractical or impossible. Resistance to separation will meet or exceed that of migweld spot on 2" (50.8mm) centers.

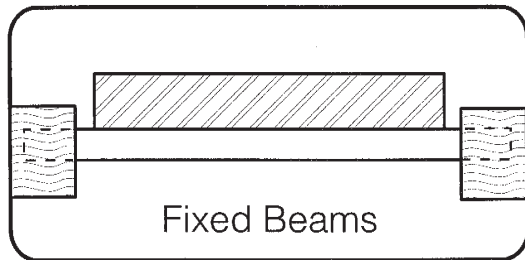


BEAM TYPES

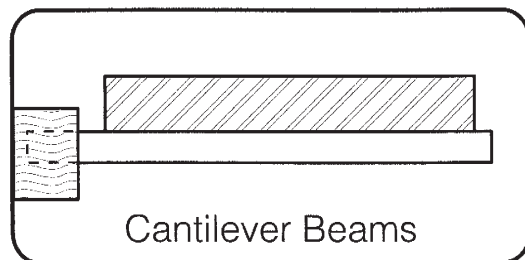
A beam is a load bearing member which, when subjected to transverse loads, is caused to bend. Such bending forces may be vertically or laterally applied. This bending, referred to as deflection, results from the combination of the effect of gravity on the beam itself, the load either distributed along the beam or concentrated at a point, and the way in which the beam is supported.



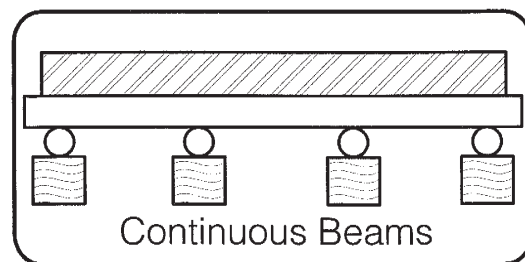
A span of channel supported by cylinders at either end represents a simple beam. Such supports will allow the beam to deflect freely in a vertical plane under a vertical load, since the beam is not restrained at its end, or at the supports. Comparative analysis of beams is generally measured by simple beam characteristics. Performance data for Versabar channels shown in section "A" is based upon simple beam analysis. Most bolted framing connections will simulate these conditions.



Rigid connections at both ends of a beam by welding, bolting, or other methods, prevent the channel from deflecting to the extent that it would if the ends were not restrained. The enhanced rigidity of the beam caused by preventing the movement of its ends, increases its load bearing capacity, and increases the beams ability to bridge longer spans.



A channel span, which is rigidly fixed at one end while the opposite end is unsupported, constitutes a cantilever. This type of beam is commonly found in bolted metal framing systems. All brackets such as those shown on pages C-23 through C-30 are cantilevers. Any load support member with one end projecting beyond its point of support is a cantilever.



A continuous beam is a load bearing member, resting on more than two supports. Installations containing continuous beams will have characteristics of simple beams on outside spans, and characteristics of fixed beams on inside spans, where a counterbalancing effect is exerted from loads on neighboring spans. Continuous beams are usually components of rack designs and lighting designs where channels pass across a series of supports.



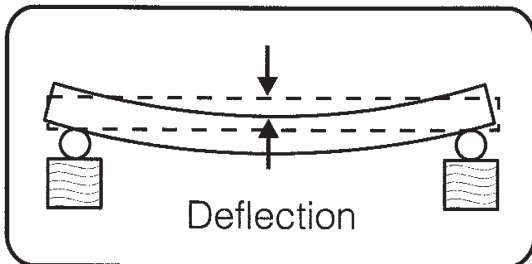
LOADING and DEFLECTION

Beam deflection and its magnitude is the physical result of the following factors:

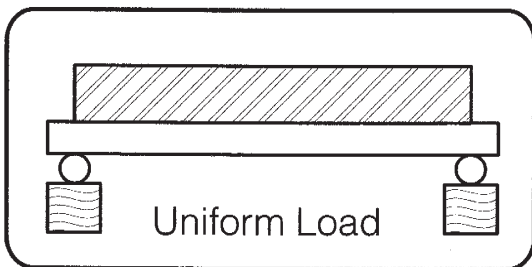
- The weight of the load combined with the weight of the beam itself.
- The way in which the load is distributed across or concentrated at a point on the beam span.
- The availability of side bracing to maintain positioning of the vertical beam axis.
- The relationship of the above to the stiffness of the beam.

The stiffness of a beam resulting from its shape, is measured by its “Moment of Inertia” or “I” value. This value is given for both X-X and Y-Y axes of beams since they may vary. The stiffness of the material from which the beam is made has a value which is measured as its “Modulus of Elasticity” or “E”. Beams of identical shapes will deflect under identical loads in proportion to the elasticity of the material from which they are made. The elasticity of materials should not be confused with “strength” of materials. Steel, having an “E” value three times greater than aluminum, will deflect one third the amount of aluminum in beams of the same “I” value; however, certain aluminum grades have strength equivalent to steel.

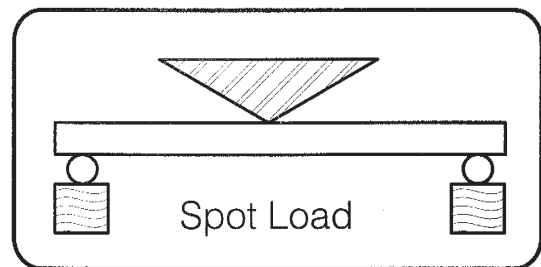
Loading tables found on pages A-1 through A-24 of this catalog showing spans, design loads, and resulting deflections should serve as guidelines to achieve safe designs. The column entitled “Maximum Allowable Uniform Load” should be used to determine deflection limits, so that safety margins will comply with AISI “Specifications For The Design of Cold-Formed Steel Structural Members” and MFMA “Guidelines for The Use of Metal Framing”.



A safely loaded beam will often have visible evidence of deflection, even though its maximum allowable stress has not been approached. Generally, the design of an installation can accommodate limitation of deflection by reducing load requirement, limiting spans, or increasing the size or stiffness of the beam. The limit of deflection for aesthetic purposes may result in higher costs, but it can be achieved. The loading chart headed “Span 360” indicates loads and resulting deflections so slight that the deflection cannot be visually perceived.



A load, spread evenly along a beam from support to support, is a “Uniform Load”. The “Maximum Allowable Uniform Load” table describes this condition while maintaining a safe deflection factor. (To determine the effect of changing “Uniform Load” to “Concentrated Load”, multiply the given load by 0.5 and related deflection by 0.8).



A load concentrated at a point along the beam span is a “Spot Load” or “Concentrated Load”. When the spot load is concentrated at the span center, the deflection is maximized. In many instances, the nature of a load application on a span will be a composite of concentrated and distributed load characteristics.



COLUMNS

Columns are structural members, subjected to axial or eccentrically applied compression, which have unbraced lengths far exceeding the smallest dimension of their cross sections. Under a load, lateral deflection will occur perpendicular to the axis for which the columns "Moment of Inertia" is smallest. Since most columns are vertical, braced by horizontal members carrying loads perpendicular to the column, the upper loads are cumulative upon the lowest unbraced vertical span of the column. Any bracing member, even though not vertical, must be considered a column if it is subjected to compression. Loads on columns are parallel to the position of the column, whether exerted axially or eccentrically as in bolted metal framing systems fitting connections.

To avoid column failure, it is necessary to evaluate how it will react to all potential forces which will act upon it and to design with an adequate safety factor to preclude that possibility. Factors affecting column load calculations are listed below:

- **Length of column** subjected to maximum cumulative load between brace points. (Example: Section of storage rack column from floor to first shelf.)
- **Structural analysis** of the member in regard to its cross sectional area multiplied by compressive stress limits of the material from which the column was made. The cross section of the shape can be evaluated by its "Radius of Gyration" or "r" value. For the purpose of column comparison, consider the "r" value for the lesser axis of each shape.
- **The direction of the applied load**, whether axial upon the columns' center of gravity or eccentrically as found in fitting connections to channel slots. Loading data is provided on pages A-1 through A-24 for both conditions. (Loads exerted on columns more eccentrically than by typical fitting connections become complex loads and require calculations by qualified design professionals.)
- **Column end conditions** and their effect on the column design equations. (Refer below)

The restraints, by which column ends are held, are calculated to have a "K" value, or an "effective length factor". This "K" value applies to column design equations in accord with AISI "Specification For The Design of Cold-Formed Steel Structural Members". Column end conditions and related "K" factors are described below.



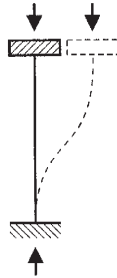
1.) Fixed top and bottom. Both ends are restricted against lateral movement (translation), and rotation. The K value of this condition is equal to .65.



2.) Pin ended top - fixed bottom. The top of the column is restricted against lateral movement (translation) but is capable of rotation. The bottom is restricted from either movement. The K value of this condition is equal to .80.



3.) Pin ended top and bottom. Both the top and bottom of the column are restricted against lateral movement (translation) but are allowed to rotate. The K value of this condition is equal to 1.0.



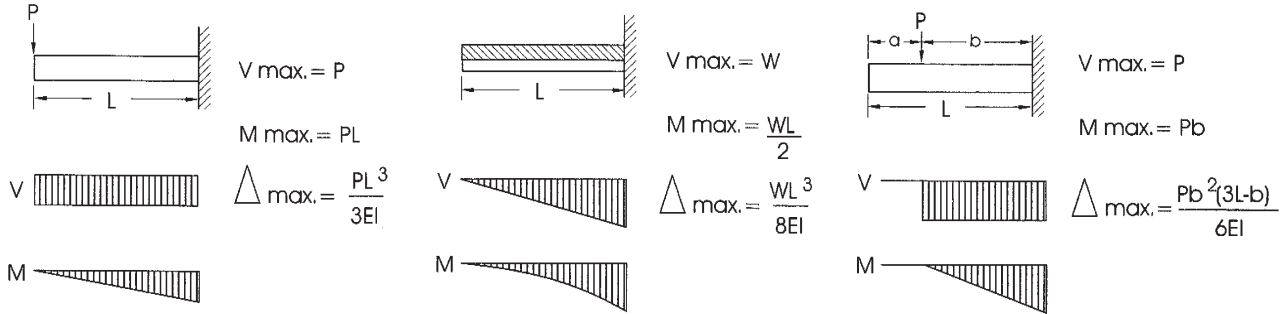
4.) Translatable top - fixed bottom. The top of the column cannot rotate but is allowed to move laterally. The bottom of the column is restricted from either movement. The K value of this condition is equal to 1.2.

VERSABAR CORPORATION

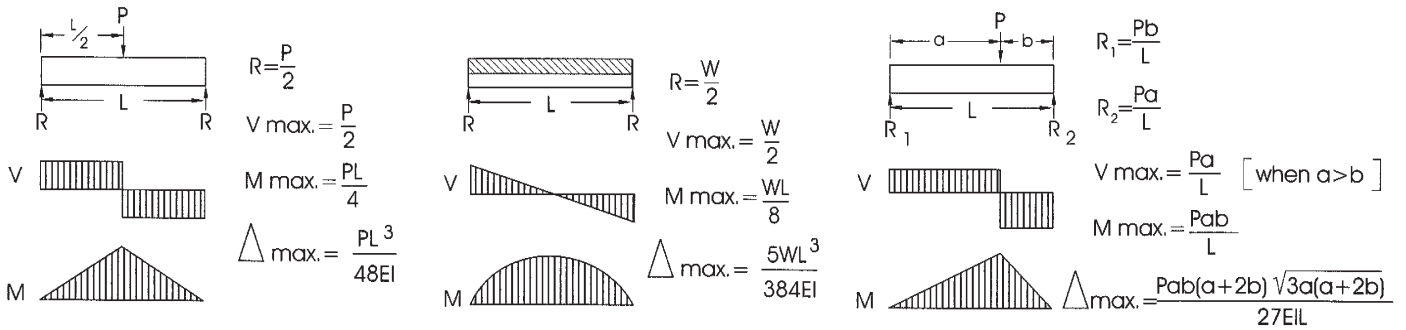
FORMULAS FOR COMMON BEAM LOADING



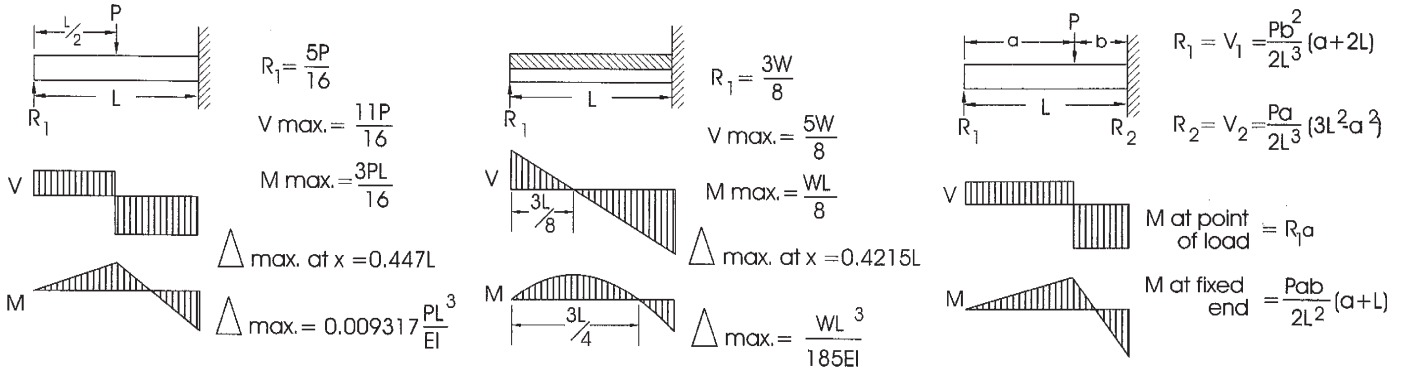
cantilever beams



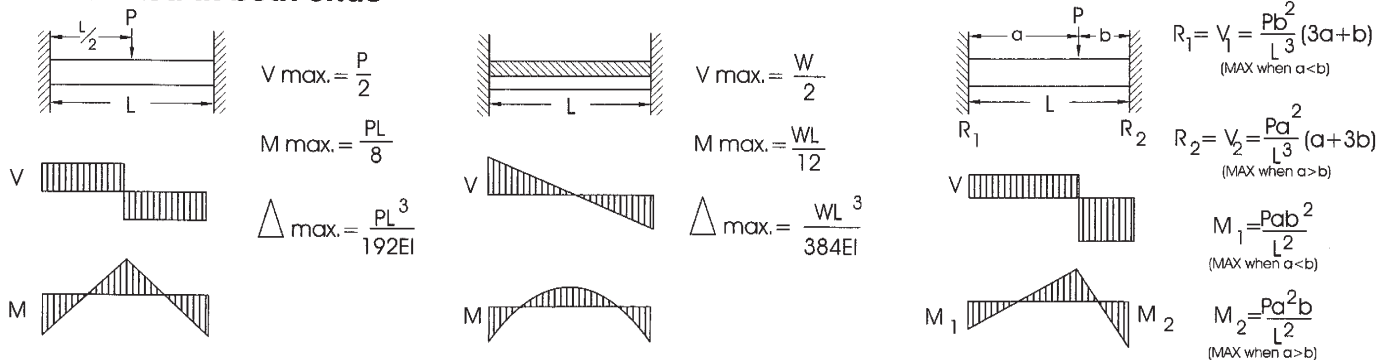
simple beams



beams fixed at one end, supported at the other



beams fixed at both ends



R - Reaction
 M - Moment
 P - Concentrated Load

W - Total Uniform Load
 V - Shear
 L - Length

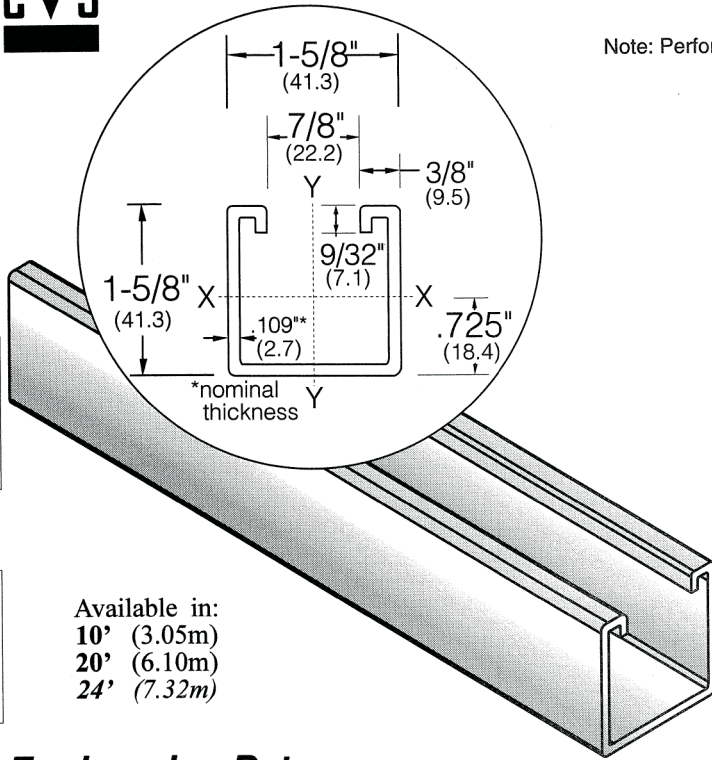
Δ - Deflection
 E - Modulus of Elasticity
 I - Moment of Inertia



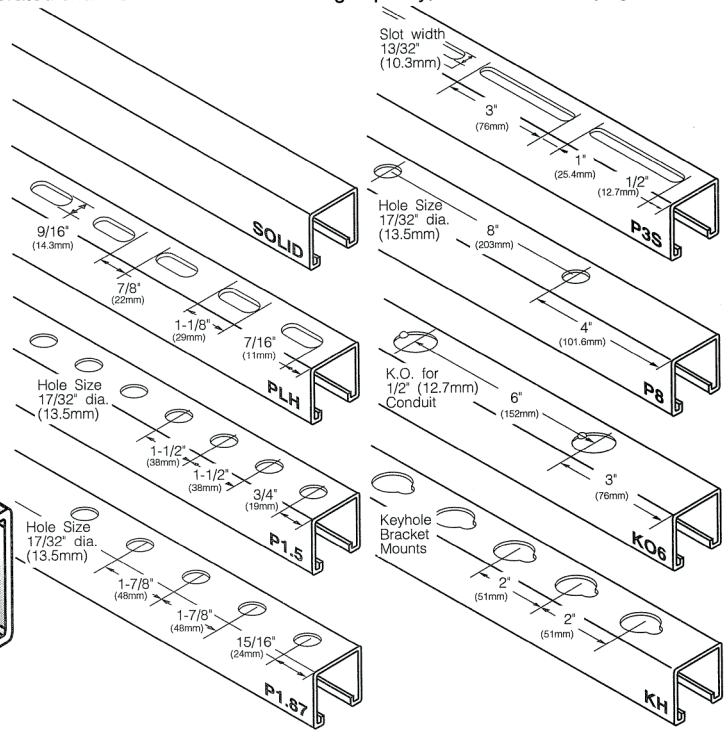
VERSABAR CORPORATION

| Produced and stocked in the following finishes and materials: | | | | | |
|---|-------|----------|----------|--------|--------|
| | | | | | |
| G-90 Galv. | Green | Aluminum | H.R.P.O. | SS 304 | SS 316 |

Note: Perforated channel has a reduced loading capacity, see introduction pages 6 & 7.



Available in:
 10' (3.05m)
 20' (6.10m)
 24' (7.32m)



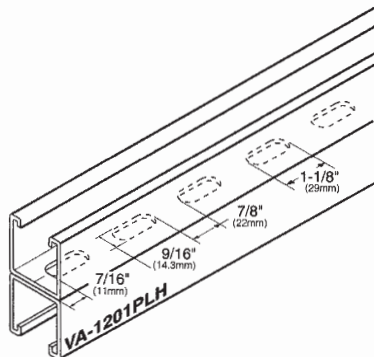
Engineering Data

| | | | | | | |
|----------------------|----------------------|-----------------------|-----------------|--------------------------|------------------------|---------------------------|
| elements of sections | | Sectional Area | X-X axis | Moment of inertia | Section modulus | Radius of gyration |
| VA-1 | | | | | | |
| 12 ga. | Wgt. Per L.F. | 1.90 lbs. | Y-Y axis | Moment of inertia | Section modulus | Radius of gyration |
| | (Kg. Per M) | (2.83) | | | | |
| | sq. in. | cm ² | | | | |
| | .559 | 3.61 | | | | |

| beam loading data | | | | | | | | column loading data | | | | | | | |
|--------------------------------|-----------------------------------|------------|-------------------------------|----------|--------------------------------|-----------|---|--|-----------|---------|---------|---------|---------|---------|---------|
| Span or Unbraced Column Height | Maximum Allowable Uniform Loading | | Deflection at Uniform Loading | | Uniform Loading at Deflections | | Maximum Allowable Loading at Slot Face K=80 | Maximum Allowable Column Load Applied at Center of Gravity | | | | | | | |
| | in. (mm) | Lbs. kN | in. (mm) | Lbs. kN | Lbs. kN | Lbs. kN | | K=.65 | | K=.80 | | K=1.0 | | K=1.2 | |
| | | | | | | | | Lbs. kN | Lbs. kN | Lbs. kN | Lbs. kN | Lbs. kN | Lbs. kN | Lbs. kN | Lbs. kN |
| 24 610 | 1691 7.5 | 0.06 1.5 | 1689 7.5 | 1689 7.5 | 3401 15.1 | 9601 42.7 | 9501 42.3 | 9321 41.5 | 9101 40.5 | | | | | | |
| 36 914 | 1131 5.0 | 0.13 3.3 | 1131 5.0 | 900 4.0 | 3002 13.4 | 7642 34.0 | 7402 32.9 | 7002 31.1 | 6490 28.9 | | | | | | |
| 48 1219 | 852 3.8 | 0.22 5.6 | 759 3.4 | 509 2.3 | 2571 11.4 | 5911 26.3 | 5531 24.6 | 4981 22.2 | 4430 19.7 | | | | | | |
| 60 1524 | 680 3.0 | 0.35 8.9 | 491 2.2 | 321 1.4 | 2229 9.9 | 4781 21.3 | 4391 19.5 | 3851 17.1 | 3331 14.8 | | | | | | |
| 72 1829 | 561 2.5 | 0.50 12.7 | 339 1.5 | 219 1.0 | 1971 8.8 | 4091 18.2 | 3681 16.4 | 3142 14.0 | 2649 11.8 | | | | | | |
| 84 2134 | 479 2.1 | 0.68 17.3 | 251 1.1 | 171 0.8 | 1759 7.8 | 3602 16.0 | 3171 14.1 | 2631 11.7 | 2161 9.6 | | | | | | |
| 96 2438 | 421 1.9 | 0.89 22.6 | 189 0.8 | 129 0.6 | 1582 7.0 | 3221 14.3 | 2770 12.3 | 2242 10.0 | 1802 8.0 | | | | | | |
| 108 2743 | 381 1.7 | 1.14 29.0 | 151 0.7 | 101 0.4 | 1431 6.4 | 2911 12.9 | 2451 10.9 | 1931 8.6 | ** ** | | | | | | |
| 120 3048 | 339 1.5 | 1.40 35.6 | 119 0.5 | 79 0.4 | 1292 5.7 | 2641 11.7 | 2182 9.7 | ** ** | ** ** | | | | | | |
| 144 3658 | 281 1.2 | 1.99 50.5 | 81 0.4 | 59 0.3 | | | | | | | | | | | |
| 168 4267 | 241 1.1 | 2.72 69.1 | 59 0.3 | 41 0.2 | | | | | | | | | | | |
| 192 4877 | 209 0.9 | 3.55 90.2 | 51 0.2 | | | | | | | | | | | | |
| 216 5486 | 191 0.8 | 4.57 116.1 | 39 0.2 | | | | | | | | | | | | |
| 240 6096 | 169 0.8 | 5.61 142.5 | | | | | | | | | | | | | |

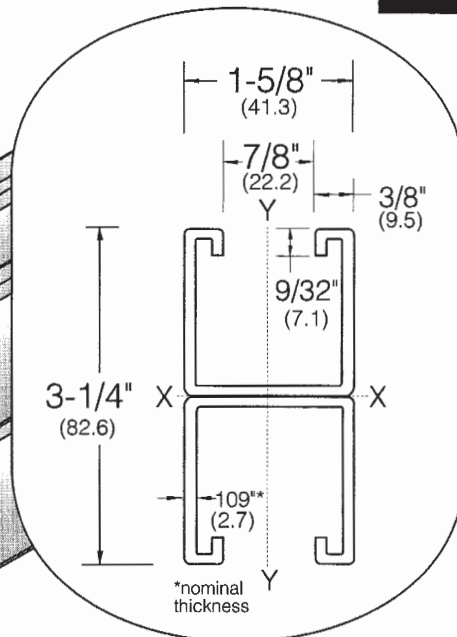
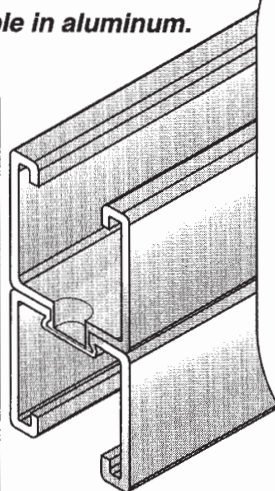
NOTES

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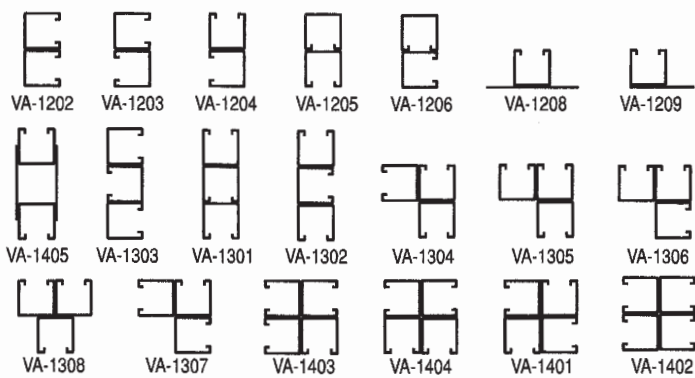
VA-1201 Galv. & VA-1201-PLH Galv.
 Feature a superior *non-welded*
 "Toggle Lock" design.

VA-1201 Also available in aluminum.



cross sectional cut of spot connection shown for illustrational purposes

welded combinations



Engineering Data

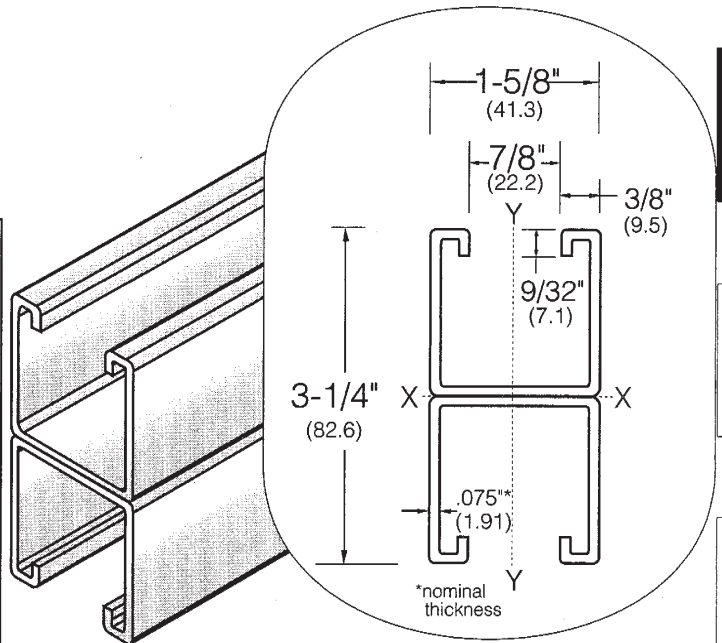
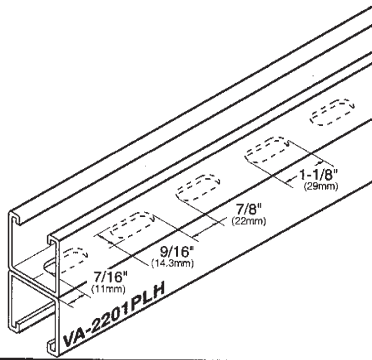
| | | | | | | |
|----------------------|---|---------------------------------------|-----------------|--|---|---------------------------|
| elements of sections | | Sectional Area | X-X axis | Moment of inertia | Section modulus | Radius of gyration |
| VA-1201 | | | | .9379 In. ⁴ 39.04 cm. ⁴ | .5772 In. ³ 9.46 cm. ³ | .924 In. 2.34 cm. |
| 12 ga. | Wgt. Per L.F. 3.80 lbs. (Kg. Per M) (5.65) | sq. in. 1.118 cm ² 7.21 | Y-Y axis | Moment of inertia | Section modulus | Radius of gyration |
| | | | | .4681 In. ⁴ 19.48 cm. ⁴ | .5761 In. ³ 9.44 cm. ³ | .653 In. 1.66 cm. |

| beam loading data | | | | | | | | column loading data | | | | | | | | | | |
|--------------------------------|-----------------------------------|---------|-------------------------------|------|--------------------------------|------|----------|---------------------|--|--|-------|-------|-------|-------|-------|-------|-------|------|
| Span or Unbraced Column Height | Maximum Allowable Uniform Loading | | Deflection at Uniform Loading | | Uniform Loading at Deflections | | | | Maximum Allowable Loading at Slot Face K=.80 | Maximum Allowable Column Load Applied at Center of Gravity | | | | | | | | |
| | in. (mm) | Lbs. kN | in. (mm) | | Span/240 | | Span/360 | | | K=.65 | | K=.80 | | K=1.0 | | K=1.2 | | |
| 24 610 | 2610 | 11.6 | 0.02 | 0.4 | 2610 | 11.6 | 2610 | 11.6 | 6360 | 28.3 | 21400 | 95.2 | 21176 | 94.2 | 20871 | 92.8 | 20411 | 90.8 |
| 36 914 | 2610 | 11.6 | 0.06 | 1.4 | 2610 | 11.6 | 2610 | 11.6 | 6190 | 27.5 | 20960 | 93.2 | 20412 | 90.8 | 19652 | 87.4 | 18672 | 83.1 |
| 48 1219 | 2400 | 10.7 | 0.13 | 3.3 | 2400 | 10.7 | 2401 | 10.7 | 5970 | 26.6 | 21231 | 94.4 | 19366 | 86.1 | 17966 | 79.9 | 16255 | 72.3 |
| 60 1524 | 1920 | 8.5 | 0.20 | 5.1 | 1920 | 8.5 | 1629 | 7.2 | 5340 | 23.8 | 19244 | 85.6 | 17941 | 79.8 | 15781 | 70.2 | 13141 | 58.5 |
| 72 1829 | 1601 | 7.1 | 0.28 | 7.1 | 1601 | 7.1 | 1129 | 5.0 | 3968 | 17.7 | 18129 | 80.6 | 16251 | 72.3 | 13141 | 58.5 | 9525 | 42.4 |
| 84 2134 | 1370 | 6.1 | 0.39 | 9.9 | 1242 | 5.5 | 829 | 3.7 | 3026 | 13.5 | 16810 | 74.8 | 14256 | 63.4 | 10080 | 44.8 | 6998 | 31.1 |
| 96 2438 | 1200 | 5.3 | 0.50 | 12.7 | 949 | 4.2 | 641 | 2.9 | 2359 | 10.5 | 15293 | 68.0 | 11952 | 53.2 | 7752 | 34.5 | 5382 | 23.9 |
| 108 2743 | 1070 | 4.8 | 0.64 | 16.3 | 752 | 3.3 | 501 | 2.2 | 1865 | 8.3 | 13566 | 60.3 | 9569 | 42.6 | 6110 | 27.2 | 4251 | 18.9 |
| 120 3048 | 960 | 4.3 | 0.79 | 20.1 | 611 | 2.7 | 412 | 1.8 | 1513 | 6.7 | 11643 | 51.8 | 7735 | 34.4 | 4952 | 22.0 | ** | ** |
| 144 3658 | 800 | 3.6 | 1.13 | 28.7 | 420 | 1.9 | 279 | 1.2 | | | | | | | | | ** | ** |
| 168 4267 | 690 | 3.1 | 1.55 | 39.4 | 310 | 1.4 | 211 | 0.9 | | | | | | | | | | |
| 192 4877 | 600 | 2.7 | 2.02 | 51.3 | 241 | 1.1 | 161 | 0.7 | | | | | | | | | | |
| 216 5486 | 530 | 2.4 | 2.53 | 64.3 | 192 | 0.9 | 131 | 0.6 | | | | | | | | | | |
| 240 6096 | 480 | 2.1 | 3.15 | 80.0 | 149 | 0.7 | 101 | 0.4 | | | | | | | | | | |

NOTES

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(Uniform beam loading on 24" and 36" spans limited by weld shear.)



welded combinations

| | | | | | | |
|---------|---------|---------|---------|---------|---------|---------|
| | | | | | | |
| VA-2202 | VA-2203 | VA-2204 | VA-2205 | VA-2206 | VA-2208 | VA-2209 |
| | | | | | | |
| VA-2405 | VA-2303 | VA-2301 | VA-2302 | VA-2304 | VA-2305 | VA-2306 |
| | | | | | | |
| VA-2308 | VA-2307 | VA-2403 | VA-2404 | VA-2401 | VA-2402 | |

Engineering Data

elements of sections

VA-2201

14 ga. Wgt. Per L.F. 2.8 lbs. (Kg. Per M) (4.16)

| Sectional Area | |
|----------------|-----------------|
| sq. in. | cm ² |
| .824 | 5.32 |

| X-X axis | Moment of inertia | Section modulus | Radius of gyration |
|----------|--|---|----------------------|
| | .7401 In. ⁴ 30.80 cm. ⁴ | .4555 In. ³ 7.46 cm. ³ | .942 In. 2.39 cm. |
| Y-Y axis | Moment of inertia | Section modulus | Radius of gyration |
| | .3655 In. ⁴ 15.21 cm. ⁴ | .4499 In. ³ 7.37 cm. ³ | .622 In. 1.68 cm. |

| beam loading data | | | | | | | column loading data | | | | | | | | | | |
|--------------------------------|-----------------------------------|-----------|-------------------------------|----------|--------------------------------|------------|---------------------|------------|---|--|--|-------|--|-------|--|-------|--|
| Span or Unbraced Column Height | Maximum Allowable Uniform Loading | | Deflection at Uniform Loading | | Uniform Loading at Deflections | | | | Maximum Allowable Loading at Slot Face K=.80 | Maximum Allowable Column Load Applied at Center of Gravity | | | | | | | |
| | in. (mm) | Lbs. kN | in. (mm) | | Span/240 | | Span/360 | | | K=.65 | | K=.80 | | K=1.0 | | K=1.2 | |
| 24 610 | 1751 7.8 | 0.01 0.4 | 1751 7.8 | 1751 7.8 | 4925 21.9 | 13093 58.2 | 12995 57.8 | 12832 57.1 | 12635 56.2 | | | | | | | | |
| 36 914 | 1751 7.8 | 0.05 1.2 | 1751 7.8 | 1751 7.8 | 4820 21.4 | 12850 57.2 | 12632 56.2 | 12260 54.5 | 11809 52.5 | | | | | | | | |
| 48 1219 | 1751 7.8 | 0.12 2.9 | 1751 7.8 | 1751 7.8 | 4675 20.8 | 12514 55.7 | 12120 53.9 | 11460 51.0 | 10652 47.4 | | | | | | | | |
| 60 1524 | 1519 6.8 | 0.20 5.0 | 1517 6.7 | 1293 5.8 | 4019 17.9 | 12085 53.8 | 11459 51.0 | 10431 46.4 | 9170 40.8 | | | | | | | | |
| 72 1829 | 1264 5.6 | 0.28 7.1 | 1266 5.6 | 897 4.0 | 3050 13.6 | 11549 51.4 | 10653 47.4 | 9172 40.8 | 7362 32.7 | | | | | | | | |
| 84 2134 | 1086 4.8 | 0.38 9.7 | 988 4.4 | 661 2.9 | 2363 10.5 | 10925 48.6 | 9705 43.2 | 7685 34.2 | 5466 24.3 | | | | | | | | |
| 96 2438 | 951 4.2 | 0.50 12.7 | 758 3.4 | 504 2.2 | 1867 8.3 | 10200 45.4 | 8610 38.3 | 6020 26.8 | 4185 18.6 | | | | | | | | |
| 108 2743 | 842 3.7 | 0.63 16.1 | 598 2.7 | 398 1.8 | 1497 6.7 | 9375 41.7 | 7365 32.8 | 4766 21.2 | 3308 14.7 | | | | | | | | |
| 120 3048 | 758 3.4 | 0.78 19.9 | 485 2.2 | 323 1.4 | 1215 5.4 | 8455 37.6 | 6029 26.8 | 3857 17.2 | ** | | | | | | | | |
| 144 3658 | 639 2.8 | 1.14 29.0 | 337 1.5 | 216 1.0 | | | | | ** | | | | | | | | |
| 168 4267 | 546 2.4 | 1.56 39.6 | 245 1.1 | 166 0.7 | | | | | ** | | | | | | | | |
| 192 4877 | 476 2.1 | 2.02 51.3 | 182 0.8 | 125 0.6 | | | | | ** | | | | | | | | |
| 216 5486 | 415 1.8 | 2.52 64.0 | 146 0.6 | 92 0.4 | | | | | ** | | | | | | | | |
| 240 6096 | 375 1.7 | 3.14 79.8 | 113 0.5 | 73 0.3 | | | | | ** | | | | | | | | |

(Uniform beam loading on 24" and 36" spans limited by weld shear.)

NOTES

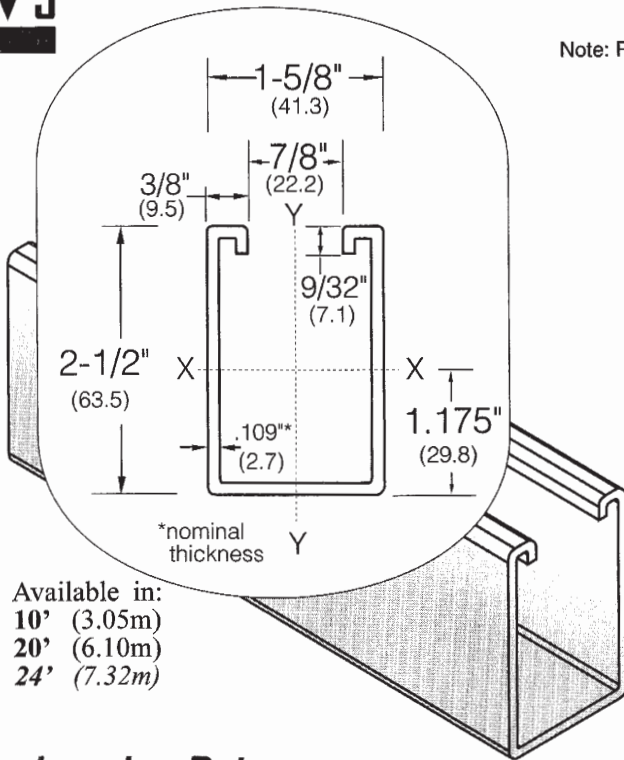
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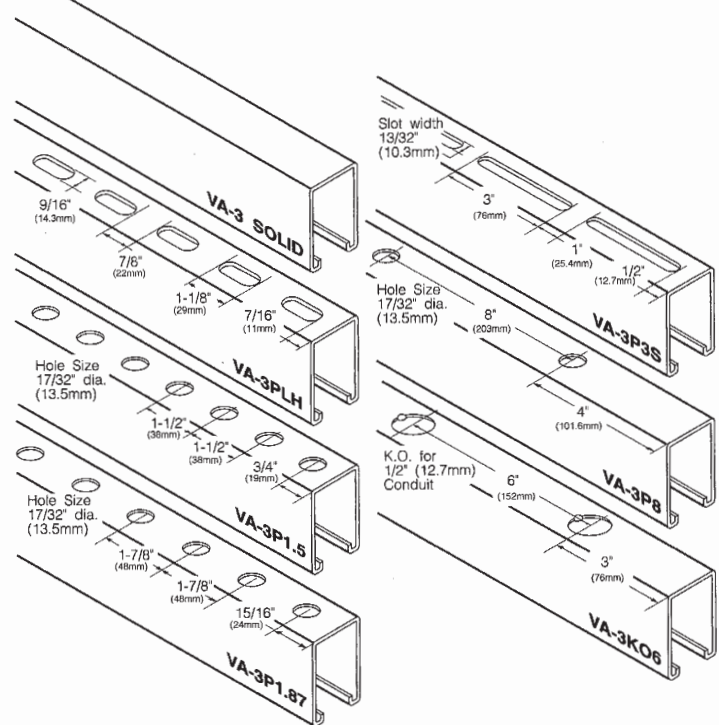
VERSABAR CORPORATION

| Produced and stocked in the following finishes and materials: | | | | | |
|---|-------|----------|----------|--------|--------|
| ● | ○ | ○ | ○ | ● | ● |
| G-90 Galv. | Green | Aluminum | H.R.P.O. | SS 304 | SS 316 |

Note: Perforated channel has a reduced loading capacity, see introduction pages 6 & 7.



Available in:
 10' (3.05m)
 20' (6.10m)
 24' (7.32m)



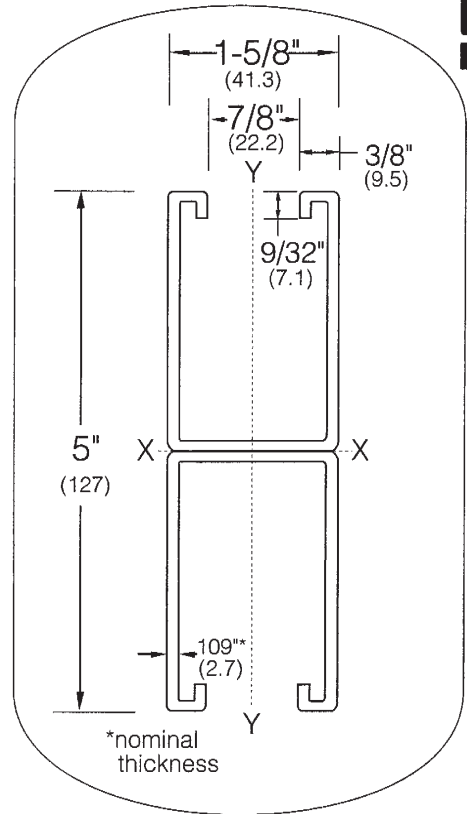
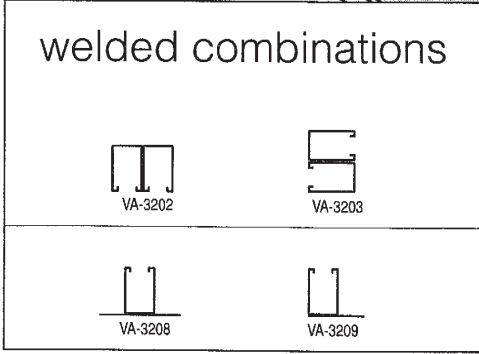
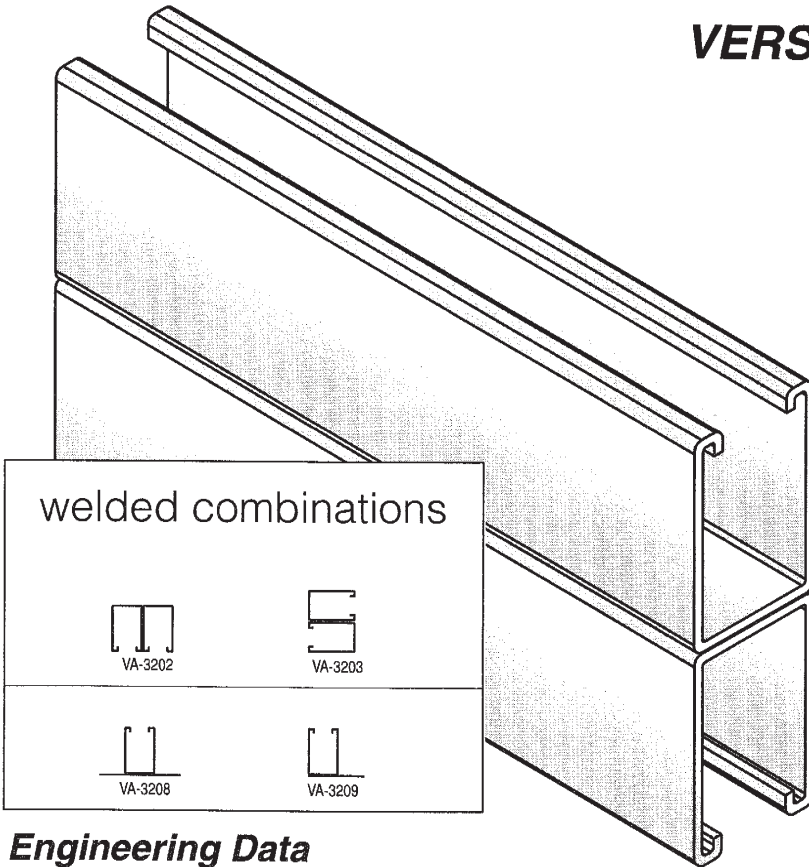
Engineering Data

| | | | | | | | |
|----------------------|--|-----------------------|----------------------|----------------------------|---------------------------|---------------------------|---------------------------|
| elements of sections | | Sectional Area | X-X axis | Moment of inertia | Section modulus | Radius of gyration | |
| VA-3 | | | | | | | |
| 12 ga. | Wgt. Per L.F. 2.47 lbs. (Kg. Per M) (3.67) | sq. in. .727 | cm ² 4.69 | .5203 In. 4 21.65 cm. 4 | .3927 In. 3 6.43 cm. 3 | .852 In. 2.16 cm. | |
| | | | | Y-Y axis | Moment of inertia | Section modulus | Radius of gyration |
| | | | | .3306 In. 4 13.76 cm. 4 | .4068 In. 3 6.66 cm. 3 | .679 In. 1.72 cm. | |

| beam loading data | | | | | | column loading data | | | | | | | | | | |
|--------------------------------|-----------------------------------|-----------|-------------------------------|-----------|--------------------------------|---------------------|--|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Span or Unbraced Column Height | Maximum Allowable Uniform Loading | | Deflection at Uniform Loading | | Uniform Loading at Deflections | | Maximum Allowable Loading at Slot Face K=.80 | Maximum Allowable Column Load Applied at Center of Gravity | | | | | | | | |
| | in. (mm) | Lbs. kN | in. (mm) | Span/240 | Span/360 | Lbs. kN | | Lbs. kN | K=.65 | | K=.80 | | K=1.0 | | K=1.2 | |
| 24 610 | 3283 14.6 | 0.04 1.0 | 3283 14.6 | 3283 14.6 | 3283 14.6 | 4492 20.0 | 9640 42.9 | 9245 41.1 | 8631 38.4 | 7935 35.3 | 7935 35.3 | 6789 30.2 | 5575 24.8 | 3720 16.5 | 2810 12.5 | 2275 10.1 |
| 36 914 | 2193 9.8 | 0.09 2.3 | 2193 9.8 | 2193 9.8 | 2193 9.8 | 3816 17.0 | 8563 38.1 | 7935 35.3 | 6789 30.2 | 5575 24.8 | 4782 21.3 | 3720 16.5 | 2810 12.5 | 2275 10.1 | | |
| 48 1219 | 1643 7.3 | 0.15 3.8 | 1643 7.3 | 1432 6.4 | 3086 13.7 | 5812 25.9 | 5542 24.7 | 4782 21.3 | 3720 16.5 | 2810 12.5 | 2275 10.1 | | | | | |
| 60 1524 | 1313 5.8 | 0.24 6.1 | 1313 5.8 | 911 4.1 | 2612 11.6 | 4483 19.9 | 4231 18.8 | 3526 15.7 | 2810 12.5 | 2275 10.1 | | | | | | |
| 72 1829 | 1093 4.9 | 0.34 8.6 | 1093 4.9 | 635 2.8 | 2198 9.8 | 3732 16.6 | 3485 15.5 | 2810 12.5 | 2275 10.1 | | | | | | | |
| 84 2134 | 943 4.2 | 0.47 11.9 | 703 3.1 | 471 2.1 | 1720 7.7 | 3253 14.5 | 2993 13.3 | 2346 10.4 | 1915 8.5 | | | | | | | |
| 96 2438 | 823 3.7 | 0.61 15.5 | 541 2.4 | 365 1.6 | 1391 6.2 | 2911 12.9 | 2602 11.6 | 2020 9.0 | 1655 7.4 | | | | | | | |
| 108 2743 | 733 3.3 | 0.78 19.8 | 422 1.9 | 281 1.2 | 1156 5.1 | 2645 11.8 | 2275 10.1 | 1776 7.9 | 1448 6.4 | | | | | | | |
| 120 3048 | 663 2.9 | 0.96 24.4 | 341 1.5 | 233 1.0 | 978 4.4 | 2431 10.8 | 2020 9.0 | 1577 7.0 | | | | | | | | |
| 144 3658 | 553 2.5 | 1.39 35.3 | 241 1.1 | 162 0.7 | | | | | | | | | | | | |
| 168 4267 | 473 2.1 | 1.88 47.8 | 172 0.8 | 122 0.5 | | | | | | | | | | | | |
| 192 4877 | 415 1.8 | 2.45 62.2 | 131 0.6 | 91 0.4 | | | | | | | | | | | | |
| 216 5486 | 362 1.6 | 3.06 77.7 | 111 0.5 | 72 0.3 | | | | | | | | | | | | |
| 240 6096 | 332 1.5 | 3.85 97.8 | 92 0.4 | 63 0.3 | | | | | | | | | | | | |

NOTES

- Long spans may have to be braced to prevent rotation and twist.
- Beam loading data already includes the weight of the member. This weight will have to be deducted in order to arrive at the net allowable load said beam span will carry.
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Engineering Data

| | | | | | | | |
|----------------------|---|-----------------------|-----------------|-----------------|--|---|---------------------------|
| elements of sections | | Sectional Area | | X-X axis | Moment of inertia | Section modulus | Radius of gyration |
| VA-3201 | | sq. in. | cm ² | | 2.8132 In. ⁴ 117.09 cm. ⁴ | 1.1541 In. ³ 18.91 cm. ³ | 1.402 In. 3.56 cm. |
| 12 ga. | Wgt. Per L.F. 4.94 lbs. (Kg. Per M) (7.35) | 1.453 | 9.37 | Y-Y axis | .6611 In. ⁴ 27.52 cm. ⁴ | .8137 In. ³ 13.33 cm. ³ | .679 In. 1.72 cm. |

| beam loading data | | | | | | column loading data | | | | | | | | | | | | |
|--------------------------------|-----------------------------------|------|-------------------------------|------|--------------------------------|---------------------|---|--|------|-------|-------|-------|-------|-------|-------|------|-------|------|
| Span or Unbraced Column Height | Maximum Allowable Uniform Loading | | Deflection at Uniform Loading | | Uniform Loading at Deflections | | Maximum Allowable Loading at Slot Face K=.80 | Maximum Allowable Column Load Applied at Center of Gravity | | | | | | | | | | |
| | Lbs. | kN | in. | (mm) | Span/240 | Span/360 | | K=.65 | | K=.80 | | K=1.0 | | K=1.2 | | | | |
| in. (mm) | Lbs. | kN | in. | (mm) | Lbs. | kN | Lbs. | kN | Lbs. | kN | Lbs. | kN | Lbs. | kN | Lbs. | kN | | |
| 24 610 | 4200 | 18.7 | 0.01 | 0.3 | 4200 | 18.7 | 4200 | 18.7 | 7958 | 35.4 | 20659 | 91.9 | 20523 | 91.3 | 20301 | 90.3 | 20025 | 89.1 |
| 36 914 | 4200 | 18.7 | 0.03 | 0.8 | 4200 | 18.7 | 4200 | 18.7 | 7850 | 34.9 | 20326 | 90.4 | 20025 | 89.1 | 19515 | 86.8 | 18895 | 84.1 |
| 48 1219 | 4200 | 18.7 | 0.08 | 2.0 | 4200 | 18.7 | 4200 | 18.7 | 7690 | 34.2 | 19870 | 88.4 | 19326 | 86.0 | 18420 | 81.9 | 17318 | 77.0 |
| 60 1524 | 3872 | 17.2 | 0.13 | 3.3 | 3872 | 17.2 | 3872 | 17.2 | 6945 | 30.9 | 19271 | 85.7 | 18415 | 81.9 | 17020 | 75.7 | 15285 | 68.0 |
| 72 1829 | 3221 | 14.3 | 0.19 | 4.8 | 3221 | 14.3 | 3221 | 14.3 | 5336 | 23.7 | 18541 | 82.5 | 17325 | 77.1 | 15281 | 68.0 | 12810 | 57.0 |
| 84 2134 | 2765 | 12.3 | 0.26 | 6.6 | 2765 | 12.3 | 2511 | 11.2 | 4178 | 18.6 | 17678 | 78.6 | 16015 | 71.2 | 13251 | 58.9 | 9892 | 44.0 |
| 96 2438 | 2421 | 10.8 | 0.34 | 8.6 | 2421 | 10.8 | 1922 | 8.5 | 3329 | 14.8 | 16690 | 74.2 | 14503 | 64.5 | 10892 | 48.5 | 7571 | 33.7 |
| 108 2743 | 2152 | 9.6 | 0.43 | 10.9 | 2152 | 9.6 | 1525 | 6.8 | 2695 | 12.0 | 15561 | 69.2 | 12801 | 56.9 | 8625 | 38.4 | 5982 | 26.6 |
| 120 3048 | 1931 | 8.6 | 0.52 | 13.2 | 1841 | 8.2 | 1234 | 5.5 | 2208 | 9.8 | 14296 | 63.6 | 10892 | 48.5 | 6972 | 31.0 | ** | ** |
| 144 3658 | 1615 | 7.2 | 0.75 | 19.1 | 1283 | 5.7 | 856 | 3.8 | | | | | | | | | ** | ** |
| 168 4267 | 1385 | 6.2 | 1.03 | 26.2 | 942 | 4.2 | 631 | 2.8 | | | | | | | | | | |
| 192 4877 | 1215 | 5.4 | 1.34 | 34.0 | 721 | 3.2 | 489 | 2.2 | | | | | | | | | | |
| 216 5486 | 1075 | 4.8 | 1.69 | 42.9 | 576 | 2.6 | 382 | 1.7 | | | | | | | | | | |
| 240 6096 | 972 | 4.3 | 2.11 | 53.6 | 462 | 2.1 | 311 | 1.4 | | | | | | | | | | |

$$** \frac{KL}{r} > 200$$

NOTES

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- Beam loading data already includes the weight of the member. This weight will have to be deducted in order to arrive at the net allowable load said beam span will carry.
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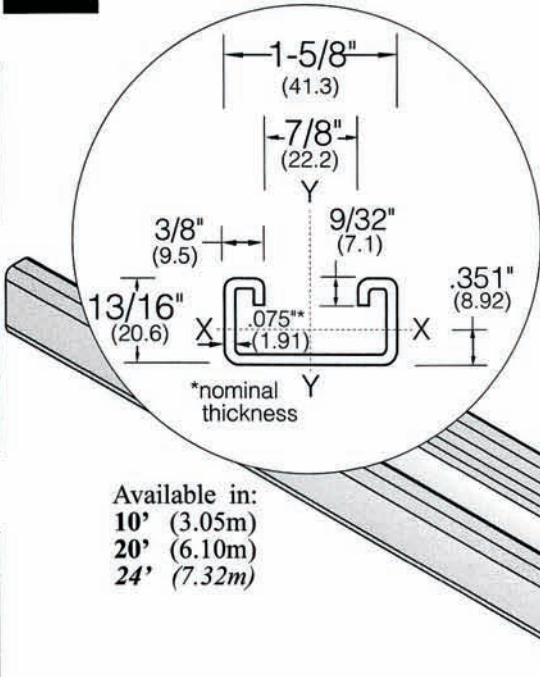
(Uniform beam loading on 24" and 36" spans limited by weld shear.)



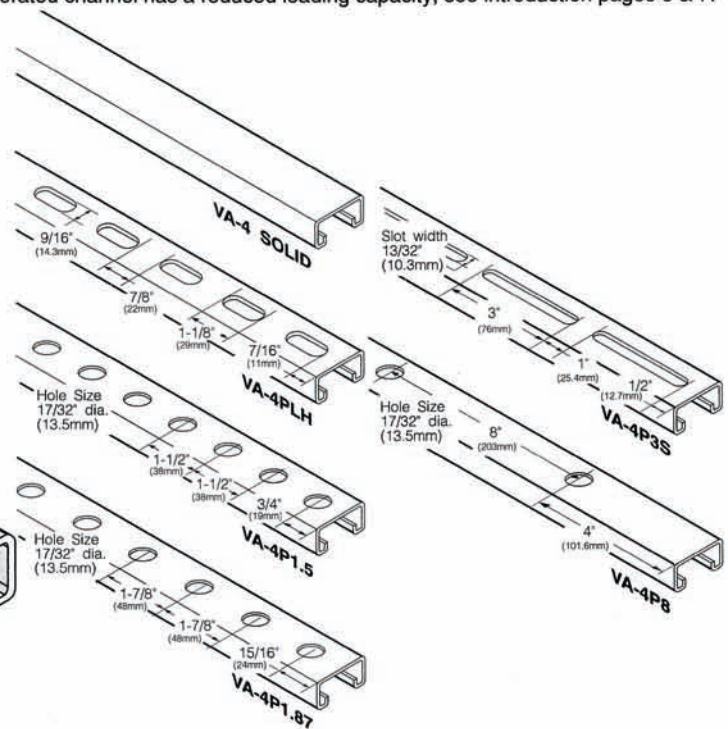
VERSABAR CORPORATION

| Produced and stocked in the following finishes and materials: | | | | | |
|---|-------|----------|----------|--------|--------|
| ● | ○ | ● | ● | ● | ● |
| G-90 Galv. | Green | Aluminum | H.R.P.O. | SS 304 | SS 316 |

Note: Perforated channel has a reduced loading capacity, see introduction pages 6 & 7.



Available in:
 10' (3.05m)
 20' (6.10m)
 24' (7.32m)



Engineering Data

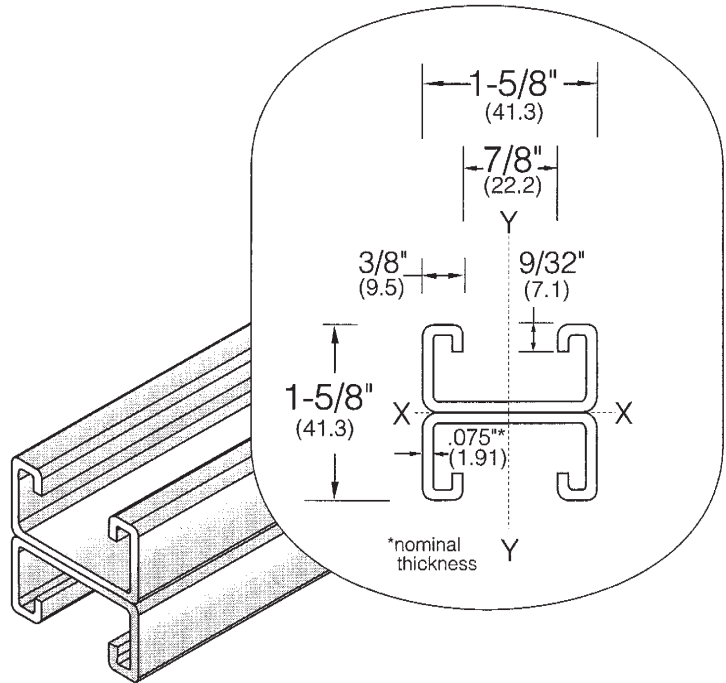
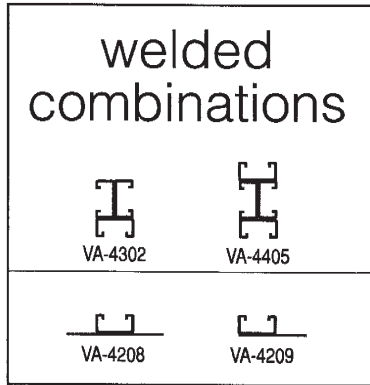
| | | | | | | | |
|----------------------|---|-----------------------|-----------------|-----------------|---|---|---------------------------|
| elements of sections | | Sectional Area | | X-X axis | Moment of inertia | Section modulus | Radius of gyration |
| VA-4 | | sq. in. | cm ² | | .0262 In. ⁴ 1.09 cm. ⁴ | .0558 In. ³ .91 cm. ³ | .298 In. .75 cm. |
| 14 ga. | Wgt. Per L.F. .97 lbs. (Kg. Per M) (1.44) | .285 | 1.84 | Y-Y axis | Moment of inertia | Section modulus | Radius of gyration |
| | | | | | .1096 In. ⁴ 4.56 cm. ⁴ | .1348 In. ³ 2.21 cm. ³ | .609 In. 1.54 cm. |

| beam loading data | | | | | | | | column loading data | | | | | | | | | |
|--------------------------------|-----------------------------------|---------|-------------------------------|--|--------------------------------|---------|----------|---------------------|--|--|-----------|-----------|-----------|----------|----------|-------|--|
| Span or Unbraced Column Height | Maximum Allowable Uniform Loading | | Deflection at Uniform Loading | | Uniform Loading at Deflections | | | | Maximum Allowable Loading at Slot Face K=.80 | Maximum Allowable Column Load Applied at Center of Gravity | | | | | | | |
| | in. (mm) | Lbs. kN | in. (mm) | | Span/240 | | Span/360 | | | K=.65 | | K=.80 | | K=1.0 | | K=1.2 | |
| 24 | 610 | 466 2.1 | 0.11 2.7 | | 431 1.9 | 288 1.3 | | 1689 7.5 | 5760 25.6 | 5462 24.3 | 4970 22.1 | 4298 19.1 | 3072 13.7 | 2132 9.5 | 1200 5.3 | | |
| 36 | 914 | 312 1.4 | 0.24 6.2 | | 192 0.9 | 127 0.6 | | 1420 6.3 | 5041 22.4 | 4298 19.1 | 3072 13.7 | 2132 9.5 | 1200 5.3 | | | | |
| 48 | 1219 | 231 1.0 | 0.43 11.0 | | 108 0.5 | 73 0.3 | | 1100 4.9 | 3918 17.4 | 2701 12.0 | 1729 7.7 | 1200 5.3 | | | | | |
| 60 | 1524 | 187 0.8 | 0.68 17.2 | | 70 0.3 | 47 0.2 | | 880 3.9 | 2620 11.7 | 1722 7.7 | ** | ** | ** | ** | ** | ** | |
| 72 | 1829 | 154 0.7 | 0.97 24.7 | | 49 0.2 | 33 0.1 | | 650 2.9 | 1819 8.1 | 1195 5.3 | ** | ** | ** | ** | ** | ** | |
| 84 | 2134 | 135 0.6 | 1.32 33.6 | | 35 0.2 | 22 0.1 | | 510 2.3 | 1335 5.9 | ** | ** | ** | ** | ** | ** | ** | |
| 96 | 2438 | 117 0.5 | 1.73 43.9 | | 28 0.1 | 18 0.1 | | 380 1.7 | ** | ** | ** | ** | ** | ** | ** | ** | |
| 108 | 2743 | 103 0.5 | 2.19 55.6 | | 21 0.1 | 12 0.1 | | 300 1.3 | ** | ** | ** | ** | ** | ** | ** | ** | |
| 120 | 3048 | 92 0.4 | 2.70 68.7 | | 17 0.1 | 8 0.0 | | 210 0.9 | ** | ** | ** | ** | ** | ** | ** | ** | |

**KL/r > 200

NOTES

- Long spans may have to be braced to prevent rotation and twist.
- Beam loading data already includes the weight of the member. This weight will have to be deducted in order to arrive at the net allowable load said beam span will carry.
- Maximum allowable uniformly distributed loads are listed for simple spans consisting of a beam on two supports. If load is to be concentrated at center of span, multiply given load by 0.5 and corresponding deflection figure by 0.8.



Engineering Data

| elements of sections | | | Sectional Area | | X-X axis | | Moment of inertia | | Section modulus | | Radius of gyration | |
|--|--|--|-----------------------|-----------------|-----------------|--|--------------------------|--|------------------------|--|---------------------------|--|
| VA-4201 | | | | | Y-Y axis | | Moment of inertia | | Section modulus | | Radius of gyration | |
| 14 ga. | | | sq. in. | cm ² | | | | | | | | |
| Wgt. Per L.F. 1.94 lbs. (Kg. Per M) (2.89) | | | .571 | 3.68 | | | | | | | | |

| beam loading data | | | | | | column loading data | | | | | | | | | |
|--------------------------------|-----------------------------------|-----------|-------------------------------|---------|--------------------------------|---------------------|---|--|------------|---------|---------|---------|---------|---------|---------|
| Span or Unbraced Column Height | Maximum Allowable Uniform Loading | | Deflection at Uniform Loading | | Uniform Loading at Deflections | | Maximum Allowable Loading at Slot Face K=.80 | Maximum Allowable Column Load Applied at Center of Gravity | | | | | | | |
| | in. (mm) | Lbs. kN | in. (mm) | | Span/240 | Span/360 | | K=.65 | | K=.80 | | K=1.0 | | K=1.2 | |
| | | | | | Lbs. kN | Lbs. kN | Lbs. kN | Lbs. kN | Lbs. kN | Lbs. kN | Lbs. kN | Lbs. kN | Lbs. kN | Lbs. kN | Lbs. kN |
| 24 610 | 869 3.9 | 0.04 1.1 | 869 3.9 | 869 3.9 | 3300 14.7 | 12210 54.3 | 11821 52.6 | 11312 50.3 | 10682 47.5 | | | | | | |
| 36 914 | 833 3.7 | 0.14 3.6 | 833 3.7 | 592 2.6 | 2850 12.7 | 11380 50.6 | 10803 48.1 | 9714 43.2 | 8405 37.4 | | | | | | |
| 48 1219 | 625 2.8 | 0.25 6.4 | 498 2.2 | 333 1.5 | 2700 12.0 | 10420 46.4 | 9317 41.4 | 7402 32.9 | 5295 23.6 | | | | | | |
| 60 1524 | 495 2.2 | 0.39 9.9 | 321 1.4 | 212 0.9 | 2265 10.1 | 9208 41.0 | 7409 33.0 | 4910 21.8 | 3362 15.0 | | | | | | |
| 72 1829 | 418 1.9 | 0.56 14.3 | 222 1.0 | 147 0.7 | 1920 8.5 | 7620 33.9 | 5302 23.6 | 3408 15.2 | 2350 10.5 | | | | | | |
| 84 2134 | 358 1.6 | 0.77 19.5 | 165 0.7 | 112 0.5 | 1602 7.1 | 5902 26.3 | 3925 17.5 | 2480 11.0 | ** ** | | | | | | |
| 96 2438 | 313 1.4 | 1.00 25.4 | 123 0.5 | 80 0.4 | 1401 6.2 | 4521 20.1 | 2961 13.2 | ** ** | ** ** | | | | | | |
| 108 2743 | 278 1.2 | 1.27 32.2 | 96 0.4 | 64 0.3 | 1220 5.4 | 3602 16.0 | 2380 10.6 | ** ** | ** ** | | | | | | |
| 120 3048 | 249 1.1 | 1.56 39.7 | 70 0.3 | 55 0.2 | 931 4.1 | 2910 12.9 | ** ** | ** ** | ** ** | | | | | | |

NOTES

- Long spans may have to be braced to prevent rotation and twist.
- Beam loading data already includes the weight of the member. This weight will have to be deducted in order to arrive at the net allowable load said beam span will carry.
- Maximum allowable uniformly distributed loads are listed for simple spans consisting of a beam on two supports. If load is to be concentrated at center of span, multiply given load by 0.5 and corresponding deflection figure by 0.8.

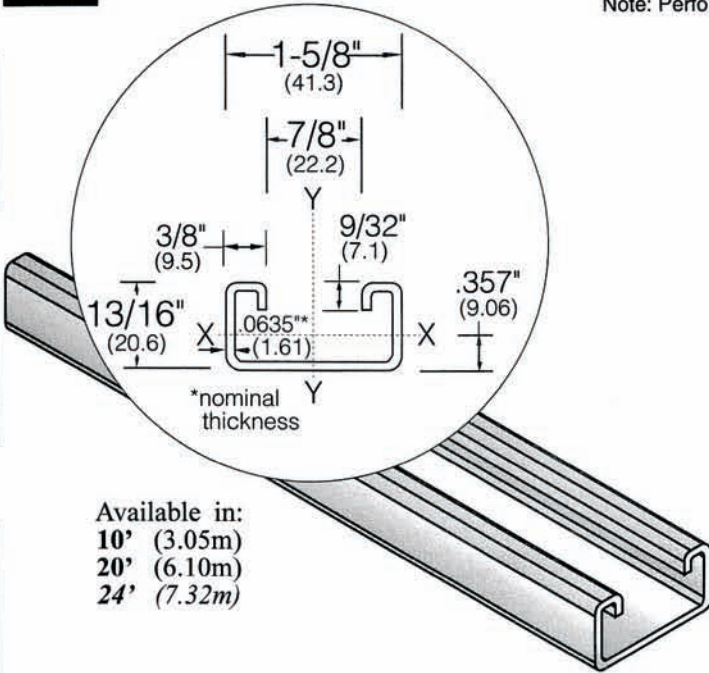
(Uniform beam loading on 24" and 36" spans limited by weld shear.)



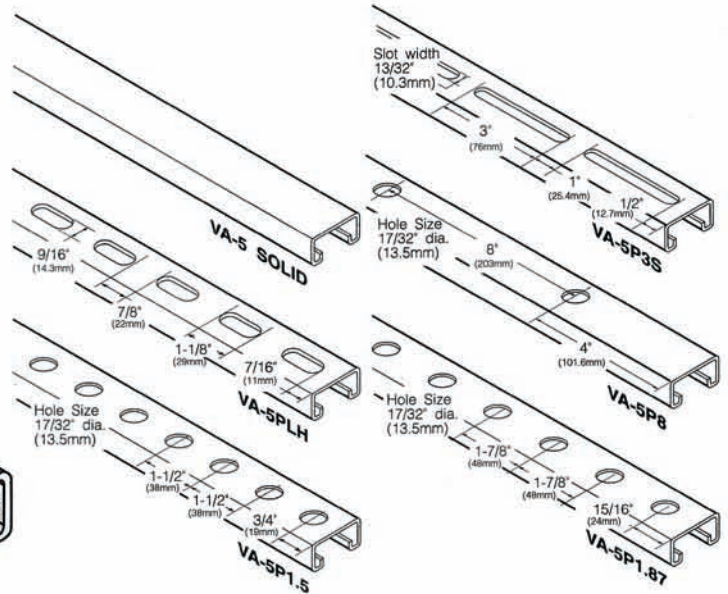
VERSABAR CORPORATION

| Produced and stocked in the following finishes and materials: | | | | | |
|---|-------|----------|----------|--------|--------|
| ● | ○ | ○ | ○ | ○ | ○ |
| G-90 Galv. | Green | Aluminum | H.R.P.O. | SS 304 | SS 316 |

Note: Perforated channel has a reduced loading capacity, see introduction pages 6 & 7.



Available in:
 10' (3.05m)
 20' (6.10m)
 24' (7.32m)



Engineering Data

| elements of sections | | | Sectional Area | | X-X axis | | Moment of inertia | | Section modulus | | Radius of gyration | |
|----------------------|---------------|----------|----------------|-----------------|----------|--|-------------------|--|-----------------|--|--------------------|--|
| VA-5 | | | sq. in. | cm ² | Y-Y axis | | Moment of inertia | | Section modulus | | Radius of gyration | |
| | | | .239 | 1.50 | | | Moment of inertia | | Section modulus | | Radius of gyration | |
| 16 ga. | Wgt. Per L.F. | .82 lbs. | | | X-X axis | | .023 In. 4 | | .048 In. 3 | | .308 In. | |
| | (Kg. Per M) | (1.2) | | | Y-Y axis | | .091 In. 4 | | .112 In. 3 | | .617 In. | |
| | | | | | | | 3.80 cm. 4 | | 1.80 cm. 3 | | 1.60 cm. | |

| beam loading data | | | | | | | column loading data | | | | | | | | | | | |
|--------------------------------|-----------------------------------|-----|-------------------------------|------|--------------------------------|-----|---|--|------|------|------|-------|------|-------|------|------|------|------|
| Span or Unbraced Column Height | Maximum Allowable Uniform Loading | | Deflection at Uniform Loading | | Uniform Loading at Deflections | | Maximum Allowable Loading at Slot Face K=80 | Maximum Allowable Column Load Applied at Center of Gravity | | | | | | | | | | |
| | Lbs. | kN | in. | (mm) | Lbs. | kN | | K=65 | | K=80 | | K=1.0 | | K=1.2 | | | | |
| in. (mm) | Lbs. | kN | in. | (mm) | Lbs. | kN | Lbs. | kN | Lbs. | kN | Lbs. | kN | Lbs. | kN | Lbs. | kN | | |
| 24 610 | 400 | 1.8 | 0.11 | 2.7 | 370 | 1.6 | 247 | 1.1 | 1375 | 6.1 | 3718 | 16.5 | 3672 | 16.3 | 3600 | 16.0 | 3502 | 15.6 |
| 36 914 | 268 | 1.2 | 0.24 | 6.2 | 162 | 0.7 | 102 | 0.5 | 988 | 4.4 | 2065 | 9.2 | 1951 | 8.7 | 1871 | 8.3 | 1760 | 7.8 |
| 48 1219 | 195 | 0.9 | 0.43 | 10.9 | 90 | 0.4 | 60 | 0.3 | 682 | 3.0 | 1125 | 5.0 | 1060 | 4.7 | 1040 | 4.6 | 992 | 4.4 |
| 60 1524 | 152 | 0.7 | 0.66 | 16.8 | 55 | 0.2 | 38 | 0.2 | 492 | 2.2 | 710 | 3.2 | 698 | 3.1 | 620 | 2.8 | ** | ** |
| 72 1829 | 125 | 0.6 | 0.95 | 24.1 | 38 | 0.2 | 26 | 0.1 | 375 | 1.7 | 489 | 2.2 | 481 | 2.1 | ** | ** | ** | ** |
| 84 2134 | 102 | 0.5 | 1.26 | 32.0 | 28 | 0.1 | 18 | 0.1 | ** | ** | 361 | 1.6 | ** | ** | ** | ** | ** | ** |
| 96 2438 | 95 | 0.4 | 1.72 | 43.7 | 20 | 0.1 | 13 | 0.1 | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| 108 2743 | 85 | 0.4 | 2.19 | 55.6 | 16 | 0.1 | 9 | 0.0 | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| 120 3048 | 75 | 0.3 | 2.68 | 68.1 | 12 | 0.1 | | | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** |

** $\frac{KL}{r} > 200$

NOTES

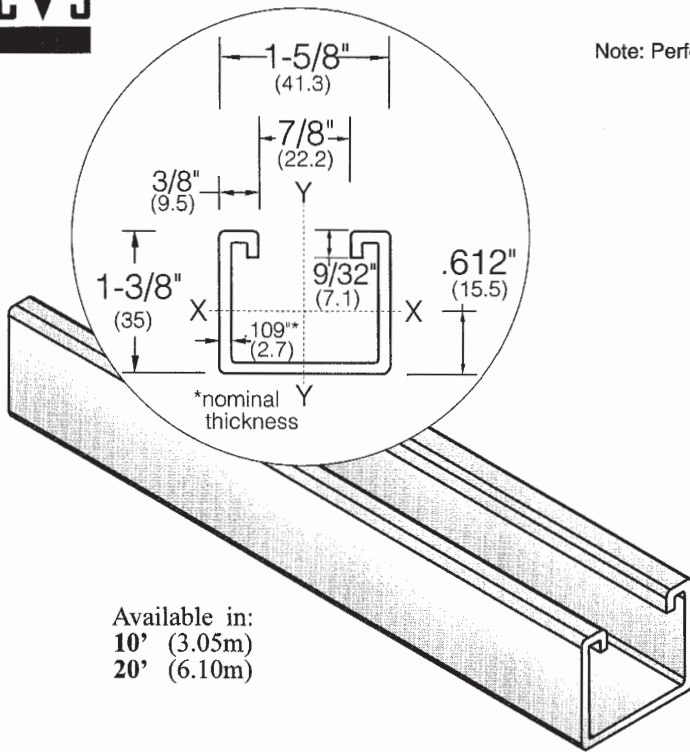
- Long spans may have to be braced to prevent rotation and twist.
- Beam loading data already includes the weight of the member. This weight will have to be deducted in order to arrive at the net allowable load said beam span will carry.
- Maximum allowable uniformly distributed loads are listed for simple spans consisting of a beam on two supports. If load is to be concentrated at center of span, multiply given load by 0.5 and corresponding deflection figure by 0.8.



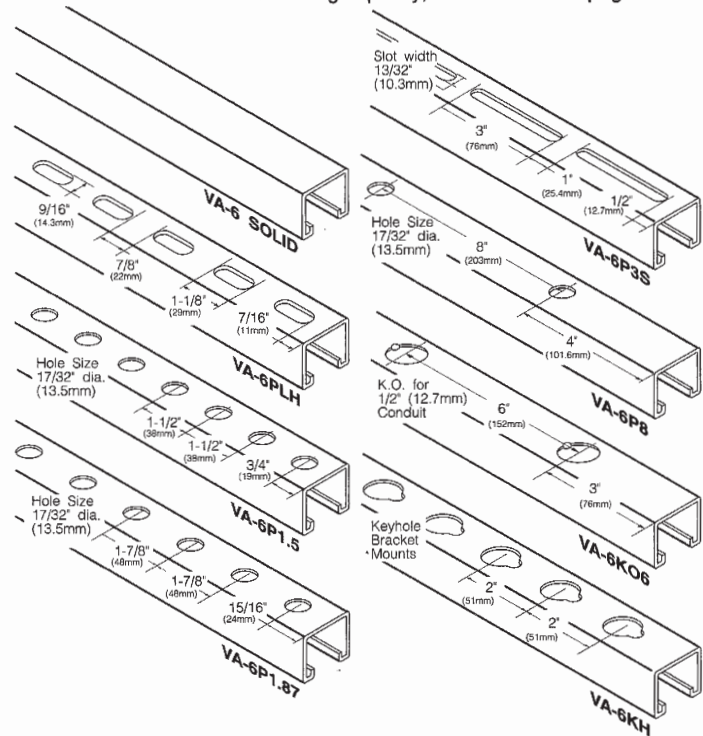
VERSABAR CORPORATION

| Produced and stocked in the following finishes and materials: | | | | | |
|---|-------|----------|----------|--------|--------|
| ● | ○ | ○ | ● | ○ | ○ |
| G-90 Galv. | Green | Aluminum | H.R.P.O. | SS 304 | SS 316 |

Note: Perforated channel has a reduced loading capacity, see introduction pages 6 & 7.



Available in:
10' (3.05m)
20' (6.10m)



Engineering Data

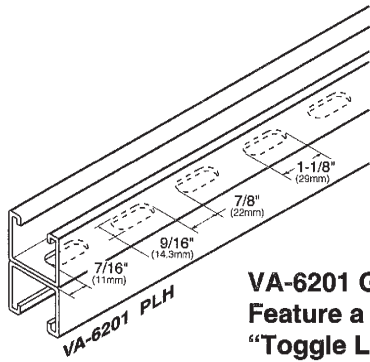
| elements of sections | | | Sectional Area | | X-X axis | | Moment of inertia | Section modulus | Radius of gyration |
|----------------------|------------------------------|--------------------|----------------|-----------------|----------|--|---------------------------|---------------------------|----------------------|
| VA-6 | | | sq. in. | cm ² | Y-Y axis | | Moment of inertia | Section modulus | Radius of gyration |
| | | | .500 | 3.23 | | | .1209 In. 4 5.03 cm. 4 | .1559 In. 3 2.55 cm. 3 | .493 In. 1.25 cm. |
| 12 ga. | Wgt. Per L.F. (Kg. Per M) | 1.7 lbs. (2.53) | | | | | Moment of inertia | Section modulus | Radius of gyration |
| | | | | | | | .2043 In. 4 8.50 cm. 4 | .2515 In. 3 4.12 cm. 3 | .640 In. 1.62 cm. |

| beam loading data | | | | | | | | | |
|--------------------------------|-----------------------------------|------|-------------------------------|------|--------------------------------|------|----------|------|-----|
| Span or Unbraced Column Height | Maximum Allowable Uniform Loading | | Deflection at Uniform Loading | | Uniform Loading at Deflections | | | | |
| | Lbs. | kN | in. | (mm) | Span/240 | | Span/360 | | |
| | | | | | Lbs. | kN | Lbs. | kN | |
| 24 | 610 | 1298 | 5.8 | 0.07 | 1.7 | 1298 | 5.8 | 1298 | 5.8 |
| 36 | 914 | 865 | 3.8 | 0.15 | 3.7 | 865 | 3.8 | 588 | 2.6 |
| 48 | 1219 | 651 | 2.9 | 0.26 | 6.7 | 494 | 2.2 | 329 | 1.5 |
| 60 | 1524 | 521 | 2.3 | 0.41 | 10.4 | 318 | 1.4 | 210 | 0.9 |
| 72 | 1829 | 432 | 1.9 | 0.59 | 15.0 | 221 | 1.0 | 148 | 0.7 |
| 84 | 2134 | 372 | 1.7 | 0.80 | 20.4 | 161 | 0.7 | 109 | 0.5 |
| 96 | 2438 | 324 | 1.4 | 1.05 | 26.6 | 123 | 0.5 | 82 | 0.4 |
| 108 | 2743 | 291 | 1.3 | 1.33 | 33.7 | 98 | 0.4 | 68 | 0.3 |
| 120 | 3048 | 260 | 1.2 | 1.64 | 41.6 | 80 | 0.4 | 52 | 0.2 |
| 144 | 3658 | 219 | 1.0 | 2.40 | 61.0 | 59 | 0.3 | 38 | 0.2 |
| 168 | 4267 | 181 | 0.8 | 3.11 | 79.0 | 40 | 0.2 | 29 | 0.1 |
| 192 | 4877 | 159 | 0.7 | 4.13 | 104.9 | 28 | 0.1 | | |
| 216 | 5486 | 141 | 0.6 | 5.15 | 130.8 | | | | |
| 240 | 6096 | 131 | 0.6 | 6.56 | 166.6 | | | | |

| column loading data | | | | | | | | | | | | | | | | | | | |
|--------------------------------|-----------------------------------|------|-------------------------------|------|--------------------------------|------|---|--|-----|-------|------|-------|------|-------|------|-------|------|------|------|
| Span or Unbraced Column Height | Maximum Allowable Uniform Loading | | Deflection at Uniform Loading | | Uniform Loading at Deflections | | Maximum Allowable Loading at Slot Face K=.80 | Maximum Allowable Column Load Applied at Center of Gravity | | | | | | | | | | | |
| | Lbs. | kN | in. | (mm) | Span/240 | | | Span/360 | | K=.65 | | K=.80 | | K=1.0 | | K=1.2 | | | |
| | | | | | Lbs. | kN | | Lbs. | kN | Lbs. | kN | Lbs. | kN | Lbs. | kN | Lbs. | kN | | |
| 24 | 610 | 1298 | 5.8 | 0.07 | 1.7 | 1298 | 5.8 | 1298 | 5.8 | 3129 | 13.9 | 8892 | 39.6 | 8802 | 39.2 | 8402 | 37.4 | 7648 | 34.0 |
| 36 | 914 | 865 | 3.8 | 0.15 | 3.7 | 865 | 3.8 | 588 | 2.6 | 2850 | 12.7 | 7531 | 33.5 | 7315 | 32.5 | 6592 | 29.3 | 5429 | 24.1 |
| 48 | 1219 | 651 | 2.9 | 0.26 | 6.7 | 494 | 2.2 | 329 | 1.5 | 2415 | 10.7 | 6402 | 28.5 | 5995 | 26.7 | 4781 | 21.3 | 3871 | 17.2 |
| 60 | 1524 | 521 | 2.3 | 0.41 | 10.4 | 318 | 1.4 | 210 | 0.9 | 2101 | 9.3 | 5503 | 24.5 | 4778 | 21.3 | 4002 | 17.8 | 3002 | 13.4 |
| 72 | 1829 | 432 | 1.9 | 0.59 | 15.0 | 221 | 1.0 | 148 | 0.7 | 1875 | 8.3 | 4710 | 21.0 | 3872 | 17.2 | 2993 | 13.3 | 2415 | 10.7 |
| 84 | 2134 | 372 | 1.7 | 0.80 | 20.4 | 161 | 0.7 | 109 | 0.5 | 1685 | 7.5 | 4109 | 18.3 | 3245 | 14.4 | 2492 | 11.1 | ** | ** |
| 96 | 2438 | 324 | 1.4 | 1.05 | 26.6 | 123 | 0.5 | 82 | 0.4 | 1452 | 6.5 | 3532 | 15.7 | 2776 | 12.3 | 1991 | 8.9 | ** | ** |
| 108 | 2743 | 291 | 1.3 | 1.33 | 33.7 | 98 | 0.4 | 68 | 0.3 | 1285 | 5.7 | 3081 | 13.7 | 2410 | 10.7 | ** | ** | ** | ** |
| 120 | 3048 | 260 | 1.2 | 1.64 | 41.6 | 80 | 0.4 | 52 | 0.2 | 1102 | 4.9 | 2720 | 12.1 | 1991 | 8.9 | ** | ** | ** | ** |
| 144 | 3658 | 219 | 1.0 | 2.40 | 61.0 | 59 | 0.3 | 38 | 0.2 | | | | | | | ** | ** | ** | ** |

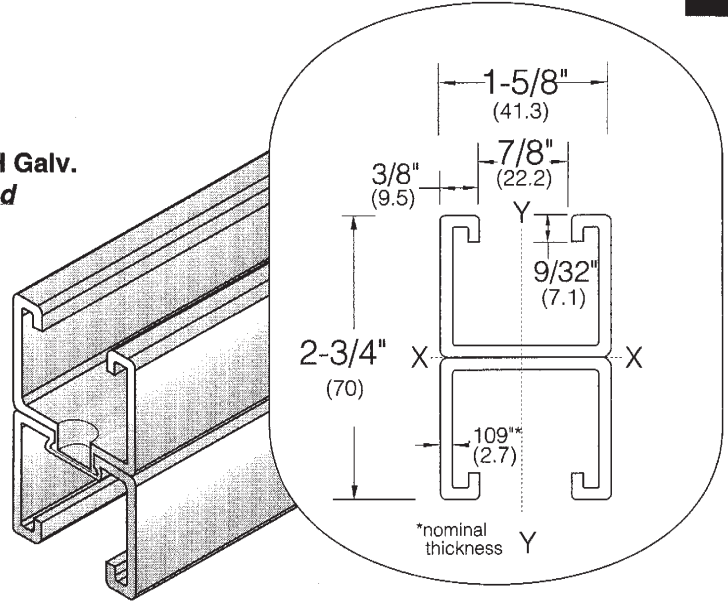
NOTES

- Long spans may have to be braced to prevent rotation and twist.
- Beam loading data already includes the weight of the member. This weight will have to be deducted in order to arrive at the net allowable load said beam span will carry.
- Maximum allowable uniformly distributed loads are listed for simple spans consisting of a beam on two supports. If load is to be concentrated at center of span, multiply given load by 0.5 and corresponding deflection figure by 0.8.



VA-6201 Galv. & VA-6201-PLH Galv.
 Feature a superior *non-welded*
 "Toggle Lock" design.

welded
 combinations



cross sectional cut of spot connection shown for illustrational purposes

Engineering Data

| elements of sections | | | Sectional Area | | X-X axis | Moment of inertia | Section modulus | Radius of gyration |
|----------------------|------------------------------|--------------------|----------------|-----------------|----------|--|---|----------------------|
| VA-6201 | | | sq. in. | cm ² | | .5997 In. ⁴ 24.96 cm. ⁴ | .4361 In. ³ 7.14 cm. ³ | .776 In. 1.97 cm. |
| | | | 1.00 | 6.45 | Y-Y axis | Moment of inertia | Section modulus | Radius of gyration |
| 12 ga. | Wgt. Per L.F. (Kg. Per M) | 3.4 lbs. (5.06) | | | | .4087 In. ⁴ 17.01 cm. ⁴ | .5030 In. ³ 8.24 cm. ³ | .640 In. 1.62 cm. |

| beam loading data | | | | | | column loading data | | | | | | | | | |
|--------------------------------|-----------------------------------|-----------|-------------------------------|----------|--------------------------------|---------------------|---|--|------------|-------------------------|------------|------------|------------|------------|------------|
| Span or Unbraced Column Height | Maximum Allowable Uniform Loading | | Deflection at Uniform Loading | | Uniform Loading at Deflections | | Maximum Allowable Loading at Slot Face K=80 | Maximum Allowable Column Load Applied at Center of Gravity | | | | | | | |
| | in. (mm) | Lbs. kN | in. (mm) | Lbs. kN | Lbs. kN | Lbs. kN | | K=65 | | K=80 | | K=1.0 | | K=1.2 | |
| 24 610 | 2212 9.8 | 0.02 0.6 | 2212 9.8 | 2212 9.8 | 2212 9.8 | 5663 25.2 | 21040 93.6 | 20810 92.6 | 20425 90.9 | 19962 88.8 | 19962 88.8 | 19962 88.8 | 19962 88.8 | 19962 88.8 | 19962 88.8 |
| 36 914 | 2212 9.8 | 0.08 1.9 | 2212 9.8 | 2212 9.8 | 2212 9.8 | 5482 24.4 | 20475 91.1 | 19963 88.8 | 19083 84.9 | 18024 80.2 | 19963 88.8 | 19083 84.9 | 18024 80.2 | 19963 88.8 | 18024 80.2 |
| 48 1219 | 1816 8.1 | 0.15 3.8 | 1816 8.1 | 1629 7.2 | 1629 7.2 | 5243 23.3 | 19685 87.6 | 18762 83.5 | 17215 76.6 | 15329 68.2 | 19685 87.6 | 18762 83.5 | 17215 76.6 | 15329 68.2 | 15329 68.2 |
| 60 1524 | 1452 6.5 | 0.23 5.9 | 1452 6.5 | 1046 4.7 | 1046 4.7 | 4720 21.0 | 18667 83.0 | 17225 76.6 | 14806 65.9 | 11859 52.8 | 18667 83.0 | 17225 76.6 | 14806 65.9 | 11859 52.8 | 11859 52.8 |
| 72 1829 | 1209 5.4 | 0.33 8.5 | 1089 4.8 | 725 3.2 | 725 3.2 | 3451 15.4 | 17428 77.5 | 15342 68.2 | 11861 52.8 | 8318 37.0 | 17428 77.5 | 15342 68.2 | 11861 52.8 | 8318 37.0 | 8318 37.0 |
| 84 2134 | 1035 4.6 | 0.45 11.5 | 798 3.5 | 533 2.4 | 533 2.4 | 2610 11.6 | 15962 71.0 | 13124 58.4 | 8796 39.1 | 6115 27.2 | 15962 71.0 | 13124 58.4 | 8796 39.1 | 6115 27.2 | 6115 27.2 |
| 96 2438 | 903 4.0 | 0.59 15.0 | 612 2.7 | 406 1.8 | 406 1.8 | 2019 9.0 | 14265 63.5 | 10532 46.8 | 6742 30.0 | 4682 20.8 | 14265 63.5 | 10532 46.8 | 6742 30.0 | 4682 20.8 | 4682 20.8 |
| 108 2743 | 802 3.6 | 0.75 19.0 | 482 2.1 | 323 1.4 | 323 1.4 | 1598 7.1 | 12341 54.9 | 8321 37.0 | 5326 23.7 | ** ** | 12341 54.9 | 8321 37.0 | 5326 23.7 | ** ** | ** ** |
| 120 3048 | 725 3.2 | 0.92 23.5 | 392 1.7 | 261 1.2 | 261 1.2 | 1292 5.7 | 10210 45.4 | 6742 30.0 | 4318 19.2 | ** ** | 10210 45.4 | 6742 30.0 | 4318 19.2 | ** ** | ** ** |
| 144 3658 | 598 2.7 | 1.33 33.8 | 269 1.2 | 178 0.8 | 178 0.8 | | | | | ** $\frac{KL}{r} > 200$ | | | | | |
| 168 4267 | 518 2.3 | 1.84 46.7 | 195 0.9 | 128 0.6 | 128 0.6 | | | | | | | | | | |
| 192 4877 | 448 2.0 | 2.37 60.2 | 145 0.6 | 95 0.4 | 95 0.4 | | | | | | | | | | |
| 216 5486 | 398 1.8 | 3.00 76.2 | 118 0.5 | 76 0.3 | 76 0.3 | | | | | | | | | | |
| 240 6096 | 354 1.6 | 3.70 94.0 | 92 0.4 | 56 0.2 | 56 0.2 | | | | | | | | | | |

NOTES

- Long spans may have to be braced to prevent rotation and twist.
- Beam loading data already includes the weight of the member. This weight will have to be deducted in order to arrive at the net allowable load said beam span will carry.
- Maximum allowable uniformly distributed loads are listed for simple spans consisting of a beam on two supports. If load is to be concentrated at center of span, multiply given load by 0.5 and corresponding deflection figure by 0.8.

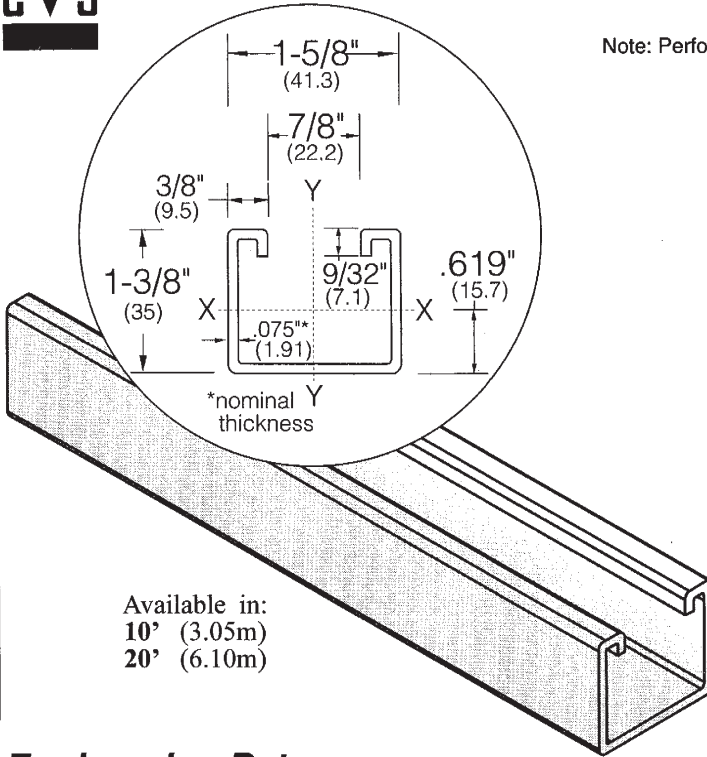
(Uniform beam loading on 24" and 36" spans limited by weld shear.)



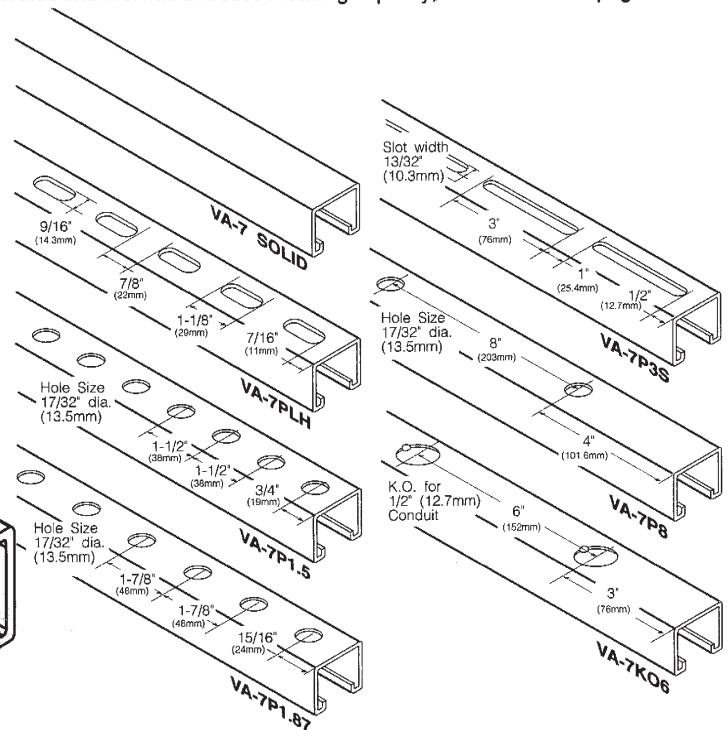
VERSABAR CORPORATION

| Produced and stocked in the following finishes and materials: | | | | | |
|---|-------|----------|----------|--------|--------|
| ● | ○ | ○ | ○ | ○ | ○ |
| G-90 Galv. | Green | Aluminum | H.R.P.O. | SS 304 | SS 316 |

Note: Perforated channel has a reduced loading capacity, see introduction pages 6 & 7.



Available in:
10' (3.05m)
20' (6.10m)



Engineering Data

elements of sections

VA-7

14 ga. Wgt. Per L.F. 1.3 lbs. (Kg. Per M) (1.936)

| Sectional Area | |
|----------------|-----------------|
| sq. in. | cm ² |
| .371 | 2.40 |

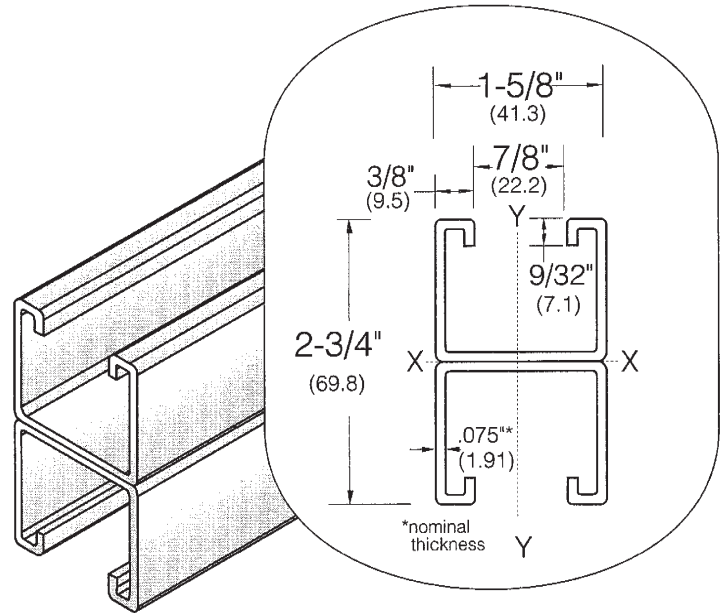
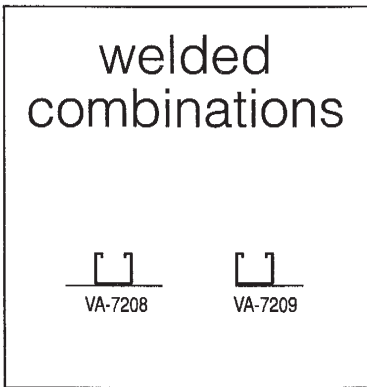
| X-X axis | Moment of inertia | Section modulus | Radius of gyration |
|----------|--------------------------|---------------------------|------------------------|
| | .102 In. 4 4.25 cm. 4 | .135 In. 3 2.208 cm. 3 | .533 In. 1.3513 cm. |
| Y-Y axis | Moment of inertia | Section modulus | Radius of gyration |
| | .151 In. 4 6.28 cm. 4 | .187 In. 3 3.058 cm. 3 | .425 In. 1.0775 cm. |

| beam loading data | | | | | | | column loading data | | | | | | | | | | |
|--------------------------------|-----------------------------------|-----------|-------------------------------|----------|--------------------------------|-----------|---------------------|-----------|---|--|--|------|--|-------|--|-------|--|
| Span or Unbraced Column Height | Maximum Allowable Uniform Loading | | Deflection at Uniform Loading | | Uniform Loading at Deflections | | | | Maximum Allowable Loading at Slot Face K=80 | Maximum Allowable Column Load Applied at Center of Gravity | | | | | | | |
| | in. (mm) | Lbs. kN | in. (mm) | | Span/240 | | Span/360 | | | K=65 | | K=80 | | K=1.0 | | K=1.2 | |
| 24 610 | 1012 4.5 | 0.07 1.7 | 1012 4.5 | 1012 4.5 | 2159 9.6 | 5068 22.5 | 5017 22.3 | 4621 20.6 | 3976 17.7 | | | | | | | | |
| 36 914 | 674 3.0 | 0.15 3.7 | 674 3.0 | 458 2.0 | 1966 8.7 | 4292 19.1 | 4169 18.5 | 3625 16.1 | 2823 12.6 | | | | | | | | |
| 48 1219 | 507 2.3 | 0.27 6.9 | 385 1.7 | 256 1.1 | 1666 7.4 | 3649 16.2 | 3417 15.2 | 2629 11.7 | 2012 8.9 | | | | | | | | |
| 60 1524 | 406 1.8 | 0.42 10.7 | 248 1.1 | 163 0.7 | 1449 6.4 | 3136 13.9 | 2723 12.1 | 2201 9.8 | 1561 6.9 | | | | | | | | |
| 72 1829 | 336 1.5 | 0.60 15.2 | 172 0.8 | 115 0.5 | 1293 5.8 | 2684 11.9 | 2207 9.8 | 1646 7.3 | 1255 5.6 | | | | | | | | |
| 84 2134 | 290 1.3 | 0.81 20.6 | 125 0.6 | 85 0.4 | 1162 5.2 | 2342 10.4 | 1849 8.2 | 1370 6.1 | ** ** | | | | | | | | |
| 96 2438 | 252 1.1 | 1.06 26.9 | 95 0.4 | 63 0.3 | 1001 4.5 | 2013 9.0 | 1582 7.0 | 1095 4.9 | ** ** | | | | | | | | |
| 108 2743 | 226 1.0 | 1.34 34.0 | 76 0.3 | 53 0.2 | 886 3.9 | 1756 7.8 | 1373 6.1 | ** ** | ** ** | | | | | | | | |
| 120 3048 | 202 0.9 | 1.65 41.9 | 62 0.3 | 40 0.2 | 760 3.4 | 1550 6.9 | 1134 5.0 | ** ** | ** ** | | | | | | | | |

**KL/r > 200

NOTES

- Long spans may have to be braced to prevent rotation and twist.
- Beam loading data already includes the weight of the member. This weight will have to be deducted in order to arrive at the net allowable load said beam span will carry.
- Maximum allowable uniformly distributed loads are listed for simple spans consisting of a beam on two supports. If load is to be concentrated at center of span, multiply given load by 0.5 and corresponding deflection figure by 0.8.



Engineering Data

| | | | | | | | | |
|----------------------|---------------|---------------------------------|-----------------------|-----------------|-----------------|---|--|---------------------------|
| elements of sections | | | Sectional Area | | X-X axis | Moment of inertia | Section modulus | Radius of gyration |
| VA-7201 | | | sq. in. | cm ² | | .478 In. ⁴ 19.89 cm. ⁴ | .347 In. ³ 5.68 cm. ³ | .817 In. 2.071 cm. |
| 14 ga. | Wgt. Per L.F. | 2.668 lbs (Kg. Per M) (3.97) | .743 | 4.80 | Y-Y axis | Moment of inertia | Section modulus | Radius of gyration |
| | | | | | | .304 In. ⁴ 12.65 cm. ⁴ | .374 In. ³ 6.11 cm. ³ | .425 In. 1.0775 cm. |

| beam loading data | | | | | | | column loading data | | | | | | | | | | | |
|--------------------------------|-----------------------------------|---------|-------------------------------|------|--------------------------------|-----|---------------------|-----|--|--|-------|-------|-------|-------|-------|-------|-------|------|
| Span or Unbraced Column Height | Maximum Allowable Uniform Loading | | Deflection at Uniform Loading | | Uniform Loading at Deflections | | | | Maximum Allowable Loading at Slot Face K=.80 | Maximum Allowable Column Load Applied at Center of Gravity | | | | | | | | |
| | in. (mm) | Lbs. kN | in. (mm) | | Span/240 | | Span/360 | | | K=.65 | | K=.80 | | K=1.0 | | K=1.2 | | |
| 24 610 | 1273 | 5.7 | 0.02 | 0.6 | 1273 | 5.7 | 1273 | 5.7 | 4303 | 19.1 | 13044 | 58.0 | 13110 | 58.3 | 12867 | 57.2 | 12576 | 55.9 |
| 36 914 | 1273 | 5.7 | 0.08 | 1.9 | 1273 | 5.7 | 1273 | 5.7 | 4166 | 18.5 | 12694 | 56.5 | 12576 | 55.9 | 12022 | 53.5 | 11355 | 50.5 |
| 48 1219 | 1273 | 5.7 | 0.15 | 3.8 | 1273 | 5.7 | 1273 | 5.7 | 3984 | 17.7 | 12204 | 54.3 | 11820 | 52.6 | 10845 | 48.2 | 9657 | 43.0 |
| 60 1524 | 1132 | 5.0 | 0.24 | 6.1 | 1147 | 5.1 | 826 | 3.7 | 3587 | 16.0 | 11573 | 51.5 | 10851 | 48.3 | 9327 | 41.5 | 7471 | 33.2 |
| 72 1829 | 943 | 4.2 | 0.34 | 8.6 | 860 | 3.8 | 572 | 2.5 | 2622 | 11.7 | 10805 | 48.1 | 9665 | 43.0 | 7472 | 33.2 | 5240 | 23.3 |
| 84 2134 | 807 | 3.6 | 0.45 | 11.4 | 630 | 2.8 | 421 | 1.9 | 1983 | 8.8 | 9896 | 44.0 | 8268 | 36.8 | 5541 | 24.6 | 3852 | 17.1 |
| 96 2438 | 704 | 3.1 | 0.60 | 15.2 | 483 | 2.1 | 320 | 1.4 | 1534 | 6.8 | 8844 | 39.3 | 6635 | 29.5 | 4247 | 18.9 | 2949 | 13.1 |
| 108 2743 | 625 | 2.8 | 0.76 | 19.3 | 380 | 1.7 | 255 | 1.1 | 1214 | 5.4 | 7651 | 34.0 | 5242 | 23.3 | 3355 | 14.9 | ** | ** |
| 120 3048 | 565 | 2.5 | 0.93 | 23.6 | 309 | 1.4 | 206 | 0.9 | 981 | 4.4 | 6330 | 28.2 | 4247 | 18.9 | 2720 | 12.1 | ** | ** |

** $\frac{KL}{r} > 200$

- NOTES**
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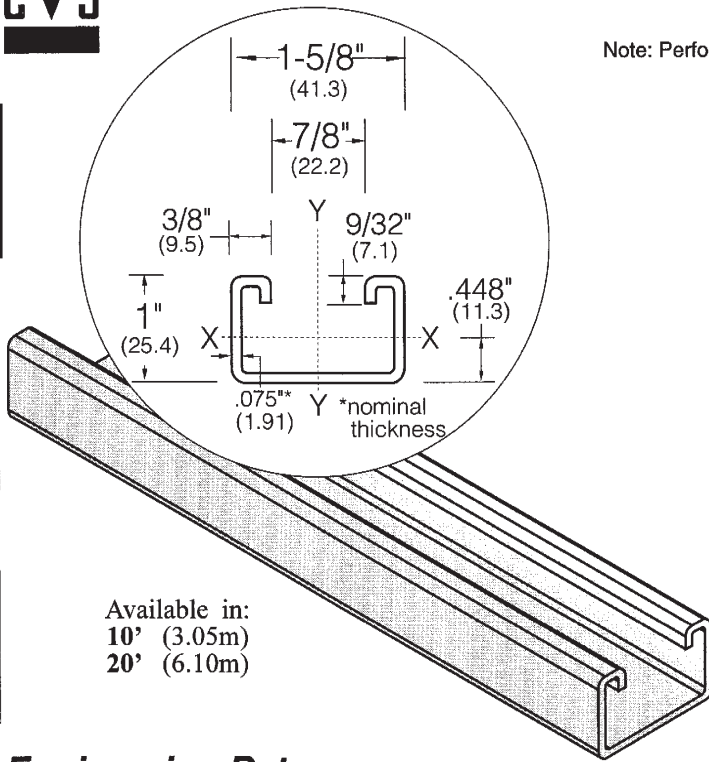
(Uniform beam loading on 24" and 36" spans limited by weld shear.)



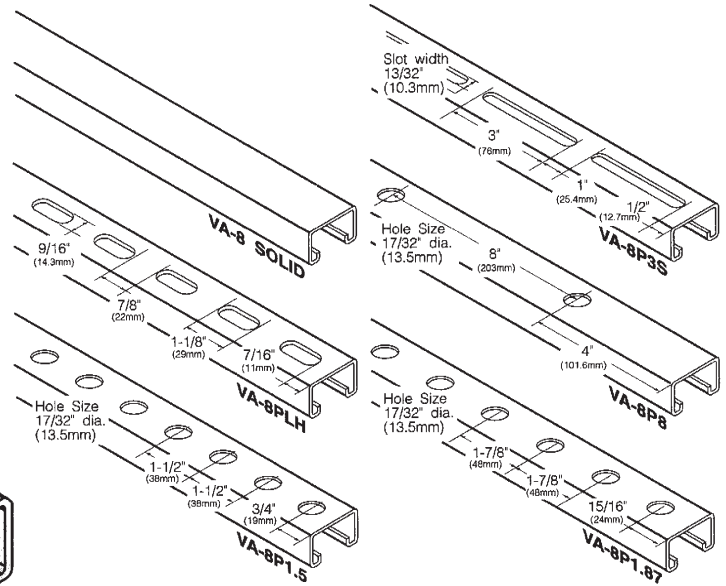
VERSABAR CORPORATION

| Produced and stocked in the following finishes and materials: | | | | | |
|---|-------|----------|----------|--------|--------|
| ● | ○ | ○ | ○ | ○ | ○ |
| G-90 Galv. | Green | Aluminum | H.R.P.O. | SS 304 | SS 316 |

Note: Perforated channel has a reduced loading capacity, see introduction pages 6 & 7.



Available in:
10' (3.05m)
20' (6.10m)



Engineering Data

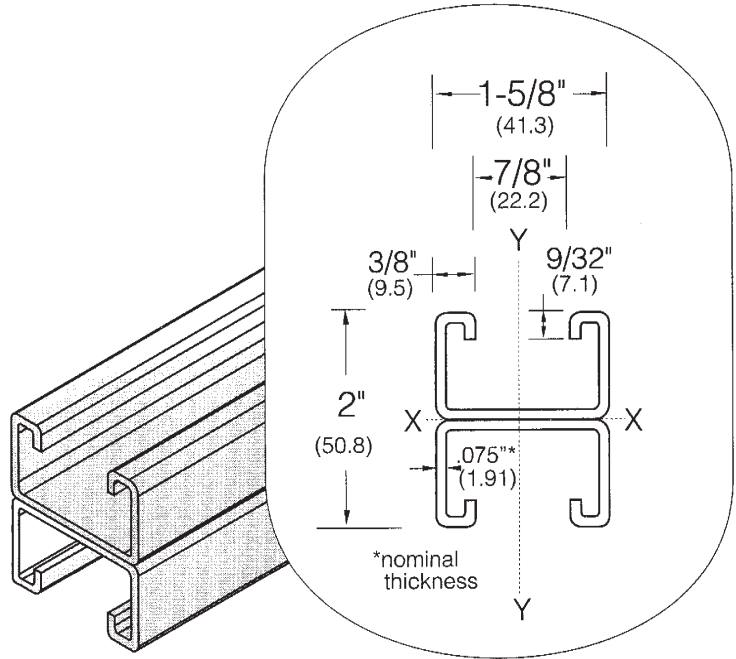
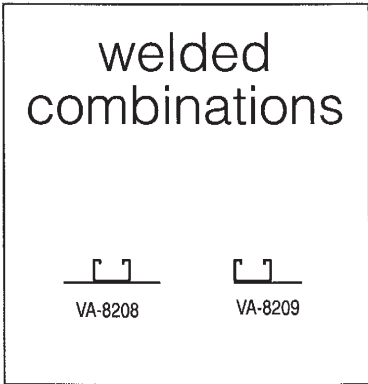
| | | | | | | | |
|---|--|-----------------------|-----------------|-----------------|--------------------------|--------------------------|---------------------------|
| elements of sections | | Sectional Area | | X-X axis | Moment of inertia | Section modulus | Radius of gyration |
| VA-8 | | | | | .044 In. 4 1.83 cm. 4 | .078 In. 3 1.27 cm. 3 | .348 In. .882 cm. |
| 14 ga. Wgt. Per L.F. 1.13 lbs. (Kg. Per M) (1.68) | | sq. in. | cm ² | Y-Y axis | Moment of inertia | Section modulus | Radius of gyration |
| | | .318 | 2.04 | | .121 In. 4 5.04 cm. 4 | .149 In. 3 2.43 cm. 3 | .396 In. 1.00 cm. |

| beam loading data | | | | | | column loading data | | | | | | | | | | | | |
|--------------------------------|-----------------------------------|-----|-------------------------------|------|--------------------------------|---------------------|--|--|------|-------|------|-------|------|-------|------|------|------|------|
| Span or Unbraced Column Height | Maximum Allowable Uniform Loading | | Deflection at Uniform Loading | | Uniform Loading at Deflections | | Maximum Allowable Loading at Slot Face K=.80 | Maximum Allowable Column Load Applied at Center of Gravity | | | | | | | | | | |
| | Lbs. | kN | in. | (mm) | Span/240 | Span/360 | | K=.65 | | K=.80 | | K=1.0 | | K=1.2 | | | | |
| in. (mm) | Lbs. | kN | in. | (mm) | Lbs. | kN | Lbs. | kN | Lbs. | kN | Lbs. | kN | Lbs. | kN | Lbs. | kN | | |
| 24 610 | 546 | 2.4 | 0.11 | 2.8 | 546 | 2.4 | 374 | 1.7 | 2166 | 9.6 | 4845 | 21.6 | 4548 | 20.2 | 4119 | 18.3 | 3588 | 16.0 |
| 36 914 | 390 | 1.7 | 0.23 | 5.8 | 234 | 1.0 | 156 | 0.7 | 1876 | 8.3 | 4332 | 19.3 | 3978 | 17.7 | 2739 | 12.2 | 2080 | 9.3 |
| 48 1219 | 250 | 1.1 | 0.42 | 10.7 | 136 | 0.6 | 93 | 0.4 | 1531 | 6.8 | 3819 | 17.0 | 3020 | 13.4 | 1870 | 8.3 | 1144 | 5.1 |
| 60 1524 | 210 | 0.9 | 0.64 | 16.3 | 93 | 0.4 | 56 | 0.2 | 1173 | 5.2 | 2793 | 12.4 | 1938 | 8.6 | 1127 | 5.0 | ** | ** |
| 72 1829 | 179 | 0.8 | 0.91 | 23.1 | 66 | 0.3 | 39 | 0.2 | 897 | 4.0 | 2052 | 9.1 | 1362 | 6.1 | ** | ** | ** | ** |
| 84 2134 | 156 | 0.7 | 1.23 | 31.2 | 46 | 0.2 | 31 | 0.1 | 690 | 3.1 | 1527 | 6.8 | 969 | 4.3 | ** | ** | ** | ** |
| 96 2438 | 132 | 0.6 | 1.60 | 40.6 | 37 | 0.2 | 25 | 0.1 | 586 | 2.6 | 1128 | 5.0 | ** | ** | ** | ** | ** | ** |
| 108 2743 | 109 | 0.5 | 1.98 | 50.3 | 28 | 0.1 | 17 | 0.1 | 496 | 2.2 | 855 | 3.8 | ** | ** | ** | ** | ** | ** |
| 120 3048 | 105 | 0.5 | 2.50 | 63.5 | 21 | 0.1 | 14 | 0.1 | 414 | 1.8 | ** | ** | ** | ** | ** | ** | ** | ** |

** $\frac{KL}{r} > 200$

NOTES

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Engineering Data

| | | | | | | | | |
|--|--|--|-----------------------|-----------------|-----------------|---------------------------|--------------------------|---------------------------|
| elements of sections | | | Sectional Area | | X-X axis | Moment of inertia | Section modulus | Radius of gyration |
| VA-8201 | | | sq. in. | cm ² | | .212 In. 4 8.82 cm. 4 | .212 In. 3 3.46 cm. 3 | .588 In. 1.49 cm. |
| 14 ga. Wgt. Per L.F. 2.20 lbs. (Kg. Per M) (3.276) | | | .636 | 4.11 | Y-Y axis | Moment of inertia | Section modulus | Radius of gyration |
| | | | | | | .242 In. 4 10.07 cm. 4 | .298 In. 3 4.87 cm. 3 | .396 In. 1.00 cm. |

| beam loading data | | | | | | | column loading data | | | | | | | | | | | |
|--------------------------------|-----------------------------------|---------|-------------------------------|------|--------------------------------|-----|---------------------|-----|--|--|-------|-------|-------|-------|-------|-------|-------|------|
| Span or Unbraced Column Height | Maximum Allowable Uniform Loading | | Deflection at Uniform Loading | | Uniform Loading at Deflections | | | | Maximum Allowable Loading at Slot Face K=.80 | Maximum Allowable Column Load Applied at Center of Gravity | | | | | | | | |
| | in. (mm) | Lbs. kN | in. (mm) | | Span/240 | | Span/360 | | | K=.65 | | K=.80 | | K=1.0 | | K=1.2 | | |
| 24 610 | 954 | 4.2 | 0.07 | 1.8 | 954 | 4.2 | 954 | 4.2 | 4028 | 17.9 | 11780 | 52.4 | 11340 | 50.4 | 10710 | 47.6 | 10395 | 46.2 |
| 36 914 | 954 | 4.2 | 0.10 | 2.5 | 954 | 4.2 | 845 | 3.8 | 3800 | 16.9 | 11160 | 49.6 | 10710 | 47.6 | 9450 | 42.0 | 8820 | 39.2 |
| 48 1219 | 834 | 3.7 | 0.20 | 5.1 | 829 | 3.7 | 553 | 2.5 | 3420 | 15.2 | 10540 | 46.9 | 9450 | 42.0 | 7560 | 33.6 | 6300 | 28.0 |
| 60 1524 | 663 | 2.9 | 0.32 | 8.1 | 529 | 2.4 | 347 | 1.5 | 3192 | 14.2 | 9300 | 41.4 | 7560 | 33.6 | 5670 | 25.2 | 3780 | 16.8 |
| 72 1829 | 553 | 2.5 | 0.46 | 11.7 | 363 | 1.6 | 244 | 1.1 | 2812 | 12.5 | 8060 | 35.9 | 6300 | 28.0 | 3780 | 16.8 | 2520 | 11.2 |
| 84 2134 | 475 | 2.1 | 0.62 | 15.7 | 268 | 1.2 | 173 | 0.8 | 2432 | 10.8 | 6820 | 30.3 | 4725 | 21.0 | 2520 | 11.2 | 1890 | 8.4 |
| 96 2438 | 413 | 1.8 | 0.81 | 20.6 | 205 | 0.9 | 134 | 0.6 | 2052 | 9.1 | 5580 | 24.8 | 3780 | 16.8 | 1890 | 8.4 | ** | ** |
| 108 2743 | 366 | 1.6 | 1.03 | 26.2 | 158 | 0.7 | 102 | 0.5 | 1748 | 7.8 | 4340 | 19.3 | 2520 | 11.2 | 1260 | 5.6 | ** | ** |
| 120 3048 | 327 | 1.5 | 1.27 | 32.3 | 126 | 0.6 | 86 | 0.4 | 1520 | 6.8 | 3100 | 13.8 | 1890 | 8.4 | ** | ** | ** | ** |

NOTES

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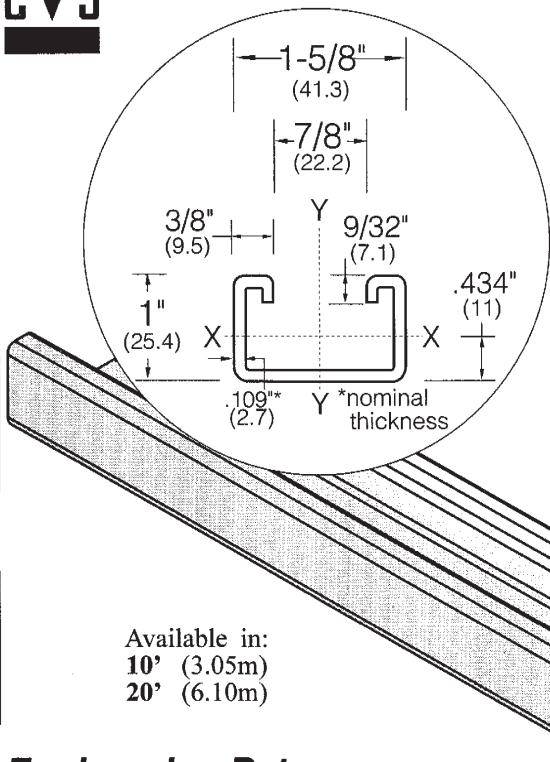
(Uniform beam loading on 24" and 36" spans limited by weld shear.)



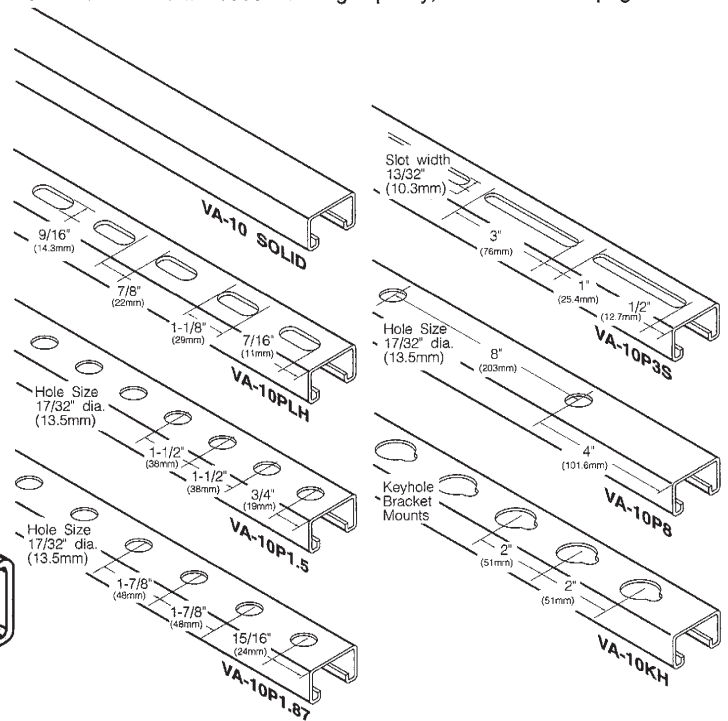
VERSABAR CORPORATION

| Produced and stocked in the following finishes and materials: | | | | | |
|---|-------|----------|----------|--------|--------|
| | | | | | |
| G-90 Galv. | Green | Aluminum | H.R.P.O. | SS 304 | SS 316 |

Note: Perforated channel has a reduced loading capacity, see introduction pages 6 & 7.



Available in:
 10' (3.05m)
 20' (6.10m)



Engineering Data

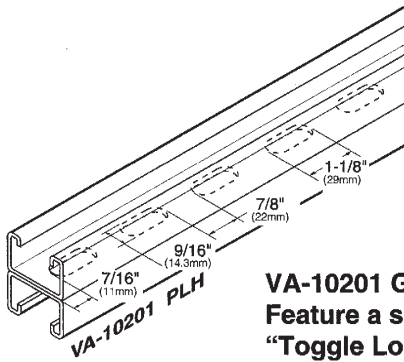
| | | | | | | | |
|---|--|-----------------------|-----------------|-----------------|---------------------------|---------------------------|---------------------------|
| elements of sections | | Sectional Area | | X-X axis | Moment of inertia | Section modulus | Radius of gyration |
| VA-10 | | | | | .0533 In. 4 2.22 cm. 4 | .0923 In. 3 1.51 cm. 3 | .356 In. .90 cm. |
| 12 ga. Wgt. Per L.F. 1.44 lbs. (Kg. Per M) (2.14) | | sq. in. | cm ² | Y-Y axis | Moment of inertia | Section modulus | Radius of gyration |
| | | .424 | 2.73 | | .1598 In. 4 6.65 cm. 4 | .1967 In. 3 3.22 cm. 3 | .616 In. 1.56 cm. |

| beam loading data | | | | | column loading data | | | | | | | | | | | | | |
|--------------------------------|-----------------------------------|-----|-------------------------------|------|--------------------------------|-----|---|--|------|------|------|-------|------|-------|------|------|------|------|
| Span or Unbraced Column Height | Maximum Allowable Uniform Loading | | Deflection at Uniform Loading | | Uniform Loading at Deflections | | Maximum Allowable Loading at Slot Face K=80 | Maximum Allowable Column Load Applied at Center of Gravity | | | | | | | | | | |
| | Lbs. | kN | in. | mm | Lbs. | kN | | K=65 | | K=80 | | K=1.0 | | K=1.2 | | | | |
| in. (mm) | Lbs. | kN | in. | mm | Lbs. | kN | Lbs. | kN | Lbs. | kN | Lbs. | kN | Lbs. | kN | Lbs. | kN | | |
| 24 610 | 762 | 3.4 | 0.10 | 2.5 | 762 | 3.4 | 578 | 2.6 | 3141 | 14.0 | 8538 | 38.0 | 8133 | 36.2 | 7585 | 33.7 | 7047 | 31.3 |
| 36 914 | 506 | 2.3 | 0.22 | 5.6 | 385 | 1.7 | 256 | 1.1 | 2721 | 12.1 | 7555 | 33.6 | 7048 | 31.4 | 5921 | 26.3 | 4333 | 19.3 |
| 48 1219 | 379 | 1.7 | 0.40 | 10.2 | 216 | 1.0 | 143 | 0.6 | 2225 | 9.9 | 6787 | 30.2 | 5402 | 24.0 | 3509 | 15.6 | 2438 | 10.8 |
| 60 1524 | 305 | 1.4 | 0.62 | 15.7 | 138 | 0.6 | 92 | 0.4 | 1719 | 7.6 | 5271 | 23.4 | 3509 | 15.6 | 2245 | 10.0 | ** | ** |
| 72 1829 | 254 | 1.1 | 0.89 | 22.6 | 95 | 0.4 | 64 | 0.3 | 1349 | 6.0 | 3693 | 16.4 | 2438 | 10.8 | ** | ** | ** | ** |
| 84 2134 | 219 | 1.0 | 1.20 | 30.5 | 70 | 0.3 | 47 | 0.2 | 1085 | 4.8 | 2712 | 12.1 | 1789 | 8.0 | ** | ** | ** | ** |
| 96 2438 | 190 | 0.8 | 1.58 | 40.1 | 54 | 0.2 | 36 | 0.2 | 891 | 4.0 | 2077 | 9.2 | ** | ** | ** | ** | ** | ** |
| 108 2743 | 170 | 0.8 | 1.95 | 49.5 | 42 | 0.2 | 29 | 0.1 | 742 | 3.3 | 1641 | 7.3 | ** | ** | ** | ** | ** | ** |
| 120 3048 | 154 | 0.7 | 2.47 | 62.7 | 35 | 0.2 | 23 | 0.1 | 625 | 2.8 | ** | ** | ** | ** | ** | ** | ** | ** |

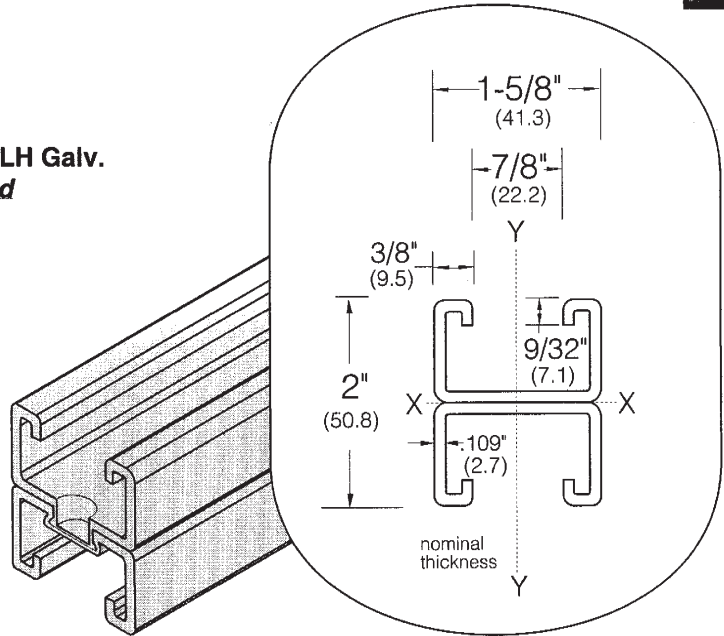
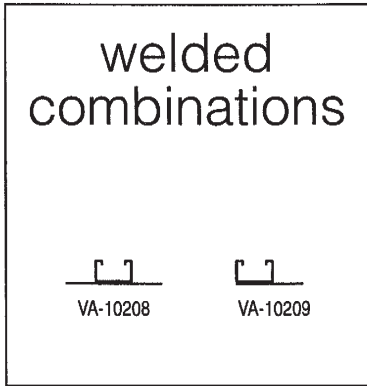
$$** \frac{KL}{r} > 200$$

NOTES

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VA-10201 Galv. & VA-10201-PLH Galv.
 Feature a superior *non-welded*
 "Toggle Lock" design.



cross sectional cut of spot connection shown for illustrational purposes

Engineering Data

| | | | | | | | |
|----------------------|---|-----------------------|-----------------|-----------------|--|---|---------------------------|
| elements of sections | | Sectional Area | | X-X axis | Moment of inertia | Section modulus | Radius of gyration |
| VA-10201 | | sq. in. | cm ² | | .2570 In. ⁴ 10.70 cm. ⁴ | .2570 In. ³ 4.21 cm. ³ | .552 In. 1.40 cm. |
| 12 ga. | Wgt. Per L.F. 2.88 lbs. (Kg. Per M) (4.28) | .847 | 5.46 | Y-Y axis | .3196 In. ⁴ 13.30 cm. ⁴ | .3933 In. ³ 6.44 cm. ³ | .616 In. 1.56 cm. |

| beam loading data | | | | | | column loading data | | | | | | | | | | | | |
|--------------------------------|-----------------------------------|---------|-------------------------------|----------|--------------------------------|---------------------|--|--|------|-------|-------|-------|-------|-------|-------|------|-------|------|
| Span or Unbraced Column Height | Maximum Allowable Uniform Loading | | Deflection at Uniform Loading | | Uniform Loading at Deflections | | Maximum Allowable Loading at Slot Face K=.80 | Maximum Allowable Column Load Applied at Center of Gravity | | | | | | | | | | |
| | in. (mm) | Lbs. kN | in. (mm) | Span/240 | Span/360 | Lbs. kN | | K=.65 | | K=.80 | | K=1.0 | | K=1.2 | | | | |
| 24 610 | 1585 | 7.1 | 0.04 | 1.0 | 1585 | 7.1 | 1585 | 7.1 | 5561 | 24.7 | 20190 | 89.8 | 19695 | 87.6 | 18761 | 83.5 | 17594 | 78.3 |
| 36 914 | 1425 | 6.3 | 0.11 | 2.9 | 1425 | 6.3 | 1245 | 5.5 | 5229 | 23.3 | 18951 | 84.3 | 18054 | 80.3 | 16475 | 73.3 | 14025 | 62.4 |
| 48 1219 | 1069 | 4.8 | 0.20 | 5.2 | 1049 | 4.7 | 701 | 3.1 | 4809 | 21.4 | 17595 | 78.3 | 16106 | 71.6 | 13795 | 61.4 | 11211 | 49.9 |
| 60 1524 | 855 | 3.8 | 0.32 | 8.1 | 672 | 3.0 | 448 | 2.0 | 4347 | 19.3 | 15989 | 71.1 | 13889 | 61.8 | 10621 | 47.2 | 7485 | 33.3 |
| 72 1829 | 713 | 3.2 | 0.46 | 11.6 | 466 | 2.1 | 309 | 1.4 | 3849 | 17.1 | 14185 | 63.1 | 11381 | 50.6 | 7475 | 33.3 | 5188 | 23.1 |
| 84 2134 | 611 | 2.7 | 0.62 | 15.8 | 342 | 1.5 | 227 | 1.0 | 3328 | 14.8 | 12125 | 53.9 | 8636 | 38.4 | 5399 | 24.0 | 3785 | 16.8 |
| 96 2438 | 533 | 2.4 | 0.81 | 20.7 | 262 | 1.2 | 175 | 0.8 | 2868 | 12.8 | 9998 | 44.5 | 6602 | 29.4 | 4166 | 18.5 | ** | ** |
| 108 2743 | 474 | 2.1 | 1.03 | 26.1 | 206 | 0.9 | 138 | 0.6 | 2489 | 11.1 | 7899 | 35.1 | 5222 | 23.2 | 3396 | 15.1 | ** | ** |
| 120 3048 | 427 | 1.9 | 1.27 | 32.3 | 167 | 0.7 | 111 | 0.5 | 2178 | 9.7 | 6405 | 28.5 | 4211 | 18.7 | ** | ** | ** | ** |

** $\frac{KL}{r} > 200$

NOTES

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- Maximum allowable uniformly distributed loads are listed for simple spans consisting of a beam on two supports. If load is to be concentrated at center of span, multiply given load by 0.5 and corresponding deflection figure by 0.8.

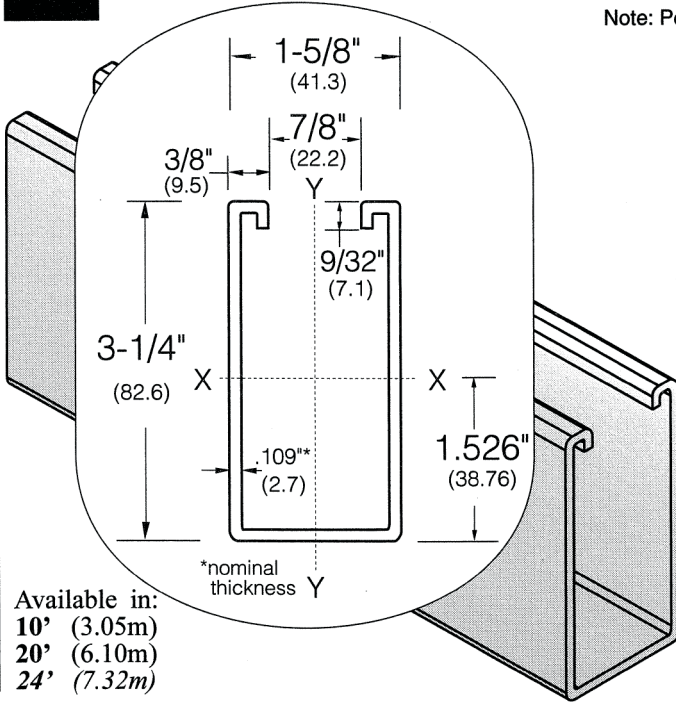
(Uniform beam loading on 24" and 36" spans limited by weld shear.)



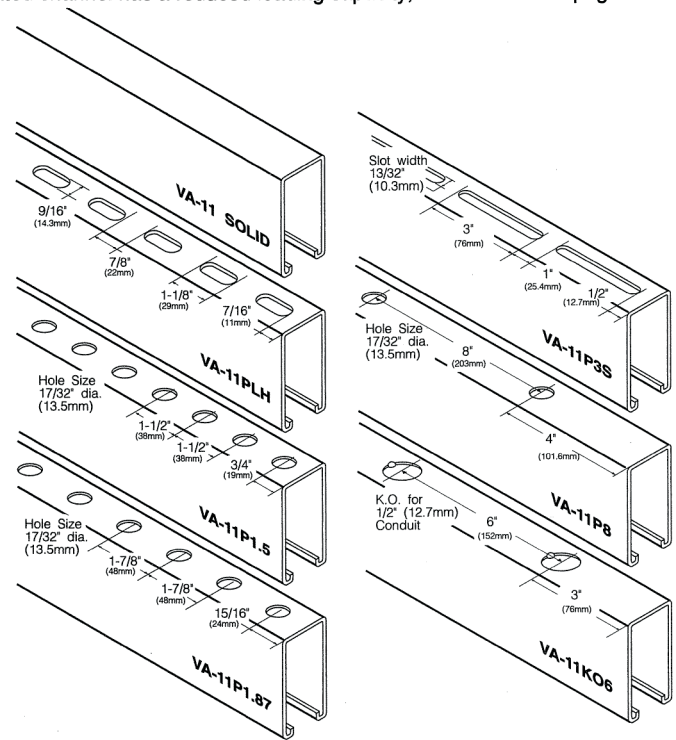
VERSABAR CORPORATION

| Produced and stocked in the following finishes and materials: | | | | | |
|---|-------|----------|----------|--------|--------|
| ● | ○ | ○ | ○ | ○ | ● |
| G-90 Galv. | Green | Aluminum | H.R.P.O. | SS 304 | SS 316 |

Note: Perforated channel has a reduced loading capacity, see introduction pages 6 & 7.



Available in:
 10' (3.05m)
 20' (6.10m)
 24' (7.32m)



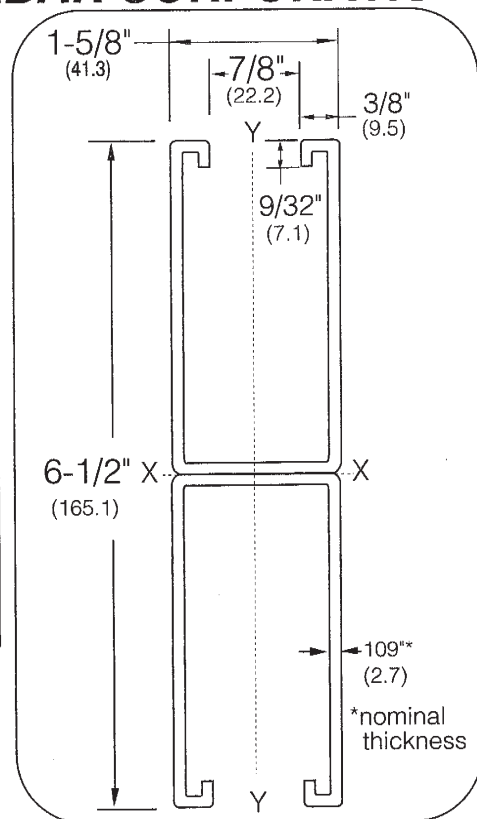
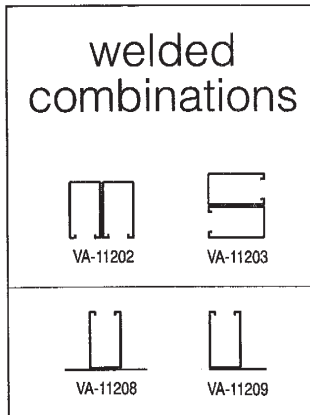
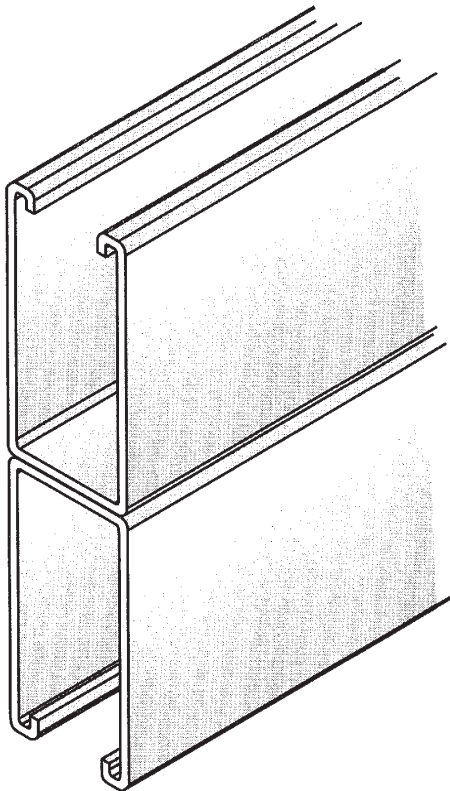
Engineering Data

| elements of sections | | Sectional Area | | X-X axis | Moment of inertia | Section modulus | Radius of gyration |
|----------------------|------------------------------|---------------------|----------------------------|----------|---|--|-----------------------|
| VA-11 | | | | | 1.0917 In. ⁴ 45.44 cm. ⁴ | .6278 In. ³ 10.29 cm. ³ | 1.112 In. 2.82 cm. |
| 12 ga. | Wgt. Per L.F. (Kg. Per M) | 3.05 lbs. (4.54) | sq. in. cm ² | Y-Y axis | Moment of inertia | Section modulus | Radius of gyration |
| | | | .897 5.79 | | .4271 In. ⁴ 17.78 cm. ⁴ | .5256 In. ³ 8.61 cm. ³ | .696 In. 1.77 cm. |

| beam loading data | | | | | | column loading data | | | | | | | | | | |
|--------------------------------|-----------------------------------|------|-------------------------------|------|--------------------------------|---------------------|---|--|------|-------|------|-------|------|-------|--------------|------|
| Span or Unbraced Column Height | Maximum Allowable Uniform Loading | | Deflection at Uniform Loading | | Uniform Loading at Deflections | | Maximum Allowable Loading at Slot Face K=.80 | Maximum Allowable Column Load Applied at Center of Gravity | | | | | | | | |
| | Lbs. | kN | in. | (mm) | Lbs. | kN | | K=.65 | | K=.80 | | K=1.0 | | K=1.2 | | |
| in. (mm) | Lbs. | kN | in. | (mm) | Lbs. | kN | Lbs. | kN | Lbs. | kN | Lbs. | kN | Lbs. | kN | Lbs. | kN |
| 24 610 | 5235 | 23.3 | 0.03 | 0.7 | 5235 | 23.3 | 4700 | 20.9 | 8500 | 37.8 | 8200 | 36.5 | 7900 | 35.1 | 7400 | 32.9 |
| 36 914 | 3487 | 15.5 | 0.07 | 1.7 | 3487 | 15.5 | 4200 | 18.7 | 7900 | 35.1 | 7400 | 32.9 | 6600 | 29.4 | 5700 | 25.4 |
| 48 1219 | 2618 | 11.6 | 0.12 | 3.0 | 2618 | 11.6 | 3400 | 15.1 | 6000 | 26.7 | 5800 | 25.8 | 5000 | 22.2 | 3900 | 17.3 |
| 60 1524 | 2090 | 9.3 | 0.18 | 4.6 | 2100 | 9.3 | 2700 | 12.0 | 5000 | 22.2 | 4500 | 20.0 | 3600 | 16.0 | 3000 | 13.3 |
| 72 1829 | 1745 | 7.8 | 0.26 | 6.7 | 1745 | 7.8 | 2300 | 10.2 | 4000 | 17.8 | 3500 | 15.6 | 2795 | 12.4 | 2300 | 10.2 |
| 84 2134 | 1492 | 6.6 | 0.36 | 9.1 | 1465 | 6.5 | 1900 | 8.5 | 3000 | 13.3 | 2700 | 12.0 | 2300 | 10.2 | 1900 | 8.5 |
| 96 2438 | 1309 | 5.8 | 0.47 | 11.9 | 1122 | 5.0 | 1600 | 7.1 | 2800 | 12.5 | 2300 | 10.2 | 1970 | 8.8 | 1600 | 7.1 |
| 108 2743 | 1166 | 5.2 | 0.59 | 15.0 | 885 | 3.9 | 1350 | 6.0 | 2200 | 9.8 | 2000 | 8.9 | 1720 | 7.7 | 1500 | 6.7 |
| 120 3048 | 1042 | 4.6 | 0.73 | 18.6 | 716 | 3.2 | 1200 | 5.3 | 2000 | 8.9 | 1800 | 8.0 | 1530 | 6.8 | ** | ** |
| 144 3658 | 870 | 3.9 | 1.05 | 26.7 | 498 | 2.2 | | | | | | | | | **KL/r > 200 | |
| 168 4267 | 748 | 3.3 | 1.43 | 36.4 | 367 | 1.6 | | | | | | | | | | |
| 192 4877 | 656 | 2.9 | 1.87 | 47.5 | 279 | 1.2 | | | | | | | | | | |
| 216 5486 | 580 | 2.6 | 2.37 | 60.1 | 219 | 1.0 | | | | | | | | | | |
| 240 6096 | 524 | 2.3 | 2.92 | 74.3 | 178 | 0.8 | | | | | | | | | | |

NOTES

- Long spans may have to be braced to prevent rotation and twist.
- Beam loading data already includes the weight of the member. This weight will have to be deducted in order to arrive at the net allowable load said beam span will carry.
- Maximum allowable uniformly distributed loads are listed for simple spans consisting of a beam on two supports. If load is to be concentrated at center of span, multiply given load by 0.5 and corresponding deflection figure by 0.8.



Engineering Data

elements of sections

VA-11201

12 ga. Wgt. Per L.F. 6.10 lbs. (Kg. Per M) (9.08)

| Sectional Area | |
|----------------|-----------------|
| sq. in. | cm ² |
| 1.794 | 11.59 |

| X-X axis | Moment of inertia | Section modulus | Radius of gyration |
|----------|--|---|-----------------------|
| | 6.2139 In. ⁴ 258.64 cm. ⁴ | 1.9120 In. ³ 31.33 cm. ³ | 1.876 In. 4.76 cm. |
| Y-Y axis | Moment of inertia | Section modulus | Radius of gyration |
| | .8542 In. ⁴ 35.55 cm. ⁴ | 1.0513 In. ³ 17.23 cm. ³ | .696 In. 1.77 cm. |

| beam loading data | | | | | | column loading data | | | | | | | | | |
|--------------------------------|-----------------------------------|-----------|-------------------------------|-----------|--------------------------------|---------------------|--|--|------------|---------|---------|---------|---------|---------|---------|
| Span or Unbraced Column Height | Maximum Allowable Uniform Loading | | Deflection at Uniform Loading | | Uniform Loading at Deflections | | Maximum Allowable Loading at Slot Face K=.80 | Maximum Allowable Column Load Applied at Center of Gravity | | | | | | | |
| | in. (mm) | Lbs. kN | in. (mm) | | Span/240 | Span/360 | | K=.65 | | K=.80 | | K=1.0 | | K=1.2 | |
| | | | | | Lbs. kN | Lbs. kN | Lbs. kN | Lbs. kN | Lbs. kN | Lbs. kN | Lbs. kN | Lbs. kN | Lbs. kN | Lbs. kN | Lbs. kN |
| 24 610 | 5132 22.8 | 0.01 0.1 | 5132 22.8 | 5132 22.8 | 7740 34.4 | 18200 81.0 | 17710 78.8 | 17600 78.3 | 17500 77.8 | | | | | | |
| 36 914 | 5132 22.8 | 0.02 0.4 | 5132 22.8 | 5132 22.8 | 7700 34.3 | 17590 78.2 | 17420 77.5 | 17200 76.5 | 16800 74.7 | | | | | | |
| 48 1219 | 5132 22.8 | 0.04 1.0 | 5132 22.8 | 5132 22.8 | 7500 33.4 | 17300 77.0 | 17020 75.7 | 16600 73.8 | 15900 70.7 | | | | | | |
| 60 1524 | 4525 20.1 | 0.08 2.0 | 4525 20.1 | 4525 20.1 | 7400 32.9 | 17000 75.6 | 16600 73.8 | 15800 70.3 | 14800 65.8 | | | | | | |
| 72 1829 | 3775 16.8 | 0.11 2.8 | 3775 16.8 | 3775 16.8 | 6200 27.6 | 16600 73.8 | 15900 70.7 | 14900 66.3 | 13400 59.6 | | | | | | |
| 84 2134 | 3240 14.4 | 0.15 3.8 | 3240 14.4 | 3240 14.4 | 5000 22.2 | 16200 72.1 | 15200 67.6 | 13700 60.9 | 11700 52.0 | | | | | | |
| 96 2438 | 2840 12.6 | 0.20 5.1 | 2840 12.6 | 2840 12.6 | 4050 18.0 | 15700 69.8 | 14300 63.6 | 13000 57.8 | 9800 43.6 | | | | | | |
| 108 2743 | 2515 11.2 | 0.25 6.4 | 2515 11.2 | 2515 11.2 | 3340 14.9 | 15000 66.7 | 13400 59.6 | 11000 48.9 | 7800 34.7 | | | | | | |
| 120 3048 | 2270 10.1 | 0.31 7.9 | 2270 10.1 | 2270 10.1 | 2790 12.4 | 14600 64.9 | 12600 56.0 | 9100 40.5 | ** | | | | | | |
| 144 3658 | 1890 8.4 | 0.44 11.2 | 1890 8.4 | 1695 7.5 | | | | | | | | | | | |
| 168 4267 | 1620 7.2 | 0.60 15.2 | 1620 7.2 | 1250 5.6 | | | | | | | | | | | |
| 192 4877 | 1415 6.3 | 0.79 20.1 | 1415 6.3 | 960 4.3 | | | | | | | | | | | |
| 216 5486 | 1270 5.6 | 1.00 25.4 | 1140 5.1 | 760 3.4 | | | | | | | | | | | |
| 240 6096 | 1140 5.1 | 1.24 31.5 | 915 4.1 | 620 2.8 | | | | | | | | | | | |

NOTE

- Long spans may have to be braced to prevent rotation and twist.
- Beam loading data already includes the weight of the member. This weight will have to be deducted in order to arrive at the net allowable load said beam span will carry.
- Maximum allowable uniformly distributed loads are listed for simple spans consisting of a beam on two supports. If load is to be concentrated at center of span, multiply given load by 0.5 and corresponding deflection figure by 0.8.

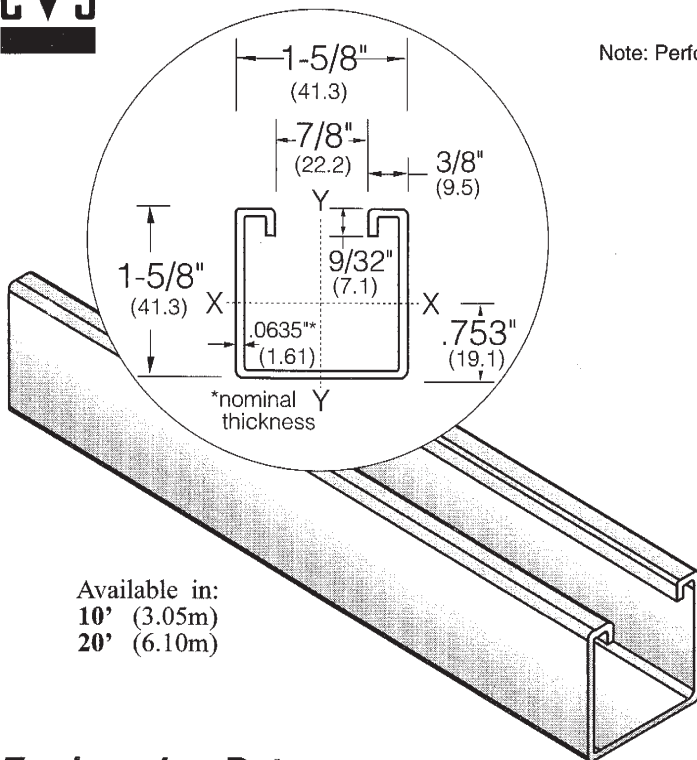
(Uniform beam loading on 24" and 36" spans limited by weld shear.)



VERSABAR CORPORATION

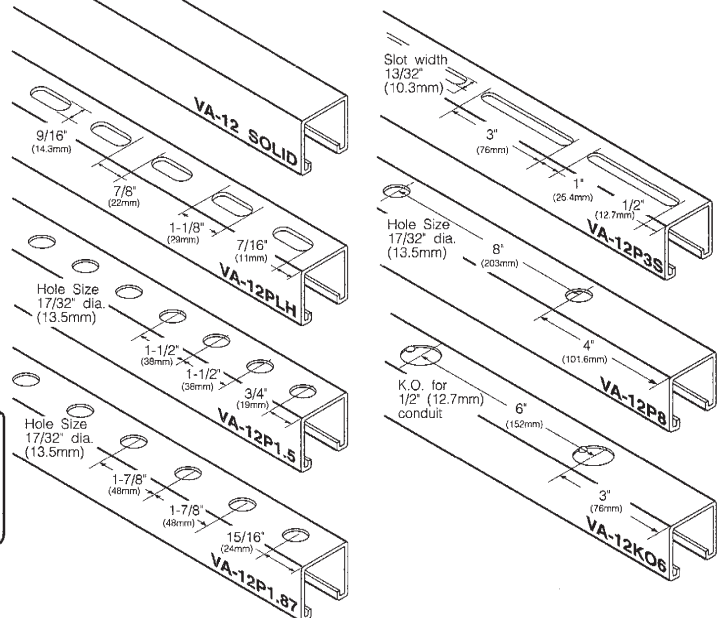
| | | | | | |
|------------|-------|----------|----------|--------|--------|
| ● | ○ | ○ | ○ | ○ | ○ |
| G-90 Galv. | Green | Aluminum | H.R.P.O. | SS 304 | SS 316 |

Note: Perforated channel has a reduced loading capacity, see introduction pages 6 & 7.



Available in:
10' (3.05m)
20' (6.10m)

Special Order Item - Non Stock



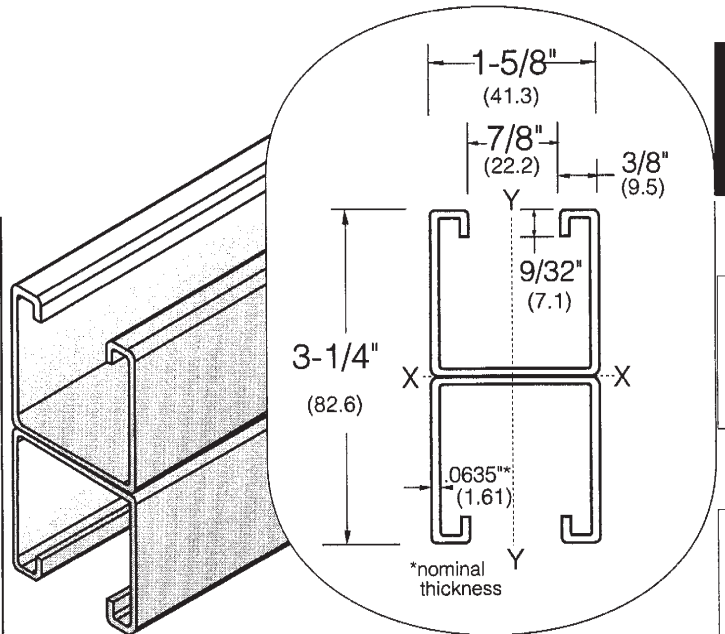
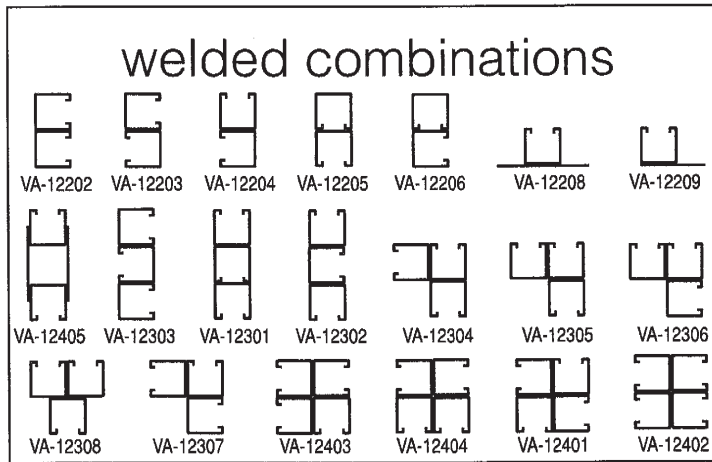
Engineering Data

| | | | | | | | |
|----------------------|---|-----------------------|-----------------|-----------------|--|---|---------------------------|
| elements of sections | | Sectional Area | | X-X axis | Moment of inertia | Section modulus | Radius of gyration |
| VA-12 | | sq. in. | cm ² | | .123 In. ⁴ 5.11 cm. ⁴ | .140 In. ³ 2.288 cm. ³ | .610 In. 1.546 cm. |
| 16 ga. | Wgt. Per L.F. 1.20 lbs. (Kg. Per M) (1.787) | .340 | 2.20 | Y-Y axis | Moment of inertia | Section modulus | Radius of gyration |
| | | | | | .149 In. ⁴ 6.20 cm. ⁴ | .184 In. ³ 3.00 cm. ³ | .672 In. 1.704 cm. |

| beam loading data | | | | | | | column loading data | | | | | | | | | | |
|--------------------------------|-----------------------------------|----------|-------------------------------|--|--------------------------------|----------|---------------------|----------|--|--|-----------|-----------|-----------|-----------|-----------|-------|--|
| Span or Unbraced Column Height | Maximum Allowable Uniform Loading | | Deflection at Uniform Loading | | Uniform Loading at Deflections | | | | Maximum Allowable Loading at Slot Face K=.80 | Maximum Allowable Column Load Applied at Center of Gravity | | | | | | | |
| | in. (mm) | Lbs. kN | in. (mm) | | Span/240 | | Span/360 | | | K=.65 | | K=.80 | | K=1.0 | | K=1.2 | |
| 24 | 610 | 1160 5.2 | 0.06 1.4 | | 1160 5.2 | 1160 5.2 | 1160 5.2 | 2100 9.3 | 3850 17.1 | 3730 16.6 | 3550 15.8 | 3330 14.8 | 3330 14.8 | 2960 13.2 | 2540 11.3 | | |
| 36 | 914 | 770 3.4 | 0.13 3.3 | | 770 3.4 | 600 2.7 | 770 3.4 | 1740 7.7 | 3450 15.3 | 3330 14.8 | 2960 13.2 | 2540 11.3 | 2540 11.3 | 2290 10.2 | 1970 8.8 | | |
| 48 | 1219 | 578 2.6 | 0.23 5.8 | | 500 2.2 | 335 1.5 | 500 2.2 | 1220 5.4 | 1940 8.6 | 1870 8.3 | 1770 7.9 | 1660 7.4 | 1660 7.4 | 1510 6.7 | 1330 5.9 | | |
| 60 | 1524 | 462 2.1 | 0.36 9.1 | | 320 1.4 | 207 0.9 | 320 1.4 | 890 4.0 | 1240 5.5 | 1200 5.3 | 1130 5.0 | 1060 4.7 | 1060 4.7 | 960 4.2 | 830 3.7 | | |
| 72 | 1829 | 382 1.7 | 0.51 13.1 | | 220 1.0 | 148 0.7 | 220 1.0 | 670 3.0 | 860 3.8 | 830 3.7 | 780 3.5 | 730 3.2 | 730 3.2 | 670 2.9 | 580 2.6 | | |
| 84 | 2134 | 328 1.5 | 0.70 17.8 | | 160 0.7 | 106 0.5 | 160 0.7 | 510 2.3 | 630 2.8 | 600 2.7 | 570 2.5 | 540 2.4 | 540 2.4 | 490 2.2 | 420 1.9 | | |
| 96 | 2438 | 287 1.3 | 0.91 23.2 | | 120 0.5 | 83 0.4 | 120 0.5 | 400 1.8 | 480 2.1 | 460 2.0 | 440 2.0 | 410 1.8 | 410 1.8 | 370 1.6 | 310 1.4 | | |
| 108 | 2743 | 255 1.1 | 1.16 29.4 | | 95 0.4 | 62 0.3 | 95 0.4 | 320 1.4 | 370 1.6 | 360 1.6 | 350 1.6 | 330 1.5 | 330 1.5 | 300 1.3 | 250 1.1 | | |
| 120 | 3048 | 230 1.0 | 1.43 36.2 | | 77 0.3 | 46 0.2 | 77 0.3 | 270 1.2 | 300 1.3 | 290 1.3 | 290 1.3 | 270 1.2 | 270 1.2 | 240 1.0 | 200 0.9 | | |
| 144 | 3658 | 190 0.8 | 2.13 54.1 | | 52 0.2 | 35 0.2 | 52 0.2 | | | | | | | | | | |
| 168 | 4267 | 160 0.7 | 2.87 72.9 | | 32 0.1 | 27 0.1 | 32 0.1 | | | | | | | | | | |
| 192 | 4877 | 140 0.6 | 3.78 96.0 | | 20 0.1 | | 20 0.1 | | | | | | | | | | |
| 216 | 5486 | 120 0.5 | 4.66 118.4 | | 15 0.1 | | 15 0.1 | | | | | | | | | | |
| 240 | 6096 | 110 0.5 | 5.90 149.9 | | | | | | | | | | | | | | |

NOTES

- Long spans may have to be braced to prevent rotation and twist.
- Beam loading data already includes the weight of the member. This weight will have to be deducted in order to arrive at the net allowable load said beam span will carry.
- Maximum allowable uniformly distributed loads are listed for simple spans consisting of a beam on two supports. If load is to be concentrated at center of span, multiply given load by 0.5 and corresponding deflection figure by 0.8.



Special Order Item - Non Stock

Engineering Data

elements of sections
VA-12201
 16 ga. Wgt. Per L.F. 2.40 lbs. (Kg. Per M) (3.574)

| Sectional Area | |
|----------------|-----------------|
| sq. in. | cm ² |
| .681 | 4.40 |

| X-X axis | Moment of inertia | Section modulus | Radius of gyration |
|----------|---|---|------------------------|
| | .612 In. ⁴ 25.47 cm. ⁴ | .377 In. ³ 6.166 cm. ³ | .961 In. 2.436 cm. |
| Y-Y axis | Moment of inertia | Section modulus | Radius of gyration |
| | .299 In. ⁴ 12.44 cm. ⁴ | .368 In. ³ 6.019 cm. ³ | .672 In. 1.7037 cm. |

| beam loading data | | | | | | column loading data | | | | | | | | | | | | |
|--------------------------------|-----------------------------------|-----|-------------------------------|------|--------------------------------|---------------------|---|-----|--|------|------|------|------|------|------|------|------|------|
| Span or Unbraced Column Height | Maximum Allowable Uniform Loading | | Deflection at Uniform Loading | | Uniform Loading at Deflections | | Maximum Allowable Loading at Slot Face K=.80 | | Maximum Allowable Column Load Applied at Center of Gravity | | | | | | | | | |
| | Lbs. | kN | in. | (mm) | Lbs. | kN | | | Lbs. | kN | Lbs. | kN | Lbs. | kN | Lbs. | kN | Lbs. | kN |
| 24 610 | 1210 | 5.4 | 0.01 | 0.4 | 1210 | 5.4 | 1210 | 5.4 | 3590 | 16.0 | 8090 | 36.0 | 8050 | 35.8 | 7970 | 35.5 | 7880 | 35.1 |
| 36 914 | 1210 | 5.4 | 0.04 | 1.0 | 1210 | 5.4 | 1210 | 5.4 | 3520 | 15.7 | 7980 | 35.5 | 7880 | 35.1 | 7710 | 34.3 | 7500 | 33.4 |
| 48 1219 | 1210 | 5.4 | 0.10 | 2.4 | 1210 | 5.4 | 1210 | 5.4 | 3440 | 15.3 | 7830 | 34.8 | 7640 | 34.0 | 7340 | 32.7 | 6970 | 31.0 |
| 60 1524 | 1100 | 4.9 | 0.19 | 4.8 | 1100 | 4.9 | 1072 | 4.8 | 3060 | 13.6 | 7630 | 33.9 | 7340 | 32.7 | 6870 | 30.6 | 6290 | 28.0 |
| 72 1829 | 1050 | 4.7 | 0.28 | 7.1 | 1050 | 4.7 | 740 | 3.3 | 2380 | 10.6 | 7380 | 32.8 | 6970 | 31.0 | 6290 | 28.0 | 5460 | 24.3 |
| 84 2134 | 900 | 4.0 | 0.38 | 9.7 | 820 | 3.6 | 540 | 2.4 | 1880 | 8.4 | 7090 | 31.5 | 6540 | 29.1 | 5610 | 25.0 | 4480 | 19.9 |
| 96 2438 | 788 | 3.5 | 0.50 | 12.7 | 630 | 2.8 | 410 | 1.8 | 1510 | 6.7 | 6760 | 30.1 | 6030 | 26.8 | 4820 | 21.4 | 3460 | 15.4 |
| 108 2743 | 700 | 3.1 | 0.63 | 16.1 | 495 | 2.2 | 330 | 1.5 | 1230 | 5.5 | 6390 | 28.4 | 5460 | 24.3 | 3930 | 17.5 | 2730 | 12.1 |
| 120 3048 | 625 | 2.8 | 0.78 | 19.9 | 400 | 1.8 | 265 | 1.2 | 1010 | 4.5 | 5960 | 26.5 | 4825 | 21.5 | 3190 | 14.2 | ** | ** |
| 144 3658 | 518 | 2.3 | 1.13 | 28.7 | 275 | 1.2 | 185 | 0.8 | | | | | | | | | ** | ** |
| 168 4267 | 438 | 1.9 | 1.53 | 38.9 | 202 | 0.9 | 135 | 0.6 | | | | | | | | | | |
| 192 4877 | 385 | 1.7 | 2.03 | 51.6 | 155 | 0.7 | 105 | 0.5 | | | | | | | | | | |
| 216 5486 | 330 | 1.5 | 2.53 | 64.3 | 115 | 0.5 | 75 | 0.3 | | | | | | | | | | |
| 240 6096 | 302 | 1.3 | 3.17 | 80.5 | 95 | 0.4 | 65 | 0.3 | | | | | | | | | | |

** $\frac{KL}{r} > 200$

NOTES

- Long spans may have to be braced to prevent rotation and twist.
- Beam loading data already includes the weight of the member. This weight will have to be deducted in order to arrive at the net allowable load said beam span will carry.
- Maximum allowable uniformly distributed loads are listed for simple spans consisting of a beam on two supports. If load is to be concentrated at center of span, multiply given load by 0.5 and corresponding deflection figure by 0.8.

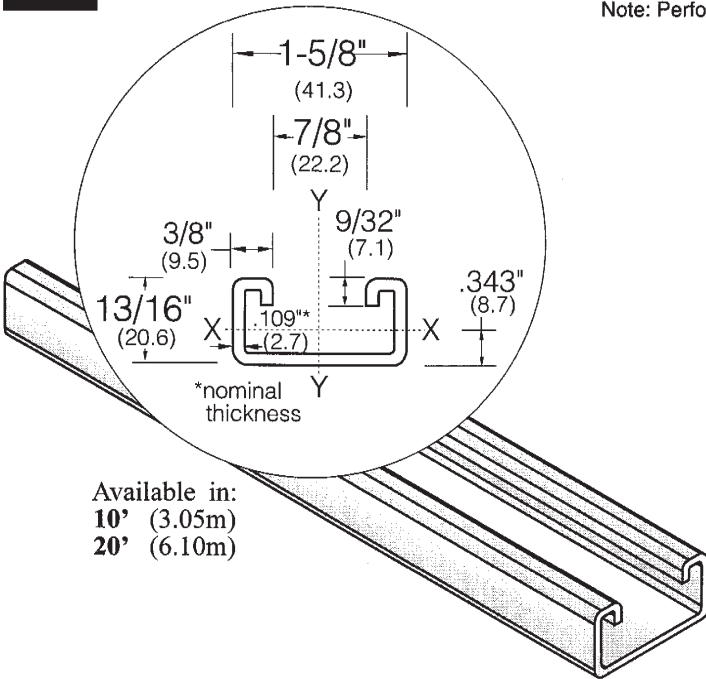
(Uniform beam loading on 24" and 36" spans limited by weld shear.)



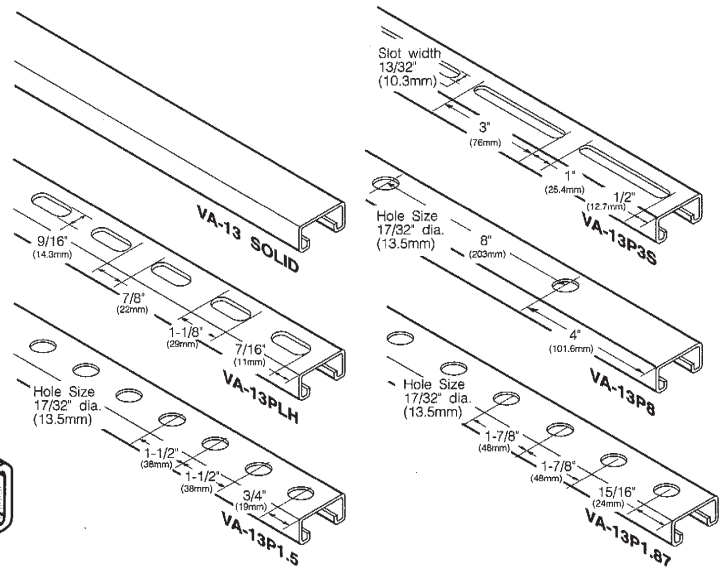
VERSABAR CORPORATION

| Produced and stocked in the following finishes and materials: | | | | | |
|---|-------|----------|----------|--------|--------|
| ● | ○ | ○ | ○ | ○ | ○ |
| G-90 Galv. | Green | Aluminum | H.R.P.O. | SS 304 | SS 316 |

Note: Perforated channel has a reduced loading capacity, see introduction pages 6 & 7.



Available in:
10' (3.05m)
20' (6.10m)



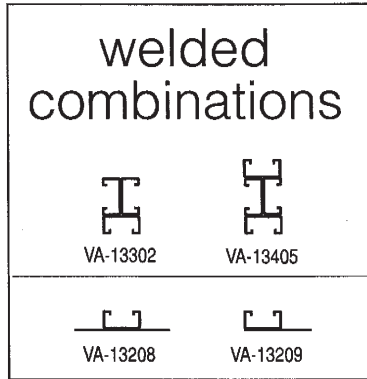
Engineering Data

| | | | | | | | | | | | | | |
|----------------------|--|--|--|-------------------------|--|--------------------------|--|--------------------------|--|---------------------------|--|---------------------------|--|
| elements of sections | | Sectional Area | | X-X axis | | Moment of inertia | | Section modulus | | Radius of gyration | | | |
| VA-13 | | | | | | | | | | | | | |
| 12 ga. | | Wgt. Per L.F. 1.27 lbs. (Kg. Per M) (1.89) | | sq. in. cm ² | | Y-Y axis | | Moment of inertia | | Section modulus | | Radius of gyration | |
| | | .374 2.41 | | | | | | | | | | | |

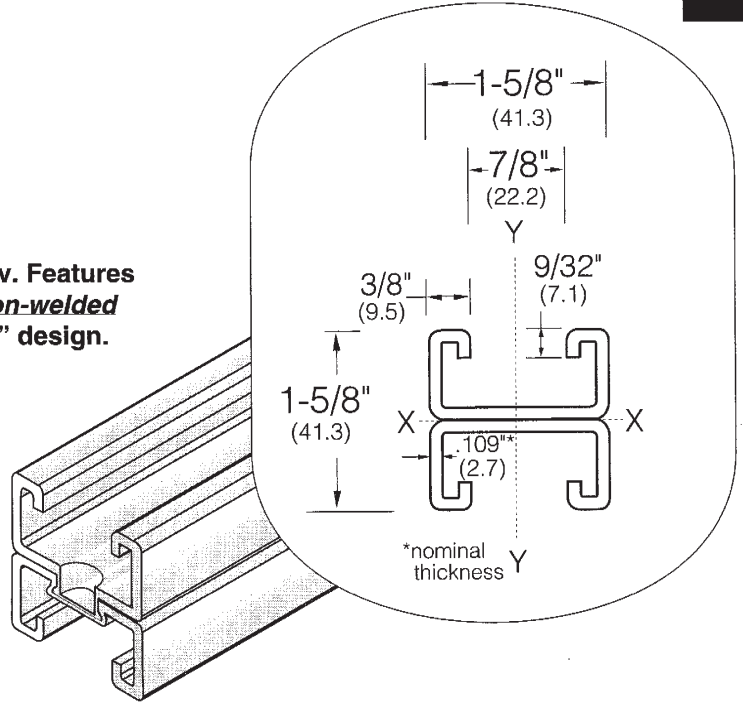
| beam loading data | | | | | | | | column loading data | | | | | | | | | | | | |
|--------------------------------|-----------------------------------|------|-------------------------------|------|--------------------------------|------|----------|---------------------|--|------|--|------|-------|------|-------|------|-------|------|-------|----|
| Span or Unbraced Column Height | Maximum Allowable Uniform Loading | | Deflection at Uniform Loading | | Uniform Loading at Deflections | | | | Maximum Allowable Loading at Slot Face K=.80 | | Maximum Allowable Column Load Applied at Center of Gravity | | | | | | | | | |
| | in. | (mm) | Lbs. | kN | in. | (mm) | Span/240 | | | | Span/360 | | K=.65 | | K=.80 | | K=1.0 | | K=1.2 | |
| | | | | | | | Lbs. | kN | Lbs. | kN | Lbs. | kN | Lbs. | kN | Lbs. | kN | Lbs. | kN | Lbs. | kN |
| 24 | 610 | 532 | 2.4 | 0.11 | 2.7 | 502 | 2.2 | 332 | 1.5 | 2750 | 12.2 | 7870 | 35.0 | 7510 | 33.4 | 6515 | 29.0 | 5390 | 24.0 | |
| 36 | 914 | 358 | 1.6 | 0.24 | 6.1 | 223 | 1.0 | 145 | 0.6 | 2150 | 9.6 | 6650 | 29.6 | 5390 | 24.0 | 3600 | 16.0 | 2500 | 11.1 | |
| 48 | 1219 | 265 | 1.2 | 0.43 | 10.8 | 122 | 0.5 | 80 | 0.4 | 1558 | 6.9 | 4780 | 21.3 | 3170 | 14.1 | 2030 | 9.0 | ** | ** | |
| 60 | 1524 | 212 | 0.9 | 0.67 | 16.9 | 78 | 0.3 | 52 | 0.2 | 1158 | 5.2 | 3078 | 13.7 | 2030 | 9.0 | ** | ** | ** | ** | |
| 72 | 1829 | 175 | 0.8 | 0.96 | 24.4 | 54 | 0.2 | 34 | 0.2 | 888 | 4.0 | 2135 | 9.5 | ** | ** | ** | ** | ** | ** | |
| 84 | 2134 | 152 | 0.7 | 1.31 | 33.2 | 39 | 0.2 | 25 | 0.1 | 700 | 3.1 | 1570 | 7.0 | ** | ** | ** | ** | ** | ** | |
| 96 | 2438 | 132 | 0.6 | 1.71 | 43.4 | 30 | 0.1 | 20 | 0.1 | 565 | 2.5 | ** | ** | ** | ** | ** | ** | ** | ** | |
| 108 | 2743 | 118 | 0.5 | 2.16 | 54.9 | 22 | 0.1 | 16 | 0.1 | 460 | 2.0 | ** | ** | ** | ** | ** | ** | ** | ** | |
| 120 | 3048 | 102 | 0.5 | 2.67 | 67.7 | 18 | 0.1 | 12 | 0.1 | 390 | 1.7 | ** | ** | ** | ** | ** | ** | ** | ** | |

**KL/r > 200

- N**
O
T
E
S
- Long spans may have to be braced to prevent rotation and twist.
 - Beam loading data already includes the weight of the member. This weight will have to be deducted in order to arrive at the net allowable load said beam span will carry.
 - Maximum allowable uniformly distributed loads are listed for simple spans consisting of a beam on two supports. If load is to be concentrated at center of span, multiply given load by 0.5 and corresponding deflection figure by 0.8.



VA-13201 Galv. Features a superior *non-welded* "Toggle Lock" design.



cross sectional cut of spot connection shown for illustrational purposes

Engineering Data

elements of sections

VA-13201

12 ga. Wgt. Per L.F. 2.54 lbs. (Kg. Per M) (3.78)

| Sectional Area | |
|----------------|-----------------|
| sq. in. | cm ² |
| .747 | 4.82 |

| X-X axis | Moment of inertia | Section modulus | Radius of gyration |
|----------|--|---|----------------------|
| | .1481 In. ⁴ 6.16 cm. ⁴ | .1823 In. ³ 2.99 cm. ³ | .440 In. 1.12 cm. |
| Y-Y axis | Moment of inertia | Section modulus | Radius of gyration |
| | .2750 In. ⁴ 11.44 cm. ⁴ | .3385 In. ³ 5.55 cm. ³ | .599 In. 1.52 cm. |

| beam loading data | | | | | | column loading data | | | | | | | | | | | |
|--------------------------------|-----------------------------------|-----------|-------------------------------|--------------------------------|-----------|---------------------|------------|---|--|------|-------|------|-------|------|-------|------|----|
| Span or Unbraced Column Height | Maximum Allowable Uniform Loading | | Deflection at Uniform Loading | Uniform Loading at Deflections | | | | Maximum Allowable Loading at Slot Face K=80 | Maximum Allowable Column Load Applied at Center of Gravity | | | | | | | | |
| | in. (mm) | Lbs. kN | | in. (mm) | Span/240 | | Span/360 | | K=.65 | | K=.80 | | K=1.0 | | K=1.2 | | |
| | | | | Lbs. | kN | Lbs. | kN | Lbs. | kN | Lbs. | kN | Lbs. | kN | Lbs. | kN | Lbs. | kN |
| 24 610 | 1268 5.6 | 0.05 1.3 | 1268 5.6 | 1268 5.6 | 4950 22.0 | 18140 80.7 | 17400 77.4 | 16410 73.0 | 15270 67.9 | | | | | | | | |
| 36 914 | 1011 4.5 | 0.14 3.6 | 1011 4.5 | 715 3.2 | 4490 20.0 | 16540 73.6 | 15200 67.6 | 13370 59.5 | 11240 50.0 | | | | | | | | |
| 48 1219 | 755 3.4 | 0.25 6.4 | 602 2.7 | 400 1.8 | 3960 17.6 | 14650 65.2 | 12690 56.4 | 9680 43.1 | 6775 30.1 | | | | | | | | |
| 60 1524 | 602 2.7 | 0.39 9.9 | 382 1.7 | 255 1.1 | 3380 15.0 | 12510 55.6 | 9680 43.1 | 6245 27.8 | 4330 19.3 | | | | | | | | |
| 72 1829 | 502 2.2 | 0.56 14.3 | 268 1.2 | 177 0.8 | 2795 12.4 | 10080 44.8 | 6775 30.1 | 4330 19.3 | 3010 13.4 | | | | | | | | |
| 84 2134 | 430 1.9 | 0.77 19.5 | 195 0.9 | 130 0.6 | 2330 10.4 | 7540 33.5 | 4980 22.2 | 3180 14.1 | ** ** | | | | | | | | |
| 96 2438 | 377 1.7 | 1.00 25.4 | 150 0.7 | 100 0.4 | 1970 8.8 | 5770 25.7 | 3810 16.9 | ** ** | ** ** | | | | | | | | |
| 108 2743 | 335 1.5 | 1.27 32.2 | 118 0.5 | 77 0.3 | 1680 7.5 | 4560 20.3 | 3010 13.4 | ** ** | ** ** | | | | | | | | |
| 120 3048 | 302 1.3 | 1.56 39.7 | 92 0.4 | 62 0.3 | 1450 6.5 | 3690 16.4 | ** ** | ** ** | ** ** | | | | | | | | |

NOTES


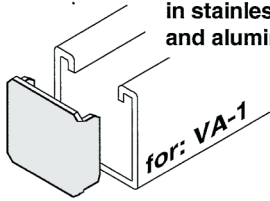
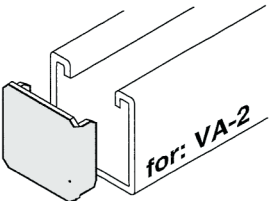
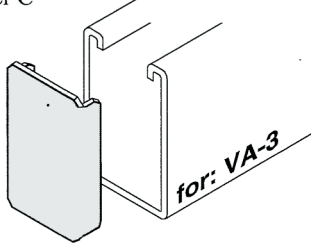
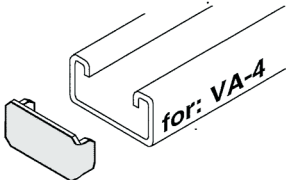
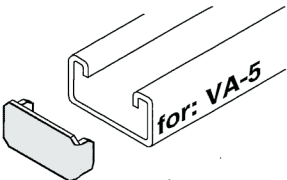
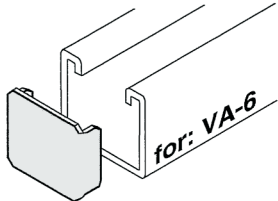
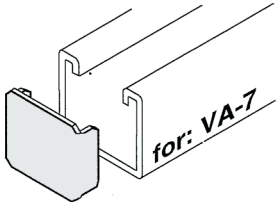
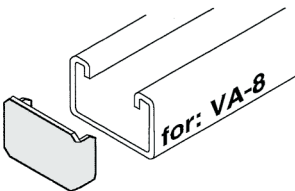
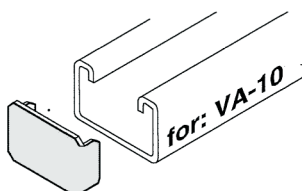
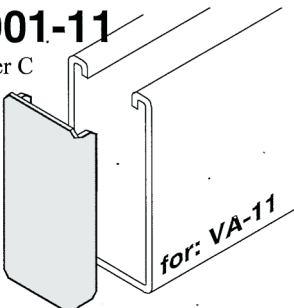
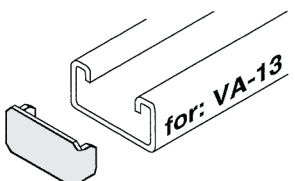
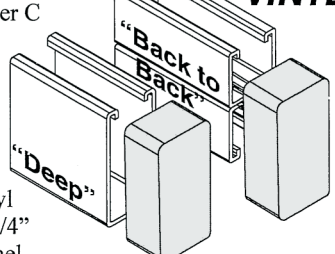
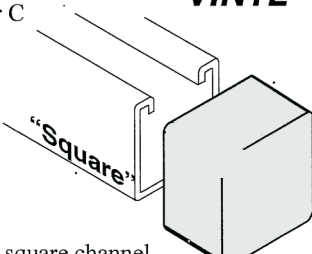
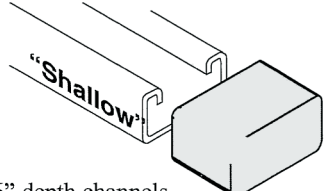
- Long spans may have to be braced to prevent rotation and twist.
- Beam loading data already includes the weight of the member. This weight will have to be deducted in order to arrive at the net allowable load said beam span will carry.
- Maximum allowable uniformly distributed loads are listed for simple spans consisting of a beam on two supports. If load is to be concentrated at center of span, multiply given load by 0.5 and corresponding deflection figure by 0.8.

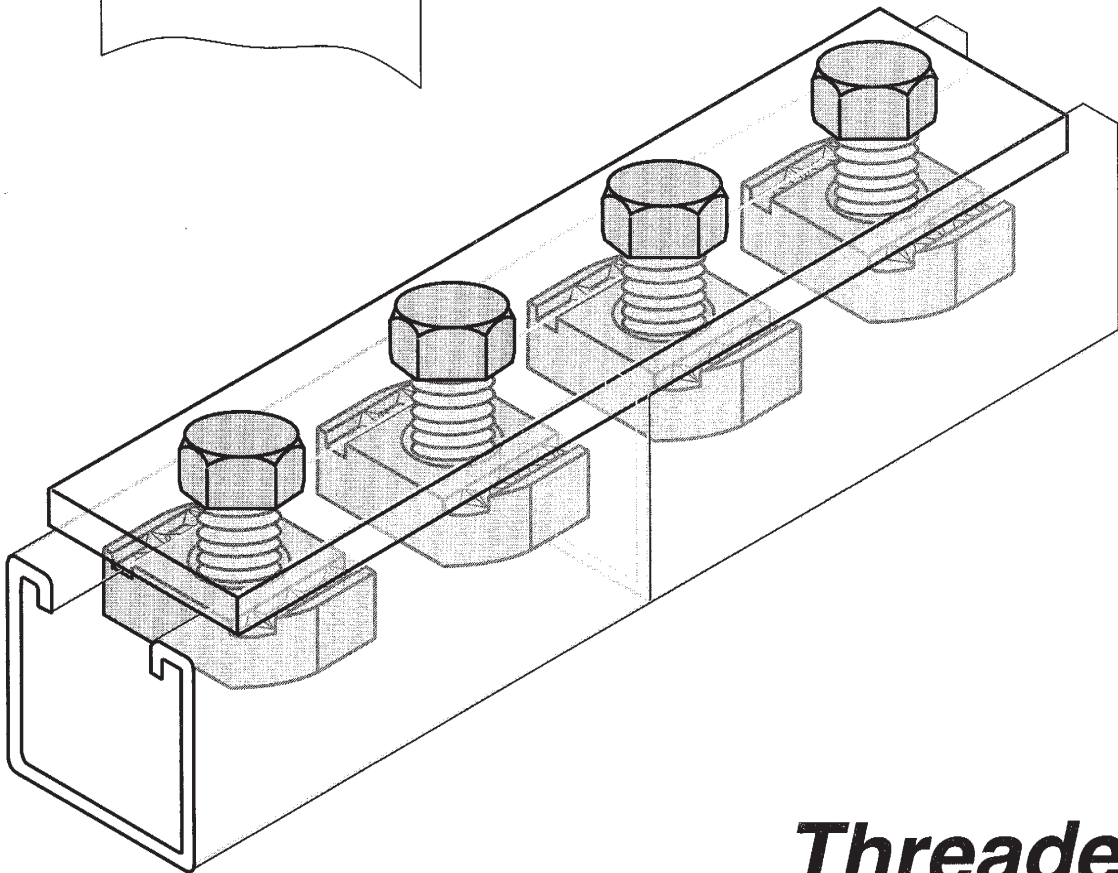
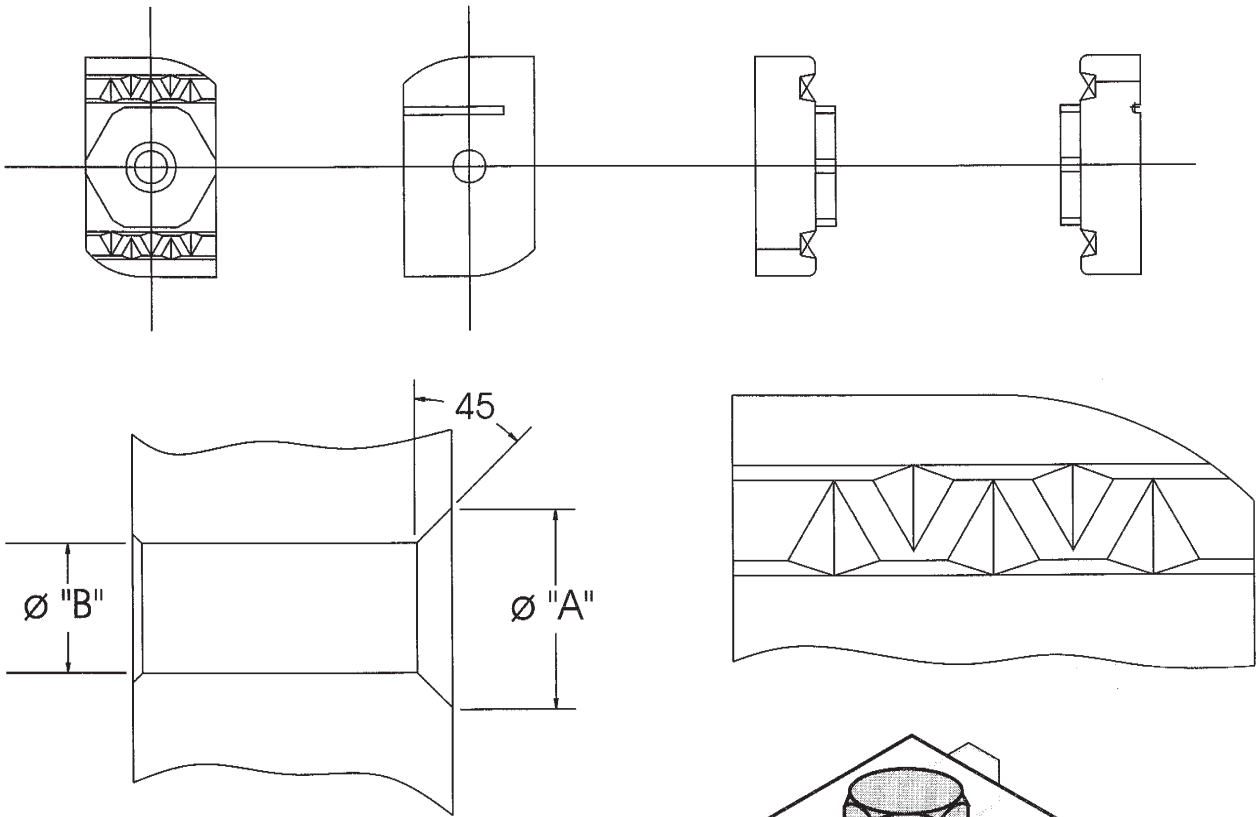
(Uniform beam loading on 24" and 36" spans limited by weld shear.)



VERSABAR CORPORATION

END CAPS and CLOSURE STRIP

| | | |
|--|--|---|
| <p>VA-9 Closure Strip Wgt. 42# per C/LF G-90 Mill Galv. Finish* (63 kg M)</p> <p>Mill Galv. is .040 (1.02) Stainless is .024 (0.61)</p> <p><i>for: All Channels</i></p> <p> UL LISTED</p> <p>*also available in stainless and aluminum</p> | <p>VF-1001</p> <p>Wgt. 11# per C (5 kg)</p> <p>UL LISTED</p> <p>also available in stainless and aluminum</p> <p>Zinc Plated Finish Std.*</p> <p><i>for: VA-1</i></p> <p></p> | <p>VF-1001-2</p> <p>Wgt. 11# per C (5 kg)</p> <p>UL LISTED</p> <p>Zinc Plated Finish</p> <p><i>for: VA-2</i></p> <p></p> |
| <p>VF-1001-3</p> <p>Wgt. 17# per C (7.7 kg)</p> <p>UL LISTED</p> <p>Zinc Plated Finish</p> <p><i>for: VA-3</i></p> <p></p> | <p>VF-1001-4</p> <p>Wgt. 4.8# per C (2.2 kg)</p> <p>Zinc Plated Finish</p> <p><i>for: VA-4</i></p> <p></p> | <p>VF-1001-5</p> <p>Wgt. 4.8# per C (2.2 kg)</p> <p>Zinc Plated Finish</p> <p><i>for: VA-5</i></p> <p></p> |
| <p>VF-1001-6</p> <p>Wgt. 9.5# per C (4.3 kg)</p> <p>Zinc Plated Finish</p> <p><i>for: VA-6</i></p> <p></p> | <p>VF-1001-7</p> <p>Wgt. 9.5# per C (4.3 kg)</p> <p>Zinc Plated Finish</p> <p><i>for: VA-7</i></p> <p></p> | <p>VF-1001-8</p> <p>Wgt. 7.5# per C (3.4 kg)</p> <p>Zinc Plated Finish</p> <p><i>for: VA-8</i></p> <p></p> |
| <p>VF-1001-10</p> <p>Wgt. 7.5# per C (3.4 kg)</p> <p>Zinc Plated Finish</p> <p><i>for: VA-10</i></p> <p></p> | <p>VF-1001-11</p> <p>Wgt. 20# per C (9.1 kg)</p> <p>Zinc Plated Finish</p> <p><i>for: VA-11</i></p> <p></p> | <p>VF-1001-13</p> <p>Wgt. 4.8# per C (2.2 kg)</p> <p>Zinc Plated Finish</p> <p><i>for: VA-13</i></p> <p></p> |
| <p>VF-1001-11-PL VINYL</p> <p>Wgt. 5# per C (2.2 kg)</p> <p>Bump Cap</p> <p>White Vinyl Fits all 3-1/4" deep channel</p> <p><i>"Back to Back"</i></p> <p><i>"Deep"</i></p> <p></p> | <p>VF-1001-1-PL VINYL</p> <p>Wgt. 2.8# per C (1.27 kg)</p> <p>Bump Cap</p> <p>White Vinyl Fits all 1-5/8" square channel</p> <p><i>"Square"</i></p> <p></p> | <p>VF-1001-4-PL VINYL</p> <p>Wgt. 2# per C (.91 kg)</p> <p>Bump Cap</p> <p>White Vinyl Fits all 13/16" depth channels</p> <p><i>"Shallow"</i></p> <p></p> |



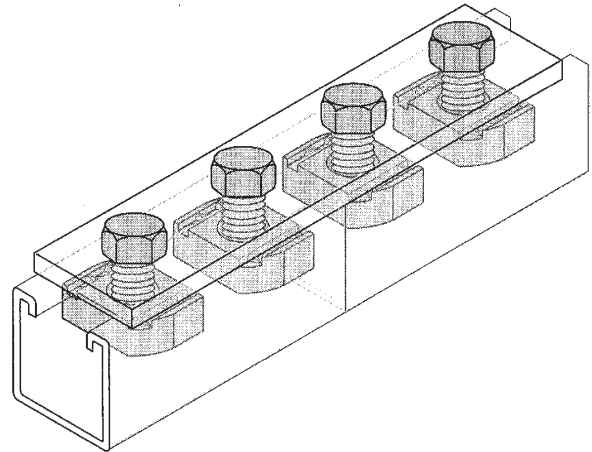
Threaded Fasteners Section B



VERSABAR CORPORATION

SECTION "B" INTRODUCTION

| | |
|------------------------------|-------------|
| Channel Nuts With Springs | B-4 |
| Channel Nuts Without Springs | B-5 |
| Stainless Nuts | B-6 |
| "TMS" Grip Nuts | B-7 |
| Stud Nuts | B-7 |
| VN-1 & VN-1-ST | B-8 |
| VCN Concrete Insert Nuts | B-8 |
| Conveyor Footing Nuts | B-8 |
| Common Fasteners | B-8 to B-10 |
| VXE Swivel Eyelets | B-10 |



Material:

Versabar lateral locking channel nuts are cold pressed, punched, tapped, and cyanide hardened, so that their teeth will provide a positive "biting" action into the inturned edges of Versabar channel sections. The nut bodies are designed with beveled ends which lock into position by contact with the interior side walls of the channel when turned 90°. Standard carbon steel channel nuts conform to ASTM #A576 GR 1015. Selected nuts are also stocked in aluminum, as well as stainless steel types 304 & 316.

Finishes:

Standard finish on carbon steel nuts is Electro-Galvanized conforming to ASTM B633 Type III SC1. We also offer a hot-dipped galvanized finish on selected nuts.

Dimensions:

All imperial dimensions provided are in inches. Metric dimensions are also included in parenthesis. Unless noted, metric dimensions are in millimeters.

Threads:

Unless noted otherwise, fasteners and channel nuts shown in this section are U.S. Coarse thread.

Torque:

Fastener diameter dictates desired torque.

| | |
|----------|-------------|
| 1/4"-20 | 6 ft/lbs. |
| 5/16"-18 | 11 ft/lbs. |
| 3/8"-16 | 19 ft/lbs. |
| 1/2"-13 | 50 ft/lbs. |
| 5/8"-11 | 100 ft/lbs. |
| 3/4"-10 | 125 ft/lbs. |

VERSABAR CORPORATION

LOAD BEARING DATA FOR CHANNEL NUTS



| Design Loading - "Pull-Out" loading for channel nuts | | | | | |
|--|--------------------------------|--------------------------------|--------------------------------|---------------------------------|--------------------------------|
| For 1-5/8" (41.3) deep channels | | | | For 13/16" (20.6) deep channels | |
| <small>NOTE:</small> Design Loading figures provided on this page require a minimum 1/4" (6.35 mm) thick fitting mounted on the slot surface. Refer to footnote (A) below. | | | | | |
| Channel Gauge & No. | <i>Ex: VSN-1050 or VN-1050</i> | <i>Ex: VSN-1037 or VN-1037</i> | <i>Ex: VSN-1025 or VN-1025</i> | Channel Gauge & No. | <i>Ex: VSN-4050 or VN-4050</i> |
| 12 (VA-1) | 2000 lb. (8.9 kN) | 1100 lb. (4.9 kN) | 550 lb. (2.45 kN) | 12 (VA-13) | 1400 lb. (6.23 kN) |
| 14 (VA-2) | 1400 lb. (6.23 kN) | 1000 lb. (4.45 kN) | 550 lb. (2.45 kN) | 14 (VA-4) | 1400 lb. (6.23 kN) |
| 16 (VA-12) | 1000 lb. (4.45 kN) | 1000 lb. (4.45 kN) | 550 lb. (2.45 kN) | 16 (VA-5) | 1000 lb. (4.45 kN) |

| Design Loading - "Slip Resistance" for channel nuts | | | | | |
|--|--------------------------------|--------------------------------|--------------------------------|---------------------------------|--------------------------------|
| For 1-5/8" (41.3) deep channels | | | | For 13/16" (20.6) deep channels | |
| <small>NOTE:</small> Design Loading figures provided on this page require a minimum 1/4" (6.35 mm) thick fitting mounted on the slot surface. Refer to footnote (A) below. | | | | | |
| Channel Gauge & No. | <i>Ex: VSN-1050 or VN-1050</i> | <i>Ex: VSN-1037 or VN-1037</i> | <i>Ex: VSN-1025 or VN-1025</i> | Channel Gauge & No. | <i>Ex: VSN-4050 or VN-4050</i> |
| 12 (VA-1) | 1500 lb. (6.68 kN) | 800 lb. (3.56 kN) | 300 lb. (1.34 kN) | 12 (VA-13) | 1300 lb. (5.79 kN) |
| 14 (VA-2) | 1000 lb. (4.45 kN) | 700 lb. (3.12 kN) | 300 lb. (1.34 kN) | 14 (VA-4) | 1000 lb. (4.45 kN) |
| 16 (VA-12) | 1000 lb. (4.45 kN) | 700 lb. (3.12 kN) | 300 lb. (1.34 kN) | 16 (VA-5) | 1000 lb. (4.45 kN) |

Note:

- 1.) Data compiled by independent testing services, records on file.
- 2.) Load bearing data is valid only if correct bolt torque is applied.
- 3.) Load bearing data is valid only if correct channel and nut combinations are used.
- 4.) **Do not apply load to nuts without a 1/4" (6.3mm) thick fitting, or bracket, properly mounted on the channel slot surface. Verify load rating of rods (and/or) bolts independently.**
- 5.) S.F. = 3

(A.) **WARNING:** All load bearing data is contingent upon basic assembly techniques as outlined on introduction page 4.



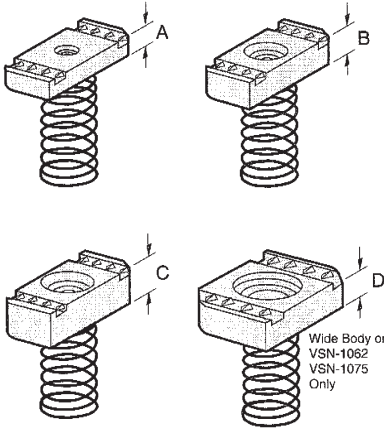
VERSABAR CORPORATION

PLATED NUTS WITH SPRINGS FOR 1-5/8" (41.3) WIDE CHANNEL

VSN-1000 Series Fits: VA-1, VA-2, VA-6, VA-7 & VA-12 Channel

These nuts fit all 1-5/8 wide channels which are 1-3/8" thru 1-5/8" deep.

Lateral Locking Nuts / Medium Spring



| Part# | Thread Diameter | Blank Style & Thickness | Weight Per "C" Pcs. |
|---------------|-----------------|-------------------------|---------------------|
| VSN-1010-0832 | No. 8-32 | "A" 1/4" (6.35) | 8 lbs. (3.63 kg) |
| VSN-1010-1024 | No. 10-24 | "A" 1/4" (6.35) | 8 lbs. (3.63 kg) |
| VSN-1010-1032 | No. 10-32 | "A" 1/4" (6.35) | 8 lbs. (3.63 kg) |
| VSN-1025** | 1/4" -20 | "A" 1/4" (6.35) | 8 lbs. (3.63 kg) |
| VSN-1031 | 5/16"-18 | "B" 3/8" (9.53) | 9 lbs. (4.09 kg) |
| VSN-1037** | 3/8" -16 | "B" 3/8" (9.53) | 10 lbs. (4.54 kg) |
| VSN-1044 | 7/16"-14 | "B" 3/8" (9.53) | 10 lbs. (4.54 kg) |
| VSN-1050** | 1/2" -13 | "C" 1/2" (12.7) | 12 lbs. (5.45 kg) |
| VSN-1062* | 5/8" -11 | "D" 7/16" (11.1) | 20 lbs. (9.08 kg) |
| VSN-1075 | 3/4" -10 | "D" 7/16" (11.1) | 18 lbs. (8.17 kg) |

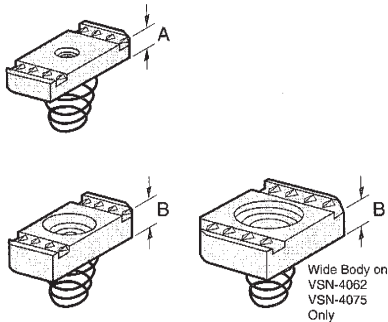
** Available in Stainless, Aluminum and Hot Dipped Galvanized

* Available in Stainless

VSN-4000 Series Fits: VA-4, VA-5, VA-8, VA-10 & VA-13 Channel

These nuts fit all 1-5/8 wide channels which are 13/16" thru 1" deep.

Lateral Locking Nuts / Short Spring



| Part# | Thread Diameter | Blank Style & Thickness | Weight Per "C" Pcs. |
|---------------|-----------------|-------------------------|---------------------|
| VSN-4010-0832 | No. 8-32 | "A" 1/4" (6.35) | 8 lbs. (3.63 kg) |
| VSN-4010-1024 | No. 10-24 | "A" 1/4" (6.35) | 8 lbs. (3.63 kg) |
| VSN-4010-1032 | No. 10-32 | "A" 1/4" (6.35) | 8 lbs. (3.63 kg) |
| VSN-4025* | 1/4" -20 | "A" 1/4" (6.35) | 8 lbs. (3.63 kg) |
| VSN-4031 | 5/16"-18 | "B" 3/8" (9.53) | 9 lbs. (4.09 kg) |
| VSN-4037* | 3/8" -16 | "B" 3/8" (9.53) | 10 lbs. (4.54 kg) |
| VSN-4044 | 7/16"-14 | "B" 3/8" (9.53) | 10 lbs. (4.54 kg) |
| VSN-4050* | 1/2" -13 | "B" 3/8" (9.53) | 9 lbs. (4.09 kg) |
| VSN-4062 | 5/8" -11 | "B" 3/8" (9.53) | 13 lbs. (5.90 kg) |
| VSN-4075 | 3/4" -10 | "B" 3/8" (9.53) | 12 lbs. (5.44 kg) |

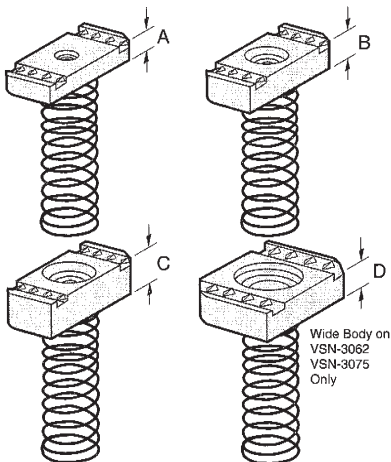
* Available in Stainless

VSN-3000 Series

Fits: VA-3 & VA-11 Channel

These nuts fit all 1-5/8 wide channels which are 2-1/2" thru 3-1/4" deep.

Lateral Locking Nuts / Long Spring



| Part# | Thread Diameter | Blank Style & Thickness | Weight Per "C" Pcs. |
|----------------|-----------------|-------------------------|---------------------|
| VSN-3010-0832* | No. 8-32 | "A" 1/4" (6.35) | 8 lbs. (3.63 kg) |
| VSN-3010-1024* | No. 10-24 | "A" 1/4" (6.35) | 8 lbs. (3.63 kg) |
| VSN-3010-1032* | No. 10-32 | "A" 1/4" (6.35) | 8 lbs. (3.63 kg) |
| VSN-3025 | 1/4" -20 | "A" 1/4" (6.35) | 8 lbs. (3.63 kg) |
| VSN-3031 | 5/16"-18 | "B" 3/8" (9.53) | 9 lbs. (4.09 kg) |
| VSN-3037 | 3/8" -16 | "B" 3/8" (9.53) | 10 lbs. (4.54 kg) |
| VSN-3044 | 7/16"-14 | "B" 3/8" (9.53) | 10 lbs. (4.54 kg) |
| VSN-3050 | 1/2" -13 | "C" 1/2" (12.7) | 12 lbs. (5.45 kg) |
| VSN-3062 | 5/8" -11 | "D" 7/16" (11.1) | 20 lbs. (9.08 kg) |
| VSN-3075 | 3/4" -10 | "D" 7/16" (11.1) | 18 lbs. (8.17 kg) |

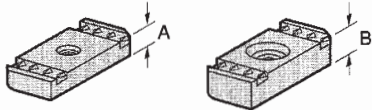
* Special Order



VN-1000 Series 1

For All 1-5/8" (41.3) Wide Channels

**Lateral Locking Nuts
#8-32 thru 7/16" Diameter Thread**



| Part# | Thread Diameter | Blank Style & Thickness | Weight Per "C" Pcs. |
|--------------|-----------------|-------------------------|---------------------|
| VN-1010-0832 | No. 8-32 | "A" 1/4" (6.35) | 8 lbs. (3.63 kg) |
| VN-1010-1024 | No. 10-24 | "A" 1/4" (6.35) | 8 lbs. (3.63 kg) |
| VN-1010-1032 | No. 10-32 | "A" 1/4" (6.35) | 8 lbs. (3.63 kg) |
| VN-1025* | 1/4" -20 | "A" 1/4" (6.35) | 8 lbs. (3.63 kg) |
| VN-1031 | 5/16"-18 | "B" 3/8" (9.53) | 9 lbs. (4.09 kg) |
| VN-1037* | 3/8" -16 | "B" 3/8" (9.53) | 10 lbs. (4.54 kg) |
| VN-1044 | 7/16"-14 | "B" 3/8" (9.53) | 10 lbs. (4.54 kg) |

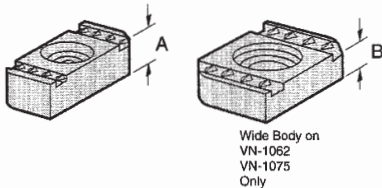
**Available in Stainless, Aluminum and Hot Dipped Galvanized*

VN-1000 Series 2

*Fits: VA-1, VA-2,
VA-3, VA-6,
VA-7, VA-8,
VA-10 & VA-11*

For Deep Standard Width Channels

**Lateral Locking Nuts
1/2" thru 3/4" Diameter Thread**



Wide Body on
VN-1062
VN-1075
Only

| Part# | Thread Diameter | Blank Style & Thickness | Weight Per "C" Pcs. |
|-----------|-----------------|-------------------------|---------------------|
| VN-1050** | 1/2"- 13 | "A" 1/2" (12.7) | 12 lbs. (5.45 kg) |
| VN-1062* | 5/8"- 11 | "B" 7/16" (11.1) | 20 lbs. (9.08 kg) |
| VN-1075 | 3/4"- 10 | "B" 7/16" (11.1) | 18 lbs. (8.17 kg) |

***Available in Stainless & Aluminum*

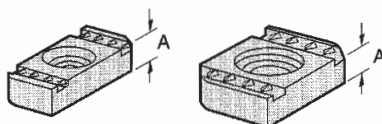
**Available in Stainless*

VN-4000 Series

Fits: VA-4, VA-5 & VA-13

For Shallow Standard Width Channels

**Lateral Locking Nuts
1/2" thru 3/4" Diameter Thread**



Wide Body on
VN-4062
VN-4075
Only

| Part# | Thread Diameter | Blank Style & Thickness | Weight Per "C" Pcs. |
|----------|-----------------|-------------------------|---------------------|
| VN-4050* | 1/2"- 13 | "A" 3/8" (9.53) | 9 lbs. (4.09 kg) |
| VN-4062 | 5/8"- 11 | "A" 3/8" (9.53) | 13 lbs. (5.90 kg) |
| VN-4075 | 3/4"- 10 | "A" 3/8" (9.53) | 12 lbs. (5.44 kg) |

**Available in Stainless*



VERSABAR CORPORATION

SINTERED STAINLESS CHANNEL NUTS FOR 1-5/8" (41.3) WIDE CHANNEL

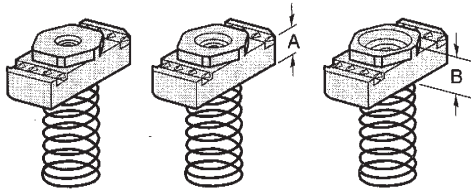
VSN-1000-H Series

Stainless Steel T316

Fits: VA-1, VA-2, VA-6, VA-7 & VA-12 Channel

(all 1-5/8 (41.3) wide channels which are 1-3/8" thru 1-5/8" deep)

**Lateral Locking Nuts / Medium Spring / Hex Top
1/4" thru 1/2" Diameter Thread**



| Part# | Thread Diameter | Dim. "A" | Dim. "B" | Weight Per "C" Pcs. |
|----------------|-----------------|-------------|-------------|---------------------|
| VSN-1025-H-SIN | 1/4"- 20 | 3/8" (9.53) | 1/2" (12.7) | 10 lbs. (4.5 kg) |
| VSN-1037-H-SIN | 3/8"- 16 | 3/8" (9.53) | 1/2" (12.7) | 10 lbs. (4.5 kg) |
| VSN-1050-H-SIN | 1/2"- 13 | 3/8" (9.53) | 1/2" (12.7) | 10 lbs. (4.5 kg) |

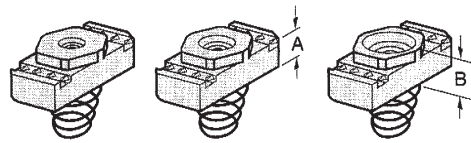
VSN-4000-H Series

Stainless Steel T316

Fits: VA-4, VA-5, VA-8, VA-10 & VA-13 Channel

(all 1-5/8 (41.3) wide channels which are 13/16" thru 1" deep)

**Lateral Locking Nuts / Short Spring / Hex Top
1/4" thru 1/2" Diameter Thread**



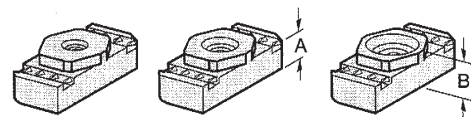
| Part# | Thread Diameter | Dim. "A" | Dim. "B" | Weight Per "C" Pcs. |
|----------------|-----------------|-------------|-------------|---------------------|
| VSN-4025-H-SIN | 1/4"- 20 | 3/8" (9.53) | 1/2" (12.7) | 10 lbs. (4.5 kg) |
| VSN-4037-H-SIN | 3/8"- 16 | 3/8" (9.53) | 1/2" (12.7) | 10 lbs. (4.5 kg) |
| VSN-4050-H-SIN | 1/2"- 13 | 3/8" (9.53) | 1/2" (12.7) | 10 lbs. (4.5 kg) |

VN-1000-H Series

Stainless Steel T316

Fits: All 1-5/8" (41.3) Wide Standard Channels

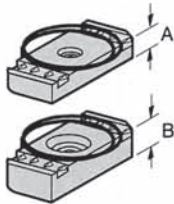
**Lateral Locking Nuts / No Spring / Hex Top
1/4" thru 1/2" Diameter Thread**



| Part# | Thread Diameter | Dim. "A" | Dim. "B" | Weight Per "C" Pcs. |
|---------------|-----------------|-------------|-------------|---------------------|
| VN-1025-H-SIN | 1/4"- 20 | 3/8" (9.53) | 1/2" (12.7) | 9 lbs. (4.1 kg) |
| VN-1037-H-SIN | 3/8"- 16 | 3/8" (9.53) | 1/2" (12.7) | 9 lbs. (4.1 kg) |
| VN-1050-H-SIN | 1/2"- 13 | 3/8" (9.53) | 1/2" (12.7) | 9 lbs. (4.1 kg) |

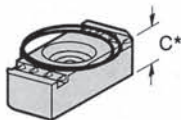


VSN-1000-TMS Series



Lateral Locking Nuts / Top Mounted Retainer Spring 1/4"-20 thru 1/2"-13 Diameter Thread

Fits all 1-5/8" (41.3) wide channels.



Fits all 1-5/8" (41.3) wide channels which are 1" (25.4) or deeper.

| Part# | Thread Diameter | Blank Style & Thickness | Weight Per "C" Pcs. |
|---------------|-----------------|-------------------------|---------------------|
| VSN-1025-TMS | 1/4" -20 | "A" 1/4" (6.35) | 8 lbs. (3.63 kg) |
| VSN-1031-TMS | 5/16"-18 | "B" 3/8" (9.53) | 9 lbs. (4.09 kg) |
| VSN-1037-TMS | 3/8" -16 | "B" 3/8" (9.53) | 10 lbs. (4.54 kg) |
| VSN-1050-TMS* | 1/2" -13 | "C" 1/2" (12.7) | 12 lbs. (5.45 kg) |

* Use VSN-4050 conventional spring nut with shallow channels if 1/2"-13 thread is required.

SSN Style

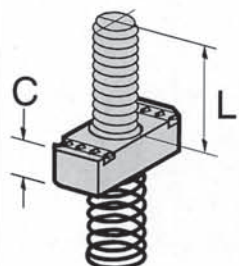
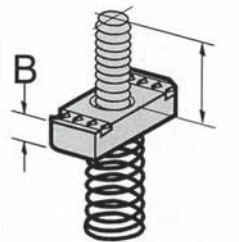
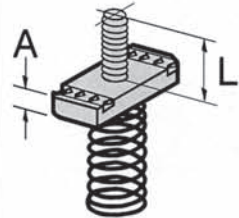
Studded Channel Nuts

SN Style

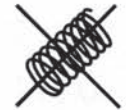
* Remember that you lose 1/4" (6.35 mm) useable stud length Dim "L" when nut is inserted into channel.



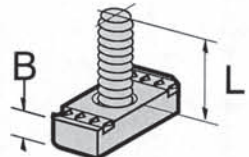
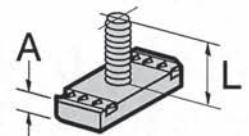
"SSN" Nuts WITH spring are compatible with VA-1, VA-2, VA-6, VA-7 & VA-12



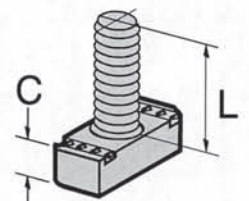
| Part# With Spring | Dim "L" | Thread Diameter | Blank Style & Thickness | Weight Per "C" Pcs. | Part# W/O Spring |
|-------------------|---------|-----------------|-------------------------|---------------------|------------------|
| SSN-25075 | 3/4" | 1/4"-20 | "A" 1/4" (6.35) | 8 lb. (3.6) | SN-25075 |
| SSN-25100 | 1" | 1/4"-20 | "A" 1/4" (6.35) | 9 lb. (4.1) | SN-25100 |
| SSN-25125 | 1-1/4" | 1/4"-20 | "A" 1/4" (6.35) | 9 lb. (4.1) | SN-25125 |
| SSN-25150 | 1-1/2" | 1/4"-20 | "A" 1/4" (6.35) | 9 lb. (4.1) | SN-25150 |
| SSN-25175 | 1-3/4" | 1/4"-20 | "A" 1/4" (6.35) | 10 lb. (4.5) | SN-25175 |
| SSN-25200 | 2" | 1/4"-20 | "A" 1/4" (6.35) | 10 lb. (4.5) | SN-25200 |
| SSN-31075 | 3/4" | 5/16"-18 | "B" 3/8" (9.53) | 13 lb. (5.9) | SN-31075 |
| SSN-31100 | 1" | 5/16"-18 | "B" 3/8" (9.53) | 13 lb. (5.9) | SN-31100 |
| SSN-31125 | 1-1/4" | 5/16"-18 | "B" 3/8" (9.53) | 14 lb. (6.4) | SN-31125 |
| SSN-31150 | 1-1/2" | 5/16"-18 | "B" 3/8" (9.53) | 14 lb. (6.4) | SN-31150 |
| SSN-31175 | 1-3/4" | 5/16"-18 | "B" 3/8" (9.53) | 15 lb. (6.8) | SN-31175 |
| SSN-31200 | 2" | 5/16"-18 | "B" 3/8" (9.53) | 15 lb. (6.8) | SN-31200 |
| SSN-37075 | 3/4" | 3/8"-16 | "B" 3/8" (9.53) | 13 lb. (5.9) | SN-37075 |
| SSN-37100 | 1" | 3/8"-16 | "B" 3/8" (9.53) | 13 lb. (5.9) | SN-37100 |
| SSN-37125 | 1-1/4" | 3/8"-16 | "B" 3/8" (9.53) | 14 lb. (6.4) | SN-37125 |
| SSN-37150 | 1-1/2" | 3/8"-16 | "B" 3/8" (9.53) | 15 lb. (6.8) | SN-37150 |
| SSN-37175 | 1-3/4" | 3/8"-16 | "B" 3/8" (9.53) | 16 lb. (7.3) | SN-37175 |
| SSN-37200 | 2" | 3/8"-16 | "B" 3/8" (9.53) | 16 lb. (7.3) | SN-37200 |
| SSN-37225 | 2-1/4" | 3/8"-16 | "B" 3/8" (9.53) | 17 lb. (7.7) | SN-37225 |
| SSN-37250 | 2-1/2" | 3/8"-16 | "B" 3/8" (9.53) | 17 lb. (7.7) | SN-37250 |
| SSN-50062 | 5/8" | 1/2"-13 | "C" 1/2" (12.7) | 13 lb. (5.9) | SN-50062 |
| SSN-50087 | 7/8" | 1/2"-13 | "C" 1/2" (12.7) | 15 lb. (6.8) | SN-50087 |
| SSN-50112 | 1-1/8" | 1/2"-13 | "C" 1/2" (12.7) | 15 lb. (6.8) | SN-50112 |
| SSN-50137 | 1-3/8" | 1/2"-13 | "C" 1/2" (12.7) | 17 lb. (7.7) | SN-50137 |
| SSN-50162 | 1-5/8" | 1/2"-13 | "C" 1/2" (12.7) | 17 lb. (7.7) | SN-50162 |
| SSN-50187 | 1-7/8" | 1/2"-13 | "C" 1/2" (12.7) | 19 lb. (8.6) | SN-50187 |
| SSN-50200 | 2" | 1/2"-13 | "C" 1/2" (12.7) | 20 lb. (9.1) | SN-50200 |
| SSN-50225 | 2-1/4" | 1/2"-13 | "C" 1/2" (12.7) | 22 lb. (10.0) | SN-50225 |
| SSN-50250 | 2-1/2" | 1/2"-13 | "C" 1/2" (12.7) | 23 lb. (10.4) | SN-50250 |
| SSN-50275 | 2-3/4" | 1/2"-13 | "C" 1/2" (12.7) | 24 lb. (10.9) | SN-50275 |
| SSN-50300 | 3" | 1/2"-13 | "C" 1/2" (12.7) | 26 lb. (11.8) | SN-50300 |
| SSN-50325 | 3-1/4" | 1/2"-13 | "C" 1/2" (12.7) | 26 lb. (11.8) | SN-50325 |



"SN" Nuts W/O spring are compatible with ALL CHANNELS up to the black line



"SN" Nuts shown below the black line fit All CHANNELS EXCEPT VA-4, VA-5, VA-13 (AKA "shallow" strut)



*Available in Stainless Steel and Custom Stud Lengths



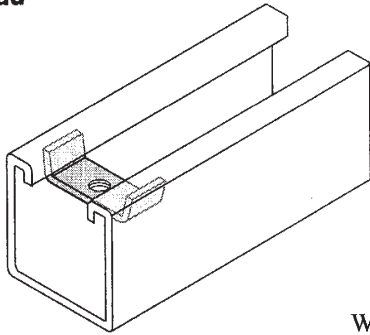
VERSABAR CORPORATION

SPECIAL APPLICATION NUTS and COMMON FASTENERS

VN-1 Light Duty Channel Nut

These nuts fit all 1-5/8 (41.3) wide channels.

1/4"-20 Thread

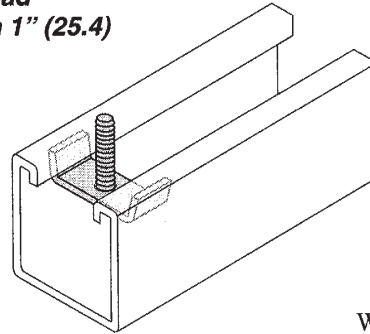


Wt/C 1.5 Lbs.
(.681 kg.)

VN-1-ST Light Duty Stud Nut

These stud nuts fit all 1-5/8 (41.3) wide channels.

1/4"-20 Thread
Stud Length 1" (25.4)

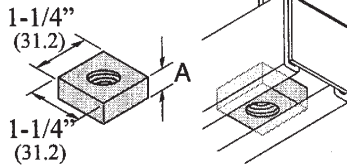


Wt/C 3.1 Lbs.
(1.41 kg.)

VCN Insert Nuts

For use with VC-1 spot inserts or any other continuous slot, concrete insert channel. (Excluding VA-4, VA-5 & VA-13 inserts)

NOTE: Must be used with flat fitting mounted on slot surface.

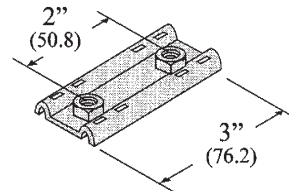


| Part Number | Thread Dia. | Blank Size "A" | Weight Per "C" |
|-------------|---------------|----------------|----------------|
| VCN-25 | 1/4"-20 | 1/4" (6.4) | 8 lbs. (3.6) |
| VCN-31 | 5/16"-18 | 1/4" (6.4) | 11 lbs. (5.0) |
| VCN-37 | 3/8"-16 | 3/8" (9.5) | 13 lbs. (5.9) |
| VCN-50 | 1/2"-13 | 1/2" (12.7) | 14 lbs. (6.4) |
| VCN-62 | 5/8"-11 | 1/2" (12.7) | 18 lbs. (8.2) |
| VCN-75 | 3/4"-10 | 1/2" (12.7) | 16 lbs. (7.3) |
| VCN-37-RP | 3/8" PIPE TAP | 1/2" (12.7) | 14 lbs. (6.4) |
| VCN-50-RP | 1/2" PIPE TAP | 1/2" (12.7) | 14 lbs. (6.4) |

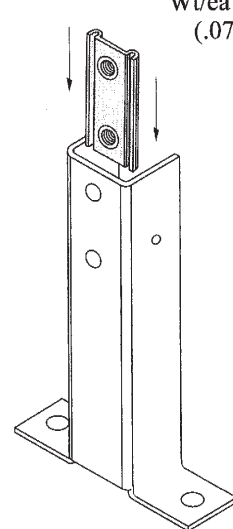
VF-5803-GRS

Footing
Double Nut

Wt/ea .17 Lbs.
(.077 kg.)

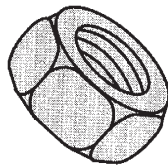


3/8"-16 Threads



Hex Nuts

U.S. Standard Coarse Thread
Double Chamfer
Zinc plated*

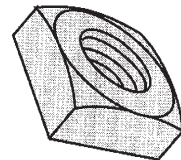


| Part Number | Thread Dia. | Weight Per "C" |
|-------------|-------------|--------------------|
| 1/4" H.N. | 1/4" -20 | .6 lbs. (.27 kg.) |
| 5/16" H.N. | 5/16"-18 | 1.2 lbs. (.54 kg.) |
| 3/8" H.N. | 3/8" -16 | 1.6 lbs. (.73 kg.) |
| 1/2" H.N. | 1/2" -13 | 4.8 lbs. (2.2 kg.) |
| 5/8" H.N. | 5/8" -11 | 7.3 lbs. (3.3 kg.) |

* Also Available in Stainless

Square Nuts

U.S. Standard Coarse Thread
Single Side Chamfer
Zinc plated

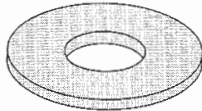


| Part Number | Thread Dia. | Weight Per "C" |
|-------------|-------------|----------------------|
| 1/4" SQ.N. | 1/4" -20 | .90 lbs. (.41 kg.) |
| 5/16" SQ.N. | 5/16"-18 | 1.60 lbs. (.73 kg.) |
| 3/8" SQ.N. | 3/8" -16 | 2.65 lbs. (1.2 kg.) |
| 1/2" SQ.N. | 1/2" -13 | 5.83 lbs. (2.6 kg.) |
| 5/8" SQ.N. | 5/8" -11 | 10.70 lbs. (4.9 kg.) |



Flat Washers

*Zinc plated**

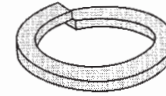


| Part Number | For Thread Dia. | Weight Per "C" |
|-------------|-----------------|---------------------|
| 1/4" F.W. | 1/4" -20 | .70 lbs. (.32 kg.) |
| 5/16" F.W. | 5/16" -18 | 1.00 lbs. (.45 kg.) |
| 3/8" F.W. | 3/8" -16 | 1.50 lbs. (.68 kg.) |
| 1/2" F.W. | 1/2" -13 | 3.50 lbs. (1.6 kg.) |
| 5/8" F.W. | 5/8" -11 | 7.70 lbs. (3.5 kg.) |

* Also Available in Stainless

Split Lock Washers

*Zinc plated**

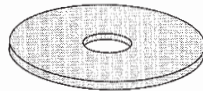


| Part Number | For Thread Dia. | Weight Per "C" |
|-------------|-----------------|---------------------|
| 1/4" L.W. | 1/4" -20 | .25 lbs. (.10 kg.) |
| 5/16" L.W. | 5/16" -18 | .41 lbs. (.20 kg.) |
| 3/8" L.W. | 3/8" -16 | .63 lbs. (.30 kg.) |
| 1/2" L.W. | 1/2" -13 | 1.32 lbs. (.60 kg.) |

* Also Available in Stainless

Fender Washers

Zinc plated



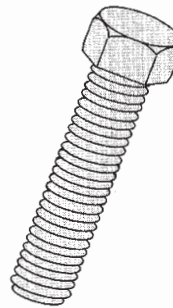
| Part Number | For Thread Dia. | Weight Per "C" |
|-------------|-----------------|---------------------|
| FEN-25 | 1/4" -20 | 3.00 lbs. (1.4 kg.) |
| FEN-31 | 5/16" -18 | 3.00 lbs. (1.4 kg.) |
| FEN-37 | 3/8" -16 | 2.50 lbs. (1.1 kg.) |
| FEN-50 | 1/2" -13 | 2.40 lbs. (1.0 kg.) |
| FEN-50-2* | 1/2" -13 | 6.00 lbs. (2.7 kg.) |

*FEN-50-2 has a 2" (50.8) O.D.

Hex Head Cap Screws

*Zinc plated**

U.S. Coarse Thread



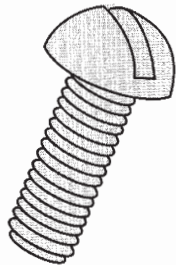
| Part Number | Wgt Per "C" |
|---------------------------|-----------------------|
| 1/4" x 1/2" HHCS | 1.00 lb. (.45) |
| 1/4" x 3/4" HHCS | 1.30 lb. (.59) |
| 1/4" x 1" HHCS | 1.70 lb. (.77) |
| 1/4" x 1-1/4" HHCS | 2.00 lb. (.91) |
| 3/8" x 3/4" HHCS | 3.50 lb. (1.6) |
| 3/8" x 1" HHCS | 5.28 lb. (2.4) |
| 3/8" x 1-1/4" HHCS | 5.30 lb. (2.4) |
| 3/8" x 1-1/2" HHCS | 6.05 lb. (2.8) |
| 3/8" x 2" HHCS | 7.59 lb. (3.6) |
| 3/8" x 2-1/4" HHCS | 8.90 lb. (4.0) |
| 3/8" x 2-1/2" HHCS | 9.50 lb. (4.3) |
| 1/2" x 15/16" HHCS | 9.10 lb. (4.1) |
| 1/2" x 1-1/4" HHCS | 10.60 lb. (4.8) |
| 1/2" x 1-1/2" HHCS | 11.65 lb. (5.3) |
| 1/2" x 1-3/4" HHCS | 13.10 lb. (6.0) |
| 1/2" x 2" HHCS | 14.56 lb. (6.6) |
| 1/2" x 2-1/4" HHCS | 16.02 lb. (7.3) |
| 1/2" x 2-1/2" HHCS | 17.48 lb. (7.9) |
| 1/2" x 3-1/2" HHCS | 20.00 lb. (9.1) |

* Also Available in Stainless

Round Head Machine Screws

*Zinc plated**

U.S. Coarse Thread

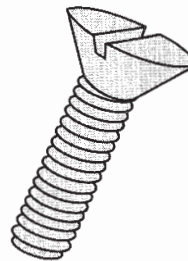


| Part Number | Weight Per "C" |
|--------------------|---------------------|
| 1/4" x 1/2" RHMS | 1.00 lbs. (.45 kg.) |
| 1/4" x 3/4" RHMS | 1.24 lbs. (.56 kg.) |
| 1/4" x 1" RHMS | 1.50 lbs. (.68 kg.) |
| 1/4" x 1-1/4" RHMS | 2.00 lbs. (.91 kg.) |
| 5/16" x 1" RHMS | 2.60 lbs. (1.2 kg.) |
| 3/8" x 1" RHMS | 4.07 lbs. (1.9 kg.) |

Flat Head Machine Screws

*Zinc plated**

U.S. Coarse Thread



| Part Number | Weight Per "C" |
|------------------|---------------------|
| 1/4" x 5/8" FHMS | 1.40 lbs. (.64 kg.) |
| 1/4" x 3/4" FHMS | 1.50 lbs. (.68 kg.) |
| 3/8" x 1" FHMS | 3.40 lbs. (1.5 kg.) |
| 1/2" x 1" FHMS | 9.30 lbs. (4.2 kg.) |

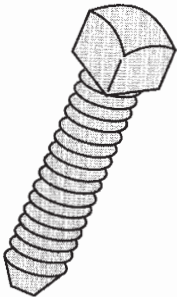


VERSABAR CORPORATION

COMMON FASTENERS & VXE WELDED SWIVEL EYELETS

Square Head Set Screws

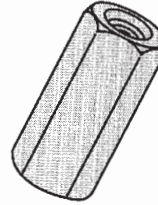
Zinc plated
U.S. Coarse Thread



| Part Number | Weight Per "C" |
|-------------------------|---------------------|
| 5/16" x 1-1/2" SQ.HD.SS | 4.2 lbs. (1.9 kg.) |
| 3/8" x 1-1/2" SQ.HD.SS | 4.5 lbs. (2.1 kg.) |
| 3/8" x 2" SQ.HD.SS | 6.1 lbs. (2.8 kg.) |
| 3/8" x 2-1/4" SQ.HD.SS | 7.0 lbs. (3.2 kg.) |
| 1/2" x 1-1/2" SQ.HD.SS | 8.5 lbs. (3.9 kg.) |
| 1/2" x 2" SQ.HD.SS | 11.4 lbs. (5.2 kg.) |
| 5/8" x 1-1/2" SQ.HD.SS | 14.5 lbs. (6.6 kg.) |

Rod Coupling Nuts

Zinc plated*

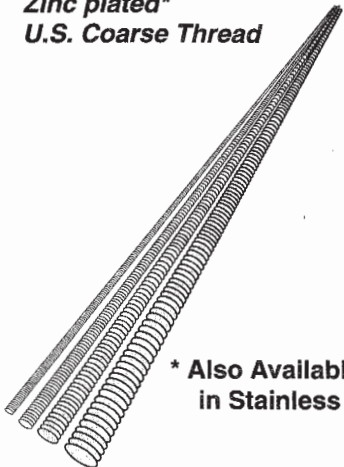


| Part Number | Thread Dia. | Weight Per "C" |
|-------------|-------------|--------------------|
| VTRC-25 | 1/4" -20 | 8 lbs. (3.6 kg.) |
| VTRC-37 | 3/8" -16 | 14 lbs. (6.4 kg.) |
| VTRC-50 | 1/2" -13 | 28 lbs. (12.7 kg.) |
| VTRC-62 | 5/8" -11 | 48 lbs. (21.7 kg.) |

* Also Available in Stainless

Threaded Rod

Zinc plated*
U.S. Coarse Thread



* Also Available in Stainless

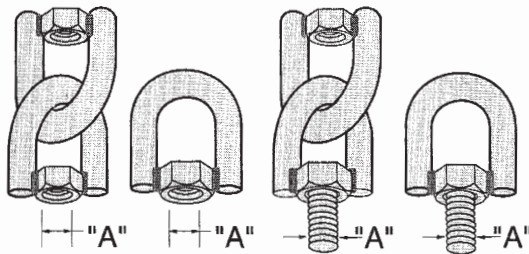
| Part Number | Thread Dia. | Length | Weight Per "C" Pcs. |
|-------------|-------------|-------------|---------------------|
| VTR-25-6 | 1/4"-20 | 6' (1.83m) | 77 lbs (35kg.) |
| VTR-25-10 | 1/4"-20 | 10' (3.05m) | 128 lbs. (58kg.) |
| VTR-25-12 | 1/4"-20 | 12' (3.66m) | 154 lbs. (70kg.) |
| VTR-37-6 | 3/8"-16 | 6' (1.83m) | 174 lbs. (79kg.) |
| VTR-37-10 | 3/8"-16 | 10' (3.05m) | 290 lbs.(132kg.) |
| VTR-37-12 | 3/8"-16 | 12' (3.66m) | 348 lbs.(158kg.) |
| VTR-50-6 | 1/2"-13 | 6' (1.83m) | 324 lbs.(147kg.) |
| VTR-50-10 | 1/2"-13 | 10' (3.05m) | 540 lbs.(245kg.) |
| VTR-50-12 | 1/2"-13 | 12' (3.66m) | 648 lbs.(294kg.) |
| VTR-62-6 | 5/8"-11 | 6' (1.83m) | 507 lbs.(230kg.) |
| VTR-62-10 | 5/8"-11 | 10' (3.05m) | 845 lbs.(384kg.) |
| VTR-62-12 | 5/8"-11 | 12' (3.66m) | 1014 lbs.(460kg.) |

| Nom. Rod Dia. | Root Area In ² | mm ² | Max. Safe Load @ Temperature 650 Deg F (343C) |
|---------------|---------------------------|-----------------|---|
| 3/8" | .068 | 43.9 | 610 lbs.(2.7 kN) |
| 1/2" | .126 | 81.3 | 1130 lbs.(5.0 kN) |
| 5/8" | .202 | 130.4 | 1810 lbs.(8.0 kN) |

Loading data per A.S.A B31.1-1973
Pertains to rod conforming to:
ASTM A575 & A576

VXE Swivel Eyelets

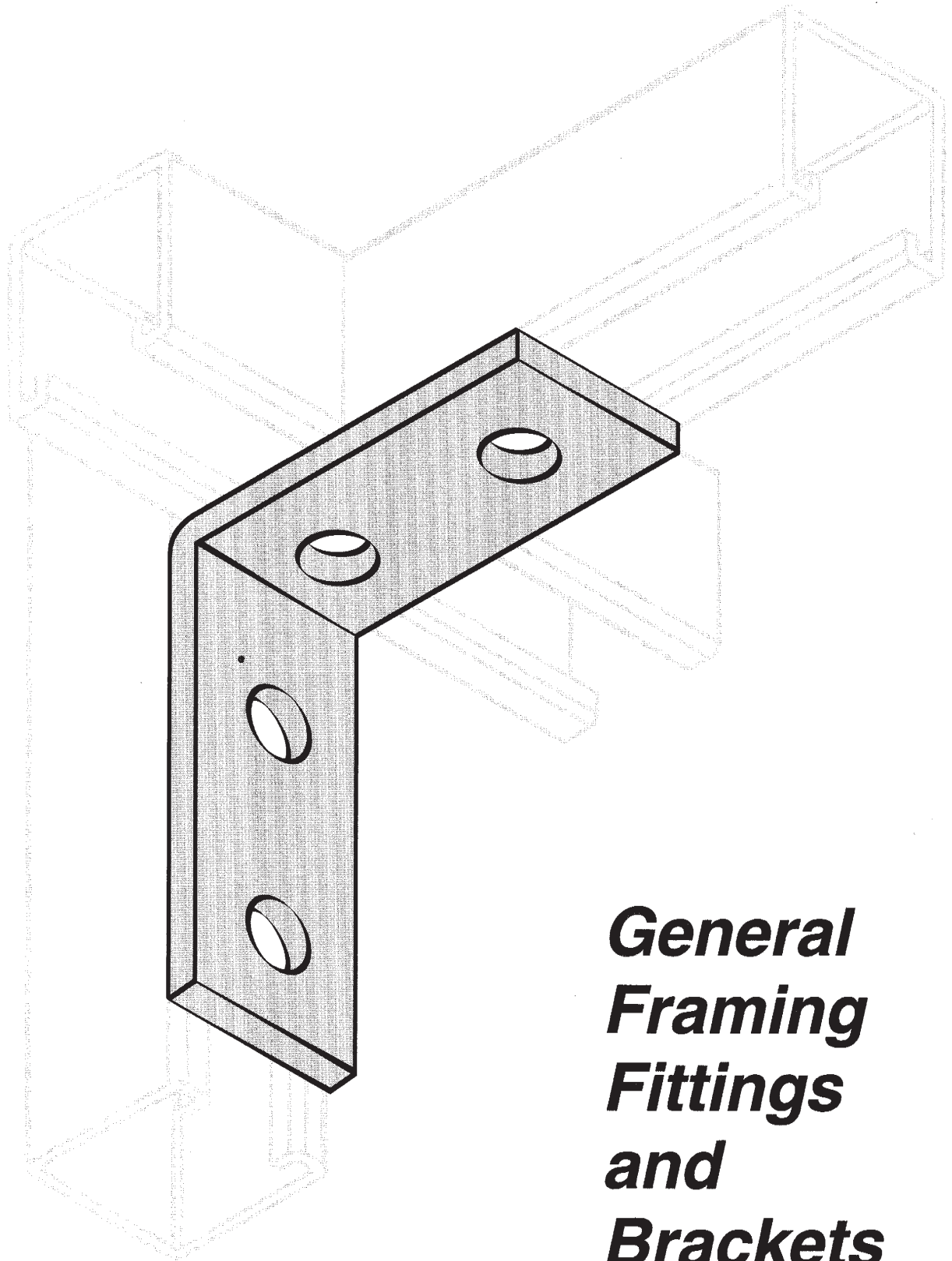
Zinc plated
U.S. Coarse Thread



VXE-1 VXE-2 VXE-3 VXE-4

| Part Number | Thread Dia. | Weight Per "C" |
|-------------|-------------|-------------------|
| VXE-1-3/8 | 3/8"-16 | 22 lbs. (10.0 kg) |
| VXE-2-3/8 | 3/8"-16 | 11 lbs. (5.0 kg) |
| VXE-3-3/8 | 3/8"-16 | 25 lbs. (11.4 kg) |
| VXE-4-3/8 | 3/8"-16 | 14 lbs. (6.4 kg) |
| VXE-1-1/2 | 1/2"-13 | 28 lbs. (12.7 kg) |
| VXE-2-1/2 | 1/2"-13 | 14 lbs. (6.4 kg) |
| VXE-3-1/2 | 1/2"-13 | 33 lbs. (15.0 kg) |
| VXE-4-1/2 | 1/2"-13 | 19 lbs. (8.6 kg) |

| Part Number | Thread Dia. | Weight Per "C" |
|-------------|-------------|-------------------|
| VXE-1-5/8 | 5/8"-11 | 36 lbs. (16.3 kg) |
| VXE-2-5/8 | 5/8"-11 | 18 lbs. (8.2 kg) |
| VXE-3-5/8 | 5/8"-11 | 44 lbs. (20.0 kg) |
| VXE-4-5/8 | 5/8"-11 | 24 lbs. (10.8 kg) |
| VXE-1-3/4 | 3/4"-10 | 56 lbs. (25.4 kg) |
| VXE-2-3/4 | 3/4"-10 | 28 lbs. (12.7 kg) |
| VXE-3-3/4 | 3/4"-10 | 60 lbs. (27.2 kg) |
| VXE-4-3/4 | 3/4"-10 | 32 lbs. (14.5 kg) |



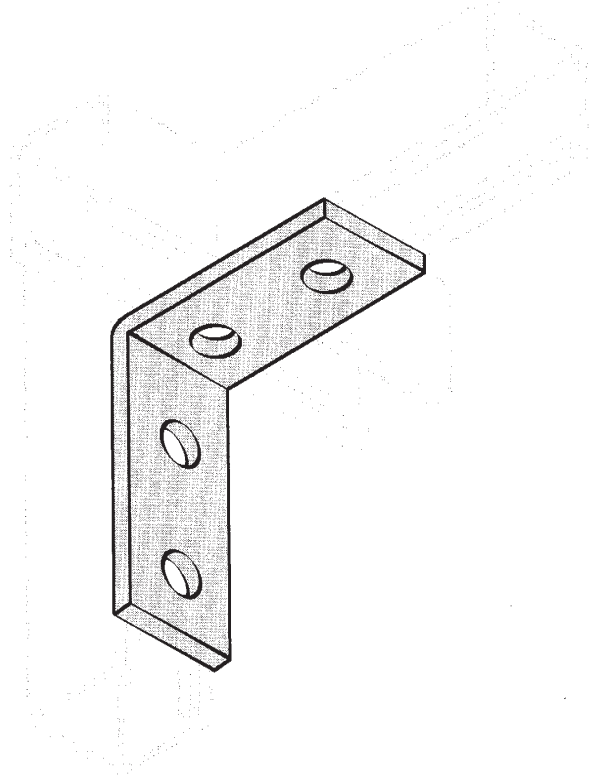
**General
Framing
Fittings
and
Brackets**
Section C



VERSABAR CORPORATION

SECTION "C" INTRODUCTION

| | |
|------------------------------|------|
| Flat Fittings | C-4 |
| Right Angle Fittings | C-6 |
| Angular Fittings | C-9 |
| "Z" Fittings | C-11 |
| Wing Fittings | C-12 |
| Splice Fittings | C-14 |
| "U" Fittings | C-16 |
| Post Bases | C-18 |
| Special Application Fittings | C-20 |
| Trolley Fittings | C-21 |
| Conveyor Fittings | C-22 |
| VCX Brackets | C-23 |
| Channel Brackets | C-24 |
| Heavy Duty Shelf Brackets | C-26 |
| Sheet Metal Shelf Brackets | C-28 |
| Cable Reel Supports | C-30 |



Material:

Fittings are manufactured from Hot Rolled Pickled and Oiled steel plate, strip, or coil, unless otherwise shown. Steel shall be in accordance with ASTM #'s: A575, A576, A635 or A36. Fitting steel shall also meet the physical requirements of ASTM A570 GR 33. Many fittings shown in this section and throughout the catalog can be produced from alternative stock such as stainless types 304 / 316, and Aluminum.

Finishes:

Standard finish is Electro-Galvanized conforming to ASTM B633 Type III SC1. We also offer unfinished, painted, and Hot Dipped Galvanized finishes on special order.

Dimensions:

All imperial dimensions provided are in inches. Metric dimensions are also included in parenthesis. Unless noted, metric dimensions are in millimeters.

Assembly:

Except where noted, fittings are designed with 9/16" diameter round holes, and accept 1/2" diameter threaded fasteners. Fittings which are 1/4" (6.35) thick can be attached to all 1-5/8" (41.3) wide channels with a 15/16" length hex head cap screw. Other diameter fasteners can be used, however, load bearing data is based upon using 1/2" diameter hardware except as noted. Nuts and bolts are to be ordered separately. It is important to choose a channel nut with the proper blank thickness and or spring length. Section "B" of the catalog will illustrate the method for proper nut selection.

Examples:

Section "C" shows one proper installation example for each fitting. Examples shown are safe and recommended. Other uses may acceptable, as long as the basic rules for channel construction shown in the front of the catalog are employed. Uses beyond what is depicted in the section are at the discretion of the user. Versabar recommends following the installation diagrams provided for the specific fitting.



| Design Loading - For Right Angle Fittings in orientation shown | | | | | |
|---|---|---|---|---|---|
| <p>NOTE:</p> <p>Fittings must be used in pairs.</p> <p>Uniform Design Loading figures provided on this page require VN-1050, VSN-1050 or VSN-3050 channel nuts.</p> <p>Refer to section "A" to determine which channel will meet your beam and / or column loading requirements.</p> | <p style="text-align: center;"><i>Ex: VF-2201</i></p> | <p style="text-align: center;"><i>Ex: VF-2305</i></p> | <p style="text-align: center;"><i>Ex: VF-2201</i></p> | <p style="text-align: center;"><i>Ex: VF-2308</i></p> | <p style="text-align: center;"><i>Ex: VF-2407</i></p> |
| Channel Gauge | | | | | |
| 12 (2.6) | 1500 lb. (6.68 kN) | 2000 lb. (8.9 kN) | 1000 lb. (4.45 kN) | 1500 lb. (6.68 kN) | 2000 lb. (8.9 kN) |
| 14 (1.9) | 1000 lb. (4.45 kN) | 1500 lb. (6.68 kN) | 650 lb. (2.89 kN) | 1000 lb. (4.45 kN) | 1900 lb. (8.46 kN) |
| 16 (1.5) | 750 lb. (3.34 kN) | 900 lb. (4.01 kN) | 500 lb. (2.23 kN) | 750 lb. (3.34 kN) | 1450 lb. (6.45 kN) |

| Design Loading - For Right Angle and Flat Fittings in orientation shown | | | | | |
|---|---|---|---|---|---|
| <p>NOTE:</p> <p>Fittings must be used in pairs.</p> <p>Uniform Design Loading figures provided on this page require VN-1050, VSN-1050 or VSN-3050 channel nuts.</p> <p>Refer to section "A" to determine which channel will meet your beam and / or column loading requirements.</p> | <p style="text-align: center;"><i>Ex: VF-2202</i></p> | <p style="text-align: center;"><i>Ex: VF-2304</i></p> | <p style="text-align: center;"><i>Ex: VF-2305</i></p> | <p style="text-align: center;"><i>Ex: VF-2708-W</i></p> | <p style="text-align: center;"><i>Ex: VF-1201</i></p> |
| Channel Gauge | | | | | |
| 12 (2.6) | 500 lb. (2.23 kN) | 500 lb. (2.23 kN) | 1200 lb. (5.34 kN) | 3000 lb. (13.35 kN) | 1000 lb. (4.45 kN) |
| 14 (1.9) | 475 lb. (2.11 kN) | 475 lb. (2.11 kN) | 1175 lb. (5.23 kN) | 2000 lb. (8.9 kN) | 800 lb. (3.56 kN) |
| 16 (1.5) | 475 lb. (2.11 kN) | 475 lb. (2.11 kN) | 975 lb. (4.34 kN) | 1450 lb. (6.45 kN) | 575 lb. (2.56 kN) |

Note:

- 1.) Illustrations show only one side of connection, mirror connection at opposite end of beam required.
- 2.) Load data is based upon connections with VN- or VSN-1050 Nuts & 1/2" Dia. Hex Head Cap Screw.
- 3.) 1/2" Dia. Hex Head Cap Screws should be torqued to 50 ft./lbs.
- 4.) Safety factor is based on 2-1/2 times the ultimate connection strength.

Recommended Bolt Torque:

| | |
|----------------|--------------------|
| 1/4"-20 | 6 ft./lbs. |
| 5/16"-18 | 11 ft./lbs. |
| 3/8"-16 | 19 ft./lbs. |
| 1/2"-13 | 50 ft./lbs. |
| 5/8"-11 | 100 ft./lbs. |
| 3/4"-10 | 125 ft./lbs. |



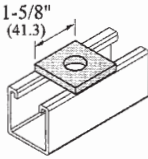
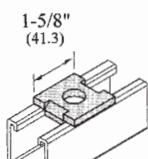
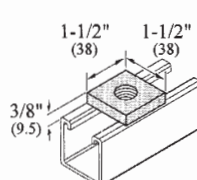
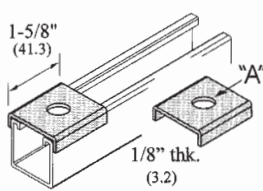
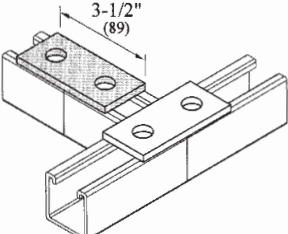
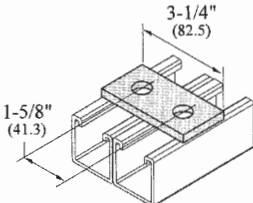
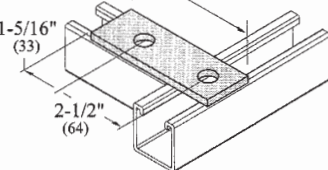
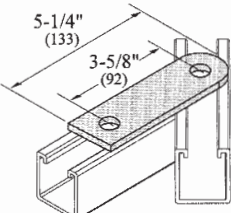
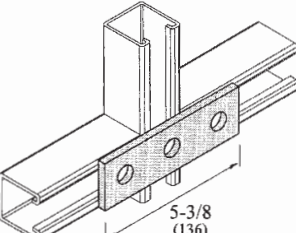
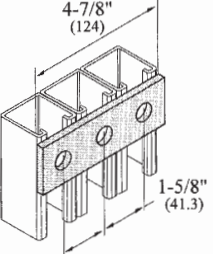
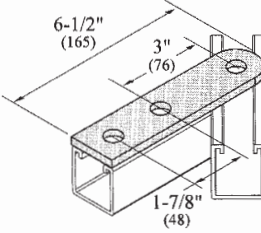
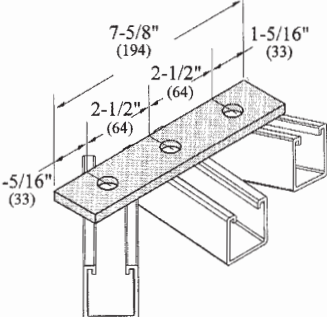
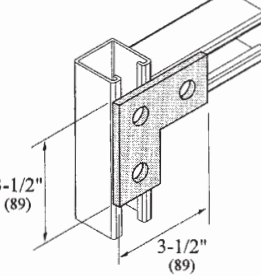
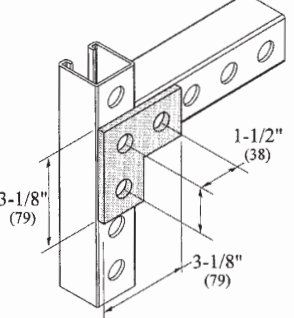
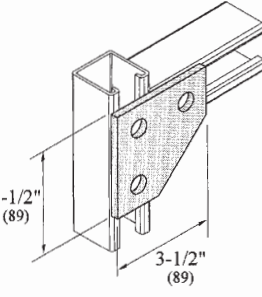
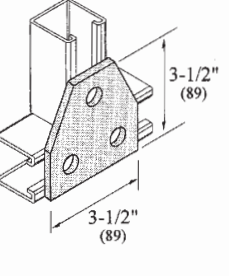
VERSABAR CORPORATION

FLAT FITTINGS

Standard Fitting Dimensions

| | | |
|-------------------------|--------|-----------|
| Width: | 1-5/8" | (41.3 mm) |
| Thickness: | 1/4" | (6.3 mm) |
| Hole Diameter: | 9/16" | (14.3 mm) |
| Hole Spacing On Center: | 1-7/8" | (47.6 mm) |
| Hole Spacing From Ends: | 13/16" | (20.6 mm) |

Metrics in Parenthesis
 •Unless Otherwise Specified•

| <p>VF-1101 Wt/ea .19 Lbs. (.086 kg.)</p>  <table border="1"> <thead> <tr> <th>Part Number</th> <th>Hole Size</th> <th>Bolt Size</th> </tr> </thead> <tbody> <tr> <td>VF-1101-1/4</td> <td>11/32 (8.7)</td> <td>1/4 or 5/16</td> </tr> <tr> <td>VF-1101-3/8</td> <td>13/32 (10.3)</td> <td>3/8</td> </tr> <tr> <td>VF-1101-1/2</td> <td>9/16 (14.3)</td> <td>1/2</td> </tr> <tr> <td>VF-1101-5/8</td> <td>21/32 (16.7)</td> <td>5/8</td> </tr> <tr> <td>VF-1101-3/4</td> <td>13/16 (20.6)</td> <td>3/4</td> </tr> <tr> <td>VF-1101-7/8</td> <td>15/16 (23.8)</td> <td>7/8</td> </tr> </tbody> </table> | Part Number | Hole Size | Bolt Size | VF-1101-1/4 | 11/32 (8.7) | 1/4 or 5/16 | VF-1101-3/8 | 13/32 (10.3) | 3/8 | VF-1101-1/2 | 9/16 (14.3) | 1/2 | VF-1101-5/8 | 21/32 (16.7) | 5/8 | VF-1101-3/4 | 13/16 (20.6) | 3/4 | VF-1101-7/8 | 15/16 (23.8) | 7/8 | <p>VF-1101-N Wt/ea .19 Lbs. (.086 kg.)</p>  <table border="1"> <thead> <tr> <th>Part Number</th> <th>Hole Size</th> <th>Bolt Size</th> </tr> </thead> <tbody> <tr> <td>VF-1101-N-1/4</td> <td>11/32 (8.7)</td> <td>1/4 or 5/16</td> </tr> <tr> <td>VF-1101-N-3/8</td> <td>13/32 (10.3)</td> <td>3/8</td> </tr> <tr> <td>VF-1101-N-1/2</td> <td>9/16 (14.3)</td> <td>1/2</td> </tr> <tr> <td>VF-1101-N-5/8</td> <td>21/32 (16.7)</td> <td>5/8</td> </tr> <tr> <td>VF-1101-N-3/4</td> <td>13/16 (20.6)</td> <td>3/4</td> </tr> </tbody> </table> | Part Number | Hole Size | Bolt Size | VF-1101-N-1/4 | 11/32 (8.7) | 1/4 or 5/16 | VF-1101-N-3/8 | 13/32 (10.3) | 3/8 | VF-1101-N-1/2 | 9/16 (14.3) | 1/2 | VF-1101-N-5/8 | 21/32 (16.7) | 5/8 | VF-1101-N-3/4 | 13/16 (20.6) | 3/4 | <p>VF-1107 Wt/ea .22 Lbs. (.10 kg.)</p>  <table border="1"> <thead> <tr> <th>Part Number</th> <th>U.S. Standard Thread</th> </tr> </thead> <tbody> <tr> <td>VF-1107-A</td> <td>3/8"-16 (9.52)</td> </tr> <tr> <td>VF-1107-B</td> <td>1/2"-13 (12.7)</td> </tr> <tr> <td>VF-1107-C</td> <td>5/8"-11 (15.8)</td> </tr> </tbody> </table> | Part Number | U.S. Standard Thread | VF-1107-A | 3/8"-16 (9.52) | VF-1107-B | 1/2"-13 (12.7) | VF-1107-C | 5/8"-11 (15.8) | <p>VF-1102 Wt/ea .16 Lbs. (.072 kg.)</p>  <table border="1"> <thead> <tr> <th>Part Number</th> <th>Thread Clearance For Bolt Size "A"</th> </tr> </thead> <tbody> <tr> <td>VF-1102-3/8</td> <td>3/8"-16 (9.52)</td> </tr> <tr> <td>VF-1102-1/2</td> <td>1/2"-13 (12.7)</td> </tr> <tr> <td>VF-1102-5/8</td> <td>5/8"-11 (15.8)</td> </tr> </tbody> </table> | Part Number | Thread Clearance For Bolt Size "A" | VF-1102-3/8 | 3/8"-16 (9.52) | VF-1102-1/2 | 1/2"-13 (12.7) | VF-1102-5/8 | 5/8"-11 (15.8) |
|---|--|--|--|-------------|-------------|-------------|-------------|--------------|-----|-------------|-------------|-----|-------------|--------------|-----|-------------|--------------|-----|-------------|--------------|-----|--|-------------|-----------|-----------|---------------|-------------|-------------|---------------|--------------|-----|---------------|-------------|-----|---------------|--------------|-----|---------------|--------------|-----|---|-------------|----------------------|-----------|----------------|-----------|----------------|-----------|----------------|---|-------------|------------------------------------|-------------|----------------|-------------|----------------|-------------|----------------|
| Part Number | Hole Size | Bolt Size | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VF-1101-1/4 | 11/32 (8.7) | 1/4 or 5/16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VF-1101-3/8 | 13/32 (10.3) | 3/8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VF-1101-1/2 | 9/16 (14.3) | 1/2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VF-1101-5/8 | 21/32 (16.7) | 5/8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VF-1101-3/4 | 13/16 (20.6) | 3/4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VF-1101-7/8 | 15/16 (23.8) | 7/8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Part Number | Hole Size | Bolt Size | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VF-1101-N-1/4 | 11/32 (8.7) | 1/4 or 5/16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VF-1101-N-3/8 | 13/32 (10.3) | 3/8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VF-1101-N-1/2 | 9/16 (14.3) | 1/2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VF-1101-N-5/8 | 21/32 (16.7) | 5/8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VF-1101-N-3/4 | 13/16 (20.6) | 3/4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Part Number | U.S. Standard Thread | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VF-1107-A | 3/8"-16 (9.52) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VF-1107-B | 1/2"-13 (12.7) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VF-1107-C | 5/8"-11 (15.8) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Part Number | Thread Clearance For Bolt Size "A" | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VF-1102-3/8 | 3/8"-16 (9.52) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VF-1102-1/2 | 1/2"-13 (12.7) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VF-1102-5/8 | 5/8"-11 (15.8) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>VF-1201 Wt/ea .4 Lbs. (.182 kg.)</p>  | <p>VF-1204 Wt/ea .35 Lbs. (.158 kg.)</p>  | <p>VF-1211 Wt/ea .5 Lbs. (.227 kg.)</p>  | <p>VF-1203 Wt/ea .5 Lbs. (.227 kg.)</p>  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>VF-1302 Wt/ea .56 Lbs. (.250 kg.)</p>  | <p>VF-1306 Wt/ea .5 Lbs. (.230 kg.)</p>  | <p>VF-1310 Wt/ea .73 Lbs. (.330 kg.)</p>  | <p>VF-1316 Wt/ea .8 Lbs. (.363 kg.)</p>  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>VF-1301 Wt/ea .58 Lbs. (.263 kg.)</p>  | <p>VF-1301-B Wt/ea .4 Lbs. (.180 kg.)</p>  | <p>VF-1304 Wt/ea .7 Lbs. (.318 kg.)</p>  | <p>VF-1305 Wt/ea .7 Lbs. (.318 kg.)</p>  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Standard Fitting Dimensions

Width: 1-5/8" (41.3 mm)
 Thickness: 1/4" (6.3 mm)
 Hole Diameter: 9/16" (14.3 mm)
 Hole Spacing On Center: 1-7/8" (47.6 mm)
 Hole Spacing From Ends: 13/16" (20.6 mm)

Metrics in Parenthesis
 •Unless Otherwise Specified•

VERSABAR CORPORATION



FLAT FITTINGS

| | | | |
|--|---|---|---|
| <p>VF-1409 Wt/ea .93 Lbs. (.420 kg.)</p> | <p>VF-1412 Wt/ea .8 Lbs. (.360 kg.)</p> | <p>VF-1402 Wt/ea .77 Lbs. (.348 kg.)</p> | <p>VF-1406-A Wt/ea .8 Lbs. (.360 kg.)</p> |
| <p>VF-1406 Wt/ea 1.07 Lbs. (.490 kg.)</p> | <p>VF-1406-B Wt/ea .64 Lbs. (.291 kg.)</p> <p>May be produced from 3/16" (4.8 mm) thick bar, check with factory.</p> | <p>VF-1401 Wt/ea .83 Lbs. (.375 kg.)</p> | <p>VF-1401-B Wt/ea .61 Lbs. (.278 kg.)</p> |
| <p>VF-1411 Wt/ea 1.1 Lbs. (.5 kg.)</p> | <p>VF-1404 Wt/ea 1.0 Lbs. (.454 kg.)</p> | <p>VF-1403 Wt/ea 1.0 Lbs. (.454 kg.)</p> | <p>VF-1419 Wt/ea 2.68 Lbs. (1.22 kg.)</p> |
| <p>VF-1501 Wt/ea 1.05 Lbs. (.474 kg.)</p> | <p>VF-1501-B Wt/ea 1.05 Lbs. (.474 kg.)</p> <p>* Outside holes 1-3/16" (30) center to end</p> | <p>VF-1505 Wt/ea 1.5 Lbs. (.678 kg.)</p> | <p>VF-1504 Wt/ea 1.5 Lbs. (.678 kg.)</p> |



VERSABAR CORPORATION

FLAT and RIGHT ANGLE FITTINGS

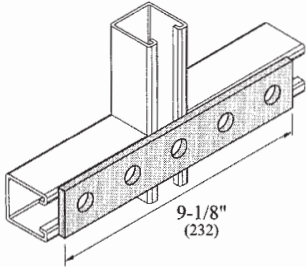
Standard Fitting Dimensions

| | | |
|-------------------------|--------|-----------|
| Width: | 1-5/8" | (41.3 mm) |
| Thickness: | 1/4" | (6.3 mm) |
| Hole Diameter: | 9/16" | (14.3 mm) |
| Hole Spacing On Center: | 1-7/8" | (47.6 mm) |
| Hole Spacing From Ends: | 13/16" | (20.6 mm) |

Metrics in Parenthesis
 Unless Otherwise Specified

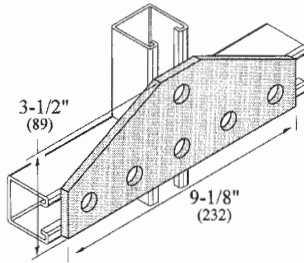
VF-1506

Wt/ea .94 Lbs.
(.424 kg.)



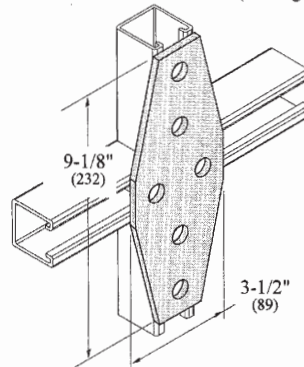
VF-1602

Wt/ea 1.75 Lbs.
(.791 kg.)



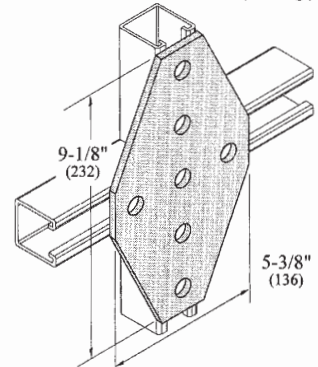
VF-1603

Wt/ea 1.66 Lbs.
(.750 kg.)



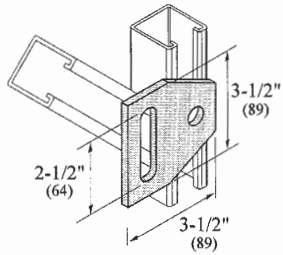
VF-1704

Wt/ea 2.4 Lbs.
(1.08 kg.)

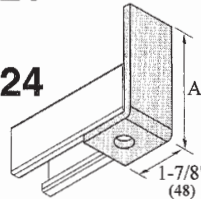


VF-1205

Wt/ea .66 Lbs.
(.30 kg.)



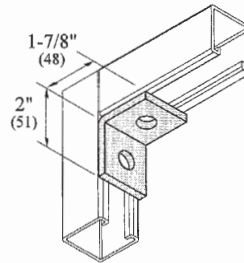
VF-2121
to
VF-2124



| Part Number | Dim "A" In. | Dim "A" mm | Wt. Each |
|-------------|-------------|------------|----------------|
| VF-2121 | 3-7/8" | (98) | 0.61 (.275) kg |
| VF-2122 | 5-7/8" | (149) | 0.86 (.388) kg |
| VF-2123 | 7-7/8" | (200) | 1.07 (.483) kg |
| VF-2124 | 9-7/8" | (250) | 1.34 (.605) kg |

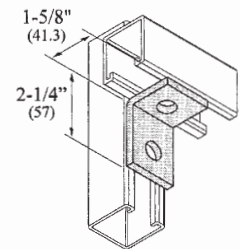
VF-2201

Wt/ea .4 Lbs.
(.180 kg.)



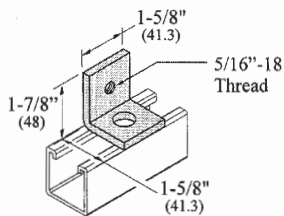
VF-2202

Wt/ea .4 Lbs.
(.180 kg.)



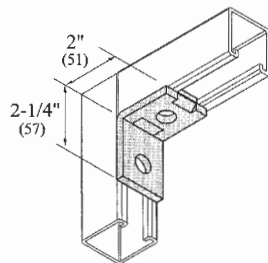
VF-2202-T

Wt/ea .4 Lbs.
(.18 kg.)



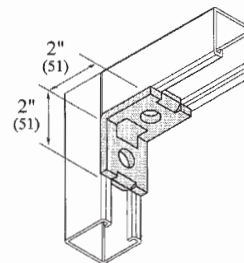
VF-2209-N

Wt/ea .37 Lbs.
(.17 kg.)

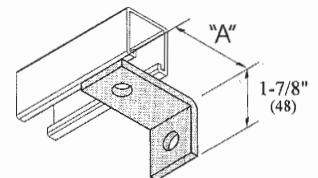


VF-2204-N

Wt/ea .34 Lbs.
(.15 kg.)



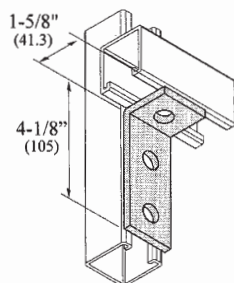
VF-2205-A to -C



| Part Number | Dim "A" | Wt. Ea. |
|-------------|---------------|-----------------|
| VF-2205-A | 3" (76.2) | .50 # (.226) kg |
| VF-2205-B | 3-1/2" (88.9) | .56 # (.253) kg |
| VF-2205-C | 4" (102) | .63 # (.285) kg |

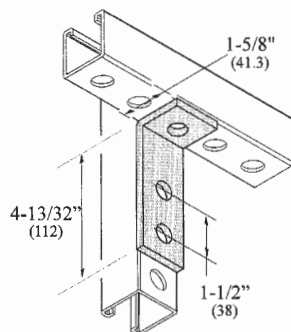
VF-2304

Wt/ea .62 Lbs.
(.280 kg.)



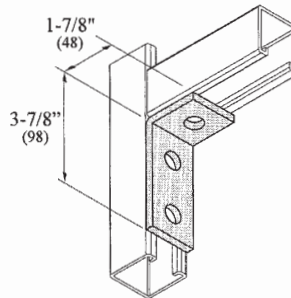
VF-2304-B

Wt/ea .59 Lbs.
(.266 kg.)



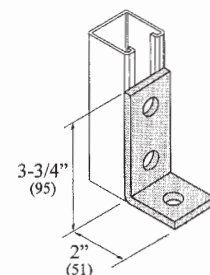
VF-2305

Wt/ea .62 Lbs.
(.280 kg.)



VF-2307

Wt/ea .62 Lbs.
(.280 kg.)



Standard Fitting Dimensions

Width: 1-5/8" (41.3 mm)
 Thickness: 1/4" (6.3 mm)
 Hole Diameter: 9/16" (14.3 mm)
 Hole Spacing On Center: 1-7/8" (47.6 mm)
 Hole Spacing From Ends: 13/16" (20.6 mm)
 Metrics in Parenthesis
 •Unless Otherwise Specified•

VERSABAR CORPORATION

RIGHT ANGLE FITTINGS



| | | | |
|---|--|--|--|
| <p>VF-2308 Wt/ea .62 Lbs. (.280 kg.)</p> | <p>VF-2213 Wt/ea .85 Lbs. (.384 kg.)</p> | <p>VF-2322 Wt/ea .81 Lbs. (.366 kg.)</p> | <p>VF-2313 Wt/ea 1 Lb. (.452 kg.)</p> |
| <p>VF-2315-R* Wt/ea .58 Lbs. (.262 kg.) VF-2315-L</p> <p>* Right Hand Version Illustrated, Left Opp.</p> | <p>VF-2301-R* Wt/ea .62 Lbs. (.280 kg.) VF-2301-L</p> <p>* Right Hand Version Illustrated, Left Opp.</p> | <p>VF-2310 Wt/ea .75 Lbs. (.339 kg.)</p> | <p>VF-2407 Wt/ea .84 Lbs. (.379 kg.)</p> |
| <p>VF-2407-B Wt/ea .74 Lbs. (.334 kg.)</p> | <p>VF-2403 Wt/ea .84 Lbs. (.379 kg.)</p> | <p>VF-2426-R* Wt/ea 1.2 Lbs. (.542 kg.) VF-2426-L</p> <p>* Right Hand Version Illustrated, Left Opp.</p> | <p>VF-2417 Wt/ea .75 Lbs. (.339 kg.)</p> |
| <p>VF-2411-R* Wt/ea 1.06 Lbs. (.479 kg.) VF-2411-L</p> <p>* Right Hand Version Illustrated, Left Opp.</p> | <p>VF-2421-R* Wt/ea 1 Lb. (.453 kg.) VF-2421-L</p> <p>* Right Hand Version Illustrated, Left Opp.</p> | <p>VF-2410 Wt/ea 1.08 Lbs. (.488 kg.)</p> | <p>VF-2402-R Wt/ea .83 Lbs. (.375 kg.) VF-2402-L*</p> <p>* Left Hand Version Illustrated, Right Opp.</p> |



VERSABAR CORPORATION

RIGHT ANGLE FITTINGS

Standard Fitting Dimensions

| | | |
|-------------------------|--------|-----------|
| Width: | 1-5/8" | (41.3 mm) |
| Thickness: | 1/4" | (6.3 mm) |
| Hole Diameter: | 9/16" | (14.3 mm) |
| Hole Spacing On Center: | 1-7/8" | (47.6 mm) |
| Hole Spacing From Ends: | 13/16" | (20.6 mm) |

Metrics in Parenthesis
 •Unless Otherwise Specified•

| | | | |
|---|--|---|--|
| <p>VF-2413 Wt/ea 1.08 Lbs. (.488 kg.)</p> | <p>VF-2401 Wt/ea .83 Lbs. (.375 kg.)</p> | <p>VF-2412 Wt/ea .85 Lbs. (.384 kg.)</p> | <p>VF-2401-B Wt/ea .75 Lbs. (.339 kg.)</p> |
| <p>VF-2501 Wt/ea .94 Lbs. (.424 kg.)</p> | <p>VF-2506 Wt/ea 1.05 Lbs. (.476 kg.)</p> | <p>VF-2502-B Wt/ea .75 Lbs. (.339 kg.)</p> | <p>VF-2510 Wt/ea 1.42 Lbs. (.641 kg.)</p> |
| <p>VF-2503-R* Wt/ea 1.4 Lbs. (.632 kg.) VF-2503-L</p> <p>* Right Hand Version Illustrated, Left Opp.</p> | <p>VF-2512 Wt/ea 1.54 Lbs. (.696 kg.)</p> | <p>VF-2505 Wt/ea 1.56 Lbs. (.705 kg.)</p> | <p>VF-2508 Wt/ea 1.36 Lbs. (.614 kg.)</p> |
| <p>VF-2509 Wt/ea 1.36 Lbs. (.614 kg.)</p> | <p>VF-2545-R Wt/ea 1.25 Lbs. (.565 kg.) VF-2545-L*</p> <p>* Left Hand Version Illustrated, Right Opp.</p> | <p>VF-2604 Wt/ea 1.75 Lbs. (.792 kg.)</p> | <p>VF-2603-R* Wt/ea 1.76 Lbs. (.795 kg.) VF-2603-L</p> <p>* Right Hand Version Illustrated, Left Opp.</p> |

Standard Fitting Dimensions

Width: 1-5/8" (41.3 mm)
 Thickness: 1/4" (6.3 mm)
 Hole Diameter: 9/16" (14.3 mm)
 Hole Spacing On Center: 1-7/8" (47.6 mm)
 Hole Spacing From Ends: 13/16" (20.6 mm)
 Metrics in Parenthesis
 •Unless Otherwise Specified•

VERSABAR CORPORATION RIGHT ANGLE & ANGULAR FITTINGS



| <p>VF-2703-R* Wt/ea 2.11 Lbs. (.957 kg.) VF-2703-L</p> <p>* Right Hand Version Illustrated, Left Opp.</p> | <p>VF-2708 Wt/ea 1.32 Lbs. (.596 kg.) VF-2708-W*</p> <p>* VF-2708-W Has A Welded Corner Joint</p> | <p>VF-2702 Wt/ea 2.4 Lbs. (1.08 kg.)</p> | <p>VF-3702 Wt/ea 2.9 Lbs. (1.31 kg.)</p> | | | | | | | | | | | | | | | | | | |
|---|--|---|---|---------|-------------|--------------|-----------|--------------|--------------|---|---|---|-------------|-------|-------|---------|--------------|----------|-----------|--------------|----------|
| <p>VF-2223 Wt/ea .75 Lbs. (.339 kg.)</p> <p>Note Side View - Not A Full Collar</p> | <p>VF-2320 Wt/ea 1.25 Lbs. (.565 kg.)</p> <p>Note Side View - Not A Full Collar</p> | <p>VF-2418 Wt/ea 1.7 Lbs. (.768 kg.)</p> <p>Note Side View - Not A Full Collar</p> | <p>VF-2215 Wt/ea 1.1 Lbs. (.497 kg.)</p> | | | | | | | | | | | | | | | | | | |
| <p>VF-2208 Wt/ea .68 Lbs. (.308 kg.) VF-2208-A Wt/ea .89 Lbs. (.404 kg.)</p> <p>Beam clamp VX-7101-S not included</p> <table border="1"> <thead> <tr> <th>Part Number</th> <th>Dim "A"</th> <th>Dim "B"</th> </tr> </thead> <tbody> <tr> <td>VF-2208</td> <td>2-1/2" (64)</td> <td>4-7/8" (124)</td> </tr> <tr> <td>VF-2208-A</td> <td>4-1/2" (114)</td> <td>6-7/8" (175)</td> </tr> </tbody> </table> | Part Number | Dim "A" | Dim "B" | VF-2208 | 2-1/2" (64) | 4-7/8" (124) | VF-2208-A | 4-1/2" (114) | 6-7/8" (175) | <p>VF-2511 Wt/ea .68 Lbs. (.307 kg.)</p> | <p>VF-2409 Wt/ea 2.5 Lbs. (1.13 kg.)</p> <p>9/16" x 1-1/2" Slots (14) (38)</p> | <p>VF-2404 Wt/ea 1.9 Lbs. (.86 kg.) VF-2404-A Wt/ea 2.5 Lbs. (1.1 kg.)</p> <table border="1"> <thead> <tr> <th>Part Number</th> <th>Dim A</th> <th>Dim B</th> </tr> </thead> <tbody> <tr> <td>VF-2404</td> <td>6-5/8" (168)</td> <td>4" (102)</td> </tr> <tr> <td>VF-2404-A</td> <td>8-5/8" (219)</td> <td>6" (152)</td> </tr> </tbody> </table> | Part Number | Dim A | Dim B | VF-2404 | 6-5/8" (168) | 4" (102) | VF-2404-A | 8-5/8" (219) | 6" (152) |
| Part Number | Dim "A" | Dim "B" | | | | | | | | | | | | | | | | | | | |
| VF-2208 | 2-1/2" (64) | 4-7/8" (124) | | | | | | | | | | | | | | | | | | | |
| VF-2208-A | 4-1/2" (114) | 6-7/8" (175) | | | | | | | | | | | | | | | | | | | |
| Part Number | Dim A | Dim B | | | | | | | | | | | | | | | | | | | |
| VF-2404 | 6-5/8" (168) | 4" (102) | | | | | | | | | | | | | | | | | | | |
| VF-2404-A | 8-5/8" (219) | 6" (152) | | | | | | | | | | | | | | | | | | | |
| <p>VF-2228-A Wt/ea .37 Lbs. (.167 kg.)</p> | <p>VF-2217 Wt/ea .5 Lbs. (.226 kg.)</p> | <p>VF-2507 Wt/ea .63 Lbs. (.284 kg.)</p> | <p>VF-3301-45° Wt/ea .62 Lbs. (.280 kg.)</p> | | | | | | | | | | | | | | | | | | |



VERSABAR CORPORATION

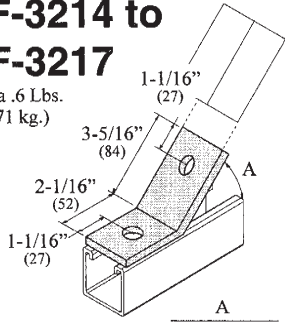
ANGULAR FITTINGS

Standard Fitting Dimensions

| | | |
|------------------------------|--------|-----------|
| Width: | 1-5/8" | (41.3 mm) |
| Thickness: | 1/4" | (6.3 mm) |
| Hole Diameter: | 9/16" | (14.3 mm) |
| Hole Spacing On Center: | 1-7/8" | (47.6 mm) |
| Hole Spacing From Ends: | 13/16" | (20.6 mm) |
| Metrics in Parenthesis | | |
| •Unless Otherwise Specified• | | |

VF-3214 to VF-3217

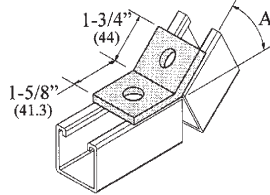
Wt/ea. .6 Lbs.
(.271 kg.)



| | | |
|--------------------------------|----------------|------|
| Part Number And Angle A | VF-3214-30 | Deg. |
| | VF-3215-22-1/2 | Deg. |
| | VF-3216-15 | Deg. |
| | VF-3217-7-1/2 | Deg. |

VF-3248

Wt/ea. .37 Lbs.
(.167 kg.)

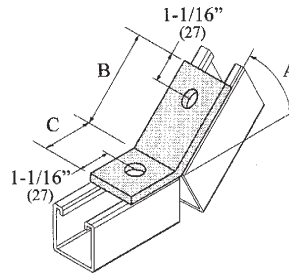


Part Number And Angle A

| | |
|----------------|----------------|
| VF-3248-7-1/2 | VF-3248-45 |
| VF-3248-15 | VF-3248-52-1/2 |
| VF-3248-22-1/2 | VF-3248-60 |
| VF-3248-30 | VF-3248-67-1/2 |
| VF-3248-37-1/2 | VF-3248-75 |
| | VF-3248-82-1/2 |

VF-3206 to VF-3213 and VF-2303-45

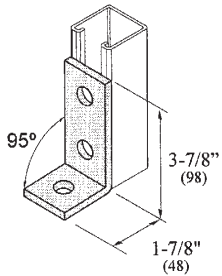
Wt/ea. .60 Lbs.
(.271 kg.)



| Part Number And Angle A | Dim. B | Dim. C |
|-------------------------|---------------|--------------------|
| VF-3207-82-1/2 | 3-1/2 (89) | 1-3/4 (44) |
| VF-3208-75 | 3-1/2 (89) | 1-3/4 (44) |
| VF-3210-67-1/2 | 3-1/2 (89) | 1-3/4 (44) |
| VF-3206-60 | 3-3/8 (86) | 1-7/8 (48) |
| VF-3211-52-1/2 | 3-1/4 (83) | 2-1/16 (52) |
| VF-2303-45 | 3 (76) | 2-5/16 (59) |
| VF-3212-37-1/2 | 3-1/2 (89) | 1-3/4 (44) |
| VF-3213-37-1/2 | 2-3/4 (70) | 2-5/8 (67) |

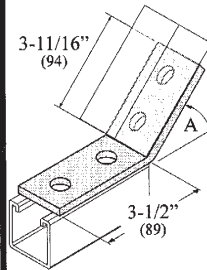
VF-3306

Wt/ea. .6 Lbs.
(.271 kg.)



VF-3402

Wt/ea. .77 Lbs.
(.348 kg.)

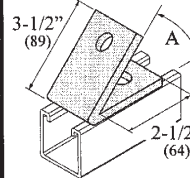


Part Number And Angle A

| |
|----------------|
| VF-3402-7-1/2 |
| VF-3402-15 |
| VF-3402-22-1/2 |
| VF-3402-30 |
| VF-3402-37-1/2 |
| VF-3402-45 |
| VF-3402-52-1/2 |
| VF-3402-60 |
| VF-3402-67-1/2 |
| VF-3402-75 |
| VF-3402-82-1/2 |

VF-3218 to VF-3222

Wt/ea. .6 Lbs.
(.271 kg.)

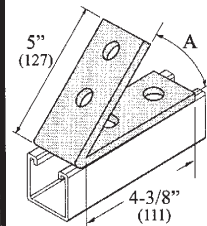


Part Number And Angle A

| |
|----------------|
| VF-3218-82-1/2 |
| VF-3219-75 |
| VF-3220-67-1/2 |
| VF-3205-60 |
| VF-3221-52-1/2 |
| VF-3202-45 |
| VF-3222-37-1/2 |

VF-3424 to VF-3430

Wt/ea 1.05 Lbs.
(.474 kg.)

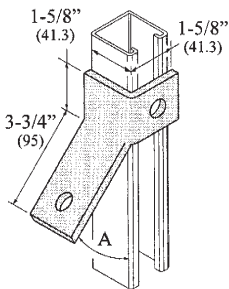


Part Number And Angle A

| |
|----------------|
| VF-3424-82-1/2 |
| VF-3425-75 |
| VF-3426-67-1/2 |
| VF-3427-60 |
| VF-3428-52-1/2 |
| VF-3429-45 |
| VF-3430-37-1/2 |

VF-6201* to VF-6206*

Wt/ea. .87 Lbs.
(.393 kg.)



Part Number And Angle A

| |
|------------------|
| VF-6201-R-22-1/2 |
| VF-6202-R-30 |
| VF-6203-R-37-1/2 |
| VF-6204-R-45 |
| VF-6205-R-52-1/2 |
| VF-6206-R-60 |

For Left Hand Fitting order as (-L)

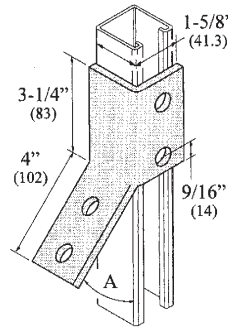
Collar fits:

VA-1 or VA-2 Channel

* Right Hand Version Illustrated, Left Opp.

VF-6406* to VF-6411*

Wt/ea 1.18 Lbs.
(.533 kg.)



Part Number And Angle A

| |
|------------------|
| VF-6406-R-22-1/2 |
| VF-6407-R-30 |
| VF-6408-R-37-1/2 |
| VF-6409-R-45 |
| VF-6410-R-52-1/2 |
| VF-6411-R-60 |

For Left Hand Fitting order as (-L)

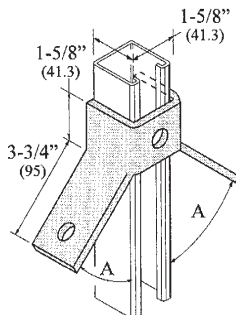
Collar fits:

VA-1 or VA-2 Channel

* Right Hand Version Illustrated, Left Opp.

VF-6310 to VF-6315

Wt/ea 1.5 Lbs.
(.678 kg.)



Part Number And Angle A

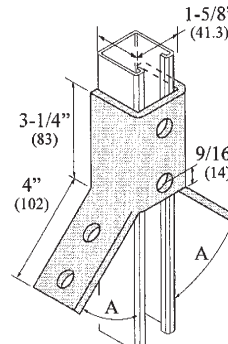
| |
|----------------|
| VF-6310-22-1/2 |
| VF-6311-30 |
| VF-6312-37-1/2 |
| VF-6313-45 |
| VF-6314-52-1/2 |
| VF-6315-60 |

Collar fits:

VA-1 or VA-2 Channel

VF-6612 to VF-6617

Wt/ea 2.19 Lbs.
(.989 kg.)



Part Number And Angle A

| |
|----------------|
| VF-6612-22-1/2 |
| VF-6613-30 |
| VF-6614-37-1/2 |
| VF-6615-45 |
| VF-6616-52-1/2 |
| VF-6617-60 |

Collar fits:

VA-1 or VA-2 Channel

Standard Fitting Dimensions

| | | |
|-------------------------|--------|-----------|
| Width: | 1-5/8" | (41.3 mm) |
| Thickness: | 1/4" | (6.3 mm) |
| Hole Diameter: | 9/16" | (14.3 mm) |
| Hole Spacing On Center: | 1-7/8" | (47.6 mm) |
| Hole Spacing From Ends: | 13/16" | (20.6 mm) |

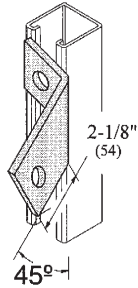
Metrics in Parenthesis
 Unless Otherwise Specified

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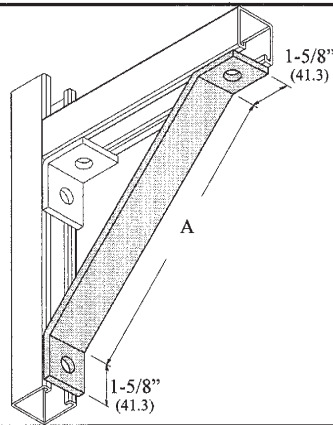


BRACES and "Z" FITTINGS

VF-2203-L* Wt/ea .55 Lbs.
(.248 kg.)
VF-2203-R



* Left Hand Version Illustrated, Right Opp.



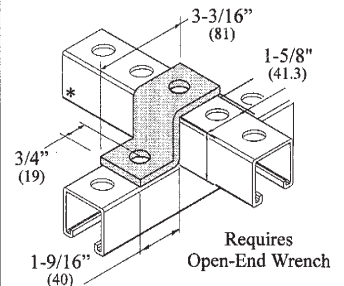
VF-3250 Series

Knee Braces

| Part Number | Dim A | Wgt. Ea. |
|-------------|-----------|-------------|
| VF-3250-12 | 12" (304) | 1.81 (.818) |
| VF-3250-18 | 18" (457) | 2.15 (.971) |
| VF-3250-24 | 24" (609) | 3.15 (1.42) |

VF-4301-B Wt/ea .59 Lbs.
(.266 kg.)

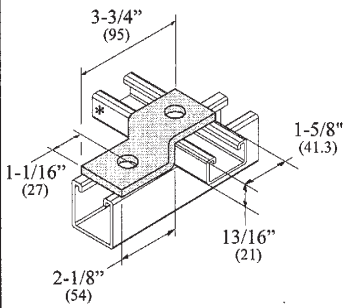
Now Also Available For: VA-4 & VA-5
 Part # **VF-4301-4B**



Requires Open-End Wrench

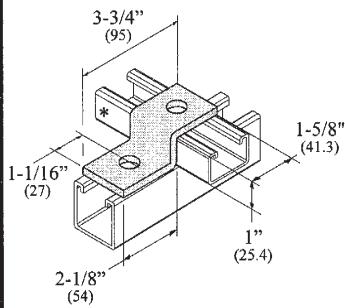
* FITS: 1-5/8 x 1-5/8 P1.5 Channel

VF-4301-4 Wt/ea .48 Lbs.
(.216 kg.)



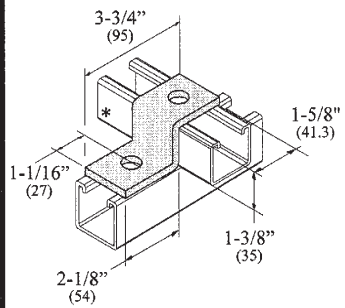
* FITS: VA-4, VA-5 or VA-13

VF-4301-10 Wt/ea .52 Lbs.
(.235 kg.)



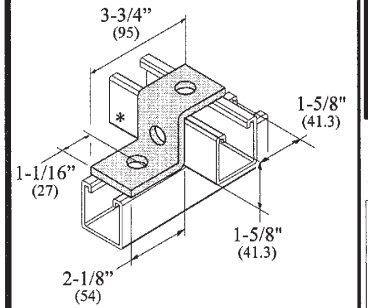
* FITS: VA-8 or VA-10

VF-4301-6 Wt/ea .54 Lbs.
(.244 kg.)



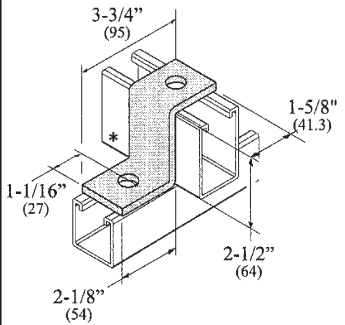
* FITS: VA-6 or VA-7

VF-4301 Wt/ea .6 Lbs.
(.271 kg.)



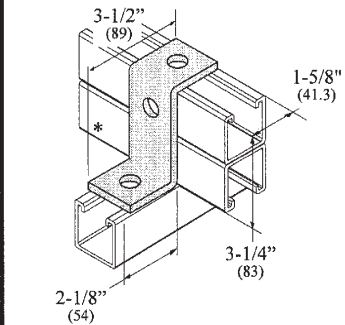
* FITS: VA-1, VA-2 or VA-12

VF-4301-3 Wt/ea .69 Lbs.
(.311 kg.)



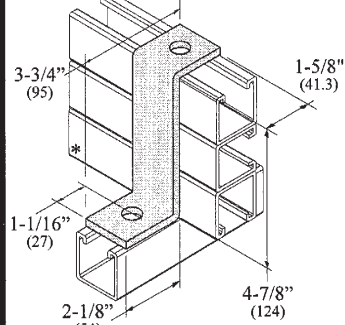
* FITS: VA-3

VF-4302 Wt/ea .75 Lbs.
(.339 kg.)



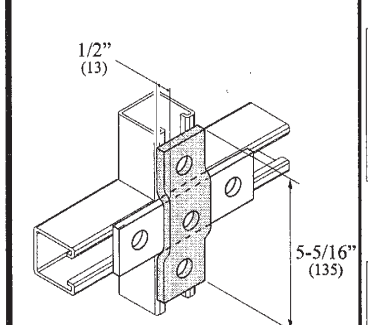
* FITS: VA-1201, VA-2201 or VA-11

VF-4205 Wt/ea .93 Lbs.
(.420 kg.)

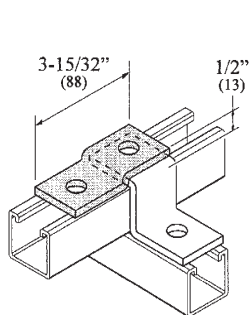


* FITS: Triple Welded VA-1, VA-2, or VA-12

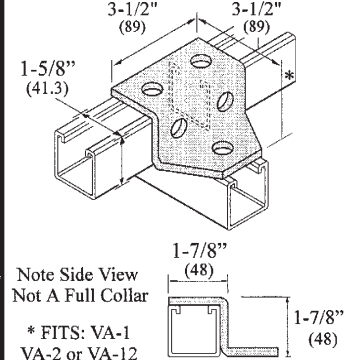
VF-6308 Wt/ea .58 Lbs.
(.262 kg.)



VF-4202 Wt/ea .38 Lbs.
(.171 kg.)



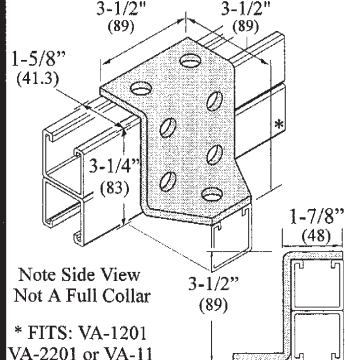
VF-4501 Wt/ea 1 Lb.
(.453 kg.)



Note Side View Not A Full Collar

* FITS: VA-1 VA-2 or VA-12

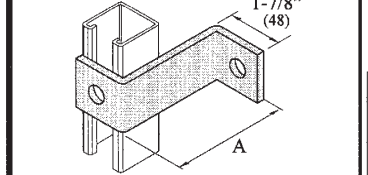
VF-4701 Wt/ea 1.5 Lbs.
(.678 kg.)



Note Side View Not A Full Collar

* FITS: VA-1201 VA-2201 or VA-11

VF-4204 Series



| Part Number | Dim A | Wt. Ea. |
|-------------|-------|----------------|
| VF-4204-A | 4" | .82 # (.37) kg |
| VF-4204-B | 5" | .93 # (.42) kg |
| VF-4204-C | 6" | 1.1 # (.48) kg |
| VF-4204-D | 7" | 1.2 # (.53) kg |
| VF-4204-E | 8" | 1.3 # (.58) kg |



VERSABAR CORPORATION

"Z" and WING FITTINGS

Standard Fitting Dimensions

| | | |
|------------------------------|--------|-----------|
| Width: | 1-5/8" | (41.3 mm) |
| Thickness: | 1/4" | (6.3 mm) |
| Hole Diameter: | 9/16" | (14.3 mm) |
| Hole Spacing On Center: | 1-7/8" | (47.6 mm) |
| Hole Spacing From Ends: | 13/16" | (20.6 mm) |
| Metrics in Parenthesis | | |
| *Unless Otherwise Specified* | | |

VF-4201-4 Wt/ea .5 Lbs. (.226 kg.)

* FITS: VA-4, VA-5 or VA-13

VF-4201 Wt/ea .59 Lbs. (.266 kg.)

* FITS: VA-1, VA-2 or VA-12

VF-4201-3 Wt/ea .72 Lbs. (.325 kg.)

* FITS: VA-3

VF-3801 Wt/ea 2.18 Lbs. (.985 kg.)

* FITS: VA-1, VA-2 or VA-12

VF-3303 Wt/ea .69 Lbs. (.311 kg.)

* FITS: VA-1, VA-2 or VA-12

VF-4203 Wt/ea .7 Lbs. (.316 kg.)

* FITS: VA-1, VA-2 or VA-12

VF-4401 Wt/ea 1.06 Lbs. (.479 kg.)

* FITS: VA-1, VA-2 or VA-12

VF-4303-4 Wt/ea .84 Lbs. (.379 kg.)

* Slot width is 9/16" (14.3)

* FITS: VA-4, VA-5 or VA-13

VF-4303 Wt/ea .92 Lbs. (.415 kg.)

* Slot width is 9/16" (14.3)

* FITS: VA-1, VA-2 or VA-12

VF-4101 Wt/ea .56 Lbs. (.253 kg.)

* FITS: VA-1, VA-2 or VA-12

VF-4102 Wt/ea .56 Lbs. (.253 kg.)

* FITS: VA-1, VA-2 or VA-12

VF-3101 Wt/ea .75 Lbs. (.339 kg.)

* FITS: VA-1, VA-2 or VA-12

VF-3103 Wt/ea .75 Lbs. (.339 kg.)

* FITS: VA-1, VA-2 or VA-12

VF-2216-R* Wt/ea .61 Lbs. (.275 kg.)

VF-2216-L

Collar section fits: VA-1, VA-2 & VA-12

* Right Hand Version Illustrated, Left Opp.

VF-3431-R* Wt/ea .74 Lbs. (.334 kg.)

VF-3431-L

Collar section fits: VA-1, VA-2 & VA-12

* Right Hand Version Illustrated, Left Opp.

VF-2504 Wt/ea 1.09 Lbs. (.492 kg.)

Collar section fits: VA-1, VA-2 & VA-12

Standard Fitting Dimensions

| | | |
|------------------------------|--------|-----------|
| Width: | 1-5/8" | (41.3 mm) |
| Thickness: | 1/4" | (6.3 mm) |
| Hole Diameter: | 9/16" | (14.3 mm) |
| Hole Spacing On Center: | 1-7/8" | (47.6 mm) |
| Hole Spacing From Ends: | 13/16" | (20.6 mm) |
| Metrics in Parenthesis | | |
| •Unless Otherwise Specified• | | |

VERSABAR CORPORATION



WING FITTINGS

| | | | |
|--|--|--|--|
| <p>VF-3405 Wt/ea .81 Lbs. (.366 kg.)</p> <p>Collar section fits: VA-1, VA-2 & VA-12</p> | <p>VF-3602 Wt/ea 1.22 Lbs. (.551 kg.)</p> <p>Collar section fits: VA-1, VA-2 & VA-12</p> | <p>VF-2324-R* Wt/ea 1.15 Lbs. (.519 kg.) VF-2324-L</p> <p>Collar section fits: VA-1, VA-2 & VA-12</p> <p>* Right Hand Version Illustrated, Left Opp.</p> | <p>VF-6801 Wt/ea 1.77 Lbs. (.80 kg.)</p> <p>Collar section fits: VA-1, VA-2 & VA-12</p> |
| <p>VF-6801-B Wt/ea 1.85 Lbs. (.84 kg.)</p> <p>Collar section fits: VA-1P1.5, VA-2P1.5 & VA-12P1.5</p> | <p>VF-3901 Wt/ea 1.9 Lbs. (.86 kg.)</p> <p>Collar section fits: VA-1, VA-2 & VA-12</p> | <p>VF-3901-B Wt/ea 2 Lbs. (.906 kg.)</p> <p>Collar section fits: VA-1P1.5, VA-2P1.5 & VA-12P1.5</p> | <p>VF-3601 Wt/ea 1.26 Lbs. (.570 kg.)</p> <p>Collar section fits: VA-1, VA-2 & VA-12</p> |
| <p>VF-2419-L* Wt/ea 1.18 Lbs. (.533 kg.) VF-2419-R</p> <p>Collar section fits: VA-1, VA-2 & VA-12</p> <p>* Left Hand Version Illustrated, Right Opp.</p> | <p>VF-3802 Wt/ea 1.53 Lbs. (.692 kg.)</p> <p>Collar section fits: VA-1, VA-2 & VA-12</p> | <p>VF-3802-B Wt/ea 1.53 Lbs. (.693 kg.)</p> <p>Collar section fits: VA-1P1.5, VA-2P1.5 & VA-12P1.5</p> | <p>VF-61002 Wt/ea 2.19 Lbs. (.989 kg.)</p> <p>Collar section fits: VA-1, VA-2 & VA-12</p> |
| <p>VF-31201 Wt/ea 2.47 Lbs. (1.12 kg.)</p> <p>Collar section fits: VA-1, VA-2 & VA-12</p> | <p>VF-21001 Wt/ea 2.62 Lbs. (1.18 kg.)</p> <p>Collar section fits: VA-1, VA-2 & VA-12</p> | <p>VF-31202 Wt/ea 3.05 Lbs. (1.37 kg.)</p> <p>Collar section fits: VA-1, VA-2 & VA-12</p> | <p>VF-3803 Wt/ea 2.15 Lbs. (.971 kg.)</p> <p>Collar section fits: VA-1, VA-2 & VA-12</p> |



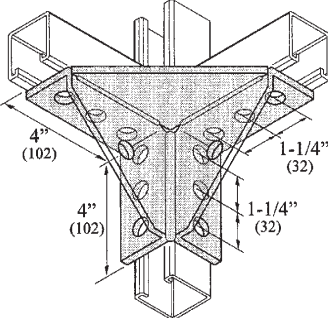
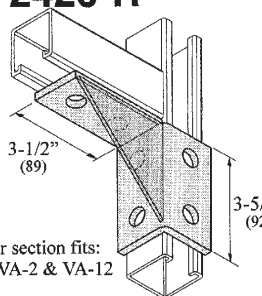
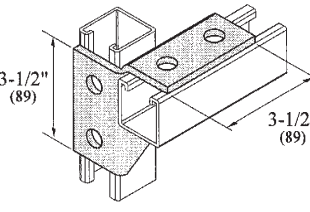
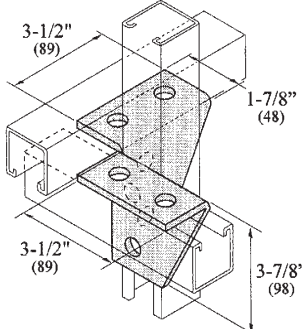
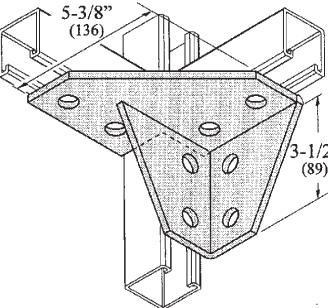
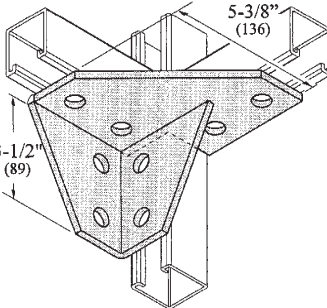
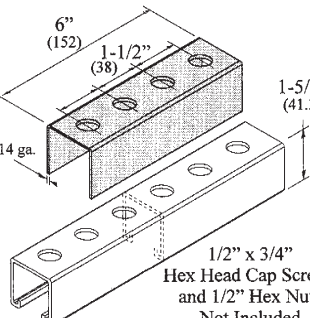
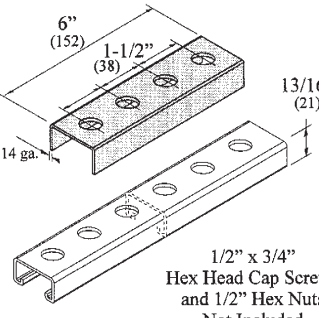
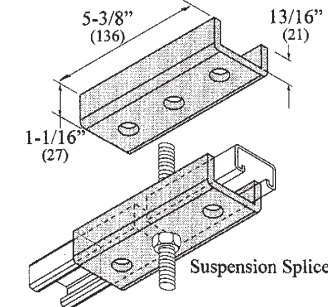
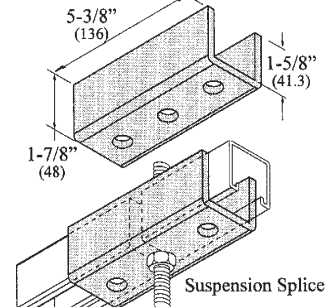
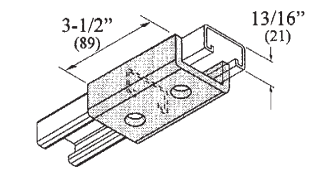
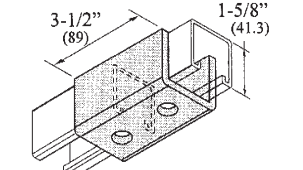
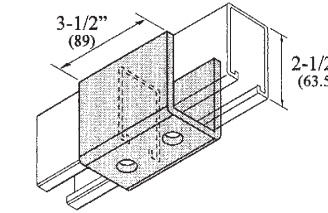
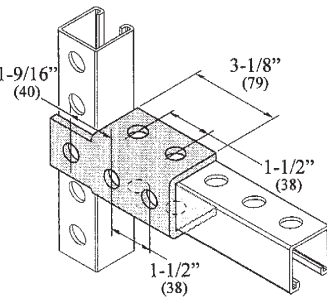
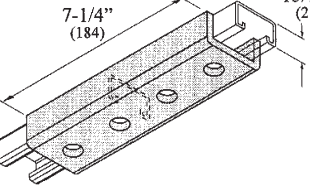
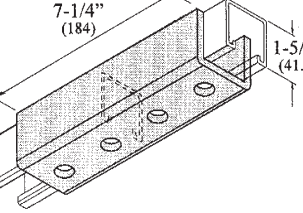
VERSABAR CORPORATION

WING and SPLICE FITTINGS

Standard Fitting Dimensions

| | | |
|-------------------------|--------|-----------|
| Width: | 1-5/8" | (41.3 mm) |
| Thickness: | 1/4" | (6.3 mm) |
| Hole Diameter: | 9/16" | (14.3 mm) |
| Hole Spacing On Center: | 1-7/8" | (47.6 mm) |
| Hole Spacing From Ends: | 13/16" | (20.6 mm) |

Metrics in Parenthesis
 Unless Otherwise Specified

| | | | |
|--|---|---|--|
| <p>VF-3807 Wt/ea 2.26 Lbs. (1.03 kg.)</p>  | <p>VF-2420-L* Wt/ea 1.7 Lbs. (.768 kg.) VF-2420-R</p>  <p>Collar section fits: VA-1, VA-2 & VA-12</p> <p>* Left Hand Version Illustrated, Right Opp.</p> | <p>VF-3304-R* Wt/ea 1.7 Lbs. (.768 kg.) VF-3304-L</p>  <p>* Right Hand Version Illustrated, Left Opp.</p> | <p>VF-7802 Wt/ea 2.2 Lbs. (.996 kg.)</p>  |
| <p>VF-3805-L Wt/ea 2.42 Lbs. (1.09 kg.)</p>  | <p>VF-3805-R Wt/ea 2.42 Lbs. (1.09 kg.)</p>  | <p>VF-5409 Wt/ea .63 Lbs. (.284 kg.)</p> <p>Allows splicing of channel through P1.5 perforations</p>  <p>1/2" x 3/4" Hex Head Cap Screws and 1/2" Hex Nuts Not Included</p> | <p>VF-5409-4 Wt/ea .41 Lbs. (.185 kg.)</p> <p>Allows splicing of channel through P1.5 perforations</p>  <p>1/2" x 3/4" Hex Head Cap Screws and 1/2" Hex Nuts Not Included</p> |
| <p>VF-5304-4 Wt/ea 1.3 Lbs. (.587 kg.)</p>  <p>Suspension Splice</p> <p>Fits VA-4, VA-5 & VA-13 channels</p> | <p>VF-5304 Wt/ea 1.95 Lbs. (.881 kg.)</p>  <p>Suspension Splice</p> <p>Fits VA-1 & VA-2 channels</p> | <p>VF-5204-4 Wt/ea .85 Lbs. (.384 kg.)</p>  <p>Fits VA-4, VA-5 & VA-13 channels</p> | <p>VF-5204 Wt/ea 1.29 Lbs. (.583 kg.)</p>  <p>Fits VA-1 & VA-2 channels</p> |
| <p>VF-5204-3 Wt/ea 1.72 Lbs. (.777 kg.)</p>  <p>Fits VA-3 channel</p> | <p>VF-5704-B Wt/ea 1.11 Lbs. (.502 kg.)</p>  <p>Fits VA-1P1.5 & VA-2P1.5 channels</p> | <p>VF-5402-4 Wt/ea 1.75 Lbs. (.791 kg.)</p>  <p>Fits VA-4, VA-5 & VA-13 channels</p> | <p>VF-5402 Wt/ea 2.65 Lbs. (1.19 kg.)</p>  <p>Fits VA-1 & VA-2 channels</p> |

Standard Fitting Dimensions

| | | |
|-------------------------|--------|-----------|
| Width: | 1-5/8" | (41.3 mm) |
| Thickness: | 1/4" | (6.3 mm) |
| Hole Diameter: | 9/16" | (14.3 mm) |
| Hole Spacing On Center: | 1-7/8" | (47.6 mm) |
| Hole Spacing From Ends: | 13/16" | (20.6 mm) |

Metrics in Parenthesis
 •Unless Otherwise Specified•

VERSABAR CORPORATION

SPLICE FITTINGS



VF-5402-3 Wt/ea 3.26 Lbs. (1.47 kg.)

Fits VA-3

VF-5402-11 Wt/ea 4.06 Lbs. (1.83 kg.)

Fits VA-11, VA-1201 or VA-2201

VF-7101 Wt/ea 1.10 Lbs. (.497 kg.)

Permits suspension of 1-5/8" square channel and free passage of trolley unit.

Side holes 7/16" dia.

3/8" x 2-3/4" H.H.C.S. 3/8" F.W. and 3/8" H.N. Not Included

VF-7101-A Wt/ea 2.4 Lbs. (1.08 kg.)

Permits suspension and splicing of 1-5/8" square channel and free passage of trolley unit.

Side holes 7/16" dia.

3/8" x 2-3/4" H.H.C.S. 3/8" F.W. and 3/8" H.N. Not Included

VF-5403-A series

UL LISTED

Flush Type Splice Assemblies

| Part # | Splice For | Dimension A | Weight Ea. |
|--------------|-------------------|------------------|---------------------|
| VF-5403-A | VA-1, VA-2, VA-12 | 1-5/8" (41.3 mm) | 1.06 # / (.479 kg.) |
| VF-5403-A-3 | VA-3 | 2-1/2" (63.5 mm) | 1.33 # / (.601 kg) |
| VF-5403-A-4 | VA-4, VA-5, VA-13 | 13/16" (20.6 mm) | 0.81 # / (.366 kg) |
| VF-5403-A-6 | VA-6 | 1-3/8" (34.9 mm) | 0.99 # / (.447 kg) |
| VF-5403-A-8* | VA-8 & VA-10 | 1" (25.4 mm) | 0.87 # / (.393 kg) |
| VF-5403-A-11 | VA-11 | 3-1/4" (82.6 mm) | 1.56 # / (.705 kg) |

Supplied as a complete kit with: Collar, 4 Hole Tapped Plate, Screws & Clip

* Denotes special order

VF-5404-A series

UL LISTED

Stud Type Splice Assemblies

| Part # | Splice For | Dimension A | Weight Ea. |
|--------------|-------------------|------------------|---------------------|
| VF-5404-A | VA-1, VA-2, VA-12 | 1-5/8" (41.3 mm) | 1.05 # / (.474 kg.) |
| VF-5404-A-3* | VA-3 | 2-1/2" (63.5 mm) | 1.32 # / (.596 kg) |
| VF-5404-A-4 | VA-4, VA-5, VA-13 | 13/16" (20.6 mm) | 0.80 # / (.361 kg) |
| VF-5404-A-6* | VA-6 | 1-3/8" (34.9 mm) | 0.97 # / (.438 kg) |
| VF-5404-A-8* | VA-8 & VA-10 | 1" (25.4 mm) | 0.86 # / (.388 kg) |
| VF-5404-A-11 | VA-11 | 3-1/4" (82.6 mm) | 1.54 # / (.696 kg) |

Supplied as a complete kit with: Collar, 4 Stud Plate & Hex Nuts

* Denotes special order

VF-5405-A series

3/8" x 3/4" Hex Head Cap Screws and 3/8" Hex Nuts Not Included

"P3S" Style Splice Assemblies

| Part # | Splice For | Dimension A | Weight Ea. |
|---------------|-------------------|------------------|---------------------|
| VF-5405-A | VA-1, VA-2, VA-12 | 1-5/8" (41.3 mm) | 1.50 # / (.678 kg.) |
| VF-5405-A-3* | VA-3 | 2-1/2" (63.5 mm) | 1.87 # / (.845 kg) |
| VF-5405-A-4* | VA-4, VA-5, VA-13 | 13/16" (20.6 mm) | 1.15 # / (.519 kg) |
| VF-5405-A-6* | VA-6 | 1-3/8" (34.9 mm) | 1.39 # / (.628 kg) |
| VF-5405-A-8* | VA-8 & VA-10 | 1" (25.4 mm) | 1.23 # / (.555 kg) |
| VF-5405-A-11* | VA-11 | 3-1/4" (82.6 mm) | 2.19 # / (.990 kg) |

Includes Collar only

* Denotes special order



VERSABAR CORPORATION

"U" FITTINGS

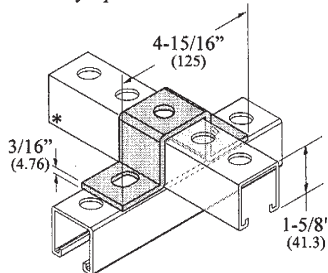
Standard Fitting Dimensions

| | | |
|-------------------------|--------|-----------|
| Width: | 1-5/8" | (41.3 mm) |
| Thickness: | 1/4" | (6.3 mm) |
| Hole Diameter: | 9/16" | (14.3 mm) |
| Hole Spacing On Center: | 1-7/8" | (47.6 mm) |
| Hole Spacing From Ends: | 13/16" | (20.6 mm) |

Metrics in Parenthesis
 •Unless Otherwise Specified•

VF-6402-B Wt/ea .86 Lbs. (.388 kg.)

Permits bolting through P1.5 style perforations

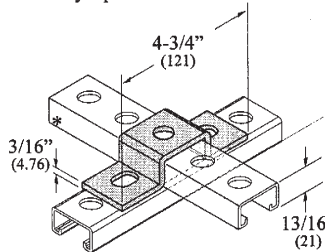


Requires Open-End Wrench

* FITS: 1-5/8 x 1-5/8 P1.5 Channel

VF-6402-4-B Wt/ea .43 Lbs. (.194 kg.)

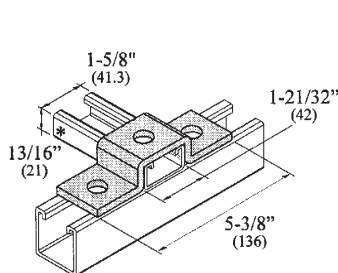
Permits bolting through P1.5 style perforations



Requires Open-End Wrench

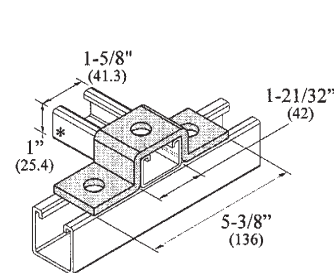
* FITS: VA-4, VA-5, VA-13, P1.5 Channel

VF-6402-4 Wt/ea .70 Lbs. (.316 kg.)



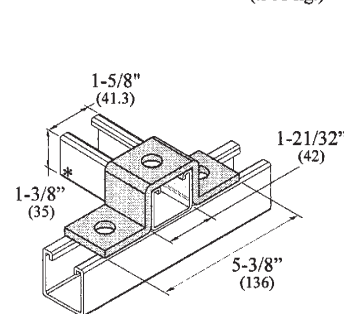
* FITS: VA-4, VA-5, & VA-13 Channel

VF-6402-10 Wt/ea .75 Lbs. (.340 kg.)



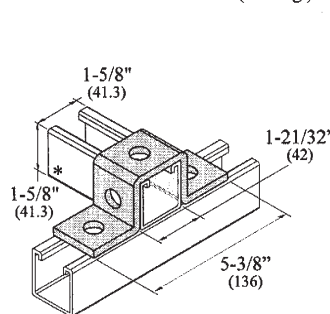
* FITS: VA-8 or VA-10 Channel

VF-6402-6 Wt/ea .84 Lbs. (.381 kg.)



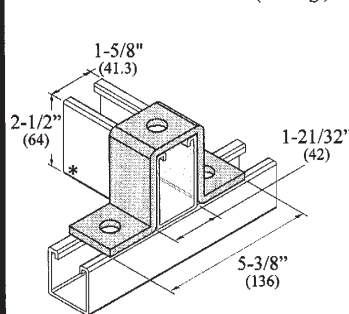
* FITS: VA-6 or VA-7

VF-6402 Wt/ea .86 Lbs. (.388 kg.)



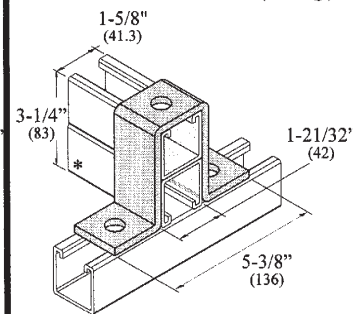
* FITS: 1-5/8 x 1-5/8 Channel

VF-6402-3 Wt/ea 1.1 Lbs. (.497 kg.)



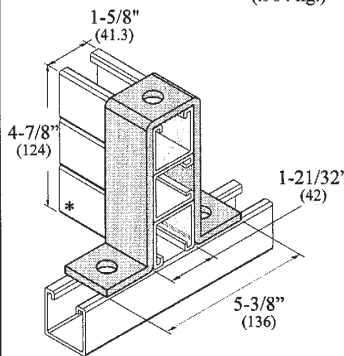
* FITS: VA-3

VF-6317 Wt/ea 1.3 Lbs. (.587 kg.)



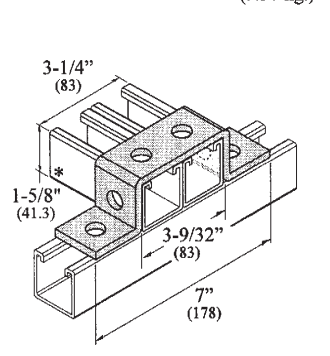
* FITS: VA-1201, VA-2201 & VA-11

VF-6319 Wt/ea 2.0 Lbs. (.904 kg.)



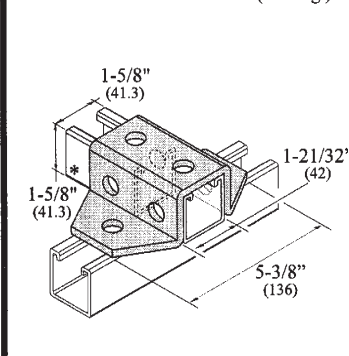
* FITS: Triple Welded 1-5/8" Sq. Channels

VF-6401 Wt/ea 1.1 Lbs. (.497 kg.)



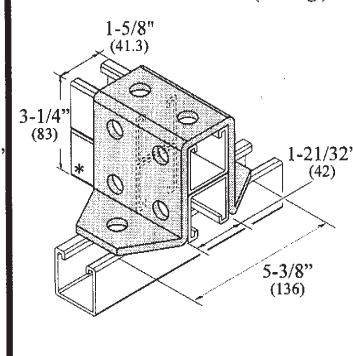
* FITS: Double Welded 1-5/8" Channel

VF-6618 Wt/ea 1.8 Lbs. (.813 kg.)



* FITS: 1-5/8 x 1-5/8 Channel

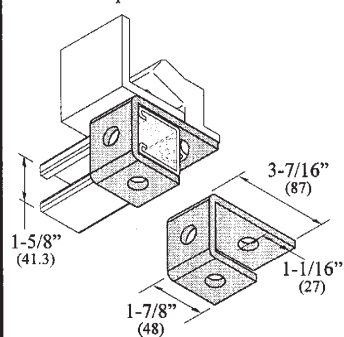
VF-6619 Wt/ea 2.62 Lbs. (1.18 kg.)



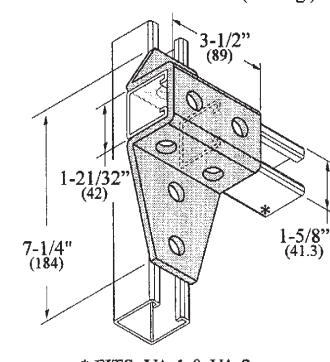
* FITS: VA-1201, VA-2201 & VA-11

VF-5302 Wt/ea .75 Lbs. (.339 kg.)

Beam clamp VX-7101-S not included

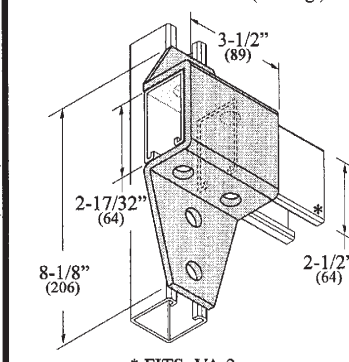


VF-6701 Wt/ea 2.0 Lbs. (.904 kg.)



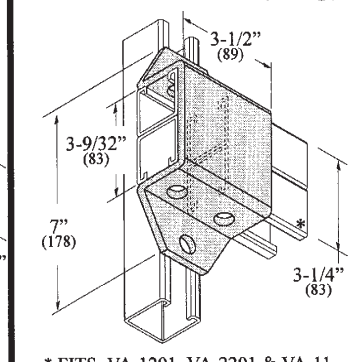
* FITS: VA-1 & VA-2

VF-6701-3 Wt/ea 2.03 Lbs. (.917 kg.)



* FITS: VA-3

VF-6802 Wt/ea 2.1 Lbs. (.949 kg.)



* FITS: VA-1201, VA-2201 & VA-11

Standard Fitting Dimensions

| | | |
|-------------------------|--------|-----------|
| Width: | 1-5/8" | (41.3 mm) |
| Thickness: | 1/4" | (6.3 mm) |
| Hole Diameter: | 9/16" | (14.3 mm) |
| Hole Spacing On Center: | 1-7/8" | (47.6 mm) |
| Hole Spacing From Ends: | 13/16" | (20.6 mm) |

Metrics in Parenthesis
 Unless Otherwise Specified

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"U" FITTINGS

| <p>VF-6501 Wt/ea 1.05 Lbs. (.474 kg.)</p> <p>* FITS: VA-1 & VA-2 Channel</p> | <p>VF-6501-3 Wt/ea 1.15 Lbs. (.519 kg.)</p> <p>* FITS: VA-3</p> | <p>VF-6402-3U Wt/ea .95 Lbs. (.429 kg.)</p> <p>* FITS: VA-3</p> | <p>VF-6401-44 Wt/ea 1.07 Lbs. (.483 kg.)</p> | | | | | | | | | | | | | | | | | | |
|---|---|--|---|---------|----------|-----------|----------|-------------|------------|------------|-------------|-----------|------------|-------------|------------|----------|-------------|------------|------------|-------------|---|
| <p>VF-6301-A Wt/ea .79 Lbs. (.357 kg.)</p> <p>* FITS: VA-1 & VA-2</p> | <p>VF-2206-4 Wt/ea .75 Lbs. (.339 kg.)</p> <p>* FITS: VA-4, VA-5 or VA-13</p> | <p>VF-2206 Wt/ea .95 Lbs. (.429 kg.)</p> <p>* FITS: VA-1 or VA-2</p> | <p>VF-5401 Wt/ea .71 Lbs. (.322 kg.)</p> <p>* FITS: VA-1201, VA-2201 & VA-11</p> | | | | | | | | | | | | | | | | | | |
| <p>VF-5401-44 Wt/ea .75 Lbs. (.339 kg.)</p> <p>* FITS: VA-4405 & VA-5505</p> | <p>VF-5401-A Wt/ea .71 Lbs. (.322 kg.)</p> | <p>VF-5203 Series</p> <table border="1"> <thead> <tr> <th>Part#</th> <th>Dim "A"</th> <th>Wgt. Ea.</th> </tr> </thead> <tbody> <tr> <td>VF-5203-A</td> <td>4" (101)</td> <td>.76# (.343)</td> </tr> <tr> <td>VF-5203-B</td> <td>5" (127)</td> <td>.90# (.406)</td> </tr> <tr> <td>VF-5203-C</td> <td>6" (152)</td> <td>1.0# (.452)</td> </tr> <tr> <td>VF-5203-D</td> <td>7" (177)</td> <td>1.1# (.510)</td> </tr> <tr> <td>VF-5203-E</td> <td>8" (203)</td> <td>1.3# (.565)</td> </tr> </tbody> </table> | Part# | Dim "A" | Wgt. Ea. | VF-5203-A | 4" (101) | .76# (.343) | VF-5203-B | 5" (127) | .90# (.406) | VF-5203-C | 6" (152) | 1.0# (.452) | VF-5203-D | 7" (177) | 1.1# (.510) | VF-5203-E | 8" (203) | 1.3# (.565) | <p>VF-6404 Wt/ea 1.2 Lbs. (.542 kg.)</p> <p>* FITS: VA-1 or VA-2</p> |
| Part# | Dim "A" | Wgt. Ea. | | | | | | | | | | | | | | | | | | | |
| VF-5203-A | 4" (101) | .76# (.343) | | | | | | | | | | | | | | | | | | | |
| VF-5203-B | 5" (127) | .90# (.406) | | | | | | | | | | | | | | | | | | | |
| VF-5203-C | 6" (152) | 1.0# (.452) | | | | | | | | | | | | | | | | | | | |
| VF-5203-D | 7" (177) | 1.1# (.510) | | | | | | | | | | | | | | | | | | | |
| VF-5203-E | 8" (203) | 1.3# (.565) | | | | | | | | | | | | | | | | | | | |
| <p>VF-6403 Wt/ea 1.17 Lbs. (.528 kg.)</p> <p>* FITS: VA-1 or VA-2</p> | <p>VF-6101 Wt/ea .85 Lbs. (.384 kg.)</p> <p>Outside holes tapped 5/16"-18</p> <p>* FITS: VA-1 & VA-2 Channel</p> | <p>VF-6102 Wt/ea .85 Lbs. (.384 kg.)</p> <p>Outside holes tapped 5/16"-18</p> <p>* FITS: VA-1 & VA-2 Channel</p> | <p>VF-6305, 06 & 07</p> <p>9/16" x 1-1/2" Slots (14) (38)</p> <p>* FITS: 1-5/8 x 1-5/8 Channel</p> <table border="1"> <thead> <tr> <th>Part#</th> <th>Dim "A"</th> <th>Dim "B"</th> <th>Wt. Ea.</th> </tr> </thead> <tbody> <tr> <td>VF-6305</td> <td>7-1/4" 184</td> <td>4-1/8" 105</td> <td>1.45# .655</td> </tr> <tr> <td>VF-6306</td> <td>8-1/2" 216</td> <td>5-3/8" 136</td> <td>1.69# .763</td> </tr> <tr> <td>VF-6307</td> <td>10-3/8" 264</td> <td>7-1/4" 184</td> <td>1.93# .872</td> </tr> </tbody> </table> | Part# | Dim "A" | Dim "B" | Wt. Ea. | VF-6305 | 7-1/4" 184 | 4-1/8" 105 | 1.45# .655 | VF-6306 | 8-1/2" 216 | 5-3/8" 136 | 1.69# .763 | VF-6307 | 10-3/8" 264 | 7-1/4" 184 | 1.93# .872 | | |
| Part# | Dim "A" | Dim "B" | Wt. Ea. | | | | | | | | | | | | | | | | | | |
| VF-6305 | 7-1/4" 184 | 4-1/8" 105 | 1.45# .655 | | | | | | | | | | | | | | | | | | |
| VF-6306 | 8-1/2" 216 | 5-3/8" 136 | 1.69# .763 | | | | | | | | | | | | | | | | | | |
| VF-6307 | 10-3/8" 264 | 7-1/4" 184 | 1.93# .872 | | | | | | | | | | | | | | | | | | |



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"U" FITTINGS and POST BASES

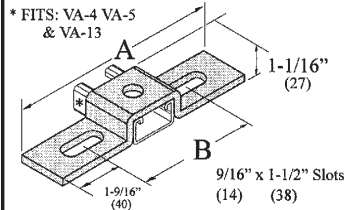
Standard Fitting Dimensions

| | | |
|-------------------------|--------|-----------|
| Width: | 1-5/8" | (41.3 mm) |
| Thickness: | 1/4" | (6.3 mm) |
| Hole Diameter: | 9/16" | (14.3 mm) |
| Hole Spacing On Center: | 1-7/8" | (47.6 mm) |
| Hole Spacing From Ends: | 13/16" | (20.6 mm) |

Metrics in Parenthesis
 •Unless Otherwise Specified•

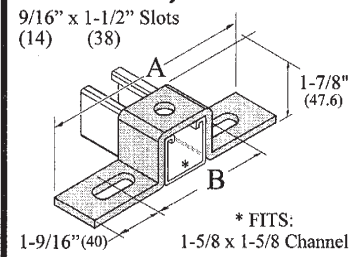
VF-6302-4 Wt/ea. 0.91# .411
VF-6303-4 Wt/ea. 1.02# .461
VF-6304-4 Wt/ea. 1.25# .565

* FITS: VA-4 VA-5 & VA-13



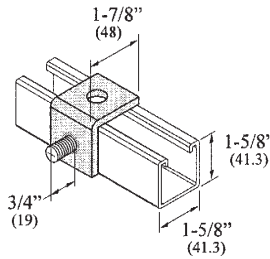
| Part# | Dim "A" | Dim "B" |
|-----------|-------------|------------|
| VF-6302-4 | 7-1/4" 184 | 4-1/8" 105 |
| VF-6303-4 | 8-1/2" 216 | 5-3/8" 136 |
| VF-6304-4 | 10-3/8" 264 | 7-1/4" 184 |

VF-6302, 03 & 04



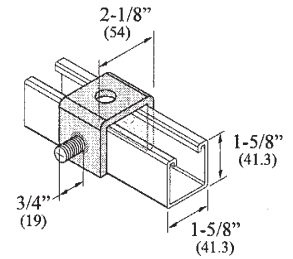
| Part# | Dim "A" | Dim "B" | Wt. Ea. |
|---------|-------------|------------|------------|
| VF-6302 | 7-1/4" 184 | 4-1/8" 105 | 1.05# .474 |
| VF-6303 | 8-1/2" 216 | 5-3/8" 136 | 1.19# .537 |
| VF-6304 | 10-3/8" 264 | 7-1/4" 184 | 1.32# .596 |

VF-2110-A Wt/ea. .40 Lbs. (.180 kg.)



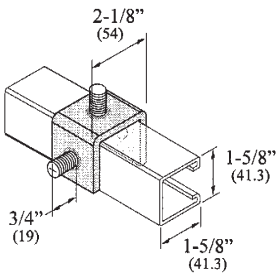
Stud Dia. 1/2"-13 (U.S. Coarse Thread)
 Custom lengths available per spec.

VF-7110-A Wt/ea. .61 Lbs. (.275 kg.)



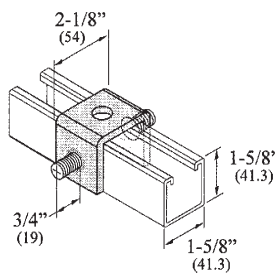
Stud Dia. 1/2"-13 (U.S. Coarse Thread)
 Custom lengths available per spec.

VF-7110-C Wt/ea. .66 Lbs. (.298 kg.)



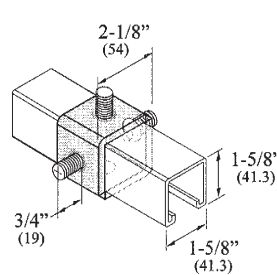
Stud Dia. 1/2"-13 (U.S. Coarse Thread)
 Custom lengths available per spec.

VF-7110-B Wt/ea. .66 Lbs. (.298 kg.)



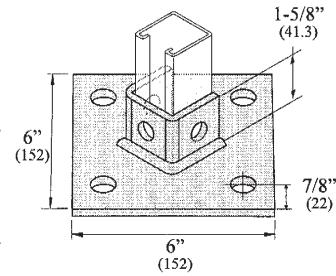
Stud Dia. 1/2"-13 (U.S. Coarse Thread)
 Custom lengths available per spec.

VF-7110-D Wt/ea. .91 Lbs. (.411 kg.)



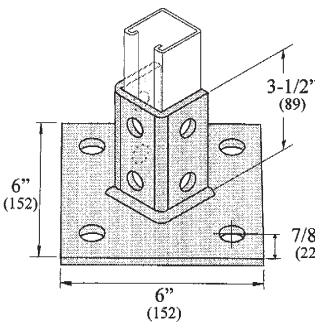
Stud Dia. 1/2"-13 (U.S. Coarse Thread)
 Custom lengths available per spec.

VF-9601-A Wt/ea 3.0 Lbs. (1.35 kg.)



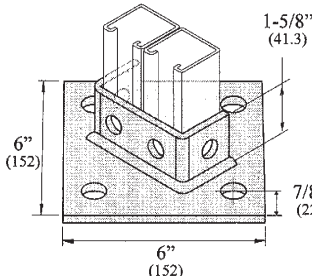
* Base plate holes are 3/4" (19mm) diameter

VF-9601 Wt/ea 3.27 Lbs. (1.47 kg.)



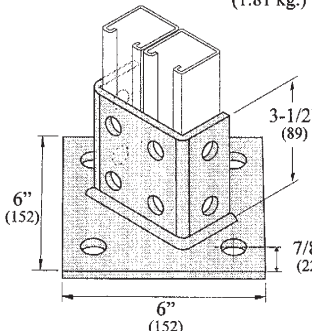
* Base plate holes are 3/4" (19mm) diameter

VF-9602-A Wt/ea 3.65 Lbs. (1.65 kg.)



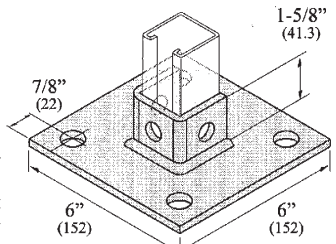
* Base plate holes are 3/4" (19mm) diameter

VF-9602 Wt/ea 4.0 Lbs. (1.81 kg.)



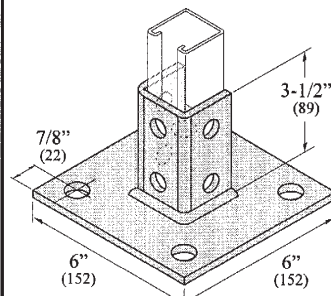
* Base plate holes are 3/4" (19mm) diameter

VF-9601-A-SQ Wt/ea 3.0 Lbs. (1.36 kg.)



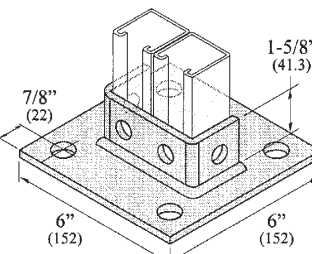
* Base plate holes are 3/4" (19mm) diameter

VF-9601-SQ Wt/ea 3.27 Lbs. (1.48 kg.)



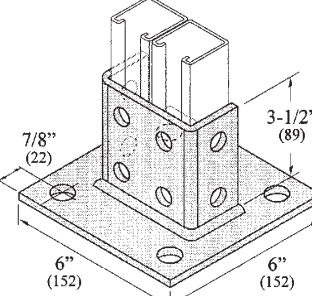
* Base plate holes are 3/4" (19mm) diameter

VF-9602-A-SQ Wt/ea 3.65 Lbs. (1.65 kg.)



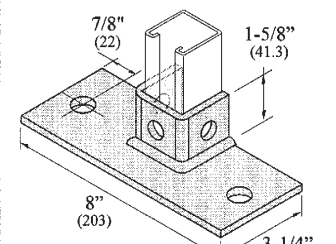
* Base plate holes are 3/4" (19mm) diameter

VF-9602-SQ Wt/ea 4.0 Lbs. (1.81 kg.)



* Base plate holes are 3/4" (19mm) diameter

VF-9601-A-FL Wt/ea 2.3 Lbs. (1.04 kg.)



* Base plate holes are 3/4" (19mm) diameter

Standard Fitting Dimensions

| | | |
|-------------------------|--------|-----------|
| Width: | 1-5/8" | (41.3 mm) |
| Thickness: | 1/4" | (6.3 mm) |
| Hole Diameter: | 9/16" | (14.3 mm) |
| Hole Spacing On Center: | 1-7/8" | (47.6 mm) |
| Hole Spacing From Ends: | 13/16" | (20.6 mm) |

Metrics in Parenthesis
 •Unless Otherwise Specified•

VERSABAR CORPORATION



POST BASES

VF-9601-FL Wt/ea 3.12 Lbs. (1.41 kg.)

* Base plate holes are 3/4" (19mm) diameter

VF-9602-A-FL Wt/ea 2.5 Lbs. (1.13 kg.)

* Base plate holes are 3/4" (19mm) diameter

VF-9602-FL Wt/ea 3.2 Lbs. (1.45 kg.)

* Base plate holes are 3/4" (19mm) diameter

VF-9605-A Wt/ea 4.15 Lbs. (1.88 kg.)

* Base plate holes are 3/4" (19mm) diameter

VF-9605 Wt/ea 5.75 Lbs. (2.60 kg.)

* Base plate holes are 3/4" (19mm) diameter

VF-9606-B Wt/ea 3.6 Lbs. (1.63 kg.)

* Base plate holes are 3/4" (19mm) diameter

VF-9311 Wt/ea 1.15 Lbs. (.519 kg.)

VF-7802 Wt/ea 2.2 Lbs. (.994 kg.)

VF-7139 Series

| Part# | Dia "A" | Wgt. Ea. |
|-----------|---------|-------------|
| VF-7139-A | 5/16" | 1.50 (.678) |
| VF-7139-B | 3/8" | 1.55 (.701) |
| VF-7139-C | 1/2" | 1.58 (.714) |
| VF-7139-D | 5/8" | 1.62 (.732) |
| VF-7139-E | 3/4" | 1.66 (.750) |

Used as:
 A column leveler
 A strut hanger

VF-7138 Series

| Part# | Dia "A" | Wgt. Ea. |
|-----------|---------|-------------|
| VF-7138-A | 3/8" | 1.65 (.745) |
| VF-7138-B | 1/2" | 1.71 (.772) |
| VF-7138-C | 3/4" | 1.74 (.786) |

Used as:
 A column leveler
 A strut hanger

VF-7803 Wt/ea 3.0 Lbs. (1.36 kg.)

* Base plate holes are 7/16" (11mm) dia.

VF-5803-GRS Wt/ea .17 Lbs. (.077 kg.)

Allows **FAST** setup of double height floor stands.

This integrated footing nut can be both a convenience and a time saver when installing channel stands. Although the center to center spacing is 2" versus 1-7/8" on the fitting, the 3/8" diameter fasteners will fit perfectly. 3/8" flatwashers are required.

3/8"-16 Threads

See Versabar

On the internet at:

<http://www.versabar.com>



VERSABAR CORPORATION

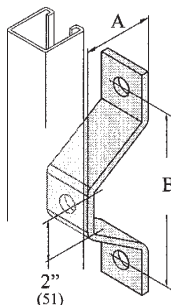
SPECIAL APPLICATION FITTINGS

Standard Fitting Dimensions

| | | |
|-------------------------|--------|-----------|
| Width: | 1-5/8" | (41.3 mm) |
| Thickness: | 1/4" | (6.3 mm) |
| Hole Diameter: | 9/16" | (14.3 mm) |
| Hole Spacing On Center: | 1-7/8" | (47.6 mm) |
| Hole Spacing From Ends: | 13/16" | (20.6 mm) |

Metrics in Parenthesis
 Unless Otherwise Specified

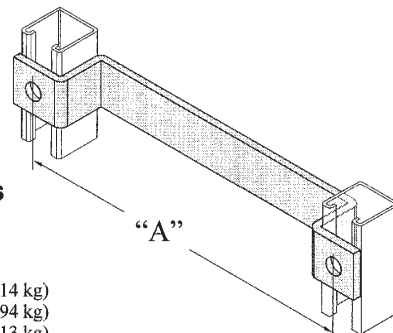
VF-6111 to VF-6115 Railing Risers



Ladder Assembly Fittings

| Part # | Dim "A" | Dim "B" | Wgt. Ea. |
|---------|---------------|-----------|-------------------|
| VF-6111 | 2-3/8" (60) | 6" (152) | 1.1 Lb. (.497 kg) |
| VF-6112 | 4-3/8" (111) | 8" (203) | 1.6 Lb. (.723 kg) |
| VF-6113 | 6-3/8" (162) | 10" (254) | 2.2 Lb. (.994 kg) |
| VF-6114 | 8-3/8" (213) | 12" (305) | 2.7 Lb. (1.22 kg) |
| VF-6115 | 10-3/8" (263) | 14" (356) | 3.2 Lb. (1.45 kg) |

VF-6108 to VF-6110 Ladder Rungs

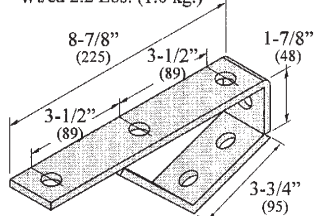


Ladder Assembly Fittings

| Part # | Dim "A" | Wgt. Ea. |
|---------|-----------|-------------------|
| VF-6108 | 12" (305) | 1.8 Lb. (.814 kg) |
| VF-6109 | 15" (381) | 2.2 Lb. (.994 kg) |
| VF-6110 | 18" (457) | 2.5 Lb. (1.13 kg) |

VF-7045-37-1/2

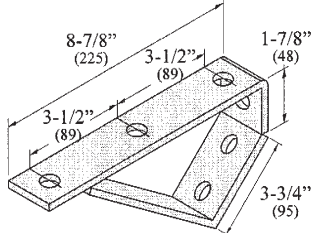
Wt/ea 2.2 Lbs. (1.0 kg.)



Stair Tread Support
37.5 Degrees

VF-7045-45

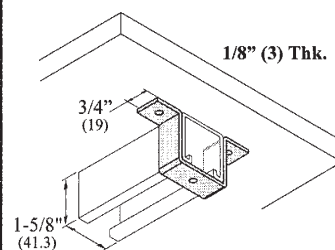
Wt/ea 2.2 Lbs. (1.0 kg.)



Stair Tread Support
45 Degrees

VF-6316

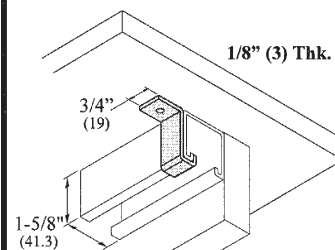
Wt/ea .18 Lbs. (.08 kg.)



Uses 1/4" Dia. Fasteners

VF-4109

Wt/ea .09 Lbs. (.04 kg.)

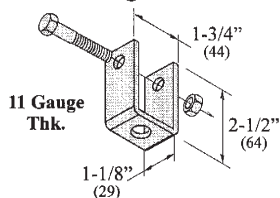


Uses 1/4" Dia. Fasteners

VX-1099

Wt/ea .31 Lbs. (.14 kg.)

Swing Clevis



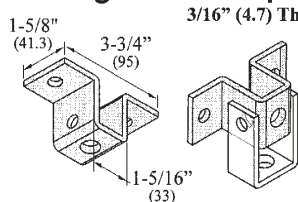
Side Holes are 7/16" (11.1) Dia.
Base Hole is 9/16" (14.3) Dia.

Includes 3/8"-16 x 2-1/4" HHCS and 3/8" Dia. Hex Nut

VX-6402-OH

Wt/ea .51 Lbs. (.23 kg.)

Swing Clevis Adaptor



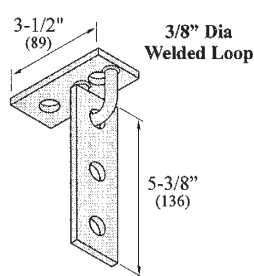
VX-1099 Swing Clevis sold separately

Side Holes are 7/16" (11.1) Dia.
Base Hole is 9/16" (14.3) Dia.

VF-7043-A

Wt/ea 1.04 Lbs. (.472 kg.)

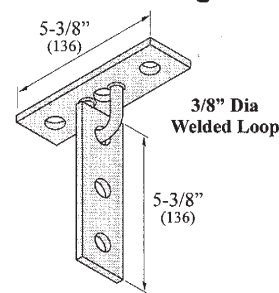
Swivel Fitting



VF-7043-B

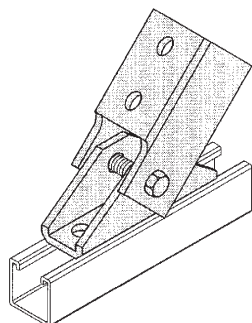
Wt/ea 1.2 Lbs. (.544 kg.)

Swivel Fitting



VF-7046 Single Swing Connector

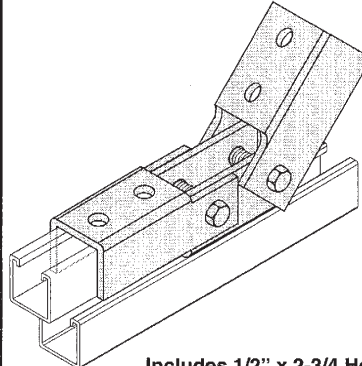
Wt/ea 3.02 Lbs. (1.37 kg.)



Includes 1/2" x 2-3/4 Hex Head Cap Screw & Hex Nut

VF-7047 Double Swing Connector

Wt/ea 5.11 Lbs. (2.31 kg.)



Includes 1/2" x 2-3/4 Hex Head Cap Screws & Hex Nuts

Standard Fitting Dimensions

| | | |
|-------------------------|--------|-----------|
| Width: | 1-5/8" | (41.3 mm) |
| Thickness: | 1/4" | (6.3 mm) |
| Hole Diameter: | 9/16" | (14.3 mm) |
| Hole Spacing On Center: | 1-7/8" | (47.6 mm) |
| Hole Spacing From Ends: | 13/16" | (20.6 mm) |

Metrics in Parenthesis
 •Unless Otherwise Specified•

VERSABAR CORPORATION

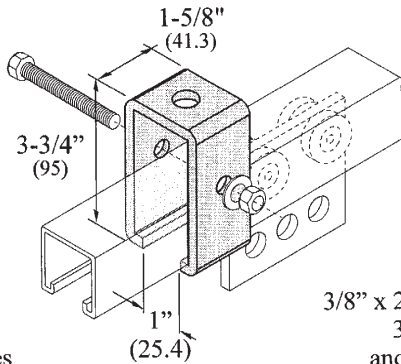
TROLLEY FITTINGS



VF-7101

Wt/ea 1.10 Lbs.
(.497 kg.)

Permits suspension of
1-5/8" square channel and
free passage of trolley unit.



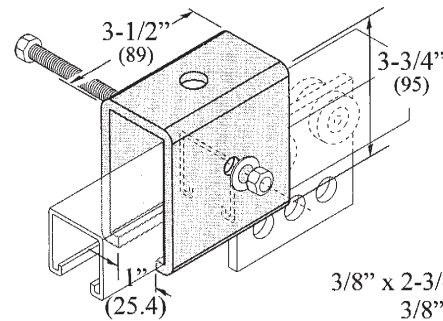
3/8" x 2-3/4" H.H.C.S.
3/8" F.W.
and 3/8" H.N.
Not Included

Side holes
7/16" dia.

VF-7101-A

Wt/ea 2.4 Lbs.
(1.08 kg.)

Permits suspension and splicing
of 1-5/8" square channel and
free passage of trolley unit.

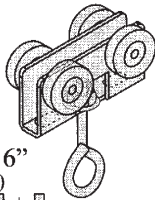


3/8" x 2-3/4" H.H.C.S.
3/8" F.W.
and 3/8" H.N.
Not Included

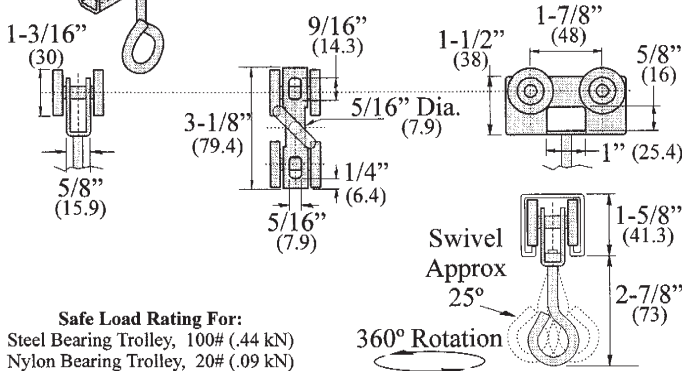
Side holes
7/16" dia.

VX-7028 & VX-7028-N

Wt/ea .56 Lbs. (.253 kg.)



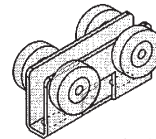
- VX-7028: All steel components.
- VX-7028-N: Steel trolley, nylon plain bearings.



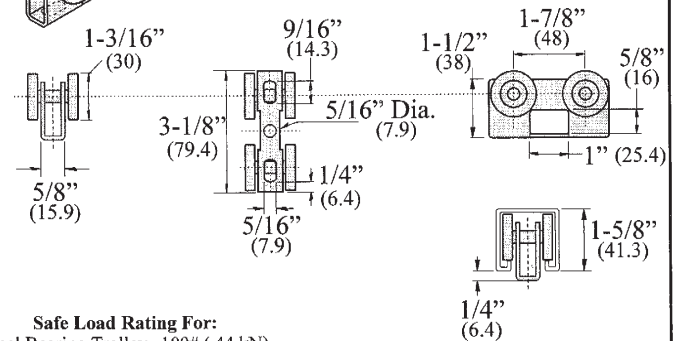
Safe Load Rating For:
Steel Bearing Trolley, 100# (.44 kN)
Nylon Bearing Trolley, 20# (.09 kN)

VX-7029 & VX-7029-N

Wt/ea .48 Lbs. (.217 kg.)



- VX-7029: All steel components.
- VX-7029-N: Steel trolley, nylon plain bearings.

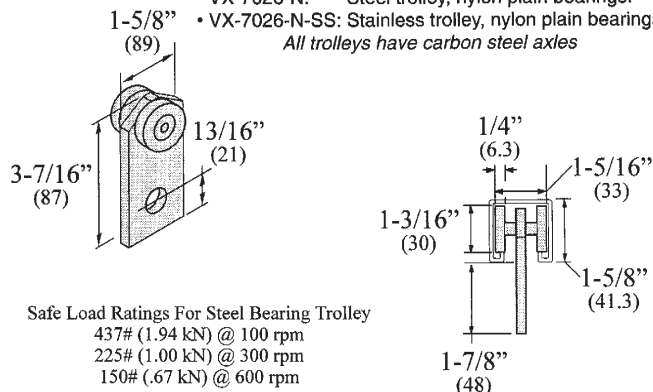


Safe Load Rating For:
Steel Bearing Trolley, 100# (.44 kN)
Nylon Bearing Trolley, 20# (.09 kN)

VX-7026 & VX-7026-N

Wt/ea .50 Lbs. (.226 kg.)

- VX-7026: All steel components.
 - VX-7026-N: Steel trolley, nylon plain bearings.
 - VX-7026-N-SS: Stainless trolley, nylon plain bearings.
- All trolleys have carbon steel axles

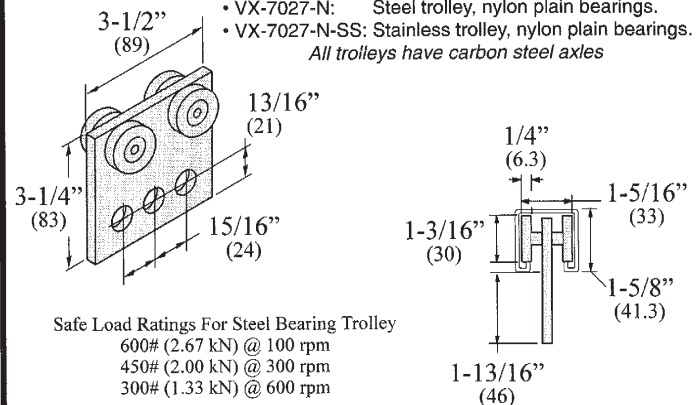


Safe Load Ratings For Steel Bearing Trolley
437# (1.94 kN) @ 100 rpm
225# (1.00 kN) @ 300 rpm
150# (.67 kN) @ 600 rpm

VX-7027 & VX-7027-N

Wt/ea 1.1 Lbs. (.50 kg.)

- VX-7027: All steel components.
 - VX-7027-N: Steel trolley, nylon plain bearings.
 - VX-7027-N-SS: Stainless trolley, nylon plain bearings.
- All trolleys have carbon steel axles



Safe Load Ratings For Steel Bearing Trolley
600# (2.67 kN) @ 100 rpm
450# (2.00 kN) @ 300 rpm
300# (1.33 kN) @ 600 rpm



VERSABAR CORPORATION
CONVEYOR APPLICATION FITTINGS

Standard Fitting Dimensions

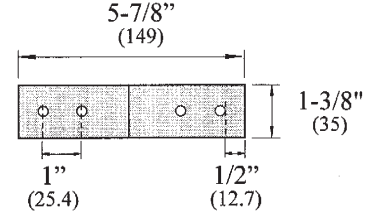
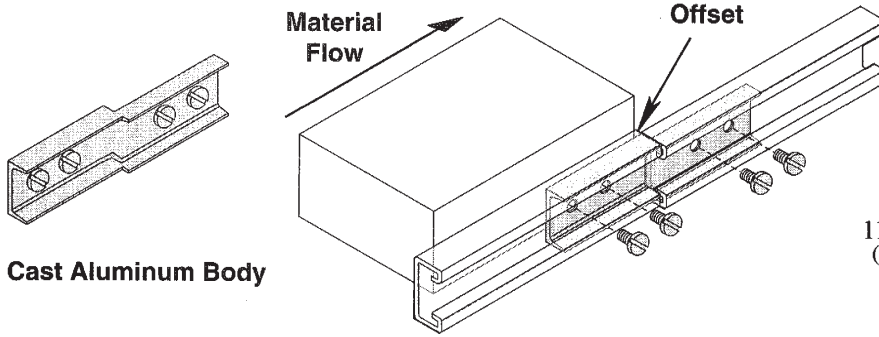
| | | |
|-------------------------|--------|-----------|
| Width: | 1-5/8" | (41.3 mm) |
| Thickness: | 1/4" | (6.3 mm) |
| Hole Diameter: | 9/16" | (14.3 mm) |
| Hole Spacing On Center: | 1-7/8" | (47.6 mm) |
| Hole Spacing From Ends: | 13/16" | (20.6 mm) |

Metrics in Parenthesis
 •Unless Otherwise Specified•

VF-5801-GRS

Conveyor Guard Rail Splice

Wt/ea .20 Lbs. (.091 kg.)



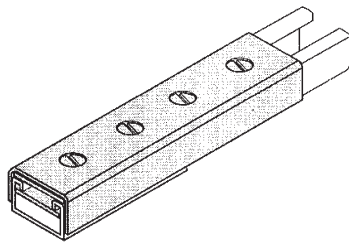
1/4"-20 U.S. Coarse Thd.
 (Includes hardware)

Offset design prevents packages from binding to guide rails

VF-5403-A-4-GRS

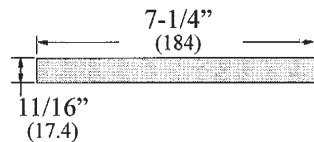
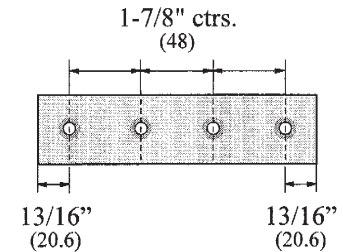
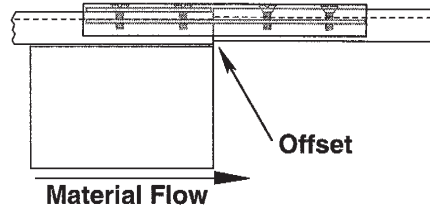
Conveyor Guard Rail Splice

Wt/ea .96 Lbs. (.436 kg.)



Component Assembly Includes:

- 1.) Outer Housing
- 2.) Four Hole Tapped Plate
- 3.) Top Spacer
- 4.) Hardware

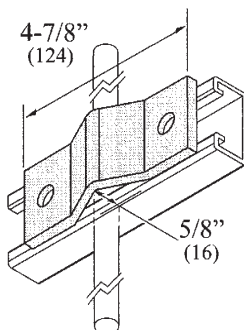


Offset design prevents packages from binding to guide rails

VF-5802-GRS

Guard Rail Clip

Wt/ea .58 Lbs. (.263 kg.)

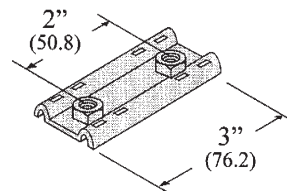


Side holes
 7/16" dia.

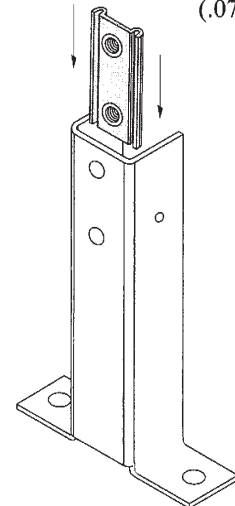
VF-5803-GRS

**Footing
 Double Nut**

Wt/ea .17 Lbs. (.077 kg.)



3/8"-16 Threads



Standard Fitting Dimensions

| | | |
|-------------------------|--------|-----------|
| Width: | 1-5/8" | (41.3 mm) |
| Thickness: | 1/4" | (6.3 mm) |
| Hole Diameter: | 9/16" | (14.3 mm) |
| Hole Spacing On Center: | 1-7/8" | (47.6 mm) |
| Hole Spacing From Ends: | 13/16" | (20.6 mm) |

Metrics in Parenthesis
 •Unless Otherwise Specified•

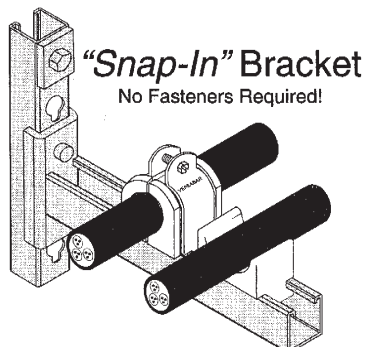
VERSABAR CORPORATION

VCX INTERLOCKING BRACKETS



VCX SERIES

INTEGRATED CABLE SUPPORT BRACKETS

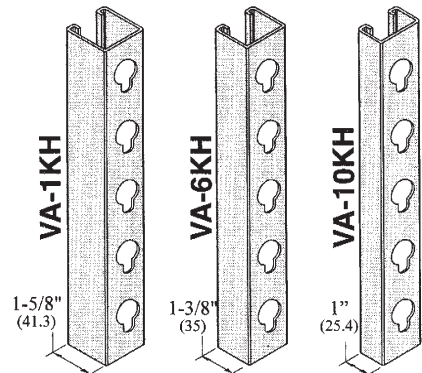


The VERSABAR VCX Bracket system offers advantages over standard channel brackets. Installation can be done in seconds, because no threaded fasteners are required when mounting the bracket to an upright. By utilizing a "snap-in" design, *brackets are secured in place without tools*, anywhere there is an available keyhole. Once dropped into the notch, the bracket cannot be accidentally dislodged.

These brackets and components can be manufactured in both carbon and stainless steels.

KEYHOLE CHANNEL

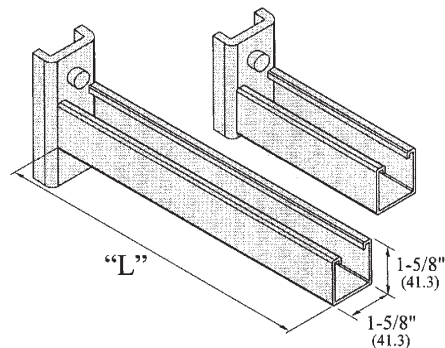
INTEGRATED CABLE SUPPORT COMPONENTS



| Part Number | Steel Gauge | Stock Lengths | Wgt. Per L.F. (Kg. Per m) |
|-------------|-------------|---|---------------------------|
| VA-1KH | 12 | 10' / 20' / 24' (3.05m / 6.09m / 7.32m) | 1.9 # (2.83) |
| VA-6KH | 12 | 10' / 20' (3.05m / 6.09m) | 1.7 # (2.53) |
| VA-10KH | 12 | 10' / 20' (3.05m / 6.09m) | 1.4# (2.07) |

KEYHOLE BRACKETS

INTEGRATED CABLE SUPPORT COMPONENTS



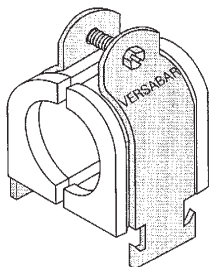
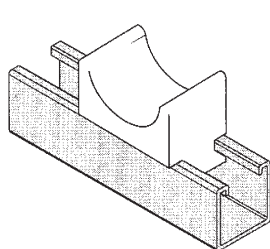
| Part# | Dim "L" | Channel | Uniform Load Rating | Wt. Ea. |
|---------|---------|---------------------|---------------------|----------------|
| VCX-4 | 4" | (101) VA-1 (12 ga.) | 1400 (635 kg) | 1.6# (.726 kg) |
| VCX-7.5 | 7-1/2" | (190) VA-1 (12 ga.) | 800 (363 kg) | 2.3# (1.04 kg) |
| VCX-10 | 10" | (254) VA-1 (12 ga.) | 700 (317 kg) | 2.8# (1.27 kg) |
| VCX-14 | 14" | (355) VA-1 (12 ga.) | 600 (272 kg) | 3.8# (1.75 kg) |
| VCX-18 | 18" | (457) VA-1 (12 ga.) | 500 (227 kg) | 4.4# (1.99 kg) |

PORCELAIN SADDLES & CLAMPS

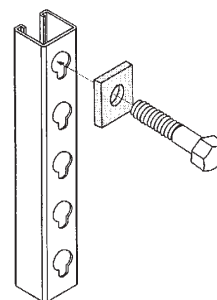
VF-1101 Series Flat Washers

INTEGRATED CABLE SUPPORT COMPONENTS

INTEGRATED CABLE SUPPORT COMPONENTS



| Part Number | Hole Size | Bolt Size |
|-------------|--------------|-------------|
| VF-1101-1/4 | 11/32 (8.7) | 1/4 or 5/16 |
| VF-1101-3/8 | 13/32 (10.3) | 3/8 |
| VF-1101-1/2 | 9/16 (14.3) | 1/2 |
| VF-1101-5/8 | 21/32 (16.7) | 5/8 |
| VF-1101-3/4 | 13/16 (20.6) | 3/4 |



Full porcelain product line listings on page E-4 & E-5 of this catalog

Used in conjunction with wall anchors



VERSABAR CORPORATION

CHANNEL BRACKETS

Standard Fitting Dimensions

| | | |
|-------------------------|--------|-----------|
| Width: | 1-5/8" | (41.3 mm) |
| Thickness: | 1/4" | (6.3 mm) |
| Hole Diameter: | 9/16" | (14.3 mm) |
| Hole Spacing On Center: | 1-7/8" | (47.6 mm) |
| Hole Spacing From Ends: | 13/16" | (20.6 mm) |

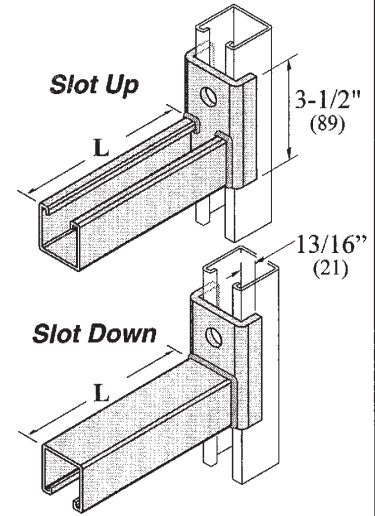
Metrics in Parenthesis
•Unless Otherwise Specified•

Collar Base Channel Brackets 6" & 12"

| Part# Slot UP | Part# Slot DOWN | Dim "L" | Uniform Load Rating† | Wt. Ea. |
|------------------|--------------------|-----------|-------------------------|---------------|
| VB-1060 | VB-1060-D | 6" (152) | 1600# (723 kg) | 1.9# (.86 kg) |
| VB-1120 | VB-1120-D | 12" (305) | 800 # (362 kg) | 2.9# (1.3 kg) |

Channel Component is VA-1 (12 Ga.)

† Load rating valid only when used with VN / VSN-1050 & 12 ga. vertical bracket mounting channel of 1-5/8" depth or greater.

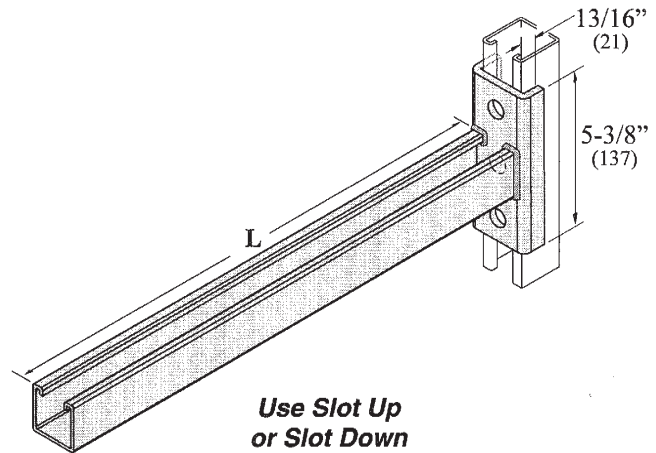


Collar Base Channel Brackets 18" & 24"

| Part Number | Dim "L" | Uniform Load Rating† | Wt. Ea. |
|----------------|-----------|-------------------------|----------------|
| VB-1180 | 18" (457) | 600# (271 kg) | 4.4# (1.99 kg) |
| VB-1240 | 24" (609) | 450# (203 kg) | 5.3# (2.40 kg) |

Channel Component is VA-1 (12 Ga.)

† Load rating valid only when used with VN / VSN-1050 & 12 ga. vertical bracket mounting channel of 1-5/8" depth or greater.

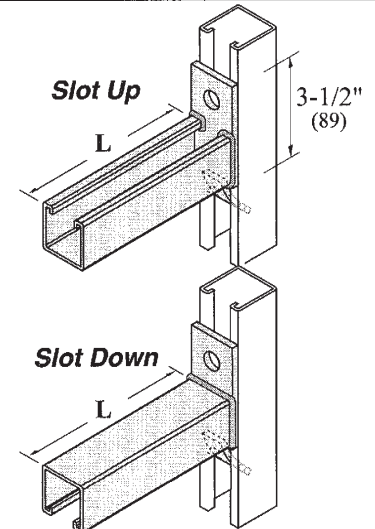


Tongue Plate Base Channel Brackets 6" thru 24"

| Part# Slot UP | Part# Slot DOWN | Dim "L" | Uniform Load Rating† | Wt. Ea. |
|------------------|--------------------|-----------|-------------------------|----------------|
| VB-1060-X | VB-1060-XD | 6" (152) | 1200# (542 kg) | 1.5# (.678 kg) |
| VB-1120-X | VB-1120-XD | 12" (305) | 600 # (271 kg) | 2.5# (1.13 kg) |
| VB-1180-X | VB-1180-XD | 18" (457) | 400# (181 kg) | 3.5# (1.58 kg) |
| VB-1240-X | VB-1240-XD | 24" (609) | 300# (135 kg) | 4.5# (2.03 kg) |

Channel Component is VA-1 (12 Ga.)

† Load rating valid only when used with VN / VSN-1050 & 12 ga. vertical bracket mounting channel of 1-5/8" depth or greater.



Standard Fitting Dimensions

| | | |
|------------------------------|--------|-----------|
| Width: | 1-5/8" | (41.3 mm) |
| Thickness: | 1/4" | (6.3 mm) |
| Hole Diameter: | 9/16" | (14.3 mm) |
| Hole Spacing On Center: | 1-7/8" | (47.6 mm) |
| Hole Spacing From Ends: | 13/16" | (20.6 mm) |
| Metrics in Parenthesis | | |
| •Unless Otherwise Specified• | | |

VERSABAR CORPORATION

CHANNEL BRACKETS



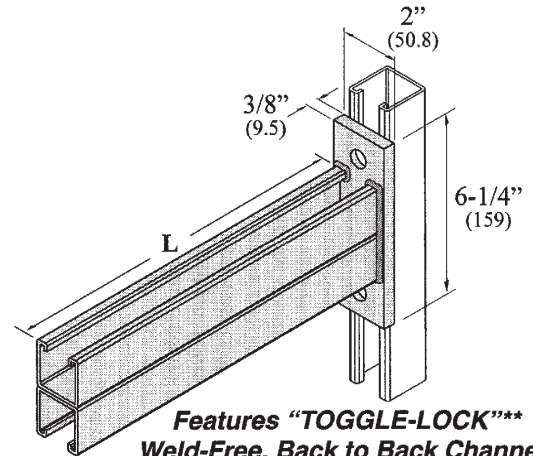
H.D. Base, Double Channel Brackets 12" thru 36"

| Part Number | Dim "L" | Uniform Load Rating † | Wt. Ea. |
|-------------|-----------|-----------------------|-----------------|
| VB-11120 | 12" (305) | 2000# (904 kg) | 5.2# (2.35 kg) |
| VB-11180 | 18" (457) | 1300# (587 kg) | 7.2# (3.25 kg) |
| VB-11240 | 24" (609) | 950# (429 kg) | 9.2# (4.15 kg) |
| VB-11300 | 30" (762) | 775# (350 kg) | 11.2# (5.06 kg) |
| VB-11360 | 36" (914) | 660# (298 kg) | 13.2# (5.96 kg) |

Channel Component is VA-1201 (12 Ga.)

** Stainless brackets will use stainless welded B/B channel

* Channel sections are welded to back plates



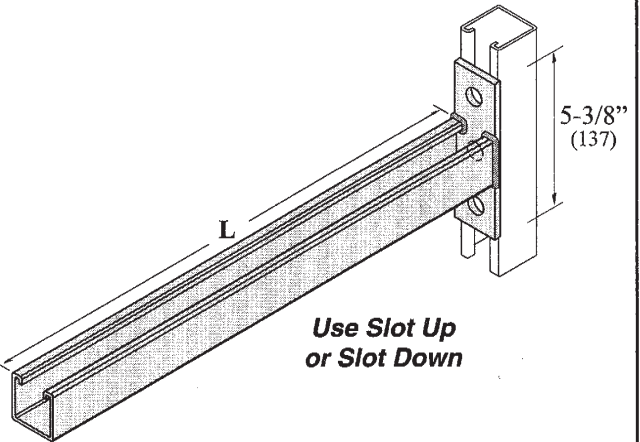
Features "TOGGLE-LOCK"***
Weld-Free, Back to Back Channel*
See catalog section "A" for details

† Load rating valid only when used with VN / VSN-1050 & 12 ga. vertical bracket mounting channel of 1-5/8" depth or greater.

Flat Plate Base Channel Brackets 6" thru 24"

| Part Number | Dim "L" | Uniform Load Rating† | Wt. Ea. |
|-------------|-----------|----------------------|-----------------|
| VB-1060-FP | 6" (152) | 1920# (867 kg) | 1.52# (.687 kg) |
| VB-1120-FP | 12" (305) | 960# (433 kg) | 2.32# (1.05 kg) |
| VB-1180-FP | 18" (457) | 600# (271 kg) | 3.22# (1.46 kg) |
| VB-1240-FP | 24" (609) | 450# (203 kg) | 4.12# (1.86 kg) |

Channel Component is VA-1 (12 Ga.)



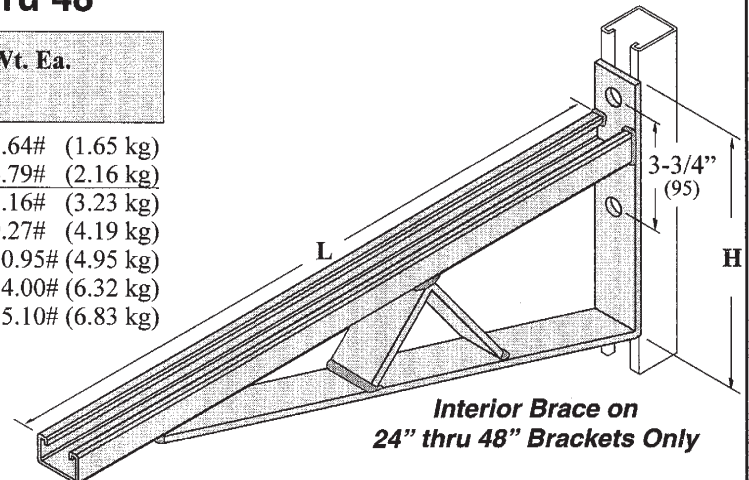
Use Slot Up
or Slot Down

† Load rating valid only when used with VN / VSN-1050 & 12 ga. vertical bracket mounting channel of 1-5/8" depth or greater.

VA-10 Channel Brackets 12" thru 48"

| Part Number | Dim "L" | Dim "H" | Uniform Load Rating† | Wt. Ea. |
|-------------|------------|---------------|----------------------|------------------|
| VB-4120 | 12" (305) | 8-3/4" (222) | 1900# (858 kg) | 3.64# (1.65 kg) |
| VB-4180 | 18" (457) | 8-3/4" (222) | 1000# (454 kg) | 4.79# (2.16 kg) |
| VB-4240 | 24" (609) | 8-3/4" (222) | 1000# (454 kg) | 7.16# (3.23 kg) |
| VB-4300 | 30" (762) | 11-1/4" (285) | 900# (408 kg) | 9.27# (4.19 kg) |
| VB-4360 | 36" (914) | 11-1/4" (285) | 750# (340 kg) | 10.95# (4.95 kg) |
| VB-4420 | 42" (1066) | 16" (406) | 650# (295 kg) | 14.00# (6.32 kg) |
| VB-4480 | 48" (1219) | 16" (406) | 600# (272 kg) | 15.10# (6.83 kg) |

Channel Component is VA-10 (12 Ga.)



Interior Brace on
24" thru 48" Brackets Only

† Load rating valid only when used with VN / VSN-1050 & 12 ga. vertical bracket mounting channel of 1-5/8" depth or greater.



VERSABAR CORPORATION

HEAVY DUTY SHELF BRACKETS

Standard Fitting Dimensions

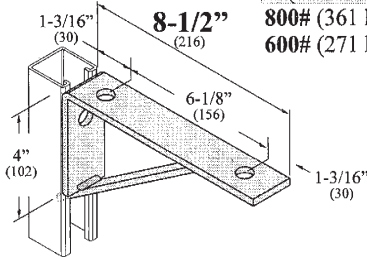
| | | |
|------------------------------|--------|-----------|
| Width: | 1-5/8" | (41.3 mm) |
| Thickness: | 1/4" | (6.3 mm) |
| Hole Diameter: | 9/16" | (14.3 mm) |
| Hole Spacing On Center: | 1-7/8" | (47.6 mm) |
| Hole Spacing From Ends: | 13/16" | (20.6 mm) |
| Metrics in Parenthesis | | |
| •Unless Otherwise Specified• | | |

VB-4085

Wt/ea 1.75 Lbs. (.791 kg.)

Uniform Load Rating†:
(Shows Vertical Channel)

800# (361 kg.) On VA-1, 12 ga.
600# (271 kg.) On VA-2, 14 ga.



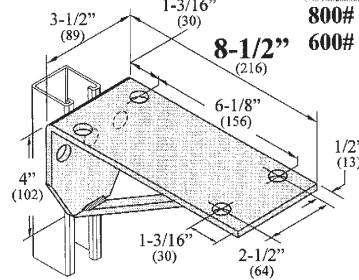
†Load rating valid **only** when mounted with VN or VSN-1050 channel nuts

VB-4085-D

Wt/ea 3.0 Lbs. (1.35 kg.)

Uniform Load Rating†:
(Shows Vertical Channel)

800# (361 kg.) On VA-1, 12 ga.
600# (271 kg.) On VA-2, 14 ga.



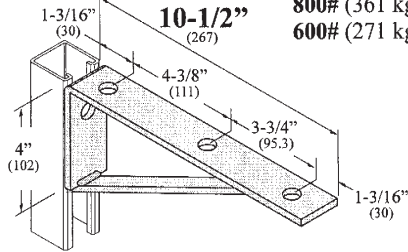
†Load rating valid **only** when mounted with VN or VSN-1050 channel nuts

VB-4105

Wt/ea 2.0 Lbs. (.904 kg.)

Uniform Load Rating†:
(Shows Vertical Channel)

800# (361 kg.) On VA-1, 12 ga.
600# (271 kg.) On VA-2, 14 ga.



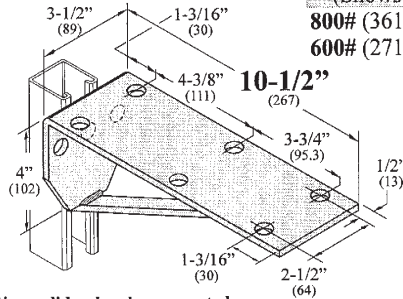
†Load rating valid **only** when mounted with VN or VSN-1050 channel nuts

VB-4105-D

Wt/ea 3.5 Lbs. (1.6 kg.)

Uniform Load Rating†:
(Shows Vertical Channel)

800# (361 kg.) On VA-1, 12 ga.
600# (271 kg.) On VA-2, 14 ga.



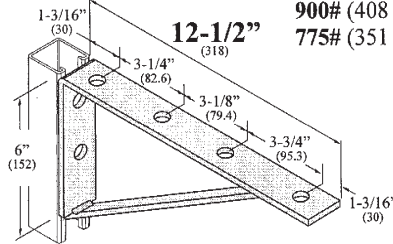
†Load rating valid **only** when mounted with VN or VSN-1050 channel nuts

VB-4125

Wt/ea 2.7 Lbs. (1.22 kg.)

Uniform Load Rating†:
(Shows Vertical Channel)

900# (408 kg.) On VA-1, 12 ga.
775# (351 kg.) On VA-2, 14 ga.



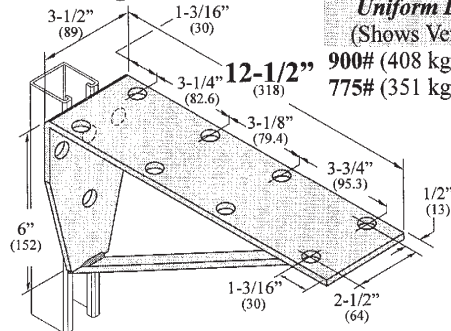
†Load rating valid **only** when mounted with VN or VSN-1050 channel nuts

VB-4125-D

Wt/ea 4.4 Lbs. (1.98 kg.)

Uniform Load Rating†:
(Shows Vertical Channel)

900# (408 kg.) On VA-1, 12 ga.
775# (351 kg.) On VA-2, 14 ga.



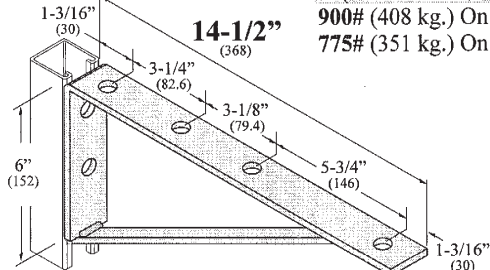
†Load rating valid **only** when mounted with VN or VSN-1050 channel nuts

VB-4145

Wt/ea 3.0 Lbs. (1.35 kg.)

Uniform Load Rating†:
(Shows Vertical Channel)

900# (408 kg.) On VA-1, 12 ga.
775# (351 kg.) On VA-2, 14 ga.



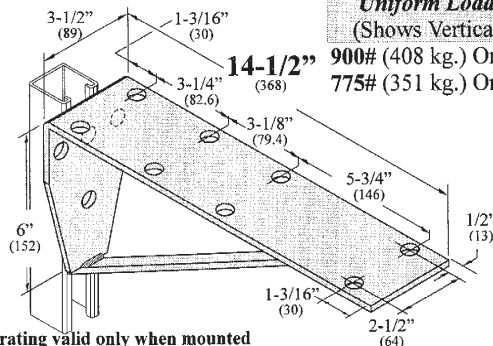
†Load rating valid **only** when mounted with VN or VSN-1050 channel nuts

VB-4145-D

Wt/ea 5.0 Lbs. (2.26 kg.)

Uniform Load Rating†:
(Shows Vertical Channel)

900# (408 kg.) On VA-1, 12 ga.
775# (351 kg.) On VA-2, 14 ga.



†Load rating valid **only** when mounted with VN or VSN-1050 channel nuts

Standard Fitting Dimensions

| | | |
|-------------------------|--------|-----------|
| Width: | 1-5/8" | (41.3 mm) |
| Thickness: | 1/4" | (6.3 mm) |
| Hole Diameter: | 9/16" | (14.3 mm) |
| Hole Spacing On Center: | 1-7/8" | (47.6 mm) |
| Hole Spacing From Ends: | 13/16" | (20.6 mm) |

Metrics in Parenthesis
 •Unless Otherwise Specified•

VERSABAR CORPORATION HEAVY DUTY SHELF BRACKETS

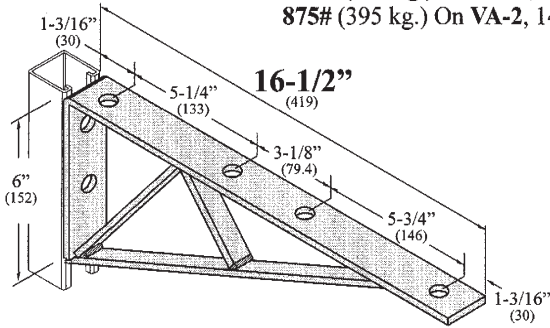


VB-4165

Wt/ea 3.85 Lbs. (1.74 kg.)

Uniform Load Rating†:
 (Shows Vertical Channel)

1200# (542 kg.) On VA-1, 12 ga.
 875# (395 kg.) On VA-2, 14 ga.



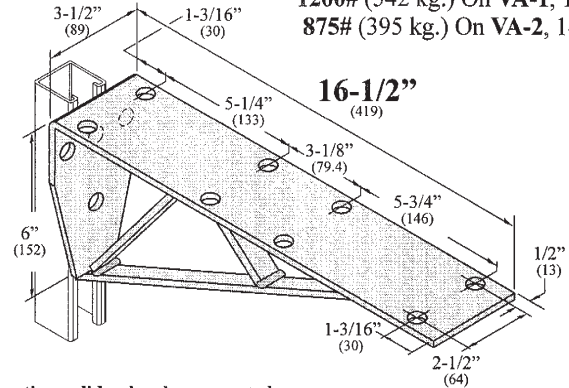
†Load rating valid only when mounted
 with VN or VSN-1050 channel nuts

VB-4165-D

Wt/ea 6.15 Lbs. (2.77 kg.)

Uniform Load Rating†:
 (Shows Vertical Channel)

1200# (542 kg.) On VA-1, 12 ga.
 875# (395 kg.) On VA-2, 14 ga.



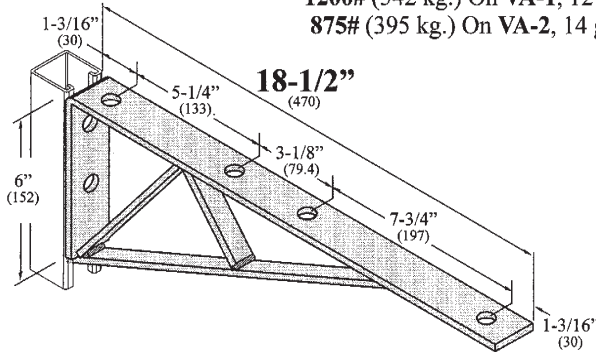
†Load rating valid only when mounted
 with VN or VSN-1050 channel nuts

VB-4185

Wt/ea 4.2 Lbs. (1.89 kg.)

Uniform Load Rating†:
 (Shows Vertical Channel)

1200# (542 kg.) On VA-1, 12 ga.
 875# (395 kg.) On VA-2, 14 ga.



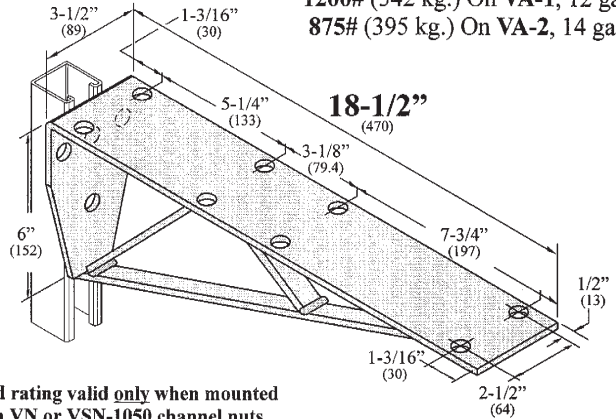
†Load rating valid only when mounted
 with VN or VSN-1050 channel nuts

VB-4185-D

Wt/ea 6.8 Lbs. (3.07 kg.)

Uniform Load Rating†:
 (Shows Vertical Channel)

1200# (542 kg.) On VA-1, 12 ga.
 875# (395 kg.) On VA-2, 14 ga.



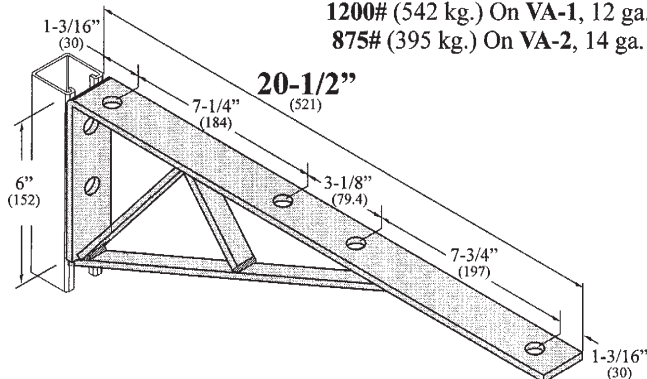
†Load rating valid only when mounted
 with VN or VSN-1050 channel nuts

VB-4205

Wt/ea 4.6 Lbs. (2.07 kg.)

Uniform Load Rating†:
 (Shows Vertical Channel)

1200# (542 kg.) On VA-1, 12 ga.
 875# (395 kg.) On VA-2, 14 ga.



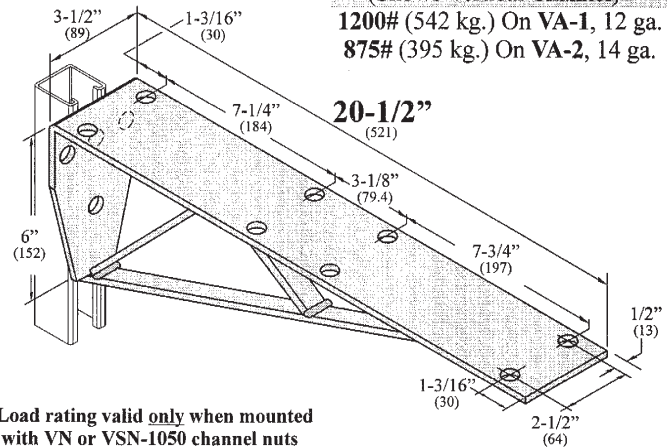
†Load rating valid only when mounted
 with VN or VSN-1050 channel nuts

VB-4205-D

Wt/ea 7.5 Lbs. (3.39 kg.)

Uniform Load Rating†:
 (Shows Vertical Channel)

1200# (542 kg.) On VA-1, 12 ga.
 875# (395 kg.) On VA-2, 14 ga.

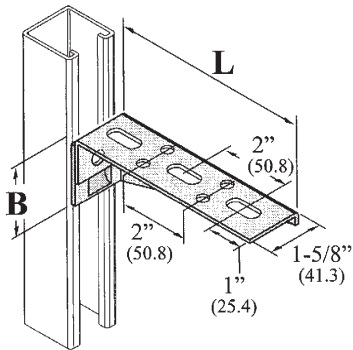


†Load rating valid only when mounted
 with VN or VSN-1050 channel nuts



VERSABAR CORPORATION

SLOTTED SHEET METAL BRACKETS



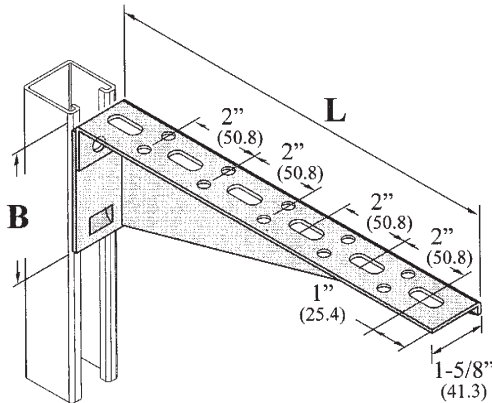
Slotted Sheet Metal Brackets - 6" thru 10"

| Part# | Dim "L" | Dim "B" | Wt. Ea. |
|----------------|-----------|---------------|----------------|
| VB-2106-SL-R/L | 6" (152) | 1-15/16" (49) | .69# (.31 kg) |
| VB-2108-SL-R/L | 8" (203) | 2-7/16" (62) | .92# (.42 kg) |
| VB-2110-SL-R/L | 10" (254) | 2-15/16" (75) | 1.2# (.542 kg) |

Top holes are 9/32" (7.14) Dia.
 Top slots are 13/32" (10.3) x 1" (25.4)
 Bracket mounting hole is 7/16" (11.1) Dia.
 Material thickness is 12 ga. (2.6)
RIGHT hand bracket illustrated.

Uniform Load Rating:

300# (136 kg) when mounted to VA-1 or VA-3
 250# (113 kg) when mounted to VA-2



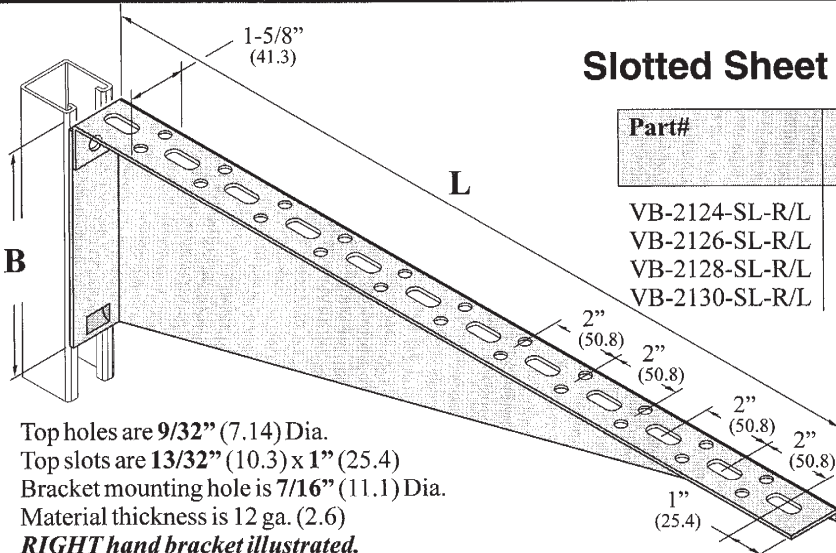
Slotted Sheet Metal Brackets - 12" thru 22"

| Part# | Dim "L" | Dim "B" | Wt. Ea. |
|----------------|-----------|----------------|-----------------|
| VB-2112-SL-R/L | 12" (305) | 3-7/16" (87.2) | 1.50# (.678 kg) |
| VB-2114-SL-R/L | 14" (356) | 3-15/16" (100) | 1.75# (.791 kg) |
| VB-2116-SL-R/L | 16" (406) | 4-7/16" (113) | 2.25# (1.02 kg) |
| VB-2118-SL-R/L | 18" (457) | 4-15/16" (126) | 2.65# (1.19 kg) |
| VB-2120-SL-R/L | 20" (508) | 5-7/16" (138) | 3.05# (1.37 kg) |
| VB-2122-SL-R/L | 22" (559) | 5-15/16" (151) | 3.50# (1.58 kg) |

Top holes are 9/32" (7.14) Dia.
 Top slots are 13/32" (10.3) x 1" (25.4)
 Bracket mounting hole is 7/16" (11.1) Dia.
 Material thickness is 12 ga. (2.6)
RIGHT hand bracket illustrated.

Uniform Load Rating:

300# (136 kg) when mounted to VA-1 or VA-3
 250# (113 kg) when mounted to VA-2



Slotted Sheet Metal Brackets - 24" thru 30"

| Part# | Dim "L" | Dim "B" | Wt. Ea. |
|----------------|-----------|----------------|----------------|
| VB-2124-SL-R/L | 24" (609) | 6-7/16" (163) | 4.0# (1.81 kg) |
| VB-2126-SL-R/L | 26" (660) | 6-15/16" (176) | 4.5# (2.03 kg) |
| VB-2128-SL-R/L | 28" (711) | 7-7/16" (189) | 5.0# (2.26 kg) |
| VB-2130-SL-R/L | 30" (762) | 7-15/16" (202) | 5.5# (2.49 kg) |

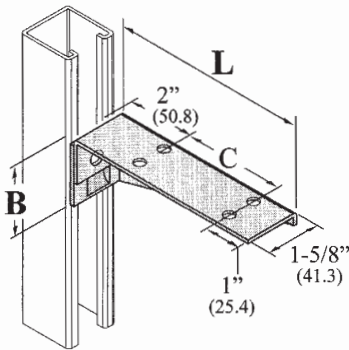
Top holes are 9/32" (7.14) Dia.
 Top slots are 13/32" (10.3) x 1" (25.4)
 Bracket mounting hole is 7/16" (11.1) Dia.
 Material thickness is 12 ga. (2.6)
RIGHT hand bracket illustrated.

Uniform Load Rating:

300# (136 kg) when mounted to VA-1 or VA-3
 250# (113 kg) when mounted to VA-2

VERSABAR CORPORATION

STANDARD SHEET METAL BRACKETS

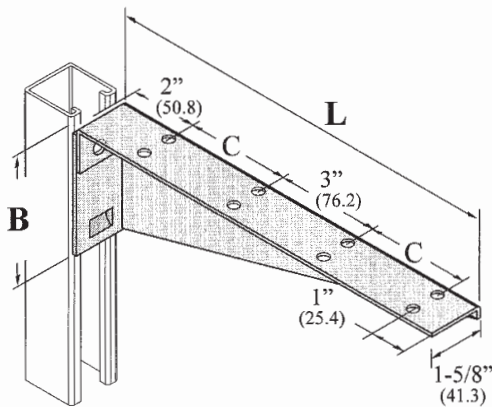


Standard Sheet Metal Brackets - 6" thru 10"

| Part# | Dim "L" | Dim "B" | Dim "C" | Wt. Ea. |
|-------------|-----------|---------------|----------|----------------|
| VB-2106-R/L | 6" (152) | 1-15/16" (49) | 3" (76) | .69# (.31 kg) |
| VB-2108-R/L | 8" (203) | 2-7/16" (62) | 5" (127) | .92# (.42 kg) |
| VB-2110-R/L | 10" (254) | 2-15/16" (75) | 7" (178) | 1.2# (.542 kg) |

Top holes are 9/32" (7.14) Dia.
 Bracket mounting hole is 7/16" (11.1) Dia.
 Material thickness is 12 ga. (2.6)
RIGHT hand bracket illustrated.

Uniform Load Rating:
 300 # (136 kg) when mounted to VA-1 or VA-3
 250 # (113 kg) when mounted to VA-2

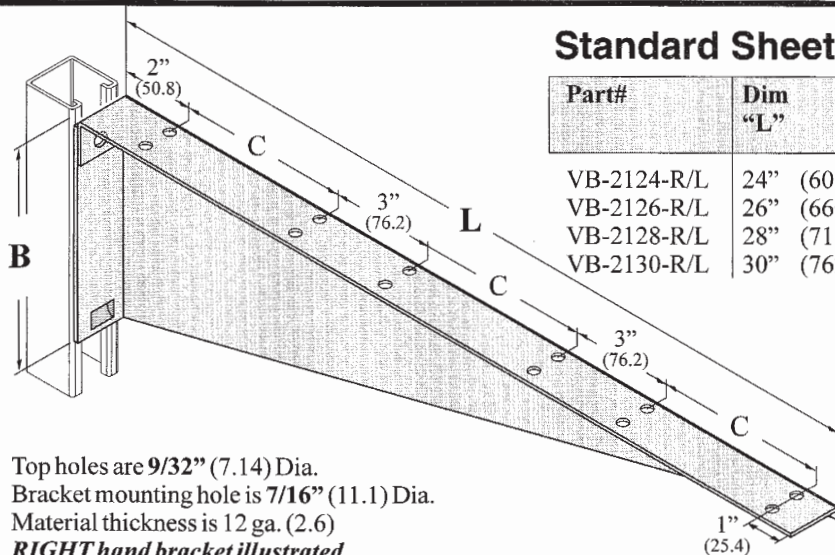


Standard Sheet Metal Brackets - 12" thru 22"

| Part# | Dim "L" | Dim "B" | Dim "C" | Wt. Ea. |
|-------------|-----------|----------------|----------|-----------------|
| VB-2112-R/L | 12" (305) | 3-7/16" (82.7) | 3" (76) | 1.50# (.678 kg) |
| VB-2114-R/L | 14" (356) | 3-15/16" (100) | 4" (102) | 1.75# (.791 kg) |
| VB-2116-R/L | 16" (406) | 4-7/16" (113) | 5" (127) | 2.25# (1.02 kg) |
| VB-2118-R/L | 18" (457) | 4-15/16" (126) | 6" (152) | 2.65# (1.19 kg) |
| VB-2120-R/L | 20" (508) | 5-7/16" (138) | 7" (178) | 3.05# (1.37 kg) |
| VB-2122-R/L | 22" (559) | 5-15/16" (151) | 8" (203) | 3.50# (1.58 kg) |

Top holes are 9/32" (7.14) Dia.
 Bracket mounting hole is 7/16" (11.1) Dia.
 Material thickness is 12 ga. (2.6)
RIGHT hand bracket illustrated.

Uniform Load Rating:
 300 # (136 kg) when mounted to VA-1 or VA-3
 250 # (113 kg) when mounted to VA-2



Standard Sheet Metal Brackets - 24" thru 30"

| Part# | Dim "L" | Dim "B" | Dim "C" | Wt. Ea. |
|-------------|-----------|----------------|----------------|----------------|
| VB-2124-R/L | 24" (609) | 6-7/16" (163) | 5" (127) | 4.0# (1.81 kg) |
| VB-2126-R/L | 26" (660) | 6-15/16" (176) | 5-21/32" (144) | 4.5# (2.03 kg) |
| VB-2128-R/L | 28" (711) | 7-7/16" (189) | 6-11/32" (161) | 5.0# (2.26 kg) |
| VB-2130-R/L | 30" (762) | 7-15/16" (202) | 7" (178) | 5.5# (2.49 kg) |

Top holes are 9/32" (7.14) Dia.
 Bracket mounting hole is 7/16" (11.1) Dia.
 Material thickness is 12 ga. (2.6)
RIGHT hand bracket illustrated.

Uniform Load Rating:
 300 # (136 kg) when mounted to VA-1 or VA-3
 250 # (113 kg) when mounted to VA-2



VERSABAR CORPORATION

BRACKETS & CABLE REEL SUPPORTS

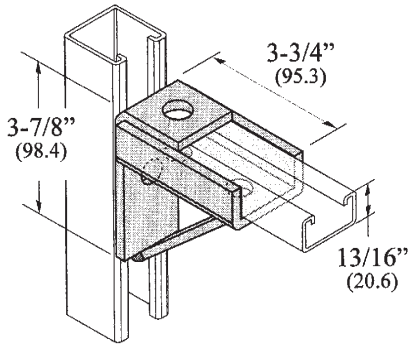
Standard Fitting Dimensions

| | | |
|-------------------------|--------|-----------|
| Width: | 1-5/8" | (41.3 mm) |
| Thickness: | 1/4" | (6.3 mm) |
| Hole Diameter: | 9/16" | (14.3 mm) |
| Hole Spacing On Center: | 1-7/8" | (47.6 mm) |
| Hole Spacing From Ends: | 13/16" | (20.6 mm) |

Metrics in Parenthesis
 •Unless Otherwise Specified•

VF-7301-4 Wt/ea 1.7 Lbs. (768 kg.)

Cantilever Support Bracket

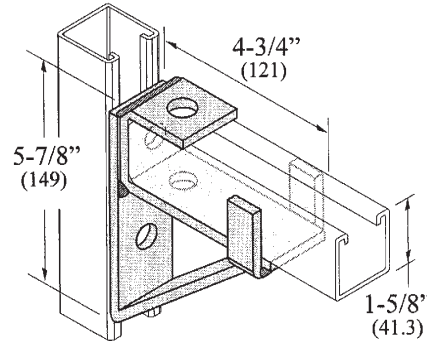


Fits VA-4, VA-5 & VA-13 channels

VF-7301 Wt/ea 2.25 Lbs. (1.02 kg.)

Cantilever Support Bracket

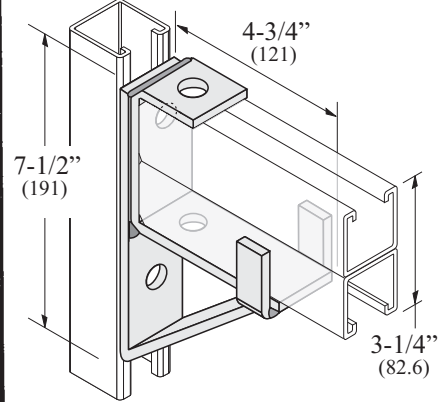
Now Also Available For: VA-3
 Part # **VF-7301-3**



Fits VA-1 & VA-2 channels

VF-7301-B Wt/ea 2.75 Lbs. (1.24 kg.)

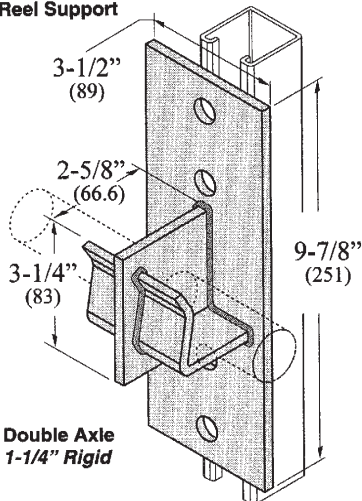
Cantilever Support Bracket



Fits VA-11, VA-1201, VA-2201

VF-7407 Wt/ea 3.80 Lbs. (1.73 kg.)

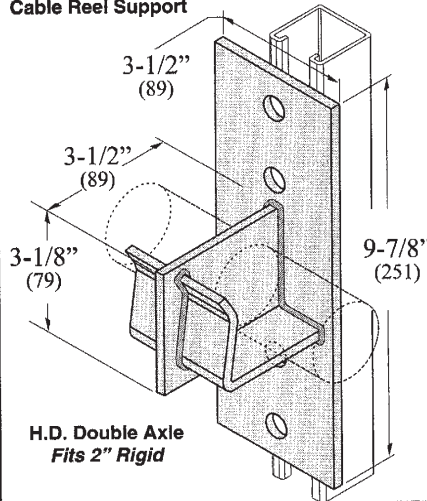
Cable Reel Support



H.D. Double Axle
 Fits 1-1/4" Rigid

VF-7408 Wt/ea 4.05 Lbs. (1.84 kg.)

Cable Reel Support

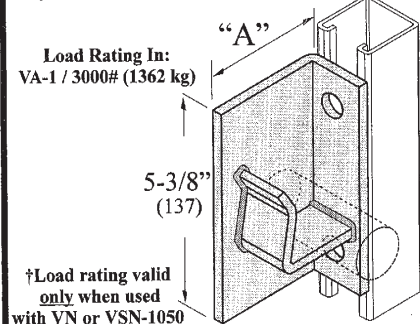


H.D. Double Axle
 Fits 2" Rigid

VF-7207 & VF-7208

Cable Reel Supports / Single Sided / L & R
 (LEFT version shown, For RIGHT order -R)

Load Rating In:
 VA-1 / 3000# (1362 kg)

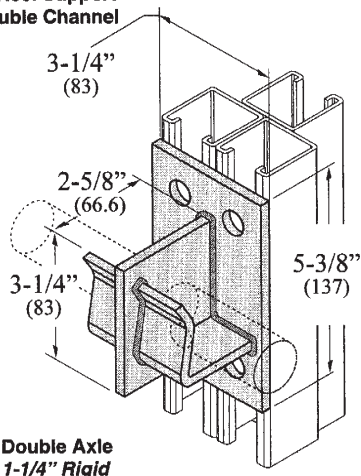


†Load rating valid only when used with VN or VSN-1050 channel nuts

| Part # | Dim "A" | Axle (R Pipe) | Wgt. Ea. |
|-------------|-------------|---------------|----------------|
| VF-7207-R/L | 3" (76) | 1-1/4" | 2.3# (1.04 kg) |
| VF-7208-R/L | 3-5/8" (92) | 2" | 2.5# (1.13 kg) |

VF-7307 Wt/ea 2.57 Lbs. (1.16 kg.)

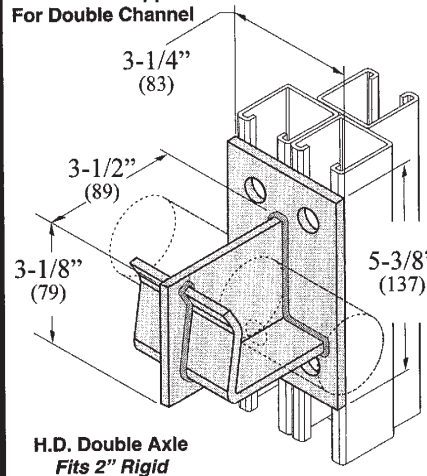
Cable Reel Support For Double Channel



H.D. Double Axle
 Fits 1-1/4" Rigid

VF-7308 Wt/ea 2.99 Lbs. (1.35 kg.)

Cable Reel Support For Double Channel



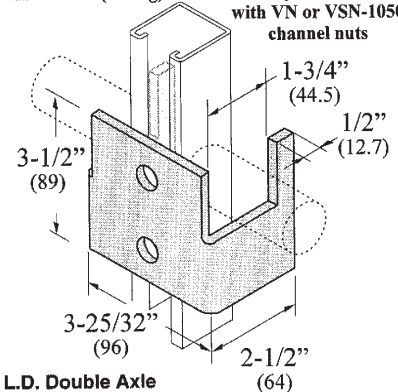
H.D. Double Axle
 Fits 2" Rigid

VF-7210 Wt/ea 1.48 Lbs. (669 kg.)

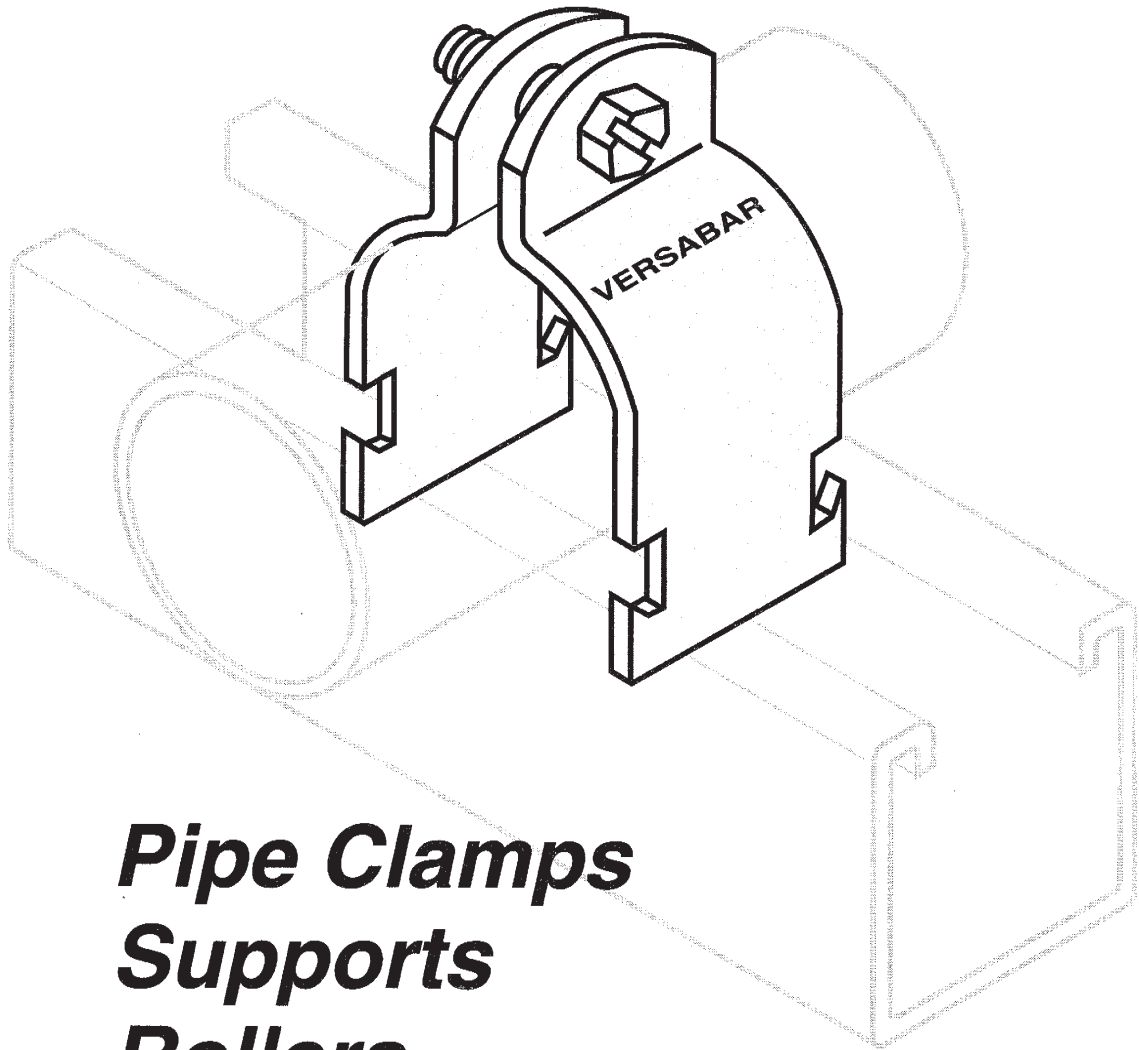
Cable Reel Support / Light Duty / Double Sided

Load Rating Per Axle In:
 VA-1 / 500# (226 kg)

†Load rating valid only when used with VN or VSN-1050 channel nuts



L.D. Double Axle
 Fits 1-1/4" Rigid



***Pipe Clamps
Supports
Rollers
Beam Clamps
Suspension Devices
Cushion Clamps by:***



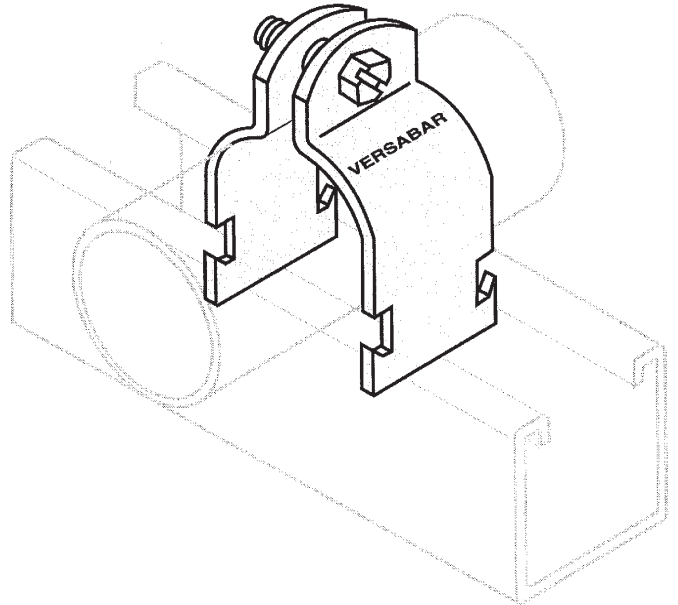
Section D



VERSABAR CORPORATION

SECTION "D" INTRODUCTION

| | |
|--------------------------------|--------------|
| Pipe & Conduit Clamps | D-3 to D-10 |
| HydraZorb™ O.D. | D-5 |
| HydraZorb™ Rigid | D-6 |
| Offset Pipe Brackets & Saddles | D-11 |
| Pipe Rollers | D-12 & D-13 |
| ModuStak™ | D-13 |
| Beam Clamps | D-14 to D-18 |
| Purlin Clamps | D-18 |
| VXE Swivel Eyelets | D-15 |



Material:

Versabar clamps, rollers and supports for pipe, beam clamps, and other suspension devices described herein are either press formed, or cast in malleable iron. Press formed parts are made from H.R.P.O. coil or bar steel conforming to ASTM #'s: A-569, A575, A576, A635 or A36. Fitting steel shall also meet the physical requirements of ASTM A570 GR 33. In addition to carbon steel, many items in this section can be produced in stainless 304, stainless 316, or aluminum.

Finishes:

Standard finish on carbon steel parts is Electro-Galvanized conforming to ASTM B633 Type III SC1. We also offer a hot-dipped galvanized finish on selected items. Certain O.D. Clamps are available with copper plating. The steel portion of standard Hydra-Zorb™ clamps has a dichromate plated finish.

Dimensions:

All imperial dimensions provided are in inches. Metric dimensions are also included in parenthesis. Unless noted, metric dimensions are in millimeters.

Load Data:

Load ratings for the devices listed in this section, where provided, are based on a safety factor of 5 as per section 6 of the A.N.S.I. Code for pressure piping B31.1.

Threads:

Unless noted otherwise, fasteners and channel nuts shown in this section are U.S. Coarse thread.

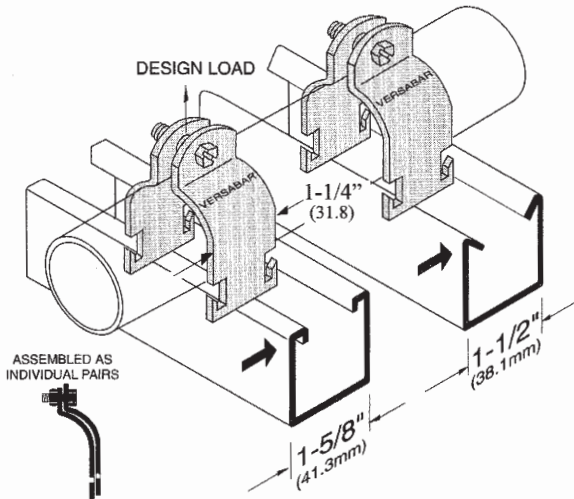
Torque:

Fastener diameter dictates desired torque.

| | |
|----------|-------------|
| 1/4"-20 | 6 ft/lbs. |
| 5/16"-18 | 11 ft/lbs. |
| 3/8"-16 | 19 ft/lbs. |
| 1/2"-13 | 50 ft/lbs. |
| 5/8"-11 | 100 ft/lbs. |
| 3/4"-10 | 125 ft/lbs. |



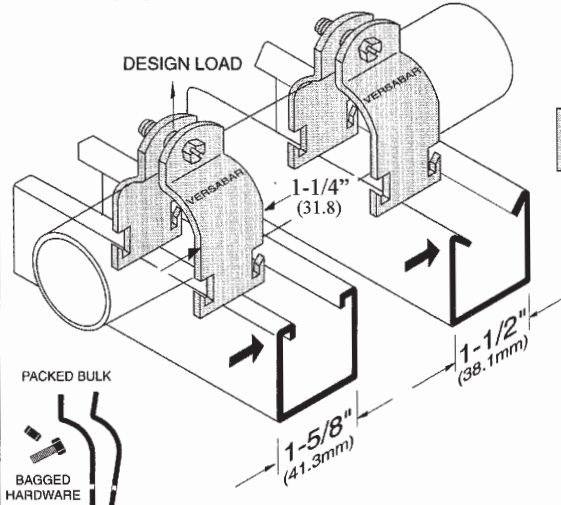
VP-9000 UNIVERSAL Series Clamps "ASSEMBLED STYLE"



Fits 1-5/8" (41.3) & 1-1/2" (38.1) Wide Channels
Fits Rigid, E.M.T. & I.M.C. of the same size

| Part # | Nominal Size | Material Thickness | Wt / C Pr. | | Load Rating | |
|---------|--------------|--------------------|------------|--------|-------------|-------|
| | | | Lbs. | kg | Lbs. | kN |
| VP-9037 | 3/8" | 16 ga. (1.5) | 11.0 | (5.0) | 400 | (1.8) |
| VP-9050 | 1/2" | 16 ga. (1.5) | 12.2 | (5.5) | 400 | (1.8) |
| VP-9075 | 3/4" | 16 ga. (1.5) | 12.5 | (5.7) | 400 | (1.8) |
| VP-9100 | 1" | 14 ga. (1.9) | 18.5 | (8.4) | 600 | (2.7) |
| VP-9125 | 1-1/4" | 14 ga. (1.9) | 19.2 | (8.7) | 600 | (2.7) |
| VP-9150 | 1-1/2" | 14 ga. (1.9) | 19.5 | (8.9) | 600 | (2.7) |
| VP-9200 | 2" | 14 ga. (1.9) | 25.0 | (11.4) | 600 | (2.7) |
| VP-9250 | 2-1/2" | 12 ga. (2.6) | 39.0 | (17.7) | 800 | (3.6) |
| VP-9300 | 3" | 12 ga. (2.6) | 44.0 | (20.0) | 800 | (3.6) |
| VP-9350 | 3-1/2" | 11 ga. (3.0) | 60.0 | (27.2) | 1000 | (4.4) |
| VP-9400 | 4" | 11 ga. (3.0) | 62.0 | (28.1) | 1000 | (4.4) |

VP-9000-UA UNIVERSAL Series Clamps "UNASSEMBLED STYLE"

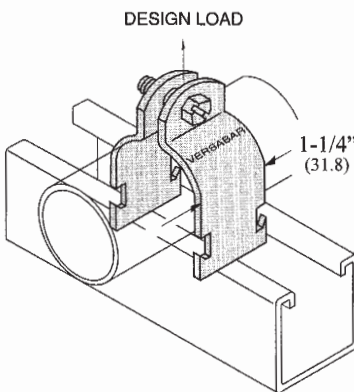


Fits 1-5/8" (41.3) & 1-1/2" (38.1) Wide Channels
Fits Rigid, E.M.T. & I.M.C. of the same size

| Part # | Nominal Size | Material Thickness | Wt / C Pr. | | Load Rating | |
|-----------------|--------------|--------------------|------------|--------|-------------|-------|
| | | | Lbs. | kg | Lbs. | kN |
| VP-9037-UA | 3/8" | 16 ga. (1.5) | 11.0 | (5.0) | 400 | (1.8) |
| VP-9050-UA | 1/2" | 16 ga. (1.5) | 12.2 | (5.5) | 400 | (1.8) |
| VP-9075-UA | 3/4" | 16 ga. (1.5) | 12.5 | (5.7) | 400 | (1.8) |
| VP-9100-UA | 1" | 14 ga. (1.9) | 18.5 | (8.4) | 600 | (2.7) |
| VP-9125-UA | 1-1/4" | 14 ga. (1.9) | 19.2 | (8.7) | 600 | (2.7) |
| VP-9150-UA | 1-1/2" | 14 ga. (1.9) | 19.5 | (8.9) | 600 | (2.7) |
| VP-9200-UA | 2" | 14 ga. (1.9) | 25.0 | (11.4) | 600 | (2.7) |
| VP-1250/9250-UA | 2-1/2" | 12 ga. (2.6) | 39.0 | (17.7) | 800 | (3.6) |
| VP-1300/9300-UA | 3" | 12 ga. (2.6) | 44.0 | (20.0) | 800 | (3.6) |
| VP-1350/9350-UA | 3-1/2" | 11 ga. (3.0) | 60.0 | (27.2) | 1000 | (4.4) |
| VP-1400/9400-UA | 4" | 11 ga. (3.0) | 62.0 | (28.1) | 1000 | (4.4) |

VP-1000 RIGID Series Pipe Clamps

Fits All 1-5/8" (41.3) Wide Channels



| Part # | Pipe Size | Actual O.D. | | Material Thickness | Wt / C Pr. | | Load Rating | |
|-----------------|-----------|-------------|---------|--------------------|------------|--------|-------------|-------|
| | | In. | mm | | Lbs. | kg | Lbs. | kN |
| VP-1037 | 3/8" | .675" | (17.1) | 16 ga. (1.5) | 9.5 | (4.3) | 400 | (1.8) |
| VP-1050 | 1/2" | .840" | (21.3) | 16 ga. (1.5) | 10.5 | (4.8) | 400 | (1.8) |
| VP-1075 | 3/4" | 1.050" | (26.7) | 14 ga. (1.9) | 14.5 | (6.6) | 600 | (2.7) |
| VP-1100 | 1" | 1.315" | (33.4) | 14 ga. (1.9) | 16.5 | (7.5) | 600 | (2.7) |
| VP-1125 | 1-1/4" | 1.660" | (42.2) | 14 ga. (1.9) | 19.0 | (8.6) | 600 | (2.7) |
| VP-1150 | 1-1/2" | 1.900" | (48.3) | 12 ga. (2.6) | 30.0 | (13.6) | 800 | (3.6) |
| VP-1200 | 2" | 2.375" | (60.3) | 12 ga. (2.6) | 33.0 | (15.0) | 800 | (3.6) |
| VP-1250/9250-UA | 2-1/2" | 2.875" | (73.0) | 12 ga. (2.6) | 39.0 | (17.7) | 800 | (3.6) |
| VP-1300/9300-UA | 3" | 3.500" | (88.9) | 12 ga. (2.6) | 44.0 | (20.0) | 800 | (3.6) |
| VP-1350/9350-UA | 3-1/2" | 4.000" | (101.6) | 11 ga. (3.0) | 60.0 | (27.2) | 1000 | (4.4) |
| VP-1400/9400-UA | 4" | 4.500" | (114.3) | 11 ga. (3.0) | 62.0 | (28.1) | 1000 | (4.4) |
| VP-1450 | 4-1/2" | 5.000" | (127.0) | 11 ga. (3.0) | 72.0 | (32.7) | 1000 | (4.4) |
| VP-1500 | 5" | 5.563" | (141.3) | 11 ga. (3.0) | 78.0 | (35.4) | 1000 | (4.4) |
| VP-1600 | 6" | 6.625" | (168.3) | 10 ga. (3.4) | 96.0 | (43.6) | 1000 | (4.4) |
| VP-1800 | 8" | 8.625" | (219.1) | 10 ga. (3.4) | 118.0 | (53.6) | 1000 | (4.4) |

Also Available: SS 304 / 316, Alum., and HDGA

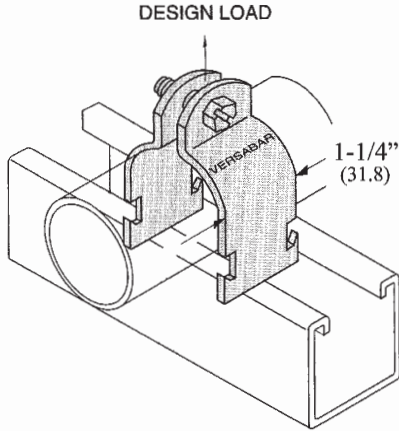


VERSABAR CORPORATION

O.D. TUBING CLAMPS

VT-1000 O.D. Series Tubing Clamps

Fits All 1-5/8" (41.3) Wide Channels



Stock Thickness

| | |
|----------------------|--------------|
| VT-1025 thru VT-1087 | 16 ga. (1.5) |
| VT-1100 thru VT-1162 | 14 ga. (1.9) |
| VT-1175 thru VT-1350 | 12 ga. (2.6) |
| VT-1362 thru VT-1550 | 11 ga. (3.0) |
| VT-1562 thru VT-1862 | 10 ga. (3.4) |

Also Produced in: SS 304 / 316, & Copper Plated (Check with factory for availability and/or minimums).

| Part # | O.D. Size | | Wt / C Pr. | | Load Rating | |
|---------|-----------|--------|------------|--------|-------------|-------|
| | In. | (mm) | Lbs. | kg | Lbs. | kN |
| VT-1025 | 1/4" | (6.3) | 9 | (4.1) | 400 | (1.8) |
| VT-1037 | 3/8" | (9.5) | 10 | (4.5) | 400 | (1.8) |
| VT-1050 | 1/2" | (12.7) | 10 | (4.5) | 400 | (1.8) |
| VT-1062 | 5/8" | (15.8) | 11 | (5.0) | 400 | (1.8) |
| VT-1075 | 3/4" | (19.1) | 12 | (5.4) | 400 | (1.8) |
| VT-1087 | 7/8" | (22.2) | 12 | (5.4) | 400 | (1.8) |
| VT-1100 | 1" | (25.4) | 13 | (5.9) | 600 | (2.7) |
| VT-1112 | 1-1/8" | (28.5) | 13 | (5.9) | 600 | (2.7) |
| VT-1125 | 1-1/4" | (31.7) | 15 | (6.8) | 600 | (2.7) |
| VT-1137 | 1-3/8" | (34.9) | 16 | (7.3) | 600 | (2.7) |
| VT-1150 | 1-1/2" | (38.1) | 17 | (7.7) | 600 | (2.7) |
| VT-1162 | 1-5/8" | (41.3) | 19 | (8.6) | 600 | (2.7) |
| VT-1175 | 1-3/4" | (44.4) | 23 | (10.4) | 800 | (3.6) |
| VT-1187 | 1-7/8" | (47.6) | 25 | (11.4) | 800 | (3.6) |
| VT-1200 | 2" | (50.8) | 27 | (12.3) | 800 | (3.6) |
| VT-1212 | 2-1/8" | (53.9) | 29 | (13.2) | 800 | (3.6) |
| VT-1225 | 2-1/4" | (57.1) | 34 | (15.4) | 800 | (3.6) |
| VT-1237 | 2-3/8" | (60.3) | 35 | (15.9) | 800 | (3.6) |
| VT-1250 | 2-1/2" | (63.5) | 36 | (16.3) | 800 | (3.6) |
| VT-1262 | 2-5/8" | (66.6) | 37 | (16.8) | 800 | (3.6) |
| VT-1275 | 2-3/4" | (69.8) | 39 | (17.7) | 800 | (3.6) |
| VT-1287 | 2-7/8" | (73) | 40 | (18.2) | 800 | (3.6) |
| VT-1300 | 3" | (76.2) | 42 | (19.1) | 800 | (3.6) |
| VT-1312 | 3-1/8" | (79.3) | 43 | (19.5) | 800 | (3.6) |
| VT-1325 | 3-1/4" | (82.5) | 45 | (20.4) | 800 | (3.6) |
| VT-1337 | 3-3/8" | (85.7) | 46 | (20.9) | 800 | (3.6) |
| VT-1350 | 3-1/2" | (88.9) | 48 | (21.8) | 800 | (3.6) |
| VT-1362 | 3-5/8" | (92) | 57 | (25.9) | 1000 | (4.5) |
| VT-1375 | 3-3/4" | (95.2) | 57 | (25.9) | 1000 | (4.5) |
| VT-1387 | 3-7/8" | (98.4) | 58 | (26.3) | 1000 | (4.5) |
| VT-1400 | 4" | (102) | 59 | (26.8) | 1000 | (4.5) |
| VT-1412 | 4-1/8" | (105) | 60 | (27.2) | 1000 | (4.5) |
| VT-1425 | 4-1/4" | (108) | 61 | (27.7) | 1000 | (4.5) |
| VT-1437 | 4-3/8" | (111) | 61 | (27.7) | 1000 | (4.5) |
| VT-1450 | 4-1/2" | (114) | 62 | (28.1) | 1000 | (4.5) |

cont.

| Part # | O.D. Size | | Wt / C Pr. | | Load Rating | |
|---------|-----------|-------|------------|---------|-------------|-------|
| | In. | (mm) | Lbs. | kg | Lbs. | kN |
| VT-1462 | 4-5/8" | (118) | 63 | (28.6) | 1000 | (4.5) |
| VT-1475 | 4-3/4" | (121) | 64 | (29.1) | 1000 | (4.5) |
| VT-1487 | 4-7/8" | (124) | 64 | (29.1) | 1000 | (4.5) |
| VT-1500 | 5" | (127) | 65 | (29.5) | 1000 | (4.5) |
| VT-1512 | 5-1/8" | (130) | 66 | (30.0) | 1000 | (4.5) |
| VT-1525 | 5-1/4" | (133) | 67 | (30.4) | 1000 | (4.5) |
| VT-1537 | 5-3/8" | (137) | 68 | (30.9) | 1000 | (4.5) |
| VT-1550 | 5-1/2" | (140) | 68 | (30.9) | 1000 | (4.5) |
| VT-1562 | 5-5/8" | (143) | 129 | (58.6) | 1000 | (4.5) |
| VT-1575 | 5-3/4" | (146) | 131 | (59.5) | 1000 | (4.5) |
| VT-1587 | 5-7/8" | (149) | 133 | (60.4) | 1000 | (4.5) |
| VT-1600 | 6" | (152) | 135 | (61.3) | 1000 | (4.5) |
| VT-1612 | 6-1/8" | (156) | 137 | (62.2) | 1000 | (4.5) |
| VT-1625 | 6-1/4" | (159) | 140 | (63.6) | 1000 | (4.5) |
| VT-1637 | 6-3/8" | (162) | 141 | (64.0) | 1000 | (4.5) |
| VT-1650 | 6-1/2" | (165) | 144 | (65.4) | 1000 | (4.5) |
| VT-1662 | 6-5/8" | (168) | 146 | (66.3) | 1000 | (4.5) |
| VT-1675 | 6-3/4" | (172) | 148 | (67.2) | 1000 | (4.5) |
| VT-1687 | 6-7/8" | (175) | 150 | (68.1) | 1000 | (4.5) |
| VT-1700 | 7" | (178) | 152 | (69.0) | 1000 | (4.5) |
| VT-1712 | 7-1/8" | (181) | 153 | (69.5) | 1000 | (4.5) |
| VT-1725 | 7-1/4" | (184) | 244 | (110.8) | 1000 | (4.5) |
| VT-1737 | 7-3/8" | (187) | 246 | (111.7) | 1000 | (4.5) |
| VT-1750 | 7-1/2" | (191) | 250 | (113.5) | 1000 | (4.5) |
| VT-1762 | 7-5/8" | (194) | 253 | (114.9) | 1000 | (4.5) |
| VT-1775 | 7-3/4" | (197) | 256 | (116.2) | 1000 | (4.5) |
| VT-1787 | 7-7/8" | (200) | 259 | (117.6) | 1000 | (4.5) |
| VT-1800 | 8" | (203) | 262 | (118.9) | 1000 | (4.5) |
| VT-1812 | 8-1/8" | (206) | 265 | (120.3) | 1000 | (4.5) |
| VT-1825 | 8-1/4" | (210) | 269 | (122.1) | 1000 | (4.5) |
| VT-1837 | 8-3/8" | (213) | 272 | (123.5) | 1000 | (4.5) |
| VT-1850 | 8-1/2" | (216) | 275 | (124.9) | 1000 | (4.5) |
| VT-1862 | 8-5/8" | (219) | 279 | (126.7) | 1000 | (4.5) |

Check with factory for availability and/or minimums on sizes above 2-5/8" O.D. (66.7)

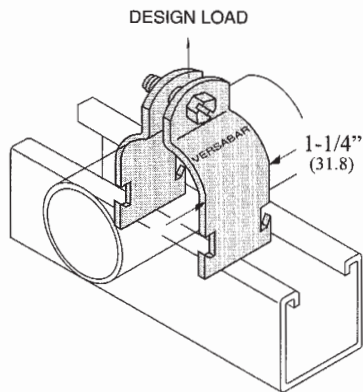
VERSABAR CORPORATION

E.M.T. and HydraZorb™ O.D. CLAMPS



VPT-1000 E.M.T. Series Clamps

Fits All 1-5/8" (41.3) Wide Channels



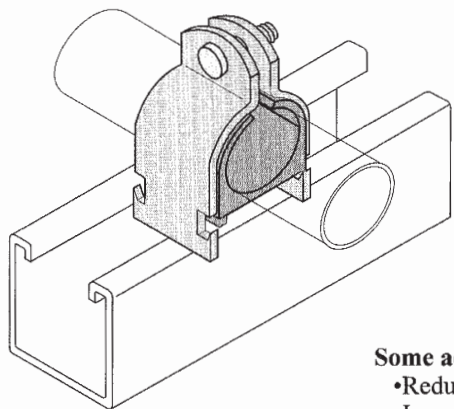
| Part # | E.M.T. Size | Actual O.D. | | Material Thickness | Wt / C Pr. | | Load Rating | |
|----------|-------------|-------------|--------|--------------------|-------------|-----------|-------------|----|
| | | In. | mm | | Lbs. | kg | Lbs. | kN |
| VPT-1037 | 3/8" | .577" | (14.7) | 16 ga. (1.5) | 9.0 (4.1) | 400 (1.8) | | |
| VPT-1050 | 1/2" | .706" | (17.9) | 16 ga. (1.5) | 9.5 (4.3) | 400 (1.8) | | |
| VPT-1075 | 3/4" | .922" | (23.4) | 16 ga. (1.5) | 11.0 (5.0) | 400 (1.8) | | |
| VPT-1100 | 1" | 1.163" | (29.5) | 14 ga. (1.9) | 15.0 (6.8) | 600 (2.7) | | |
| VPT-1125 | 1-1/4" | 1.510" | (38.4) | 14 ga. (1.9) | 19.0 (8.6) | 600 (2.7) | | |
| VPT-1150 | 1-1/2" | 1.740" | (44.2) | 12 ga. (2.6) | 27.0 (12.3) | 800 (3.6) | | |
| VPT-1200 | 2" | 2.197" | (55.8) | 12 ga. (2.6) | 32.0 (14.5) | 800 (3.6) | | |

NOTE: E.M.T. over 2" has the same O.D. as rigid pipe, and requires a rigid or universal clamp of the same nominal size.

VHZ-100 Series O.D. & Copper Tube Isolating Clamp Assemblies

Fits All 1-5/8" (41.3) Wide Channels

- Includes:** Steel clamp* with welded stud,
Cushion insert with 275° F rating,
(useable down to -65°)
Nylon insert hex nut.
- Finish:** Zinc dichromate plated.*



| Part # | Fits: O.D. Size | | Fits: Copper Tube Size | | Wt / C Pr. | |
|------------|--------------------|---------|---------------------------|---------|------------|--------|
| | In. | mm | In. | mm | Lbs. | kg |
| VHZ-100025 | 1/4" | (6.4) | | | 10 | (4.5) |
| VHZ-100031 | 5/16" | (7.9) | | | 11 | (5.0) |
| VHZ-100037 | 3/8" | (9.5) | 1/4" | (6.4) | 11 | (5.0) |
| VHZ-100050 | 1/2" | (12.7) | 3/8" | (9.5) | 12 | (5.4) |
| VHZ-100062 | 5/8" | (15.9) | 1/2" | (12.7) | 13 | (5.9) |
| VHZ-100075 | 3/4" | (19.1) | | | 20 | (9.1) |
| VHZ-100087 | 7/8" | (22.2) | 3/4" | (19.1) | 21 | (9.5) |
| VHZ-100100 | 1" | (25.4) | | | 28 | (12.7) |
| VHZ-100112 | 1-1/8" | (28.6) | 1" | (25.4) | 29 | (13.2) |
| VHZ-100125 | 1-1/4" | (31.8) | | | 31 | (14.1) |
| VHZ-100137 | 1-3/8" | (34.9) | 1-1/4" | (31.8) | 40 | (18.2) |
| VHZ-100150 | 1-1/2" | (38.1) | | | 40 | (18.2) |
| VHZ-100162 | 1-5/8" | (41.3) | 1-1/2" | (38.1) | 45 | (20.4) |
| VHZ-100175 | 1-3/4" | (44.5) | | | 43 | (19.5) |
| VHZ-100200 | 2" | (50.8) | | | 48 | (21.8) |
| VHZ-100212 | 2-1/8" | (54.0) | 2" | (50.8) | 53 | (24.1) |
| VHZ-100225 | 2-1/4" | (57.2) | | | 60 | (27.2) |
| VHZ-100251 | 2-1/2" | (63.5) | | | 56 | (25.4) |
| VHZ-100262 | 2-5/8" | (66.7) | 2-1/2" | (63.5) | 53 | (24.1) |
| VHZ-100300 | 3" | (76.2) | | | 65 | (29.5) |
| VHZ-100312 | 3-1/8" | (79.4) | 3" | (76.2) | 63 | (28.6) |
| VHZ-100362 | 3-5/8" | (92.1) | 3-1/2" | (88.9) | 78 | (35.4) |
| VHZ-100412 | 4-1/8" | (104.8) | 4" | (101.6) | 90 | (40.9) |

Some advantages of Hydra-Zorb clamps over conventional pipe & tube clamps:

- Reduced noise, shock and vibration caused by fluid surges in tubes and hoses.
- Improved resistance to most fuels, oils, gases, greases, solvents, mineral acids, etc..
- Eliminates metal to metal contact.

Some advantages of Hydra-Zorb Brand isolator clamps over other brands:

- Superior salt spray results per ASTM B117-95. (No base metal corrosion after 72 hours).
- Steel clamp hardness rating of 73.3 HRB.

* Also available in:
Stainless 304 & 316



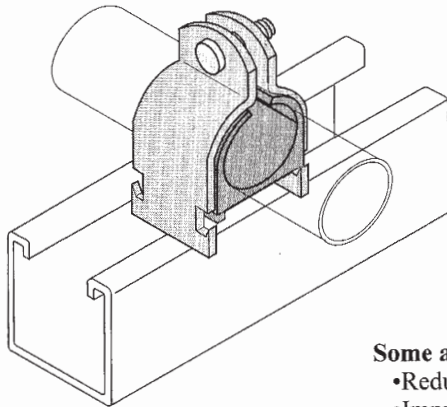
VERSABAR CORPORATION

HydraZorb™ PIPE CLAMPS and ELASTOMER STRIP

VHZ-200 Series RIGID PIPE Isolating Clamp Assemblies

Fits All 1-5/8" (41.3) Wide Channels

- Includes:** Steel clamp* with welded stud,
Cushion insert with 275° F rating,
(useable down to -65°)
Nylon insert hex nut.
- Finish:** Zinc dichromate plated.*



| Part # | Fits: Rigid Pipe Size | Actual O.D. Size | | Wt / C Pr. | |
|------------|-----------------------------|------------------|---------|------------|--------|
| | | In. | mm | Lbs. | kg |
| VHZ-200025 | 1/4" | .540" | (13.7) | 12 | (5.4) |
| VHZ-200037 | 3/8" | .675" | (17.1) | 14 | (6.4) |
| VHZ-200050 | 1/2" | .840" | (21.3) | 21 | (9.5) |
| VHZ-200075 | 3/4" | 1.050" | (26.7) | 29 | (13.2) |
| VHZ-200100 | 1" | 1.315" | (33.4) | 41 | (18.6) |
| VHZ-200125 | 1-1/4" | 1.660" | (42.2) | 45 | (20.4) |
| VHZ-200150 | 1-1/2" | 1.900" | (48.3) | 49 | (22.2) |
| VHZ-200200 | 2" | 2.375" | (60.3) | 56 | (25.4) |
| VHZ-200250 | 2-1/2" | 2.875" | (73.0) | 60 | (27.2) |
| VHZ-200300 | 3" | 3.500" | (88.9) | 77 | (35.0) |
| VHZ-200350 | 3-1/2" | 4.000" | (101.6) | 97 | (44.0) |
| VHZ-200400 | 4" | 4.500" | (114.3) | 110 | (49.9) |
| VHZ-200500 | 5" | 5.563" | (141.3) | 130 | (59.0) |
| VHZ-200600 | 6" | 6.625" | (168.3) | 140 | (63.6) |

Some advantages of Hydra-Zorb clamps over conventional pipe & tube clamps:

- Reduced noise, shock and vibration caused by fluid surges in tubes and hoses.
- Improved resistance to most fuels, oils, gases, greases, solvents, mineral acids, etc..
- Eliminates metal to metal contact.

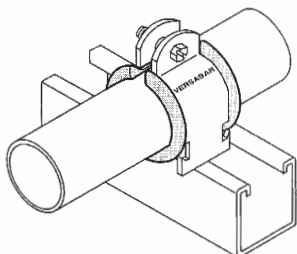
* Also available in:
Stainless 304 & 316

Some advantages of Hydra-Zorb Brand isolator clamps over other brands:

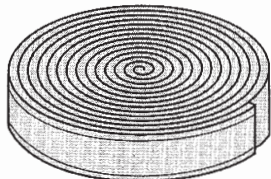
- Superior salt spray results per ASTM B117-95. (No base metal corrosion after 72 hours).
- Steel clamp hardness rating of 73.3 HRB.

VT-1 Elastomer Isolation Strip

Wgt. per box 3.8 lbs. (1.72 kg.)



20' Coil (6.1m) per box



VT-1 insulation strip is provided in a continuous coil length of 20' (6.1m) per carton. Included chart shows correct length for cuts to fit specific type / size of pipe or tube.

Note: * Clamps should be ordered 1/4" OVERSIZE when used with VT-1 isolator.

- Eliminates galvanic corrosion by removing any metal to metal contact.
- Dampens vibration and noise.
- Allows for expansion and contraction within the assembly.
- Stable in use from: -75° F (-60° C) to +375° F (+199° C).
- Coil can be cut to any size required, minimizing cost & inventory.

VERSABAR CORPORATION

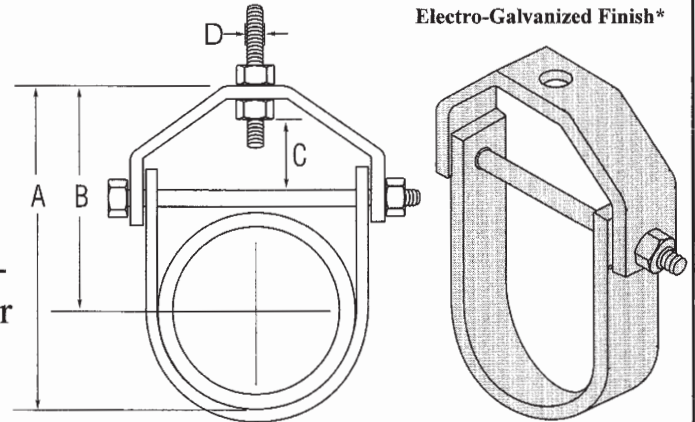
CLEVIS and SIDE OPENING HANGERS



VP-2000 Series Clevis Hangers

Standard adjustable clevis hanger

For: Non-Insulated, stationary pipe lines.
 General piping, heating and sprinkler installations. *Also available: Stainless, Hot-Dipped, and Black H.R.P.O., (Larger sizes for up to 30" rigid pipe can be supplied).



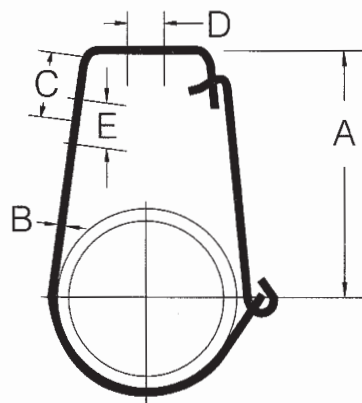
| Part# | Pipe Size | Upper Stock Size | | Lower Stock Size | | Dim "A" | | Dim "B" | | Dim "C" | | Dim "D" | | Wgt. "C" | |
|---------|-----------|------------------|------------|------------------|------------|----------|-------|----------|-------|----------|--------|---------|--------|----------|----------|
| | | In. | mm | In. | mm | In. | mm | In. | mm | In. | mm | In. | mm | Lbs. | Pcs. kg. |
| VP-2050 | 1/2" | 1/8"x1" | (3.2x25.4) | 1/8"x1" | (3.2x25.4) | 2-1/8" | (54) | 1-11/16" | (43) | 7/16" | (11) | 3/8" | (9.5) | 30# | (14) |
| VP-2075 | 3/4" | 1/8"x1" | (3.2x25.4) | 1/8"x1" | (3.2x25.4) | 2-7/16" | (62) | 1-7/8" | (48) | 1/2" | (12.7) | 3/8" | (9.5) | 32# | (15) |
| VP-2100 | 1" | 1/8"x1" | (3.2x25.4) | 1/8"x1" | (3.2x25.4) | 2-13/16" | (71) | 2-1/8" | (54) | 5/8" | (15.8) | 3/8" | (9.5) | 36# | (17) |
| VP-2125 | 1-1/4" | 1/8"x1" | (3.2x25.4) | 1/8"x1" | (3.2x25.4) | 3-7/16" | (87) | 2-9/16" | (65) | 7/8" | (22.2) | 3/8" | (9.5) | 42# | (19) |
| VP-2150 | 1-1/2" | 9ga x1" | (3.8x25.4) | 1/8"x1" | (3.2x25.4) | 4" | (102) | 3" | (76) | 1-1/16" | (26.9) | 3/8" | (9.5) | 55# | (26) |
| VP-2200 | 2" | 9ga x1" | (3.8x25.4) | 1/8"x1" | (3.2x25.4) | 4-7/8" | (124) | 3-11/16" | (94) | 1-5/8" | (41.2) | 3/8" | (9.5) | 60# | (28) |
| VP-2250 | 2-1/2" | 3/16"x1-1/4" | (4.8x32) | 3/16"x1-1/4" | (4.8x32) | 6-1/8" | (156) | 4-11/16" | (119) | 2" | (50.8) | 1/2" | (12.7) | 115# | (53) |
| VP-2300 | 3" | 3/16"x1-1/4" | (4.8x32) | 3/16"x1-1/4" | (4.8x32) | 6-9/16" | (166) | 4-3/4" | (121) | 1-3/4" | (44.4) | 1/2" | (12.7) | 132# | (60) |
| VP-2350 | 3-1/2" | 3/16"x1-1/4" | (4.8x32) | 3/16"x1-1/4" | (4.8x32) | 6-15/16" | (176) | 4-15/16" | (125) | 1-3/4" | (44.4) | 1/2" | (12.7) | 156# | (71) |
| VP-2400 | 4" | 1/4"x1-1/4" | (6.4x32) | 3/16"x1-1/4" | (4.8x32) | 7-13/16" | (199) | 5-9/16" | (142) | 1-15/16" | (49.2) | 5/8" | (15.8) | 190# | (87) |
| VP-2500 | 5" | 1/4"x1-1/4" | (6.4x32) | 3/16"x1-1/4" | (4.8x32) | 9" | (229) | 6-3/16" | (158) | 1-3/4" | (44.4) | 5/8" | (15.8) | 240# | (109) |
| VP-2600 | 6" | 1/4"x1-1/2" | (6.4x38) | 3/16"x1-1/2" | (4.8x38) | 10-1/8" | (257) | 6-13/16" | (173) | 1-7/8" | (47.6) | 3/4" | (19) | 320# | (146) |
| VP-2800 | 8" | 1/4"x1-3/4" | (6.4x44) | 3/16"x1-3/4" | (4.8x44) | 12-5/8" | (321) | 8-5/16" | (212) | 2-1/8" | (53.9) | 7/8" | (22) | 500# | (227) |

VP-3000 Series Side Opening Hangers

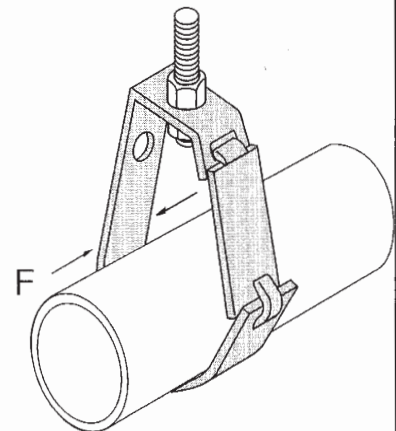
Swing hinge design

Can be supported by rod or bolted directly to wall.

Hanger is rigid enough to hold pipe prior to closure.



Electro-Galvanized Finish



| Part# | Pipe Size | Dim "A" | | Dim "B" | | Dim "C" | | Dim "D" | | Dim "E" | | Dim "F" | | Wgt. "C" | |
|---------|-----------|----------|--------|---------|-------|---------|--------|---------|--------|---------|--------|---------|--------|----------|----------|
| | | In. | mm | In. | mm | In. | mm | In. | mm | In. | mm | In. | mm | Lbs. | pcs. kg. |
| VP-3050 | 1/2" | 2-7/16" | (61.9) | 1/8" | (3.2) | 1" | (25.4) | 3/8" | (9.5) | 13/32" | (10.3) | 3/4" | (19.1) | 17# | 8 |
| VP-3075 | 3/4" | 2-1/2" | (63.5) | 1/8" | (3.2) | 1" | (25.4) | 3/8" | (9.5) | 13/32" | (10.3) | 3/4" | (19.1) | 19# | 9 |
| VP-3100 | 1" | 2-9/16" | (65.1) | 1/8" | (3.2) | 1" | (25.4) | 3/8" | (9.5) | 13/32" | (10.3) | 3/4" | (19.1) | 22# | 10 |
| VP-3125 | 1-1/4" | 2-11/16" | (68.3) | 1/8" | (3.2) | 1" | (25.4) | 3/8" | (9.5) | 13/32" | (10.3) | 3/4" | (19.1) | 26# | 12 |
| VP-3150 | 1-1/2" | 2-7/8" | (73) | 1/8" | (3.2) | 1" | (25.4) | 3/8" | (9.5) | 13/32" | (10.3) | 3/4" | (19.1) | 26# | 12 |
| VP-3200 | 2" | 3-5/16" | (84.1) | 1/8" | (3.2) | 1" | (25.4) | 3/8" | (9.5) | 13/32" | (10.3) | 3/4" | (19.1) | 31# | 14 |
| VP-3250 | 2-1/2" | 3-7/8" | (98.4) | 1/8" | (3.2) | 1-1/8" | (28.6) | 1/2" | (12.7) | 9/16" | (14.3) | 1-1/4" | (31.7) | 66# | 30 |
| VP-3300 | 3" | 4-11/16" | (105) | 1/8" | (3.2) | 1-1/8" | (28.6) | 1/2" | (12.7) | 9/16" | (14.3) | 1-1/4" | (31.7) | 72# | 33 |
| VP-3350 | 3-1/2" | 4-5/8" | (117) | 1/8" | (3.2) | 1-1/8" | (28.6) | 1/2" | (12.7) | 9/16" | (14.3) | 1-1/4" | (31.7) | 84# | 38 |
| VP-3400 | 4" | 5" | (127) | 3/16" | (4.8) | 1-1/8" | (28.6) | 5/8" | (15.9) | 9/16" | (14.3) | 1-1/4" | (31.7) | 178# | 81 |

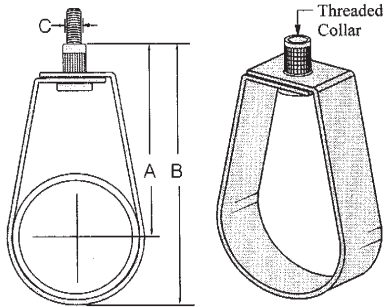


VERSABAR CORPORATION

Swivel Ring Hangers, Riser & Parallel Clamps

VP-7000 Series Adjustable Swivel Ring Hangers

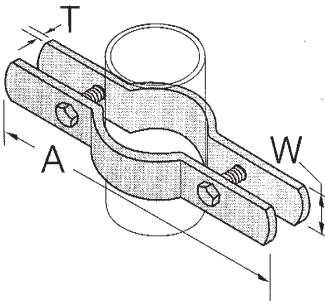
"EM-LOK" Style hangers are approved for use without additional locking nuts, which are normally required with pipe hangers.



Electro-Galvanized Finish

| Part # | Pipe Size | Dim "A" | | Dim "B" | | Rod Dia. | Stock Size | | Wgt. Per "C" | |
|---------|-----------|---------|-------|---------|-------|----------|--------------|------|--------------|-----|
| | | In. | mm | In. | mm | | In. | | lbs. | kg. |
| VP-7050 | 1/2" | 2-5/8" | (67) | 3-3/16" | (81) | 3/8"-16 | 16ga. x 5/8" | 11# | (5) | |
| VP-7075 | 3/4" | 2-1/2" | (64) | 3-3/16" | (81) | 3/8"-16 | 16ga. x 5/8" | 11# | (5) | |
| VP-7100 | 1" | 2-5/8" | (67) | 3-3/8" | (86) | 3/8"-16 | 16ga. x 5/8" | 12# | (5.4) | |
| VP-7125 | 1-1/4" | 2-3/4" | (70) | 3-3/4" | (95) | 3/8"-16 | 16ga. x 5/8" | 13# | (5.9) | |
| VP-7150 | 1-1/2" | 2-7/8" | (73) | 4" | (102) | 3/8"-16 | 16ga. x 5/8" | 14# | (6.3) | |
| VP-7200 | 2" | 3-1/4" | (83) | 4-5/8" | (117) | 3/8"-16 | 16ga. x 5/8" | 15# | (6.8) | |
| VP-7250 | 2-1/2" | 3-3/4" | (95) | 5-5/8" | (143) | 1/2"-13 | 13ga. x 3/4" | 32# | (14) | |
| VP-7300 | 3" | 4-1/2" | (114) | 6-1/4" | (159) | 1/2"-13 | 13ga. x 3/4" | 34# | (15) | |
| VP-7350 | 3-1/2" | 5" | (127) | 7" | (178) | 1/2"-13 | 13ga. x 3/4" | 37# | (16) | |
| VP-7400 | 4" | 5" | (127) | 7-3/8" | (188) | 5/8"-11 | 11ga. x 1" | 78# | (35) | |
| VP-7500 | 5" | 6" | (152) | 9-1/8" | (232) | 5/8"-11 | 11ga. x 1" | 94# | (42) | |
| VP-7600 | 6" | 7-1/4" | (184) | 10-5/8" | (270) | 3/4"-10 | 11ga. x 1" | 120# | (54) | |
| VP-7800 | 8" | 8-7/8" | (225) | 13-1/8" | (333) | 3/4"-10 | 11ga. x 1" | 145# | (65) | |

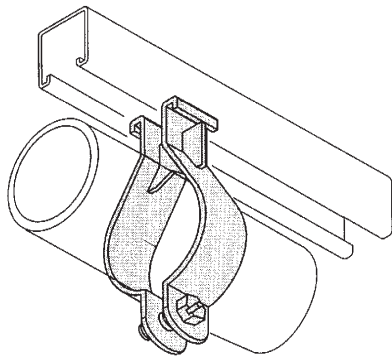
VP-8000 Series Pipe Riser Supports



| Part# | Pipe Size | Actual O.D. | | Dim "T" | | Dim "W" | | Dim "A" | | Bolt Size | Wgt. Per "C" Pcs. |
|---------|-----------|-------------|---------|---------|-------|---------|--------|-----------|-------|-------------|-------------------|
| | | In. | mm | In. | mm | In. | mm | In. | mm | | |
| VP-8075 | 3/4" | 1.050" | (26.7) | 3/16" | (4.8) | 1" | (25.4) | 9-1/4" | (235) | 3/8"x1-1/2" | 106 (49) |
| VP-8100 | 1" | 1.315" | (33.4) | 3/16" | (4.8) | 1" | (25.4) | 9-5/8" | (244) | 3/8"x1-1/2" | 107 (49) |
| VP-8125 | 1-1/4" | 1.660" | (42.2) | 1/4" | (6.4) | 1" | (25.4) | 9-7/8" | (251) | 3/8"x1-1/2" | 112 (51) |
| VP-8150 | 1-1/2" | 1.900" | (48.3) | 1/4" | (6.4) | 1" | (25.4) | 10" | (254) | 3/8"x1-1/2" | 120 (55) |
| VP-8200 | 2" | 2.375" | (60.3) | 1/4" | (6.4) | 1" | (25.4) | 10-1/2" | (267) | 3/8"x1-1/2" | 125 (57) |
| VP-8250 | 2-1/2" | 2.875" | (73) | 1/4" | (6.4) | 1" | (25.4) | 11-1/16" | (281) | 3/8"x1-1/2" | 167 (76) |
| VP-8300 | 3" | 3.500" | (88.9) | 1/4" | (6.4) | 1" | (25.4) | 11-13/16" | (300) | 3/8"x1-1/2" | 181 (83) |
| VP-8350 | 3-1/2" | 4.000" | (101.6) | 1/4" | (6.4) | 1" | (25.4) | 13" | (330) | 1/2"x1-1/2" | 212 (97) |
| VP-8400 | 4" | 4.500" | (114.3) | 1/4" | (6.4) | 1" | (25.4) | 13-1/2" | (343) | 1/2"x1-1/2" | 222 (101) |
| VP-8500 | 5" | 5.563" | (141.3) | 1/4" | (6.4) | 1-1/2" | (38.1) | 14" | (356) | 1/2"x1-3/4" | 344 (157) |
| VP-8600 | 6" | 6.625" | (168.3) | 1/4" | (6.4) | 1-1/2" | (38.1) | 15-3/16" | (386) | 1/2"x1-3/4" | 365 (166) |
| VP-8800 | 8" | 8.625" | (219.1) | 3/8" | (9.5) | 1-1/2" | (38.1) | 19" | (483) | 5/8"x2-1/2" | 724 (329) |

Also Available in Stainless

VP-6000 Series Parallel Pipe Clamps



Electro-Galvanized Finish

| Part # | Pipe Size | Actual O.D. | | Design Load | | Wgt. Per "C" | |
|---------|-----------|-------------|---------|-------------|--------|--------------|------|
| | | In. | mm | Lbs. | kN | lbs. | kg. |
| VP-6037 | 3/8" | .675" | (17.1) | 300# | (1.35) | 28# | (13) |
| VP-6050 | 1/2" | .840" | (21.3) | 300# | (1.35) | 32# | (14) |
| VP-6075 | 3/4" | 1.050" | (26.7) | 300# | (1.35) | 34# | (15) |
| VP-6100 | 1" | 1.315" | (33.4) | 400# | (1.80) | 36# | (16) |
| VP-6125 | 1-1/4" | 1.660" | (42.2) | 400# | (1.80) | 38# | (17) |
| VP-6150 | 1-1/2" | 1.900" | (48.3) | 500# | (2.25) | 40# | (18) |
| VP-6200 | 2" | 2.375" | (60.3) | 500# | (2.25) | 47# | (21) |
| VP-6250 | 2-1/2" | 2.875" | (73.0) | 500# | (2.25) | 58# | (26) |
| VP-6300 | 3" | 3.500" | (88.9) | 500# | (2.25) | 65# | (29) |
| VP-6350 | 3-1/2" | 4.000" | (101.6) | 500# | (2.25) | 69# | (31) |
| VP-6400 | 4" | 4.500" | (114.3) | 500# | (2.25) | 76# | (34) |

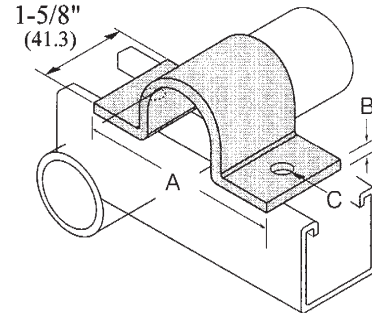


| Part # | Pipe Size | Dim "A" | | Dim "B" | | Dia. "C" | | Wgt. Per "C" | |
|---------|-----------|----------|-------|---------|-------|----------|--------|--------------|-------|
| | | In. | mm | In. | mm | In. | mm | Lbs. | kg. |
| VP-4050 | 1/2" | 2-7/8" | (73) | 1/8" | (3.1) | 9/32" | (7.14) | 24# | (11) |
| VP-4075 | 3/4" | 3-1/16" | (78) | 1/8" | (3.1) | 9/32" | (7.14) | 27# | (12) |
| VP-4100 | 1" | 3-11/32" | (85) | 1/8" | (3.1) | 9/32" | (7.14) | 32# | (14) |
| VP-4125 | 1-1/4" | 3-11/16" | (94) | 1/8" | (3.1) | 9/32" | (7.14) | 36# | (16) |
| VP-4150 | 1-1/2" | 3-29/32" | (99) | 1/8" | (3.1) | 9/32" | (7.14) | 40# | (18) |
| VP-4200 | 2" | 5-21/32" | (144) | 1/4" | (6.4) | 13/32" | (10.3) | 95# | (43) |
| VP-4250 | 2-1/2" | 6-5/32" | (156) | 1/4" | (6.4) | 13/32" | (10.3) | 115# | (52) |
| VP-4300 | 3" | 6-25/32" | (172) | 1/4" | (6.4) | 13/32" | (10.3) | 135# | (61) |
| VP-4350 | 3-1/2" | 7-9/32" | (185) | 1/4" | (6.4) | 13/32" | (10.3) | 150# | (68) |
| VP-4400 | 4" | 7-25/32" | (197) | 1/4" | (6.4) | 13/32" | (10.3) | 175# | (79) |
| VP-4500 | 5" | 8-27/32" | (224) | 1/4" | (6.4) | 13/32" | (10.3) | 200# | (91) |
| VP-4600 | 6" | 9-29/32" | (252) | 1/4" | (6.4) | 13/32" | (10.3) | 250# | (113) |

Electro-Galvanized Finish (2" and over available in Stainless) Hardware is sold separately

VP-4000 Series

Full Standard Straps

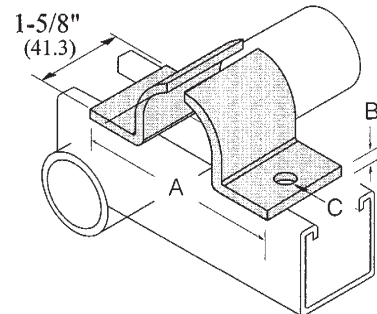


| Part # | Pipe Size | Dim "A" | | Dim "B" | | Dia. "C" | | Wgt. Per "C" | |
|---------|-----------|----------|-------|---------|-------|----------|--------|--------------|------|
| | | In. | mm | In. | mm | In. | mm | Lbs. | kg. |
| VP-5100 | 1" | 3-5/16" | (84) | 1/8" | (3.1) | 9/32" | (7.14) | 25# | (11) |
| VP-5125 | 1-1/4" | 3-11/16" | (94) | 1/8" | (3.1) | 9/32" | (7.14) | 32# | (14) |
| VP-5150 | 1-1/2" | 3-15/16" | (100) | 1/8" | (3.1) | 9/32" | (7.14) | 34# | (15) |
| VP-5200 | 2" | 6" | (152) | 3/16" | (4.7) | 7/16" | (11.1) | 78# | (35) |
| VP-5250 | 2-1/2" | 6-1/2" | (165) | 3/16" | (4.7) | 7/16" | (11.1) | 87# | (39) |
| VP-5300 | 3" | 7-1/8" | (181) | 3/16" | (4.7) | 7/16" | (11.1) | 101# | (46) |
| VP-5350 | 3-1/2" | 7-3/4" | (197) | 1/4" | (6.4) | 9/16" | (14.2) | 113# | (51) |
| VP-5400 | 4" | 8-1/4" | (209) | 1/4" | (6.4) | 9/16" | (14.2) | 122# | (55) |
| VP-5500 | 5" | 9-5/16" | (237) | 1/4" | (6.4) | 9/16" | (14.2) | 146# | (66) |
| VP-5600 | 6" | 10-3/8" | (264) | 1/4" | (6.4) | 9/16" | (14.2) | 168# | (76) |

Electro-Galvanized Finish Hardware is sold separately

VP-5000 Series

Split Standard Straps

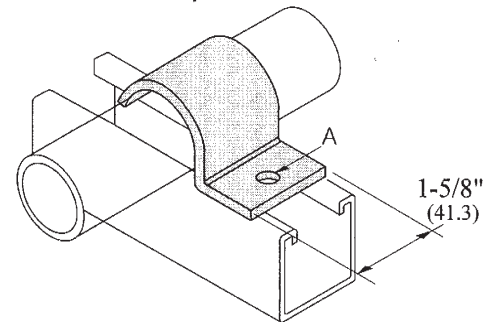


| Part # | O.D. Size | | Stock Gauge | Dia. "A" | | Wgt. Per "C" |
|---------|-----------|-------|-------------|----------|--------|--------------|
| | In. | mm | | In. | mm | |
| VT-2025 | 1/4" | (6.4) | 16ga (1.6) | 9/32" | (7.14) | 4# (1.8) |
| VT-2031 | 5/16" | (7.9) | 16ga (1.6) | 9/32" | (7.14) | 5# (2.2) |
| VT-2037 | 3/8" | (9.5) | 16ga (1.6) | 9/32" | (7.14) | 5# (2.2) |
| VT-2050 | 1/2" | (13) | 16ga (1.6) | 9/32" | (7.14) | 6# (2.7) |
| VT-2062 | 5/8" | (16) | 14ga (1.99) | 9/32" | (7.14) | 8# (3.6) |
| VT-2075 | 3/4" | (19) | 14ga (1.99) | 9/32" | (7.14) | 9# (4.1) |
| VT-2087 | 7/8" | (22) | 14ga (1.99) | 9/32" | (7.14) | 10# (4.5) |
| VT-2100 | 1" | (25) | 14ga (1.99) | 9/32" | (7.14) | 11# (4.9) |

Electro-Galvanized Finish (Also available in stainless) Hardware is sold separately

VT-2000 Series

Single Hole O.D. Straps

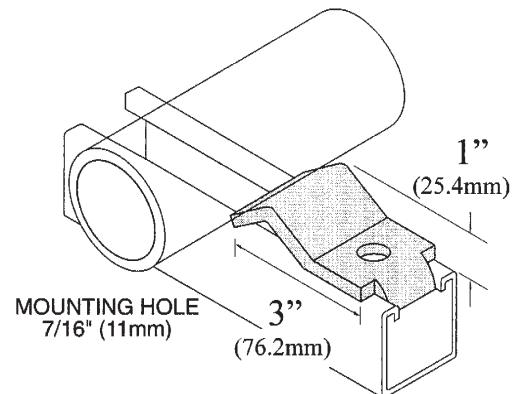


VF-7108 Knee Type Pipe Block

Inhibits lateral motion on 2" (50.8mm) through 8" (203mm) standard pipe.

Wgt. 40# (18 kg) per "C"

Electro-Galvanized Finish Hardware is sold separately

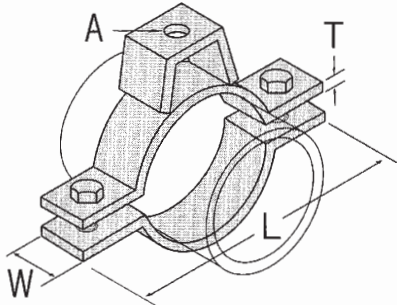




VERSABAR CORPORATION

Pipe Suspension Devices

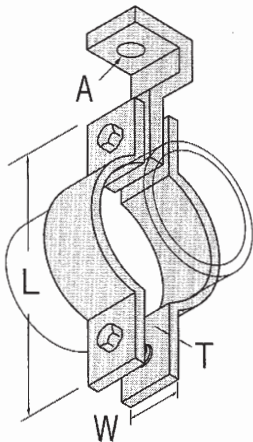
VP-10000 Series Rod Suspension Pipe Clamp



| Part # | Pipe Size | Dim "T" | | Dim "L" | | Dim "A" | | Dim "W" | | Wgt. Per "C" | |
|----------|-----------|---------|-------|---------|-------|---------|------|---------|--------|--------------|-------|
| | | In. | mm | In. | mm | In. | mm | In. | mm | lbs. | kg. |
| VP-10075 | 3/4" | 1/8" | (3.1) | 3-5/16" | (84) | 7/16" | (11) | 1" | (25.4) | 46# | (21) |
| VP-10100 | 1" | 1/8" | (3.1) | 3-3/4" | (95) | 7/16" | (11) | 1" | (25.4) | 51# | (23) |
| VP-10125 | 1-1/4" | 1/8" | (3.1) | 4" | (101) | 7/16" | (11) | 1" | (25.4) | 52# | (24) |
| VP-10150 | 1-1/2" | 1/8" | (3.1) | 4-5/16" | (109) | 7/16" | (11) | 1" | (25.4) | 54# | (25) |
| VP-10200 | 2" | 1/4" | (6.3) | 5-1/2" | (140) | 7/16" | (11) | 1" | (25.4) | 134# | (61) |
| VP-10250 | 2-1/2" | 1/4" | (6.3) | 6-3/8" | (162) | 9/16" | (14) | 1" | (25.4) | 157# | (71) |
| VP-10300 | 3" | 1/4" | (6.3) | 7" | (178) | 9/16" | (14) | 1" | (25.4) | 168# | (76) |
| VP-10350 | 3-1/2" | 1/4" | (6.3) | 7-9/16" | (192) | 9/16" | (14) | 1" | (25.4) | 197# | (89) |
| VP-10400 | 4" | 1/4" | (6.3) | 8-5/8" | (219) | 9/16" | (14) | 1-1/4" | (32) | 270# | (123) |
| VP-10500 | 5" | 1/4" | (6.3) | 9-3/4" | (247) | 11/16" | (17) | 1-1/4" | (32) | 308# | (140) |
| VP-10600 | 6" | 3/8" | (9.5) | 11-5/8" | (295) | 3/4" | (19) | 1-1/2" | (38) | 609# | (276) |
| VP-10800 | 8" | 3/8" | (9.5) | 13-7/8" | (352) | 7/8" | (22) | 1-1/2" | (38) | 713# | (324) |

Electro-Galvanized Finish (2" through 5" can be manufactured in stainless)

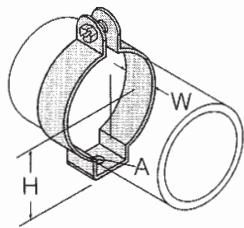
VP-11000 Series Rod Suspension Pipe Clamp



| Part # | Pipe Size | Dim "T" | | Dim "L" | | Dim "A" | | Dim "W" | | Wgt. Per "C" | |
|----------|-----------|---------|-------|---------|-------|---------|------|---------|--------|--------------|-------|
| | | In. | mm | In. | mm | In. | mm | In. | mm | lbs. | kg. |
| VP-11075 | 3/4" | 1/8" | (3.1) | 3-5/16" | (84) | 7/16" | (11) | 1" | (25.4) | 71# | (32) |
| VP-11100 | 1" | 1/8" | (3.1) | 3-3/4" | (95) | 7/16" | (11) | 1" | (25.4) | 76# | (35) |
| VP-11125 | 1-1/4" | 1/8" | (3.1) | 4" | (101) | 7/16" | (11) | 1" | (25.4) | 77# | (35) |
| VP-11150 | 1-1/2" | 1/8" | (3.1) | 4-5/16" | (109) | 7/16" | (11) | 1" | (25.4) | 79# | (36) |
| VP-11200 | 2" | 1/4" | (6.3) | 5-1/2" | (140) | 7/16" | (11) | 1" | (25.4) | 166# | (75) |
| VP-11250 | 2-1/2" | 1/4" | (6.3) | 6-3/8" | (162) | 9/16" | (14) | 1" | (25.4) | 179# | (81) |
| VP-11300 | 3" | 1/4" | (6.3) | 7" | (178) | 9/16" | (14) | 1" | (25.4) | 190# | (86) |
| VP-11350 | 3-1/2" | 1/4" | (6.3) | 7-9/16" | (192) | 9/16" | (14) | 1" | (25.4) | 203# | (92) |
| VP-11400 | 4" | 1/4" | (6.3) | 8-5/8" | (219) | 9/16" | (14) | 1-1/4" | (32) | 320# | (145) |
| VP-11500 | 5" | 1/4" | (6.3) | 9-3/4" | (247) | 11/16" | (17) | 1-1/4" | (32) | 353# | (160) |
| VP-11600 | 6" | 3/8" | (9.5) | 11-5/8" | (295) | 3/4" | (19) | 1-1/2" | (38) | 637# | (289) |
| VP-11800 | 8" | 3/8" | (9.5) | 13-7/8" | (352) | 7/8" | (22) | 1-1/2" | (38) | 837# | (380) |

Electro-Galvanized Finish (2" through 5" can be manufactured in stainless)

VP-13000 Series Conduit Hangers



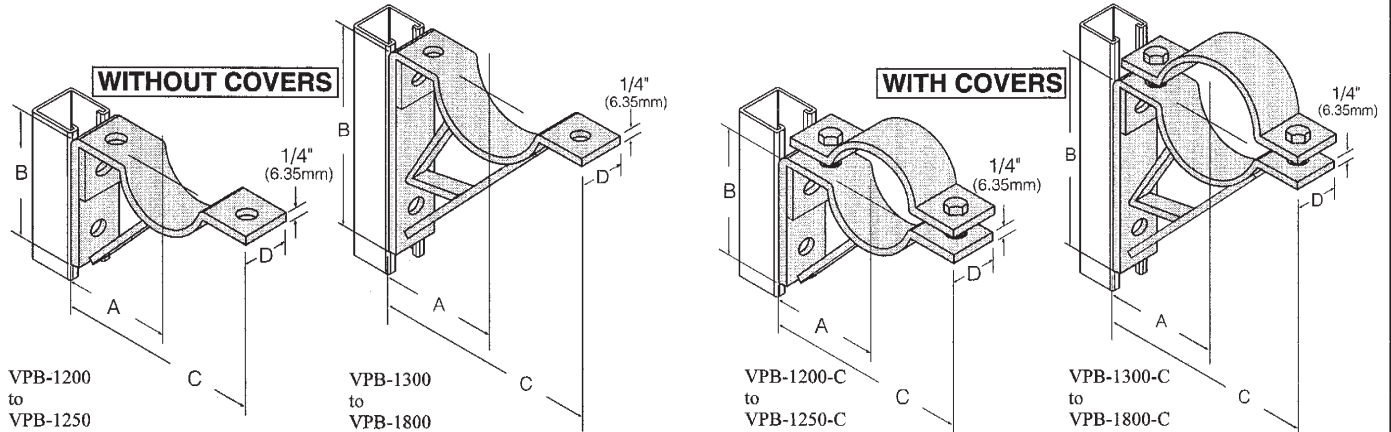
| Part # | Nom. Size | Stock Ga. | | Dim "H" | | Dia. "A" | | Dim "W" | | Wgt. Per "C" | |
|------------|-----------|-----------|-------|----------|------|----------|-------|---------|------|--------------|-------|
| | | In. | mm | In. | mm | In. | mm | In. | mm | lbs. | kg. |
| VP-13050 | 1/2 | 18ga. | (1.3) | 7/8" | (22) | 9/32" | (7.1) | 3/4" | (19) | 7# | (3) |
| VP-13075 | 3/4 | 18ga. | (1.3) | 31/32" | (24) | 9/32" | (7.1) | 7/8" | (22) | 8# | (3.6) |
| VP-13100 | 1 | 18ga. | (1.3) | 1-1/4" | (32) | 9/32" | (7.1) | 7/8" | (22) | 10# | (4.5) |
| VP-13125-R | 1-1/4-R | 18ga. | (1.3) | 1-13/32" | (36) | 9/32" | (7.1) | 7/8" | (22) | 10# | (4.5) |
| VP-13125-E | 1-1/4-E | 18ga. | (1.3) | 1-1/4" | (32) | 9/32" | (7.1) | 7/8" | (22) | 10# | (4.5) |
| VP-13150 | 1-1/2 | 16ga. | (1.6) | 1-5/8" | (41) | 11/32" | (8.7) | 1" | (25) | 17# | (7.7) |
| VP-13200 | 2 | 16ga. | (1.6) | 1-7/8" | (48) | 11/32" | (8.7) | 1-1/4" | (32) | 25# | (11) |
| VP-13250 | 2-1/2 | 16ga. | (1.6) | 2-1/16" | (52) | 11/32" | (8.7) | 1-1/4" | (32) | 26# | (12) |
| VP-13300 | 3 | 16ga. | (1.6) | 2-1/2" | (64) | 11/32" | (8.7) | 1-1/4" | (32) | 33# | (15) |
| VP-13350 | 3-1/2 | 16ga. | (1.6) | 2-3/4" | (70) | 11/32" | (8.7) | 1-1/4" | (32) | 36# | (16) |
| VP-13400 | 4 | 16ga. | (1.6) | 3-1/2" | (89) | 11/32" | (8.7) | 1-1/4" | (32) | 40# | (18) |

Electro-Galvanized Finish



VPB Series Offset Pipe Bracket Saddles

Brackets require: (2) each VSN-1050 & (2) each 1/2"x15/16" Hex Hd. Cap Scr. for mounting to channel.



| Part # | Pipe Size | Dim "A" | | Dim "B" | | Dim "C" | | Dim "D" | | Design Load | | Design Load | | Wgt. "C" | | |
|---------------------|-----------|---------|-------|---------|-------|---------|-------|---------|--------|-------------|-------------------------------------|-------------|-----------------------------|----------|-------|--|
| | | In. | mm | In. | mm | In. | mm | In. | mm | Lbs. | kN | Lbs. | kN | Lbs. | kg | |
| Bracket Only | | | | | | | | | | | Mounted on: VA-1 or VA-3 | | Mounted on: VA-2 | | | |
| VPB-1200 | 2" | 4-1/2" | (114) | 4-1/2" | (114) | 7" | (178) | 1-5/8" | (41.3) | 300# | (1.35) | 215# | (.97) | 181# | (82) | |
| VPB-1250 | 2-1/2" | 5" | (127) | 5" | (127) | 7-3/4" | (197) | 1-5/8" | (41.3) | 300# | (1.35) | 215# | (.97) | 208# | (94) | |
| VPB-1300 | 3" | 5-1/2" | (140) | 5-3/4" | (146) | 8-7/8" | (225) | 1-5/8" | (41.3) | 500# | (2.25) | 365# | (1.6) | 277# | (126) | |
| VPB-1350 | 3-1/2" | 6" | (152) | 6-1/4" | (159) | 9-5/8" | (245) | 1-5/8" | (41.3) | 500# | (2.25) | 365# | (1.6) | 305# | (138) | |
| VPB-1400 | 4" | 6-1/2" | (165) | 6-3/4" | (171) | 10-5/8" | (270) | 1-5/8" | (41.3) | 500# | (2.25) | 365# | (1.6) | 334# | (152) | |
| VPB-1500 | 5" | 7-1/2" | (191) | 8" | (203) | 12-3/8" | (315) | 1-5/8" | (41.3) | 700# | (3.15) | 500# | (2.25) | 424# | (192) | |
| VPB-1600 | 6" | 8" | (203) | 8-3/4" | (222) | 13-1/2" | (343) | 1-5/8" | (41.3) | 700# | (3.15) | 500# | (2.25) | 493# | (223) | |
| VPB-1800 | 8" | 9" | (229) | 10-1/2" | (267) | 15-3/4" | (400) | 2" | (51) | 700# | (3.15) | 500# | (2.25) | 600# | (272) | |
| With Cover | | | | | | | | | | | | | | | | |
| VPB-1200-C | 2" | 4-1/2" | (114) | 4-1/2" | (114) | 7" | (178) | 1-5/8" | (41.3) | 300# | (1.35) | 215# | (.97) | 251# | (114) | |
| VPB-1250-C | 2-1/2" | 5" | (127) | 5" | (127) | 7-3/4" | (197) | 1-5/8" | (41.3) | 300# | (1.35) | 215# | (.97) | 298# | (135) | |
| VPB-1300-C | 3" | 5-1/2" | (140) | 5-3/4" | (146) | 8-7/8" | (225) | 1-5/8" | (41.3) | 500# | (2.25) | 365# | (1.6) | 377# | (171) | |
| VPB-1350-C | 3-1/2" | 6" | (152) | 6-1/4" | (159) | 9-5/8" | (245) | 1-5/8" | (41.3) | 500# | (2.25) | 365# | (1.6) | 425# | (193) | |
| VPB-1400-C | 4" | 6-1/2" | (165) | 6-3/4" | (171) | 10-5/8" | (270) | 1-5/8" | (41.3) | 500# | (2.25) | 365# | (1.6) | 484# | (219) | |
| VPB-1500-C | 5" | 7-1/2" | (191) | 8" | (203) | 12-3/8" | (315) | 1-5/8" | (41.3) | 700# | (3.15) | 500# | (2.25) | 600# | (272) | |
| VPB-1600-C | 6" | 8" | (203) | 8-3/4" | (222) | 13-1/2" | (343) | 1-5/8" | (41.3) | 700# | (3.15) | 500# | (2.25) | 693# | (314) | |
| VPB-1800-C | 8" | 9" | (229) | 10-1/2" | (267) | 15-3/4" | (400) | 2" | (51) | 700# | (3.15) | 500# | (2.25) | 810# | (367) | |

VPB-7000 Series Offset Pipe Brackets

VPB-7150
Wgt. Per C 90# / (40 kg.)

For 1/2" to 1-1/2" Nominal Size Pipe

Load Rating: 85 lb. / (.38 kN)
When mounted on 12 ga. channel
Safety Factor = 5

Note* For mounting brackets order:
VSN-1050 and 1/2" x 15/16" H.H.C.S.

VPB-7300
Wgt. Per C 140# / (64 kg.)

For 2" to 3" Nominal Size Pipe

Load Rating: 185 lb. / (.83 kN)
When mounted on 12 ga. channel
Safety Factor = 5

Note* For mounting brackets order:
VSN-1050 and 1/2" x 15/16" H.H.C.S.



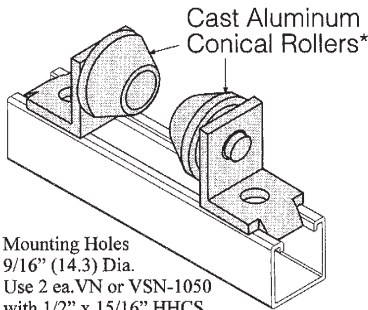
VERSABAR CORPORATION

Pipe Rollers

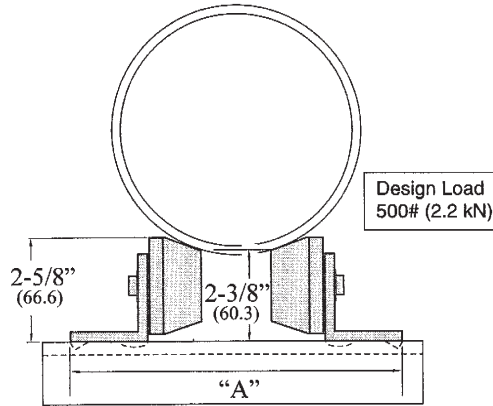
VPR Pipe Rollers - No Axle

Complete set
Fully assembled

Wgt. Per "C" pair 154# / (70 kg.)



Mounting Holes
9/16" (14.3) Dia.
Use 2 ea. VN or VSN-1050
with 1/2" x 15/16" HHCS
(order separately)



| Pipe Size | Dim "A" | |
|-----------|---------|-------|
| | In. | mm |
| 1/2" | 6-1/2" | (165) |
| 3/4" | 6-1/2" | (165) |
| 1" | 6-1/2" | (165) |
| 1-1/4" | 6-1/2" | (165) |
| 1-1/2" | 6-1/2" | (165) |
| 2" | 6-1/2" | (165) |
| 2-1/2" | 6-1/2" | (165) |
| 3" | 6-1/2" | (165) |
| 3-1/2" | 7" | (178) |
| 4" | 7" | (178) |
| 5" | 7-1/2" | (191) |
| 6" | 7-3/4" | (197) |
| 8" | 9" | (229) |

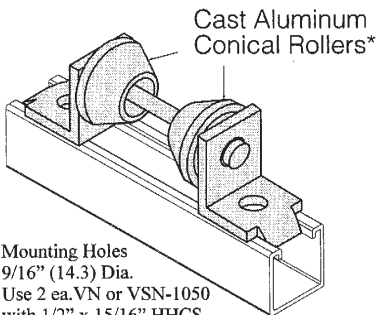
(Without insulation)

*Steel portion has "Electro-Galvanized" finish

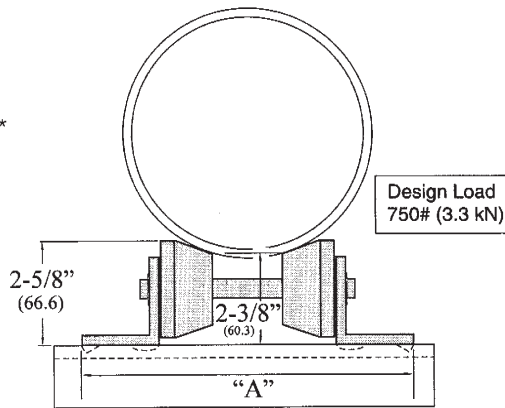
VPR-1 thru 5, Pipe Rollers - With Axle

Wgt. Per "C" units 175# / (79 kg.)

Complete set
Requires assembly



Mounting Holes
9/16" (14.3) Dia.
Use 2 ea. VN or VSN-1050
with 1/2" x 15/16" HHCS
(order separately)



| Part # | Pipe Size | Dim "A" | |
|--------|-----------|---------|-------|
| | | In. | mm |
| VPR-1 | 1/2" | 6-1/2" | (165) |
| VPR-1 | 3/4" | 6-1/2" | (165) |
| VPR-1 | 1" | 6-1/2" | (165) |
| VPR-1 | 1-1/4" | 6-1/2" | (165) |
| VPR-1 | 1-1/2" | 6-1/2" | (165) |
| VPR-1 | 2" | 6-1/2" | (165) |
| VPR-1 | 2-1/2" | 6-1/2" | (165) |
| VPR-1 | 3" | 6-1/2" | (165) |
| VPR-2 | 3-1/2" | 7" | (178) |
| VPR-2 | 4" | 7" | (178) |
| VPR-3 | 5" | 7-1/2" | (191) |
| VPR-4 | 6" | 7-3/4" | (197) |
| VPR-5 | 8" | 9" | (229) |

(Without insulation)

*Steel portion has "Electro-Galvanized" finish

VPR-2000

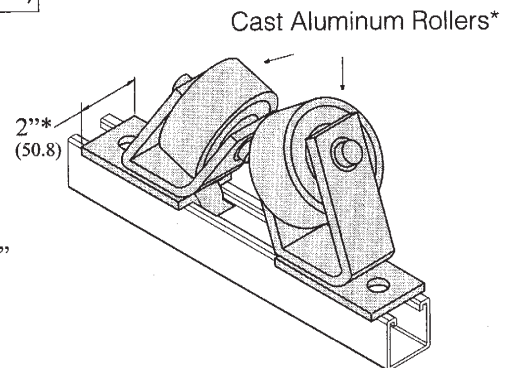
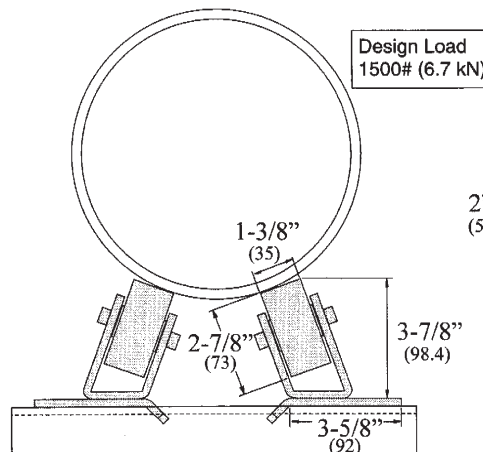
Wgt. Per "C" pair 430# / (195 kg.)

Double Pipe Rollers

Complete set
Fully assembled

For 6" - 18" Pipe

Mounting Holes
9/16" (14.3) Dia.
Use 2 ea. VN or VSN-1050
with 1/2" x 15/16" HHCS
(order separately)



*Steel portion has "Electro-Galvanized" finish



VPR-3000
Triple Pipe Rollers

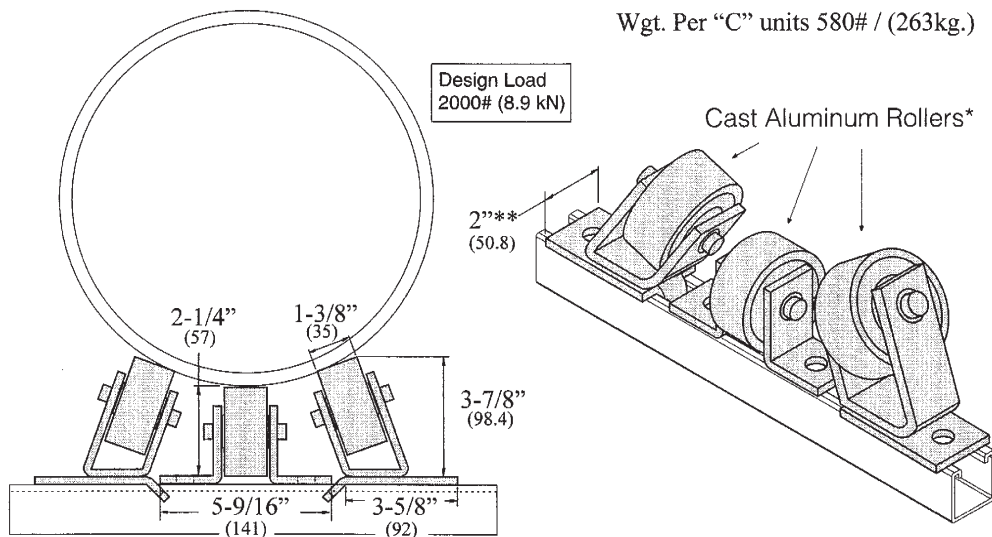
Complete set
Fully assembled

For 16" - 24" Pipe

Mounting Holes
9/16" (14.3) Dia.
Use 4 ea. VN or VSN-1050
with 1/2" x 15/16" HHCS
(order separately)

*Steel portion has
"Electro-Galvanized" finish

** Center Fitting is 1-5/8"
(41.3) wide stock



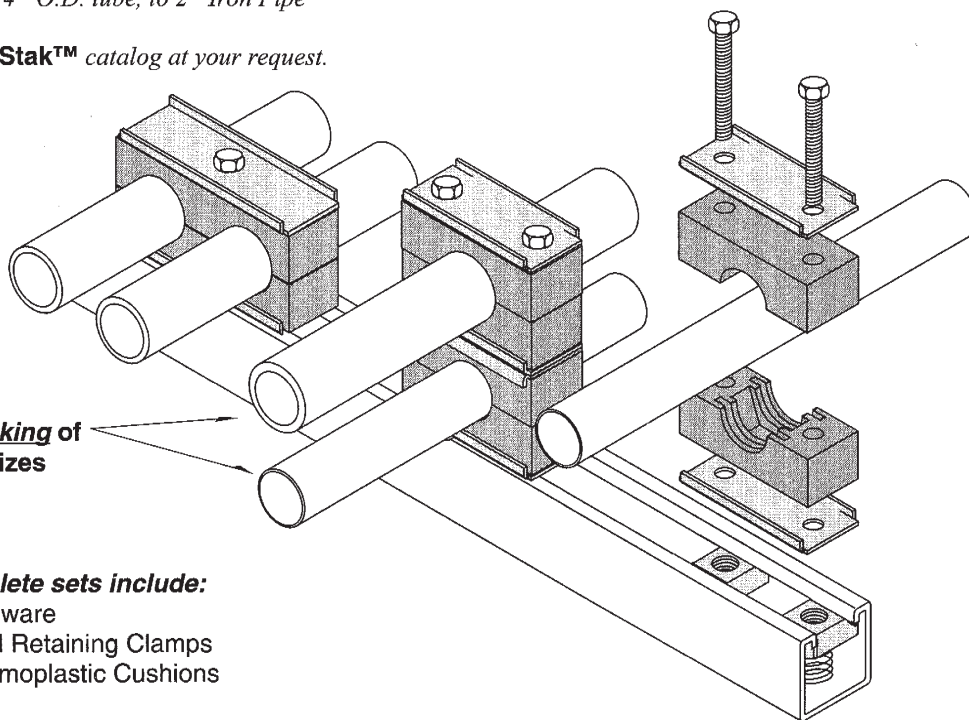
ModuStak™ MODULAR CLAMPING SYSTEMS

ModuStak clamping systems provide an easy solution to securing compound tube & pipe runs. Similar in physical characteristics to "HydraZorb" clamps, this product provides the following advantages:

- Can be mounted to various surfaces, including **Versabar** channels
- Reduces shock, noise and vibration in multiple fluid lines
- Eliminates metal-to-metal contact between fluid conductors, clamps, and channel
- Resists most fuels, oils, gases, greases, mineral acids, etc.
- Remains stable and usable from -20° F to 212° F
- Lets you concurrently mount groups of various pipe and tube types
- ModuStak clamping systems are available with stainless steel bases and hardware
- Cushions available to fit 1/4" O.D. tube, to 2" Iron Pipe

Versabar will provide a **ModuStak™** catalog at your request.

Permits **multi-level stacking** of various pipe and tube sizes



Complete sets include:
Hardware
Steel Retaining Clamps
Thermoplastic Cushions



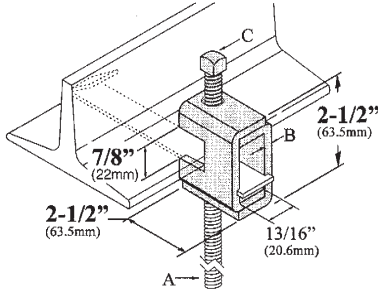
VERSABAR CORPORATION

Beam Clamps

VX-7000 Series 1 Rod Suspension Beam Clamps

Loading Based on S.F. 5

1-1/2" (38) Long set screw
3/8" (9.5) Min. beam flange thickness

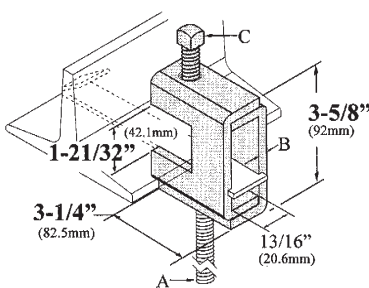


| Part # | Rod Thread Size "A" | Thickness Dim "B" | | Set Screw Thread Size "C" | Design Load | | Wgt. Per "C" | |
|-----------|---------------------|-------------------|--------|---------------------------|-------------|-------|--------------|--------|
| | | In. | mm | | Lbs. | kN | Lbs. | kg. |
| VX-7002-A | 1/4"-20 | 1/8" | (3.17) | 3/8"-16 | 600# | (2.7) | 65# | (29.6) |
| VX-7003-A | 5/16"-18 | 1/8" | (3.17) | 3/8"-16 | 600# | (2.7) | 65# | (29.6) |
| VX-7004-A | 3/8"-16 | 1/8" | (3.17) | 3/8"-16 | 600# | (2.7) | 65# | (29.6) |
| VX-7005-A | 3/8"-16 | 3/16" | (4.7) | 1/2"-13 | 1000# | (4.5) | 100# | (45.4) |
| VX-7006-A | 1/2"-13 | 3/16" | (4.7) | 1/2"-13 | 1000# | (4.5) | 100# | (45.4) |
| VX-7007-A | 1/2"-13 | 1/4" | (6.3) | 1/2"-13 | 1500# | (6.8) | 135# | (61.3) |
| VX-7008-A | 5/8"-11 | 1/4" | (6.3) | 1/2"-13 | 1500# | (6.8) | 135# | (61.3) |
| VX-7009-A | 5/8"-11 | 5/16" | (7.9) | 5/8"-11 | 2200# | (9.9) | 165# | (75) |
| VX-7010-A | 3/4"-10 | 5/16" | (7.9) | 5/8"-11 | 2200# | (9.9) | 165# | (75) |

VX-7000 Series 2 Rod Suspension Beam Clamps

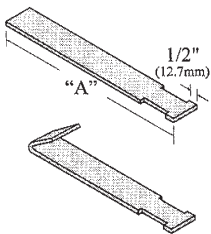
Loading Based on S.F. 5

2" (51) Long set screw
3/4" (19) Min. beam flange thickness



| Part # | Rod Thread Size "A" | Thickness Dim "B" | | Set Screw Thread Size "C" | Design Load | | Wgt. Per "C" | |
|-----------|---------------------|-------------------|--------|---------------------------|-------------|--------|--------------|--------|
| | | In. | mm | | Lbs. | kN | Lbs. | kg. |
| VX-7011-A | 1/4"-20 | 1/8" | (3.17) | 3/8"-16 | 750# | (3.4) | 98# | (44.5) |
| VX-7012-A | 5/16"-18 | 1/8" | (3.17) | 3/8"-16 | 750# | (3.4) | 98# | (44.5) |
| VX-7013-A | 3/8"-16 | 1/8" | (3.17) | 3/8"-16 | 750# | (3.4) | 98# | (44.5) |
| VX-7014-A | 3/8"-16 | 3/16" | (4.7) | 1/2"-13 | 1200# | (5.4) | 154# | (70) |
| VX-7015-A | 1/2"-13 | 3/16" | (4.7) | 1/2"-13 | 1200# | (5.4) | 154# | (70) |
| VX-7016-A | 1/2"-13 | 1/4" | (6.3) | 1/2"-13 | 1900# | (8.6) | 194# | (88.1) |
| VX-7017-A | 5/8"-11 | 1/4" | (6.3) | 1/2"-13 | 1900# | (8.6) | 194# | (88.1) |
| VX-7018-A | 5/8"-11 | 5/16" | (7.9) | 5/8"-11 | 2700# | (12.2) | 225# | (102) |
| VX-7019-A | 3/4"-10 | 5/16" | (7.9) | 5/8"-11 | 2700# | (12.2) | 225# | (102) |

Retaining Straps For: VX-7000 Series 1 & 2 (shown above)

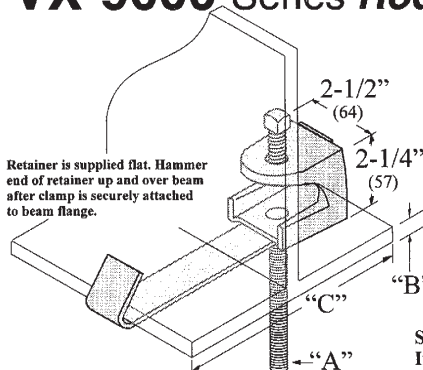


| Part # | Maximum Beam Flange Width | | Dim. "A" | Wgt. Per "C" | | |
|---------|---------------------------|---------|----------|--------------|-----|--------|
| | In. | mm | | In. | mm | Lbs. |
| VX-1006 | 7" | (177.8) | 10" | (254) | 26# | (11.8) |
| VX-1007 | 9" | (228.6) | 12" | (304.8) | 34# | (15.5) |
| VX-1008 | 11" | (279.4) | 14" | (355.6) | 41# | (18.7) |
| VX-1009 | 13" | (330.2) | 16" | (406.4) | 45# | (20.5) |
| VX-1010 | 15" | (381) | 18" | (457.2) | 50# | (22.7) |

Straps can be used as a secondary method of securing clamp to beam. After inserting strap and mounting clamp to beam, excess length is then bent back up and over beam.

VX-9000 Series Rod Suspension Beam Clamps with Retainers

Design Load: 400 lbs. (1.8 kN)
Beam clamp is malleable iron
Retainer strap is carbon steel



Retainer is supplied flat. Hammer end of retainer up and over beam after clamp is securely attached to beam flange.

| Part # | Rod Thread Size "A" | Beam Thickness Range Size "B" | | Beam Flange Width Size "C" | Wgt. Per "C" | | | | |
|---------|---------------------|-------------------------------|-----------------|----------------------------|--------------|--------------|-------|------|--------|
| | | In. | mm | | Lbs. | kg. | | | |
| VX-9000 | 1/2"-13 | 3/8" | (9.5) to 13/16" | (20.6) | 4" | (102) to 6" | (152) | 160# | (72.6) |
| VX-9001 | 1/2"-13 | 3/8" | (9.5) to 13/16" | (20.6) | 7" | (178) to 9" | (229) | 170# | (77.2) |
| VX-9002 | 1/2"-13 | 3/8" | (9.5) to 13/16" | (20.6) | 10" | (254) to 12" | (305) | 182# | (82.6) |
| VX-9003 | 1/2"-13 | 3/8" | (9.5) to 13/16" | (20.6) | 13" | (330) to 15" | (381) | 192# | (87.2) |

Stock Thickness on retainer strap is 14 ga. .075" (1.91) Set Screw Diameter is 1/2"-13 x 1-1/4 Includes: Clamp & Set Screw, J-Hook, & 1pc. 1/2"-13 Hex Head Cap Screw (1/2" Diameter threaded rod sold separately).



VX-1000-A, B, & C

Beam Clamp Series

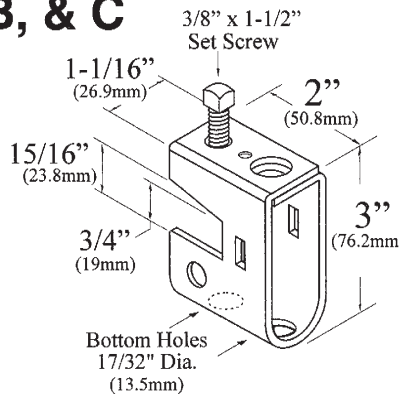
Versatile & Economical

Supports 1/4", 3/8" and 1/2" rod offset, or directly under beam.

Allows approx. 20° degree swivel on 1/4" & 3/8" rod.

Allows unlimited vertical adjustment of offset rod.

Electro-Galvanized finish.



VX-1090-A

Swing Adaptor Clip

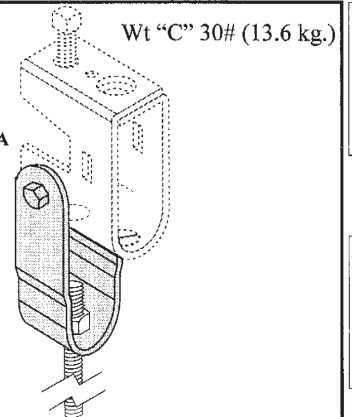
Adaptor is supplied with mounting screw and hardware for connection to VX-1000-A (VX-1000-A Sold separately)

Suspends: 1/4", 3/8", & 1/2" Rod

Design Load 500# (2.25 kN) SF4

For VX-1000 Clamp & Swivel Adaptor Assembly, Order As:

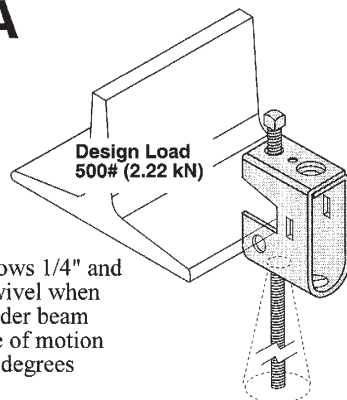
VX-1000-HA



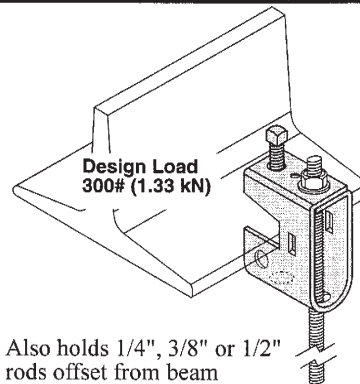
VX-1000-A

3 Applications

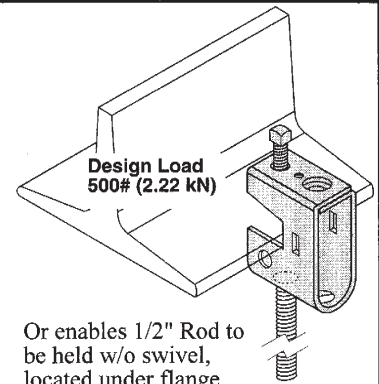
Wt "C" 44# (20 kg.)



Assembly allows 1/4" and 3/8" rod to swivel when suspended under beam flange. Range of motion is approx. 20 degrees



Also holds 1/4", 3/8" or 1/2" rods offset from beam



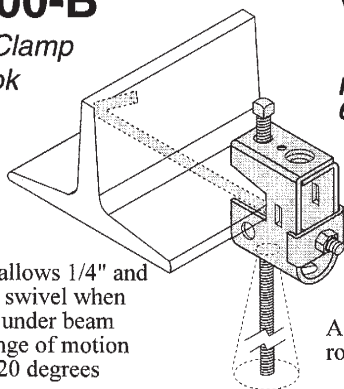
Or enables 1/2" Rod to be held w/o swivel, located under flange

VX-1000-B

Universal Clamp With J-Hook

Includes: Clamp, J-Hook, 3/8" H.N., & Clip

Assembly allows 1/4" and 3/8" rod to swivel when suspended under beam flange. Range of motion is approx. 20 degrees



Wt "C" 80# (36 kg.)

For beams up to: 6" (152mm) wide

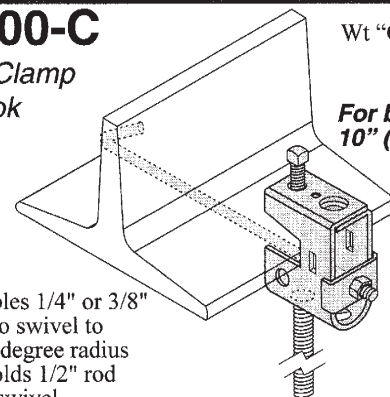
Also holds 1/2" rod w/o swivel

VX-1000-C

Universal Clamp With J-Hook

Includes: Clamp, J-Hook, 3/8" H.N., & Clip

Enables 1/4" or 3/8" rod to swivel to a 20 degree radius or holds 1/2" rod w/o swivel

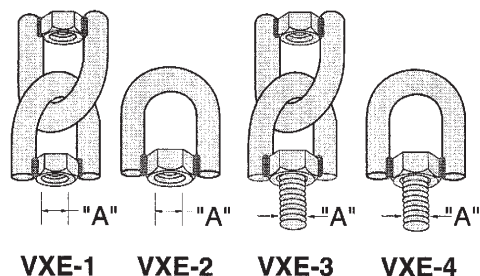


Wt "C" 83# (38 kg.)

For beams up to: 10" (254mm) wide

VXE Series

Swivel Eyelets



| Part Number | Thread Dia. | Weight Per "C" |
|-------------|-------------|-------------------|
| VXE-1-3/8 | 3/8"-16 | 22 lbs. (10.0 kg) |
| VXE-2-3/8 | 3/8"-16 | 11 lbs. (5.0 kg) |
| VXE-3-3/8 | 3/8"-16 | 25 lbs. (11.4 kg) |
| VXE-4-3/8 | 3/8"-16 | 14 lbs. (6.4 kg) |
| VXE-1-1/2 | 1/2"-13 | 28 lbs. (12.7 kg) |
| VXE-2-1/2 | 1/2"-13 | 14 lbs. (6.4 kg) |
| VXE-3-1/2 | 1/2"-13 | 33 lbs. (15.0 kg) |
| VXE-4-1/2 | 1/2"-13 | 19 lbs. (8.6 kg) |

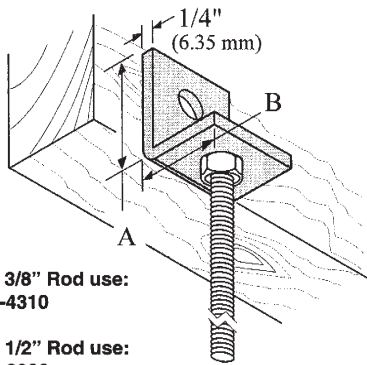
| Part Number | Thread Dia. | Weight Per "C" |
|-------------|-------------|-------------------|
| VXE-1-5/8 | 5/8"-11 | 36 lbs. (16.3 kg) |
| VXE-2-5/8 | 5/8"-11 | 18 lbs. (8.2 kg) |
| VXE-3-5/8 | 5/8"-11 | 44 lbs. (20.0 kg) |
| VXE-4-5/8 | 5/8"-11 | 24 lbs. (10.8 kg) |
| VXE-1-3/4 | 3/4"-10 | 56 lbs. (25.4 kg) |
| VXE-2-3/4 | 3/4"-10 | 28 lbs. (12.7 kg) |
| VXE-3-3/4 | 3/4"-10 | 60 lbs. (27.2 kg) |
| VXE-4-3/4 | 3/4"-10 | 32 lbs. (14.5 kg) |



VERSABAR CORPORATION

Rod Hangers and Beam Clamps

VX-4310 & VX-2308

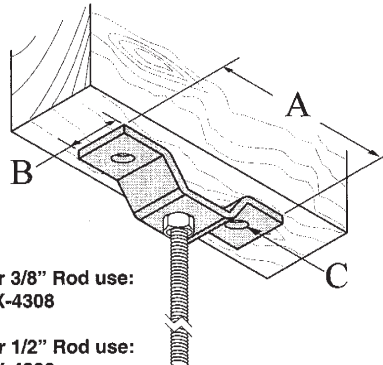


For 3/8" Rod use:
VX-4310

For 1/2" Rod use:
VX-2308

| Part # | Dim. "A" In. mm | Dim. "B" In. mm | Hole Dia. In. mm | Wgt. "C" Lbs. kg |
|---------|--------------------|--------------------|---------------------|---------------------|
| VX-4310 | 2" (51) | 1-1/2" (38) | 7/16" (11) | 20# (9) |
| VX-2308 | 2-1/4" (57) | 1-5/8" (41) | 9/16" (14) | 40# (18) |

VX-4308 & VX-4309

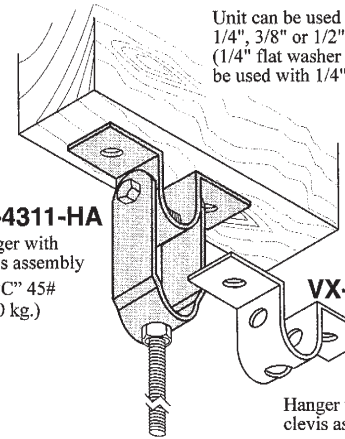


For 3/8" Rod use:
VX-4308

For 1/2" Rod use:
VX-4309

| Part # | Dim. "A" In. mm | Dim. "B" In. mm | Dia. "C" In. mm | Wgt. "C" Lbs. kg |
|---------|--------------------|--------------------|--------------------|---------------------|
| VX-4308 | 3-1/2" (89) | 1" (25) | 5/16" (7.9) | 18# (8) |
| VX-4309 | 5-1/2" (140) | 1-5/8" (41) | 9/16" (14) | 40# (18) |

VX-4311-HA



Unit can be used with
1/4", 3/8" or 1/2" rods.
(1/4" flat washer must
be used with 1/4" rod.)

VX-4311-HA
Hanger with
clevis assembly
Wt "C" 45#
(20 kg.)

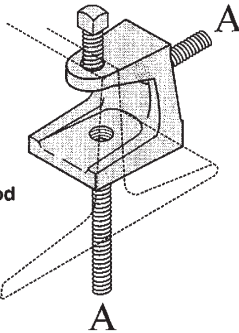
VX-4311
Hanger without
clevis assembly
Wt "C" 16#
(7.6 kg.)

VX-9004 thru VX-9006

Malleable Iron Casting
For 1/4", 3/8" & 1/2" Rod

Threaded Base & Rear

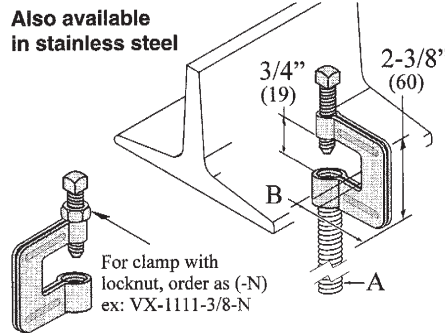
Fits flanges up to
3/4" (19mm) thick



| Part # | For Rod Dia. "A" | Design Load Lbs. kN | Wgt. per "C" Lbs. kg |
|---------|---------------------|------------------------|-------------------------|
| VX-9004 | 1/4" | 150# (.675) | 23# (10.4) |
| VX-9005 | 3/8" | 350# (1.58) | 65# (29.5) |
| VX-9006 | 1/2" | 400# (1.80) | 132# (59.9) |

VX-1111 & VX-1111-N

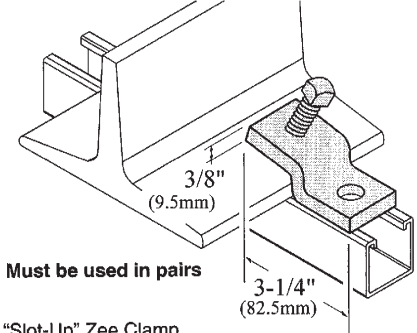
Also available
in stainless steel



For clamp with
locknut, order as (-N)
ex: VX-1111-3/8-N

| Part # | Rod Dia. "A" In. mm | Dim. "B" In. mm | Wgt. "C" Lbs. kg |
|-------------|------------------------|--------------------|---------------------|
| VX-1111-3/8 | 3/8"-16 | 2-3/8" (60) | 41 (19) |
| VX-1111-1/2 | 1/2"-13 | 2-3/8" (60) | 41 (19) |
| VX-1111-5/8 | 5/8"-11 | 2-1/4" (57) | 59 (27) |
| VX-1111-3/4 | 3/4"-10 | 2-1/4" (57) | 67 (30) |

VX-7106-A

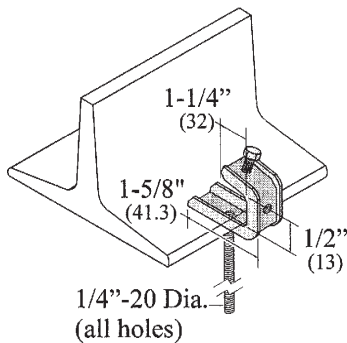


Must be used in pairs

"Slot-Up" Zee Clamp
1/2 x 1-1/2" Set Screw Included

| Design Load Used in pairs | Mounted On | Wgt. "C" Lbs. kg |
|------------------------------|--------------|---------------------|
| 600# (2.7 kN) | VA-1 or VA-3 | 75# (34) |
| 500# (2.2 kN) | VA-2 | |

VX-7049-A



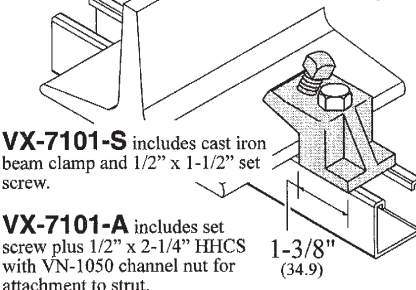
"Mini" Steel Clamp
Set Screw Included

| Design Load | Wgt. "C" |
|---------------|----------|
| Used in pairs | Lbs. kg |
| 75# (.34 kN) | 13# (6) |

VX-7101-S, & -A

Cast Iron clamp
with set screw

Must be used in pairs

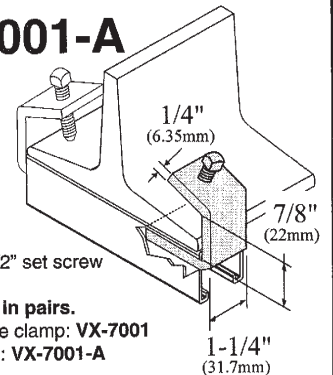


VX-7101-S includes cast iron
beam clamp and 1/2" x 1-1/2" set
screw.

VX-7101-A includes set
screw plus 1/2" x 2-1/4" HHCS
with VN-1050 channel nut for
attachment to strut.

| Design Load | Mounted On | Wgt. "C" |
|---------------|--------------|-----------|
| Used in pairs | | Lbs. kg |
| 600# (2.7 kN) | VA-1 or VA-3 | 124# (56) |
| 500# (2.2 kN) | VA-2 | |

VX-7001 VX-7001-A



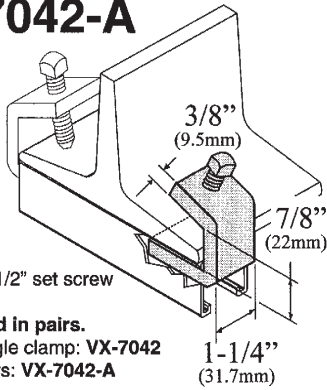
Steel Clamp
with 3/8" x 1-1/2" set screw

Must be used in pairs.
Part # for single clamp: VX-7001
Part # for pairs: VX-7001-A

| Design Load | Wgt. "C" |
|---------------|------------|
| used in pairs | Lbs. kg |
| 500# (2.2 kN) | 40# (18.2) |



VX-7042 VX-7042-A

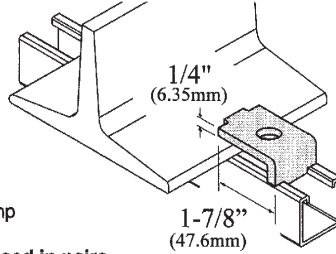


Steel Clamp with 1/2" x 1-1/2" set screw

Must be used in pairs.
Part # for single clamp: VX-7042
Part # for pairs: VX-7042-A

| Design Load used in pairs | Wgt. "C" Lbs. kg |
|---------------------------|------------------|
| 1000# (4.5 kN) | 60# (27.2) |

VF-2102 VF-2102-AL



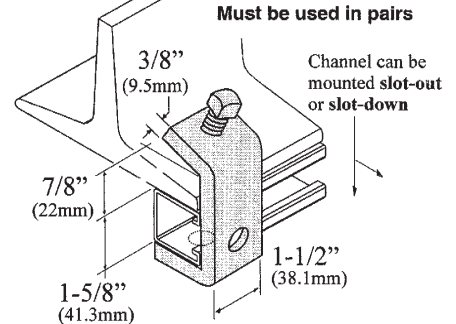
Steel Clamp

Must be used in pairs.
Part # without mounting hardware: VF-2102
Part # with mounting hardware: VF-2102-AL
*(1/2" x 1-1/2" HHCS and VN-1050 included)

| Design Load Used in pairs | Mounted On | Wgt. "C" Lbs. kg |
|---------------------------|--------------|------------------|
| 600# (2.7 kN) | VA-1 or VA-3 | 25# (11) |
| 500# (2.2 kN) | VA-2 | |

VX-7002-AL

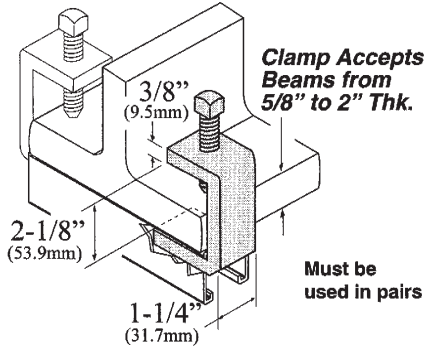
Steel clamp with 1/2" x 1-1/2" Set Screw



Maximum Beam Flange Thickness is 7/8" (22)

| Design Load used in pairs | Wgt. "C" Lbs. kg |
|---------------------------|------------------|
| 500# (2.2 kN) | 110# (50) |

VX-7043 & VX-7043-A



Part # for single clamp: VX-7043
Part # for pair of clamps: VX-7043-A

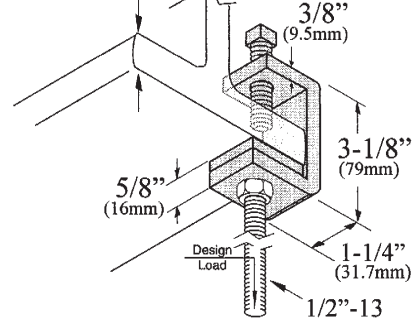
Steel Clamp with 1/2" x 2" set screw

| Design Load used in pairs | Wgt. "C" Lbs. kg |
|---------------------------|------------------|
| 1000# (4.5 kN) | 80# (36) |

VX-7044-1/2

Wt "C" 91 Lbs. (.41kg.)
Heavy Beam 1/2" Rod Suspension Clamp

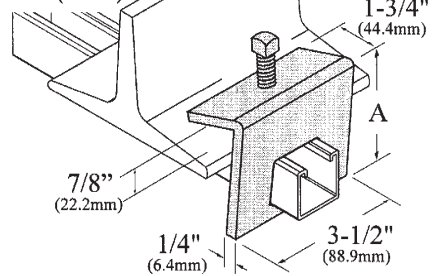
Clamp Accepts Beams from 5/8" to 2" Thk.



Steel clamp with 1/2"-13 threaded base
Design Load 800 lbs. (3.6kN)
1/2" x 2" set screw

VX-7037 Series

Load Rating Used in pairs: 400# (1.8 kN)

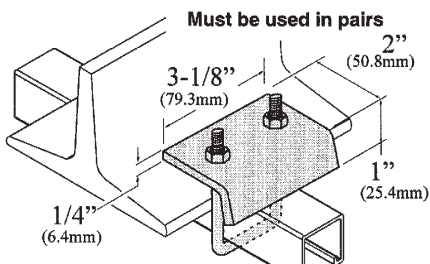


Steel Clamp with 1/2" x 1-1/2" Set Screw

| Part # | For Channel | Dim "A" In mm | Wgt. "C" Lbs. kg |
|-------------|-------------|-----------------|------------------|
| VX-7037-A | VA-1 or 2 | 3-1/2" (88.9) | 110# (50) |
| VX-7037-A-4 | VA-4 or 5 | 2-11/16" (68.3) | 100# (45) |
| VX-7037-A-3 | VA-3 | 4-3/8" (111) | 120# (54) |

VX-7038-A (short) VX-7038-B (long)

3/8"-16 Threaded U-Bolt and Hex Nuts Included

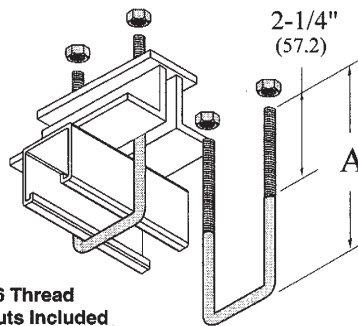


Design Load 1000# When used in pairs

| Part # | Fits Channel Depths | Wgt. "C" Lbs. kg |
|-----------|----------------------|------------------|
| VX-7038-A | Up to: 1-5/8" (41.3) | 85# (39) |
| VX-7038-B | Over: 1-5/8" (41.3) | 85# (39) |

VX-7050-A (short) VX-7050-B (long)

3/8"-16 Thread Hex Nuts Included



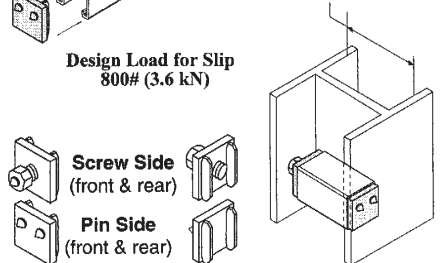
| Part # | Dim "A" In mm | Wgt. "C" Lbs. kg |
|-----------|---------------|------------------|
| VX-7050-A | 3-1/2" (89) | 24# (10.8) |
| VX-7050-B | 5" (127) | 34# (15.4) |

VX-7715-A

Wt "C" 120 Lbs. (.54 kg.)

Sold as a "set" See "New Parts" in rear of catalog for this type of clamp to fit "Shallow Strut".

Cut VA-1 Square Channel 1-3/4" (44.4) shorter than I.D. between beam flange.



Column mounts are sold as a matched pair. Jacking screw provides pressure to hold channel between beam flanges. Hardened tips on pin side bite into opposite side. Channel can be mounted with slot facing up, down or out.

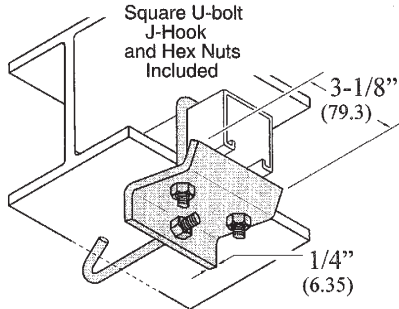


VERSABAR CORPORATION

Beam & Purlin Clamps

VX-7041-A Series

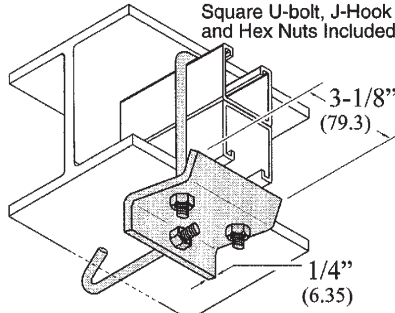
Fits channels up to 1-5/8 (41.3) Deep



| Part # | Beam Flange Width Range In. mm | Wgt. "C" Lbs. kg |
|--------------|-----------------------------------|---------------------|
| VX-7041-A-4 | 4" to 5-7/8" (102) to (149) | 122# (55) |
| VX-7041-A-6 | 6" to 8-7/8" (152) to (225) | 128# (58) |
| VX-7041-A-9 | 9" to 11-7/8" (229) to (302) | 136# (62) |
| VX-7041-A-12 | 12" to 14-7/8" (305) to (378) | 142# (64) |

VX-7041-B Series

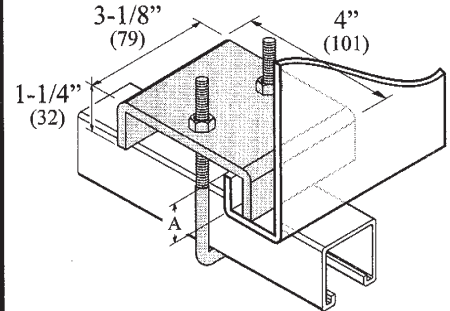
Fits channels over 1-5/8 (41.3) Deep



| Part # | Beam Flange Width Range In. mm | Wgt. "C" Lbs. kg |
|--------------|-----------------------------------|---------------------|
| VX-7041-B-4 | 4" to 5-7/8" (102) to (149) | 131# (59) |
| VX-7041-B-6 | 6" to 8-7/8" (152) to (225) | 137# (62) |
| VX-7041-B-9 | 9" to 11-7/8" (229) to (302) | 143# (65) |
| VX-7041-B-12 | 12" to 14-7/8" (305) to (378) | 149# (67) |

VX-9007

Fits VA-1 or VA-3 channels

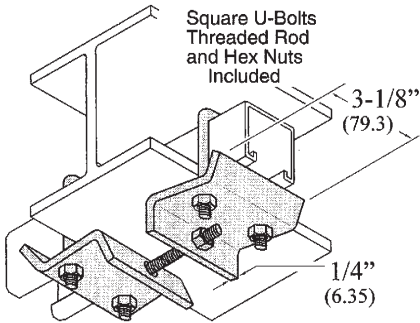


One piece purlin clamp set:
Includes "B" U-Bolt & hex nuts

| Maximum Purlin Lip Height Dim "A" | Wgt. "C" Lbs. kg |
|--------------------------------------|---------------------|
| 1" (25.4 mm) | 160# (72) |

VX-7045-A Series

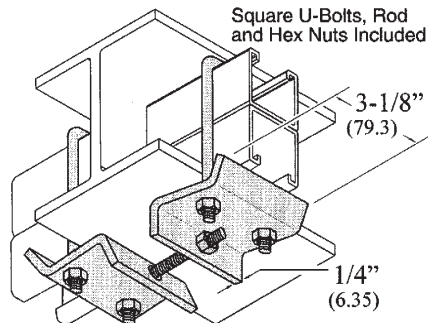
Fits channels up to 1-5/8 (41.3) Deep



| Part # | Flange Width In. mm | Rod Length In. mm | Wgt. "C" Lbs. kg |
|--------------|------------------------|----------------------|---------------------|
| VX-7045-A-4 | 4" to 5-7/8" (102) | 4" (102) | 203# (92) |
| VX-7045-A-6 | 6" to 8-7/8" (152) | 6" (152) | 207# (94) |
| VX-7045-A-9 | 9" to 11-7/8" (229) | 9" (229) | 215# (98) |
| VX-7045-A-12 | 12" to 14-7/8" (305) | 12" (305) | 222# (101) |

VX-7045-B Series

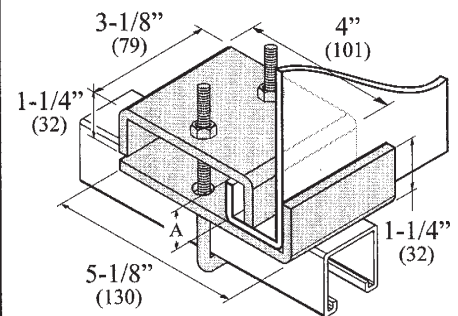
Fits channels over 1-5/8 (41.3) Deep



| Part # | Flange Width In. mm | Rod Length In. mm | Wgt. "C" Lbs. kg |
|--------------|------------------------|----------------------|---------------------|
| VX-7045-B-4 | 4" to 5-7/8" (102) | 4" (102) | 217# (99) |
| VX-7045-B-6 | 6" to 8-7/8" (152) | 6" (152) | 220# (100) |
| VX-7045-B-9 | 9" to 11-7/8" (229) | 9" (229) | 229# (104) |
| VX-7045-B-12 | 12" to 14-7/8" (305) | 12" (305) | 236# (107) |

VX-9008

Fits VA-1 or VA-3 channels



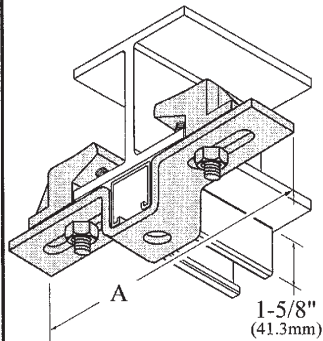
Two piece purlin clamp set:
Includes "B" U-Bolt & hex nuts

| Maximum Purlin Lip Height Dim "A" | Wgt. "C" Lbs. kg |
|--------------------------------------|---------------------|
| 1" (25.4 mm) | 270# (122) |

VF-6300 Series Combination Clamps

Assembly includes:

- 1 pair of cast iron beam clamps
- Base Fitting
- 1/2" x 1-1/2" set screws
- 1/2" x 2-1/4" HHCS & 1/2" Hex Nuts

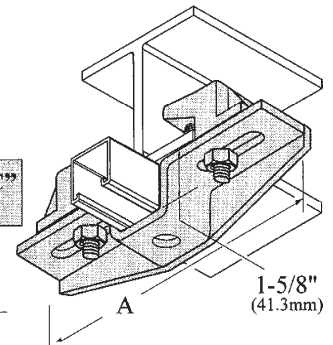


VF-6302-X thru VF-6304-X

WITHOUT GUSSET

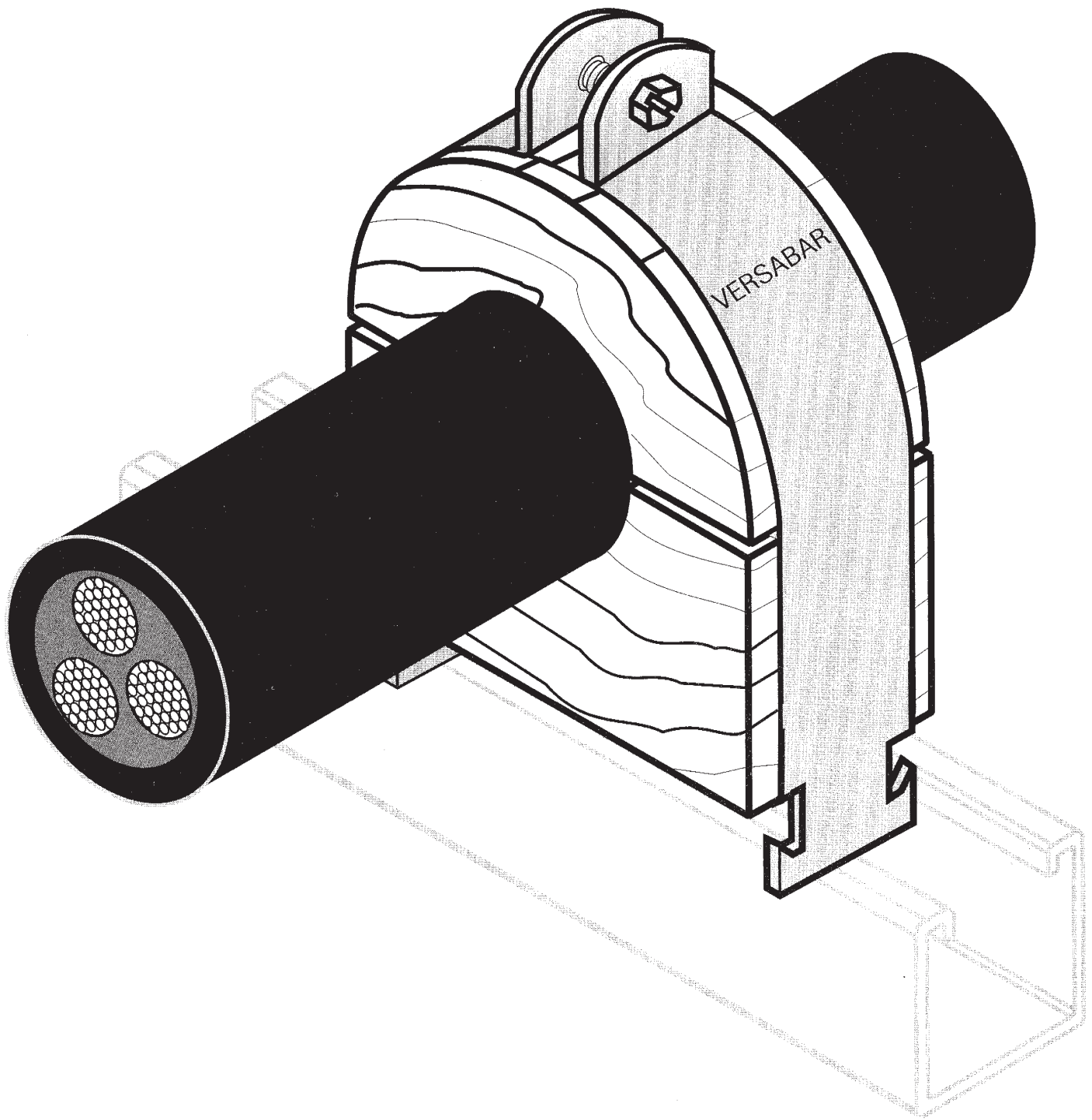
| Part # | Flange Width Range | Dim "A" In. mm | Wgt. Per "C" lbs. kg. |
|------------|--------------------|-------------------|--------------------------|
| VF-6304-X | 5-5/8" to 7-5/8" | 10-3/8" (263) | 307# (139) |
| VF-6303-X | 3-3/4" to 5-3/4" | 8-1/2" (216) | 282# (128) |
| VF-6302-X | 2-3/8" to 4-1/2" | 7-1/4" (184) | 266# (121) |
| VF-6307-X* | 5-5/8" to 7-5/8" | 10-3/8" (263) | 351# (159) |
| VF-6306-X* | 3-3/4" to 5-3/4" | 8-1/2" (216) | 343# (156) |
| VF-6305-X* | 2-3/8" to 4-1/2" | 7-1/4" (184) | 302# (137) |

* NOTE: Channel will NOT pass through fittings with gusset.



VF-6305-X thru VF-6307-X

WITH GUSSET



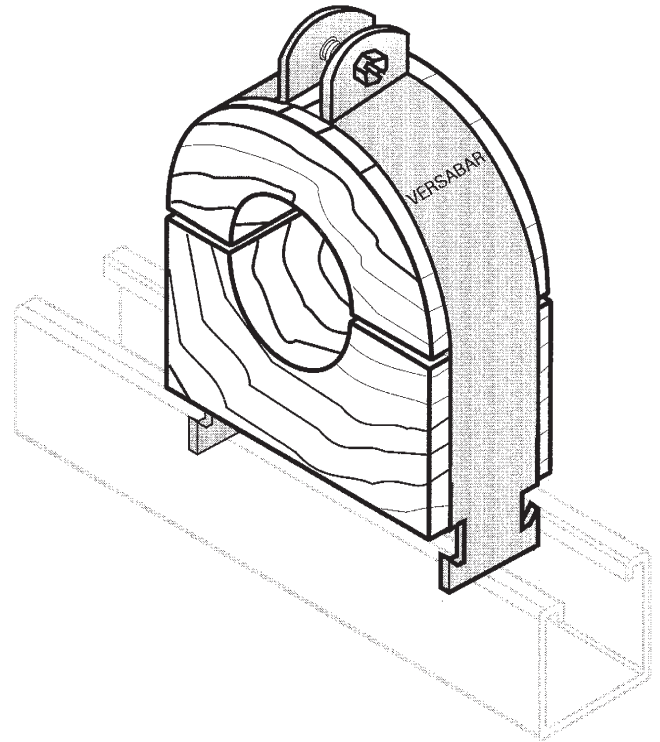
***Electrical
Fittings
Section E***



VERSABAR CORPORATION

SECTION "E" INTRODUCTION

| | |
|----------------------------|-----------|
| VCX Bracket System | E-3 |
| Porcelain Clamps & Saddles | E-4 & E-5 |
| Maple Clamps & Saddles | E-4 & E-5 |
| Bus Duct Fittings | E-6 |



Material:

Maple parts are fabricated from kiln cured clear lumber, and paraffin impregnated to a depth of 1/16" (1.58)

Porcelain parts are manufactured by Dry Process.

Fittings are manufactured from Hot Rolled Pickled and Oiled steel plate, strip, or coil, unless otherwise shown.

Steel shall be in accordance with ASTM #'s: A575, A576, A635 or A36. Fitting steel shall also meet the physical requirements of ASTM A570 GR 33. Many fittings shown in this section and throughout the catalog can be produced from alternative stock such as stainless types 304 / 316, or Aluminum.

Finishes:

Porcelain products have a clear glaze over a white base. Standard finish on steel parts is Electro-Galvanized conforming to ASTM B633 Type III SC1.

Dimensions:

Dimensions are provided in inches, with metric equivalents in parenthesis. Unless noted, metric dimensions are in millimeters.

Threads:

Unless noted otherwise, fasteners and channel nuts shown in this section are U.S. Coarse thread.

Torque:

Fastener diameter dictates desired torque.

| | |
|----------|-------------|
| 1/4"-20 | 6 ft/lbs. |
| 5/16"-18 | 11 ft/lbs. |
| 3/8"-16 | 19 ft/lbs. |
| 1/2"-13 | 50 ft/lbs. |
| 5/8"-11 | 100 ft/lbs. |
| 3/4"-10 | 125 ft/lbs. |

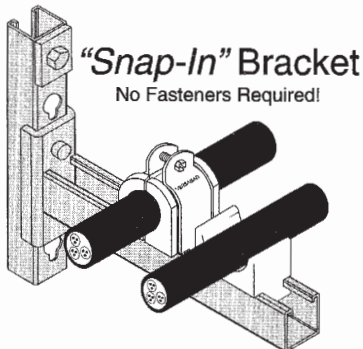
VERSABAR CORPORATION

VCX INTERLOCKING BRACKETS



VCX SERIES

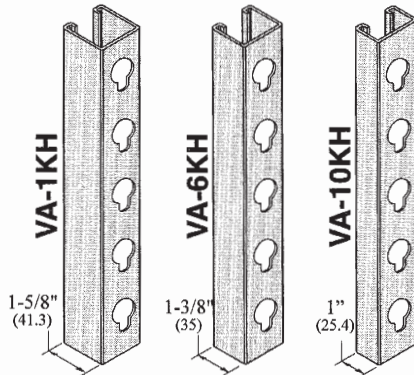
INTEGRATED CABLE SUPPORT BRACKETS



The VERSABAR VCX Bracket system offers advantages over standard channel brackets. Installation can be done in seconds, because no threaded fasteners are required when mounting the bracket to an upright. By utilizing a "snap-in" design, *brackets are secured in place without tools*, anywhere there is an available keyhole. Once dropped into the notch, the bracket cannot be accidentally dislodged.

These brackets and components can be manufactured in both carbon and stainless steels.

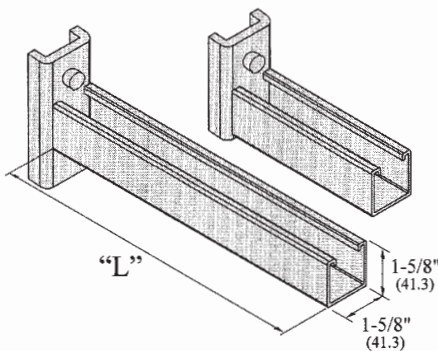
KEYHOLE CHANNEL



CABLE SUPPORT STANCHIONS

| Part Number | Steel Gauge | Stock Lengths | Wgt. Per L.F. (Kg. Per m) |
|-------------|-------------|---|---------------------------|
| VA-1KH | 12 | 10' / 20' / 24' (3.05m / 6.09m / 7.32m) | 1.9 # (2.83) |
| VA-6KH | 12 | 10' / 20' (3.05m / (6.09m) | 1.7 # (2.53) |
| VA-10KH | 12 | 10' / 20' (3.05m / (6.09m) | 1.4# (2.07) |

KEYHOLE BRACKETS

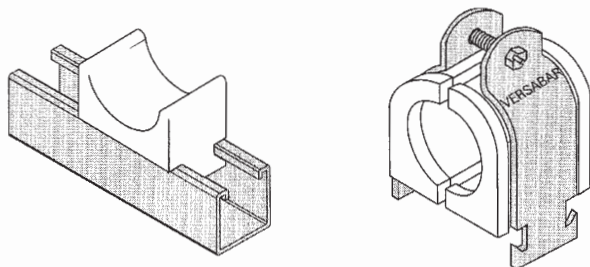


CABLE SUPPORT BRACKETS

| Part# | Dim "L" | Channel | Uniform Load Rating | Wt. Ea. |
|---------|---------|---------------------|---------------------|----------------|
| VCX-4 | 4" | (101) VA-1 (12 ga.) | 1400 (635 kg) | 1.6# (.726 kg) |
| VCX-7.5 | 7-1/2" | (190) VA-1 (12 ga.) | 800 (363 kg) | 2.3# (1.04 kg) |
| VCX-10 | 10" | (254) VA-1 (12 ga.) | 700 (317 kg) | 2.8# (1.27 kg) |
| VCX-14 | 14" | (355) VA-1 (12 ga.) | 600 (272 kg) | 3.8# (1.75 kg) |
| VCX-18 | 18" | (457) VA-1 (12 ga.) | 500 (227 kg) | 4.4# (1.99 kg) |

Note: Custom length brackets are available.
Example: For a 12" (305) bracket, order "VCX-12"

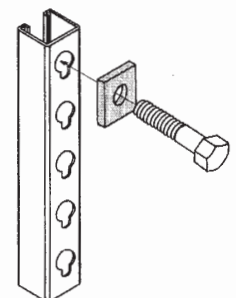
PORCELAIN SADDLES & CLAMPS



Full porcelain product line listings on page E-4 & E-5 of this catalog

VF-1101 Series Square Washers

| Part Number | Hole Size | Bolt Size |
|-------------|--------------|-------------|
| VF-1101-1/4 | 11/32 (8.7) | 1/4 or 5/16 |
| VF-1101-3/8 | 13/32 (10.3) | 3/8 |
| VF-1101-1/2 | 9/16 (14.3) | 1/2 |
| VF-1101-5/8 | 21/32 (16.7) | 5/8 |
| VF-1101-3/4 | 13/16 (20.6) | 3/4 |



Used in conjunction with wall anchors

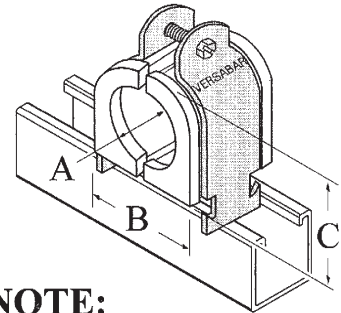


VERSABAR CORPORATION

CABLE CLAMPS

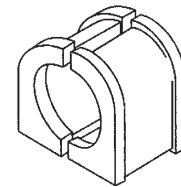
| Part# | Dim "A" | Dim "B" | Dim "C" | Clamp# | Wgt. C |
|---------|----------------|-----------------|------------------|---------|---------------------|
| VE-1037 | 3/8" (9.5) | 1-7/8" (47.6) | 1-1/2" (38.1) | VT-1200 | 65 lbs. (29.5 kg) |
| VE-1050 | 1/2" (12.7) | 1-7/8" (47.6) | 1-1/2" (38.1) | VT-1200 | 53 lbs. (24.1 kg) |
| VE-1062 | 5/8" (15.9) | 1-7/8" (47.6) | 1-1/2" (38.1) | VT-1200 | 51 lbs. (23.2 kg) |
| VE-1075 | 3/4" (19.1) | 2-13/32" (61.1) | 2-1/32" (51.6) | VT-1250 | 91 lbs. (41.3 kg) |
| VE-1087 | 7/8" (22.2) | 2-13/32" (61.1) | 2-1/32" (51.6) | VT-1250 | 89 lbs. (40.4 kg) |
| VE-1100 | 1" (25.4) | 2-13/32" (61.1) | 2-1/32" (51.6) | VT-1250 | 85 lbs. (38.6 kg) |
| VE-1112 | 1-1/8" (28.6) | 2-13/32" (61.1) | 2-1/32" (51.6) | VT-1250 | 83 lbs. (37.7 kg) |
| VE-1125 | 1-1/4" (31.7) | 2-29/32" (73.8) | 2-17/32" (64.3) | VP-1200 | 115 lbs. (52.2 kg) |
| VE-1137 | 1-3/8" (34.9) | 2-29/32" (73.8) | 2-17/32" (64.3) | VP-1200 | 111 lbs. (50.4 kg) |
| VE-1150 | 1-1/2" (38.1) | 2-29/32" (73.8) | 2-17/32" (64.3) | VP-1200 | 107 lbs. (48.6 kg) |
| VE-1162 | 1-5/8" (41.3) | 2-29/32" (73.8) | 2-17/32" (64.3) | VP-1200 | 103 lbs. (46.8 kg) |
| VE-1175 | 1-3/4" (44.4) | 4" (101.6) | 3-5/8" (92.1) | VP-1300 | 221 lbs. (100.3 kg) |
| VE-1187 | 1-7/8" (47.6) | 4" (101.6) | 3-5/8" (92.1) | VP-1300 | 215 lbs. (97.6 kg) |
| VE-1200 | 2" (50.8) | 4" (101.6) | 3-5/8" (92.1) | VP-1300 | 207 lbs. (94.0 kg) |
| VE-1212 | 2-1/8" (54.0) | 4" (101.6) | 3-5/8" (92.1) | VP-1300 | 202 lbs. (91.7 kg) |
| VE-1225 | 2-1/4" (57.2) | 4-1/2" (114.3) | 4-1/8" (104.8) | VP-1350 | 266 lbs. (120.8 kg) |
| VE-1237 | 2-3/8" (60.3) | 4-1/2" (114.3) | 4-1/8" (104.8) | VP-1350 | 253 lbs. (114.9 kg) |
| VE-1250 | 2-1/2" (63.5) | 4-1/2" (114.3) | 4-1/8" (104.8) | VP-1350 | 244 lbs. (110.8 kg) |
| VE-1262 | 2-5/8" (66.7) | 4-1/2" (114.3) | 4-1/8" (104.8) | VP-1350 | 240 lbs. (109.0 kg) |
| VE-1275 | 2-3/4" (69.9) | 5-1/8" (130.2) | 4-5/8" (117.5) | VP-1400 | 254 lbs. (115.3 kg) |
| VE-1287 | 2-7/8" (73.0) | 5-1/8" (130.2) | 4-5/8" (117.5) | VP-1400 | 244 lbs. (110.8 kg) |
| VE-1300 | 3" (76.2) | 5-1/8" (130.2) | 4-5/8" (117.5) | VP-1400 | 234 lbs. (106.2 kg) |
| VE-1312 | 3-1/8" (79.4) | 5-1/8" (130.2) | 4-5/8" (117.5) | VP-1400 | 224 lbs. (101.7 kg) |
| VE-1325 | 3-1/4" (82.6) | 6-3/16" (157.2) | 5-11/16" (144.5) | VP-1500 | 341 lbs. (154.8 kg) |
| VE-1337 | 3-3/8" (85.7) | 6-3/16" (157.2) | 5-11/16" (144.5) | VP-1500 | 330 lbs. (149.8 kg) |
| VE-1350 | 3-1/2" (88.9) | 6-3/16" (157.2) | 5-11/16" (144.5) | VP-1500 | 320 lbs. (145.3 kg) |
| VE-1362 | 3-5/8" (92.1) | 6-3/16" (157.2) | 5-11/16" (144.5) | VP-1500 | 305 lbs. (138.5 kg) |
| VE-1375 | 3-3/4" (95.3) | 7-1/4" (184.2) | 6-3/4" (171.5) | VP-1600 | 565 lbs. (256.5 kg) |
| VE-1387 | 3-7/8" (98.4) | 7-1/4" (184.2) | 6-3/4" (171.5) | VP-1600 | 551 lbs. (250.2 kg) |
| VE-1400 | 4" (101.6) | 7-1/4" (184.2) | 6-3/4" (171.5) | VP-1600 | 538 lbs. (244.3 kg) |
| VE-1412 | 4-1/8" (104.8) | 7-1/4" (184.2) | 6-3/4" (171.5) | VP-1600 | 521 lbs. (236.5 kg) |
| VE-1425 | 4-1/4" (107.9) | 7-1/4" (184.2) | 6-3/4" (171.5) | VP-1600 | 494 lbs. (224.3 kg) |
| VE-1437 | 4-3/8" (111.1) | 7-1/4" (184.2) | 6-3/4" (171.5) | VP-1600 | 478 lbs. (217.0 kg) |
| VE-1450 | 4-1/2" (114.3) | 7-1/4" (184.2) | 6-3/4" (171.5) | VP-1600 | 464 lbs. (210.7 kg) |

VE-1000 Series Porcelain Cable Clamps



NOTE:

Check with factory for delivery information. Certain sizes of clamps will not be restocked when supply is depleted.

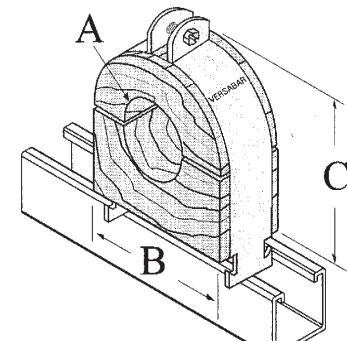


To order porcelain set without metal clamp add (-NS) to part # ex: VE-1100-NS

VEM-1000 Series Maple Cable Clamps

| Part # | Dim "A" Range* | | Dim. "B" | | Dim. "C" | | Clamp # | Wgt. Per "C" | |
|-----------|------------------|---------------|----------|---------|----------|-------|---------|--------------|--------|
| | Inches | Millimeters | In. | mm | In. | mm | | Lbs. | kg. |
| VEM-1062A | 0" to 5/8" | (0) to (16) | 1-1/2" | (38.1) | 2-1/16" | (52) | VP-1100 | 29# | (13.2) |
| VEM-1100A | 1/2" to 1" | (13) to (25) | 2-1/8" | (54.0) | 2-25/32" | (71) | VP-1150 | 49# | (22.2) |
| VEM-1150A | 3/4" to 1-1/2" | (19) to (38) | 2-5/8" | (66.7) | 3-9/32" | (83) | VP-1200 | 61# | (27.7) |
| VEM-1175A | 1-1/4" to 1-3/4" | (32) to (44) | 3" | (76.2) | 3-3/4" | (95) | VP-1250 | 67# | (30.4) |
| VEM-1225A | 1-1/2" to 2-1/4" | (38) to (57) | 3-5/8" | (92.1) | 4-3/8" | (111) | VP-1300 | 90# | (40.9) |
| VEM-1250A | 2" to 2-1/2" | (51) to (64) | 4-1/8" | (104.8) | 5" | (127) | VP-1350 | 113# | (51.3) |
| VEM-1300A | 2-1/4" to 3" | (57) to (76) | 4-5/8" | (117.4) | 5-1/2" | (140) | VP-1400 | 131# | (59.5) |
| VEM-1400A | 3" to 4" | (76) to (102) | 5-3/4" | (146.0) | 6-5/8" | (168) | VP-1500 | 170# | (77.2) |

Assembly includes paraffin impregnated cable clamps, steel pipe strap, and Silicon Bronze fasteners.

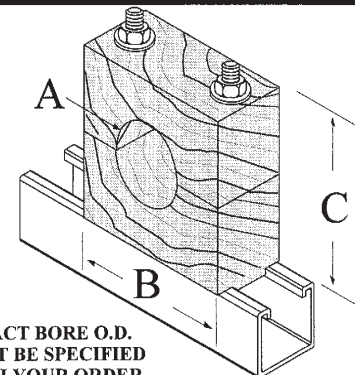


*EXACT BORE O.D. MUST BE SPECIFIED WITH YOUR ORDER

VEM-2000 Series Square Maple Cable Clamps

| Part # | Dim "A" Range* | | Dim. "B & C" | | Stud Length | | Wgt. Per "C" | |
|-----------|----------------|---------------|--------------|---------|-------------|---------|--------------|---------|
| | Inches | Millimeters | In. | mm | In. | mm | Lbs. | kg. |
| VEM-2100A | 0" to 1" | (0) to (25) | 3-1/2" | (88.9) | 5-3/4" | (146.1) | 84# | (38.1) |
| VEM-2150A | 1" to 1-1/2" | (25) to (38) | 4" | (101.6) | 6-1/4" | (158.8) | 100# | (45.4) |
| VEM-2200A | 1-1/2" to 2" | (38) to (51) | 4-1/2" | (114.3) | 6-3/4" | (171.5) | 120# | (54.5) |
| VEM-2250A | 2" to 2-1/2" | (51) to (64) | 5-1/2" | (139.7) | 7-3/4" | (196.9) | 163# | (74.0) |
| VEM-2300A | 2-1/2" to 3" | (64) to (76) | 6" | (152.4) | 8-1/4" | (209.6) | 186# | (84.4) |
| VEM-2350A | 3" to 3-1/2" | (76) to (89) | 6-1/2" | (165.1) | 8-3/4" | (222.3) | 214# | (97.2) |
| VEM-2400A | 3-1/2" to 4" | (89) to (102) | 7" | (177.8) | 9-1/4" | (235.0) | 240# | (109.0) |
| VEM-2500A | 4" and up | (102) and up | | | | | | |

Assembly includes paraffin impregnated cable clamps, 3/8" dia. steel studs, hex nuts & washers. (VN-1037 channel nuts not included).



*EXACT BORE O.D. MUST BE SPECIFIED WITH YOUR ORDER

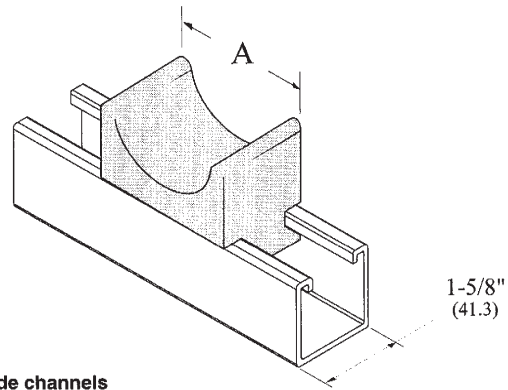
VERSABAR CORPORATION

CABLE SADDLES and BUS BAR SEPARATORS



VE-3000 Series Porcelain Cable Saddles

| Part Number | Dim "A" | | Max Cable Dia. | | Wgt. "C" | |
|-------------|---------|-------|----------------|-------|----------|------|
| | Inches | mm | Inches | mm | Lbs. | kg. |
| VE-3300 | 3" | (76) | 3" | (76) | 82# | (37) |
| VE-3500 | 4" | (101) | 4-1/2" | (114) | 121# | (54) |

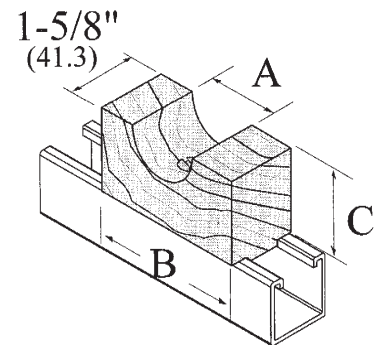


Use with Versabar 1-5/8" (41.3) wide channels

VEM-3000 Series Maple Saddles

Assembly Includes: Paraffin impregnated maple cable saddle and 3/8" flat head machine screw. Order VN-1037 channel nut for connection to channel.

| Part # | Dim "A" Range* | | Dim. "B" | | Dim. "C" | | Wgt. Per "C" | |
|------------|----------------|---------------|----------|-------|----------|------|--------------|------|
| | Inches | Millimeters | In. | mm | In. | mm | Lbs. | kg. |
| VEM-3100-A | 0" to 1" | (0) to (25) | 3" | (76) | 1-3/4" | (44) | 31# | (14) |
| VEM-3150-A | 1" to 1-1/2" | (25) to (38) | 3-1/2" | (89) | 2" | (51) | 37# | (17) |
| VEM-3200-A | 1-1/2" to 2" | (38) to (51) | 4" | (102) | 2-1/4" | (57) | 46# | (21) |
| VEM-3250-A | 2" to 2-1/2" | (51) to (64) | 4-1/2" | (114) | 2 1/2" | (64) | 56# | (25) |
| VEM-3300-A | 2-1/2" to 3" | (64) to (76) | 5" | (127) | 2-3/4" | (70) | 66# | (30) |
| VEM-3350-A | 3" to 3-1/2" | (76) to (89) | 5-1/2" | (140) | 3" | (76) | 78# | (35) |
| VEM-3400-A | 3-1/2" to 4" | (89) to (102) | 6" | (152) | 3-1/4" | (83) | 92# | (42) |

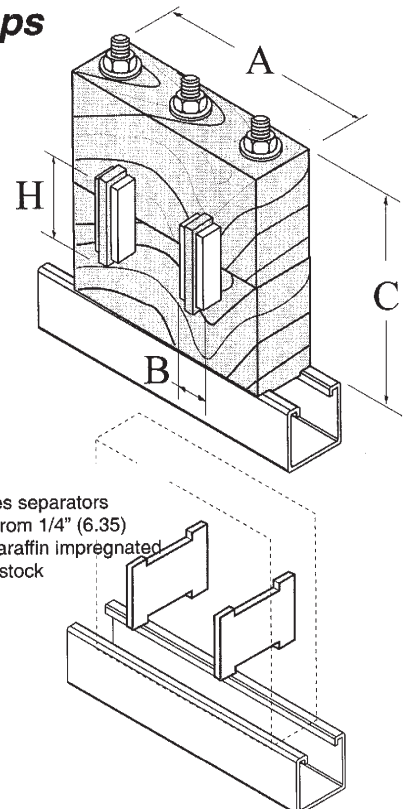


*EXACT BORE O.D. MUST BE SPECIFIED WITH YOUR ORDER

VEM-19A thru VEM-21F Maple Bus Bar Clamps

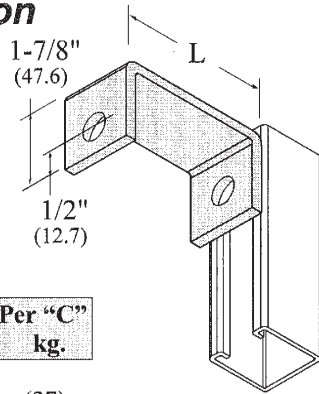
Assembly Includes:
 One pair maple bus bar clamps
 Separators where required
 3/8" dia. studs, 3/8" square nuts and washers
 Order 3 VN-1037 nuts for connection to channel

| Part# | Bus Bar Height "H" | #Bars Per Leg | Separators Included | Dim "A" | Dim "B" | Dim "C" | Wgt "C" |
|---------|--------------------|---------------|---------------------|--------------|------------|--------------|------------|
| VEM-19A | 2" (51) | 1 | 0 | 8-1/2 (216) | 1/4 (6.4) | 5-3/8" (137) | 319# (145) |
| VEM-19B | 2" (51) | 2 | 2 | 9-1/2 (241) | 3/4 (19) | 5-3/8" (137) | 349# (158) |
| VEM-19C | 2" (51) | 3 | 4 | 10-1/2 (267) | 1-1/4 (32) | 5-3/8" (137) | 379# (172) |
| VEM-19D | 2" (51) | 4 | 6 | 11-1/2 (292) | 1-3/4 (44) | 5-3/8" (137) | 409# (186) |
| VEM-19E | 2" (51) | 5 | 8 | 12-1/2 (318) | 2-1/4 (57) | 5-3/8" (137) | 439# (199) |
| VEM-19F | 2" (51) | 6 | 10 | 13-1/2 (343) | 2-3/4 (70) | 5-3/8" (137) | 469# (213) |
| VEM-20A | 4" (102) | 1 | 0 | 8-1/2 (216) | 1/4 (6.4) | 7-3/8" (187) | 421# (191) |
| VEM-20B | 4" (102) | 2 | 2 | 9-1/2 (241) | 3/4 (19) | 7-3/8" (187) | 465# (211) |
| VEM-20C | 4" (102) | 3 | 4 | 10-1/2 (267) | 1-1/4 (32) | 7-3/8" (187) | 509# (231) |
| VEM-20D | 4" (102) | 4 | 6 | 11-1/2 (292) | 1-3/4 (44) | 7-3/8" (187) | 553# (251) |
| VEM-20E | 4" (102) | 5 | 8 | 12-1/2 (318) | 2-1/4 (57) | 7-3/8" (187) | 597# (271) |
| VEM-20F | 4" (102) | 6 | 10 | 13-1/2 (343) | 2-3/4 (70) | 7-3/8" (187) | 631# (286) |
| VEM-21A | 6" (152) | 1 | 0 | 8-1/2 (216) | 1/4 (6.4) | 9-3/8" (238) | 515# (234) |
| VEM-21B | 6" (152) | 2 | 2 | 9-1/2 (241) | 3/4 (19) | 9-3/8" (238) | 568# (258) |
| VEM-21C | 6" (152) | 3 | 4 | 10-1/2 (267) | 1-1/4 (32) | 9-3/8" (238) | 621# (282) |
| VEM-21D | 6" (152) | 4 | 6 | 11-1/2 (292) | 1-3/4 (44) | 9-3/8" (238) | 674# (306) |
| VEM-21E | 6" (152) | 5 | 8 | 12-1/2 (318) | 2-1/4 (57) | 9-3/8" (238) | 727# (330) |
| VEM-21F | 6" (152) | 6 | 10 | 13-1/2 (343) | 2-3/4 (70) | 9-3/8" (238) | 780# (354) |



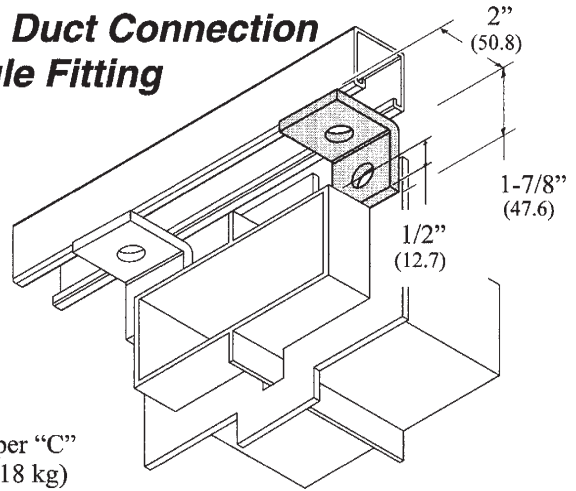


VF-5200 Series
Bus Duct Connection
Clevis Fittings



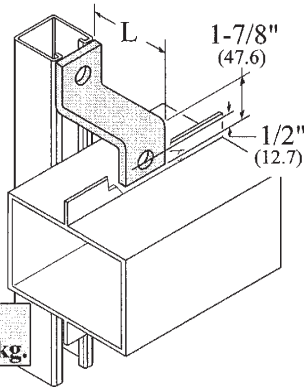
| Part # | Dim "A" | | Wgt. Per "C" | |
|---------|----------|-------|--------------|------|
| | In | mm | lbs. | kg. |
| VF-5214 | 2-13/32" | (61) | 60# | (27) |
| VF-5215 | 3-25/32" | (96) | 75# | (34) |
| VF-5216 | 4-3/4" | (121) | 86# | (39) |

VF-2226
Bus Duct Connection
Angle Fitting



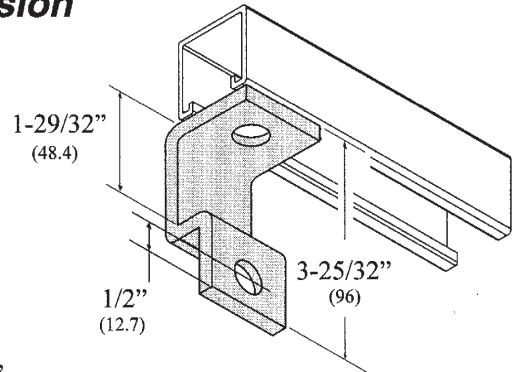
Wgt. per "C"
 40# (18 kg)

VF-4200-E Series
Bus Duct
Connection
"Z" Fittings



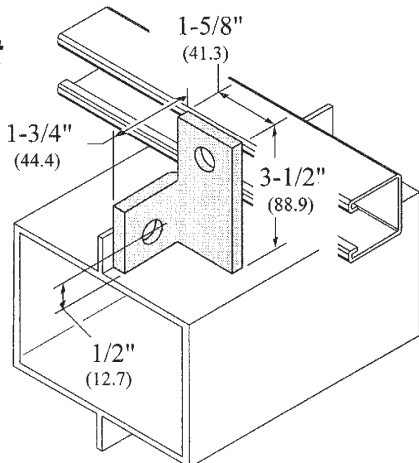
| Part # | Dim "A" | | Wgt. "C" | |
|-----------|----------|-------|----------|------|
| | In | mm | lbs. | kg. |
| VF-4205-E | 2-13/32" | (61) | 60# | (27) |
| VF-4206-E | 3-25/32" | (96) | 75# | (34) |
| VF-4207-E | 4-3/4" | (121) | 86# | (39) |

VF-7205
Bus Duct
Suspension
Fitting



Wgt. per "C"
 66# (30 kg)

VF-2224-(L&R)
Bus Duct
Drop Support
Fitting

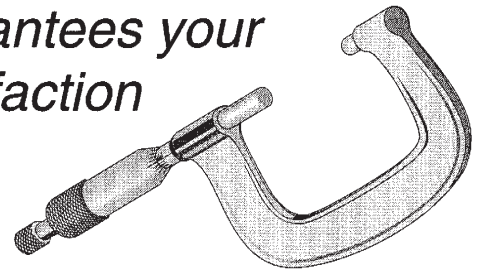


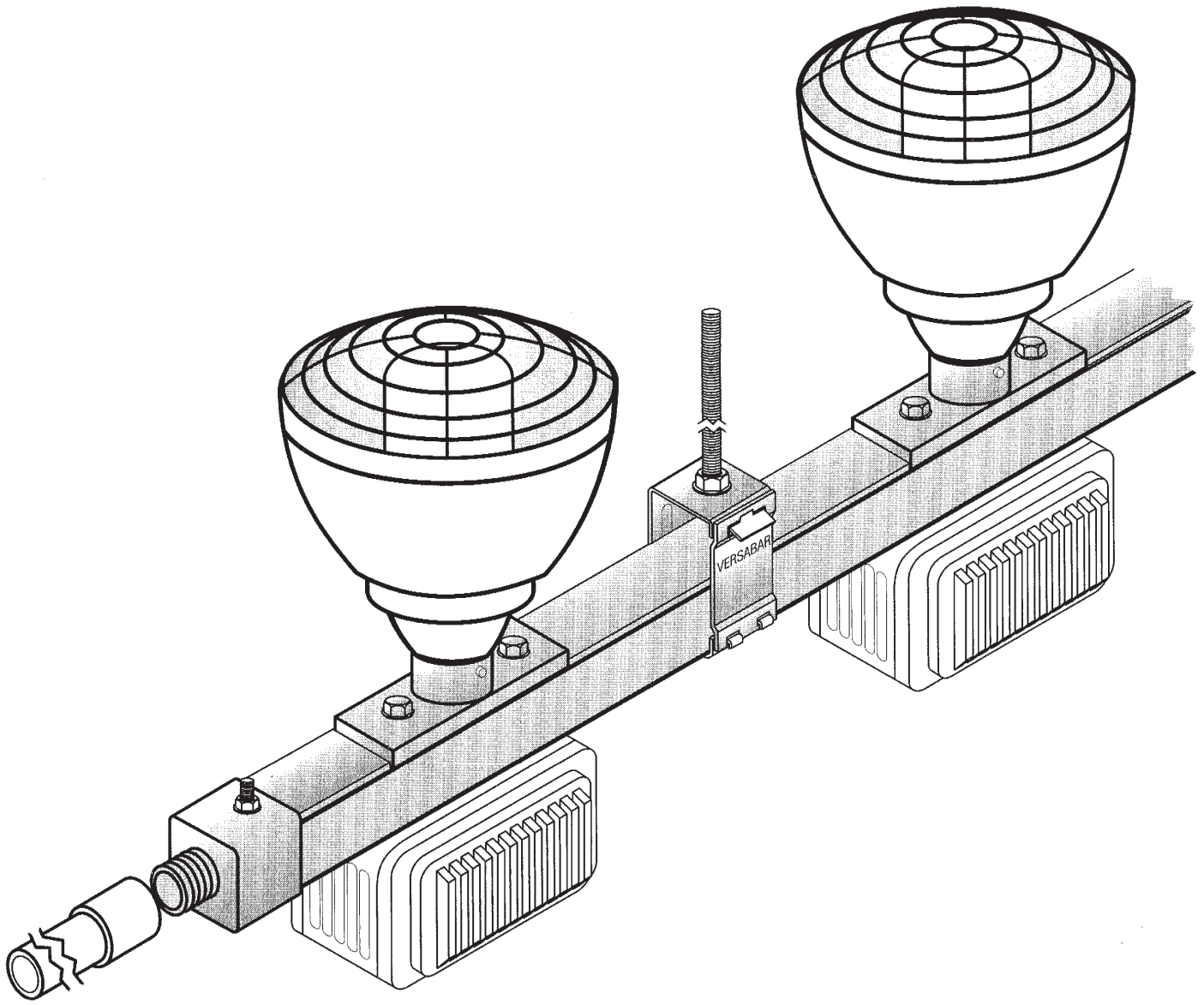
Left hand fitting shown

Right hand version opposite

Wgt. per "C"
 59# (27 kg)

Our commitment to quality guarantees your satisfaction





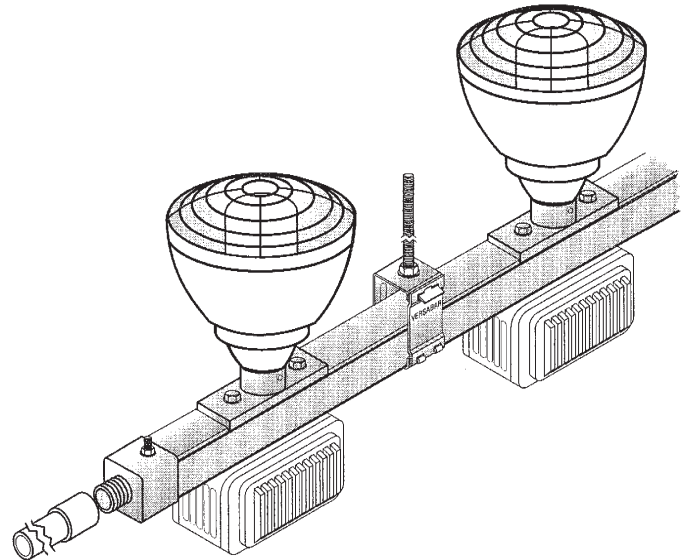
***Fixture Raceway &
Support
System
Components
Section F***



VERSABAR CORPORATION

SECTION "F" INTRODUCTION

| | |
|-------------------------------|--------------|
| Wire Fill Chart | F-3 |
| Channel | F-4 |
| Closure Strip | F-4 |
| End Caps | F-4 |
| Hangers | F-5 & F-8 |
| Splices | F-6 & F-7 |
| Grounding Kits (NEW) | F-7 |
| Receptacle Housings | F-7 |
| Wire Feed Devices | F-8 & F-9 |
| Beam Clamps | F-10 |
| Threaded Rod | F-10 |
| VXE Swivel Eyelets | F-10 |
| Raceway Installation Examples | F-11 to F-14 |



Illustrations of various installation types can be found on pages F-11 through F-14

Underwriters Laboratories Inc. Listings

Products listed to applicable UL standards and requirements are shown with the the UL mark.

(Per standard UL5B, effective 03/31/1999)

Material:

Carbon steel devices described herein are either press formed, or cast, in grey iron or aluminum. Press formed parts are made from H.R.P.O. coil or bar steel conforming to ASTM #'s: A575, A576, A635 or A36. Fitting steel shall also meet the physical requirements of ASTM A570 GR 33. In addition, many items in this section can be produced in stainless 304 & 316.

Finishes:

Standard finish on carbon steel parts is Electro-Galvanized conforming to ASTM B633 Type III SC1.

Dimensions:

All dimensions provided are in inches, with metric dimensions included in parenthesis. Unless noted, metric dimensions are in millimeters.

Load Data:

Load ratings for the devices listed in this section, where provided, are based on a safety factor of (2.5).

Threads:

Unless noted otherwise, fasteners and channel nuts shown in this section are U.S. Coarse thread.

Torque:

Fastener diameter dictates desired torque.

| | |
|----------|-------------|
| 1/4"-20 | 6 ft/lbs. |
| 5/16"-18 | 11 ft/lbs. |
| 3/8"-16 | 19 ft/lbs. |
| 1/2"-13 | 50 ft/lbs. |
| 5/8"-11 | 100 ft/lbs. |
| 3/4"-10 | 125 ft/lbs. |



VERSABAR CORPORATION

"LITE-LINE"™ RACEWAY SYSTEM



About our raceway system....

VERSABAR channel and fittings are listed by Underwriters' Laboratories, Inc. for use as integrated raceway-fixture supports. This "LITE LINE"™ system is engineered so that perfectly aligned installations can be accomplished with ease and speed even in buildings with irregular structural characteristics or field obstructions. The VERSABAR system is so flexible and logical that designing and detailing time is cut to the minimum. The channels, which create a suspended platform to carry the fixtures, are of sufficient strength so that acoustical and luminous ceilings may be supported by the same network. Raceway assembly and wiring can take place at floor level. When convenient, entire sections of raceway can be elevated into place and spliced into the circuit. With a choice of our many fully integrated systems, your

jobs will progress rapidly and safely. VERSABAR system supports are designed for fluorescent, mercury vapor, metal halide, high or low pressure sodium, and heavy incandescents. They are suitable for general task, or emergency lighting, for high bay, low bay, or hung ceiling applications. The attachment devices provide for fast fixture installation and convenient future revamping if lighting requirements change. VERSABAR attachment devices make fixtures readily accessible for minimum cost lighting maintenance. Standard finish of components is Electro-Galvanized conforming to ASTM B633 Type III SC1. Check with factory for availability on special order finishes and coatings. Fill charts below show maximum conductor type and number for specific raceway channel and type.

Fill Chart for Surface Metal Raceway with Exterior Type Splices

For VA-1, VA-2

| | Insulation Group | Wire Size AWG | | | | |
|---|------------------------------|----------------------------|----|----|----|----|
| | | 14 | 12 | 10 | 8 | 6 |
| | | Max # of conductors & type | | | | |
| 1 | THWN THHN FEP FEP B | 63 | 47 | 32 | 16 | 11 |
| 2 | TW XHHW | 41 | 32 | 26 | 13 | 9 |
| 3 | THW | 27 | 22 | 19 | 9 | 9 |
| 4 | RH | 22 | 19 | 11 | 7 | 6 |
| 5 | RHH RHW | 16 | 14 | 12 | 7 | 6 |

For VA-3

| | Insulation Group | Wire Size AWG | | | | |
|---|------------------------------|----------------------------|----|----|----|----|
| | | 14 | 12 | 10 | 8 | 6 |
| | | Max # of conductors & type | | | | |
| 1 | THWN THHN FEP FEP B | 102 | 76 | 51 | 26 | 18 |
| 2 | TW XHHW | 64 | 44 | 42 | 20 | 15 |
| 3 | THW | 43 | 35 | 30 | 15 | 15 |
| 4 | RH | 37 | 31 | 20 | 11 | 10 |
| 5 | RHH RHW | 27 | 22 | 20 | 11 | 10 |

Fill Chart for Surface Metal Raceway When Supporting Electric Discharge Fixtures*

| | Insulation Group | Wire Size AWG | | | | |
|--|--|----------------------------|----|----|---|---|
| | | 14 | 12 | 10 | 8 | 6 |
| | | Max # of conductors & type | | | | |
| | | For VA-1 or VA-2 | | | | |
| | FEP, FEPB, RH, RHH, RHW, TW, THHN, THWN, THW, XHHW | 10 | 10 | 5 | 4 | 4 |

| | Insulation Group | Wire Size AWG | | | | |
|--|--|----------------------------|----|----|---|---|
| | | 14 | 12 | 10 | 8 | 6 |
| | | Max # of conductors & type | | | | |
| | | For VA-3 | | | | |
| | FEP, FEPB, RH, RHH, RHW, TW, THHN, THWN, THW, XHHW | 10 | 10 | 8 | 6 | 4 |

* When installed to support and supply electric discharge type lighting fixtures when raceway wiring is suitable for 75° C.
EXCEPTION: Wire suitable for 60° C may be used when clearance between fixture and raceway is at least 1/2" (12.7).

IN ALL CASES , THE SNAP-IN COVER (VA-9) IS REQUIRED TO COMPLETE RACEWAY ENCLOSURE.

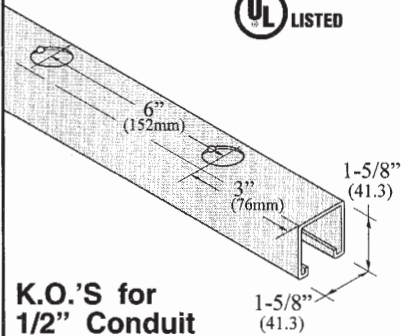


VERSABAR CORPORATION

RACEWAY CHANNELS, END CAPS & CLOSURE STRIP

VA-1KO6 "Knockout Back"

Wgt per L.F. 1.9 lbs. (2.83 kg/m)



K.O.'S for 1/2" Conduit

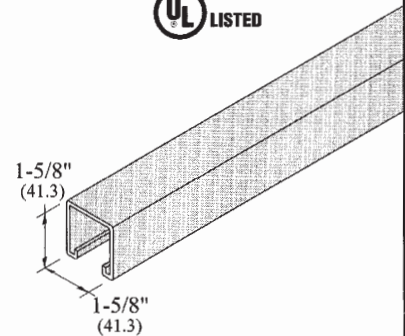
Stock Thickness: 12 ga.
Standard Finish: G-90 Galvanized
Available Lengths: 10', 20', 24'

Refer to page A-1 for Load Data
Refer to page F-3 for conductor fill chart

KO6 Channel requires a 5% reduction in beam loading capacity

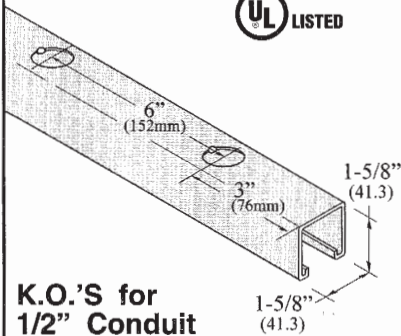
VA-9 closure strip also required

VA-1 "Solid Back"



VA-2KO6 "Knockout Back"

Wgt per L.F. 1.4 lbs. (2.08 kg/m)



K.O.'S for 1/2" Conduit

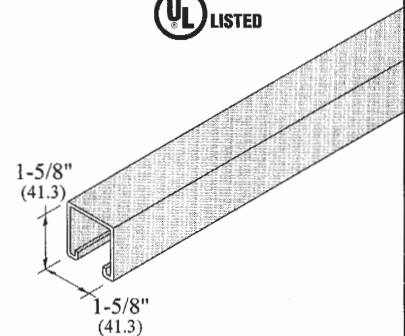
Stock Thickness: 14 ga.
Standard Finish: G-90 Galvanized
Available Lengths: 10', 20', 24'

Refer to page A-3 for Load Data
Refer to page F-3 for conductor fill chart

KO6 Channel requires a 5% reduction in beam loading capacity

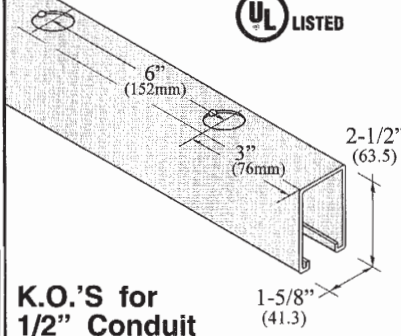
VA-9 closure strip also required

VA-2 "Solid Back"



VA-3KO6 "Knockout Back"

Wgt per L.F. 2.47 lbs. (3.67 kg/m)



K.O.'S for 1/2" Conduit

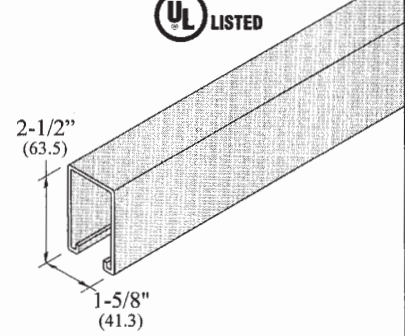
Stock Thickness: 12 ga.
Standard Finish: G-90 Galvanized
Available Lengths: 10', 20', 24'

Refer to page A-5 for Load Data
Refer to page F-3 for conductor fill chart

KO6 Channel requires a 5% reduction in beam loading capacity

VA-9 closure strip also required

VA-3 "Solid Back"



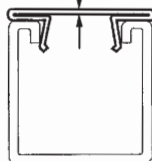
VA-9 Raceway Closure Strip

Wgt. 42# per C/LF (63 kg m) G-90 Mill Galv. Finish



Note: Required on all raceway systems

.040 THK (1.02)

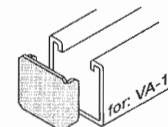


Snap-In design Friction Fit

End Caps for Raceway *plated finish*

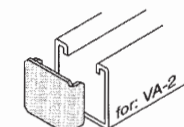
VF-1001

Wgt. 11# per C (5 kg)



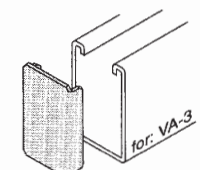
VF-1001-2

Wgt. 11# per C (5 kg)



VF-1001-3

Wgt. 17# per C (7.7 kg)





VF-7106 Wgt per "C"
 38 lbs. (17 kg)

Snap closing hanger with hinged door for easy channel installation.

*Accepts rod swivel nuts
 See page F-10

9/16"* (14.3)
 3-1/8" (79.4)
 1-5/8" Max. (41.3)

UL LISTED

VF-7106-11

Snap closing hanger with hinged door for easy channel installation.

*Accepts rod swivel nuts
 See page F-10

9/16"* (14.3)
 5-1/8" (130)
 3-1/4" (82.5)

UL LISTED Wgt per "C"
 47 lbs. (21 kg)

VF-7104 Wgt per "C"
 38 lbs. (17 kg)

Permits angled suspension.
 Accepts rod to 7/8" Dia.
 or 1/2" conduit

*Reducing washers for 3/8"
 & 1/2" rod are also included.

.870"* (22)
 3-1/8" (79.4)
 1-5/8" Max. (41.3)

UL LISTED

VF-7104-11

Permits angled suspension.
 Accepts rod to 7/8" Dia.
 or 1/2" conduit

*Reducing washers for 3/8"
 & 1/2" rod included.

.870"* (22)
 4" (102)
 3-1/4" (82.5)

UL LISTED Wgt per "C"
 40 lbs. (18 kg)

VF-7106-F Series

Hanger assembly comes complete with wing nut and bolt for quick attachment of fixtures.
Provides at least 1/2" (12.7) space between fixture and raceway. Fits all channels up to 1-5/8" (41.3) deep. For channels over 1-5/8" (41.3) deep order VF-7106F-3.
To cushion fixture use: RW-25 Bushing

1-1/2" (38.1)
 B

UL LISTED

| Part # | Dim "B" | Wt. "C" |
|--------------|---------------|------------|
| VF-7106-F | 3-1/8" (79.4) | 39# (17.7) |
| VF-7106-F-11 | 5-1/8" (130) | 48# (21.8) |

VF-7106-11H

1-1/2" (38.1)
 5-1/8" (130)

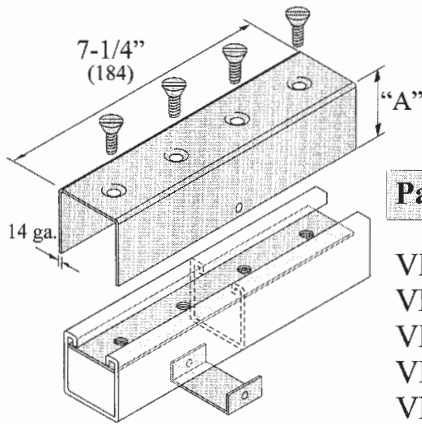
Wgt per "C"
 70 lbs. (32 kg)

Fast connection of H.I.D. fixture couplings.

Includes:
 Hanger
 VXE-4-1/2 eyelet
 1/2" hex nut



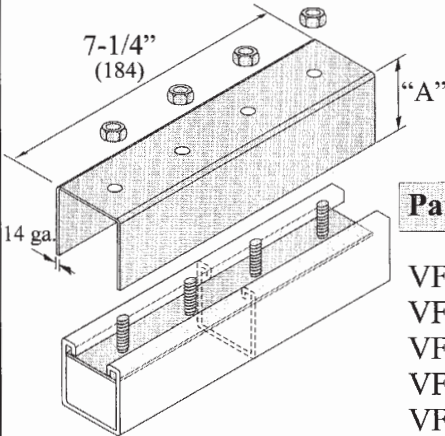
VF-5403-A series



Flush Type Splice Assemblies

| Part # | For Channel | Dim "A" | Weight Each |
|--------------|--------------------|------------------|--------------------|
| VF-5403-A | VA-1, VA-2 & VA-12 | 1-5/8" (41.3 mm) | 1.06# / (.479 kg.) |
| VF-5403-A-3 | VA-3 | 2-1/2" (63.5 mm) | 1.33# / (.601 kg.) |
| VF-5403-A-4 | VA-4, VA-5 & VA-13 | 13/16" (20.6 mm) | 0.81# / (.366 kg.) |
| VF-5403-A-6 | VA-6 & VA-7 | 1-3/8" (34.9 mm) | 0.99# / (.447 kg.) |
| VF-5403-A-8 | VA-8 & VA-10 | 1" (25.4 mm) | 0.87# / (.393 kg.) |
| VF-5403-A-11 | VA-11 | 3-1/4" (82.6 mm) | 1.56# / (.705 kg.) |

VF-5404-A series

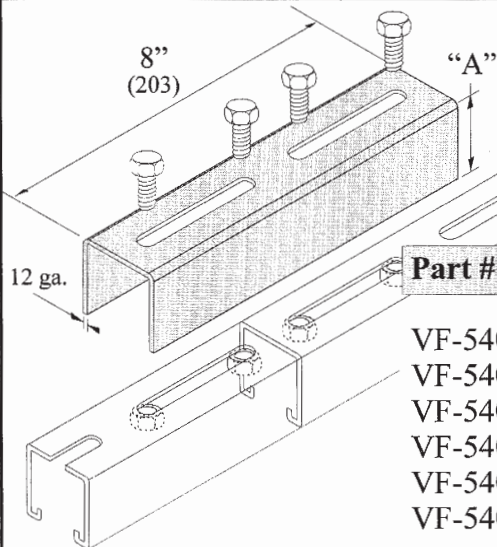


Stud Type Splice Assemblies

| Part # | For Channel | Dim "A" | Weight Each |
|--------------|--------------------|------------------|--------------------|
| VF-5404-A | VA-1, VA-2 & VA-12 | 1-5/8" (41.3 mm) | 1.05# / (.477 kg.) |
| VF-5404-A-3 | VA-3 | 2-1/2" (63.5 mm) | 1.32# / (.599 kg.) |
| VF-5404-A-4 | VA-4, VA-5 & VA-13 | 13/16" (20.6 mm) | 0.80# / (.363 kg.) |
| VF-5404-A-6 | VA-6 & VA-7 | 1-3/8" (34.9 mm) | 0.97# / (.440 kg.) |
| VF-5404-A-8 | VA-8 & VA-10 | 1" (25.4 mm) | 0.86# / (.390 kg.) |
| VF-5404-A-11 | VA-11 | 3-1/4" (82.6 mm) | 1.54# / (.699 kg.) |

VF-5405-A series

P3S Channel Splice Assemblies

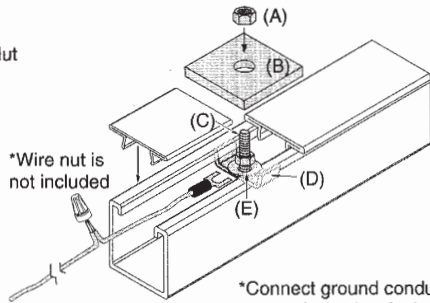


| Part # | For Channel | Dim "A" | Weight Each |
|--------------|--------------------|------------------|--------------------|
| VF-5405-A | VA-1, VA-2 & VA-12 | 1-5/8" (41.3 mm) | 1.50# / (.681 kg.) |
| VF-5405-A-3 | VA-3 | 2-1/2" (63.5 mm) | 1.87# / (.848 kg.) |
| VF-5405-A-4 | VA-4, VA-5 & VA-13 | 13/16" (20.6 mm) | 1.15# / (.522 kg.) |
| VF-5405-A-6 | VA-6 & VA-7 | 1-3/8" (34.9 mm) | 1.39# / (.631 kg.) |
| VF-5405-A-8 | VA-8 & VA-10 | 1" (25.4 mm) | 1.23# / (.558 kg.) |
| VF-5405-A-11 | VA-11 | 3-1/4" (82.6 mm) | 2.19# / (.994 kg.) |



LL-G1 Raceway Grounding Kit

- (A.) 2 pcs. 1/4" Hex Nut
- (B.) VF-1101-1/4"
- (C.) 1/4" x 1" HHCS
- (D.) VN-1 Nut
- (E.) 1/4 Flatwasher

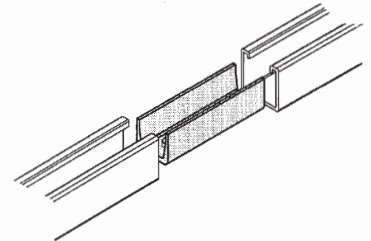
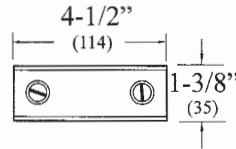


*Connect ground conductor to ground wire (not included)

VF-5901-A

Weight each .18# (.08 kg)

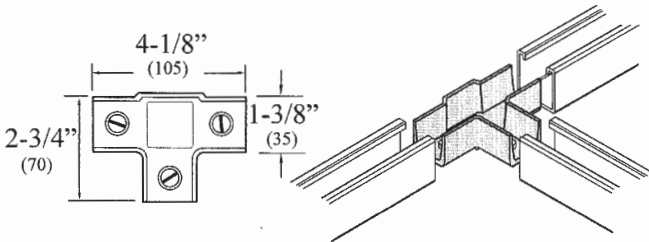
standard straight intersplice
 for 1-5/8" (41.3) deep channels



VF-5902-A

Weight each .3# (.14 kg)

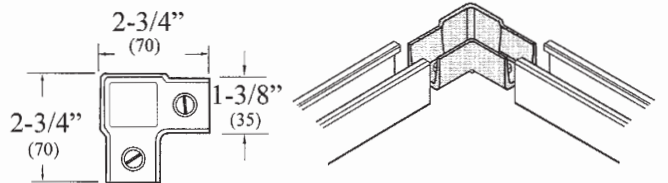
"T" intersplice
 for 1-5/8" (41.3) deep channels



VF-5903-A

Weight each .23# (.10 kg)

"L" intersplice
 for 1-5/8" (41.3) deep channels

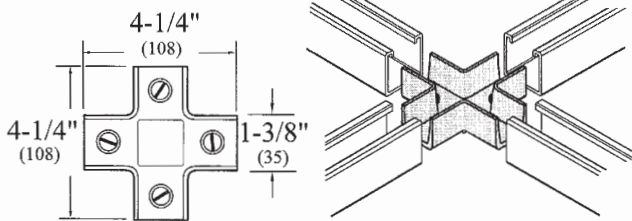


NOTE: Includes 2 pcs. VA-9 x 6" mitted to fit corner

VF-5904-A

Weight each .38# (.17 kg)

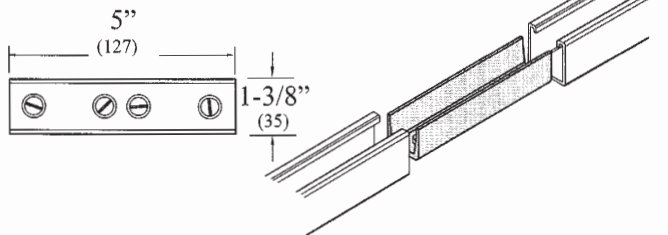
"X" intersplice
 for 1-5/8" (41.3) deep channels



VF-5905-A

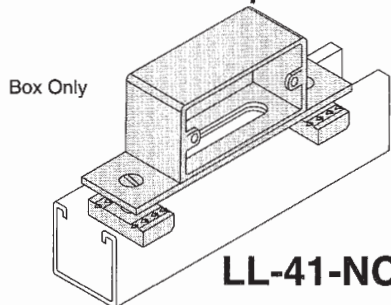
Weight each .22# (.10 kg)

long intersplice
 for 1-5/8" (41.3) deep channels

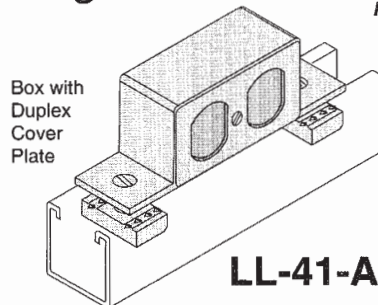


LL-41 Receptacle Housing Series

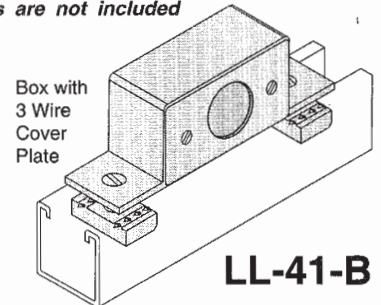
All boxes include VN-1025 Channel Nuts and Flat Head Machine Screws
 Receptacles are not included



Wgt per "C" 90 lbs. (41 kg)



Wgt per "C" 100 lbs. (45 kg)



Wgt per "C" 100 lbs. (45 kg)



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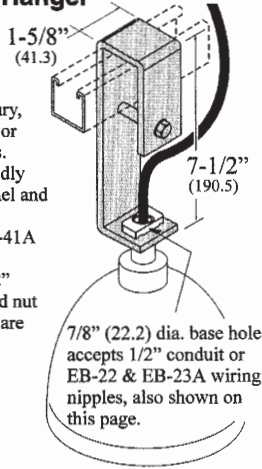
ILLUMINATION SYSTEMS SUPPORTS

VF-7105-A

Wt. "C" 197 Lbs.
(89.4 kg.)

Clevis Fixture Hanger

Clevis hanger for suspension of mercury, metal halide, H.P.S. or heavy incandescents. Supports fixture rigidly from raceway channel and allows for plug-in connection with LL-41A or B. For use with channels up to 2-1/2" (63.5) deep. Bolt and nut for clamping action are included.

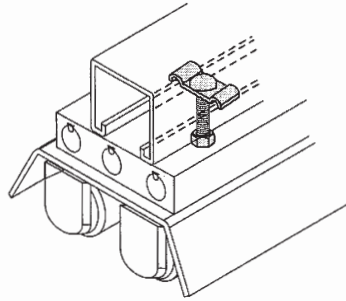


7/8" (22.2) dia. base hole accepts 1/2" conduit or EB-22 & EB-23A wiring nipples, also shown on this page.

FF-100

Wt. "C" 6 Lbs.
(2.7 kg.)

Fixture Stud Nut Assembly

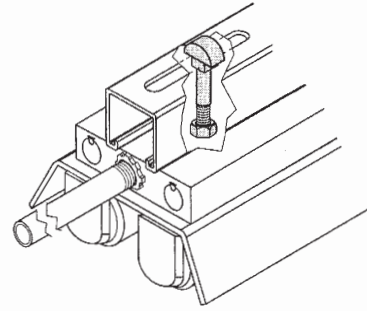


1/4"-20 x 1-1/4" stud nut for fixture attachment. Stud extends 1" (25.4) below channel slot. Hex nut included.

FF-200

Wt. "C" 10 Lbs.
(4.5 kg.)

Fixture Shoulder Bolt

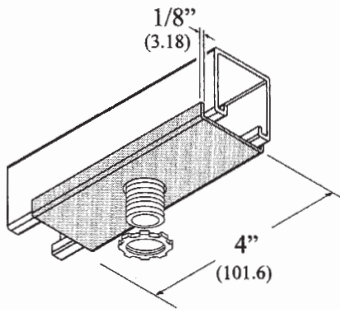


3/8"-16 X 2-1/4" shoulder bolt with special head to fit through P3S channel slots. Bolt extends 3/4" (19.1) below 1-5/8" (41.3) square channels. Hex nut included.

LL-60

Wt. "C" 25 Lbs.
(11.3 kg.)

Fixture Spacer

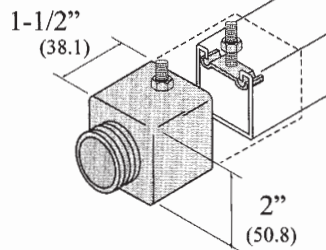


Spacer fits between channel and electric discharge lighting fixtures where 1/8" (3.2) clearance is required. Clearance hole for EB-22 wiring nipple nut also shown on this page. (Nipple and locknut not included.)

LL-21A

Wt. "C" 32 Lbs.
(14.5 kg.)

1" Nipple End Cap

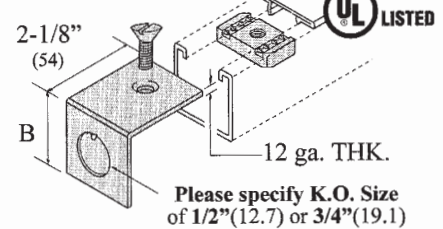


Conduit entry fitting with 1" NPT male thread on 9/16" long nipple. Fits 1-5/8" (41.3) square channel only. Comes complete with FF-100 stud nut assembly.



VF-1003A Series

Knock-Out End Cap



Please specify K.O. Size of 1/2" (12.7) or 3/4" (19.1)

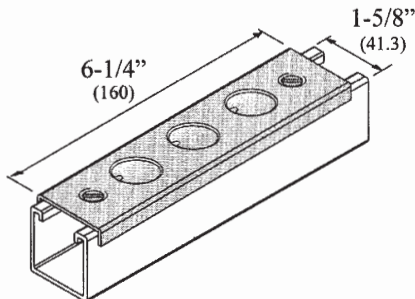
Conduit entry end cap with 1/2" (12.7) or 3/4" (19.1) opening. End cap is available to fit channel sizes of 1-3/8" (34.9) and deeper. 1/4" x 5/8" FHMS & VN-1025 included.

| Part # | Fits Channel | Dim "B" | Wgt. per "C" |
|-------------|--------------|---------------|--------------|
| | | | Lbs. kg |
| VF-1003A-6 | VA-6 & 7 | 1-3/8" (34.9) | 14# (6.4) |
| VF-1003A-1 | VA-1 & 2 | 1-5/8" (41.3) | 16# (7.3) |
| VF-1003A-3 | VA-3 | 2-1/2" (63.5) | 20# (9.1) |
| VF-1003A-11 | VA-11 | 3-1/4" (82.5) | 24# (11) |

LL-50A

Wt. "C" 36 Lbs.
(16.3 kg.)

Outlet Plate

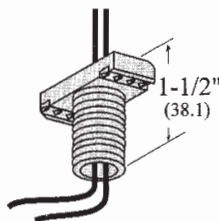


Outlet plate fitting. Three 7/8" (22.2) dia. K.O.'s on 1-3/16" (30.2) centers. Supplied ready to install with VN-1025 channel nuts and 1/4" x 5/8" flat head machine screws.

EB-22

Wt. "C" 21 Lbs.
(9.5 kg.)

Aluminum 1/2" Nipple Nut



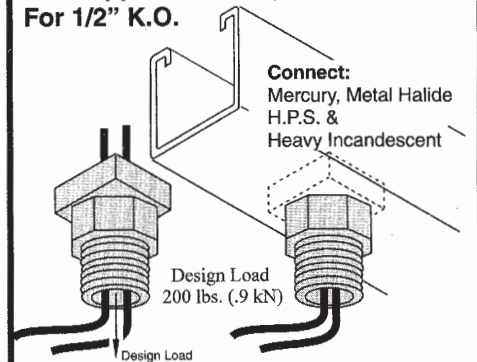
Universal design works with channel slot or K.O. Also works with fittings, hangers, and all other devices which have a 1/2" pipe thread K.O.



EB-23A

Wt. "C" 38 Lbs.
(17 kg.)

3/4" Nipple Assembly For 1/2" K.O.



This adaptor works with manufacturers standard 1/2" K.O. raceway channel or VF-7105-A fixture hanger. 3/4" male pipe thread nipple can be removed if 3/4" female thread is required.



VJB-1 Wt. "C" 160 Lbs. (73 kg.)
Raceway End Box Assembly

FF-100 Included

1-5/8" (41.3)

1-5/8" (41.3)

K.O. for 1" conduit or add additional LL-21A connectors

STEEL K.O. BOXES ARE LISTED BY MANUFACTURER
 LL-21A COUPLING DEVICE LISTED BY VERSABAR

VJB-2 Wt. "C" 210 Lbs. (95 kg.)
Raceway Straight Box Assembly

2 x FF-100 Included

1-5/8" (41.3)

1-5/8" (41.3)

K.O. for 1" conduit or add additional LL-21A connectors

STEEL K.O. BOXES ARE LISTED BY MANUFACTURER
 LL-21A COUPLING DEVICE LISTED BY VERSABAR

VJB-3 Wt. "C" 210 Lbs. (95 kg.)
Raceway Corner Box Assembly

2 x FF-100 Included

1-5/8" (41.3)

1-5/8" (41.3)

Rear K.O.'s for 1" conduit or add additional LL-21A connectors

STEEL K.O. BOXES ARE LISTED BY MANUFACTURER
 LL-21A COUPLING DEVICE LISTED BY VERSABAR

VJB-4 Wt. "C" 260 Lbs. (118 kg.)
Raceway 3 Way Box Assembly

3 x FF-100 Included

1-5/8" (41.3)

1-5/8" (41.3)

Rear K.O. for 1" conduit or add additional LL-21A connector

STEEL K.O. BOXES ARE LISTED BY MANUFACTURER
 LL-21A COUPLING DEVICE LISTED BY VERSABAR

VJB-5 Wt. "C" 3.15 Lbs. (1.43 kg.)
Raceway 4 Way Box Assembly

4 x FF-100 Included

1-5/8" (41.3)

1-5/8" (41.3)

STEEL K.O. BOXES ARE LISTED BY MANUFACTURER
 LL-21A COUPLING DEVICE LISTED BY VERSABAR

Raceway Box Versatility
 Make additional connections
 Through any open K.O. with LL-21A

LL-21A
 UL LISTED

STEEL K.O. BOXES ARE LISTED BY MANUFACTURER
 LL-21A COUPLING DEVICE LISTED BY VERSABAR

EB-19A, 3/4 & 1/2
Raceway Conduit Connector
 EB-19A1/2 Wt. "C" 98Lbs. (44 kg.)
 EB-19A3/4 Wt. "C" 95Lbs. (43 kg.)

4-5/8" (117)

1-1/8" (28.6)

UL LISTED

Raceway supporting conduit connector. Fraction indicates conduit size. Furnished with 1/4"x1/2" set screw and mounting hardware for connection to channel.
Casting thread is for 3/4" conduit, reducer will be supplied for 1/2" conduit if ordered as EB-19A1/2

EB-20A, 3/4 & 1/2
Raceway Conduit Connector
 EB-20A1/2 or 3/4 Wt. "C" 25Lbs. (11 kg.)

5-1/8" (130)

1-1/8" (28.6)

UL LISTED

Non load bearing conduit connector. Fraction indicates conduit size. Furnished with mounting hardware for connection to channel. **Please specify conduit size.**

EB-25A Wt. "C" 71 Lbs. (32 kg.)
Raceway Conduit Swivel Connector
 fits 1/2" or 3/4" conduit thread

Check with factory for stock & delivery.

Neck is threaded for 3/4" conduit, but reducer is included for 1/2" conduit. Also includes mounting hardware for connection to channel.



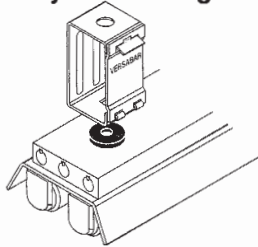
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ILLUMINATION SYSTEMS SUPPORTS

RW-25

Wt. "C" 1 Lbs.
(.45 kg.)

**Cushion Washer for
VF-7106 Style Box Hangers**

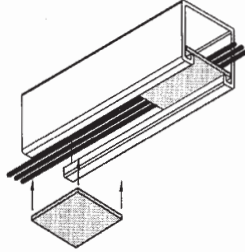


Provides a cushion between fluorescent fixture and hanger. For use with 1/4" thread diameter fasteners.

LL-42

Wt. "C" .3 Lbs.
(.12 kg.)

Fibre Wire Retainer



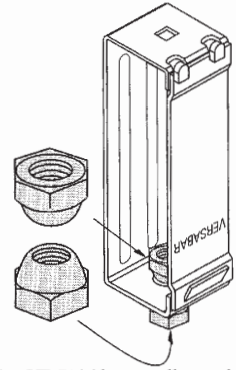
Holds wire in place while VA-9 closure strip is installed. Fits all raceway channels.

SWN

Swivel Nuts

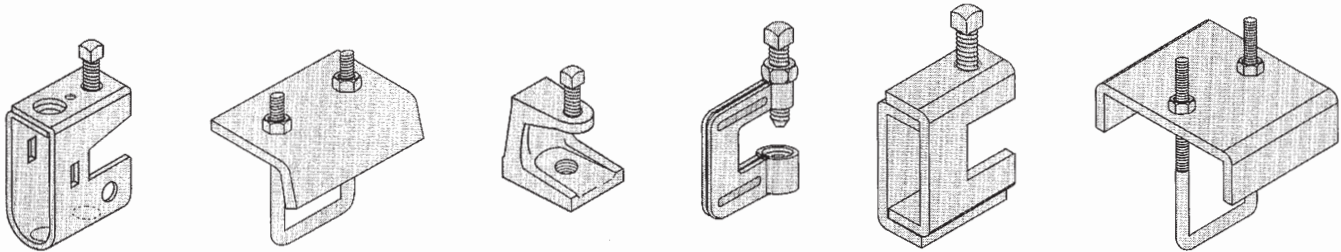
SWN-37 (3/8" thd.)
SWN-50 (1/2" thd.)

Wt. "C" 7 Lbs.
(3.2 kg.)



Two opposing nuts with a VF-7106 hanger allow rod to swivel below. Available with 3/8"-16, or 1/2"-13 thread.

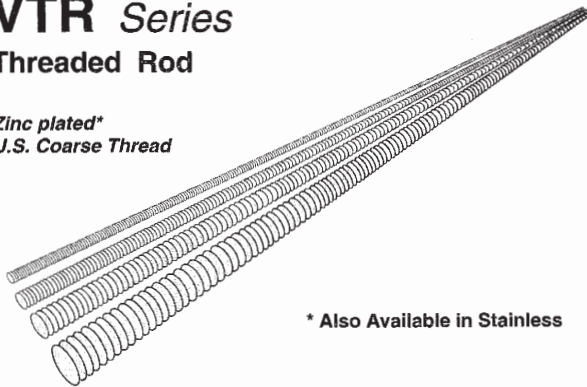
Raceway Support Beam Clamps*



***Abbreviated Listing:** Our full line of beam clamps can be found on pages D-14 through D-18. Loading data and general specifications are provided as well.

VTR Series Threaded Rod

Zinc plated*
U.S. Coarse Thread

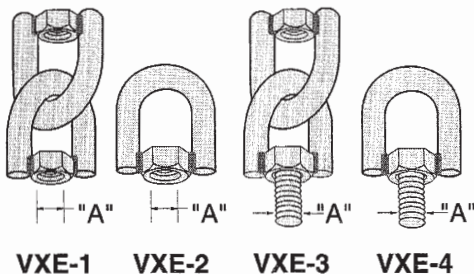


* Also Available in Stainless

| Part Number | Thread Dia. | Length | Weight Per "C" Pcs. | Nom. Rod Dia. | Root Area In ² | mm | Max. Safe Load @ Temperature 650 Deg F (343C) |
|-------------|-------------|-------------|---------------------|---------------|---------------------------|-------|---|
| VTR-25-6 | 1/4"-20 | 6' (1.83m) | 77 lbs (35kg.) | | | | |
| VTR-25-10 | 1/4"-20 | 10' (3.05m) | 128 lbs. (58kg.) | | | | |
| VTR-25-12 | 1/4"-20 | 12' (3.66m) | 154 lbs. (70kg.) | | | | |
| VTR-37-6 | 3/8"-16 | 6' (1.83m) | 174 lbs. (79kg.) | 3/8" | .068 | 43.9 | 610 lbs.(2.7 kN) |
| VTR-37-10 | 3/8"-16 | 10' (3.05m) | 290 lbs.(132kg.) | 1/2" | .126 | 81.3 | 1130 lbs.(5.0 kN) |
| VTR-37-12 | 3/8"-16 | 12' (3.66m) | 348 lbs.(158kg.) | 5/8" | .202 | 130.4 | 1810 lbs.(8.0 kN) |
| VTR-50-6 | 1/2"-13 | 6' (1.83m) | 324 lbs.(147kg.) | | | | |
| VTR-50-10 | 1/2"-13 | 10' (3.05m) | 540 lbs.(245kg.) | | | | |
| VTR-50-12 | 1/2"-13 | 12' (3.66m) | 648 lbs.(294kg.) | | | | |
| VTR-62-6 | 5/8"-11 | 6' (1.83m) | 507 lbs.(230kg.) | | | | |
| VTR-62-10 | 5/8"-11 | 10' (3.05m) | 845 lbs.(384kg.) | | | | |
| VTR-62-12 | 5/8"-11 | 12' (3.66m) | 1014 lbs.(460kg.) | | | | |

Loading data per A.S.A B31.1-1973
Pertains to rod conforming to:
ASTM A575 & A576

VXE Series Swivel Eyelets



| Part Number | Thread Dia. | Weight Per "C" |
|-------------|-------------|-------------------|
| VXE-1-3/8 | 3/8"-16 | 22 lbs. (10.0 kg) |
| VXE-2-3/8 | 3/8"-16 | 11 lbs. (5.0 kg) |
| VXE-3-3/8 | 3/8"-16 | 25 lbs. (11.4 kg) |
| VXE-4-3/8 | 3/8"-16 | 14 lbs. (6.4 kg) |
| VXE-1-1/2 | 1/2"-13 | 28 lbs. (12.7 kg) |
| VXE-2-1/2 | 1/2"-13 | 14 lbs. (6.4 kg) |
| VXE-3-1/2 | 1/2"-13 | 33 lbs. (15.0 kg) |
| VXE-4-1/2 | 1/2"-13 | 19 lbs. (8.6 kg) |

| Part Number | Thread Dia. | Weight Per "C" |
|-------------|-------------|-------------------|
| VXE-1-5/8 | 5/8"-11 | 36 lbs. (16.3 kg) |
| VXE-2-5/8 | 5/8"-11 | 18 lbs. (8.2 kg) |
| VXE-3-5/8 | 5/8"-11 | 44 lbs. (20.0 kg) |
| VXE-4-5/8 | 5/8"-11 | 24 lbs. (10.8 kg) |
| VXE-1-3/4 | 3/4"-10 | 56 lbs. (25.4 kg) |
| VXE-2-3/4 | 3/4"-10 | 28 lbs. (12.7 kg) |
| VXE-3-3/4 | 3/4"-10 | 60 lbs. (27.2 kg) |
| VXE-4-3/4 | 3/4"-10 | 32 lbs. (14.5 kg) |



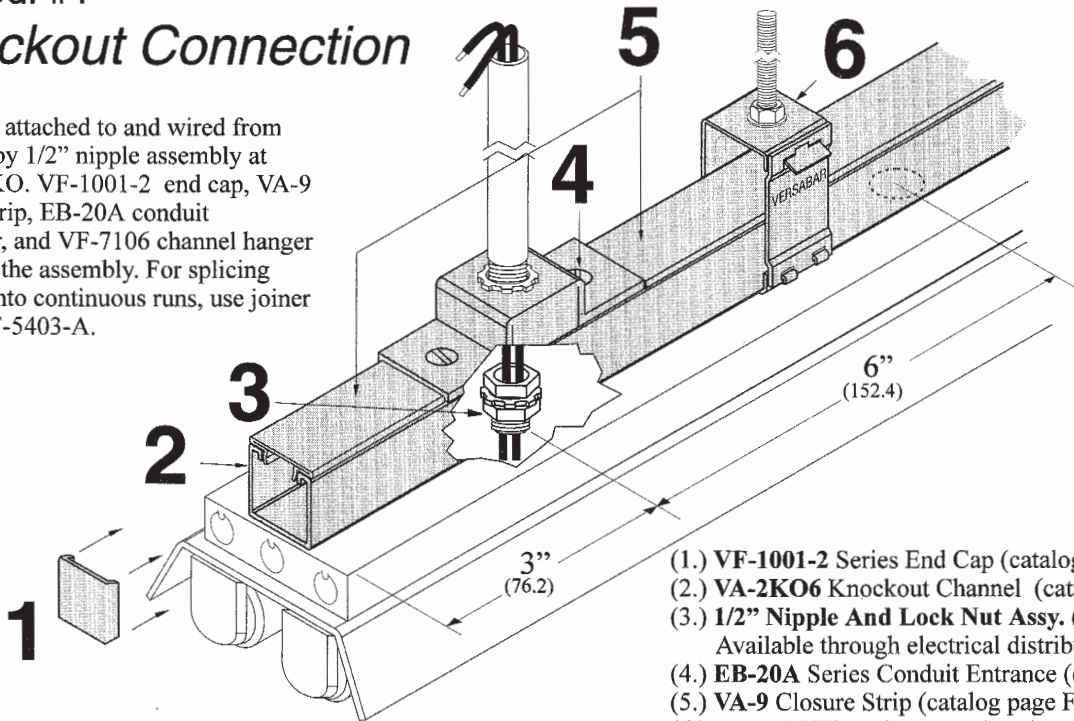
Raceway Construction

Channel specifications
 in section "A"

Method: #1

Knockout Connection

Fixture is attached to and wired from raceway by 1/2" nipple assembly at channel KO. VF-1001-2 end cap, VA-9 closure strip, EB-20A conduit connector, and VF-7106 channel hanger complete the assembly. For splicing channel into continuous runs, use joiner fitting VF-5403-A.



- (1.) VF-1001-2 Series End Cap (catalog page F-4)
- (2.) VA-2KO6 Knockout Channel (catalog page A-3)
- (3.) 1/2" Nipple And Lock Nut Assy. (non Versabar items)
 Available through electrical distributor.
- (4.) EB-20A Series Conduit Entrance (catalog page F-9)
- (5.) VA-9 Closure Strip (catalog page F-4)
- (6.) VF-7106 Hinged Hanger (catalog page F-5)

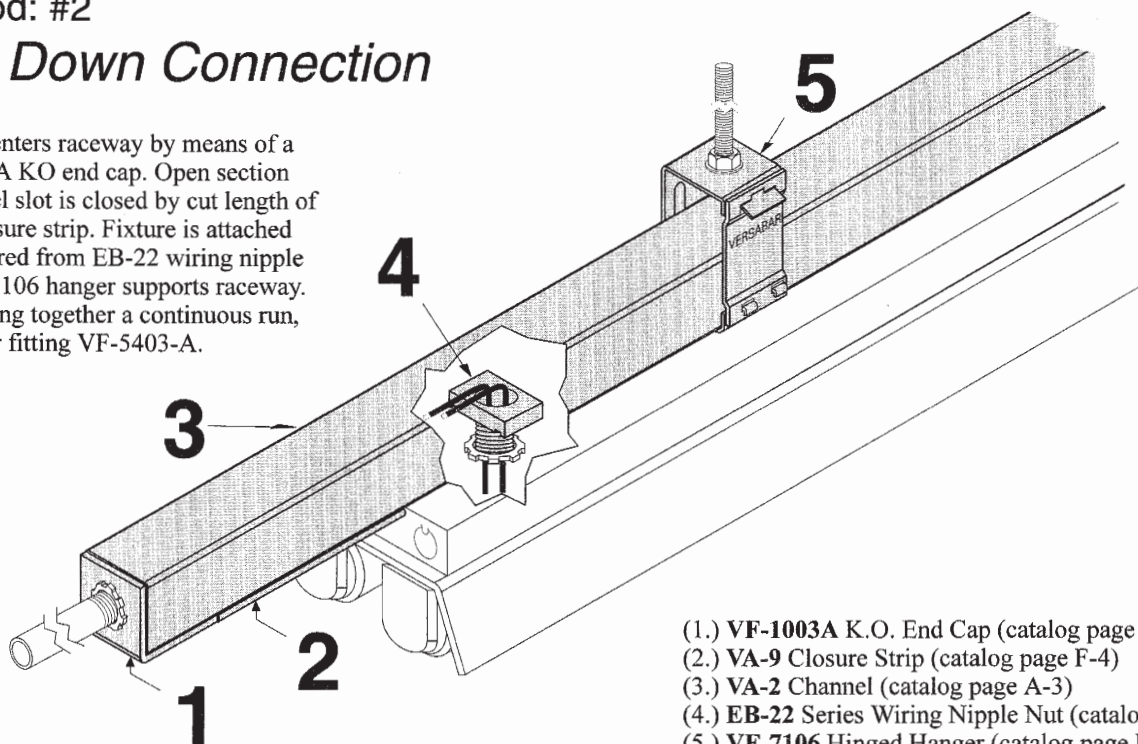
Raceway Construction

Channel specifications
 in section "A"

Method: #2

Slot Down Connection

Conduit enters raceway by means of a VF-1003A KO end cap. Open section of channel slot is closed by cut length of VA-9 closure strip. Fixture is attached to and wired from EB-22 wiring nipple nut. VF-7106 hanger supports raceway. For splicing together a continuous run, use joiner fitting VF-5403-A.



- (1.) VF-1003A K.O. End Cap (catalog page F-8)
- (2.) VA-9 Closure Strip (catalog page F-4)
- (3.) VA-2 Channel (catalog page A-3)
- (4.) EB-22 Series Wiring Nipple Nut (catalog page F-8)
- (5.) VF-7106 Hinged Hanger (catalog page F-5)

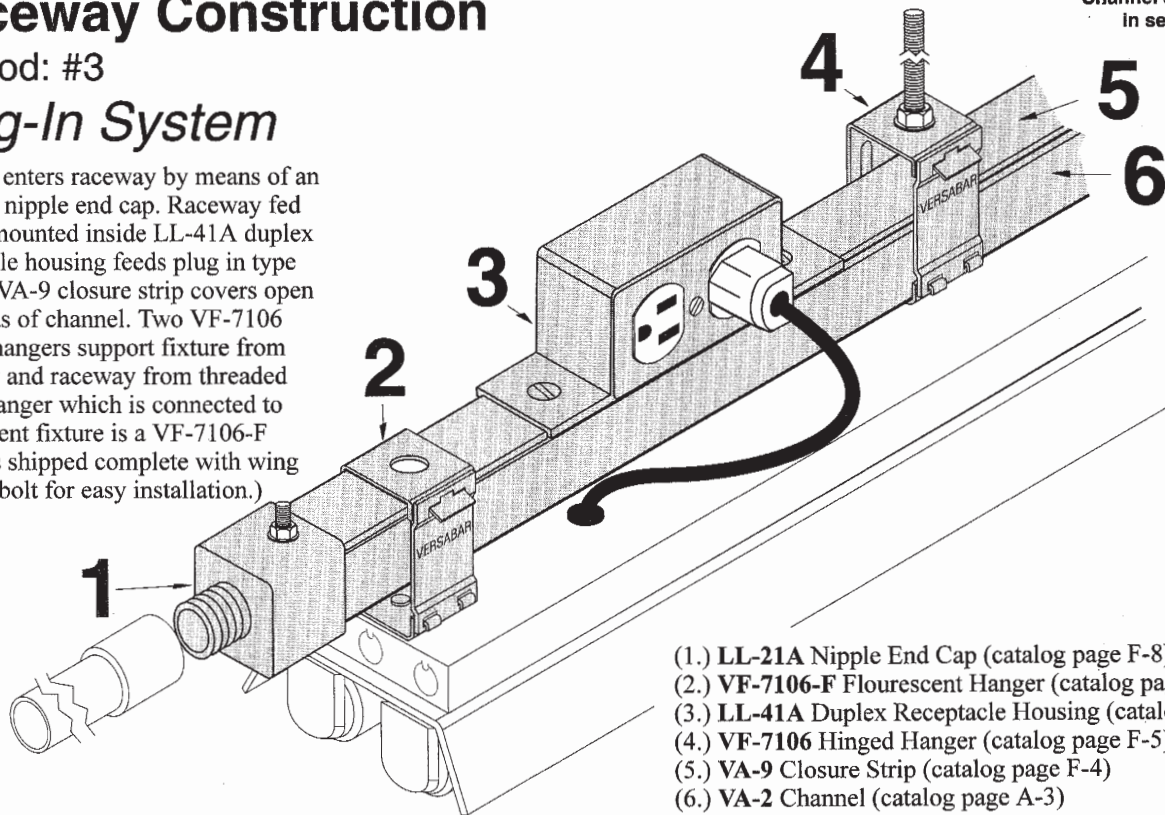


Raceway Construction

Method: #3

Plug-In System

Conduit enters raceway by means of an LL-21A nipple end cap. Raceway fed outlets mounted inside LL-41A duplex receptacle housing feeds plug in type fixture. VA-9 closure strip covers open slot areas of channel. Two VF-7106 hinged hangers support fixture from raceway and raceway from threaded rod. (Hanger which is connected to fluorescent fixture is a VF-7106-F which is shipped complete with wing nut and bolt for easy installation.)



Channel specifications
in section "A"

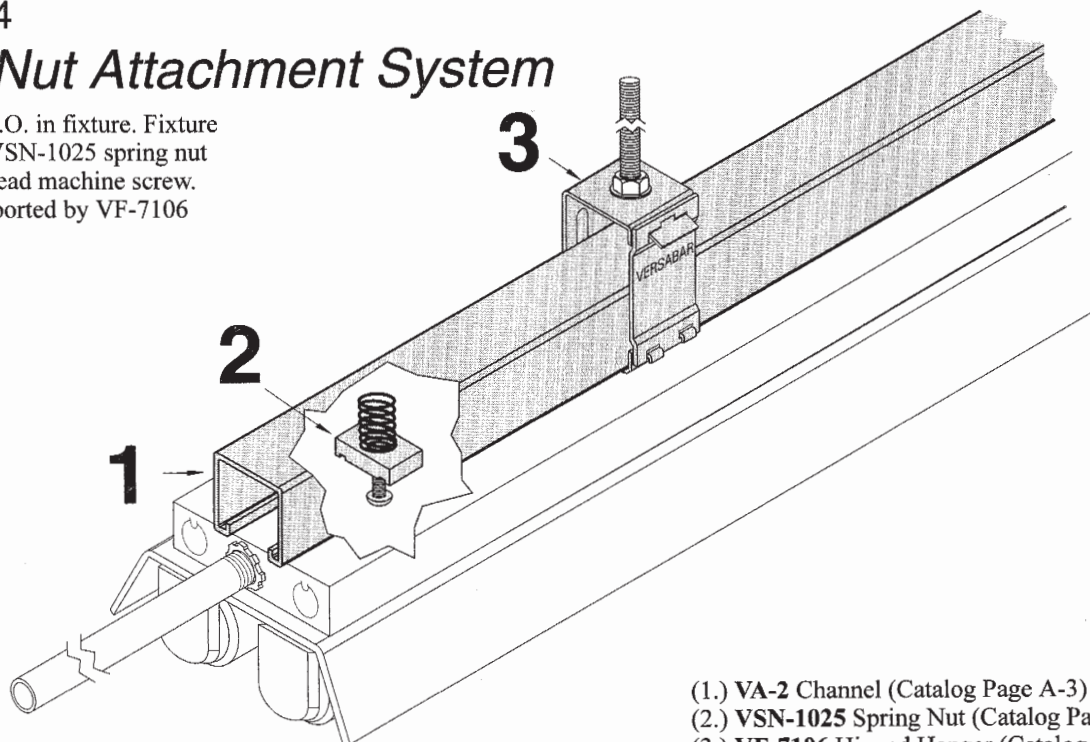
- (1.) LL-21A Nipple End Cap (catalog page F-8)
- (2.) VF-7106-F Fluorescent Hanger (catalog page F-5)
- (3.) LL-41A Duplex Receptacle Housing (catalog page F-7)
- (4.) VF-7106 Hinged Hanger (catalog page F-5)
- (5.) VA-9 Closure Strip (catalog page F-4)
- (6.) VA-2 Channel (catalog page A-3)

Solid Channel Track System

Method: #4

Spring Nut Attachment System

Conduit enters K.O. in fixture. Fixture is supported by VSN-1025 spring nut and 1/4" round head machine screw. Assembly is supported by VF-7106 hinged hanger.



Channel specifications
in section "A"

- (1.) VA-2 Channel (Catalog Page A-3)
- (2.) VSN-1025 Spring Nut (Catalog Page B-4)
- (3.) VF-7106 Hinged Hanger (Catalog Page F-5)



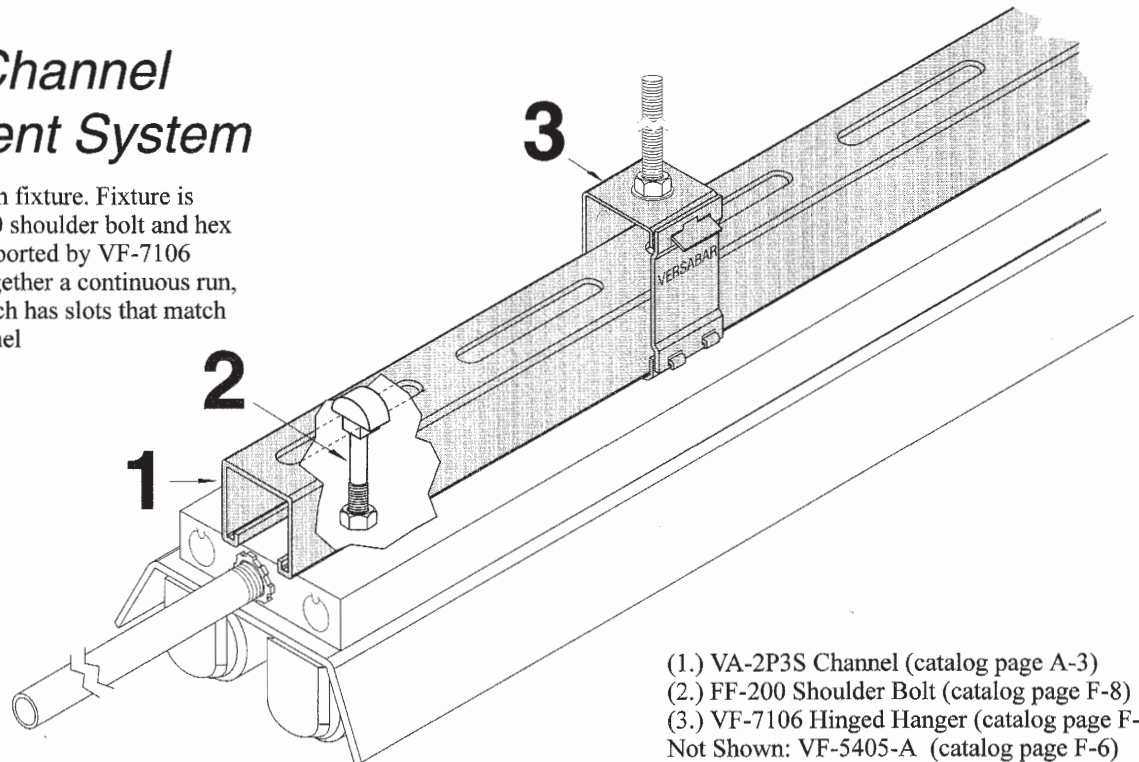
Slotted Channel Track System

Channel specifications
in section "A"

Method: #5

Slotted Channel Attachment System

Conduit enters KO in fixture. Fixture is supported by FF-200 shoulder bolt and hex nut. Raceway is supported by VF-7106 hanger. To splice together a continuous run, use VF-5405-A which has slots that match P3S pattern of channel



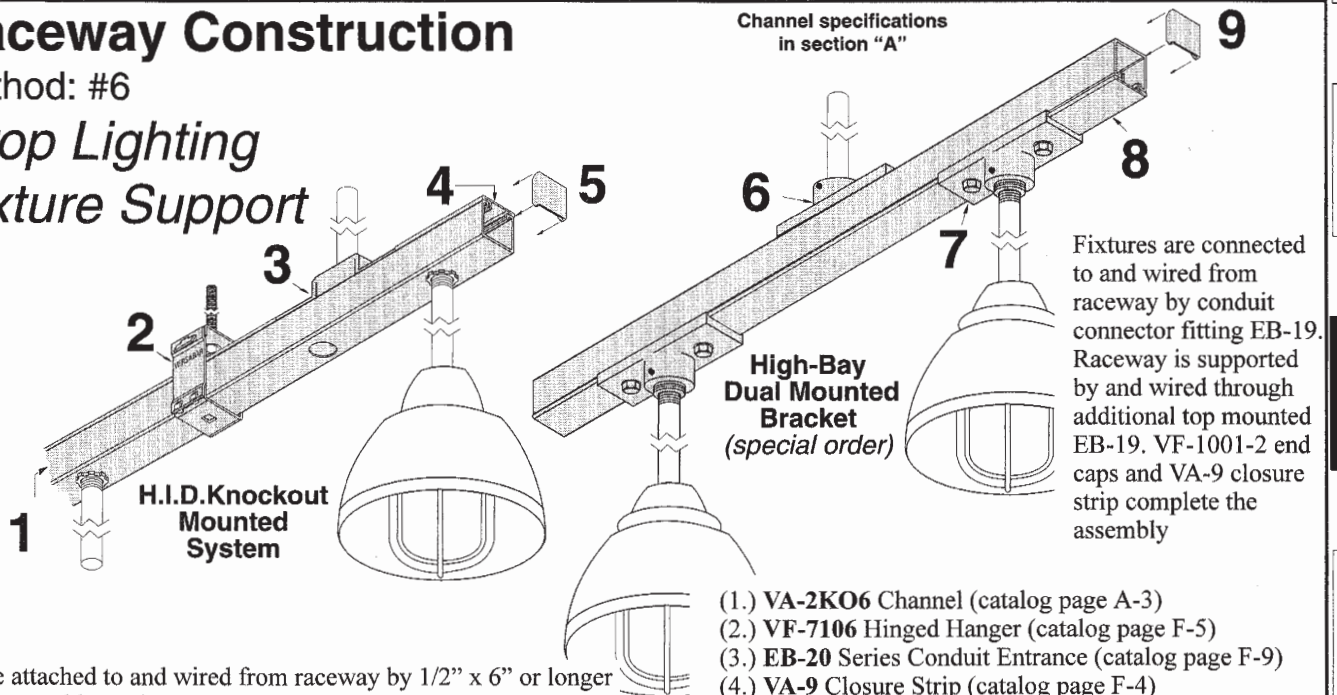
- (1.) VA-2P3S Channel (catalog page A-3)
- (2.) FF-200 Shoulder Bolt (catalog page F-8)
- (3.) VF-7106 Hinged Hanger (catalog page F-5)
- Not Shown: VF-5405-A (catalog page F-6)

Raceway Construction

Method: #6

Drop Lighting Fixture Support

Channel specifications
in section "A"



Fixtures are connected to and wired from raceway by conduit connector fitting EB-19. Raceway is supported by and wired through additional top mounted EB-19. VF-1001-2 end caps and VA-9 closure strip complete the assembly

- (1.) VA-2KO6 Channel (catalog page A-3)
- (2.) VF-7106 Hinged Hanger (catalog page F-5)
- (3.) EB-20 Series Conduit Entrance (catalog page F-9)
- (4.) VA-9 Closure Strip (catalog page F-4)
- (5.) VF-1001 End Cap (catalog page F-4)
- (6.) & (7.) EB-19 Conduit Connector (catalog page F-9)
- (8.) VA-9 Closure Strip (catalog page F-4)
- (9.) VF-1001-2 End Cap (catalog page F-4)
- Note: Some Identical Parts Listed Twice

Fixture attached to and wired from raceway by 1/2" x 6" or longer nipple assembly at channel K.O.. VF-1001 end cap, VA-9 closure strip, EB-20A conduit connector, and VF-7106 channel hanger complete assembly. For splicing channels into continuous raceway runs, use joiner fitting VF-5403-A. Additional fixtures can be added at any K.O. point along raceway. (K.O.'s on 6" (152) centers)



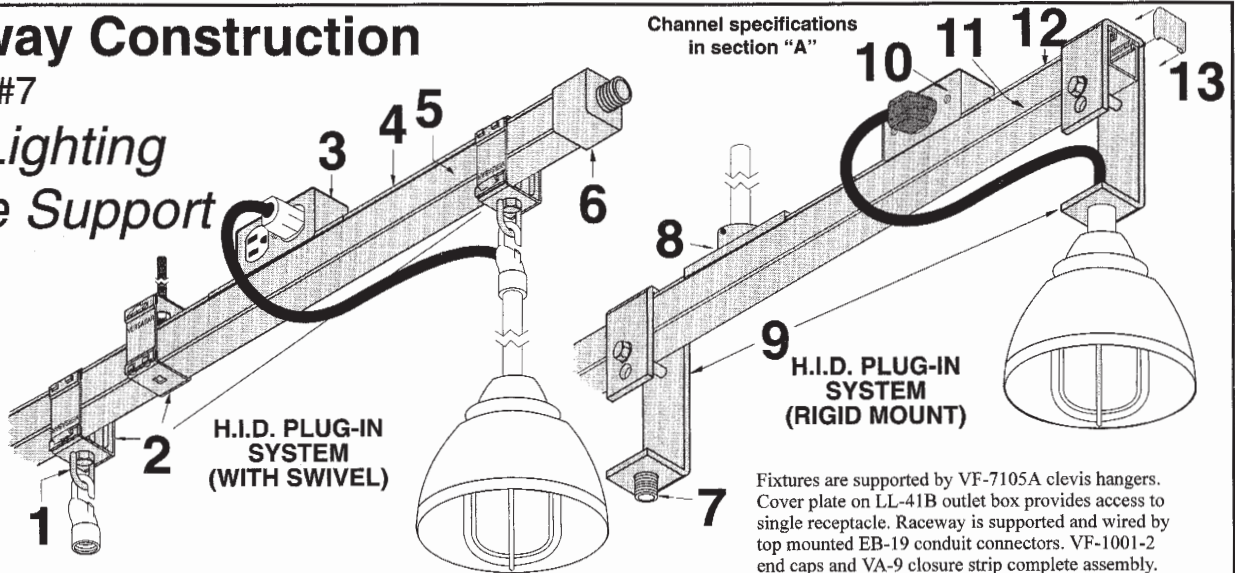
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RACEWAY INSTALLATION EXAMPLES

Raceway Construction

Method: #7

Drop Lighting Fixture Support



Fixtures, supported by VF-7106 hangers and VXE-4 eyelets, plug into receptacle mounted in LL-41A outlet box. VF-7106 hangers also support raceway. Use VF-5403-A splices for continuous raceways. VF-1001-2 end caps (not shown) and VA-9 closure strip complete assembly.

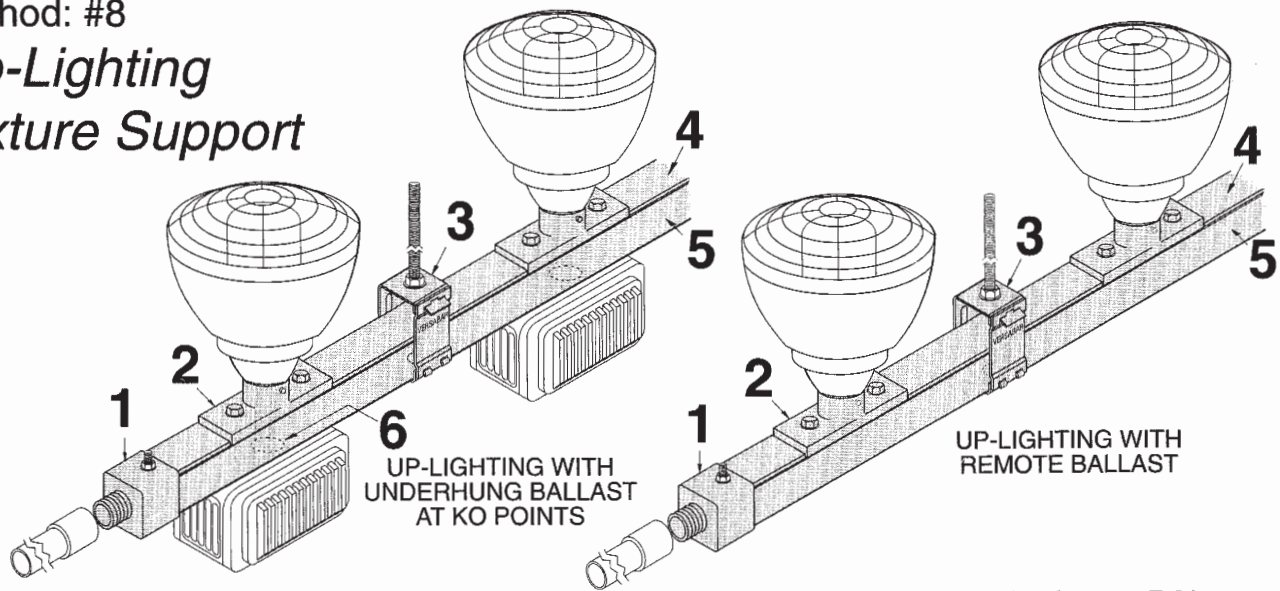
- (1.) VXE-4 Swivel Hanger (catalog page F-10)
- (2.) VF-7106 Hinged Hanger (catalog page F-5)
- (3.) LL-41A Duplex Receptacle Housing (catalog page F-7)
- (4.) VA-9 Closure Strip (catalog page F-4)
- (5.) VA-2 Channel (catalog page A-3)
- (6.) LL-21A Nipple End Cap (catalog page F-8)

- (7.) EB-22 Wiring Nipple Nut (catalog page F-8)
- (8.) EB-19 Conduit Connector (catalog page F-9)
- (9.) VF-7105A Clevis Hanger (catalog page F-8)
- (10.) LL-41B Single Receptacle Housing (catalog page F-7)
- (11.) VA-2 Channel (catalog page A-3)
- (12.) VA-9 Closure Strip (catalog page F-4)

Raceway Construction

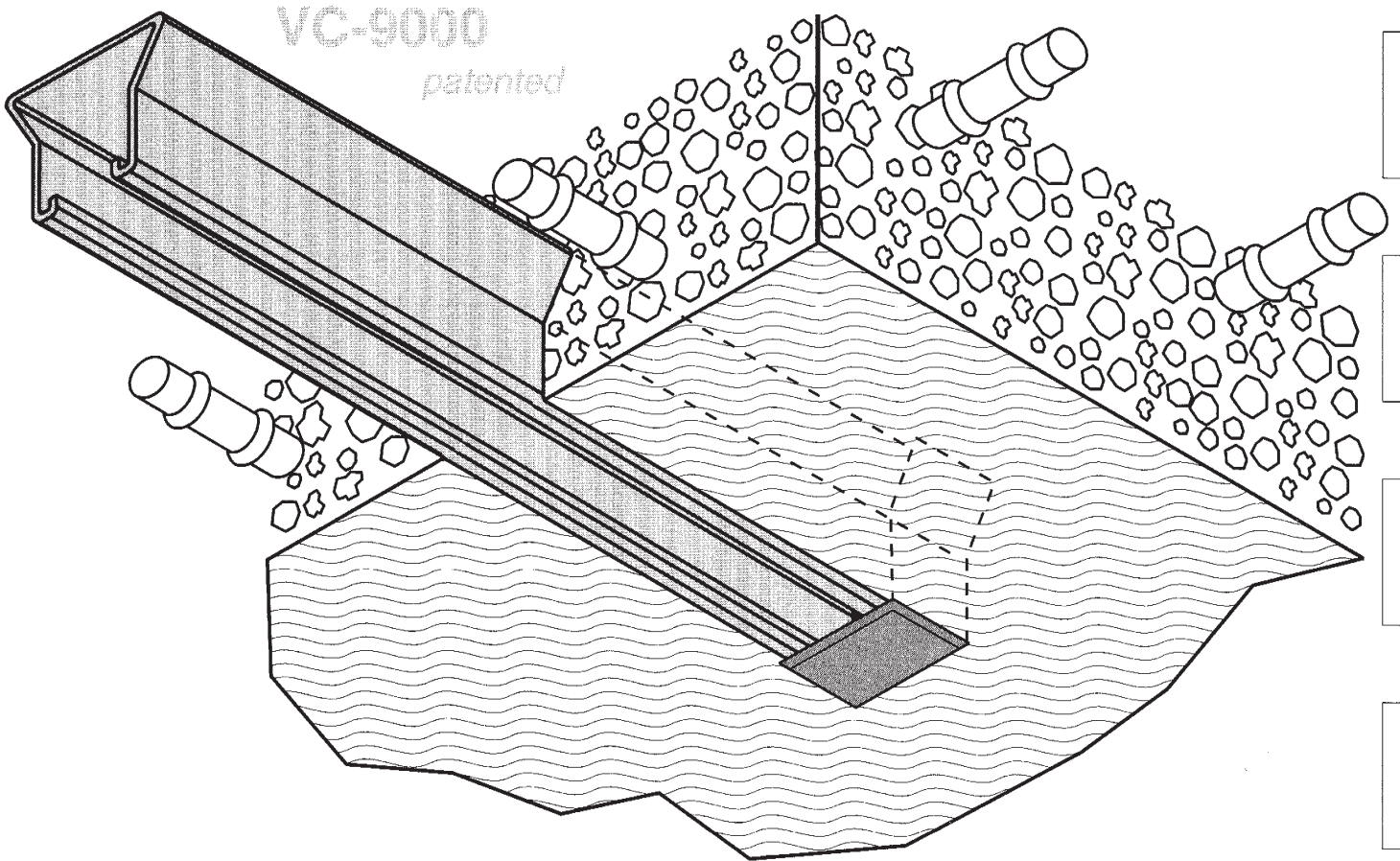
Method: #8

Up-Lighting Fixture Support



Fixtures attached to and wired from EB-19's which are mounted to slot side of channel. Raceway can be wired by LL-21A nipple end cap as shown or in illustration #1, conduit can enter through available KO. Ballasts in illustration #1 are connected at K.O. by EB-23A fixture adaptor. In remote ballast installations (figure #2) follow manufacturers instructions. VF-7106 hinged hangers support both types of installations. VA-9 closure strip and VF-1001-2 end caps complete assembly. For continuous raceways, use joiner fitting VF-5403-A.

- (1.) LL-21A Nipple End Cap (catalog page F-8)
- (2.) EB-19 Conduit Connector (catalog page F-9)
- (3.) VF-7106 Hinged Hanger (catalog page F-5)
- (4.) VA-9 Closure Strip (catalog page F-4)
- (5.) Illus #1: VA-2KO6, Illus #2: VA-2 (catalog page A-3)
- (6.) K.O. For EB-23A Ballast Connector (catalog page F-8)



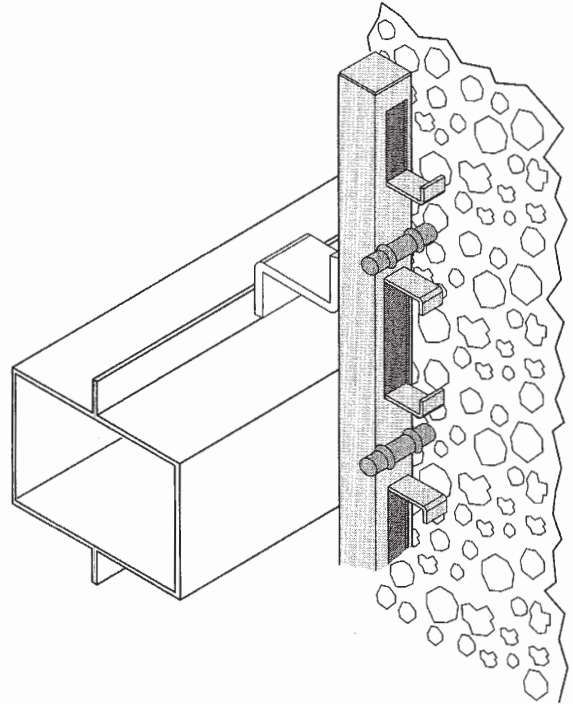
**Concrete
Inserts**
Section G



VERSABAR CORPORATION

SECTION "G" INTRODUCTION

| | |
|----------------------------|-----------|
| Hook Type Channel Inserts | G-3 & G-4 |
| Wedge Type Channel Inserts | G-4 & G-5 |
| VC1 Spot Inserts | G-6 |
| VCN Square Insert Nuts | G-6 |
| Insert End Caps | G-6 |
| Foam Filler Strip | G-6 |
| Independent Test Results | G-7 & G-8 |



Material:

Pre-Galvanized channel inserts are cold roll formed from mill galvanized carbon steel and conform to ASTM A653, Structural Quality Grade 33. Unfinished inserts are cold roll formed from carbon steel and conform to ASTM A570 Grade 33. Standard channel width is 1-5/8" (41.3). Spot inserts are manufactured from Hot Rolled Pickled and Oiled steel plate, strip, or coil, unless otherwise shown. Steel shall be in accordance with ASTM #'s: A575, A576, A635 or A36. VCN insert nuts also meet the physical requirements of ASTM A570 GR 33.

Finishes:

Standard finish of galvanized channel inserts is G-90 Grade, conforming to ASTM A653 GR 33. Fittings are Electro-Galvanized conforming to ASTM B633 Type III SC1.

Dimensions:

All dimensions are in inches except where noted. Metric dimensions are shown in parenthesis. Unless noted, metric dimensions are in millimeters.

Load Data:

Load ratings for the devices listed in this section, where provided, are based on a safety factor of (3).

Threads:

Unless noted otherwise, fasteners and channel nuts shown in this section are U.S. Coarse thread.

Torque:

Fastener diameter dictates desired torque.

| | |
|----------|-------------|
| 1/4"-20 | 6 ft/lbs. |
| 5/16"-18 | 11 ft/lbs. |
| 3/8"-16 | 19 ft/lbs. |
| 1/2"-13 | 50 ft/lbs. |
| 5/8"-11 | 100 ft/lbs. |
| 3/4"-10 | 125 ft/lbs. |

VERSABAR CORPORATION

VA-1 & VA-4, HOOK TYPE CHANNEL INSERTS

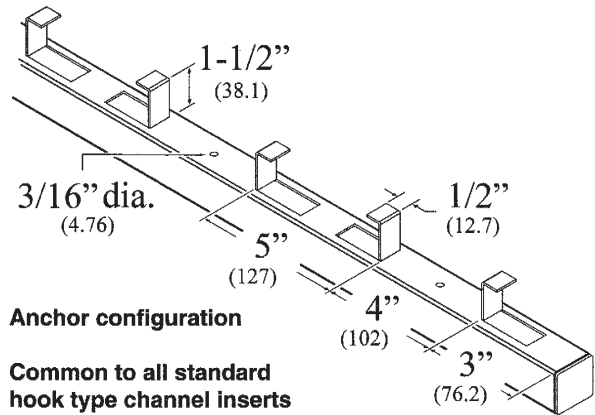


***Our Inserts Are Shipped Fully Assembled,
Ready For Installation.***

VERSABAR hook style inserts are available in VA-1, VA-4, VA-6, and VA-10 channel sizes, with either a galvanized or plain finish. Continuous inserts provide economical and convenient attachment points for all strut system components without the use of hazardous powder actuated fasteners or costly drilling. Connections can be made at any point along the slot opening by using lateral locking nuts or square insert nuts described in section B. Square nuts shown on page G-5 may be used with VC-1000, VC-6000 or VC-10000 Series inserts. VC-4000 inserts require nuts specifically designed for VA-4 channel as listed in Section B. Hook style anchors are lanced out of the channel spine and spaced as shown in the accompanying diagram. 3/16" diameter knock-outs are spaced at 9-inch intervals for nailing inserts to the form. **Continuous hook style inserts are shipped ready for installation** with factory installed Cello-Foam filler strip, taped spine openings, and end caps to prevent concrete seepage. Hook style inserts 18" or shorter are factory equipped with anchor style end caps.

NOTE: To reach maximum resistance to pull out of the nut in continuous concrete inserts, a fitting should be mounted on the slot surface and the rod or bolt connected as shown on introduction page 4 in the front section of this catalog. Without the exterior fitting, the nut pull out resistance is reduced to approximately one half the normal pull out rating.

Pull out load ratings for channel nuts are shown on page B-3 of this catalog. Independent laboratory tests of VERSABAR concrete insert anchoring capabilities are documented on page G-7 & G-8 of this section.



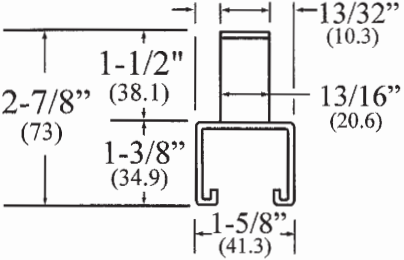
NOTE: Under no circumstances subject any channel insert to a load without a 1/4" (6.4mm) thick fitting, bracket, or pipe support, mounted on the channel slot surface. Refer to introduction page #4 of this catalog.

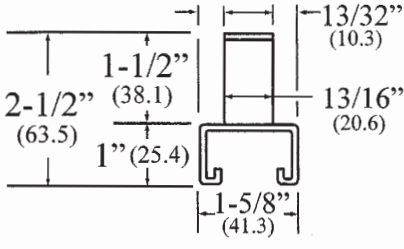
| VC-1000 Series (VA-1 Insert - 12 ga.) Wt. 1.98 lb / Ft (2.95 kg / m) | | NOTE : Last three digits in insert part #'s convert to total length of insert. First digit(s) indicate channel part number. | | | | | |
|---|---------|---|----------|----------------------|---|----------------------|--------------|
| | Part # | Length In/Ft (mm) | Part # | Length In/Ft (mm) | Part # | Length In/Ft (mm) | |
| | | VC-1003 | 3" (76) | VC-1054 | 4'-6" (1372) | VC-1114 | 9'-6" (2896) |
| | VC-1006 | 6" (152) | VC-1060 | 5'-0" (1524) | VC-1120 | 10'-0" (3048) | |
| | VC-1009 | 9" (229) | VC-1066 | 5'-6" (1676) | VC-1144 | 12'-0" (3658) | |
| | VC-1012 | 12" (305) | VC-1072 | 6'-0" (1829) | VC-1168 | 14'-0" (4267) | |
| | VC-1018 | 1'-6" (457) | VC-1078 | 6'-6" (1981) | VC-1192 | 16'-0" (4877) | |
| | VC-1024 | 2'-0" (610) | VC-1084 | 7'-0" (2134) | VC-1216 | 18'-0" (5486) | |
| | VC-1030 | 2'-6" (762) | VC-1090 | 7'-6" (2286) | VC-1240 | 20'-0" (6096) | |
| | VC-1036 | 3'-0" (914) | VC-1096 | 8'-0" (2438) | VC-1288 | 24'-0" (7315) | |
| | VC-1042 | 3'-6" (1067) | VC-1102 | 8'-6" (2591) | | | |
| | VC-1048 | 4'-0" (1219) | VC-1108 | 9'-0" (2743) | | | |
| | | | | | NOTE: Safe Uniform Design Load (12' or longer inserts) = 2130# per L.F. embedded in 3000 psi. or better concrete S.F.=3. (See introduction page 11) | | |
| VC-4000 Series (VA-4 Insert - 14 ga.) Wt. 1.09 lb / Ft (1.62 kg / m) | | NOTE : Last three digits in insert part #'s convert to total length of insert. First digit(s) indicate channel part number. | | | | | |
| | Part # | Length In/Ft (mm) | Part # | Length In/Ft (mm) | Part # | Length In/Ft (mm) | |
| | | VC-4009 | 9" (229) | VC-4060 | 5'-0" (1524) | VC-4114 | 9'-6" (2896) |
| | VC-4012 | 12" (305) | VC-4066 | 5'-6" (1676) | VC-4120 | 10'-0" (3048) | |
| | VC-4018 | 1'-6" (457) | VC-4072 | 6'-0" (1829) | VC-4144 | 12'-0" (3658) | |
| | VC-4024 | 2'-0" (610) | VC-4078 | 6'-6" (1981) | VC-4168 | 14'-0" (4267) | |
| | VC-4030 | 2'-6" (762) | VC-4084 | 7'-0" (2134) | VC-4192 | 16'-0" (4877) | |
| | VC-4036 | 3'-0" (914) | VC-4090 | 7'-6" (2286) | VC-4216 | 18'-0" (5486) | |
| | VC-4042 | 3'-6" (1067) | VC-4096 | 8'-0" (2438) | VC-4240 | 20'-0" (6096) | |
| | VC-4048 | 4'-0" (1219) | VC-4102 | 8'-6" (2591) | VC-4288 | 24'-0" (7315) | |
| | VC-4054 | 4'-6" (1372) | VC-4108 | 9'-0" (2743) | | | |
| | | | | | NOTE: Safe Uniform Design Load (12' or longer inserts) = 1200# per L.F. embedded in 3000 psi. or better concrete S.F.=3. (See introduction page 11) | | |



VERSABAR CORPORATION

HOOK and WEDGE TYPE CHANNEL INSERTS

| VC-6000 Series (VA-6 Insert - 12 ga.) Wt. 1.80 lb / Ft (2.68 kg / m) | | NOTE : Last three digits in insert part #'s convert to total length of insert. First digit(s) indicate channel part number. | | | | | |
|---|---------|---|---------|--------------|---|---------------|--|
|  | Part # | Length | Part # | Length | Part # | Length | |
| | | In/Ft (mm) | | In/Ft (mm) | | In/Ft (mm) | |
| | VC-6003 | 3" (76) | VC-6054 | 4'-6" (1372) | VC-6114 | 9'-6" (2896) | |
| | VC-6006 | 6" (152) | VC-6060 | 5'-0" (1524) | VC-6120 | 10'-0" (3048) | |
| | VC-6009 | 9" (229) | VC-6066 | 5'-6" (1676) | VC-6144 | 12'-0" (3658) | |
| | VC-6012 | 12" (305) | VC-6072 | 6'-0" (1829) | VC-6168 | 14'-0" (4267) | |
| | VC-6018 | 1'-6" (457) | VC-6078 | 6'-6" (1981) | VC-6192 | 16'-0" (4877) | |
| | VC-6024 | 2'-0" (610) | VC-6084 | 7'-0" (2134) | VC-6216 | 18'-0" (5486) | |
| | VC-6030 | 2'-6" (762) | VC-6090 | 7'-6" (2286) | VC-6240 | 20'-0" (6096) | |
| | VC-6036 | 3'-0" (914) | VC-6096 | 8'-0" (2438) | VC-6288 | 24'-0" (7315) | |
| | VC-6042 | 3'-6" (1067) | VC-6102 | 8'-6" (2591) | | | |
| | VC-6048 | 4'-0" (1219) | VC-6108 | 9'-0" (2743) | | | |
| | | | | | NOTE: Safe Uniform Design Load (12' or longer inserts) = 2000# per L.F. embedded in 3000 psi. or better concrete S.F.=3. (See introduction page 11) | | |

| VC-10000 Series (VA-10 Insert - 12 ga.) Wt. 1.54 lb / Ft (2.29 kg / m) | | NOTE : Last three digits in insert part #'s convert to total length of insert. First digit(s) indicate channel part number. | | | | | |
|---|----------|---|----------|--------------|---|---------------|--|
|  | Part # | Length | Part # | Length | Part # | Length | |
| | | In/Ft (mm) | | In/Ft (mm) | | In/Ft (mm) | |
| | VC-10003 | 3" (76) | VC-10054 | 4'-6" (1372) | VC-10114 | 9'-6" (2896) | |
| | VC-10006 | 6" (152) | VC-10060 | 5'-0" (1524) | VC-10120 | 10'-0" (3048) | |
| | VC-10009 | 9" (229) | VC-10066 | 5'-6" (1676) | VC-10144 | 12'-0" (3658) | |
| | VC-10012 | 12" (305) | VC-10072 | 6'-0" (1829) | VC-10168 | 14'-0" (4267) | |
| | VC-10018 | 1'-6" (457) | VC-10078 | 6'-6" (1981) | VC-10192 | 16'-0" (4877) | |
| | VC-10024 | 2'-0" (610) | VC-10084 | 7'-0" (2134) | VC-10216 | 18'-0" (5486) | |
| | VC-10030 | 2'-6" (762) | VC-10090 | 7'-6" (2286) | VC-10240 | 20'-0" (6096) | |
| | VC-10036 | 3'-0" (914) | VC-10096 | 8'-0" (2438) | VC-10288 | 24'-0" (7315) | |
| | VC-10042 | 3'-6" (1067) | VC-10102 | 8'-6" (2591) | | | |
| | VC-10048 | 4'-0" (1219) | VC-10108 | 9'-0" (2743) | | | |
| | | | | | NOTE: Safe Uniform Design Load (12' or longer inserts) = 2000# per L.F. embedded in 3000 psi. or better concrete S.F.=3. (See introduction page 11) | | |

Introducing the Versabar VC-9000 Flared Wedge insert

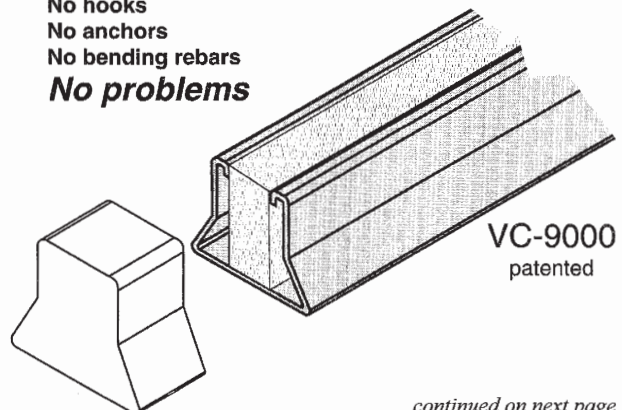
The VC-9000 inserts' exceptional load-bearing capacity is not dependent upon pierced or welded anchor hooks of any kind. The elimination of sharp edged hooks and straps makes the handling and installation of the VC-9000 much safer, faster, and more economical. **Its overall height is only 1-7/8". This low profile permits the VC-9000 to be installed between reinforcing bars and forms, and other locations with shallow clearances.** Its unique design precludes the possibility of installers bending anchors to avoid obstructions, thereby creating hidden load capacity reduction hazards of unknown magnitude. The VC-9000's solid back design eliminates concrete seepage through spine openings and thereby avoids costly chipping needed to remove hardened seepage.

The VC-9000 has a standard strut slot configuration, and accepts all standard strut system related components. Connections can be made at any point along the slot opening by using lateral locking nuts described in Section B or square nuts shown on page G-6.

Our flared wedge design causes the concrete to encase the VC-9000 during pouring, minimizing formation of air pockets. **The flared wedge shape locks the insert securely within the concrete and gives the VC-9000 superior loading capacity directly related to the concrete strength curve as described on the next page.** This exceptional strength characteristic is inherently compatible with modern concrete construction practices, and highly desirable in the precast and prestressed concrete fields.

VC-9000 inserts are shipped ready for installation, with end caps and foam strips to prevent seepage. Standard finish is pre-galvanized (G-90). This product is also available Hot dipped galvanized after fabrication, hot rolled pickled and oiled, or in stainless steel.

**No hooks
No anchors
No bending rebar
No problems**



continued on next page



Unlike hook type inserts, higher stress concrete increases VC-9000 loading capabilities

The VC-9000's distinctive shape, consisting of a standard strut channel backed by an abruptly flared wedge, is a multi-purpose design. In addition to incorporating the anchoring wedge, the design gives the insert an extremely rigid beam strength. This stiff beam characteristic helps the VC-9000 to distribute concentrated spot loads over its embedded length with maximum efficiency. Thus the VC-9000 minimizes spot loadings on the supporting concrete and simultaneously eliminates cracking problems caused by sharp edges of hook anchors which act as stress risers.

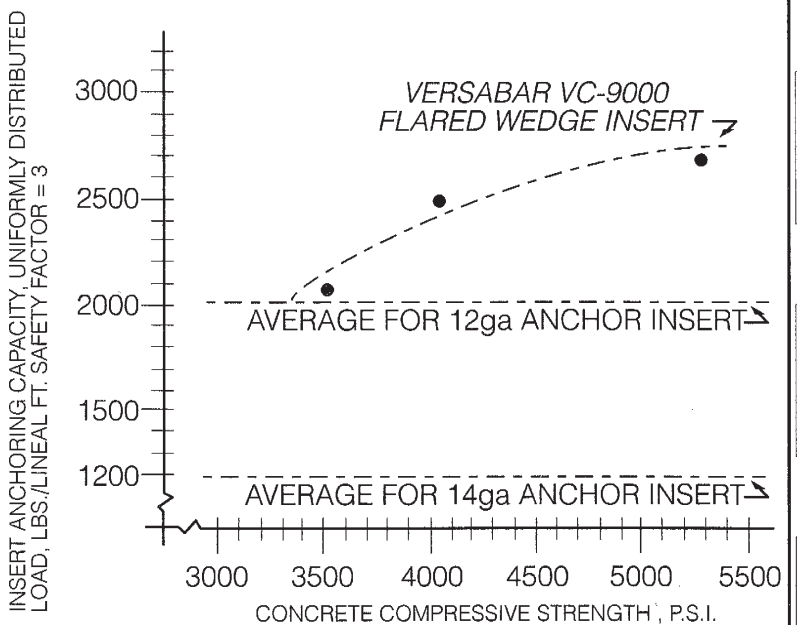
The VC-9000 does not rely on hooks or straps to anchor its load to the concrete but rather distributes the load evenly upon mating surfaces of concrete and insert wedge area. *Hook and strap inserts have an anchoring capacity determined by the anchor's resistance to pull out. Loading failures of this type insert are generally characterized by straightening or tearing of the hooks or straps during pull out. If the anchors are welded to the insert, then weld failure can further lower the loading capacity. Increasing the concrete's compressive strength above the minimum required does not increase the hook or strap style insert's loading capacity. Since the VC-9000's flared wedge locks the load within the encasing concrete, then by increasing the concrete's strength, the VC-9000's loading capacity is increased.* Because the VC-9000 has this unique loading characteristic, designers can take best advantage of the extra supportive strength automatically provided by the modern higher strength concretes.

The VC-9000's unique performance curve is illustrated in the graph to the right.

NOTE: To reach maximum resistance to pull out of the nut in continuous concrete inserts, a fitting should be mounted on the slot surface and the rod or bolt connected as shown on introduction page 4. **Without an exterior fitting, nut pull out resistance is reduced to approximately one half of the normal load rating.** Pull out load ratings for channel nuts are shown on page B-3. VCN style concrete insert nuts also work with VC-9000 and can be found on page G-6.

Independent laboratory tests of VC-9000 concrete inserts are documented on page G-7.

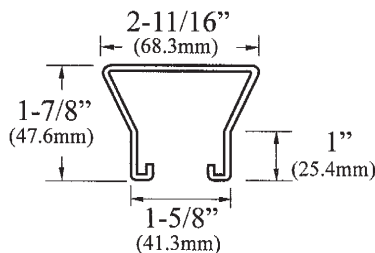
COMPARATIVE PERFORMANCE CHARACTERISTICS OF CONCRETE INSERTS IN HIGHER STRENGTH CONCRETES



VC-9000 Uniform Design Load (S.F. 3)
 In 3500 psi. concrete: **2100 lbs.** (9.4 kN) per L.F.
 In 4000 psi. concrete: **2500 lbs.** (11.3 kN) per L.F.
 In 5300 psi. concrete: **2650 lbs.** (11.9 kN) per L.F.
 (Loading types explained on Introduction Page #11)

VC-9000 Series

(12 ga.)
 Wt. 2.59 lb / Ft (3.48 kg / m)



NOTE : Last three digits in insert part #'s convert to total length of insert. First digit(s) indicate channel part number.

| Part # | Length | | Part # | Length | | Part # | Length | |
|---------|--------|--------|---------|--------|--------|---------|--------|--------|
| | In/Ft | (mm) | | In/Ft | (mm) | | In/Ft | (mm) |
| VC-9004 | 4" | (102) | VC-9054 | 4'-6" | (1371) | VC-9114 | 9'-6" | (2895) |
| VC-9006 | 6" | (152) | VC-9060 | 5'-0" | (1524) | VC-9120 | 10'-0" | (3048) |
| VC-9009 | 9" | (228) | VC-9066 | 5'-6" | (1676) | VC-9144 | 12'-0" | (3658) |
| VC-9012 | 12" | (305) | VC-9072 | 6'-0" | (1828) | VC-9168 | 14'-0" | (4267) |
| VC-9018 | 1'-6" | (457) | VC-9078 | 6'-6" | (1980) | VC-9192 | 16'-0" | (4877) |
| VC-9024 | 2'-0" | (610) | VC-9084 | 7'-0" | (2133) | VC-9216 | 18'-0" | (5486) |
| VC-9030 | 2'-6" | (762) | VC-9090 | 7'-6" | (2285) | VC-9240 | 20'-0" | (6096) |
| VC-9036 | 3'-0" | (914) | VC-9096 | 8'-0" | (2438) | VC-9288 | 24'-0" | (7315) |
| VC-9042 | 3'-6" | (1067) | VC-9102 | 8'-6" | (2590) | | | |
| VC-9048 | 4'-0" | (1219) | VC-9108 | 9'-0" | (2743) | | | |

NOTE: Safe Uniform Design Load (12" or longer inserts)
 Refer to graph and information shown above



VERSABAR CORPORATION

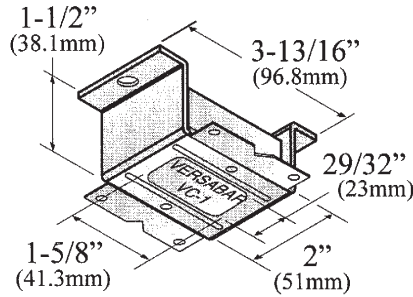
SPOT INSERTS, INSERT NUTS & ACCESSORIES

VC-1

spot insert

Plated Finish Standard
Wgt. per "C" 48# (22 kg)

- Low cost
- Fast installation
- Load rating
1300# (5.85 kN)
in 3000 psi. min concrete
- Seepage free
- Fits all rod to 7/8" dia.
- Easy to remove K.O. plate



When installing square nuts:

Place VCN square nut inside VC-1 insert prior to threading. Several turns of the rod will force it to bind against the interior face of the insert. Once securely threaded, the VCN nut cannot be removed from the insert unless the rod is removed first.

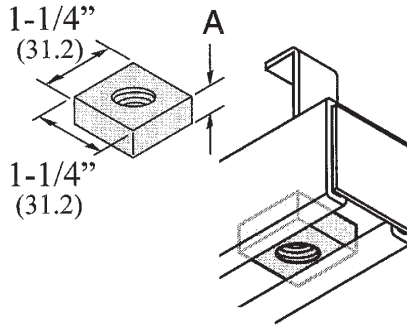
VCN

Insert Nuts

Plated Finish Standard

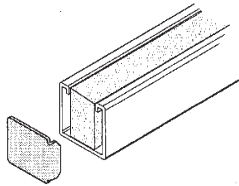
For use with VC-1 spot inserts or any other continuous slot, concrete insert channel. (Excluding VA-4, VA-5 & VA-13 inserts) Alternative nuts in section "B" of this catalog.

NOTE: Must be used with flat fitting mounted on slot surface prior to loading. (When used with channel type inserts)



| Part Number | Thread Dia. | Blank Size "A" | Weight Per "C" |
|-------------|---------------|----------------|----------------|
| VCN-25 | 1/4"-20 | 1/4" (6.4) | 8 lbs. (3.6) |
| VCN-31 | 5/16"-18 | 1/4" (6.4) | 11 lbs. (5.0) |
| VCN-37 | 3/8"-16 | 3/8" (9.5) | 13 lbs. (5.9) |
| VCN-50 | 1/2"-13 | 1/2" (12.7) | 14 lbs. (6.4) |
| VCN-62 | 5/8"-11 | 1/2" (12.7) | 18 lbs. (8.2) |
| VCN-75 | 3/4"-10 | 1/2" (12.7) | 16 lbs. (7.3) |
| VCN-37-RP | 3/8" PIPE TAP | 1/2" (12.7) | 14 lbs. (6.4) |
| VCN-50-RP | 1/2" PIPE TAP | 1/2" (12.7) | 14 lbs. (6.4) |

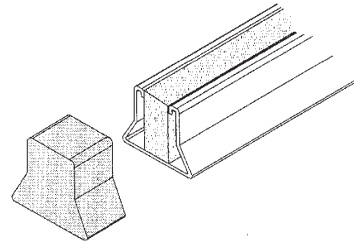
Concrete Insert End Caps & Filler Strip



VF-1001 Series End Caps

Steel Plated End-Cap for:

- VC-1000 order VF-1001 Wgt per "C" 11# (5 kg)
- VC-4000 order VF-1001-4 Wgt per "C" 4.8# (2.2 kg)
- VC-6000 order VF-1001-6 Wgt per "C" 9.5# (4.3 kg)
- VC-10000 order VF-1001-10 Wgt per "C" 7.5# (3.4 kg)



VF-1001-9 End Cap

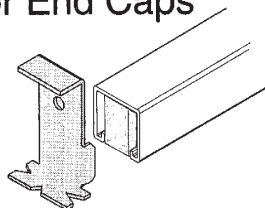
PVC Cover cap for VC-9000 Inserts

VF-2002 Series Anchor End Caps

Supplied with inserts under 18"

Hook type end cap for:

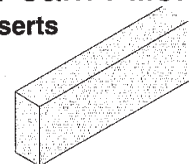
- VC-1000 order VF-2002
- VC-4000 order VF-2002-4
- VC-6000 order VF-2002-6
- VC-10000 order VF-2002-10



VF-2004 Series EPS Foam Filler

Fits all 1-5/8 (41.3) wide slot inserts

- VC-1000 order VF-2004
- VC-4000 order VF-2004-4
- VC-6000 order VF-2004-6
- VC-10000 order VF-2004-10



Contact Factory For Stock & Standard Lengths



**NEW JERSEY
INSTITUTE OF TECHNOLOGY**
323 High Street / Newark, N.J. 07102

Newark College of Engineering
Civil and Environmental Engineering (201) 645-5431, 5426, 5421, 5422

July 20, 1977

CLIENT : Versabar Corporation
33-41 Bergen Street
Paterson, New Jersey 07522

SUBJECT : Test Data

PROJECT : Versabar Insert VC9000 Tests

Dates of Inspection: June 22, 1977 and June 27, 1977.

Six Versabar concrete inserts, VC9000 (anchorless), were tested to determine their anchoring characteristics when embedded in concrete.

Six Portland cement concrete panels were cast with the inserts embedded on the bottom face as cast. Panel size was 42" x 14" x 5 1/2" deep. Three panels had a water-cement ratio of .58 by weight, and the other three had a .44 water-cement ratio. The mixes used type I Portland cement, crushed stone with a 3/4" maximum size, and sand. A No. 3 deformed steel bar was placed at mid-point of depth dimension (2-3/4") and spaced three inches laterally from the VC9000 in both length and width dimensions. At no point was there contact between the rebars and the inserts. The inserts were 30 inches long.

Tension was exerted on the insert by means of standard holding nuts and six-inch threaded rods with nuts. Fourteen of these bolts were spaced along the insert in groups of threes and fours, and load was transmitted to a loading frame. A brass plate between the frame and panel provided a method of obviating local stress concentrations.

Movement of the insert was measured during loading by means of two dial gauges.

The concrete panels with a water-cement ratio of .44 by weight were tested at five days, and had a concrete strength of 4089 psi. The average strength of the specimens was 7475 lbs./ft. The movement of the insert was .001 inches per 1000 lbs. The failures were one-way action shear through the concrete.

The concrete panels with a water-cement ratio of .58 by weight were tested at ten days, and had a concrete strength of 3520 psi. The average strength of the specimens was 6260 lbs./ft. The movement of the insert was .0015 inches per 1000 lbs. The failures were one-way action shear through the concrete.

Sincerely yours,

ROBERT JOHN CRAIG, Ph.D.,
Assistant Professor.

RJC/pl

VC-9000 Testing in 3500 & 4000 psi. concrete

ESTABLISHED 1880

Testing Company Inc.

HOBOKEN, N. J. 07030
TELEPHONE: 201.792.2400

REPORT

Client: versabar Corporation
33-41 Bergen Street
Paterson, New Jersey 07522

NUMBER
50141
(Refer to this number)

June 10, 1976

Subject: Test Data

Project: VC-9000 Series Beam Style
Anchorless Concrete Insert

Date of Test: June 9, 1976

Two P.V.C. coated concrete inserts (VC-9000 Series Beam Style Anchorless Concrete Insert) were furnished for test to determine anchoring characteristics when embedded in concrete.

Two portland cement concrete panels were cast with the inserts embedded on the bottom face as cast. Panel size was 42" x 14" x 5 1/2" deep. The concrete was designed to provide +5000 psi. The concrete mixture included Type III cement, crushed Appalachian stone and Long Island sand. No. 3 deformed steel bars were installed at mid point and 3" from the insert. At no point was there contact between the rebars and the inserts. Test cylinders for each concrete batch were cast, cured and tested in compression. The results of the concrete cylinder tests, performed on the test day, were as follows:

| Specimen No. | Compressive Strength, psi |
|--------------|---------------------------|
| A | 5380 |
| B | 5380 |
| C | 5340 |
| D | 5130 |

Tension was applied to the inserts by means of standard holding nuts and bolts. The load was transmitted to a loading frame.

The testing machine used was a Baldwin-Southwark 2000,000 lb. machine, calibrated and accurate to 1%.

Test data are attached. The inserts were 30 inches in length.

Failure of the insert-concrete assembly occurred by pull-out of the insert and was due to fracture and failure of the concrete in which the panel was embedded. The only visible evidence of disturbance to the insert was slight rupture of the P.V.C. coating.

The two panels failed at total loads: 19,150 lbs. and 21,950 lbs; average 19,850 lbs. per insert. The average load at failure was 7940 lbs. per ft.

Photographs of the tests were taken by the client.

United States Testing Company, Inc.
by J. E. Warner, P.E.

ek

OUR LETTERS AND REPORTS ARE FOR THE EXCLUSIVE USE OF THE CLIENT TO WHOM THEY ARE ADDRESSED, AND THEIR COMMUNICATION TO ANY OTHERS OR THE USE OF THE NAME OF UNITED STATES TESTING COMPANY, INC. MUST RECEIVE OUR PRIOR WRITTEN APPROVAL. OUR LETTERS AND REPORTS APPLY ONLY TO THE SAMPLE TESTED AND ARE NOT NECESSARILY INDICATIVE OF THE QUALITIES OF APPARENTLY IDENTICAL OR SIMILAR PRODUCTS. SAMPLES NOT IDENTIFIED IN REPORTS ARE RETAINED A MANNER OF PRINT DATA. THE REPORTS AND LETTERS AND THE NAME OF THE UNITED STATES TESTING COMPANY, INC. OR ITS SIGNS OR INITIALS, ARE NOT TO BE USED UNDER ANY CIRCUMSTANCES IN ADVERTISING TO THE GENERAL PUBLIC.

11-201

VC-9000 Testing in 5000 psi. concrete

Test Results For Versabar VC-9000 Wedge Inserts

Above Left:

Patented Wedge Type VC-9000 tested in 3500 min., & 4000 min. psi. concrete.

Above Right:

Patented Wedge Type VC-9000 tested in 5000 min. psi. concrete.

Please note that failure occurred due to "fracture & failure" of the cement test block. Normal failure mode of "Hook Type" inserts occurs when the insert is removed in whole, or torn apart from the test block. In this case, the test block yielded to the insert, which was removed intact. **The only damage to the insert was a "slight rupture of the P.V.C. coating".**

The inherent strength in the VC-9000 wedge type insert enabled it to overcome the testing embedment.

continued

ESTABLISHED 18 10

Testing Company Inc.

HOBOKEN, N. J. 07030
TELEPHONE: 201-792-2400

REPORT

Client: Versabar Corporation
33-41 Bergen Street
Paterson, New Jersey 07522

46640
NUMBER
Report #1
(Refer to this number)

Subject: Test Data

Project: Versabar Tests

Date of Inspection: March 11, 1976.

Three Versabar P.V.C. coated VC-1000 concrete inserts were furnished for test to determine anchoring characteristics when embedded in concrete. Test criterion was 3 tons per linear foot of insert.

Three portland cement concrete panels were cast with the inserts embedded on the bottom face as cast. Panel size was 42" X 14" X 5½" deep. The concrete was designed with a water-cement ratio of 5.0 gallons per bag of cement using Type III cement, crushed Appalachian stone and Long Island Sand. A seven-day cylinder crushed at 5590 psi. No. 3 deformed steel bars were installed at mid point and 3" from the insert. At no point was there contact between the rebars and inserts. The panels were tested at age 8 days.

Tension was exerted on the insert by means of standard holding nuts and 3 inch bolts. The bolts were spaced on 3-inch centers and load was transmitted to a loading frame. Annealed brass washers were provided between the bolts and frame in order to obviate local stress concentrations.

The distance between channels was measured before and after testing at three points: mid-point and one inch from each end.

Movement of the insert was measured during loading by means of a dial gauge micrometer.

Photographs of all procedures were taken and are appended.

Test data are attached.

The inserts are 30 inches long (2½ Ft.) and the design criterion of 3 tons per linear foot corresponds to a total requirement of at least 15,000 lbs.

The three panels failed at total loads: 15,950 lbs., 16,150 lbs. and 15,900 lbs. The change in channel distance was negligible.

It may be concluded that the inserts meet the design requirement.

United States Testing Company, Inc.

BY

A. Weiner
A. Weiner, P.E.

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ET-101

1b

VC-1000 Testing in 5500 psi. concrete

Test Results For Versabar VC-1000 Hook Anchor Inserts

Above:

Standard Hook Type VC-1000 tested in 5000 min. psi. concrete.

***Application Engineering Data
Product Specifications
Part Number Index***

Section H



VERSABAR CORPORATION

ENGINEERING DATA - PIPE

STANDARD WEIGHT STEEL PIPE

| Nominal pipe size | | Outside Diameter | | Inside Diameter | | Nominal Wgt. Plain End Per 100 ft. (30.5m) | | Weight of Pipe Filled With Water Per 100 ft. (30.5m) | | Minimum Pitch to Eliminate Pockets Caused By Deflection <1> | |
|-------------------|-----|------------------|-------|-----------------|-------|--|--------|--|---------|---|--------------|
| In | mm | In. | mm | In. | mm | Lbs. | Kg. | Lbs. | Kg. | In./Ft. | mm / M |
| 3/8" | 10 | 0.675 | 17.1 | 0.493 | 12.5 | 57.0 | 25.9 | 65.3 | 29.6 | 1" in 10' | 25.4 in 3.05 |
| 1/2" | 13 | 0.840 | 21.3 | 0.622 | 15.8 | 86.0 | 39.0 | 99.2 | 45.0 | 1" in 20' | 25.4 in 6.10 |
| 3/4" | 19 | 1.050 | 26.7 | 0.824 | 20.9 | 114.0 | 51.8 | 137.2 | 62.3 | 1" in 30' | 25.4 in 9.15 |
| 1" | 25 | 1.315 | 33.4 | 1.049 | 26.6 | 168.0 | 76.3 | 205.5 | 93.3 | 1" in 40' | 25.4 in 12.2 |
| 1-1/4" | 32 | 1.660 | 42.2 | 1.380 | 35.1 | 228.0 | 103.5 | 292.9 | 133.0 | 1" in 40' | 25.4 in 12.2 |
| 1-1/2" | 38 | 1.900 | 48.3 | 1.610 | 40.9 | 272.0 | 123.5 | 360.2 | 163.5 | 1" in 40' | 25.4 in 12.2 |
| 2" | 51 | 2.375 | 60.3 | 2.067 | 52.5 | 366.0 | 166.2 | 511.4 | 232.2 | 1" in 40' | 25.4 in 12.2 |
| 2-1/2" | 64 | 2.875 | 73.0 | 2.469 | 62.7 | 580.0 | 263.3 | 787.3 | 357.4 | 1" in 40' | 25.4 in 12.2 |
| 3" | 76 | 3.500 | 88.9 | 3.068 | 77.9 | 758.0 | 344.1 | 1078.1 | 489.5 | 1" in 40' | 25.4 in 12.2 |
| 3-1/2" | 89 | 4.000 | 101.6 | 3.548 | 90.1 | 911.0 | 413.6 | 1339.7 | 608.2 | 1" in 40' | 25.4 in 12.2 |
| 4" | 102 | 4.500 | 114.3 | 4.026 | 102.3 | 1080.0 | 490.3 | 1631.6 | 740.7 | 1" in 40' | 25.4 in 12.2 |
| 5" | 127 | 5.563 | 141.3 | 5.047 | 128.2 | 1470.0 | 667.4 | 2337.4 | 1061.2 | 1" in 40' | 25.4 in 12.2 |
| 6" | 152 | 6.625 | 168.3 | 6.065 | 154.1 | 1900.0 | 862.6 | 3152.0 | 1431.0 | 1" in 40' | 25.4 in 12.2 |
| 8" | 203 | 8.625 | 219.1 | 7.981 | 202.7 | 2860.0 | 1298.4 | 5028.0 | 2282.7 | 1" in 40' | 25.4 in 12.2 |
| 10" | 254 | 10.750 | 273.1 | 10.020 | 254.5 | 4050.0 | 1838.7 | 7466.0 | 3389.6 | 1" in 40' | 25.4 in 12.2 |
| 12" | 305 | 12.750 | 323.9 | 12.000 | 304.8 | 4956.0 | 2250.0 | 9856.0 | 4474.6 | | |
| 14" | 356 | 14.000 | 355.6 | 13.250 | 336.6 | 5457.0 | 2477.5 | 11429.0 | 5188.8 | | |
| 16" | 406 | 16.000 | 406.4 | 15.250 | 387.4 | 6258.0 | 2841.1 | 14170.0 | 6433.2 | | |
| 18" | 457 | 18.000 | 457.2 | 17.250 | 438.2 | 7060.0 | 3205.2 | 17182.0 | 7800.6 | | |
| 20" | 508 | 20.000 | 508.0 | 19.250 | 489.0 | 7860.0 | 3568.4 | 20460.0 | 9288.8 | | |
| 24" | 610 | 24.000 | 609.6 | 23.250 | 590.6 | 9463.0 | 4296.2 | 27842.0 | 12640.3 | | |

A. S. A. B36.10 SCHEDULE NOS. AND NOMINAL WALL THICKNESS DESIGNATIONS.

<1> Figures are related to sag of filled pipe when supports are located on 10' (3.05M) centers.

SCHEDULE 40 PIPE

| Nominal pipe size | | Outside Diameter | | Inside Diameter | | Nominal Wgt. Plain End Per 100 ft. (30.5m) | | Weight of Pipe Filled With Water Per 100 ft. (30.5m) | | Minimum Pitch to Eliminate Pockets Caused By Deflection <1> | |
|-------------------|-----|------------------|-------|-----------------|-------|--|--------|--|---------|---|--------------|
| In | mm | In. | mm | In. | mm | Lbs. | Kg. | Lbs. | Kg. | In./Ft. | mm / M |
| 3/8" | 10 | 0.675 | 17.1 | 0.493 | 12.5 | 57.0 | 25.9 | 65.3 | 29.6 | 1" in 10' | 25.4 in 3.05 |
| 1/2" | 13 | 0.840 | 21.3 | 0.622 | 15.8 | 86.0 | 39.0 | 99.2 | 45.0 | 1" in 20' | 25.4 in 6.10 |
| 3/4" | 19 | 1.050 | 26.7 | 0.824 | 20.9 | 114.0 | 51.8 | 137.2 | 62.3 | 1" in 30' | 25.4 in 9.15 |
| 1" | 25 | 1.315 | 33.4 | 1.049 | 26.6 | 168.0 | 76.3 | 205.5 | 93.3 | 1" in 40' | 25.4 in 12.2 |
| 1-1/4" | 32 | 1.660 | 42.2 | 1.380 | 35.1 | 228.0 | 103.5 | 292.9 | 133.0 | 1" in 40' | 25.4 in 12.2 |
| 1-1/2" | 38 | 1.900 | 48.3 | 1.610 | 40.9 | 272.0 | 123.5 | 360.2 | 163.5 | 1" in 40' | 25.4 in 12.2 |
| 2" | 51 | 2.375 | 60.3 | 2.067 | 52.5 | 366.0 | 166.2 | 511.4 | 232.2 | 1" in 40' | 25.4 in 12.2 |
| 2-1/2" | 64 | 2.875 | 73.0 | 2.469 | 62.7 | 580.0 | 263.3 | 787.3 | 357.4 | 1" in 40' | 25.4 in 12.2 |
| 3" | 76 | 3.500 | 88.9 | 3.068 | 77.9 | 758.0 | 344.1 | 1078.1 | 489.5 | 1" in 40' | 25.4 in 12.2 |
| 3-1/2" | 89 | 4.000 | 101.6 | 3.548 | 90.1 | 911.0 | 413.6 | 1339.7 | 608.2 | 1" in 40' | 25.4 in 12.2 |
| 4" | 102 | 4.500 | 114.3 | 4.026 | 102.3 | 1080.0 | 490.3 | 1631.6 | 740.7 | 1" in 40' | 25.4 in 12.2 |
| 5" | 127 | 5.563 | 141.3 | 5.047 | 128.2 | 1470.0 | 667.4 | 2337.4 | 1061.2 | 1" in 40' | 25.4 in 12.2 |
| 6" | 152 | 6.625 | 168.3 | 6.065 | 154.1 | 1900.0 | 862.6 | 3152.0 | 1431.0 | 1" in 40' | 25.4 in 12.2 |
| 8" | 203 | 8.625 | 219.1 | 7.981 | 202.7 | 2860.0 | 1298.4 | 5028.0 | 2282.7 | 1" in 40' | 25.4 in 12.2 |
| 10" | 254 | 10.750 | 273.1 | 10.020 | 254.5 | 4050.0 | 1838.7 | 7466.0 | 3389.6 | 1" in 40' | 25.4 in 12.2 |
| 12" | 305 | 12.750 | 323.9 | 11.938 | 303.2 | 5360.0 | 2433.4 | 10210.0 | 4635.3 | | |
| 14" | 356 | 14.000 | 355.6 | 13.126 | 333.4 | 6330.0 | 2873.8 | 12199.0 | 5538.3 | | |
| 16" | 406 | 16.000 | 406.4 | 15.000 | 381.0 | 8280.0 | 3759.1 | 15932.0 | 7233.1 | | |
| 18" | 457 | 18.000 | 457.2 | 16.876 | 428.7 | 10500.0 | 4767.0 | 20200.0 | 9170.8 | | |
| 20" | 508 | 20.000 | 508.0 | 18.814 | 477.9 | 12300.0 | 5584.2 | 24344.0 | 11052.2 | | |
| 24" | 610 | 24.000 | 609.6 | 22.626 | 574.7 | 17100.0 | 7763.4 | 34530.0 | 15676.6 | | |

A. S. A. B36.10 SCHEDULE NOS. AND NOMINAL WALL THICKNESS DESIGNATIONS.

<1> Figures are related to sag of filled pipe when supports are located on 10' (3.05M) centers.



EXTRA STRONG PIPE

| Nominal pipe size | | Outside Diameter | | Inside Diameter | | Nominal Wgt. Plain End Per 100 ft. (30.5m) | | Weight of Pipe Filled With Water Per 100 ft. (30.5m) | | Minimum Pitch to Eliminate Pockets Caused By Deflection <1> | |
|-------------------|-----|------------------|-------|-----------------|-------|--|--------|--|---------|---|--------------|
| In | mm | In. | mm | In. | mm | Lbs. | Kg. | Lbs. | Kg. | In./Ft. | mm / M |
| 3/8" | 10 | 0.675 | 17.1 | 0.423 | 10.7 | 74.1 | 33.6 | 80.2 | 36.4 | 1" in 10' | 25.4 in 3.05 |
| 1/2" | 13 | 0.840 | 21.3 | 0.546 | 13.9 | 109.2 | 49.6 | 119.3 | 54.2 | 1" in 20' | 25.4 in 6.10 |
| 3/4" | 19 | 1.050 | 26.7 | 0.742 | 18.8 | 148.0 | 67.2 | 166.8 | 75.7 | 1" in 30' | 25.4 in 9.15 |
| 1" | 25 | 1.315 | 33.4 | 0.957 | 24.3 | 217.0 | 98.5 | 248.1 | 112.6 | 1" in 40' | 25.4 in 12.2 |
| 1-1/4" | 32 | 1.660 | 42.2 | 1.278 | 32.5 | 300.0 | 136.2 | 355.5 | 161.4 | 1" in 40' | 25.4 in 12.2 |
| 1-1/2" | 38 | 1.900 | 48.3 | 1.500 | 38.1 | 363.5 | 165.0 | 440.0 | 199.8 | 1" in 40' | 25.4 in 12.2 |
| 2" | 51 | 2.375 | 60.3 | 1.939 | 49.3 | 503.0 | 228.4 | 630.9 | 286.4 | 1" in 40' | 25.4 in 12.2 |
| 2-1/2" | 64 | 2.875 | 73.0 | 2.323 | 59.0 | 766.0 | 347.8 | 949.4 | 431.0 | 1" in 40' | 25.4 in 12.2 |
| 3" | 76 | 3.500 | 88.9 | 2.900 | 73.7 | 1030.0 | 467.6 | 1315.9 | 597.4 | 1" in 40' | 25.4 in 12.2 |
| 3-1/2" | 89 | 4.000 | 101.6 | 3.364 | 85.4 | 1250.0 | 567.5 | 1634.7 | 742.2 | 1" in 40' | 25.4 in 12.2 |
| 4" | 102 | 4.500 | 114.3 | 3.826 | 97.2 | 1500.0 | 681.0 | 1997.6 | 906.9 | 1" in 40' | 25.4 in 12.2 |
| 5" | 127 | 5.563 | 141.3 | 4.813 | 122.3 | 2080.0 | 944.3 | 2867.5 | 1301.8 | 1" in 40' | 25.4 in 12.2 |
| 6" | 152 | 6.625 | 168.3 | 5.761 | 146.3 | 2860.0 | 1298.4 | 3989.0 | 1811.0 | 1" in 40' | 25.4 in 12.2 |
| 8" | 203 | 8.625 | 219.1 | 7.625 | 193.7 | 4340.0 | 1970.4 | 6319.0 | 2868.8 | 1" in 40' | 25.4 in 12.2 |
| 10" | 254 | 10.750 | 273.1 | 9.750 | 247.7 | 5475.0 | 2485.7 | 8705.0 | 3952.1 | | |
| 12" | 305 | 12.750 | 323.9 | 11.750 | 298.5 | 6541.0 | 2969.6 | 11243.0 | 5104.3 | | |
| 14" | 356 | 14.000 | 355.6 | 13.000 | 330.2 | 7210.0 | 3273.3 | 12960.0 | 5883.8 | | |
| 16" | 406 | 16.000 | 406.4 | 15.000 | 381.0 | 8280.0 | 3759.1 | 15930.0 | 7232.2 | | |
| 18" | 457 | 18.000 | 457.2 | 17.000 | 431.8 | 9345.0 | 4242.6 | 19187.0 | 8710.9 | | |
| 20" | 508 | 20.000 | 508.0 | 19.000 | 482.6 | 10412.0 | 4727.0 | 22694.0 | 10303.1 | | |
| 24" | 610 | 24.000 | 609.6 | 23.000 | 584.2 | 12549.0 | 5697.2 | 30560.0 | 13874.2 | | |

A. S. A. B36.10 SCHEDULE NOS. AND NOMINAL WALL THICKNESS DESIGNATIONS.

<1> Figures are related to sag of filled pipe when supports are located on 10' (3.05M) centers.

SCHEDULE 80 PIPE

| Nominal pipe size | | Outside Diameter | | Inside Diameter | | Nominal Wgt. Plain End Per 100 ft. (30.5m) | | Weight of Pipe Filled With Water Per 100 ft. (30.5m) | | Minimum Pitch to Eliminate Pockets Caused By Deflection <1> | |
|-------------------|-----|------------------|-------|-----------------|-------|--|---------|--|---------|---|--------------|
| In | mm | In. | mm | In. | mm | Lbs. | Kg. | Lbs. | Kg. | In./Ft. | mm / M |
| 3/8" | 10 | 0.675 | 17.1 | 0.423 | 10.7 | 74.1 | 33.6 | 80.2 | 36.4 | 1" in 10' | 25.4 in 3.05 |
| 1/2" | 13 | 0.840 | 21.3 | 0.546 | 13.9 | 109.2 | 49.6 | 119.3 | 54.2 | 1" in 20' | 25.4 in 6.10 |
| 3/4" | 19 | 1.050 | 26.7 | 0.742 | 18.8 | 148.0 | 67.2 | 166.8 | 75.7 | 1" in 30' | 25.4 in 9.15 |
| 1" | 25 | 1.315 | 33.4 | 0.957 | 24.3 | 217.0 | 98.5 | 248.1 | 112.6 | 1" in 40' | 25.4 in 12.2 |
| 1-1/4" | 32 | 1.660 | 42.2 | 1.278 | 32.5 | 300.0 | 136.2 | 355.5 | 161.4 | 1" in 40' | 25.4 in 12.2 |
| 1-1/2" | 38 | 1.900 | 48.3 | 1.500 | 38.1 | 363.5 | 165.0 | 440.0 | 199.8 | 1" in 40' | 25.4 in 12.2 |
| 2" | 51 | 2.375 | 60.3 | 1.939 | 49.3 | 503.0 | 228.4 | 630.9 | 286.4 | 1" in 40' | 25.4 in 12.2 |
| 2-1/2" | 64 | 2.875 | 73.0 | 2.323 | 59.0 | 766.0 | 347.8 | 949.4 | 431.0 | 1" in 40' | 25.4 in 12.2 |
| 3" | 76 | 3.500 | 88.9 | 2.900 | 73.7 | 1030.0 | 467.6 | 1315.9 | 597.4 | 1" in 40' | 25.4 in 12.2 |
| 3-1/2" | 89 | 4.000 | 101.6 | 3.364 | 85.4 | 1250.0 | 567.5 | 1634.7 | 742.2 | 1" in 40' | 25.4 in 12.2 |
| 4" | 102 | 4.500 | 114.3 | 3.826 | 97.2 | 1500.0 | 681.0 | 1997.6 | 906.9 | 1" in 40' | 25.4 in 12.2 |
| 5" | 127 | 5.563 | 141.3 | 4.813 | 122.3 | 2080.0 | 944.3 | 2867.5 | 1301.8 | 1" in 40' | 25.4 in 12.2 |
| 6" | 152 | 6.625 | 168.3 | 5.761 | 146.3 | 2860.0 | 1298.4 | 3989.0 | 1811.0 | 1" in 40' | 25.4 in 12.2 |
| 8" | 203 | 8.625 | 219.1 | 7.625 | 193.7 | 4340.0 | 1970.4 | 6319.0 | 2868.8 | 1" in 40' | 25.4 in 12.2 |
| 10" | 254 | 10.750 | 273.1 | 9.564 | 242.9 | 6435.0 | 2921.5 | 9545.0 | 4333.4 | | |
| 12" | 305 | 12.750 | 323.9 | 11.376 | 289.0 | 8858.0 | 4021.5 | 13260.0 | 6020.0 | | |
| 14" | 356 | 14.000 | 355.6 | 12.500 | 317.5 | 10616.0 | 4819.7 | 15934.0 | 7234.0 | | |
| 16" | 406 | 16.000 | 406.4 | 14.314 | 363.6 | 13703.0 | 6221.2 | 20676.0 | 9386.9 | | |
| 18" | 457 | 18.000 | 457.2 | 16.126 | 409.6 | 17069.0 | 7749.3 | 25919.0 | 11767.2 | | |
| 20" | 508 | 20.000 | 508.0 | 17.938 | 455.6 | 20890.0 | 9484.1 | 31839.0 | 14454.9 | | |
| 24" | 610 | 24.000 | 609.6 | 21.564 | 547.7 | 29642.0 | 13457.5 | 45468.0 | 20642.5 | | |

A. S. A. B36.10 SCHEDULE NOS. AND NOMINAL WALL THICKNESS DESIGNATIONS.

<1> Figures are related to sag of filled pipe when supports are located on 10' (3.05M) centers.



VERSABAR CORPORATION

ENGINEERING DATA - ELECTRICAL SUPPORTS

RIGID STEEL CONDUIT

| Nominal Conduit Size | | Outside Diameter | | Inside Diameter | | Outside Diameter Of Couplings | | Weight of Conduit Per 100 Ft (30.5m) | | Maximum Weight of Conduit and Conductor In Lbs. Per 100 Ft (30.5m) <2> | | | |
|----------------------|-----|------------------|-------|-----------------|-------|-------------------------------|-------|--------------------------------------|-------|--|--------|------------------|--------|
| In | mm | In. | mm | In. | mm | In. | mm | Lbs. | kg. | Lead Covered | | Not Lead Covered | |
| | | | | | | | | | | Lbs. | kg. | Lbs. | kg. |
| 1/2" | 15 | 0.840 | 21.3 | 0.622 | 15.8 | 1.063 | 27.0 | 85 | 38.6 | 117.2 | 53.2 | 104.2 | 47.3 |
| 3/4" | 20 | 1.050 | 26.7 | 0.824 | 20.9 | 1.297 | 32.9 | 113 | 51.3 | 175.4 | 79.6 | 139.8 | 63.5 |
| 1" | 25 | 1.315 | 33.4 | 1.049 | 26.6 | 1.563 | 39.7 | 168 | 76.3 | 261.4 | 118.7 | 234.7 | 106.6 |
| 1-1/4" | 32 | 1.660 | 42.2 | 1.380 | 35.1 | 1.969 | 50.0 | 228 | 103.5 | 431.1 | 195.7 | 358.1 | 162.6 |
| 1-1/2" | 40 | 1.900 | 48.3 | 1.610 | 40.9 | 2.234 | 56.7 | 273 | 123.9 | 589.1 | 267.5 | 454.6 | 206.4 |
| 2" | 50 | 2.375 | 60.3 | 2.067 | 52.5 | 2.719 | 69.1 | 368 | 167.1 | 852.8 | 387.2 | 720.8 | 327.2 |
| 2-1/2" | 65 | 2.875 | 73.0 | 2.469 | 62.7 | 3.313 | 84.2 | 582 | 264.2 | 1150.9 | 522.5 | 1021.9 | 463.9 |
| 3" | 80 | 3.500 | 88.9 | 3.068 | 77.9 | 3.938 | 100.0 | 762 | 345.9 | 1650.6 | 749.4 | 1450.6 | 658.6 |
| 3-1/2" | 90 | 4.000 | 101.6 | 3.548 | 90.1 | 4.438 | 112.7 | 920 | 417.7 | 1905.2 | 865.0 | 1749.1 | 794.1 |
| 4" | 100 | 4.500 | 114.3 | 4.026 | 102.3 | 4.938 | 125.4 | 1089 | 494.4 | 2474.9 | 1123.6 | 2147.9 | 975.1 |
| 5" | 125 | 5.563 | 141.3 | 5.047 | 128.2 | 6.296 | 159.9 | 1481 | 672.4 | 3587.0 | 1628.5 | 3083.0 | 1399.7 |
| 6" | 150 | 6.625 | 168.3 | 6.065 | 154.1 | 7.358 | 186.9 | 1919 | 871.2 | 5068.5 | 2301.1 | 4342.5 | 1971.5 |

INTERMEDIATE METAL CONDUIT (IMC)

TABLE 346-12

| Nominal Conduit Size | | Outside Diameter | | Nominal Inside Diameter | | Wt./100 Ft. (30.5m) with couplings attached | | Weight of Conduit and Conductors per 100 LF (30.5m) <2> | |
|----------------------|-----|------------------|-------|-------------------------|-------|---|-------|---|-------|
| In | mm | In. | mm | In. | mm | Lbs. | kg. | Lbs. | kg. |
| 1/2" | 15 | 0.815 | 20.7 | 0.745 | 18.9 | 60 | 27.2 | 82.1 | 37.3 |
| 3/4" | 20 | 1.029 | 26.1 | 0.954 | 24.2 | 82 | 37.2 | 122.8 | 55.8 |
| 1" | 25 | 1.290 | 32.8 | 1.205 | 30.6 | 116 | 52.7 | 182.3 | 82.8 |
| 1-1/4" | 32 | 1.638 | 41.6 | 1.553 | 39.4 | 150 | 68.1 | 267.3 | 121.4 |
| 1-1/2" | 40 | 1.883 | 47.8 | 1.793 | 45.5 | 182 | 82.6 | 341.8 | 155.2 |
| 2" | 50 | 2.360 | 59.9 | 2.266 | 57.6 | 242 | 109.9 | 503.8 | 228.7 |
| 2-1/2" | 65 | 2.857 | 72.6 | 2.727 | 69.3 | 401 | 182.1 | 775.0 | 351.9 |
| 3" | 80 | 3.476 | 88.3 | 3.346 | 85.0 | 443 | 201.1 | 1069.0 | 485.3 |
| 3-1/2" | 90 | 3.971 | 100.9 | 3.841 | 97.6 | 573 | 260.1 | 1346.0 | 611.1 |
| 4" | 100 | 4.466 | 113.4 | 4.336 | 110.1 | 638 | 289.7 | 1632.0 | 740.9 |

| Conduit Size | Maximum Support Span |
|----------------|----------------------|
| 1/2 to 3/4 | 10 feet |
| 1 | 12 feet |
| 1-1/4 to 1-1/2 | 14 feet |
| 2 to 2-1/2 | 16 feet |
| 3 and over | 20 feet |
| (15 to 20) | (3.05) |
| (25) | (3.66) |
| (32 to 40) | (4.27) |
| (50 to 65) | (4.88) |
| (80 to 150) | (6.10) |

ELECTRICAL METALLIC TUBING (EMT) - THIN WALL

| Nominal Tubing Size | | Outside Diameter Of Tubing | | Minimum Wall Thickness | | Inside Diameter | | Weight Of Tubing Per 100 LF (30.5m) | |
|---------------------|----|----------------------------|------|------------------------|-------|-----------------|------|-------------------------------------|------|
| In | mm | In. | mm | In. | mm | In | mm | Lbs. | kg. |
| 3/8" | 10 | 0.577 | 14.7 | 0.040 | 1.016 | 0.497 | 12.6 | 26.0 | 11.8 |
| 1/2" | 15 | 0.706 | 17.9 | 0.040 | 1.016 | 0.626 | 15.9 | 32.1 | 14.6 |
| 3/4" | 20 | 0.922 | 23.4 | 0.046 | 1.168 | 0.830 | 21.1 | 48.8 | 22.2 |
| 1" | 25 | 1.163 | 29.5 | 0.054 | 1.372 | 1.055 | 26.8 | 71.1 | 32.3 |
| 1-1/4" | 32 | 1.510 | 38.4 | 0.061 | 1.549 | 1.388 | 35.3 | 98.5 | 44.7 |
| 1-1/2" | 40 | 1.740 | 44.2 | 0.061 | 1.549 | 1.618 | 41.1 | 114.1 | 51.8 |
| 2" | 50 | 2.197 | 55.8 | 0.061 | 1.549 | 2.075 | 52.7 | 147.0 | 66.7 |

<2> Maximum weight equals weight of conduit plus weight of heaviest conductor combination as specified by the National Electrical Code Handbook.

Rigid, IMC and EMT shall be supported at least every 10 feet (3.05m) and within 3 feet (914m) of each outlet box, junction box, cabinet or fitting. (Exception:) Straight runs of conduit connected with threaded couplings which may be supported in accordance with the N.E.C. Articles 345 and 346, provided such supports prevent transmission of stresses to termination where conduit is deflected between supports. (See table 346-12 above)

VERSABAR CORPORATION

ENGINEERING DATA - PIPE & THREADED ROD



MAXIMUM SPACING BETWEEN PIPE SUPPORTS

| Nominal Pipe Size | Maximum Span | | (cont.) | Nominal Pipe Size | Maximum Span | |
|-------------------|--------------|----------|---------|-------------------|--------------|----------|
| | In | Ft. m | | | In | Ft. m |
| 1" | 7 | 2.14 | | 8" | 19 | 5.80 |
| 1-1/2" | 9 | 2.75 | | 10" | 22 | 6.71 |
| 2" | 10 | 3.05 | | 12" | 23 | 7.02 |
| 2-1/2" | 11 | 3.36 | | 14" | 25 | 7.63 |
| 3" | 12 | 3.66 | | 16" | 27 | 8.24 |
| 3-1/2" | 13 | 3.97 | | 18" | 28 | 8.54 |
| 4" | 14 | 4.27 | | 20" | 30 | 9.15 |
| 5" | 16 | 4.88 | | 24" | 32 | 9.76 |
| 6" | 17 | 5.19 | | | | |

LOAD CARRYING CAPACITY OF THREADED ROD CONFORMING TO ASTM A575 and A576

| Nominal Rod Diameter | Root Area | | Maximum Safe Load @ Temperature | |
|----------------------|-----------|--------|---------------------------------|------|
| | In | mm | Lbs. | kN |
| 3/8" | 0.068 | 43.9 | 610 | 2.7 |
| 1/2" | 0.126 | 81.3 | 1130 | 5.0 |
| 5/8" | 0.202 | 130.4 | 1810 | 8.0 |
| 3/4" | 0.302 | 195.0 | 2710 | 12.0 |
| 7/8" | 0.419 | 270.5 | 3770 | 16.7 |
| 1" | 0.552 | 356.4 | 4960 | 22.0 |
| 1-1/8" | 0.693 | 447.4 | 6230 | 27.6 |
| 1-1/4" | 0.889 | 573.9 | 8000 | 35.4 |
| 1-1/2" | 1.293 | 834.7 | 11630 | 51.5 |
| 1-3/4" | 1.714 | 1106.5 | 15690 | 69.5 |
| 2" | 2.292 | 1479.7 | 20690 | 91.6 |

A.S.A. B31.1-1973

Note:

All piping systems shall have adequate hangers, supports, guides, anchors and sway braces which are designed in compliance with the requirements of the CODE FOR PRESSURE PIPING, ASA31.1. The connecting equipment shall be allowed to carry part of the weight within the limits outlined by the equipment manufacturer.

All installations shall be in compliance with current state and local code restrictions.
State and local codes take precedence over any information found in this catalog.



VERSABAR CORPORATION

SPECIFICATION OUTLINE FOR VERSABAR PRODUCTS

GENERAL

Strut system components for this project shall be **VERSABAR** or approved equal having the following characteristics: Manufacturer of said components will have a minimum of ten years experience in manufacturing strut systems. Steel channel shall be cold roll-formed to design dimensional tolerances of plus or minus .010" (.254mm) (*Exclusive of finish and stock thickness variations allowed in applicable ASTM specifications cited below*). **No interior corner radius of the "channel items" shall exceed 1/32" (.794mm).** Edges of the strip used to roll-form channels shall have been squared during the slitting process so that inturned, nut supporting lips of the channel will allow full, double edged engagement with the shear cutting teeth located in both serrations of the lateral locking nut. **Pyramidal or other lip edge configurations which preclude the double edged engagement at both nut serrations will not be permitted.** Utilization of 1/4" (6.35mm) thick framing fittings, mounted at the channel slot, and fastened with 1/2" thick lateral locking nuts*, shall enable 12 ga. channels to provide a 2000#** (8.9 kN) resistance to pull out.

* (VN-1050 or VSN-1050 & 1/2"-13 H.H.C.S. @ 50 ft/lb torque).

** (S.F.=3.0) Under loading conditions specified by manufacturer.

MILL GALVANIZED STEEL CHANNEL

Pre-Galvanized channels shall be cold roll formed from coated carbon steel and conform to ASTM A653, Structural Quality Grade 33.

HOT ROLLED CHANNEL (H.R.P.O. / UNFINISHED)

H.R.P.O. channel shall be cold roll formed from carbon steel and conform to ASTM A570 Structural Quality Grade 33.

STAINLESS STEEL CHANNELS

Stainless steel channels shall be produced by specification in either type 304 or 316 conforming to ASTM A-240 & A-480.

ALUMINUM CHANNELS

Aluminum channel sections shall be extruded from alloy 6063-T6 conforming to ASTM B-221.

MILL GALVANIZED FINISH

Pre-Galvanized channel finish shall conform to ASTM A653 (G-90 Grade).

HOT DIPPED GALVANIZED FINISH

Hot-Dipped Galvanized finish complying to ASTM A-153 shall be applied to channel sections after all manufacturing processes are completed.

GREEN PAINTED FINISH (POWDER COATED)

AK1030 "Bell Green" thermosetting epoxy will be applied to H.R.P.O. channel sections after all manufacturing processes are complete. Prior to painting, channels will be cleaned and phosphated to insure maximum adhesion and uniformity of coating thickness.

Green painted channels shall meet the physical requirements of the following:

continued

VERSABAR CORPORATION
SPECIFICATION OUTLINE FOR VERSABAR PRODUCTS



green painted finish continued

| | | |
|--------------------|-----------------------------|--------------------------|
| Flexibility: | ASTM D522 (Conical Mandrel) | Pass 1/8" Inch (3.175mm) |
| Adhesion: | ASTM D3359 (Cross Hatch) | Pass (Classification SB) |
| Gloss: | ASTM D523 (60 Degree) | 55% |
| Pencil Hardness: | ASTM D3303 | 2H |
| Impact Resistance: | ASTM D2794 | 160/160 Direct & Reverse |

Salt spray resistance: ASTM B117
Pass at 1000 hours / no corrosion creep more than 1/16" (1.6mm) from scribe

Humidity resistance: ASTM D2217
Pass at 1000 hours / no blistering or loss of gloss

STOCK LENGTHS FOR CHANNEL

Manufacturer shall stock channels in the following standard lengths.

- 10' (3.05m) +/- 1/16"
- 20' (6.10m) +/- 1/16"
- 24' (6.35m) +/- 1/16"

CUTTING TOLERANCE FOR NON STANDARD CHANNEL LENGTHS

Plus or minus 1/16" (1.6 mm)

STEEL FITTINGS

Fittings shall be manufactured from Hot Rolled Pickled and Oiled steel plate, strip, or coil, unless otherwise shown. Steel shall be in accordance with ASTM #'s: A575, A576, A635 or A36. Fitting steel shall also meet the physical requirements of ASTM A570 GR 33.

FINISH FOR STEEL FITTINGS

Standard finish shall be Electro-Galvanized conforming to ASTM B633 Type III SC1.

GRAY IRON CASTINGS

Shall conform to ASTM A-48

MALLEABLE IRON CASTINGS

Shall conform to ASTM A-47

continued



VERSABAR CORPORATION

SPECIFICATION OUTLINE FOR VERSABAR PRODUCTS

PRODUCTS FOR ELECTRICAL APPLICATIONS

All channel, fittings, and accessories, shall meet or exceed NEMA Standards for Metal Framing, ML-1-1993, and when products are to be used for metal raceway, they shall be listed by Underwriters' Laboratories Inc. for such use. Products listed to applicable UL standards and requirements are to be identified with: (1.) The UL mark. (2.) The manufacturers name. (3.) The manufacturers part number. (*Per std. UL5B effective 03/31/99*). Additionally, all products must conform to current National Electrical Code and N.F.P.A. requirements as amended.

MAPLE CLAMPS, SADDLES, AND BUS BAR CLAMPS

Shall be fabricated from kiln cured clear hard maple lumber and impregnated with paraffin to a depth of 1/16" (1.588mm) after specified bore, slots or cradle radius has been cut.

PORCELAIN CABLE CLAMPS AND SADDLES

Shall be white glazed porcelain manufactured by the Dry Process as specified by the Dry Process Electrical Porcelain section of the National Electrical Manufacturers' Association. Such cable clamps and saddles shall have the following average values for the following properties: 1.0% water absorption; 2.4 specific gravity; 2500 psi. tensile strength; 40,000 psi compressive strength; 5000 psi. flexural strength; and 50 volts/mil-dielectric strength.

CLOSURE STRIP

Shall be roll-formed from pre-galvanized steel conforming to ASTM A653 (G-90) and have a minimum thickness of .040" (1.02mm)

THREADED FASTENERS

Standard carbon steel threaded fasteners shall be manufactured in conformance with ASTM A-307 and SAE J429 GR2. Standard finish for carbon steel threaded fasteners shall be electro-galvanized conforming to ASTM B-633 Type III SC1. (*VERSABAR fasteners conform to U.S. federal spec. HR3000*)

LATERAL LOCKING "CHANNEL NUTS"

Shall have surface serrations and opposed gripping teeth within the serrations to engage the inturned lips of the channel and enhance their gripping power, and reduce lateral slippage. Standard lateral locking nuts shall have a rectangular shape with beveled ends to permit a clockwise rotation that is restricted to 90° by contact with the interior channel side walls after insertion through the 7/8" channel slot. Nuts shall be case hardened to assure that teeth within the nut serrations will become fully engaged with the inturned lips of the channel when tightened. This will guarantee slip resistance and pull out performance characteristics for each size nut once they have been tightened to their recommended torque value. (Recommended torque values are on page B-2).

STAINLESS STEEL LATERAL LOCKING "CHANNEL NUTS"

Shall be manufactured from Type 304 bar and conform with ASTM A-276; or manufactured from type 316 stainless conforming to ASTM B-783. In either case, the spring portion of the nut will be regular carbon steel.

continued

VERSABAR CORPORATION

SPECIFICATION OUTLINE FOR VERSABAR PRODUCTS



CONCRETE INSERTS - WEDGE TYPE ANCHOR CHANNEL

Lengths of concrete inserts specified for this project shall be VC-9000 Series Beam Style Flared Wedge Concrete Inserts as manufactured by VERSABAR CORPORATION. These inserts shall be capable of supporting an average evenly-distributed load of 2500# (11.2kN) per lin. ft. embedded in 4000 min. psi. concrete, and 2650# (11.9kN) per lin. ft. embedded in 5000 min. psi. concrete (based on a safety factor of 3). **Inserts should have an anchoring capacity that will increase as the compressive strength of the concrete increases. Loading capability must be without dependence upon hooks or anchors either welded to the insert or pierced from the parent metal.** The load exerted by the insert upon the encasing concrete shall be evenly distributed to the concrete on both sides of the insert along its embedded length and must not be dependent upon hooks or anchors which would act as stress risers at intervals within the concrete. **Total overall depth of the insert must not exceed 2" (50.8mm) at any point**, and its rated loading capacity must not be dependent upon contact with or connection to metal reinforcements within the concrete. Inserts must have a smooth overall surface and contain no sharp edges. All angles and surfaces of the insert shape must be optimized to permit an easy flow of concrete around the exterior surfaces and to prevent voids. Inserts must be fully compatible with all accessories manufactured by VERSABAR CORPORATION.

CONCRETE INSERTS - HOOK TYPE ANCHOR CHANNEL

Lengths of pierced anchor concrete inserts specified for this project shall be VERSABAR or approved equal corresponding to designated part number. Inserts shall have 1-1/2" (38.1mm) long hook anchors which are lanced from the channel spine on 4-1/2" (114.3mm) centers throughout the length of the insert. Each anchor shall be bent at its top to a sharp 90° angle and thereby provide a holding area measuring at least 13/16" x 1/2" (20.6mm) x (12.7mm). Vertical portions of each anchor must be formed straight to achieve maximum anchoring depth possible for metal area. Such inserts shall be manufactured from channel size and gauge as specified. Each insert shall be provided with a 3/16" (4.76mm) nailing hole on 9" (228.6mm) centers throughout its entire length. Short inserts without nail holes will have end caps which provide nailing cutouts. **Inserts will be shipped fully assembled with anchor openings completely sealed from the inside of the shape. EPS foam sections will be inserted into the shape and end caps will be installed at each end of the insert.** Foam inserts will protrude at least 1/16" (1.588mm) beyond the surface of the channel slot so that when insert is nailed to form, the foam is compressed thereby providing the most efficient seal possible. Anchor end caps will be supplied with inserts which are less than 18" (457mm) in length. Standard end caps will be supplied with longer inserts. End caps shall be designed so that the possibility of concrete seepage is eliminated.

Note:

We reserve the right to make changes and improvements to the materials described herein without obligation to advertise these changes or to make such changes in material previously manufactured. Under no circumstances will the quality of our products be less than that specified by The Metal Framing Manufacturers Association.

Product Warranty

Every VERSABAR product has been carefully inspected during manufacturing, and prior to shipment. We guarantee to correct any defect called to our attention in writing within six months after shipment, caused by faulty material or workmanship. The buyers exclusive remedy shall be repair and/or replacement, at VERSABAR'S discretion, of the defective parts. The parties further agree that no other remedy (including but not limited to, incidental or consequential damages for lost profits, lost sales, injury to person or property, negligence in the design, installation, or repair of the product, or any other incidental or consequential loss) shall be available. The parties further agree that all other warranties, express or implied (including but not limited to, any implied warranty of merchantability or fitness for a particular purpose) are excluded.



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VF-2509 C-8
VF-2510 C-8
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VF-2512 C-8
VF-2545-(R/L) C-8
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VF-2604 C-8



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| | | VF-4201 | C-12 | | |
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| VF-3802-B | C-13 | VF-5304-4 | C-14 | | |
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| | | VF-5401-A | C-17 | VF-6303-X | D-18 |
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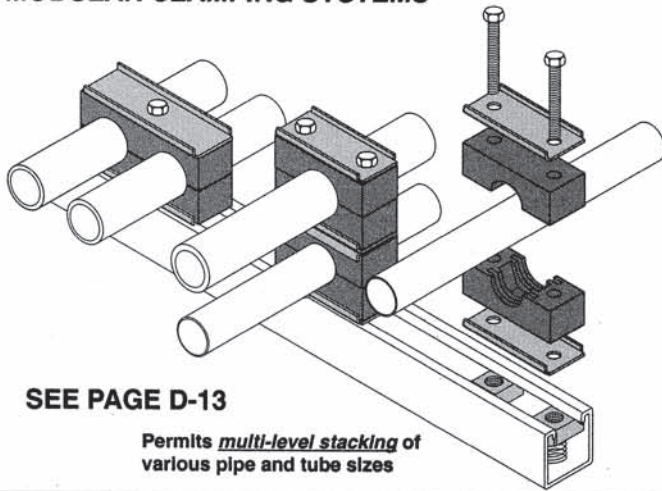
Welded Swivel Eyelets

| | |
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For information regarding modifications to products shown in this catalog, or special fabrications, please contact the factory at 1-800-228-3772



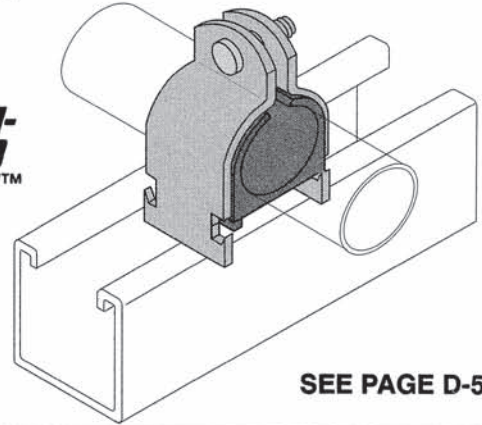
ModuStak™
MODULAR CLAMPING SYSTEMS



SEE PAGE D-13

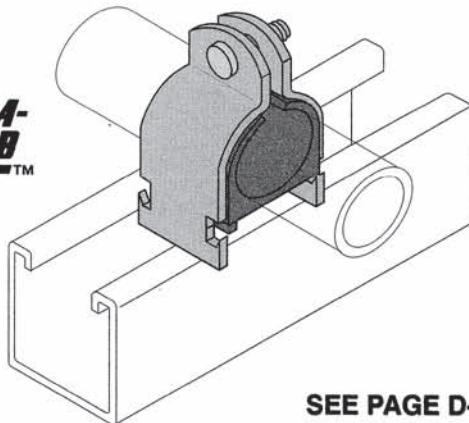
Permits *multi-level stacking* of various pipe and tube sizes

VHZ-100 Series For:
COPPER & O.D. Tubing
Cushion Clamp Assemblies



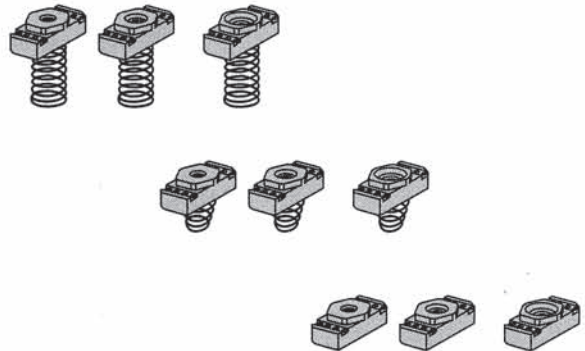
SEE PAGE D-5

VHZ-200 Series For: RIGID PIPE
Cushion Clamp Assemblies



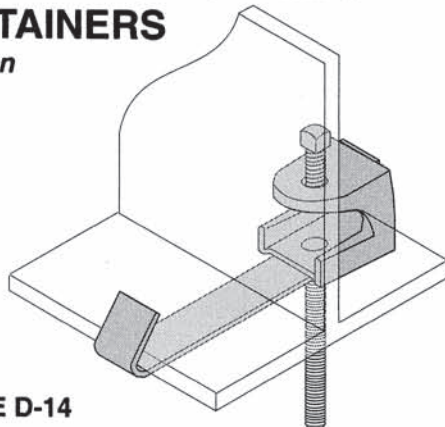
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HEX TOP STAINLESS NUTS
Type 316



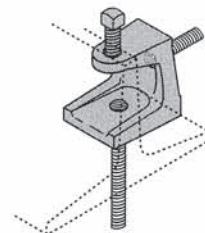
SEE PAGE B-6

VX-9000 Series
ROD SUSPENSION CLAMPS
WITH RETAINERS
Available Soon



SEE PAGE D-14

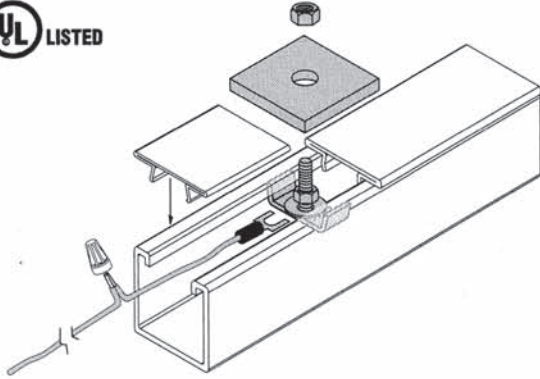
VX-9004 Series
MALLEABLE BEAM CLAMPS



SEE PAGE D-16



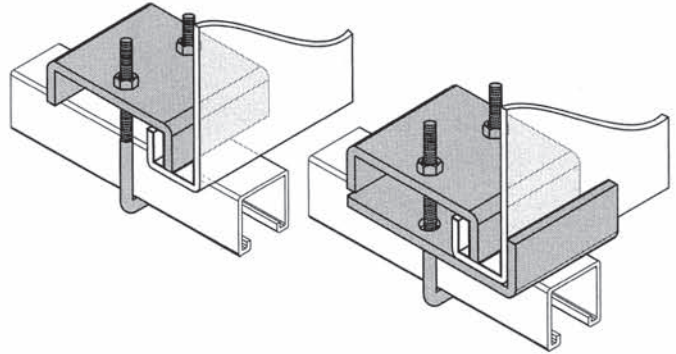
LL-G1 RACEWAY GROUNDING KIT



SEE PAGE F-7

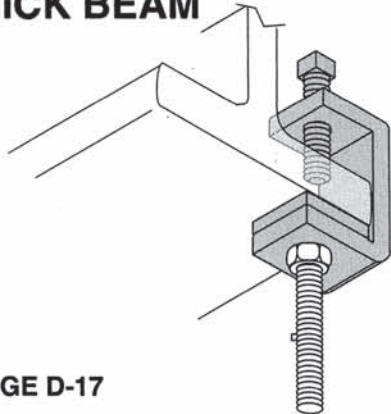
VX-9007 & VX-9008

PURLIN CLAMPS



SEE PAGE D-18

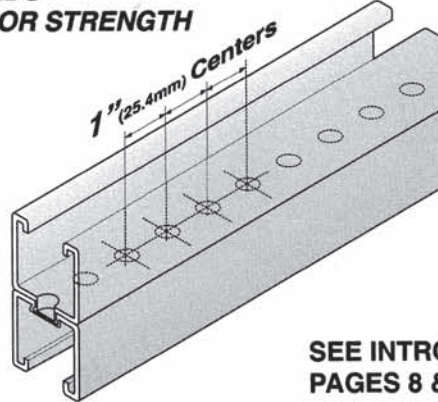
VX-7044-1/2
ROD SUSPENSION CLAMP
FOR THICK BEAM



SEE PAGE D-17

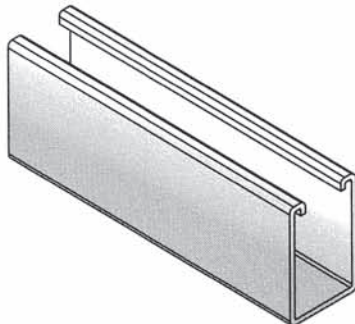
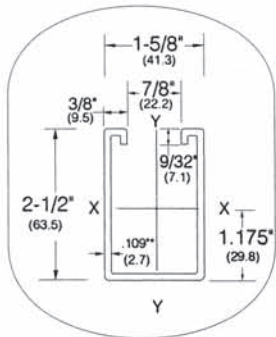
TOGGLE LOCKED
BACK TO BACK CHANNEL

NO WELDS
SUPERIOR STRENGTH



SEE INTRODUCTION
PAGES 8 & 9

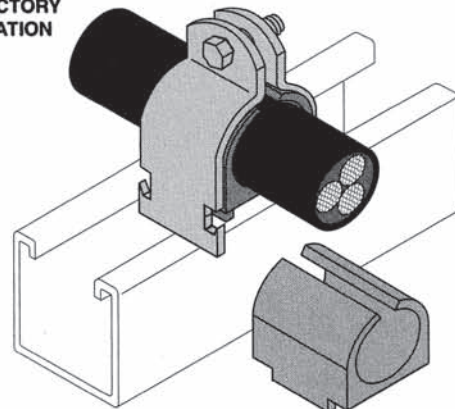
VA-3 STAINLESS CHANNEL



SEE PAGE A-5

VHZ-100 E SERIES
ELECTRIC CABLE ISOLATORS

AVAILABLE SOON
CONTACT FACTORY
FOR INFORMATION





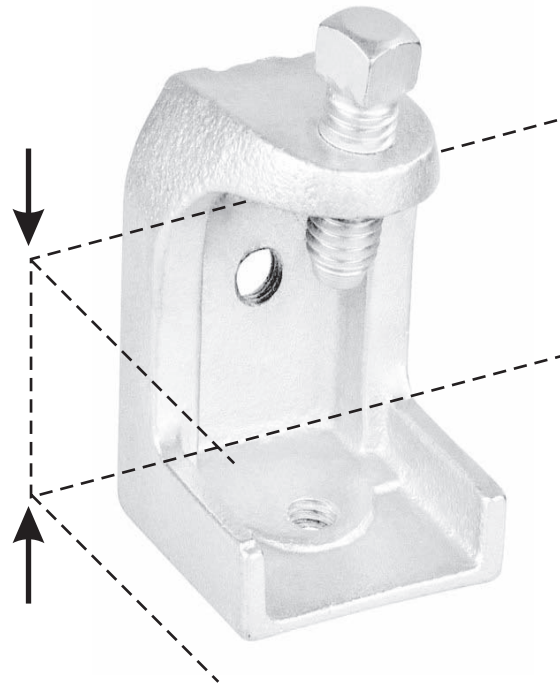
NEW PRODUCTS

VERSABAR CORPORATION • 100 MALTESE DRIVE • TOTOWA, NJ • 07512 • 1-800-228-3772

“Wide Mouth” Electricians Style Rod Suspension Beam Clamps

VX-9000-WM Series

**Accepts
up to
3” thick
Flanges**



**Heavy Duty
Malleable Iron**



Finish is Bright Zinc

Application:

They are tapped for threaded rod on their bottom and backs.

These beam clamps are used with conduit hangers, bridle rings and Threaded Rods in the following sizes:

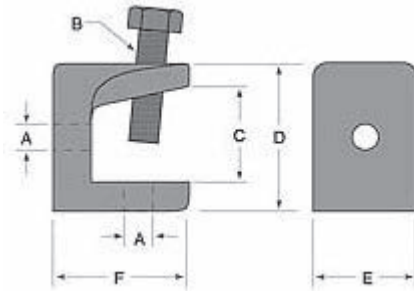
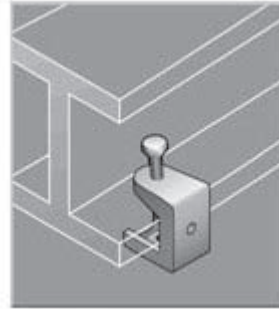
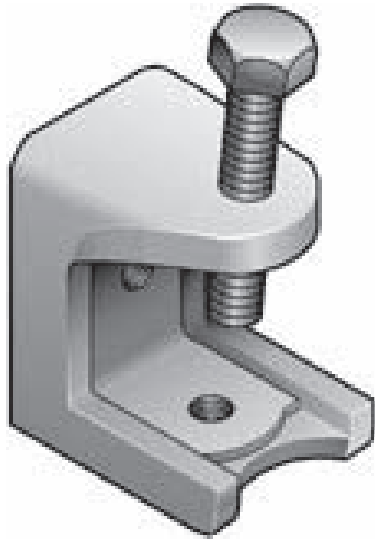
| Rod Dia | Part # | Workload | Set Screw Size | Box Qty |
|----------------|---------------|-----------------|------------------------|----------------|
| 1/4”-20 | VX-9004-WM | 200# | 5/16 x 2-1/2 set screw | 25 |
| 3/8”-16 | VX-9005-WM | 300# | 3/8” x 2-1/2 set screw | 10 |
| 1/2”-13 | VX-9006-WM | 400# | 1/2” x 2-1/2 set screw | 10 |

Advantages:

VX-9000-WM beam clamps are used to hang medium, light, or heavy loads from structural beams. Their hardened, cup-point screw and malleable iron body will not distort or slip off the beam edge when tightened.

VERSABAR

STAINLESS STEEL 316 ELECTRICIANS BEAM CLAMPS



This heavy-duty "electrician's" style beam clamp is cast in **Stainless 316** for superior strength and corrosion resistance. Designed for use on I-beams, channels, and other structural members, this beam clamp provides firm fixturing without drilling holes. Attachment holes in the back and bottom permit a wide variety of applications. **Available in three sizes.**

| Part Number | Weight Per C | Load Rating (lbs) |
|----------------|--------------|-------------------|
| VX-9004-SS-316 | 25 | 150 |
| VX-9005-SS-316 | 80 | 750 |
| VX-9006-SS-316 | 148 | 1,100 |

| Part Number | Dimensions (inches) * MAX BEAM FLANGE "C" INDICATED | | | | | |
|----------------|---|----------|------|---------|--------|---------|
| | A | B | C* | D | E | F |
| VX-9004-SS-316 | 1/4"-20 | 5/16"-18 | 3/4" | 1-3/8" | 1" | 1-5/16" |
| VX-9005-SS-316 | 3/8"-16 | 1/2"-13 | 1" | 1-7/8" | 1-7/8" | 2" |
| VX-9006-SS-316 | 1/2"-13 | 5/8"-11 | 1" | 2-3/16" | 2-1/8" | 2-1/4" |

Material:

Body - CF8M(316), Hardware - 316SS

Standards:

ASTM A351, ASTM F593

VERSABAR

VRP Series Roofing Piers

A superior product at a lower cost

We use:

HOT DIPPED GALVANIZED STRUT
STAINLESS STEEL FASTENERS

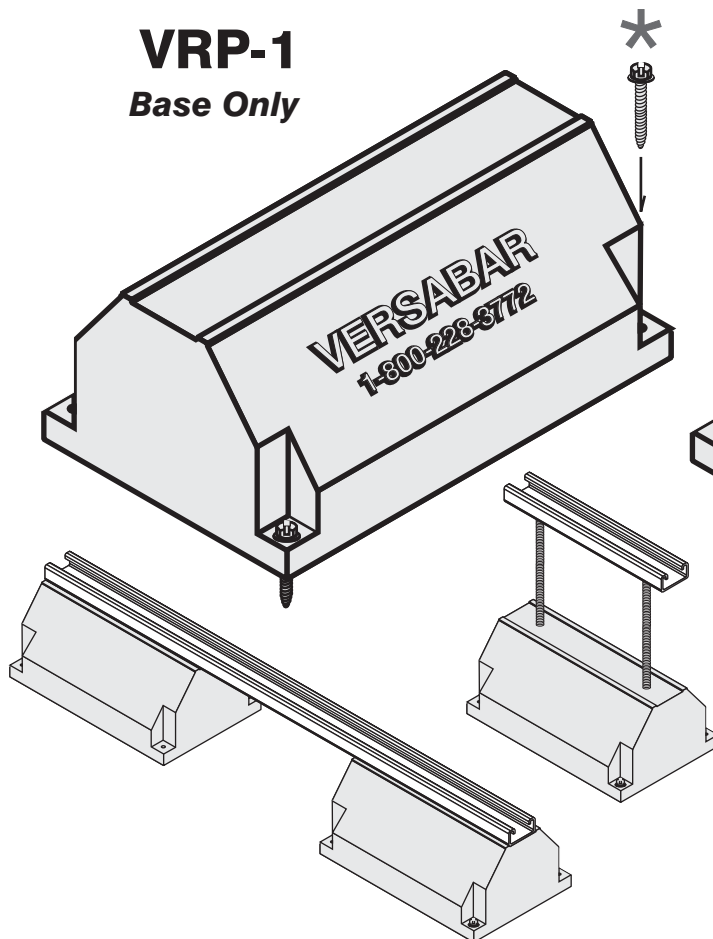
They use:

MILL GALVANIZED STRUT
ZINC PLATED FASTENERS

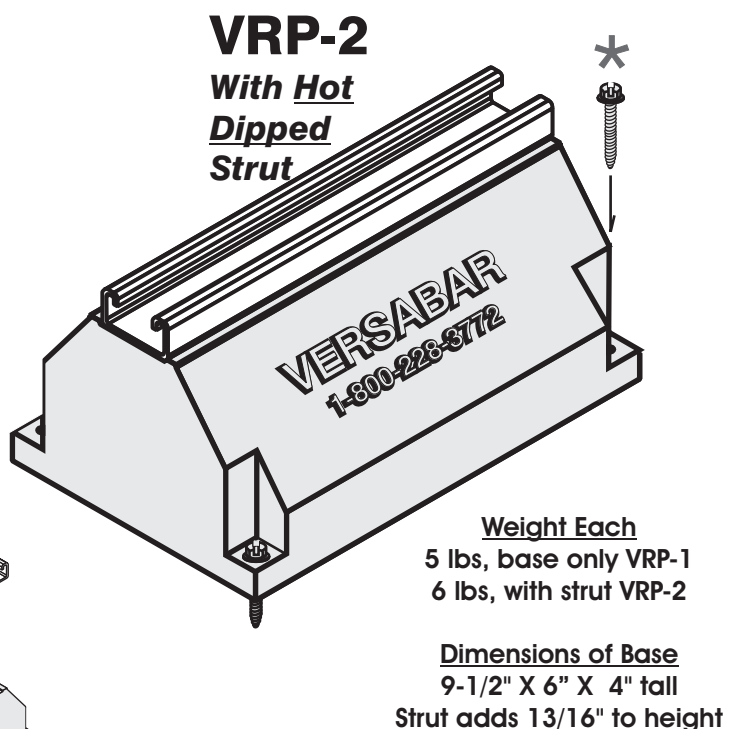
VRP SERIES - DESIGNED FOR OUTDOOR USE AND BUILT TO TAKE IT!

**Recessed Corners for Screw Down If Desired (extra safety / security)
Durable Ground Rubber Base, Reflectors Available, Supports 500# Uniform Load**

VRP-1
Base Only



VRP-2
With *Hot Dipped*
Strut



Combining Piers and adding additional mechanical devices offers open ended support solutions
WE CAN BUILD WHAT YOU NEED - FAST

NEW PRODUCTS

Rod Suspension Beam Clamps

AVAILABLE IN STAINLESS 316

Allows suspension of

1/4", 3/8", 1/2", & 5/8" Threaded Rods

Standard Fabrication with threaded base only.

Can be fabricated with threaded base and back if required.

Minimum quantities may apply.

Material Specifications:

Cold formed from Stainless Steel Bar Stock Type 316L

Tensile Strength 70,000 psi

Yield Strength 25,000 psi

Elongation 40%

Hardness Rockwell B Scale 95

All U.N.C. Coarse Threads

Supplied with stainless 18-8 cup point square head set screws

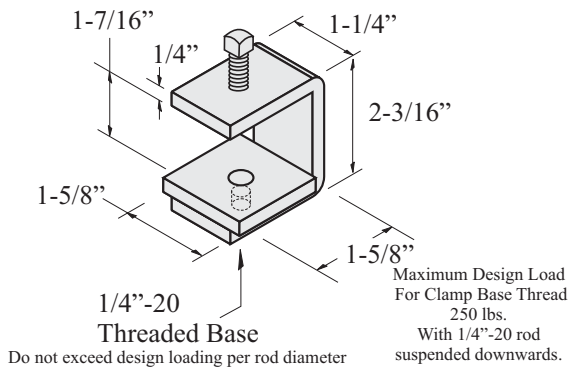
(Stainless 316 set screws are only available on special order, and subject to availability)

VX-7070-A

Wt/ea .74 Lbs.
(.333 kg.)

Wide Jaw
1/4"-20 Base
Beam Clamp

3/8"-16 X 2" Square Head
Set Screw Included



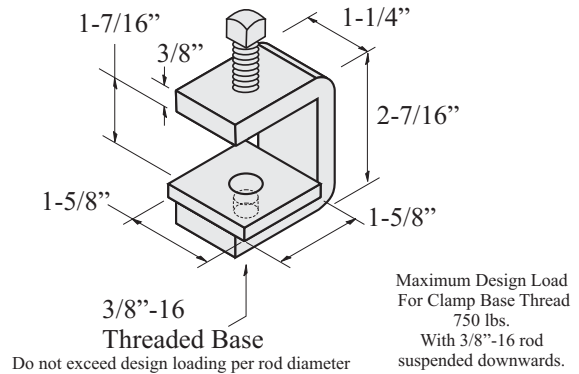
**Accepts Beams up to 1-3/8" thick
and 1/4"-20 Threaded Rod in Base**

VX-7070-B

Wt/ea .98 Lbs.
(.442 kg.)

Wide Jaw
3/8"-16 Base
Beam Clamp

1/2"-13 X 2" Square Head
Set Screw Included



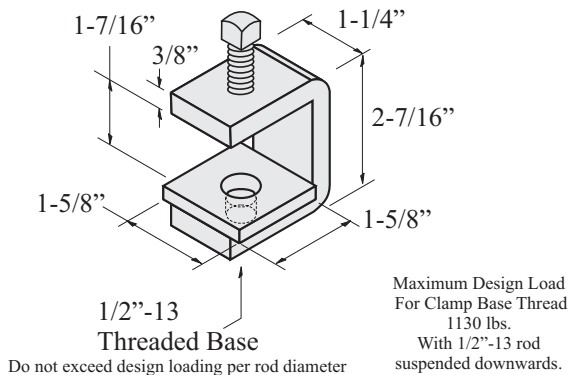
**Accepts Beams up to 1-3/8" thick
and 3/8"-16 Threaded Rod in Base**

VX-7070-C

Wt/ea 1.03 Lbs.
(.464 kg.)

Wide Jaw
1/2"-13 Base
Beam Clamp

1/2"-13 X 2" Square Head
Set Screw Included



**Accepts Beams up to 1-3/8" thick
and 1/2"-13 Threaded Rod in Base**

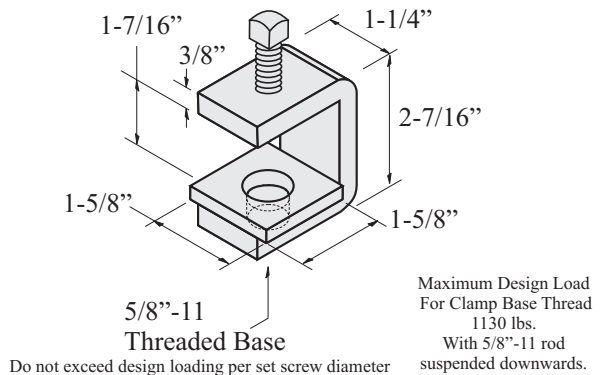
VX-7070-D

Wt/ea 1.10 Lbs.
(.496 kg.)

Wide Jaw
5/8"-11 Base
Beam Clamp

1/2"-13 X 2" Square Head
Set Screw Included

*Revised 11/23/11

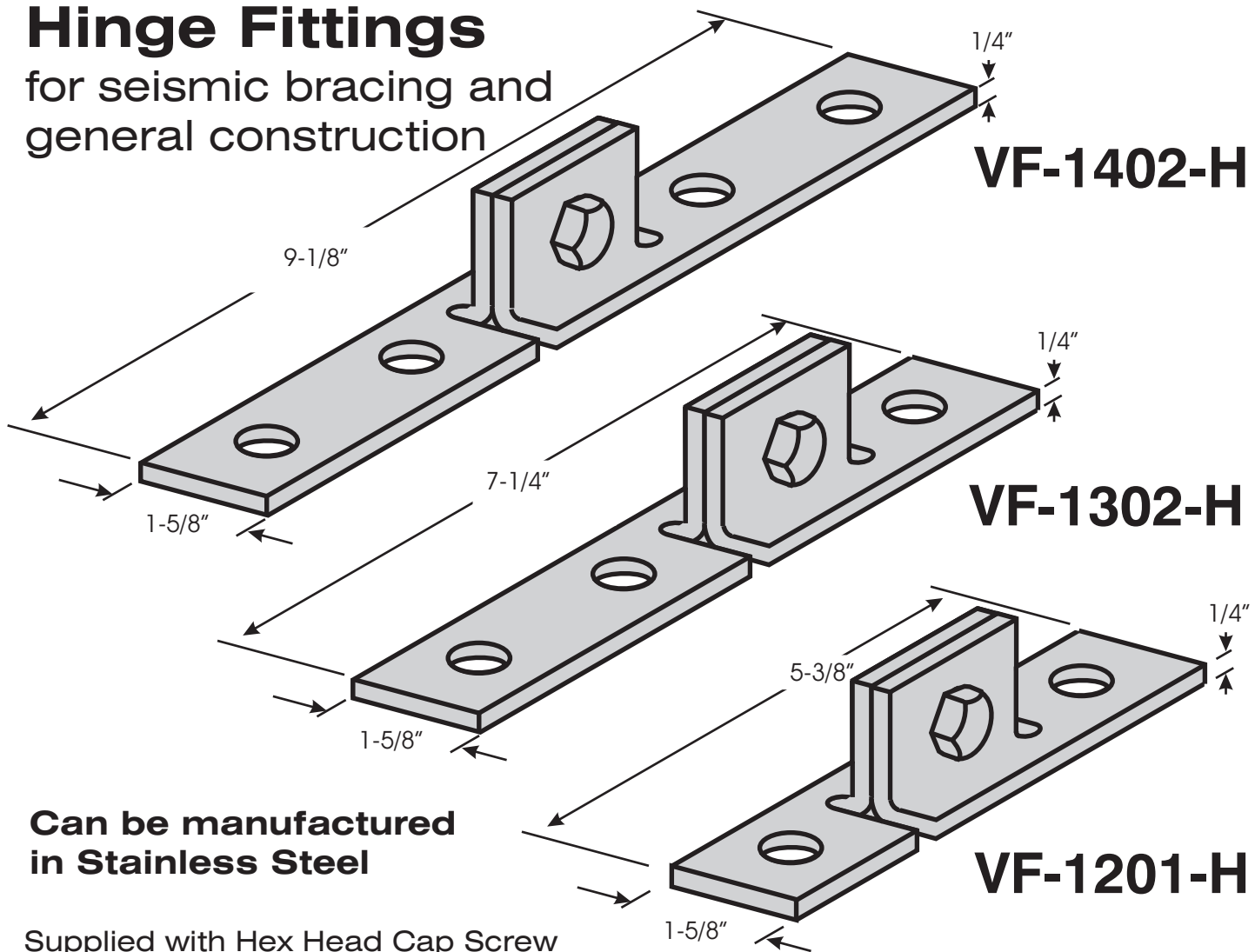


**Accepts Beams up to 1-3/8" thick
and 5/8"-11 Threaded Rod in Base**

VERSABAR

Hinge Fittings

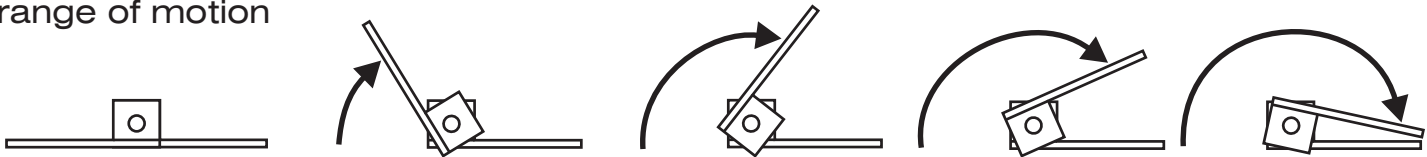
for seismic bracing and
general construction



**Can be manufactured
in Stainless Steel**

Supplied with Hex Head Cap Screw
Nylok Hex Nut, Flat Washer

Allows adjustable tension through full
range of motion



Versabar Hinge Type Fittings are available in 2, 3, and 4 hole versions.

These fittings allow a full range of motion, and are compatible with all manufacturers 1-5/8" standard channels. Available in carbon steel with various finishes including zinc plated, plain, and PVC Coated. **Also available in stainless steel 304 & 316.**

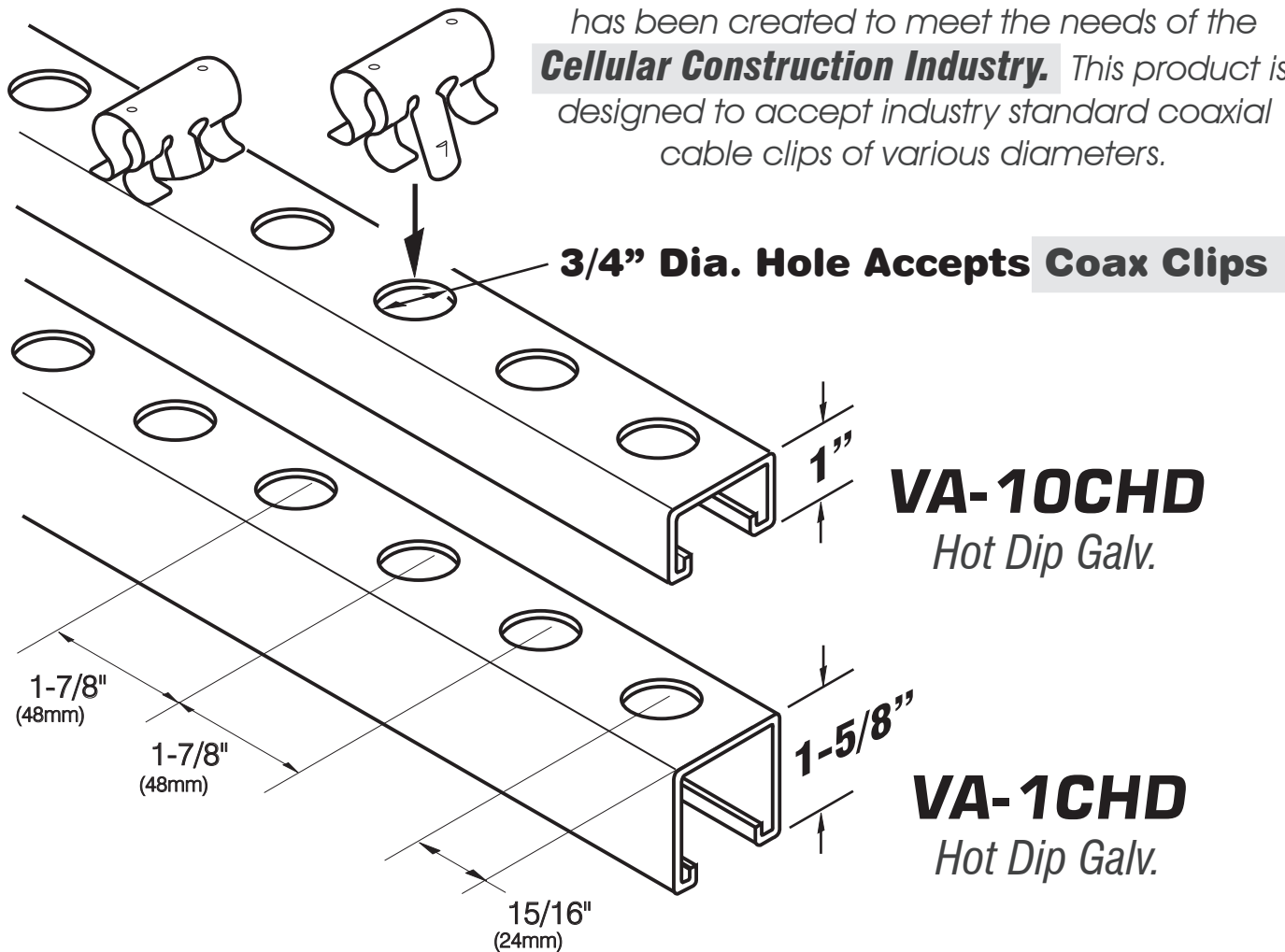
For additional information please contact
VERSABAR CORPORATION

1-800-228-3772 • versaquote@gmail.com • www.versabar.com

VERSABAR

New Product Announcement

We are pleased to offer a new product which has been created to meet the needs of the **Cellular Construction Industry**. This product is designed to accept industry standard coaxial cable clips of various diameters.



Versabar CHD type channels are Hot Dipped Galvanized after fabrication. Available in 1" and 1-5/8" deep styles. Both channels are 1-5/8" wide across the base, and roll formed from 12ga. Steel.

3/4" diameter perforations accept industry standard cellular coax clips. Standard lengths will be 10'. Contact factory for volume pricing on non-standard lengths.

IN STOCK NOW

For additional information please contact William E. Taylor

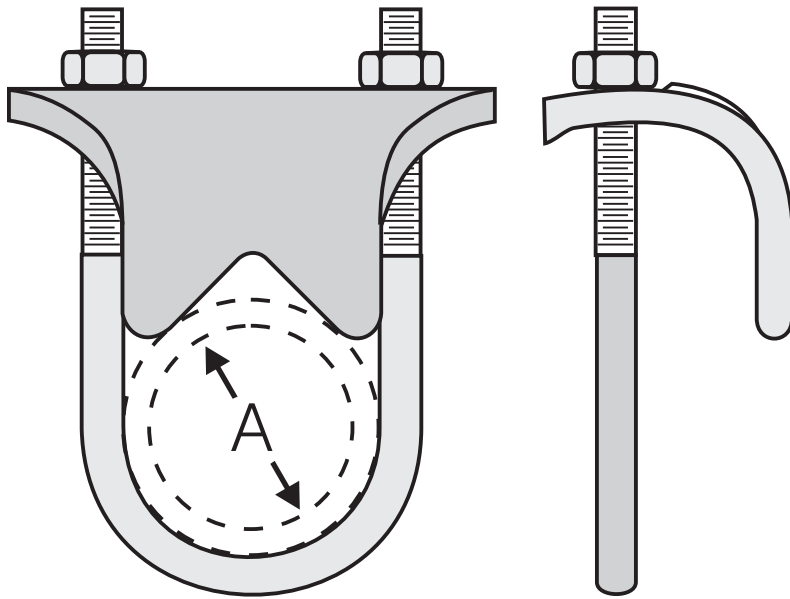
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VERSABAR

New Product Availability

“Korn” Type Right Angle Conduit Supports for 3/8” to 4” I.P.



Beam Clamps for Iron Pipe

**Standard Finish
Hot Dipped Galvanized**

| PART NUMBER | PIPE SIZE "A" | BOX QTY | WGT. PER C | FINISH |
|--------------------|----------------------|----------------|-------------------|---------------|
| VX-2037 | 3/8" | 50 | 25 | H.D.G.A. |
| VX-2050 | 1/2" | 50 | 40 | H.D.G.A. |
| VX-2075 | 3/4" | 50 | 43 | H.D.G.A. |
| VX-2100 | 1" | 50 | 48 | H.D.G.A. |
| VX-2125 | 1-1/4" | 50 | 53 | H.D.G.A. |
| VX-2150 | 1-1/2" | 50 | 58 | H.D.G.A. |
| VX-2200 | 2" | 50 | 85 | H.D.G.A. |
| VX-2250 | 2-1/2" | 25 | 106 | H.D.G.A. |
| VX-2300 | 3" | 25 | 110 | H.D.G.A. |
| VX-2350 | 3-1/2" | 25 | 128 | H.D.G.A. |
| VX-2400 | 4" | 25 | 140 | H.D.G.A. |

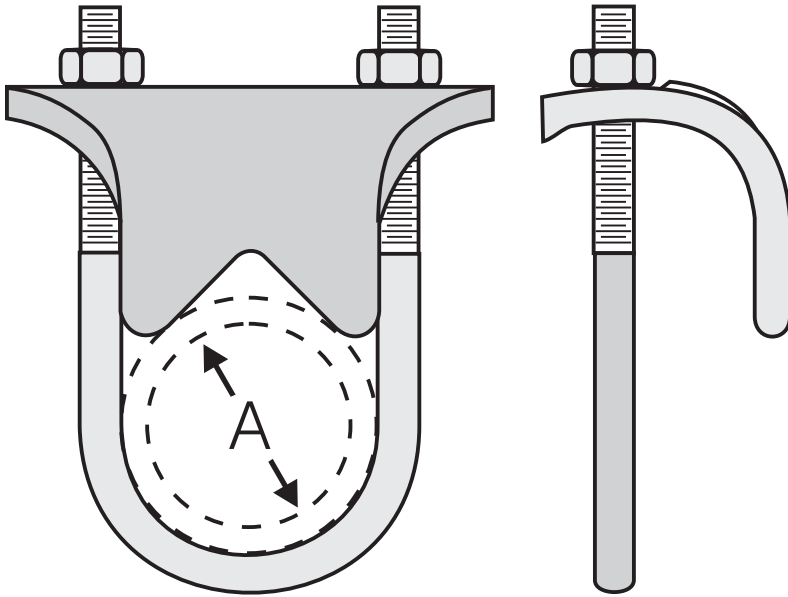
1-800-228-3772

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VERSABAR

New Product Availability

STAINLESS STEEL Right Angle Conduit Supports for 1/2" to 4" I.P.



Beam Clamps for Pipe

**PRODUCED IN FULL
TYPE 316 STAINLESS**

Clamp Body: CF8M, 316
Hardware: 316

Standards: ASTM A351, ASTM F593

Designed to work with pipe/rigid as well as
PVC coated conduit.

Provides high strength and corrosion resistance

| PART NUMBER | PIPE SIZE "A" | BOX QTY | WGT. PER C | FINISH |
|------------------------|--------------------------|--------------------|-----------------------|---------------|
| VX-2050 | 1/2" | 50 | 34 | SS 316 |
| VX-2075 | 3/4" | 50 | 36 | SS 316 |
| VX-2100 | 1" | 50 | 44 | SS 316 |
| VX-2125 | 1-1/4" | 50 | 51 | SS 316 |
| VX-2150 | 1-1/2" | 50 | 61 | SS 316 |
| VX-2200 | 2" | 50 | 97 | SS 316 |
| VX-2250 | 2-1/2" | 25 | 125 | SS 316 |
| VX-2300 | 3" | 25 | 148 | SS 316 |
| VX-2350 | 3-1/2" | 25 | 163 | SS 316 |
| VX-2400 | 4" | 25 | 178 | SS 316 |

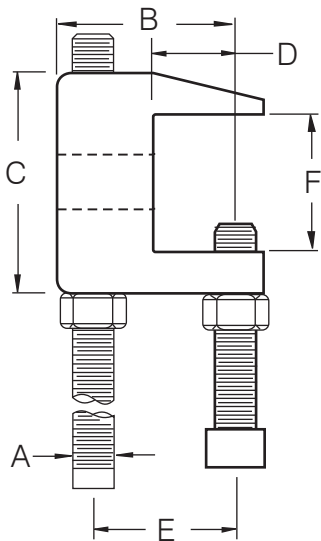
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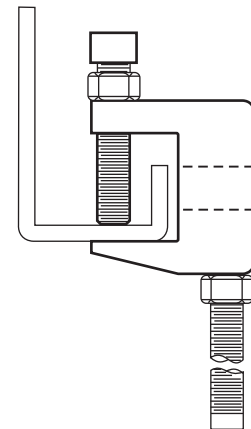
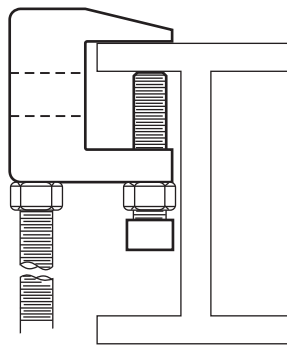
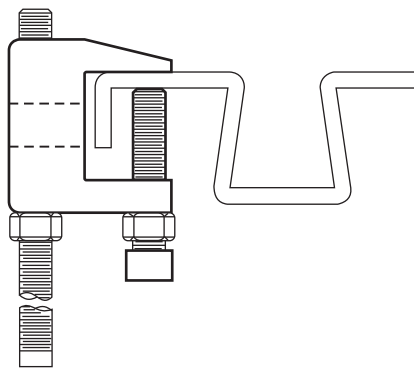
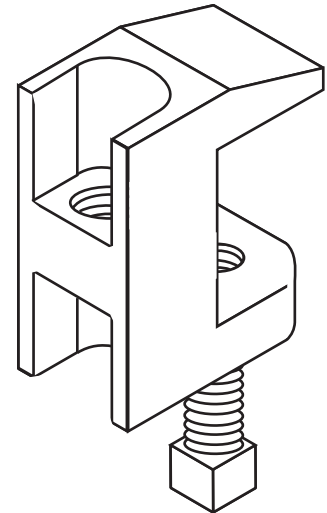
New Product Announcement

**Top Beam Style, Reversible, with Tall Jaw
Clamps in 3/8" through 3/4" are now available"**



Includes:
Clamp
Set Screw
Lock-Nut

Finish:
Zinc



| PART NUMBER | Dimensions | | | | | | | Weight Per C pc | Design Load | Ctn. Std. Pack |
|----------------------|------------|--------|--------|------|--------|--------|--------|-----------------|-------------|----------------|
| | A | B | C | D | E | F | G | | | |
| VX-1111-3/8-T | 3/8" | 1-5/8" | 2" | 3/4" | 1" | 1-1/4" | 7/8" | 28 | 400 | 50 |
| VX-1111-1/2-T | 1/2" | 1-5/8" | 2" | 3/4" | 1" | 1-1/4" | 7/8" | 34 | 500 | 50 |
| VX-1111-5/8-T | 5/8" | 1-3/4" | 2-1/4" | 3/4" | 1-1/4" | 1-1/4" | 1" | 66 | 600 | 50 |
| VX-1111-3/4-T | 3/4" | 1-7/8" | 2-3/8" | 3/4" | 1-3/8" | 1-1/4" | 1-1/4" | 83 | 800 | 50 |

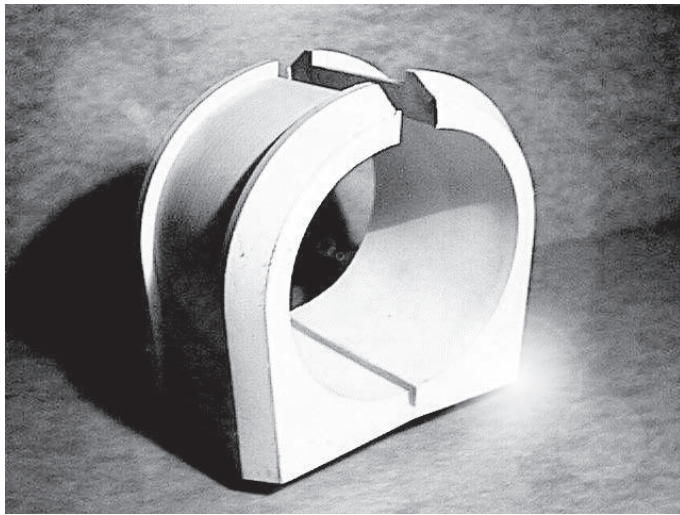
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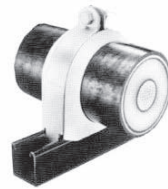
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New Product Announcement



PORCE-A-CLAMP

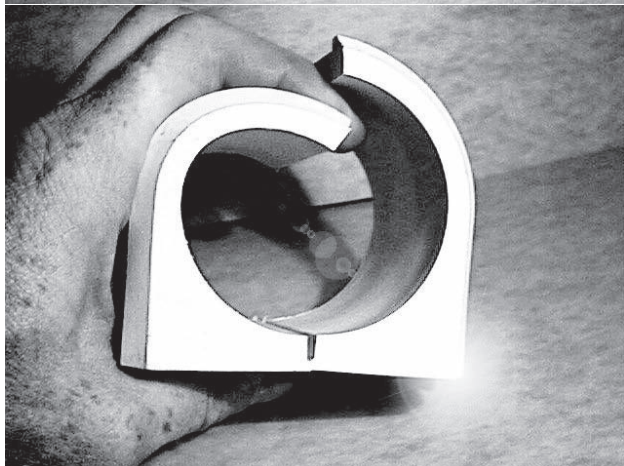
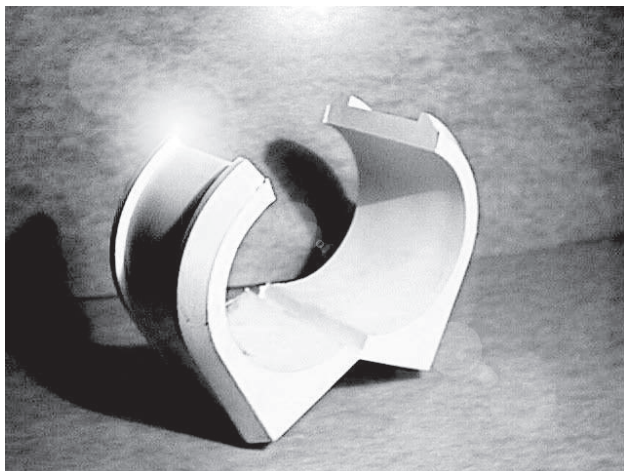
The THERMOPLASTIC
Cable Clamp



Use with
all Mfr.
1-5/8"
Channels



Porce-A-Clamps come in a variety of sizes to fit 3/8" to 4-1/2" diameter electric cables. The product is supplied with a steel outer clamp, and "Ever-Dur" silicon bronze hardware. If required, the outer clamps can be supplied in stainless as well. The most significant benefit to this product is the UL listing. Porcelain clamps have never been listed with UL. These products have been fully tested both in the lab and the field. Since there are no minimums or long wait times, you can have your project up and running right away. This product is clearly superior to porcelain.



| P/N and Size | WT./C | P/N and Size | WT./C |
|--------------|-------|--------------|-------|
| PAC 3/8 | 25 | PAC 2-1/2 | 90 |
| PAC 1/2 | 25 | PAC 2-5/8 | 90 |
| PAC 5/8 | 25 | PAC 2-3/4 | 109 |
| PAC 3/4 | 37 | PAC 2-7/8 | 109 |
| PAC 7/8 | 37 | PAC 3 | 109 |
| PAC 1 | 37 | PAC 3-1/8 | 109 |
| PAC 1-1/8 | 37 | PAC 3-1/4 | 130 |
| PAC 1-1/4 | 58 | PAC 3-3/8 | 130 |
| PAC 1-3/8 | 58 | PAC 3-1/2 | 130 |
| PAC 1-1/2 | 58 | PAC 3-5/8 | 130 |
| PAC 1-5/8 | 58 | PAC 3-3/4 | 160 |
| PAC 1-3/4 | 76 | PAC 3-7/8 | 160 |
| PAC 1-7/8 | 76 | PAC 4 | 160 |
| PAC 2 | 76 | PAC 4-1/8 | 160 |
| PAC 2-1/8 | 76 | PAC 4-1/4 | 160 |
| PAC 2-1/4 | 90 | PAC 4-3/8 | 160 |
| PAC 2-3/8 | 90 | PAC 4-1/2 | 160 |

Why **Porce-A-Clamp** instead of Porcelain?

- Costs less than porcelain
- Won't rot like maple or break like porcelain
- Short lead times
- Lightweight and inexpensive to ship
- Virtually indestructible
- One Piece design with hinge

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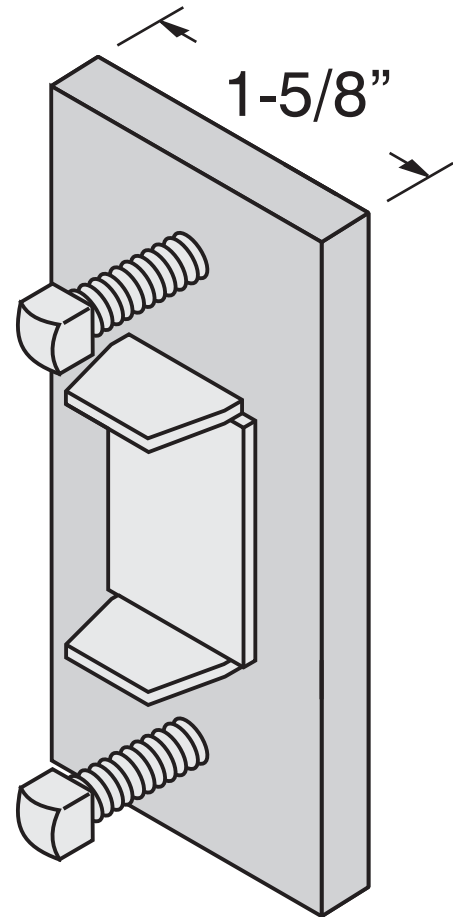
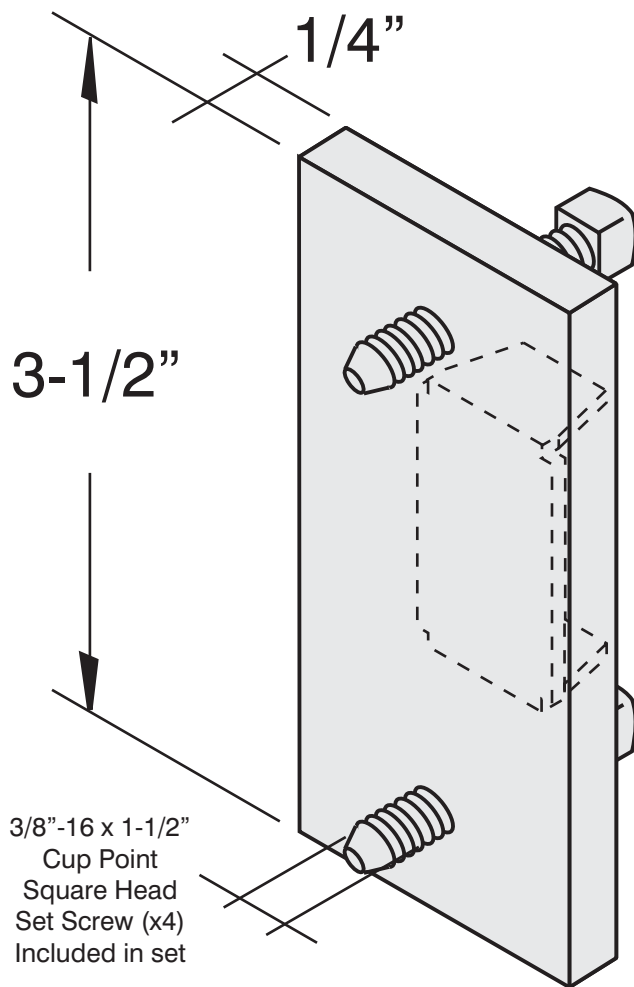
VERSABAR

New Product Availability

“Interior Type” Beam Clamp to fit “Shallow Channels”

VX-7715-A-4

Works with “shallow” Channels
VA-4, VA-5, and VA-13



Torque set screws to 19 ft./Lbs
Sold in “sets”

Undercut channel length min of 1/2" (12.7 mm) to allow for plate thickness.

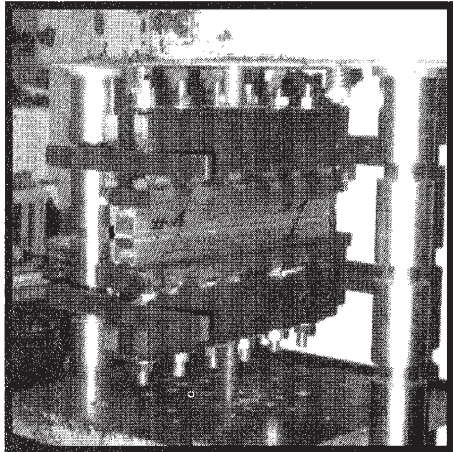
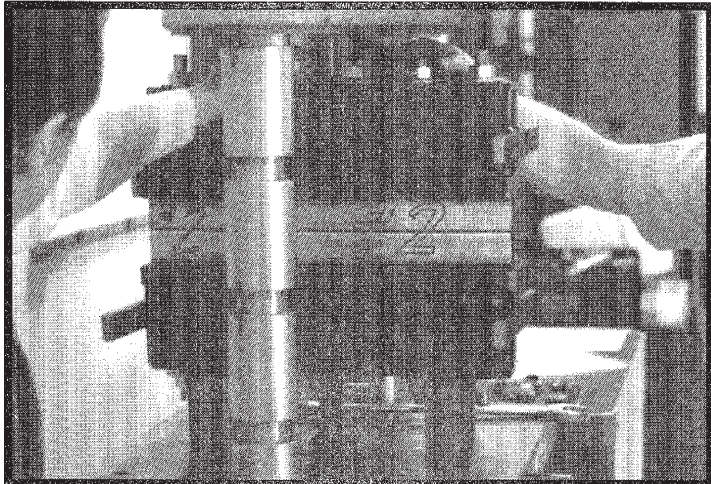
Slip Load of plates is 800#

NOTE: Refer to section “A” for load values on channel.
Channel Load rating is independent of clamp slip load rating.

| PART NUMBER | WGT. PER C | FINISH |
|-------------|------------|-------------|
| VX-7715-A-4 | 100# | Zinc Plated |

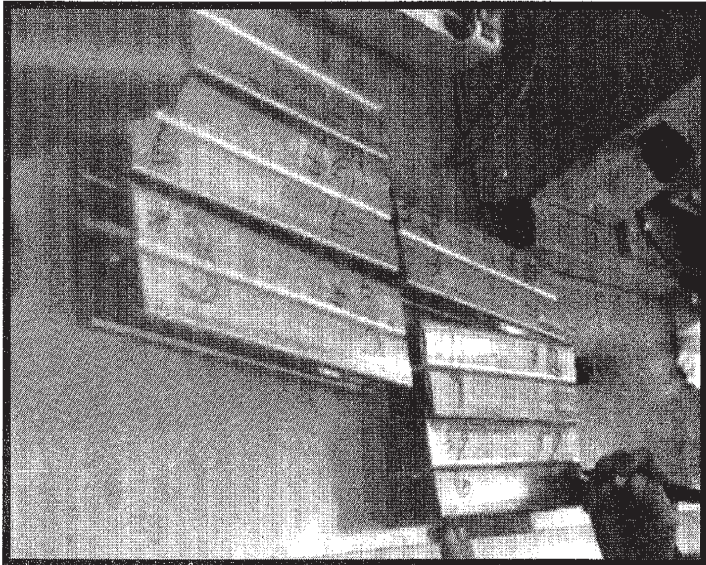
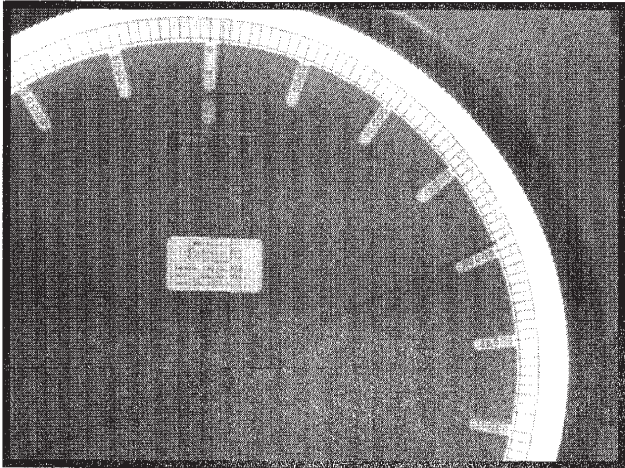
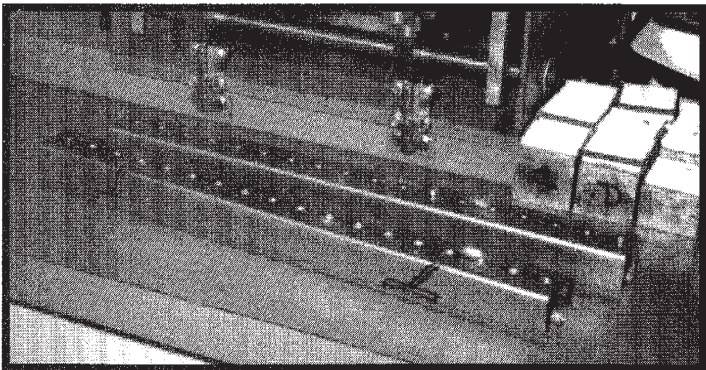
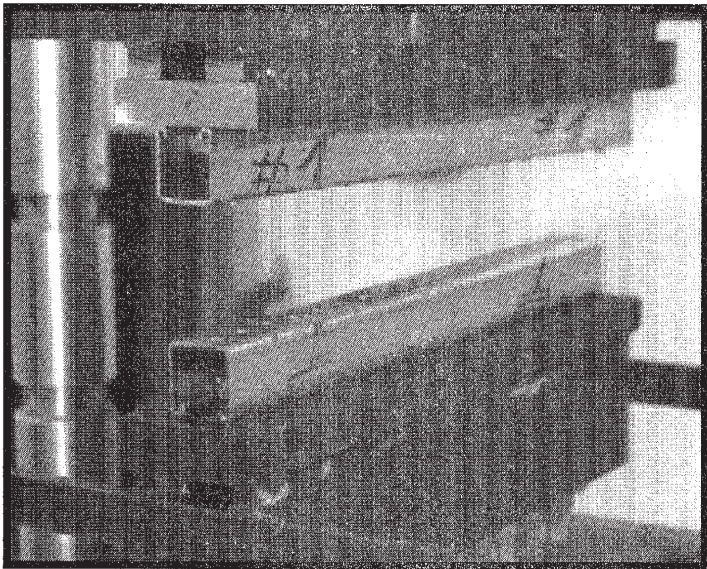
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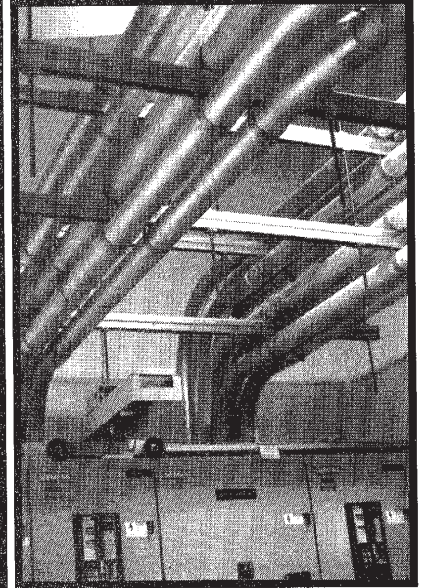
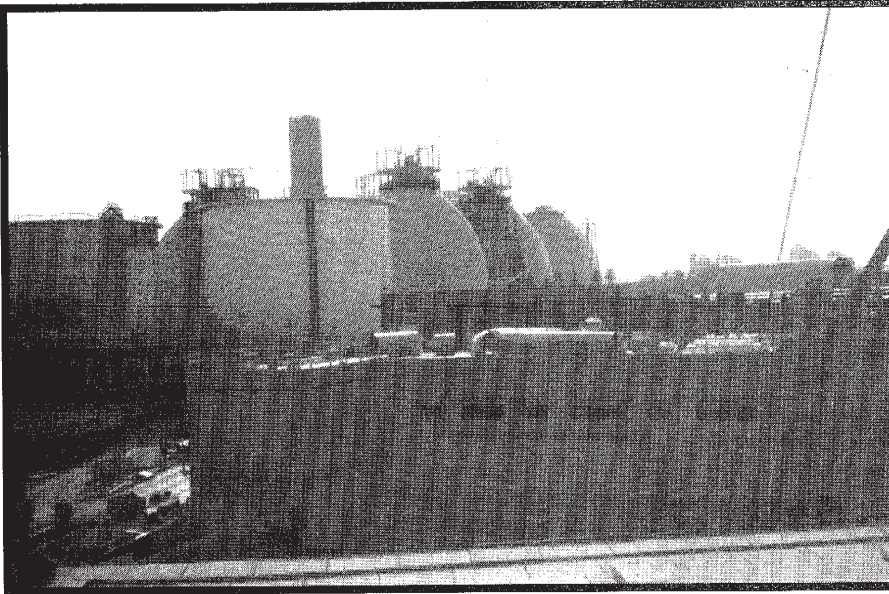
Destructive Testing by Independent Laboratories.

Images show **VERSABAR** exclusive "Toggle-Lock" back to back channel sections undergoing "Pull-Out" testing of connection strength. Indicator shows ultimate loading of 19,500 lbs. Our least efficient sample pulled apart at an astounding 18,500 Lbs. (= 4,111 per LF. SF3) Samples were 18" long sections of VA-1201, 12 gauge back-to-back channel.





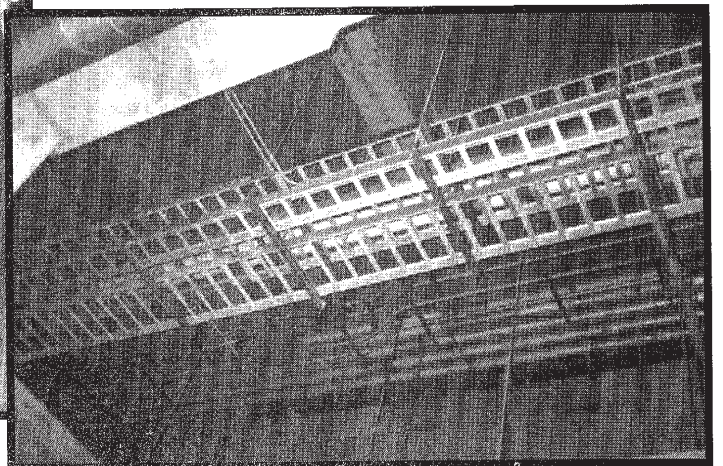
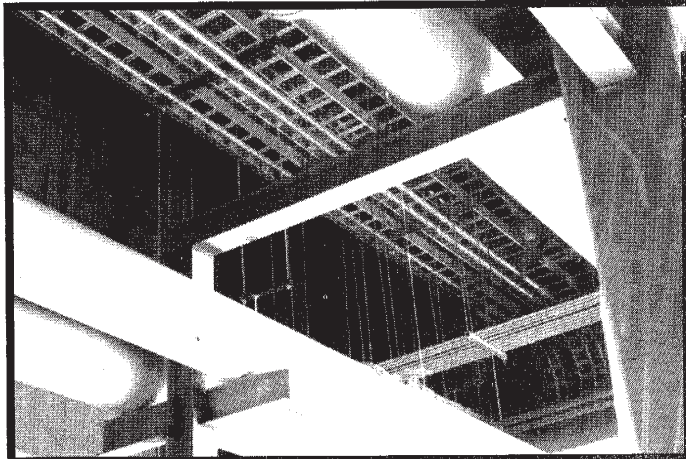
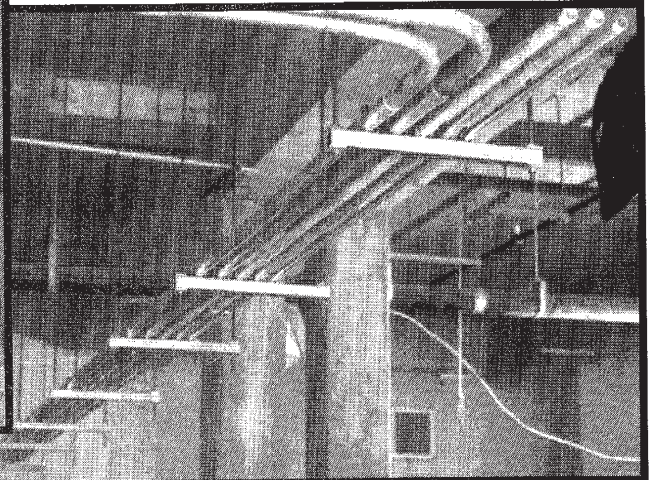
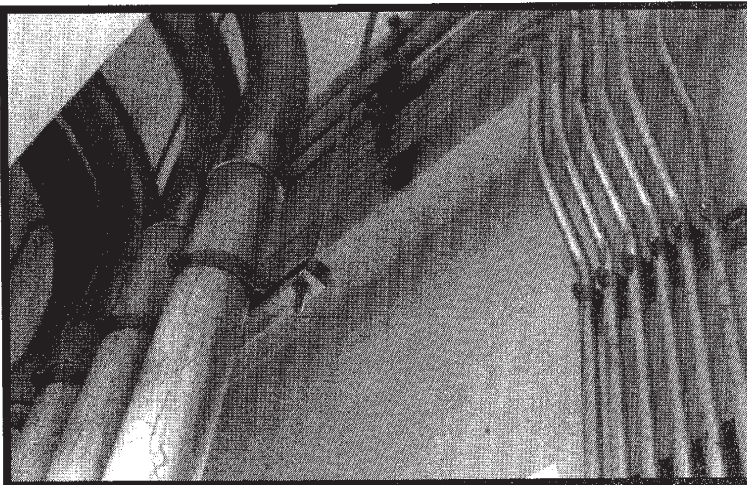
VERSABAR CORPORATION

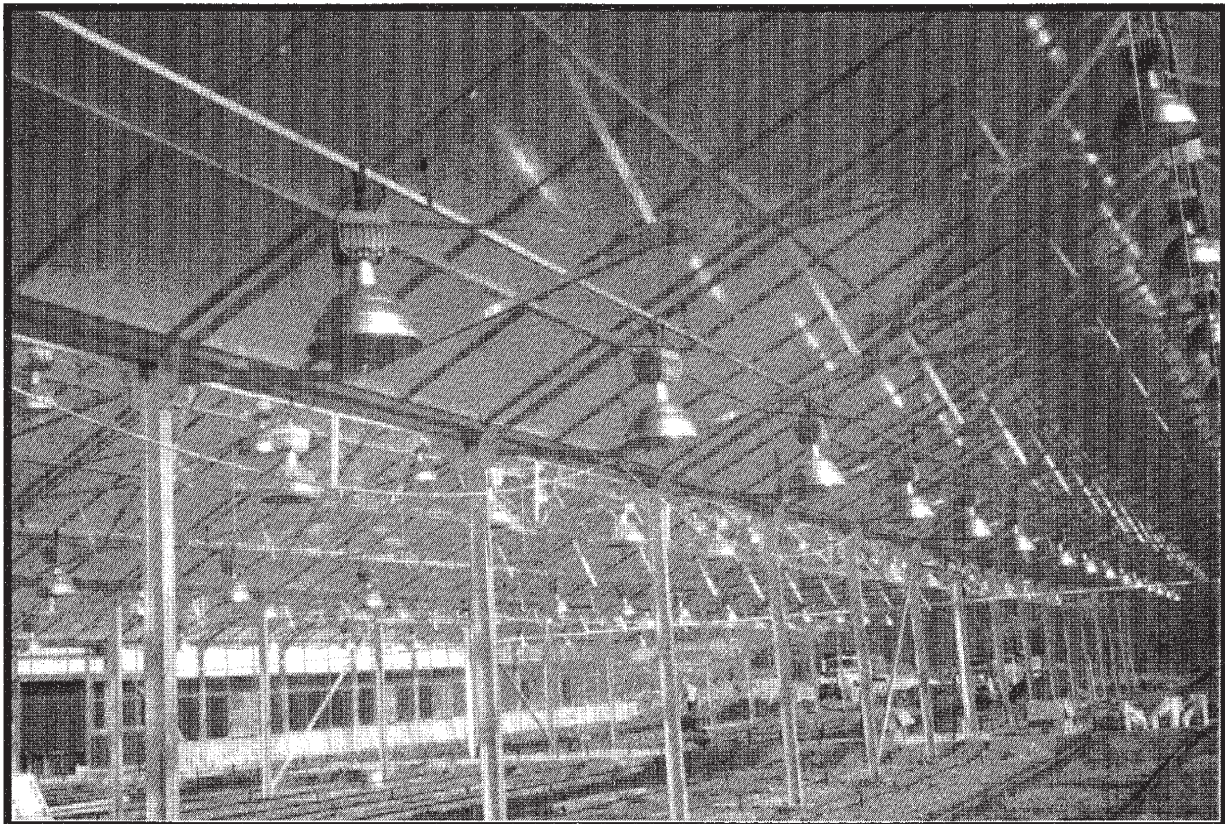
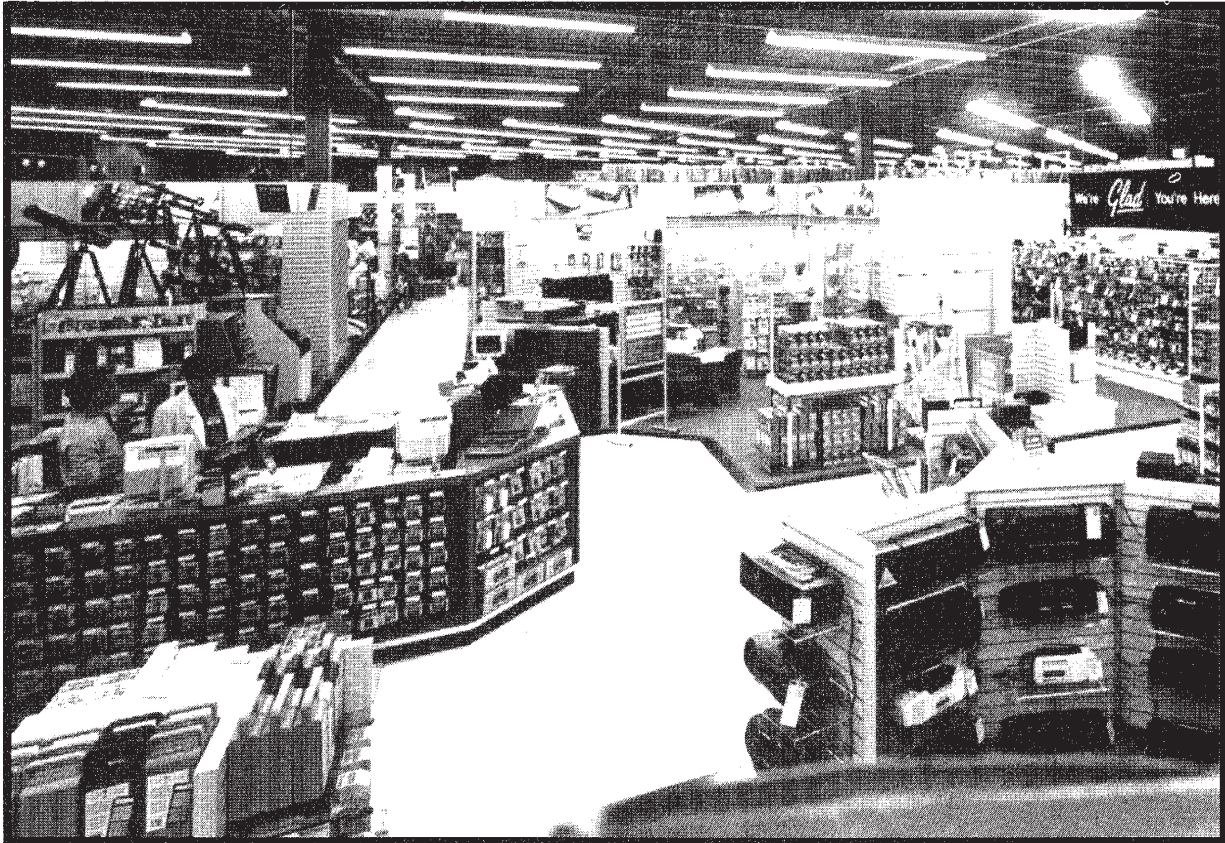


Boston Harbor Water Purification Plant on Deer Island.

Images show **VERSABAR** stainless steel products in use, supporting cable tray, conduit, and pipe runs. **VERSABAR** has a reputation earned over fifty years for delivering prime products on time. Whether the job is large or small, look to us for quality and timely deliveries.

Photos courtesy of Fischbach & Moore

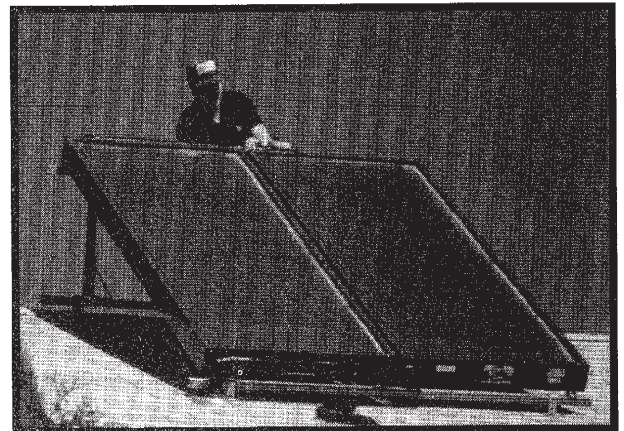
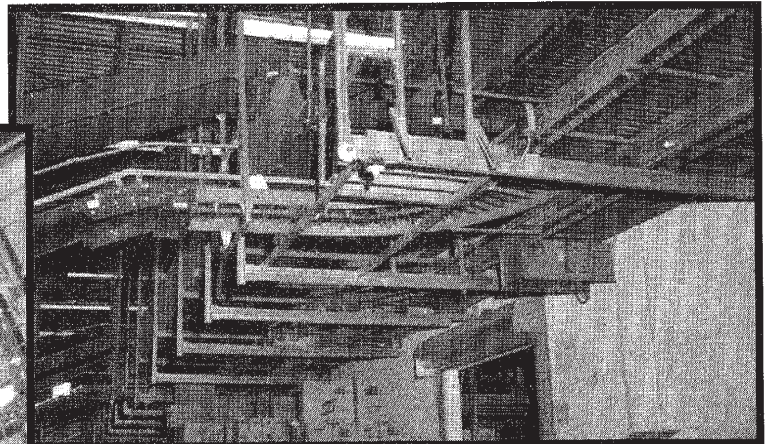
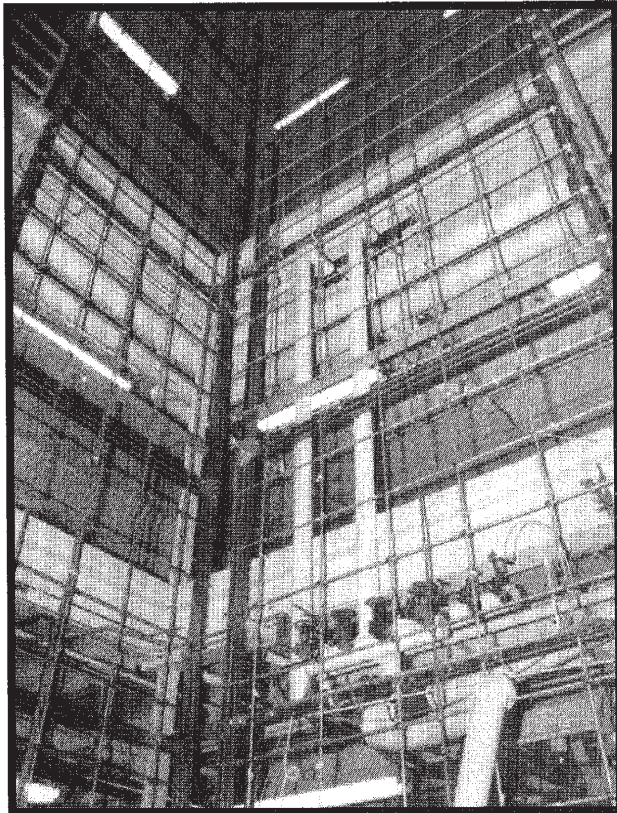
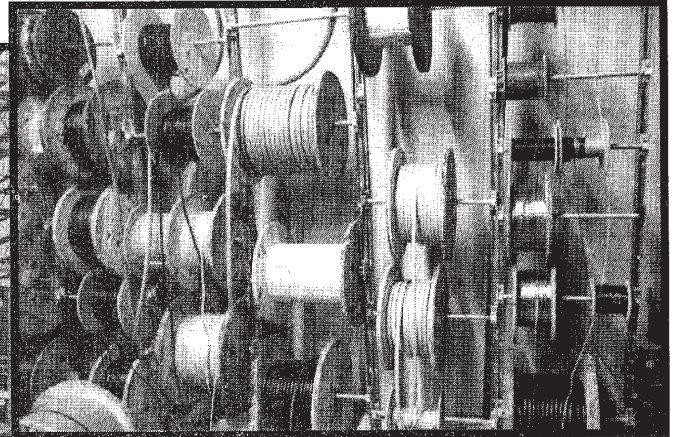
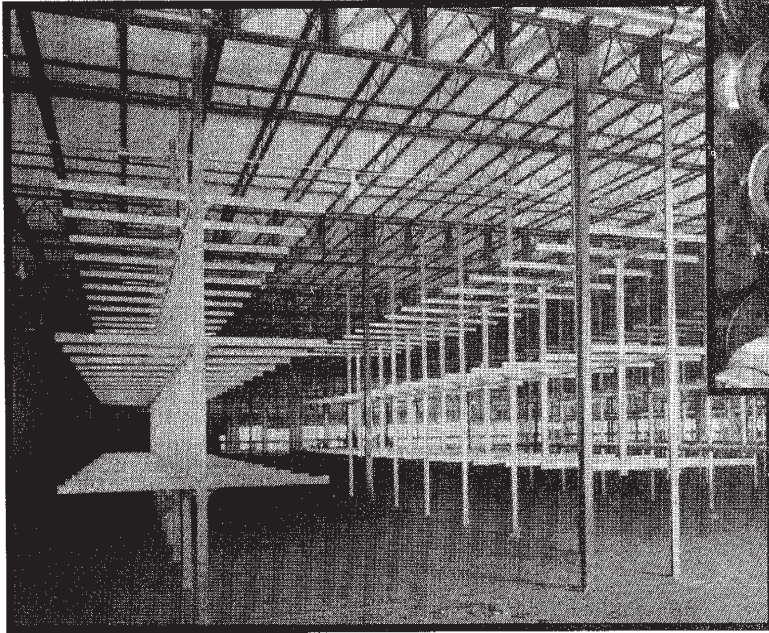




Commercial and industrial lighting support systems



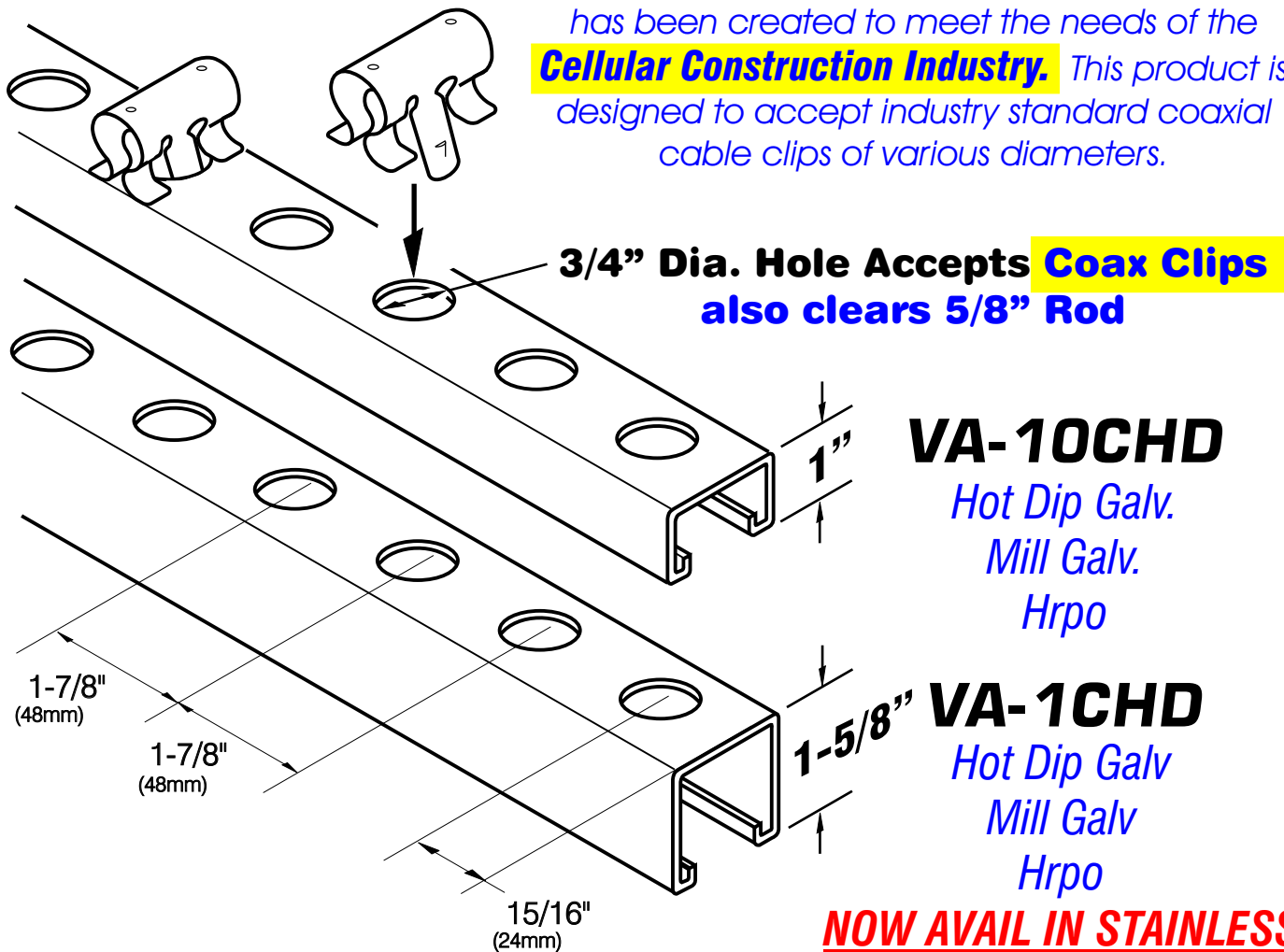
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VERSABAR

New Product Announcement

We are pleased to offer a new product which has been created to meet the needs of the **Cellular Construction Industry**. This product is designed to accept industry standard coaxial cable clips of various diameters.



Versabar CHD type channels are Hot Dipped Galvanized after fabrication. Available in 1" and 1-5/8" deep styles. Both channels are 1-5/8" wide across the base, and roll formed from 12ga. Steel.

3/4" diameter perforations accept industry standard cellular coax clips. Standard lengths will be 10'. Contact factory for volume pricing on non-standard lengths.

IN STOCK NOW

For additional information please contact William E. Taylor

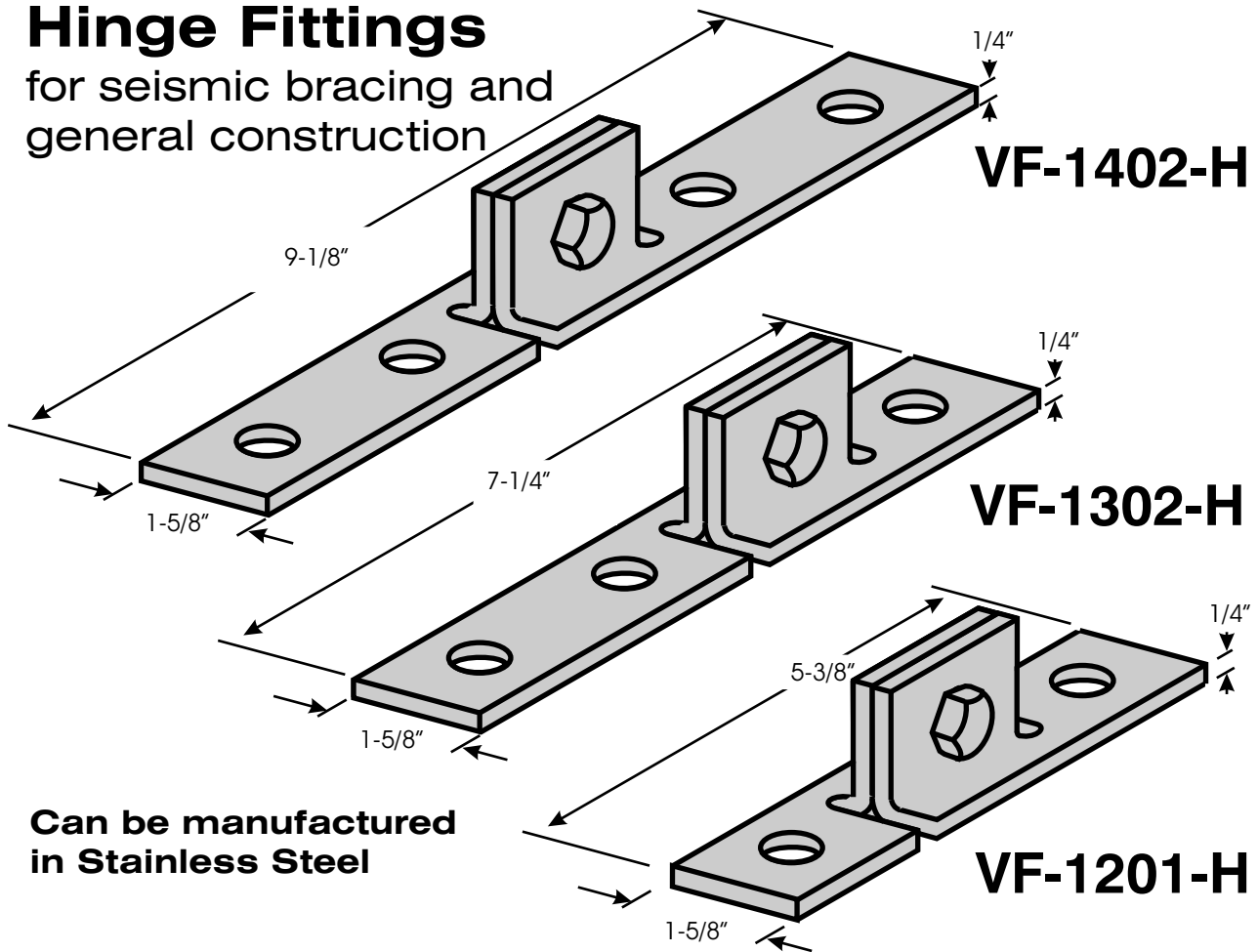
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VERSABAR

Hinge Fittings

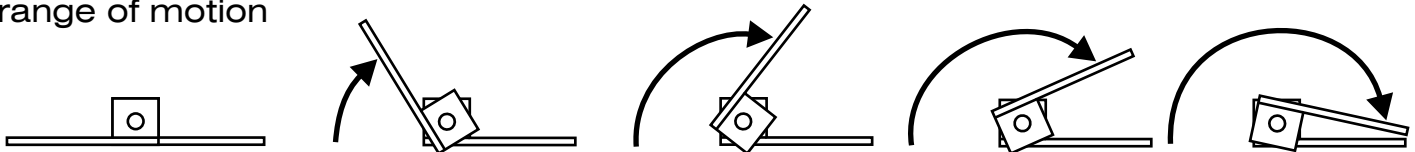
for seismic bracing and general construction



Can be manufactured in Stainless Steel

Supplied with Hex Head Cap Screw
Nylok Hex Nut, Flat Washer

Allows adjustable tension through full range of motion



Versabar Hinge Type Fittings are available in 2, 3, and 4 hole versions.

These fittings allow a full range of motion, and are compatible with all manufacturers 1-5/8" standard channels. Available in carbon steel with various finishes including zinc plated, plain, and PVC Coated. **Also available in stainless steel 304 & 316.**

For additional information please contact
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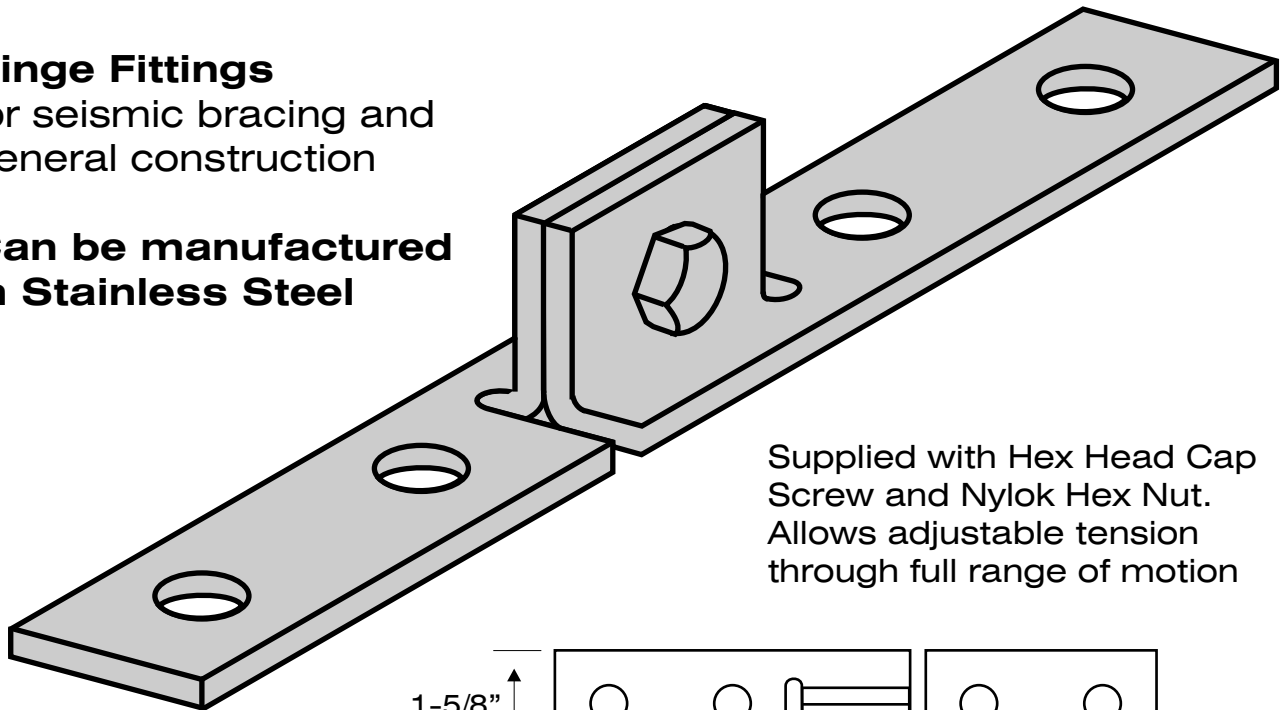
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New Product Announcement

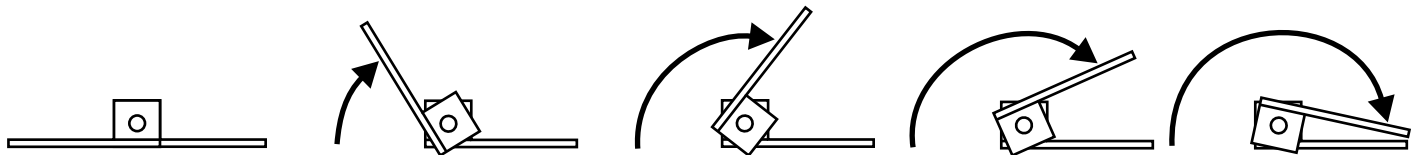
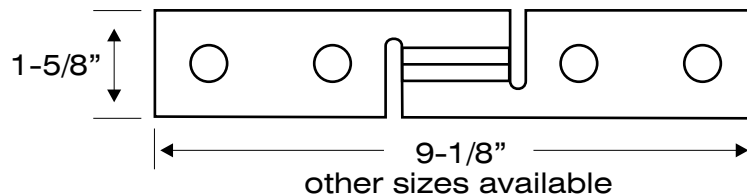
Hinge Fittings

for seismic bracing and
general construction

**Can be manufactured
in Stainless Steel**



Supplied with Hex Head Cap
Screw and Nylok Hex Nut.
Allows adjustable tension
through full range of motion



Versabar Hinge Type Fittings are available in 2, 3, and 4 hole versions.

PN's# (VF-1201-H) (VF-1302-H) (VF-1402-H shown)

These fittings allow a full range of motion, and are compatible with all manufacturers 1-5/8" standard channels. Available in carbon steel with various finishes including zinc plated, plain, and PVC Coated. **Also available in stainless steel 304 & 316.**

IN STOCK NOW

For additional information please contact William E. Taylor

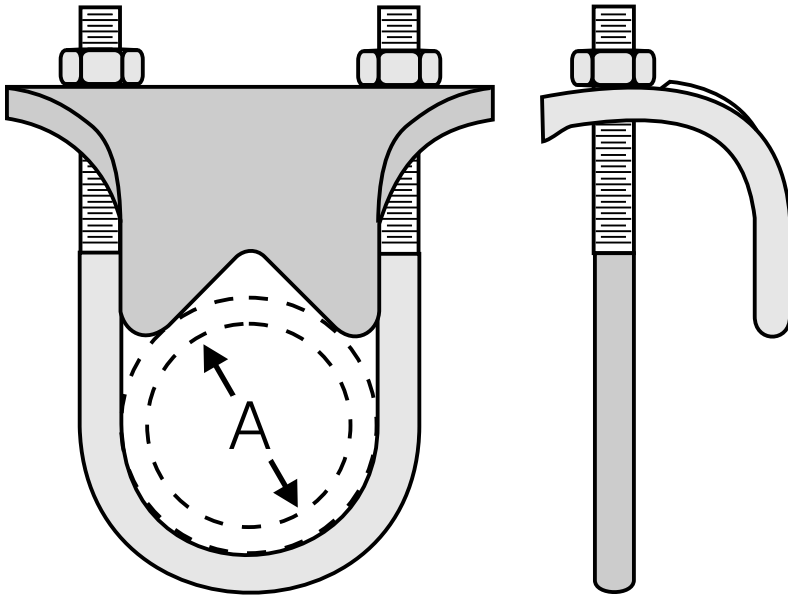
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VERSABAR

New Product Availability

HOT DIPPED Right Angle Conduit Clamps for 3/8" to 4" Pipe



Beam Clamps for Iron Pipe

**Standard Finish
Hot Dipped Galvanized**

| PART NUMBER | PIPE SIZE A | BOX QTY | WGT. PER C | FINISH |
|--------------------|--------------------|----------------|-------------------|---------------|
| VX-2037 | 3/8" | 50 | 25 | HDGA |
| VX-2050 | 1/2" | 50 | 40 | HDGA |
| VX-2075 | 3/4" | 50 | 43 | HDGA |
| VX-2100 | 1" | 50 | 48 | HDGA |
| VX-2125 | 1-1/4" | 50 | 53 | HDGA |
| VX-2150 | 1-1/2" | 50 | 58 | HDGA |
| VX-2200 | 2" | 50 | 85 | HDGA |
| VX-2250 | 2-1/2" | 25 | 106 | HDGA |
| VX-2300 | 3" | 25 | 110 | HDGA |
| VX-2350 | 3-1/2" | 25 | 128 | HDGA |
| VX-2400 | 4" | 25 | 140 | HDGA |

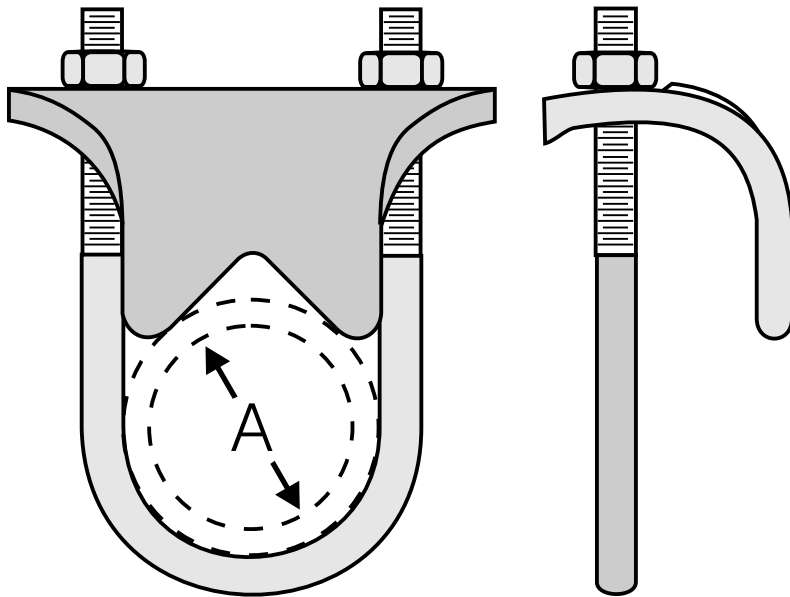
1-800-228-3772

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VERSABAR

New Product Availability

STAINLESS STEEL Right Angle Conduit Clamps for 1/2" to 4" I.P.



Beam Clamps for Pipe

**PRODUCED IN FULL
TYPE 316 STAINLESS**

Clamp Body: CF8M, 316
Hardware: 316

Standards: ASTM A351, ASTM F593

Designed to work with pipe/rigid as well as
PVC coated conduit.

Provides high strength and corrosion resistance

| PART NUMBER | PIPE SIZE "A" | BOX QTY | WGT. PER C | FINISH |
|------------------------|--------------------------|--------------------|-----------------------|---------------|
| VX-2050-SS316 | 1/2" | 50 | 34 | SS 316 |
| VX-2075-SS316 | 3/4" | 50 | 36 | SS 316 |
| VX-2100-SS316 | 1" | 50 | 44 | SS 316 |
| VX-2125-SS316 | 1-1/4" | 50 | 51 | SS 316 |
| VX-2150-SS316 | 1-1/2" | 50 | 61 | SS 316 |
| VX-2200-SS316 | 2" | 50 | 97 | SS 316 |
| VX-2250-SS316 | 2-1/2" | 25 | 125 | SS 316 |
| VX-2300-SS316 | 3" | 25 | 148 | SS 316 |
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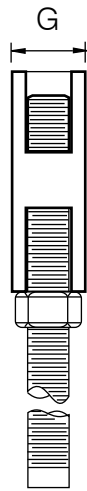
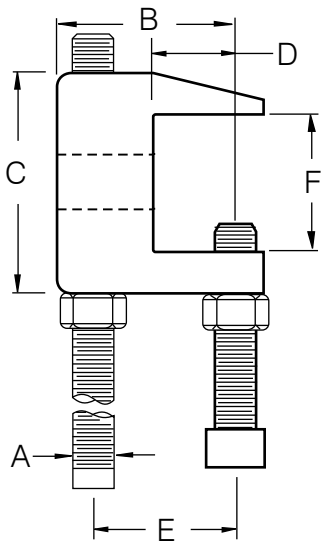
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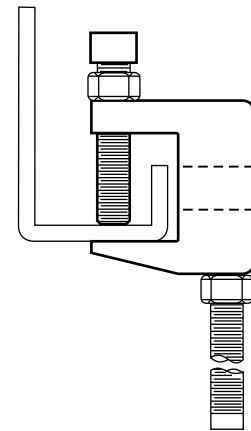
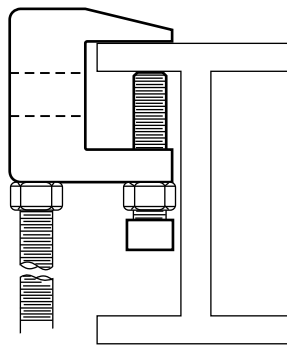
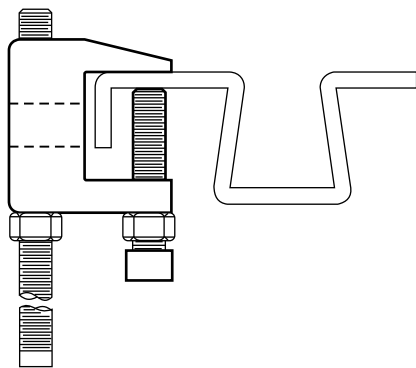
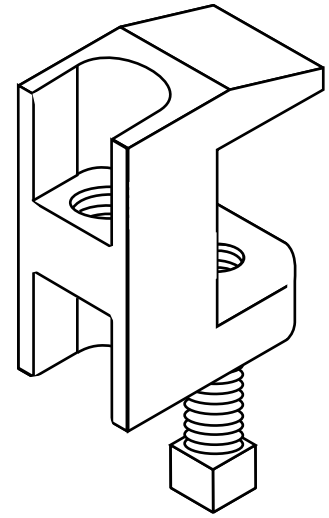
New Product Announcement

Top Beam Style, Reversible, with Tall Jaw
Clamps in 3/8" through 3/4" are now available"



Includes:
Clamp
Set Screw
Lock-Nut

Finish:
Zinc



| PART NUMBER | Dimensions | | | | | | | Weight Per C pc | Design Load | Ctn. Std. Pack |
|----------------------|------------|--------|--------|------|--------|--------|--------|-----------------|-------------|----------------|
| | A | B | C | D | E | F | G | | | |
| VX-1111-3/8-T | 3/8" | 1-5/8" | 2" | 3/4" | 1" | 1-1/4" | 7/8" | 28 | 400 | 50 |
| VX-1111-1/2-T | 1/2" | 1-5/8" | 2" | 3/4" | 1" | 1-1/4" | 7/8" | 34 | 500 | 50 |
| VX-1111-5/8-T | 5/8" | 1-3/4" | 2-1/4" | 3/4" | 1-1/4" | 1-1/4" | 1" | 66 | 600 | 50 |
| VX-1111-3/4-T | 3/4" | 1-7/8" | 2-3/8" | 3/4" | 1-3/8" | 1-1/4" | 1-1/4" | 83 | 800 | 50 |

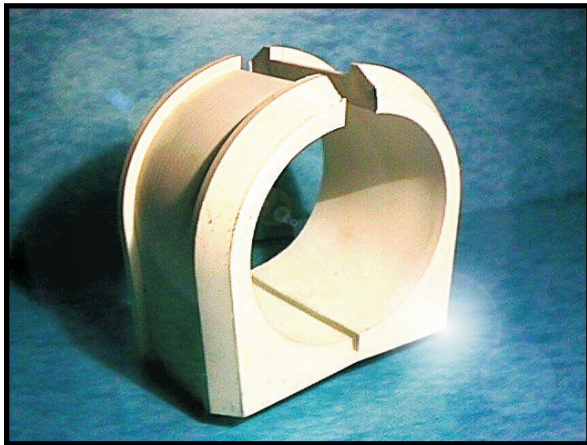
1-800-228-3772

versabar.com



VERSABAR

Versabar Corporation 100 Maltese Drive Totowa, N.J. 07512 1-800-228-3772

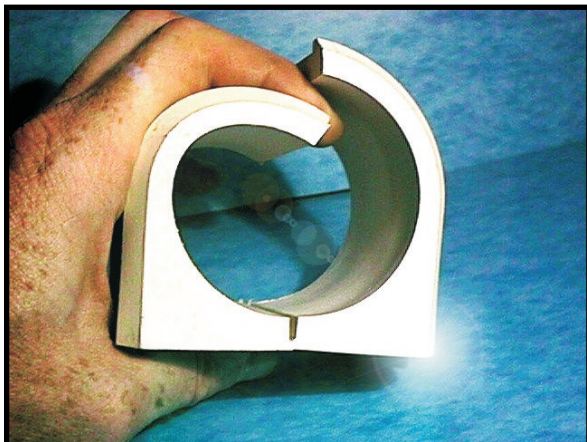
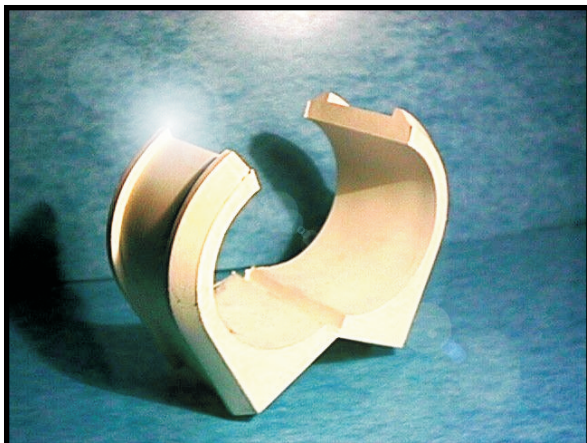


PORCE-A-CLAMP

Why Porce-A-Clamp instead of Porcelain?

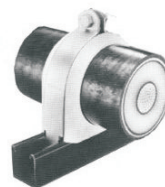
- Costs less than porcelain
- Won't rot like maple or break like porcelain
 - Short lead times
- Lightweight and inexpensive to ship
 - Virtually indestructible
- One Piece design with hinge

Porce-A-Clamps come in a variety of sizes to fit 3/8" to 4-1/2" diameter electric cables. The product is supplied with a steel outer clamp, and "Ever-Dur" silicon bronze hardware. If required, the outer clamps can be supplied in stainless as well. The most significant benefit to this product is the UL listing. Porcelain clamps have never been listed with UL. These products have been fully tested both in the lab and the field. Since there are no minimums or long wait times, you can have your project up and running right away. This product is clearly superior to porcelain.



| P/N and Size | WT./C | P/N and Size | WT./C |
|--------------|-------|--------------|-------|
| PAC 3/8 | 25 | PAC 2-1/2 | 90 |
| PAC 1/2 | 25 | PAC 2-5/8 | 90 |
| PAC 5/8 | 25 | PAC 2-3/4 | 109 |
| PAC 3/4 | 37 | PAC 2-7/8 | 109 |
| PAC 7/8 | 37 | PAC 3 | 109 |
| PAC 1 | 37 | PAC 3-1/8 | 109 |
| PAC 1-1/8 | 37 | PAC 3-1/4 | 130 |
| PAC 1-1/4 | 58 | PAC 3-3/8 | 130 |
| PAC 1-3/8 | 58 | PAC 3-1/2 | 130 |
| PAC 1-1/2 | 58 | PAC 3-5/8 | 130 |
| PAC 1-5/8 | 58 | PAC 3-3/4 | 160 |
| PAC 1-3/4 | 76 | PAC 3-7/8 | 160 |
| PAC 1-7/8 | 76 | PAC 4 | 160 |
| PAC 2 | 76 | PAC 4-1/8 | 160 |
| PAC 2-1/8 | 76 | PAC 4-1/4 | 160 |
| PAC 2-1/4 | 90 | PAC 4-3/8 | 160 |
| PAC 2-3/8 | 90 | PAC 4-1/2 | 160 |

The ***THERMOPLASTIC***
Cable Clamp



Use with
all Mfr.
1-5/8"
Channels



The clear alternative to glass cable insulators

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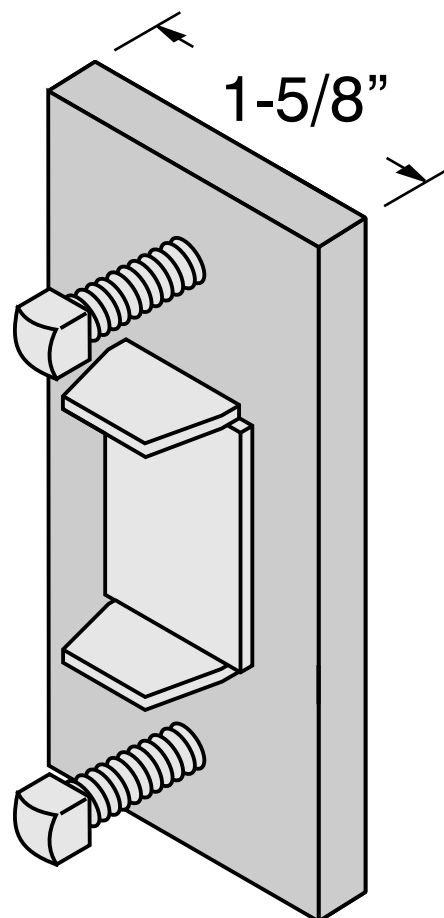
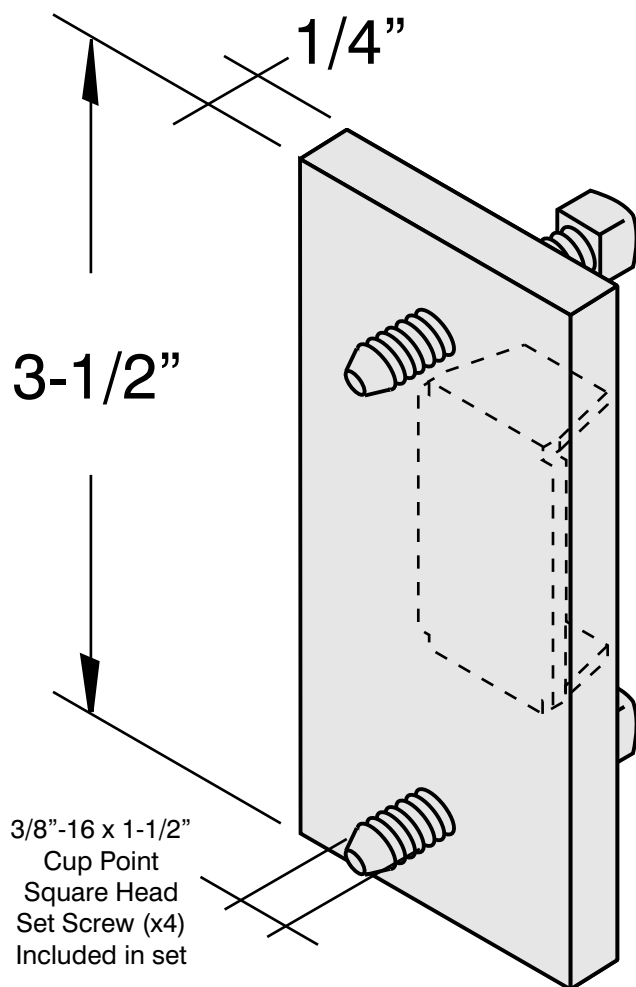
New Product Availability

“Interior Type” Beam Clamp to fit “Shallow Channels”

* Can be manufactured in Stainless Steel

VX-7715-A-4

Works with “shallow” Channels
VA-4, VA-5, and VA-13



Torque set screws to 19 ft./Lbs

Undercut channel length min of 1/2"
(12.7 mm) to allow for plate thickness.

Slip Load of plates is 800#

NOTE: Refer to section “A” for load values on channel.
Channel Load rating is independent of clamp slip load rating.

| PART NUMBER | WGT. PER C | FINISH |
|-------------|------------|-------------|
| VX-7715-A-4 | 100# | Zinc Plated |

1-800-228-3772

versabar.com



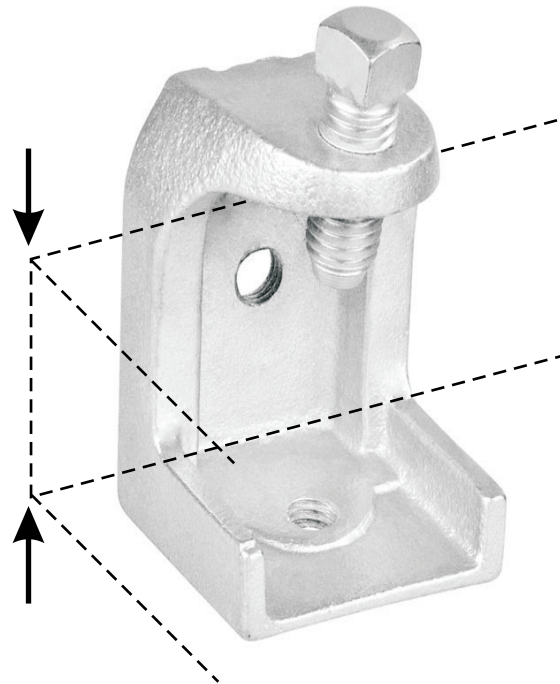
NEW PRODUCTS

Versabar Corporation 100 Maltese Drive Totowa, N.J. 07512 1-800-228-3772

“Wide Mouth” Electricians Style Rod Suspension Beam Clamps

VX-9000-WM Series

**Accepts
up to
3” thick
Flanges**



**Heavy Duty
Malleable Iron**



Finish is Bright Zinc

Application:

They are tapped for threaded rod on their bottom and backs.

These beam clamps are used with conduit hangers, bridle rings and Threaded Rods in the following sizes:

| Rod Dia | Part # | Workload | Set Screw Size | Box Qty |
|----------------|---------------|-----------------|-------------------------|----------------|
| 1/4”-20 | VX-9004-WM | 200# | 5/16” x 2-1/2 set screw | 25 |
| 3/8”-16 | VX-9005-WM | 300# | 3/8” x 2-1/2 set screw | 10 |
| 1/2”-13 | VX-9006-WM | 400# | 1/2” x 2-1/2 set screw | 10 |

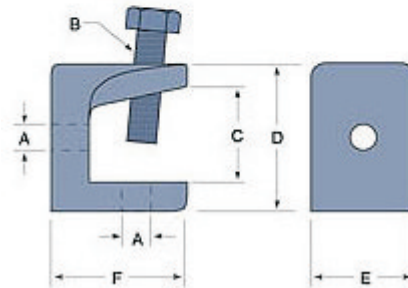
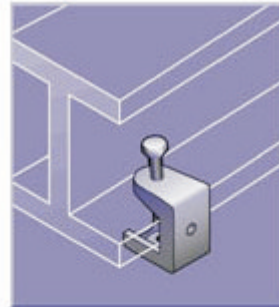
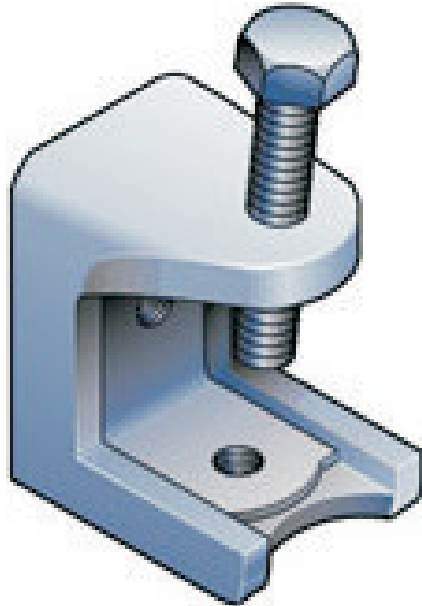
Advantages:

VX-9000-WM beam clamps are used to hang medium, light, or heavy loads from structural beams. Their hardened, cup-point screw and malleable iron body will not distort or slip off the beam edge when tightened.

VERSABAR



STAINLESS STEEL 316 ELECTRICIANS BEAM CLAMPS



This heavy-duty electricians style beam clamp is cast in **Stainless 316** for superior strength and corrosion resistance. Designed for use on I-beams, channels, and other structural members, this beam clamp provides firm fixturing without drilling holes. Attachment holes in the back and bottom permit a wide variety of applications. **Available in three sizes.**

| Part Number | Weight Per C | Load Rating (lbs) | Material: Body - CF8M(316), Hardware - 316SS |
|----------------|--------------|-------------------|---|
| VX-9004-SS-316 | 25 | 150 | Standards: ASTM A351, ASTM F593 |
| VX-9005-SS-316 | 80 | 750 | |
| VX-9006-SS-316 | 148 | 1,100 | |

Part Number Dimensions (inches) * MAX BEAM FLANGE "C" INDICATED

| | A | B | C* | D | E | F |
|----------------|---------|----------|------|---------|--------|---------|
| VX-9004-SS-316 | 1/4"-20 | 5/16"-18 | 3/4" | 1-3/8" | 1" | 1-5/16" |
| VX-9005-SS-316 | 3/8"-16 | 1/2"-13 | 1" | 1-7/8" | 1-7/8" | 2" |
| VX-9006-SS-316 | 1/2"-13 | 5/8"-11 | 1" | 2-3/16" | 2-1/8" | 2-1/4" |

VERSABAR

VRP Series Roofing Piers

A superior product at a lower cost

We use:

HOT DIPPED GALVANIZED STRUT
STAINLESS STEEL FASTENERS

They use:

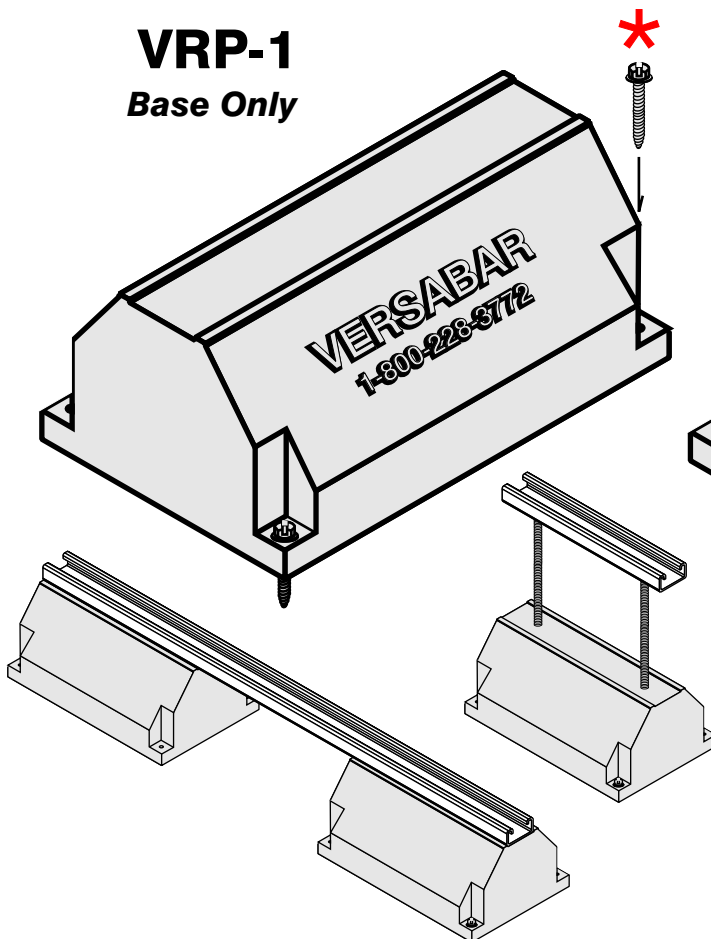
MILL GALVANIZED STRUT
ZINC PLATED FASTENERS

VRP SERIES - DESIGNED FOR OUTDOOR USE AND BUILT TO TAKE IT!

**Recessed Corners for Screw Down If Desired (extra safety / security)
Durable Ground Rubber Base, Reflectors Available, Supports 500# Uniform Load**

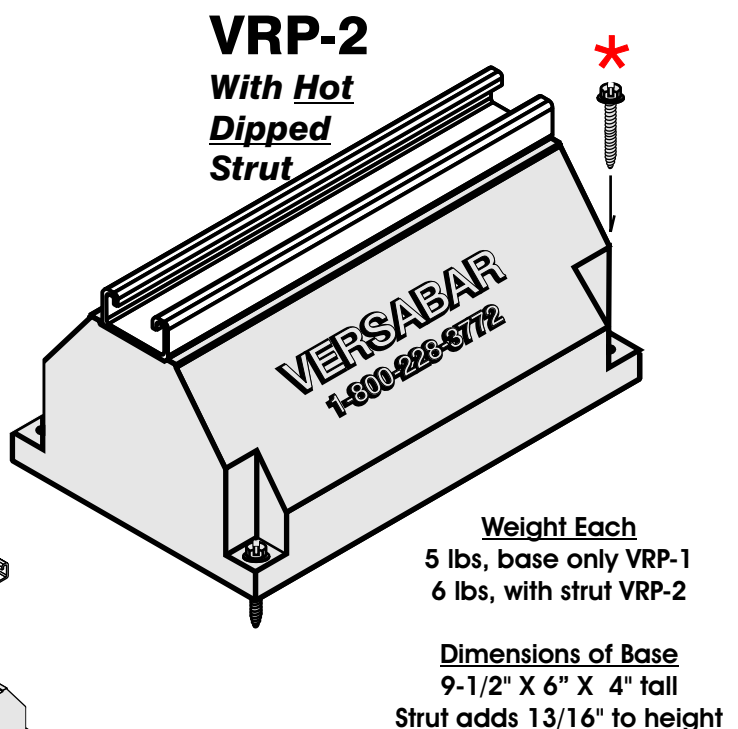
VRP-1

Base Only



VRP-2

*With Hot
Dipped
Strut*



Weight Each
5 lbs, base only VRP-1
6 lbs, with strut VRP-2

Dimensions of Base
9-1/2" X 6" X 4" tall
Strut adds 13/16" to height

Combining Piers and adding
additional mechanical devices
offers open ended support solutions
WE CAN BUILD WHAT YOU NEED - FAST