

# HOHMANN & BARNARD, INC.



AIR & VAPOR BARRIERS / ANCHORS & TIES / CONCEALED LINTELS
EXPANSION & CONTROL JOINTS / INSULATED SHELF ANGLE SYSTEMS
MASONRY & CONCRETE ACCESSORIES / MASONRY JOINT REINFORCEMENT
MOISTURE CONTROL SYSTEMS / RAINSCREEN SUPPORT SYSTEMS
REPAIR & RESTORATION SYSTEMS

www.h-b.com 1-800-645-0616

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**MATERIAL CONFORMANCE** 





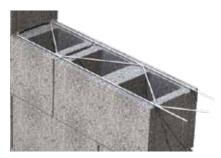






#### JOINT REINFORCEMENT

#### 120 Truss-Mesh



#### 130 Truss-Tri-Mesh



140 Truss-Twin-Mesh



220 Ladder-Mesh



230 Ladder-Tri-Mesh



240 Ladder-Twin-Mesh



Truss-Mesh and Ladder-Mesh are continuous lengths of joint reinforcement that are embedded into the horizontal mortar joint of masonry walls. Joint reinforcement has long proven to be necessary for superior performance of masonry wall construction.

- Greatly reduces cracking that can arise from thermal stresses. This enhances resistance to water penetration, as cracks are controlled.
- Increases lateral flexural strength.
- Bonds exterior and interior masonry wythes together in composite or cavity walls. Also bonds masonry at intersecting walls and corners.
- Increases elasticity and performance of masonry walls under various stresses.

- Butt-welding of cross rods to longitudinal rods (not more than 16"o.c.) enhances bonding capabilities, eliminates projection of cross rods beyond the specified width of reinforcement, and prevents excessive height of wire in limited mortar joints.
- Continuous deformation along each longitudinal rod for superior bonding performance.

#### **Standard Sizes:**

(S) Standard: 9 ga. side rods x 9 ga. cross rods. (SHD) Super Heavy Duty: 3/16" side rods x 3/16" cross rods. (EH) Extra Heavy: 3/16" side rods x 9 ga. cross rods.

**Finishes:** Mill Galvanized, Hot Dip Galvanized, and Stainless Steel.

#### **Continuous Wire**



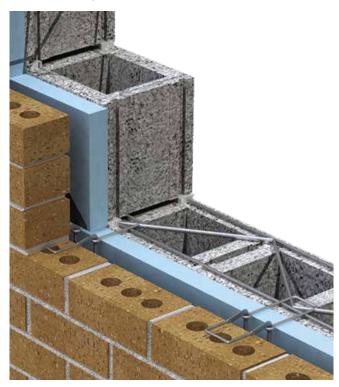
Continuous wire used in masonry veneer walls helps to provide additional protection against thermal expansion and contraction problems. The wire must be embedded into the mortar joints of anchored veneer walls, per the Uniform Building Code for seismic zones. The wire is secured to the tie anchor, which is fastened to the supporting structure.

Continuous wire can be integrated into several of our masonry joint reinforcement or anchor systems: Seismiclip® Interlock System (S.I.S), Byna-Lok® Wire Tie, Seismic Hook

**Sizes:** 9 ga., 3/16" dia., or 1/4" dia.

#### JOINT REINFORCEMENT ANCHORING SYSTEMS

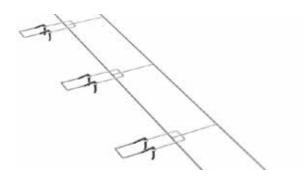
#### 170 Truss Eye-Wire



#### 270 Ladder Eye-Wire







Truss Style Adjustable Joint Reinforcement with Eyes and the 2X-HOOK $^{\text{TM}}$  for cavity/insulated walls.

- 2X-HOOK (pintle) drops into snug eyelet as exterior wall is erected, tying both wythes together.
- Allows construction of interior wythe in advance of exterior wythe.
- Special design of pintle serves to mechanically secure insulation to the masonry back-up.

**Standard Sizes:** 4" wall - 16" wall. Other widths available on special request. Adjustable reinforcing made to accommodate various insulation / air dimensions. Eyes and Pintles are 3/16" diameter.

(S) Standard: 9 ga. side rods x 9 ga. cross rods.

(SHD) Super Heavy Duty: 3/16" side rods x 3/16" cross rods.

For seismic conditions and crack control add "-SH" to any product number. Example: 270-SH

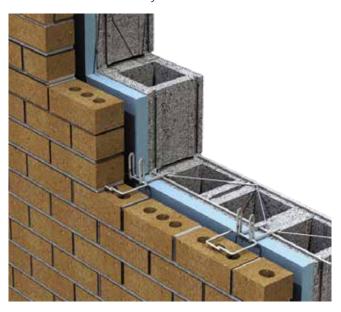
Finishes: Hot-Dip Galvanized, 304 Stainless Steel (316 Special Order).

U.S. Patent: 8,613,175. Other Patents Pending.

HOHMANN & BARNARD's wire products conform to ASTM A 951 standard specifications for masonry joint reinforcement.

#### ADJUSTABLE REINFORCEMENT SYSTEMS

#### **180-BL Truss** with Byna-Lok® Wire Tie



Loop-Lok\* Truss allows in-plane vertical and horizontal movement of masonry wythes while restraining tension and compression.

- 100% protection against separation of wire tie from reinforcement. (See Code TMS 402/TMS 602)
- Loops welded shut to maintain allowable tolerance and system integrity.
- Unlike horizontal eyelets, vertical loops will not clog with mortar as construction progresses.
- Loop extends one direction only to allow simple placement of insulation. Slip on Loop-Lok® Washer to mechanically lock insulation in place.
- Also available: 280-BL Ladder Style.

**U.S. Patent: 5,408,798; 5,454,200; 6,279,283; 6,668,505; 6,789,365; 6,851,239; 6,925,768; 8,881,488.** Other Patents Pending.

#### Byna-Lok® Wire Tie



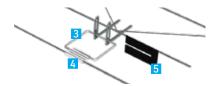
New masonry veneer can be anchored to studs, existing masonry, concrete or steel with the Byna-Lok® Wire Tie. Various H&B systems can be fitted with the Byna-Lok® Wire Tie, affording easy and secure insertion of the continuous joint reinforcing wire.

- Swage and mild pitch on legs of the Byna-Lok® Wire Tie provide an integral track for the continuous joint reinforcement wire.
- Economical. Add continuous wire to masonry walls at little additional cost.
- Suitable for standard 3/8" mortar joint.
- The use of continuous wire in the outer brick wythe is beneficial in providing protection against problems arising from thermal expansion and contraction (crack control). It also allows for a more uniform distribution of lateral forces.

#### Loop-Lok-HS-BL



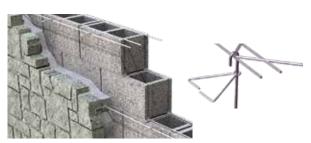
#### Loop-Lok-HS S.I.S



- 1. 3/16" BYNA-LOK° WIRE TIE (STANDARD)
- 2. 9 GA. OR 3/16" CONTINUOUS WIRE
- 3. 3/16" BOX BYNA-TIE (STANDARD)
- 4. SEISMICLIP®
- 5. LOOP-LOK® WASHER (OPTIONAL)

#### ADJUSTABLE SYSTEMS FOR RUBBLE STONE

#### Tie-HVR-190V

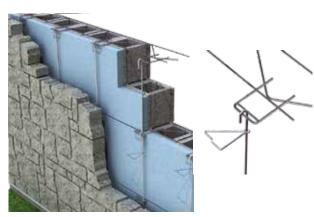


Designed for a filled cavity condition, the backup is reinforced with truss type reinforcement.

- The mason then places the vertical rod into the collar joint by hooking onto the extended truss cross rod.
- Rubble stone can be tied easily to the backup using 195/295
   Vee Byna-Ties\*.
- Horizontal mortar joints do not have to align.

U.S. Patent No. 8,375,667. Other Patents Pending.

#### Tie-HVR-195V



For use with cavity and insulated walls. The projecting boxes with factory-welded restraint bars prevent in-and-out movement of wire ties.

- Modified Vee Byna-Tie® accepts a vertical J-Hook, preventing in-and-out movement of the masonry tie and allowing maximum vertical adjustability.
- Ties can be placed wherever the horizontal mortar joint lies without reconfiguring the stone materials.
- Available for any wall size. State block, insulation, cavity and rubble stone sizes when ordering.
- Ladder style also available (Product Tie-HVR-295V).

U.S. Patent No. 8,375,667. Other Patents Pending.

#### Tie-2R-195VB





For cavity/insulated walls and stud backup. Tie-HVR-195VB is ideal for use on concrete, CMU, metal stud or when masonry backup is already in place and a new veneer is being installed.

- L-shaped plate is sized for any thickness of insulation, and has a slotted hole to accept the vertical J-Hook.
- Uses the 195/295 Vee Byna-Tie°.
- State insulation, cavity and rubble stone sizes when ordering.

U.S. Patent No. 8,904,725. Other Patents Pending.

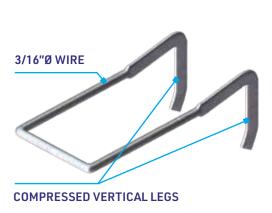
**TIE-HVR Series Size Availability:** 

(S) Standard: 9 ga. side rods x 9 ga. cross rods. (SHD) Super Heavy Duty: 3/16" side rods x 3/16" cross rods.

Projecting box portion (195V or 295V) available 9 ga. or 3/16" dia. **Finishes:** Hot-Dip Galvanized or 304 Stainless Steel (316 Special Order).

#### **VENEER ANCHORS & TIES**

#### 2X-HOOK™



Tested and designed to withstand over 200-lbf, in tension or compression, at maximum allowed offset (TMS 402/602) of 1¼" (disengagement of the pintle from the veneer anchor). These results exceed BIA recommendations and the capabilities of standard "round wire" hooks/pintles by over 100%, while maintaining the ASTM A1064/1064M wire specification.

- The embedded portion of the 2X-Hook is 3/16" DIA round wire, satisfying the code requirement that the mortar bed thickness (typically 3/8") must be twice the diameter of the wire.

Available Lengths: 3", 4", 5", 6" or 7" long.

U.S. Patent: 8,613,175.

#### HB-213 for Stud Backup



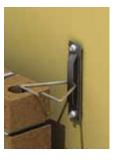
Adjustable veneer anchor accommodates various wallboard and insulation combinations up to 6" thick. L-shaped plate with ribs for added strength and two 9/32" diameter holes to accept various screws. Fabricated to accommodate various wallboard/insulation combinations. Specify thickness when ordering.

- Slot allows for 2X-HOOK<sup>™</sup> insertion and are sized to prevent in-and-out movement beyond allowable tolerances.
- Available with Seismic Hook and Continuous Wire.

Back Plate: 14 ga. or 12. ga thick.

**Finishes:** Hot-Dip Galvanized or 304 Stainless Steel (316 Special Order).

#### **VBT- VEE BYNA-TIE®**





For use with H&B's DW-10 Series Anchors, X-Seal\* Anchors (tying brick veneer to steel studs), or #359 Series Weld-On Ties (tying masonry walls to steel columns).

**Standard Sizes:** 3/16" or 1/4" diameter X 3", 4", 5". Other sizes available upon request.

Finishes: Hot-Dip Galvanized or 304 Stainless Steel (316 Special Order).

#### **VENEER ANCHORS & TIES**

#### HB-5213 for Masonry Backup



Adjustable veneer anchor designed to provide a high strength connection to brick, block, concrete, terracotta, and other masonry backup systems.

- Features the HB-213 back plate with a single 7/16" diameter hole to accept the BL-523 brass expansion bolt for use in masonry.
- Fabricated to accommodate various wallboard/ insulation combinations. Specify thickness when ordering.

#### **BL-523** Brass Expansion Bolt



The BL-523 Brass Expansion Bolt is for fastening anchors to concrete, block, brick and into mortar joints.

- Stainless steel internal bolt is surrounded by a brass expansion sleeve that is torque activated.
- Providing an easy method of inspection.

#### HB-200-X



The HB-200-X features three pronged punch outs that project from the back of the anchor. The prongs prevent positive wind-loads from crushing the wallboard by transferring these loads to the stud.

- Fabricated to accommodate various wallboard/ insulation combinations. Specify thickness when ordering.
- For use with the 2X-HOOK™.
- The eyelets allow pintle insertion (1 1/4" maximum allowable eccentricity) and are sized to prevent in-and-out movement beyond allowable tolerances.
- Veneer can be adapted for seismic conditions and crack control applications by adding the optional H&B Seismic Hook and Continuous Wire (9 gauge or 3/16" diameter continuous wire available).

Finishes: Hot-Dip Galvanized or 304 Stainless Steel (316 Special Order).

#### **BL-407 Anchor**



BL-407 is a wire tie and plate combination system that provides adjustability, strength, stiffness, positive connection, corrosion resistance, and is test rated.

- Provides for in-plane differential movement.
- Provides vertical movement of up to 1-1/4".
- Addition of Wedge-Lok® fastener secures insulation in place.
- Can be paired with Vee Byna-Tie<sup>®</sup> and Seismiclip for use in seismic zones.

Base Plate: 16 ga. thick X 2" wide with 1" bend. Length to accommodate various insulation thicknesses.

Vee Byna-Tie: 3/16" or 1/4" diameter X 3", 4", 5". Other sizes available upon request.

Finishes: Hot-Dip Galvanized or 304 Stainless Steel (316 Special Order).

Note: Combine with BL-523 Expansion Bolt for masonry or concrete backup.

#### **VENEER ANCHORS & TIES**

#### #345-BT Flexible Tie



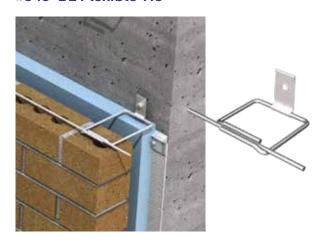


For tying masonry to concrete or CMU backup with a flexible (not rigid) connection. It is comprised of a Vee Byna-Tie® with wrap-around metal strap to allow for installation with Seismiclip® and Continuous Wire.

**Available Sizes: Wrap-around strap** - 12 ga thick X 3/4" wide with 5/16" hole **Vee Byna-Tie** - 3/16" or 1/4" diameter X 3", 31/2", 4", 41/2", or 5" long. Other lengths available upon request.

**Finishes:** Hot-Dip Galvanized or 304 Stainless Steel (316 Special Order).

#### #345-BL Flexible Tie



Byna-Lok\* Tie fitted with same strap as above. Swaged and pitched Byna-Lok\* allows for addition of the continuous wire without need for the Seismiclip.

**Finishes:** Hot-Dip Galvanized or 304 Stainless Steel (316 Special Order).

#### **DW-10HS** with Vee Byna-Tie®

















DW-10HS offers 14 ga. or 12 ga. thick X 5-1/2" long with over 3" of vertical adjustability. Features the Vee Byna-Tie to anchor brick veneer to steel stud. For anchoring brick veneer to metal stud, masonry, concrete or wood backup. Primarily for use when there is no insulation and little potential for wallboard deterioration.\*

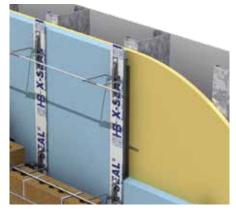
DW-10-HS with the Seismiclip\* for use with Continuous Wire in seismic conditions and crack control.

DW-10-HS with the Byna-Lok\* Tie for easy installation of continuous wire while maintaining a standard 3/8" mortar joint.

\*For insulated walls, or when there is concern about wallboard deterioration, please see our X-SEAL\* Anchor.

#### SELF-SEALING VENEER ANCHORS

#### X-SEAL Anchor





The X-SEAL® Anchor features a patented pronged leg design that seals the sheathing from air and moisture.

- Pronged legs bridge the sheathing and abut the steel stud, affording independent, positive anchorage.
- Compression of the sheathing by positive loads is also prevented.
- Pronged legs are rib-stiffened and oriented closer to each other, enhancing the compressive strength by over 20%.
- Owners, architects and masons can be confident in over 3 decades of proven strength and performance.
- Capable of withstanding 100# working loads in tension and compression without deforming or developing play in excess of 0.05".
- Provides 100% protection against separation of wire tie from anchor (See Code TMS 402/602).
- Installed before the veneer allowing for easy on-site inspection.
- Secures insulation to the backup better than staples or screws.
- Meet or exceed requirements of the Commonwealth of Massachusetts State Building Code for air leakage and water penetration. Contact H&B's technical department for test results.

**Standard Sizes:** Available in leg lengths from  $\frac{1}{2}$ " -  $4\frac{1}{2}$ " to accommodate wallboard and/or insulation.

Finishes: Hot-Dip Galvanized or Stainless Steel (Type 304).

U.S. Patents: 6,925,768; 6,941,717; 7,587,874; 7,845,137 & 7,562,506 CAN. Patents: 2,458,008 & 2,458,012. Other Patents Pending.

#### 2-Seal<sup>™</sup> Tie



Installation chuck adapter sold separately.

An innovative single-screw veneer tie for metal stud construction.

- Fabricated from Zamac zinc with a premium quality organic polymer coating.
- Has a dual-diameter barrel with factory-installed EPDM washers to seal both the face of the insulation and the air/vapor barrier.
- Improvement over single barrel types which only seal at the insulation and render the vapor barrier susceptible to air and moisture infiltration if not precisely installed (perfectly perpendicular to the stud).
- The dual-barrel has an integrated #12 self-drilling screw.
- The projecting eyelet accepts the 2-Seal™ Byna-Lok® Wire Tie.
- Barrel portion available in 5/8", 1", 1½", 2", 2½", 3", 3½", 4", 4½", 5", 5½", 6", and 6½" lengths to accommodate insulation/wallboard (sheathing).

For concrete, CMU, masonry or wood stud backup applications, please use Concrete 2-Seal™ Tie. For steel stud with wood or gypsum sheathing, use Standard 2-Seal™ Tie.

U.S. Patent: 8,037,653. CAN. Patent: 2,690,819. Other Patents Pending.

#### THERMAL VENEER ANCHORS

#### Thermal 2-Seal<sup>™</sup> Tie

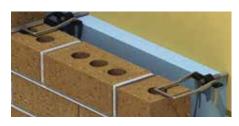


Thermal transfer through the wall cavity is a major source of lost energy, and ultimately, dollars spent on heating and cooling. Hohmann & Barnard has engineered an innovative new anchor to solve this problem. The Thermal 2-Seal<sup>TM</sup> Tie features a dual-diameter Stainless Steel barrel to seal at both the insulation and the air barrier while reducing thermal transfer through the cavity to as little as 1/7 the conductivity of standard zinc barrels.

- A large diameter washer secures insulation to the back up, while a second smaller washer completely seals the air barrier for a continuous membrane.
- Stainless Steel Barrel reduces thermal conductivity by as much as 1/7 of a standard zinc barrel and 1/3 compared to carbon steel barrels.
- A proprietary UL-94 coating creates a thermal break at the insulation.
- Uses a 2-Seal Byna-Lok Wire Tie for easy addition of a continuous wire.
- Barrel available in lengths of 5/8", 1", 1½", 2", 2½", 3", 3½", 4", 4½", 5", 5½", 6", and 6½" lengths to accommodate insulation. Other sizes available upon request.

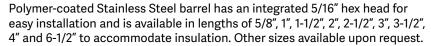
U.S. Patent: 8,037,653 & 9,140,001. Other Patents Pending.

#### 2-Seal<sup>™</sup> Thermal Wing Nut



The Thermal 2-Seal™ Wing Nut Anchor is an innovative single screw veneer tie for metal stud construction that features a Stainless Steel Barrel with two washers to seal at both the insulation and the air barrier just like the Thermal 2-Seal anchor above with the following added features:

- A UL-94 coating encapsulates a steel wing, creating a thermal break at the insulation.
- Wing is reinforced by a steel core to maintain integrity of the anchoring system in case of fire making it superior to clip-on plastic wings that will melt if exposed to extreme heat.
- Wing accepts a standard, seismic or Mighty-Lok® Pintle and spins to easily orient pintles/hooks with masonry joints.
- Wing is adjustable up to 1/2" to accommodate various insulation thickness' and secure insulation to the backup, eliminating convection hoop.



U.S. Patent: 7,415,803; 8,613,175; D702,544 & D706,127. Other Patents Pending.



Metal Type	Thermal Conductivity
AISI-SAE 1020 (Plain Carbon Steel)	0.52 (W/cm K)
Stainless Steel (Type 304)	0.15 (W/cm K)
Zinc Alloy (Galvanizing)	1.1 (W/cm K)

#### Available Anchors:

Standard Thermal & Thermal Wing Nut 2-SEAL™ - for use in steel stud with wood or gypsum sheathing.

Concrete Thermal & Concrete Thermal Wing Nut 2-SEAL™ - for concrete, wood, or masonry backup.

#### **COLUMN AND BEAM ANCHORS**

#### #353 Column Anchor





For anchoring masonry to structural column when masonry is perpendicular to column flange and there is no space between the CMU and the column. 1-1/4" wide x 12 ga. thick. Made to order based on flange width and overall length. Other thicknesses (including 1/4" heavy duty) available upon request.

#### #353L Column Anchor with Lok-Bolt





#353 with Lok-Bolt is for anchoring masonry to the building frame while restraining both positive and negative wind load actions when there is a space between the CMU and the column. Made with a slotted hole to accept Positive Lok Bolt to mechanically engage both sides of the flange.

#### #354 Notched Column Anchor





For anchoring masonry to structural column when masonry is parallel to column flange. Can be used in wall with or without air space. 1-1/2" wide x 12 ga. thick. Notch is 1" wide, beginning 1" from end. Made to order in any length. Other notch sizes available on special order.

#### #355L Column Anchor with Lok-Rod





For anchoring masonry to the building frame while restraining both positive and negative wind load actions. 1-1/4" wide x 12 ga. thick. Other thicknesses (including 1/4" heavy duty) available upon request. Made with a slotted hole to accept Positive Lok Rod.

#### #356 Column Anchor





For anchoring masonry to structural column when masonry is parallel to column web. Has a slotted hole to accept Positive Lok Rod. Anchors masonry to the building frame while restraining both positive and negative wind load actions. 1/4" thick x 3/4" wide. Available in any length. Custom sizes available.

Finishes: Hot Dip Galvanized or Stainless Steel.

#### #357 Beam Anchor





For anchoring masonry to structural beams. Standard size is 11/4" wide x 12 ga. thick x 12" long.

**Finishes:** Mill Galvanized, Hot Dip Galvanized, or Stainless Steel.

#353, #353L, #355L, #355L, #357: U.S. Patent No. 8,904,731; Canadian Patent No. 2,844,459.

#### **COLUMN WELD-ON TIES**

#### #359 & #359-C



#### #359FP & #359FP-C



#### #359FH



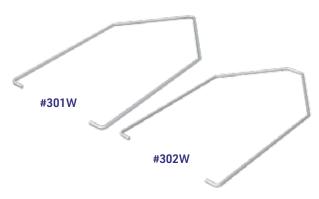
Used in conjunction with Vee-Byna\* Tie or Column Web Ties. Anchors masonry to structural steel frame while allowing vertical differential movements between steel and masonry.

Finishes: Hot-Dip Galvanized or 304 Stainless Steel (316 Special Order).

**Note:** 359FP & 359FP-C have exaggerated offset (specify dimension when ordering) to allow for spray-on fireproofing. Backplate restrains compressive loads.

#### **COLUMN WEB & WIRE TIES**

#### #301W & #302W



**#301W** - 3/16" or 1/4" diameter x 12" long. For use with #359 Weld-On Tie (anchoring masonry to structural column).

**#302W** - 3/16" or 1/4" diameter x 12" long. For use with #359 Weld-On Tie (anchoring masonry to structural column). Includes a 1" flat end for use with #359FH Weld-On Tie.

**Widths:** 2-3/8", 4", 6", 8", 10", 12" to accommodate various size CMU.

**Finishes:** Hot-Dip Galvanized or 304 Stainless Steel (316 Special Order).

#### #351 & #352 Wire Column Tie





**#351** - 3", 5", 7" or 9" long. For use with masonry that is parallel to column flange. **#352** - 8", 10", 12" or 14" long. For use with masonry that is perpendicular to column flange.

**Standard Sizes:** 3/16" or 1/4" diameter with 2" Bend and 2-1/2" Hook with 1/2" opening.

**Finishes:** Hot-Dip Galvanized or 304 Stainless Steel (316 Special Order).

#### **DOVETAIL SLOT & ANCHORS**

#### #305 Dovetail Slot



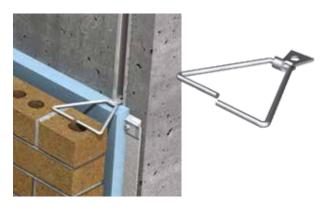
For anchoring masonry to concrete with dovetail ties, accepts all H&B dovetail anchors.

Standard Sizes: 1" wide back x 1" deep x 22 ga., 18 ga. or 16 ga. thick by 10' long foam filled. 24 ga. Also available in Stainless Steel only

Finishes: Hot-Dip Galvanized or 304 Stainless Steel (316 Special Order).

Important: We are not responsible for incompatibility if ties or slots are interchanged with those of other manufacturers.

#### #315 Flexible Dovetail Brick Tie



The #315 Flexible Dovetail Brick Tie permits horizontal and vertical movement of the masonry wall while restraining tension and compression. Can be surface mounted or used with #305 Dovetail Slot.

Available Sizes: Dovetail Head - 14 ga or 12 ga thick X 1" wide. Vee Wall Tie - 3/16" or 1/4" diameter X 3", 31/2", 4", 41/2", or 5" long. Other lengths available upon request.

Finishes: Hot-Dip Galvanized or 304 Stainless Steel (316 Special Order).

#### #315-BT Flexible Dovetail Brick Tie



#315-BT includes the S.I.S. Seismiclip Interlock System® for use in seismic conditions and for crack control.

Finishes: Hot-Dip Galvanized or 304 Stainless Steel (316 Special Order).

#### #315-BL BYNA-LOK® Flexible Dovetail



#315-BL includes the Byna-Lok Tie® to accept Continuous Wire.

Available Sizes: Byna-Lok Tie - 3/16" X 3", 4", or 5" long.

Finishes: Hot-Dip Galvanized or 304 Stainless Steel (316 Special Order).

#### GRIPSTAY™ CHANNELS & ANCHORS

#### **#360** Welded



#362 Surface Mounted







#360 - 71/2" long (51/2" vertical adjustability).

#361 - Furnished with built-in straps for embedment into block back-up.

#362 - 61/4" long o.a., furnished with integrally-formed tabs for attachment to masonry.

#362-C - 5' long continuous channel, other lengths available in 71/2" increments (15", 221/2", 30" etc.)

Standard Sizes: 14 ga., 12 ga. or 11 ga. thick with 5/16" holes.

Finishes: Hot-Dip Galvanized or Stainless Steel.

#362-C with optional Lok-Channel Clip

#### #362-CX Gripstay<sup>™</sup> Channel Slot







The 362-CX features factory-welded prongs to bridge the insulation and abut the concrete block (or other substrate), affording independent, positive anchorage. The integrity of the insulation is maintained while compression due to positive loads is transferred to face of CMU.

**Available Sizes:** 14 ga., 12 ga., or 11 ga. thick with a standard length of 5' 0". Other lengths are available in 7-1/2" increments (example: 15", 22-1/2", 30").

Finishes: Hot-Dip Galvanized or 304 Stainless Steel (316 Special Order).

U.S. Patents: 5,063,722. Other Patents Pending.

Note: Gripstay Head fits any style H&B Gripstay Channel above for tying masonry to steel columns, concrete, or existing walls. All Gripstay anchors can be modified to fit larger Unistrut channels.

#### GRIPSTAY™ CHANNELS & ANCHORS

#### #363 Flexible Gripstay Anchor



Gripstay head is 14 ga. thick x 1-1/4" wide. Vee Byna-Tie $^{\circ}$  portion is 3/16" or 1/4" dia. x 3", 4", 5", 6" 7" or 9" long. Other sizes available upon request.

**Finishes:** Hot-Dip Galvanized or 304 Stainless Steel (316 Special Order).

#### **#363-BT Flexible Gripstay** with S.I.S.



Includes Seismiclip® for use with Continuous Wire in seismic zones. Gripstay head is 14 ga. thick x 1-1/4" wide. Vee Byna-Tie® portion is 3/16" or 1/4" dia. x 3", 4", 5", 6" 7" or 9" long. Other sizes available upon request.

**Finishes:** Hot-Dip Galvanized or 304 Stainless Steel (316 Special Order).

#### #363-BL Byna-Lok Flexible Gripstay



Byna-Lok® portion is 3/16" dia. x 3", 4" or 5" long. Other sizes available upon request. Gripstay head is 14 ga. thick x 1-1/4" wide.

**Finishes:** Hot-Dip Galvanized or 304 Stainless Steel (316 Special Order).

#### #365 Bent Gripstay Anchor



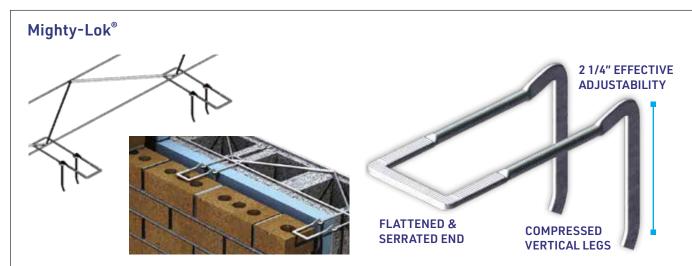


Standard - 11/4" wide X 16, 14, or 12 ga. thick. Bend is 1" long. Longer bends available upon request. Gripstay head is 14 ga. thick x 1-1/4" wide.

**Finishes:** Hot-Dip Galvanized or 304 Stainless Steel (316 Special Order).



#### SYSTEMS FOR HIGH WIND LOADS & CAVITIES UP TO 71/2"



Mighty-Lok® adjustable joint reinforcement has been redesigned to feature the Mighty-Lok® Hook. The ¼" diameter hook still features a flattened and serrated pintle but now has compressed vertical legs for increased adjustability up to 2¼". This allows for optimum performance in today's multi-wythe construction with extra-wide cavity walls or when mortar joints are not in close alignment. This is the only ¼" diameter system that meets the TMS-402 code by allowing for a 3/8" mortar bed.

For extra-wide cavity conditions and high wind loads. Modified eyelets and pintles afford usage where high strength requirements are present and standard eyelets and pintles would fail (including extra-wide cavity conditions and high wind loads). Also designed for usage where standard eyelets and pintles would fail due to greater than normal misalignment of mortar joints between the 2 wythes. Modified eyelets engage pintles in conformance with existing codes (less than 1/16" mechanical play).

The Mighty-Lok® Hook is flattened and serrated for superior bonding with mortar and offers 2¼" of vertical adjustability. Available Truss style (170-ML) or Ladder style (270-ML).\*SHD wire required.

U.S. Patent No. 6,668,505; 8,122,663; & 8,613,175 Other Patents Pending.

#### HB-213-HS High-Strength Veneer Anchor System



For heavy-duty applications, the HB-213-HS High-Strength Veneer Anchor System incorporates the Mighty-Lok® Hook.

- Flattened and then serrated for superior bonding with mortar while maintaining a 3/8" mortar joint per Code TMS 402/602.
- Ideal for usage when the offset of engagement between pintle and anchor is greater than 1-1/4" (limit set by standard TMS-402/602).
- Longer leg lengths are available on special order, subject to loading requirements.
- Ideal for wide cavity conditions, where a standard 3/16" pintle would not satisfy lateral load requirements. (Note: The 2016 TMS 402/602, adopted by the 2018 IBC, allows maximum cavity spans of up to 6 5/8" with restrictions, prescriptively. Additionally, 4 5/8" cavity spans are allowable with no special rules.)

Standard Backplate Available: 14 ga. or 12 ga.

U.S. Patent: 8,122,663 & 8,613,175. Other Patents Pending.



#### REINFORCED VENEER SYSTEMS FOR SEISMIC AND CRACK CONTROL

#### Channel-Tee Seismic-Notch Anchor System



Ideal for use where maximum vertical adjustability is preferred. The Continuous Channel is surface mounted to the back up. The Seismic-Notch Anchor is then easily inserted into the channel anywhere along the vertical length to conveniently fit wherever the mortar joint lies. Continuous joint reinforcing wire is easily inserted into the seismic notches of each anchor.

- Thin 5/8" profile of channel is ideal for tight cavity conditions.
- Channel provided in 10' lengths.
- Holes drilled 12" on center in channel.
- Also suitable for use on concrete or CMU.

Seismic-Notch Anchor available 14 ga. thick by 3", 3-1/2", 4", 4-1/2" or 5" long. (Other sizes available upon request). Available Hot-Dip Galvanized or 304 Stainless Steel.

#### HB-213S Veneer Anchor





Formerly known as T-LOK TIE™. The configuration of the HB-213S Seismic Plate Pintle allows easy insertion into slot, while preventing future disengagement. This also prevents the tie from being installed beyond allowable eccentricity.

Standard Sizes: Pintle portion: 31/2" or 41/2" long, 12 ga. or 11 ga. thick. Backplate portion is fabricated to accommodate various wallboard/insulation combinations. Specify thickness when ordering.

#### #345 SV Seismic-Notch Veneer Anchor





Same availability as above with bent end and 9/32" diameter hole to accommodate hardware. Includes bent end and 9/32" diameter hole to accommodate hardware. Made to order in any length.

#### #364 SV Seismic-Notch Gripstay™ Anchor





1 1/4" wide x 14 ga. or 12 ga. thick with a standard dovetail head. Includes a standard Gripstay notch. Use with any style H&B Gripstay Channel. Made to order in any length.

#### #303 SV Seismic-Notch Dovetail Anchor





11/4" wide x 14 ga. or 12 ga. thick with a standard dovetail head. Use with the #305 dovetail slot. Made to order in any length.

#### SEISMIC AND CRACK CONTROL ACCESSORIES

#### Seismiclip® Interlock System (S.I.S)





For use with H&B wire ties and Continuous Wire. Components snap into the Seismiclip® allowing them to function integrally as a single unit.

**Available Sizes:** #187 - For use with 3/16" diameter ties. #250 - For use with 1/4" diameter ties. Both versions accept 9 ga. and 3/16" continuous wire.

**Finishes:** Impact-resistant, rigid PVC with retaining ridges to securely snap in wire ties and continuous wire.

#### Byna-Lok® Wire Tie





Various H&B systems can be fitted with the Byna-Lok® Wire Tie, affording easy and secure insertion of the continuous joint reinforcing wire. More details can be found on page 7.

#### SH - Seismic 2X-HOOK™



H&B'S Seismic 2X-HOOK™ is "swaged" (indented) in two places to accommodate either a 9 gauge or 3/16" continuous wire. A channel is formed that braces the continuous wire and holds it in place. Suitable for standard 3/8" joints.



**Finishes:** Hot-Dip Galvanized & 304 Stainless Steel (316 Special Order).

**U.S. Patents: 6,789,365; 7,325,366; 8,096,090 & 8,613,175.** Other Patents Pending.

#### INTERSECTING WALL ANCHORS

#### #344 Rigid Partition Anchor



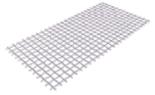


For anchoring load bearing walls at an intersection. Fabricated from 1/4" bar stock 1-1/2" wide per code TMS 402/602. Length is custom to job with 2" standard bends on each end.

**Finishes:** Hot-Dip Galvanized or 304 Stainless Steel (316 Special Order).

#### MWT Mesh Wall Tie





For bonding intersecting masonry walls. Conforms to ASTM A740.

**Available Sizes:** 1/2" square by 16 ga. 3", 4", 6", 8", or 10" wide by 100' roll. Other sizes available upon request.

**Finishes:** Hot-Dip Galvanized (ASTM A 153) or 304 Stainless Steel. (ASTM E 437).

#### **STONE ANCHORS & ACCESSORIES**

Hohmann & Barnard can fabricate custom stone anchors from mild steel up to 1" thick Stainless Steel. H&B has over 80 years of fabrication expertise with jobs spanning the 50 United States, Canada, and world wide.



#### **STONE ANCHORS & ACCESSORIES**



















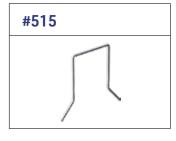






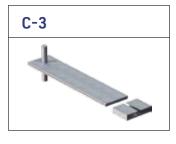
























#### PTA - PARTITION TOP ANCHORS

PTA SERIES PARTITION TOP ANCHORS are engineered products that are project-specific, and have been developed to provide lateral shear resistance at the upper limit of masonry walls. They permit vertical deflection of the slab above while resisting positive and negative lateral shear loads, without transferring compressive loads to the masonry wall below. PTA Series Anchors are suitable for construction using steel or concrete. PTA Tube with expansion filler is placed over rod anchor, which has been attached to concrete or steel by any of the methods illustrated. The vertical joint is then filled with mortar, fully surrounding tube. Other sizes available for heavy-duty applications.

#### PTA-310 & PTA-310-HS



PTA-310 - #3 rebar rod with 3/16" thick Dovetail Head.

PTA-310-HS - Standard - 5/8" rod with 1/4" thick Dovetail Head.

- For use on concrete construction.
- Must be used in conjunction with H&B #305 Dovetail Slot and PTA Tubes.

U.S. Patent 8,978,326. Other Patents Pending.

Finishes: Hot-Dip Galvanized or Stainless Steel.

#### **PTA-420-HS**



Standard - #3 rebar with 3/16" thick plate containing 5/16" diameter holes

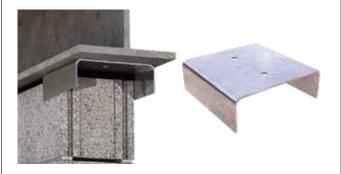
- For use on concrete or steel beam construction.
- Use with PTA Tubes.

**Finishes:** Hot-Dip Galvanized or 304 Stainless Steel (316 Special Order).

#### **PTA Tubes**

Grey plastic Tubes filled with compressible polyethylene filler. For use with PTA-310, 310-HS and 420-HS anchors.

#### PTA-422



Standard - 12 gauge thick with 2" standard bends. Widths to fit 4"-12" block. Use on concrete or steel construction. Provided with two 7/16" holes for mounting hardware.

**Finishes:** Mil Galvanized, Hot-Dip Galvanized or 304 Stainless Steel (316 Special Order).

#### HB-LSA-1 & HB-LSA-2





Standard - 12 gauge thick with 2-1/2" standard bends. Widths to fit 4"-12" block. Use as a Lateral Support Anchor for concrete or steel beam where the slab and wall are offset. LSA Anchors comply with CSA A370-14.

**Finishes:** Hot-Dip Galvanized or 304 Stainless Steel (316 Special Order).

#### **CONCRETE INSERTS**

#### LW-340

#### HW-340

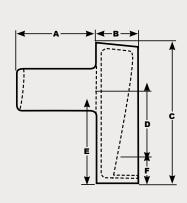




Wedge inserts are embedded into concrete slabs. Nail holes in the back of the insert allow easy nailing to forms. When the forms are stripped, the open face of the insert is flush with the concrete. The beveled head of the askew head bolt engages the internal wedge shape of the insert and produces an automatic tightening action when a shear or dead load is placed on it.

LW-340 Long Wedge Insert is suitable for use at the bottom of the slab or when additional vertical adjustability is needed. HW-340 Standard Wedge Insert must be installed at least 1-1/2" from bottom of slab. Both anchors require a minimum of 1-1/2" of concrete above the top of the insert.

Finish: Hot-Dip Galvanized.



	LW-340	HW-340
BOLT DIA.	3/4"	3/4"
Α	2-3/8"	2-1/2"
В	1-3/16"	1-3/16"
С	5-1/2"	4"
D	3"	1-3/4"
E	3-1/2"	2"
F	7/8"	7/8"

#### Performance Data

	Shear	Tension	Concrete Strength	Torque
LW-340	17,305 lbs.	17,367 lbs.	4,125 psi	150 ft./lbs.
HW-340	16,650 lbs.	13,093 lbs.	4,125 psi	150 ft./lbs.

All values listed are ultimate capacities in pounds which should be reduced by a minimum safety factor of three to determine the allowable working loads.

**Note:** Rebar hairpins are not required to achieve published loads.

#### Horseshoe Shim



Horseshoe Shim for Wedge Inserts. 3" or 4" tall by 1/8", 1/4", or 3/8" thick. Other sizes available upon request.

**Finishes:** Mill Galvanized, Hot-Dip Galvanized, or 304 Stainless Steel (316 Special Order).

#### **Askew Head Bolt**



Askew Head Bolt for Wedge Inserts. 3/4" dia. x 2", 2-1/2", 3" or 4" long. Other Lengths available upon request.

**Finishes:** Hot-Dip Galvanized or 304 Stainless Steel (316 Special Order).

Carbon Steel	60,000 psi minimum tensile strength
Stainless Steel	70,000 psi minimum tensile strength

#### SHARKTOOTH & CSH INSERTS

#### ST-4





ST-4 Brick relief angle at concrete beam.

#### **ST-12**





ST-12 Insert is cast into concrete walls to accept stone anchors.

Sharktooth Insert has various applications and is capable of developing working loads up to 8,000#/ft. in both shear and tension. It is adjustable along virtually its entire length, and also allows in and out adjustment, while still resisting shear and tension loads. Available in Hot-Dip Galvanized or Type 304 Stainless Steel (Type 316 available on special order). It is fabricated in lengths from 3" to 12'-0" long, and can be custom designed for project-specific applications, such as radii or specific lengths. The Sharktooth Insert is a new, labor-saving, pre-engineered, high-strength insert from H&B.

- Serrated shark-tooth design allows insert to resist high vertical shear loads (eliminates potential for vertical slip due to inadequate bolt torque, as with wedge style inserts).
- Rebar interference not an issue (unlike post-installed expansion bolts).
- Additional rebar hairpins not required to develop published working loads.
- Allows for vertical adjustment along full length of insert.
- Welded connections not required. Nut or bolt connection into insert allows for easy installation and adjustment.
- Bolting hardware is U.S. standard thread (metric thread can be difficult to source).
- Custom design available for special load requirements.

Sharktooth Insert Patent # D724769. Other Patents Pending.







CSH-4 cast into the underside of the concrete slab to accept pipes, ductwork, mechanical equipment, etc.

#### CSH-R





CSH-R cast into radial concrete to accept handrails.

**CSH INSERTS** meet the demand for a high strength continuous slotted insert for use in applications requiring high working loads.

#### SHARKTOOTH & CSH INSERTS

#### Working Loads: Single Point Loading

Part	Insert	Spacing Between	Allowabl	e Loads	Ultimat	e Loads
Number	Length*	Studs	Tension	Shear	Tension	Shear
ST-3	3"	N/A	5300#	5185#	10,600#	10,370#
ST-4	4"	N/A	5300#	5185#	10,600#	10,370#
ST-6	6"	4"	7889#	8059#	13,432#	20,147#
ST-8	8″	4"	7889#	8059#	13,432#	20,147#
ST-12	12"	4"	7889#	8059#	13,432#	20,147#
ST-24	24"	4"	7889#	8059#	13,432#	20,147#
ST-C	12′ *	4"	7889#	8059#	13,432#	20,147#

<sup>\*</sup> ST-C standard length is 12 ft. Other lengths available on special order.

#### Working Loads: Multiple Point Loading

_			_		
Part	Insert	Minimum Spacing	Allowabl	e Loads	
Number	Length	Between Load	Tension	Shear	
ST-12	12"	5″	4525#	8059#	
ST-24	24′	5″	4525#	8059#	
ST-C	12'-0"	6"	5300#	8059#	

- Shear controlled by flange bending.
- Tension controlled by headed stud strengths.

- Concrete strength = 4,000 p.s.i.
- No additional reinforcement in the concrete has been assumed in the analysis of the sharktooth inserts.
- Headed welded studs utilize a design factor of 2:1, as per manufacturers recommendations.
- Insert #ST-3 and #ST-4 allowable shear loads and tension loads are controlled by headed stud strengths.
- Insert #ST-6 thru #ST-C working tension and working shear loads controlled by insert flange bending.
- Combined loading evaluation using;

$$\left(\frac{\text{T actual}}{\text{T allowable}}\right)^{5/3^*} + \left(\frac{\text{V actual}}{\text{V allowable}}\right)^{5/3^*} \le 1.0$$

- \* or as required by code
- Allowable loads shown are applicable along the entire length of insert, no minimum distance required.
- Minimum edge distance to centerline of headed stud equals 3-1/4" (vertical installation).
- Minimum concrete required above or below centerline of headed studs, when mounted vertically or horizontally is 3-1/4".
- Higher allowable loads can be achieved for the #ST-3 or #ST-4 insert by increasing headed stud diameter.

#### Patents pending.

#### **REBAR ACCESSORIES**

#### **RB** - Rebar Positioner



For positioning rebars in center of block. The z-shaped wire bridges cell of block while bends rest on shell.

Available Sizes: 9 ga. dia. wire for 6", 8", 10" or 12" block.

Finishes: Mill Galvanized, Hot-Dip Galvanized or 304 Stainless Steel (316 Special Order).

#### **RB - Twin**



For positioning rebars in center of block. The z-shaped wire bridges cell of block while bends rest on shell with double loops to hold 4 rebars.

Available Sizes: 9 ga. dia. wire for 6", 8", 10" or 12" block.

Finishes: Mill Galvanized, Hot-Dip Galvanized or 304 Stainless Steel (316 Special Order).

### **Mushroom Caps**



Used as a protective cover for bolts, pipes, rebar and other protrusions that could be potentially hazardous. This product is not intended to eliminate impalement or accidental falls, but to reduce possible risks or dangers.

Available Sizes: Fits a variety of diameters from 1/2" to 2-1/4".

#### **RB-TwinW**



Wider version of the RB-Twin, holds 4 rebars. RB-TWIN-10-W is 8" long for 10" block and keeps pairs of rebar 11/2" apart. RB-TWIN-12-W is 10" long for 12" block and keeps pairs of rebar 31/2" apart.

Finishes: Mill Galvanized, Hot-Dip Galvanized or 304 Stainless Steel (316 Special Order).

#### **OSHA Caps**



4X4 high-impact plastic and durable texture provides extensive protection on construction work zones. This product meets Federal OSHA Standards.

Available Sizes: Standard, Size 3-7. Medium, Size 8-12. Large, Size 12 & Up.

#### CONCEALED LINTEL SYSTEMS FOR BRICKWORK

Hohmann & Barnard's Concealed Lintel Systems are individually designed and engineered to fit even the most intricate and complex architectural requirements. Architects can feel free to incorporate this distinctive feature into prestigious edifices for projects such as Places of Worship, Libraries, Schools, University Buildings, or wherever the design calls for stately and enduring elegance.

- Every concealed lintel system is custom designed and engineered to meet the unique architectural and structural requirements of individual projects.
- Hohmann & Barnard provides all necessary drawings, calculations, and components.
- The opportunities for Architectural Creativity are virtually limitless.

Finishes: Hot-Dip Galvanized or 304 Stainless Steel.

- Designers can incorporate various masonry courses, spans, offsets and soffit widths.
- Freedom to select various sizes and colors of brickwork.
- No further maintenance is required all steel is unexposed when finished.
- Designed, Engineered and Fabricated in the USA!



#### Flat Spine



Can be engineered for various widths, spans, brick types and veneer loads.

**Common Uses:** Flat Arch, Bonded Flat Arch, Jack Arch and, Bonded Flat Arch.

#### **Arched Spine**



Provides the classic curved arch look for any project and allows the designer many options.

**Common Uses:** Semi-Circular Arch, Bonded Semi-Circular Arch, Paladin Style Arch, Gothic Arch.

#### **Surface Mounted Arch**



Conveniently fastens directly to the structural backup (no spine required).

**Common Uses:** Segmented Arch, Elliptical Arch, "Vee" Style Arches.

#### **Material Conformance**

Carbon Steel	Hot-Dip Galvanized	Stainless Steel
ASTM A36 / A36M	ASTM A123 /A123M ASTM A153/A153M-B2	ASTM A276, ASTM 240, ASTM A66

#### **INSULATED SHELF ANGLE SYSTEMS**

The Thermal Brick Support (TBS) System is Hohmann & Barnard's custom offset shelf angle for use when designing masonry cavity walls to increase thermal efficiency.

- Mason installs by hand no welding required or heavy equipment needed.
- Adjustments can be made to work with construction tolerances and masonry joint alignments.
- Custom designed and engineered in-house for unlimited shapes and sizes.
- Manufactured in the USA!

Finishes: Hot-Dip Galvanized, 304 Stainless Steel.

Dimensions: The Thermal Brick Support (TBS) System is fabricated to meet individual project requirements.

#### TBS - TYPE B (BRACKET STYLE)

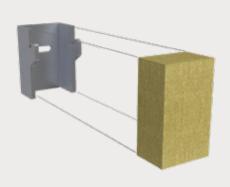


Type B - The B Style of TBS maintains between 65% - 86% of the effective R-value, depending on insulation thickness, thickness of angle, and finish of material.

#### TBS - TYPE F (FIN STYLE)



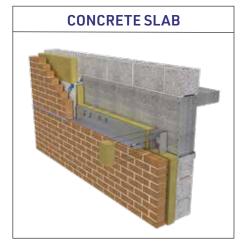
Type F - The F Style of TBS maintains between 81% - 94% of the effective R-value, depending on insulation thickness and finish of material.



All Type B - Bracket Style TBS Systems come with custom cut ROCKWOOL® Mineral Wool Plugs for ease of installation and continuity of insulation at the angle to further increase thermal efficiency.

#### **INSULATED SHELF ANGLE SYSTEMS**

Common TBS structural connections allow for continuous insulation at the relief angle condition.







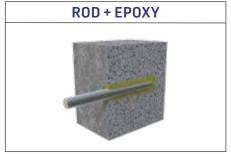
TBS is custom designed to fit specific project conditions. Different attachments are used at the structural connection, depending on the project needs and requirements:



















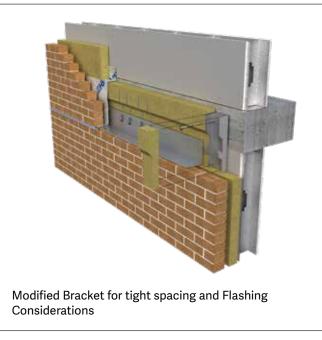
#### **INSULATED SHELF ANGLE SYSTEMS**

TBS offers design solutions in addition to thermal efficiency, including but not limited to:





Wide Cavity with Exposed Soffit and/or Storefront Horiz

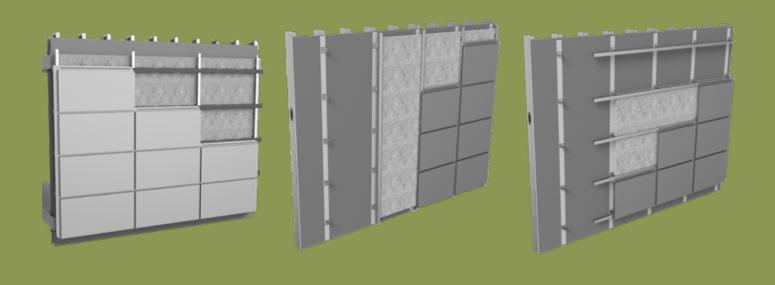






Air barrier can be installed before the angles for true continuity.

# RAINSCREEN SUPPORT SYSTEMS





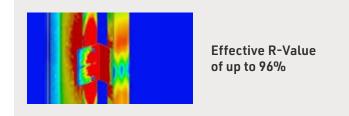


# **RAINSCREEN SUPPORT SYSTEMS**

#### HB RS EZCLAD RAINSCREEN SUPPORT SYSTEM

The HB RS EZclad Rainscreen Support System is fully engineered to project conditions by H&B's Engineering Team. The system uses stainless steel structural connecting components, in lieu of aluminum. This reduces conductivity by 93% over pure aluminum, while increasing thermal efficiency.

METAL TYPE	THERMAL CONDUCTIVITY (watts per Kelvin per meter)
Pure Aluminum	235
304 Stainless Steel	15



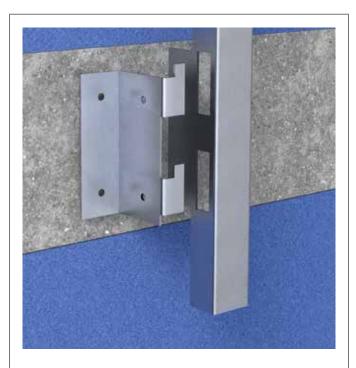
The rail consists of a high-quality aluminum for inward and outward adjustability and fastening flexibility. HB RS EZclad accepts various rainscreen cladding and attachment clips. This system can span 100 inches before a midspan bracket connection is needed, further reducing thermal bridging.

#### **BENEFITS:**

- Customized to specific project conditions.
- Includes structural connection, rail, engineering calculations, and shop drawings.
- Does not interrupt continuous insulation.
- Thermal shims can be added for increased thermal efficiency.
- Can be powder coated or anodized for aesthetics.

Brackets: Type 304 Stainless Steel

Horizontal/Vertical L or T Rails: 6000 Series Aluminum



The aluminum rail attaches to the stainless steel connection, allowing for inward and outward adjustability.



of rainscreen façade panel needed for the project.

# HOHMANN & BARNARD, INC.

#### HB RS FLEXBRACKET RAINSCREEN SUPPORT BRACKET

The HB RS FLEXbracket Rainscreen Support Bracket is a stainless steel universal bracket that is ordered to fit the depth of insulation needed on a project. The bracket accepts various aluminum rail systems and can be installed for both vertical and horizontal rails.

#### **REDUCES THERMAL TRANSFER**

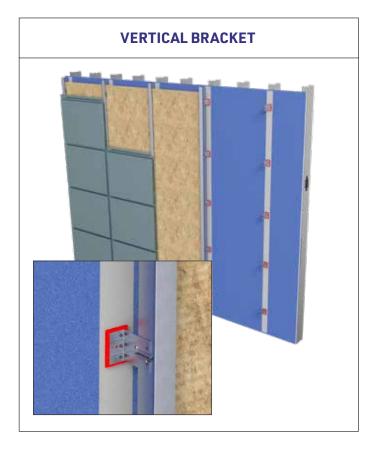
THERMAL SHIMS CAN BE ADDED FOR INCREASED ENERGY EFFICIENCY

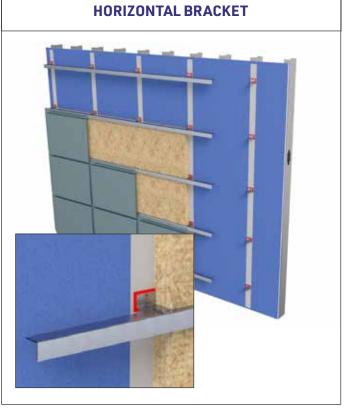
ONE BRACKET FOR ANY CONDITION

ALLOWS FOR VERTICAL AND HORIZONTAL ORIENTATION

# DUAL FRICTION FINGERS FOR EASE OF INSTALLATION

# ADJUSTABLE ENGINEERED SYSTEM





# REPAIR & RESTORATION SYSTEMS





## TORQ-LOK® MECHANICAL RESTORATION SYSTEM

The Torq-Lok\* mechanical anchoring system is an easy-to-use and cost-effective method to re-connect existing veneers to various substrates. Anchors are manufactured of AISI Type 300 series austenitic stainless steel and ASTM Type 360 brass for a corrosion-resistant tie assembly. The 500 and 510 Series system consists of brass expansion elements that are situated in the veneer and backup segments of the wall system being rehabilitated. They are torque-activated, which provides a method of inspection for both the façade and backup connection.

Use around bulging areas or sections that are to be removed. Can be used in high stress areas or to replace broken or cracked headers in composite walls.

## 500 Series Anchor

for Solid Backup



360 Brass expanders with Type 304 Stainless Steel shaft and 300 Stainless Steel hardware.

Hole in Veneer = 1/2" Hole in Backup = 1/2"

Installation Torque: Veneer = 30-80 in.- lbs. Backup = 30-80 in.- lbs.

## 510 Series Anchor

for Hollow Backup



360 Brass expanders with Type 304 Stainless Steel shaft and 300 Stainless Steel hardware.

Hole in Veneer = 1/2" Hole in Backup = 3/8"

Installation Torque: Veneer = 30-80 in.- lbs. Backup = 30-80 in.- lbs.

## 520 Series Anchor

for Stud Backup



360 Brass expanders with Type 304 Stainless Steel shaft and 300 Stainless Steel hardware. Selfdrilling/self-tapping screw.

Hole in Veneer = 9/16" Hole in Backup = self-drilled

Installation Torque: Metal Stud = 25-50 in.- lbs. (30-80 in.- lbs. for 16 ga.) Structural Steel = 30-80 in.- lbs.

## 530 Series Anchor

for Stud Backup



360 Brass expanders with Type 304 Stainless Steel shaft and 300 Stainless Steel hardware. Selftapping lag thread.

Hole in Veneer = 9/16" Hole in Backup = 3/16"

Installation Torque: Veneer = 30-80 in.- lbs., 16 ga = 30-60 in.- lbs.,

18 ga = 20-40 in.- lbs. Wood Stud = 30-50 in.- lbs.





## Torq-Lok® Selction Chart (based on a typical 3-5/8" veneer)

	Hollow CMU	Solid CMU	Concrete	Brick	Clay Tile	Wood	Metal Stud	Steel
500 Series		•	•	•	•			
510 Series	•	•	•	•	•			•
520 Series							•	•
530 Series						•	•	

## Torq-Lok® Shaft Properties (Ultimate Shaft Buckling Strength)

Shaft Length (in.)	5-1/2	6-1/2	9-1/2	11-1/2
Capacity (lb.)	1620	1425	1100	725

## **BLOK-LOK RESTORATION**

## PANEL-LOK® MECHANICAL RESTORATION SYSTEM

The Panel-Lok\* re-anchoring system is an easy to use, mechanically activated, cost-effective method to re-connect existing stone panel veneers to various substrates. Anchors are manufactured of AISI Type 300 series austenitic stainless steel and ASTM Type 360 brass for a corrosion-resistant tie assembly. They are either torque activated or hammer set, which provides a method of inspection for the backup connection. Field testing can easily be performed by direct tension or toque after installation is complete. The backup anchorage system and the veneer connection method develop performance characteristics similar to the original stone anchoring requirements. The expanders are integrated with a stainless steel shaft and various hex or screw attached heads for the stone veneer connection. They are available in a variety of lengths, and can be custom manufactured upon request.

## **Basic Applications**

Use where there is a need to re-attach existing stone panel veneers less than 3 inches thick that require additional restraint or support to resist live and dead loads. These Panel-Lok anchors accommodate bilateral live-load resistance, unidirectional forces, support loading, and combinations of all types. The backup anchorage system may dictate the style of anchorage required.

## 600 Series Anchor



Uni-directional loading to restrain stone panel to solid backup.

## 600-TGL Series Anchor



Bilateral loading to restrain stone panel to solid backup.

## **T Series Anchor**



Torque activated, support and restrain stone panel to solid backup with or without cavity.

## 610 Series Anchor



Restrain stone panel to hollow and solid backup.

## 610-S-TGL Series Anchor



Bilateral loading to restrain soft-stone panel to steel backup.

## Large H Series Anchor



Stabilize stone panel to concrete backup (3/8", ½", ¾" diameter).

## **Small H Series Anchor**



Stabilize stone panel to concrete backup (1/4" diameter).

## SPIRA-LOK® WALL TIE SYSTEM

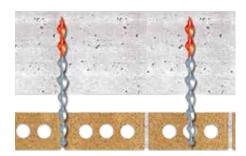
A one-piece, flexible, stainless-steel wall tie for pinning masonry to new or existing walls. Also suitable for temporary support for lintel and shelf angle replacement. The dry-set technique may involve various tie diameters, drill bit and installation tools.

Available in 8 mm or 10 mm diameter in lengths from 6 1/8" (155 mm) through 24" (600 mm) long in Stainless Steel Type 304 (316 available by special order).

- Only a small diameter pilot hole required.
- No toxic adhesives or expansion devices.
- Site-tested immediately after installation.
- Functional in a wide variety of building materials.
- Able to withstand cyclic loading.
- Accommodates differential movements between materials.
- Does not stress or fracture fragile substrates.

An on-site survey should be carried out prior to project tendering to determine material strength, tie diameter and length, pilot-hole size and appropriate drilling technique.

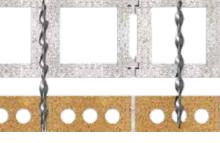
## SPIRA-LOK®



Brick to Concrete (mortar joint or solid brick - use asymmetrical ties)

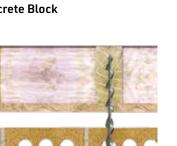


**Brick to Concrete Block** 

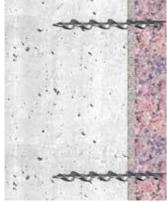




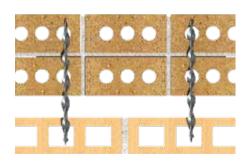
**Brick to Wood Stud** (mortar joint or solid brick)



**Brick to Clay Tile** 



**Dimensional Stone** to Concrete or Masonry



Terracotta to Masonry

Multi-Wythe Brick



Interior: Steel Stud to Brick

## **BLOK-LOK RESTORATION**

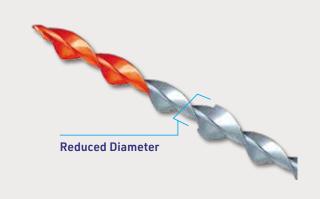
## SPIRA-LOK® WALL TIE SYSTEM

## Spira-Lok® Features and Benefits

One Piece Anchor	Simplified handling and increased site productivity.	
Austenitic Stainless Steel	Long term durability.	
Helical Configuration	Acts as a drip and maximizes cutting edge contact. Provides self-tapping action. Simulates thread conditions without pre-load stress. Accommodates in-plane cyclic loading. Provides flexibility to accommodate differential movement between wythes.	
Central Core Cruciform Shape	ptimizes axial strength in tension and compression. Dissipates installation energy and centralizes load transfer.	
Pointed End Symmetry	asy installation.	
Only a Small Pilot Hole Required	Minimal visual impact.	
No Adhesive Required	Can be used in any climatic condition. Eliminates substrate preparation, enhances in-plane ductility and is less problematic.	
Pullout Resistance	Up to TEN (10) times conventional wall tie capacity.	
Engineered Design	Can be tested for performance verification on site and will work in various building materials.	

## Spira-Lok® Performance Characteristics

Material	Effective Minimum Embed (inches)	Ultimate Tension/Compression (lbs.)		
	,	8mm	10mm	
Mortar Joint (100 psi)	3-1/4	616	780	
Solid Brick (9000 psi)	3-1/4	700	700	
Cavity Brick	3-1/4	1280	1390	
Normal Weight CMU	1-1/4	801	907	
Light Weight CMU	2	550	550	
Concrete (3500 psi)	1-1/2	1200	1300	
Kiln Dried Wood Stud				
2x4	3	517	N/R	
2x6	3	520	N/R	
Metal Stud	16 Gauge	310	N/R	
Granite	1-1/8	620	650	
Travertine	7/8	590	800	
Limestone	3	600	620	
3/16" Steel	3/16	520	N/R	



Spira-Lok° Asymmetrical Ties are dual diameter Spira-Lok° Stainless Steel Helical Wall Ties designed for use in connecting soft veneer materials to a hard back-up. Typically a larger installation pilot hole is required in hard substrates, such as concrete or brick, than, for example, in a soft veneer mortar.

Since drilling a larger diameter pilot hole behind a small entry hole in the veneer is not possible, Blok-Lok supplies a dual diameter **Spira-Lok® Asymmetrical Tie** with a smaller diameter on the end being installed in the substrate. This ensures the connection in both the veneer and substrate attain optimum pull-out loading in service.

Spira-Lok® Physical Characteristics (nominal dimensions)

Spira-Lok Frigsical Characteristics (Hollina dillensions)		
Outside Diameter	8mm	10mm
Pitch Length: in. (mm.)	0.84 (21.4)	1.0 (25.4)
Tie Cross-Sectional Area: in² (mm²)	0.017 (11.6)	0.022 (14.2)
<b>Yield Strength: ksi (MPa)</b> 65.9 (455) 73.8 (509)		
<b>Tensile Strength ksi (MPa)</b> 137.0 (950 137.0 (950		
*Material: ASTM A-167 Type 304 (Stainless Steel)		

Spira-Lok® Properties (ultimate buckling strength)

Unsupported Length	Capacity (lb.)		
in. (mm)	8mm	10mm	
1 (25)	1638	2335	
2 (50)	1290	1613	
4 (100)	690	1185	
6 (150)	375	614	

## DIEDRICH TECHNOLOGIES













## **DIEDRICH TECHNOLOGIES**

Diedrich cleaners, strippers and water repellent products provide a safe, cost-effective alternative to damaging processes, such as sandblasting and muriatic acids. This section is only a sampling of the Diedrich product line.

For more information, visit www.diedrichtechnologies.com, or call 800-296-0771.

## **NEW MASONRY CLEANERS**

## 202 New Masonry Cleaner



DIEDRICH

TERRORQUES, INC.

(202)

ANY RASSONS OF TREATMENT CLEARS

THE MANY CANADAM STREET CL

A more productive general purpose New Masonry Detergent with a combination of organic and inorganic acids, wetting agents and inhibitors for professional use in the final cleanup of new masonry.

- Efficiently cleans off residual mortar, job-site soiling, staining and efflorescence.
- Will work on brick, stone, tile, exposed aggregate and several varieties of new masonry construction not susceptible to metallic staining.
- Will not discolor or damage masonry surfaces.
- Safer and more controllable than raw muriatic acid.

**Typical Coverage Rates:** 150 to 200 square feet/gallon.

## **Suggested Dilution Rates**

1 Part Product:	То:
Concrete and Clay Block	4 parts water
Hard-Burned Pink, Salmon & Tan Brick	6 parts water
Exposed Aggregate Concrete	6 parts water
Structural Tile (Unglazed)	6 parts water
Red Brick	6-8 parts water
Sandstone, Ohio Bluestone, Other Porous Stone	8 parts water (If metallic stains are present prior to testing or appear afterwards, do not use 202 — Use 202V Vana-Stop)
Specialty Pre-Faced Concrete Block & Tile	8 parts water
Smooth Finished Precast & Cast in Place Concrete	10 parts water
Polished Stone (Granite & Marble)	20 parts water (Product could etch stone; testing required)
Structural & Ceramic Glazed Tile & Brick	10-12 parts water
Burnished Masonry	Refer to Diedrich 222 Cleanser for more information
Metallic Stain/Discolorations	If metallic stains are present prior to testing or appear afterwards, do not use 202 — Use 202V Vana-Stop

## **NEW MASONRY CLEANERS**

## 202V VANA-STOP™ New Masonry







A productive combination of organic and inorganic acids, wetting agents and inhibitors for use in the professional cleanup of new masonry, 202V Vana-Stop™ New Masonry is specifically formulated for cleaning new brick subject to vanadium, manganese, molybdenum and other metallic stains.

- Efficiently cleans off residual mortar, efflorescence, job-site soiling, and staining.
- Will work on brick, natural stone, tile, exposed aggregate and several varieties of new masonry construction susceptible to metallic staining.
- Cleaning with this product greatly reduces the likelihood of a staining occurrence, eliminating costly recleaning and stain removal.
- Will not discolor or damage surfaces.
- Safer and more controllable than raw muriatic acid.

Typical Coverage Rates: 150 to 200 square feet/gallon.

## **Suggested Dilution Rates**

1 Part Product:	То:
Black, White, Grey Tan & Chocolate Faced Brick; Limestone; Unglazed Structural Tile; Precast & Exposed Aggregate	6 parts water
Colored Concrete Masonry Units (CMU)	10-15 parts water
Sandstone, Ohio Bluestone; Other Porous Stone	8 parts water
Glazed Structural & Ceramic Tile; Ceramic Brick	10 parts water
Burnished Masonry	12-15 parts water: Refer to Diedrich 222 Cleanser for more information



## **DIEDRICH TECHNOLOGIES**

## WATER REPELLENTS

## 333 Omegaseal™ Water Repellent



This is a split face block sealer with heavy duty solids that can be applied year-round at 20°F and above. The series of water repellents provides hydrophobic protection to masonry surfaces through the formation of a semi-permeable membrane.

- Flexible membrane remains intact through thermal movement of the masonry, rejects water in the solid state and allows for moisture vapor transmission.
- Unique blend of silicone polymers provides maximum resistance to destruction from ultraviolet light and acid rain.
- VOC Compliant formulations available.

### **Product Solution:**

333-E 10%	Use for clay and concrete brick, concrete block, highly porous natural stone, L&S stone and other manufactured stone. Covers 75-100 sq. ft./gal.
333-L 20%	Use for extremely porous block (hollow core split faced) with or without integral waterproofing. Covers 50-100 sq. ft./gal. 2 coats required for warranty consideration

## PAINT REMOVERS & SPECIALTY CLEANERS

## 606 Multi-Layer Paint Remover



Designed to dissolve and remove oil and lead base paints, latex paints and varnishes from masonry and metal exterior surfaces under normal conditions.

- Diedrich 606 paint remover is a specially thickened potassium hydroxide solution which is both biodegradable, when neutralized, and soluble in water.
- The product is applied without dilution. A thick coat of remover may dwell from 1 to 24 hours, depending on the number of layers and the types of paint.
- On masonry, use Diedrich 101/101G as an after-wash to clean the dirt and residue that may be left after the paint removal.
- Use 200, 202, or 707N to neutralize wood surfaces.

## Product should not be diluted.

**Typical Coverage Rates:** 50 to 100 sq. ft./gal.



## Anti-Graffiti System



The Diedrich Anti-Graffiti System consists of protective and removal components. The **333 Omegaseal™** delivers graffiti protection, creating a membrane that protects against penetration of most common materials used by vandals.

When a protected surface has been attacked, the graffiti can be removed with **606 Multi-Layer Paint Remover**, assisted by high-pressure water, re-application of **333 Omegaseal** will be required after removal of graffiti.

Graffiti is easily removed from the protected surface.

## MASONRY RESTORATION CLEANERS

## **ENVIRESTORE 100™**



## **Suggested Dilution Rates:**

1 Part Product Up to

Up to 3 parts water

This product is perfect for the environmentally conscious architect and historic preservationist who wants to eliminate harsh acids. It is a citric based gentle restoration cleaner.

- Safer, environmentally friendly, now made more effective and blended slightly stronger to take on a wider variety of surfaces.
- Relies on the action of citric and phosphoric acid for results, rather than harsh mineral acids.
- Milder product that poses fewer hazards to workers and the environment.
- Will not over-clean brick and stone.
- Formulated for restoring brick, sandstone, unpolished granite, terra cotta and some limestone.
- Ideal for maintenance.

Typical Coverage Rates: 150 to 200 sq. ft./gal.

## 707X Limestone Cleaner Pre-Rinse





This alkaline -based formula was developed specifically for cleaning heavily carbonized, extremely dirty limestone and sandstone surfaces.

- Used with high-pressure washing equipment.
- Most effective on extremely old limestone structures in urban areas where exposure to atmospheric pollutants is high.
- Not generally effective for restoration cleaning of brick, marble or granite.

## Product should not be diluted.

Typical Coverage Rates: 75 to 125 sq. ft./gal.

## 707N Limestone Neutralizer After-Rinse



707N Limestone Neutralizer After-Rinse cleans and restores the dirtiest limestone without damaging the masonry surface, restoring its original light grey appearance. Contains no abrasive solids and will not damage the underlying surface. Developed for limestone and sandstone.

- Will not harm glass.
- Concentrated acid-based compound.
- Must be used after 707X and 808X to neutralize the surface.

Typical Coverage Rates: 150 to 200 sq. ft./gal.

## AIR & VAPOR BARRIERS













## FLUID APPLIED AIR/VAPOR BARRIER PRODUCTS

## ENVIRO-BARRIER™



NFPA 285 Tested - ENVIRO-BARRIER Air and Vapor Barrier products have been tested and shown to meet the requirements of NFPA 285, the National Fire Protection Association Fire Performance Standard, in various wall assemblies. Please contact H&B for approved assemblies. ENVIRO-BARRIER™ is a single component, fluid applied, elastomeric membrane to provide an air, water and vapor barrier when applied to abovegrade wall assemblies. It cures to form a resilient, monolithic, fully-adhered elastomeric membrane which meets & exceeds the highest industry standards for air barrier performance.

- Remains flexible over a wide temperature range.
- Cost effective, easy spray application.
- Asphalt-free formulation.
- Excellent adhesion to most construction materials including CMU, stone, gypsum board, wood, and metal.

## **Product Data**

Color	Dark blue
Solids By Weight	65%
Weight Per Gallon	10.2 pounds
Coverage Rate	25 sf/gal @ 60 mils wet (40 mils dry)
UV Resistance	Up to 120 days
Application Temperature	40° – 120° F
Dry Time	Tack Free: 2 – 4 hrs Full Cure: 4 – 24 hrs
Performance Tested	ASTM E2178, ASTM E96, ASTM E2357, NFPA 285

## **ENVIRO-BARRIER™ VP**





ENVIRO-BARRIER™ VP is fluid applied and provides an air and water barrier, and resists air leakage and water penetration but allows vapor diffusion.

- Asphalt-free formulation.
- Fire/Flame Characteristics: NFPA 285, ASTM E84 (Class A).
- Cost effective, easy spray application.
- Excellent UV resistance.

## **Product Data**

Color	Black	
Packaging	5-gallon pails, 55-gallon drums	
Film Requirements Wet 55 mils, Dry min. 30 mils		
Coverage Rates	~30 sq. ft. (55 mils wet) per gallon	
Drying Time	Tack free 4 hours, Full cure 48 hours	
Percentage of Solids	55% by volume	
Pull Adhesion	139 psi	
Performance Tested	ASTM E2178, ASTM E2357, NFPA 285 (Passed), ASTM E84 (Compliant, Class A)	

## **AIR & VAPOR BARRIERS**

## **ENVIRO-BARRIER™ Silicone**



ENVIRO-BARRIER™ Silicone is an air and water-resistive barrier (AWB) that has a 100% silicone coating that is solvent-free, fluid-applied.

- UV rating of 15+ years.
- Rain ready in as little as 30 minutes.
- Primerless adhesion applied in a single coat.
- Clean Air GOLD certified.
- Low VOC formulation.

**Accessories: EB Silicone TS** is a pre-cured silicone rubber accessory for flashing and transition applications, with lasting resistance to UV radiation, weathering, range in temperatures, and moisture.

**EB Reinforcing Fabric** is used with EB SILICONE TS and is flexible, durable, and spun with 100% polyester, aiding in high tear resistance. Provides additional tensile strength after correct application.

**ENVIRO-BARRIER™ Liquid-Flash Silicone** is a low-sag, air- and water-resistive barrier flashing with primerless adhesion. Long-term resistance to weathering, temperatures, and UV. Fast curing ~40 minutes.



## **Product Data**

Temperature Range	0° – 150° F
Peel Strength	40 psi
Full Cure	24-48 hours
Performance Tested	NFPA 285 (Passed), ASTM E84 (Compliant, Class A)

## **PEEL & STICK AIR BARRIER**

## X-BARRIER™



X-BARRIER™ is a sheet-applied, self-adhesive membrane to provide an air and water barrier when applied to above-grade wall assemblies. X-BARRIER meets and exceeds the highest industry standards for air barrier performance.

- Remains flexible over a wide temperature range.
- Asphalt-free formulation.
- Excellent adhesion to most construction materials including CMU, stone, wood, and metal.

Available Sizes: 36" x 75' rolls.

## **Product Data**

Color	White Sheet				
Adhesive	High Temperature Non-Asphalt				
Thickness	40 mils				
UV Resistance	180 Days				
Application Temperature	Above 40° F				
Performance Tested	ASTM E2178, ASTM E96, ASTM E2357				

## AIR BARRIER ACCESSORIES & DETAIL TAPES

## **ENVIRO-BARRIER™ LIQUID-FLASH™**



**Applications:** Window & Door Flashing, Sheathing Joint Sealant, Membrane Termination Sealant, Joint Sealant, Air Barrier Transitions.

Liquid-Flash™ is formulated using a high performance silyl-terminated polyether polymer technology (STPE). It is a single component, moisture cure elastomeric waterproofing membrane that is applied and tooled to create a long-term moisture proof barrier. Because Liquid-Flash™ is 100% solids it will not shrink or crack. It is compatible with most common building materials, including concrete, plywood, concrete masonry, brick, gypsum sheathing, wood and cement based sheathings.

**Coverage Rates:** Typical coverage is 20-30 lineal feet per 20 oz. sausage at a recommended 12-25 mil coating. Bonds To Wet Substrates.

- Bonds to wet substrates.
- Resistant to UV degradation & weathering.
- Water resistant prior to cure, will not out gas or wash off.
- Excellent physical properties.
- Prevents moisture transmission.
- Excellent perm rating.

- Excellent unprimed adhesion to various substrates.
- Breathable, allows damp surfaces to dry.
- VOC compliant: contains no solvents, phalates or isocyanate's.
- Low odor, eco-friendly formulation.
- Fills joints & voids.

## X-SEAL® Membrane



X-SEAL® Membrane Self-Sealing, Self-Adhering Detail tape provides a durable seal around doors and windows and can be used to seal joints, seams, holes and other undesirable openings in wall systems. It resists the elements with unfailing performance and prohibits harsh environmental conditions from invading a structure.

- Heavy-duty adhesive, made from a proprietary synthetic rubber compound, integrally bonded to a high strength woven polyethylene/polypropylene film.
- Will not rot, crack, or leach, like rubberized-asphalt adhesives.
- UV resistant for up to 90 days.
- Asphalt-free.

**Available Sizes:** 3", 4", or 6" wide x 75 ft. long rolls. Other widths (up to 36") available upon request.

Patents Pending.

## MOISTURE CONTROL















## **FLASHING SYSTEMS**

## **TeXtroflash™**



- TeXtroflash™ Flashing
- 2. T1 OR T2 TERMINATION BAR required for surface-mount application
- 3. DRIP PLATE/EDGE strongly recommended for surface-mount or thru-wall application

This 40-mil thick composite membrane is made with a synthetic-rubber adhesive that offers superior adhesion for optimal performance. This adhesive is factory-laminated to a woven-reinforced polyethylene sheeting, yielding a flexible membrane that is suitable for application to masonry, concrete, steel, gypsum and wood.

- Provides dual-layered waterproofing protection.
- Resists tearing and slicing.
- UV-resistant for up to 90 days.
- Adhesive backing will not leach out when exposed to UV or heat.

**Note:** H&B recommends using stainless steel corners and end dams for optimal waterproofing protection. Use Primer-SA $^{\text{TM}}$  and HB Sealant for proper installation.

**Available Widths:** 12", 16", 18", 20", 24", 36", 48", 54", 60" & 72" wide x 75' long rolls. Other sizes available upon request.

U.S. Patents: 7,823,355 and 7,882,673. Other Patents Pending.

## Flex-Flash® Flashing





**Surface Mount** 



Thru-Wall

\*Elvaloy is a registered trademark of the DuPont Company. Moisture infiltration can occur at sills, projections, recesses, intersections and mortar joints. The solution begins with proper flashing. H&B's Flex-Flash® is a 40-mil thick product formulated with Elvaloy® Kee\*. It does not seep and combines the best features of other types of flashing, making it a truly superior product.

- Extremely tough, with excellent impact and tear resistance.
- Flexibility is maintained in all weather environments, even in extreme heat or cold.
- Highly resistant to oils and repels most chemicals.
- Not susceptible to UV degradation.
- Compatible with most silicone and urethane sealants.
- Suitable for thru-wall or surface-mount applications.

Typical "peel-and-stick" flashings have a black, rubberized-asphalt component that can leach out of the building in warm temperatures if not precisely installed, leaving unsightly marks that are difficult to remove. Flex-Flash™ has a pressure-sensitive, clear adhesive that will not seep when exposed to UV or heat.

Flex-Flash® may be used in thru-wall or surface-mount applications. For surface-mount applications, apply to clean, dry surface. For surfaces where additional adhesion may be required, use H&B Foam-Tak™ Hi-Performance Spray Adhesive. Termination Bars must also be used. Flex-Flash® should be extended beyond the wall face and cut flush with the brick. Optional Drip Plates may be used to effectively guide moisture to the exterior.

For maximum protection against moisture infiltration, specify the complete Flex-Flash® Flashing System, comprised of Flex-Flash®, Mortar Trap™, Foam-Tite Seal™ Drip Plates and Termination Bar.

U.S. Patents: 6,584,746. Other Patents Pending.

## **MOISTURE CONTROL**

## **FLASHING SYSTEMS**

## Mighty-Flash™ Stainless Steel Composite Flashing



- MIGHTY-FLASH™ FLASHING
- 2. T1 OR T2 TERMINATION BAR required for surface-mount application
- DRIP PLATE required for surface-mount or thru-wall application

Mighty-Flash™ is a stainless steel composite flashing, a Class A material consisting of a layer of polymeric fabric with a single sheet of 304 stainless steel bonded to one side. It is an innovative product featuring excellent puncture and tear resistance, designed to last for the life of the wall.

- Flexible and easy to form on the job site.
- Fire resistant: conforms to ASTM E84, Class A material.
- Mold resistant: ASTM D3273 tested.
- Heat resistant: no degradation in high heat applications.
- UV resistant for up to 120 days.
- Recyclable.
- A cost-effective alternative to traditional copper composite flashing products.

## **Lifetime Warranty**

**Available Widths:** 12", 16", 18", 24" & 36" x 60' long rolls.



## Mighty-Flash™ SA Self-Adhering Stainless Steel Composite Flashing



Removable Release Liner

Mighty-Flash™ SA is a self-adhering stainless steel fabric flashing product with a synthetic-rubber clear adhesive. The adhesive is factory-laminated to a Class A material consisting of a layer of polymeric fabric with a single sheet of 304 stainless steel bonded to one side. It features excellent puncture and tear resistance, designed to last for the life of the wall. Mighty-Flash™ SA will not degrade under high heat applications and conforms to ASTM D3273 for mold resistance.

## **Lifetime Warranty**

Available Widths: 12", 16", 18", 24" & 36" x 60' long rolls

- Will not seep from UV or heat exposure.
- Removable Release Liner for easy application.
- Fire resistant: Conforms to ASTM E84, Class A material.
- UV resistant up to 120 days.
- Recyclable.
- A cost-effective alternative to traditional copper fabric flashing.

## **FLASHING SYSTEMS**

## Copper Composite Flashing



Copper-Fabric™ NA and Copper-Fabric™ SA come are provided as easy-touse, color-coded material, so you can quickly find the right solution for the job with less inventory.

Copper Color Code:

- 3 oz. Copper: GREY - 5 oz. Copper: RED - 7 oz. Copper: BEIGE

**Available in 25 ft. rolls:** 12", 16", 18", 20", 24", 32" & 36" wide. Other sizes available upon request.

U.S. Patents: 6,928,780 and 6,945,000. Other Patents Pending.

## Copper-Fabric™ NA



**Surface Mount** 

Copper-Fabric™ NA is a composite membrane consisting of a polyethylene film laminated to BOTH sides of a 3, 5, or 7 oz. copper sheet to create a superior flashing that can

also serve as a drip edge.

- Suitable for thru-wall or surface-mount applications.
- UV-resistant for up to 120 days.
- Highly resistant to oils and will repel most chemicals
- Extremely tough, with excellent impact and tear resistance.
- Maintains flexibility in extreme heat or cold weather environments.
- Asphalt-free composition compatible with a wide variety of sealants.

Use with Primer-SA™ & HB Sealant for best results (see page 54 for more information).

## Copper-Fabric<sup>™</sup> SA



Thru-wall shown with copper end dam

Copper-Fabric<sup>™</sup> has all of the same great features of the standard Copper NA flashing with the added benefit of a self-adhesive layer on one side.

- Pressure-sensitive, clear adhesive.
- Will not seep like other self-adhesive "peel and stick" bituminous based flashings.
- Remains UV-resistant for up to 120 days.

Note: For a full list of sealants compatible with H&B Flashings, please visit: www.h-b.com

## **MOISTURE CONTROL**

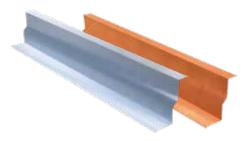
## **CUSTOM METAL FLASHING**

H&B manufactures a variety of metal flashing products and accessories to suit numerous job conditions. Products include standard sheet flashings bent to custom sizes and shapes, pre-fabricated inside or outside corners, end dams, splice tape and reglets. Seen below are various product styles, each of which are manufactured per the dimensional requirements of the customer. Metal flashing products are manufactured from 26 ga. type 304 Stainless Steel (316 Special Order).and 16 or 12 oz. copper. (Lead-coated copper, terne-coated stainless steel or other gauges are available on special order.)

## MFL Metal Flashings





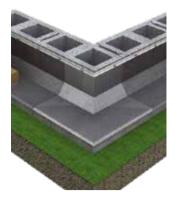


Thru-Wall

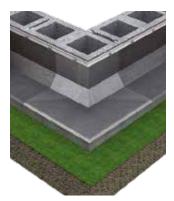
Surface-Mount

MFL can be formed according to job requirements. State dimensions when ordering. Comes standard with factory-formed, hemmed drip edge information.

## MFL Outside & Inside Corners









Outside Corner (Thru-Wall)

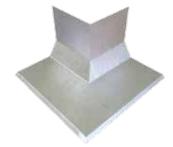
Inside Corner (Thru-Wall)

Outside Corner (Surface-Mount)

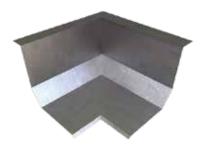
Inside Corner (Surface-Mount)

Metal Flashing Outside and Inside Corners are custom-fabricated, pre-formed pieces with a smooth, hemmed drip edge. Outside corners have a continuous, uninterrupted drip edge for a smooth, non-jagged finish (important in maintaining the integrity, aesthetics and safety aspects of the flashing corner).

Compatible with ST Splice Tape.

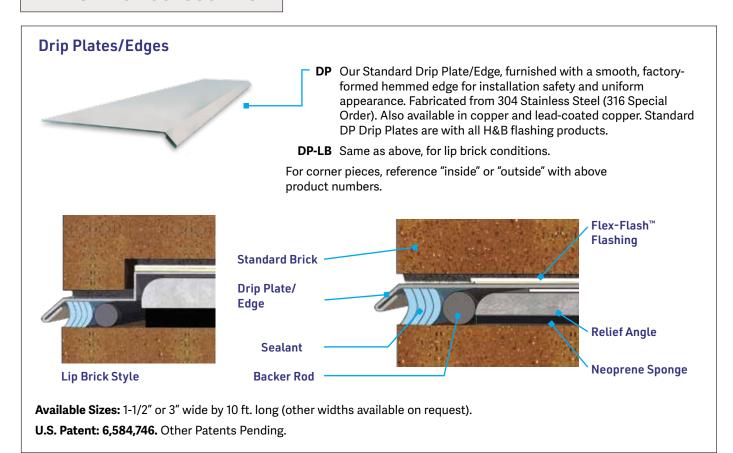






MFL - Inside Corner

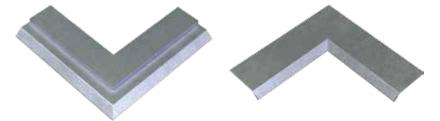
## **FLASHING ACCESSORIES**







**Drip Plate/Edge Inside and Outside Corners** are pre-formed pieces with a smooth, uninterrupted, hemmed drip edge to maintain the integrity of the flashing system.



Outside Lip Brick Style

**Inside Corner** 

## **MOISTURE CONTROL**

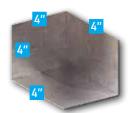
## **FLASHING ACCESSORIES**

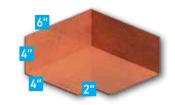
## Stainless Steel and Copper Soldered Corners & End Dams

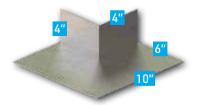
**St/Steel** - for use with Flex-Flash®, Textroflash™, Mighty-Flash™ and Stainless Steel Metal Flashings.

Copper - for use with Copper NA and Copper SA Flashings.

Simply place underneath flashing for the ultimate protection against moisture penetration at corners and end dams.













St/Steel End Dam

**Copper Inside Corner** 

St/Steel Outside Corner

# Type T1 Type T2 has a 3/8" flange on top for easy caulking

For securing the top edge of flashing to the backup. Available in T1 Standard or T2 with 3/8" flange for easy caulking. Compatible with all H&B Membrane & Copper Laminate Flashings. Order with Foam-Tite™ Seal to help fill irregularities between Termination Bar and the Substrate behind.

- T1 1/8" X 1" X 8' long; available 304 Stainless Steel (316 Special Order), Aluminum or Plastic.
- T2 26 ga. X 1-1/2" X 8' long; available 304 Stainless Steel (316 Special Order) or Aluminum.

U.S. Patent: 6,945,000. Other patents pending.

## **FLASHING ACCESSORIES**

## PRIMER-SA™



This water-based primer imparts an aggressive, high-tack finish on the treated substrate.

- Specifically designed to facilitate tenacious adhesion of all H&B self-adhered membranes to numerous substrates, such as CMU, glass-faced sheathing, plywood, and OSB.
- Remains sensitive.
- Fast-drying.
- VOC-compliant with no noxious fumes.

## **HB Sealant**



Compatible with all H&B non-asphalt flashings, H&B Sealant is excellent for lapping and sealing flashing, drip edges, terminations, and end dams.

- Effective in damp, dry, or cold climates.
- Free of solvents and isocyanates.
- Can be applied in temperatures as low as 32° F.
- UV-resistant.
- Multi-Purpose Sealant with 25% Movement.

Note: Hohmann & Barnard is not responsible for incompatibility of non-H&B primers, sealants, and flashings.

## **WEEP HOLES & MORTAR SUSPENSION**



#341 Series Standard - 1/4" or 3/8" outside diameter x 4" long.

#342 Series Standard - 3/8" wide x 1-1/2" high x 3-1/2" long.

#341W & #342W Provided with cotton wick attached, for placement inside cavity.

#341S & #342S Provided with screen insert (brass or stainless steel), to prevent infiltration of insects or debris.

#341W/S & #342W/S - Provided with both wick and screen.

#343 Series Standard –  $2 \frac{1}{4}$ ",  $2 \frac{7}{8}$ ", or  $3 \frac{1}{2}$ " high, injection-molded flexible PVC. Available only in gray. Rectangular closer strip prevents mortar droppings from clogging openings. Compressible flanges for joint widths of  $\frac{1}{2}$ " –  $\frac{3}{4}$ ".

## **MOISTURE CONTROL**

## **WEEP HOLES & MORTAR SUSPENSION**

## Mortar Trap™ Weep Vents



**Standard Sizes:** 3/8" x 2 ½" x 3 ½".

Colors: Almond, Brown, Gray, Red, Tan, White.

A 100% recycled polyester plastic non-woven mesh vent which is treated with a flame retardant and ultra-violet inhibitors. Used in vertical joints between brick masonry in masonry wall construction to provide for the drainage of moisture and promotion of air flow. The weep vents also prevent insects from entering through the openings.

## **QV - Quadro-Vent**<sup>™</sup>





**Standard Sizes:** %" x 3%" x 2%" high or Jumbo: %" x 3%" x 3%" high. Other sizes available upon request.

Colors: Clear, Gray, White, Black, Buff, Cocoa or Almond.

Honeycomb design restricts ingress of insects and other debris while allowing passage of moisture up to its 2-1/2" height, important in the event of mortar droppings at bottom of cavity. Also suitable for top of wall venting.

## MGS Mortar / Grout Screen



Mono-filament screen is fabricated from high-strength, non-corrosive polypropylene polymers. Isolates flow of grout in designated areas requiring reinforced concrete block. Also allows for greater bonding of masonry anchor in hollow brick construction.

**Available Sizes:**  $\frac{1}{4}$ " square x 4", 6", 8", 10", or 12" wide x 100' rolls.

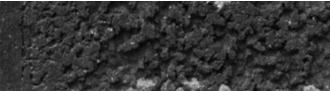
## Mortar Trap™



Mortar Trap's unique shape breaks up and suspends mortar droppings to prevent blockage and allow water to flow to weep holes. High-density polyethylene (HDPE) strands woven into a 90% open mesh will not react to common building products and is inedible to insects.

**Available Sizes:** 0.4", 1", 1-1/2" or 2" thick x 10" high x 4' long.





# EXPANSION & CONTROL JOINTS









## **EXPANSION & CONTROL JOINTS**

## **EXPANSION & CONTROL JOINTS**

## **NS - Neoprene Sponge**



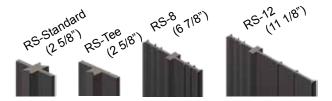
NS - Neoprene Sponge is a closed-cell, non-absorbent horizontal and vertical joint filler used in a variety of masonry applications.

- Neoprene allows expansion and prevents clogging of joints with mortar.
- Special widths and thicknesses available on request.
- Pressure-sensitive adhesive backing and tear-strip also available on request.
- Optional tear strip.

**Available Sizes:** 1/4", 3/8" or 1/2" thick x 3", 4" or 6" wide in 50' long rolls

**ASTM D 1056 Grade 2A 1.** 

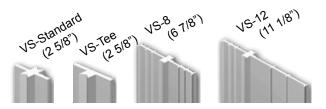
## RS - Rubber Control Joint



Extruded rubber material designed for masonry walls at control joints. Rubber material conforms to ASTM D-2000 2AA-805. "Standard" and "Tee" versions are for use in Sash Blocks. "-8" and "-12" are for standard 8" & 12" Stretcher Blocks.

**Available Sizes:** 4 ft. lengths, 60 ft. per box (RS-12 48 ft. per box).

## **VS - PVC Control Joint**



Complete line of polyvinyl chloride control joints suitable for various wall conditions. PVC material conforms to ASTM D 2287 (Type PVC 654-4). "Standard" and "Tee" versions are for use in Sash Blocks. "-8" and "-12" are for standard 8" & 12" Stretcher Blocks.

**Available Sizes:** 4 ft. lengths, 60 ft. per box (VS-12 48 ft. per box).

## Slip-Set<sup>™</sup> Stabilizer





Bonds masonry walls and restrains lateral movement while allowing expansion and control joints to perform as designed. Field bend to connect intersecting walls, or new walls to existing walls.

**Finishes:** Mill Galvanized, Hot-Dip Galvanized or Type 304 Stainless Steel with a loose PVC "Slip-Tube".

## **EXPANSION & CONTROL JOINTS**

## **Backer Rod**



Backer Rod is an ideal non-absorbent, compressible backup material inserted into a joint to control sealant depth. It creates a backstop to allow proper sealant tooling and allows proper sealant of the joint surfaces. Backer Rod forms a proper bond between the back-up material and the sealant. It can also be used as a temporary joint seal.

- Standard Backer Rod is an extruded round, closed cell, low density polyethylene foam material with a skin-like outer texture.
- Commonly used for glazing operations, window and door applications, expansion joints, curtain wall joints, partitions, log construction or pavement joints.
- Highly flexible and compressible for easy installation.
- Compatible with butyl, polysulfide, acrylic, polyurethane, silicone and most other cold sealants.

Available Sizes: diameters from 1/4" to 6".

ASTM D1622, ASTM D1621, ASTM C5090, ASTM C335.

## Soft Rod



Soft Rod is a closed cell material that is much lighter than standard Backer Rod. This allows for a product that is much lower in density and much easier to work with. It is compatible with butyl, polysulfide, acrylic, polyurethane, silicone and most other cold sealants.

**Available Sizes:** 3/8", 5/8", 7/8", 1 1/8", 1 1/2", 2", 2 1/2", 3" and 4" diameter.

ASTM D1622, ASTM D1621, ASTM C5090, ASTM C335.

## Removable Expansion Joint Cap

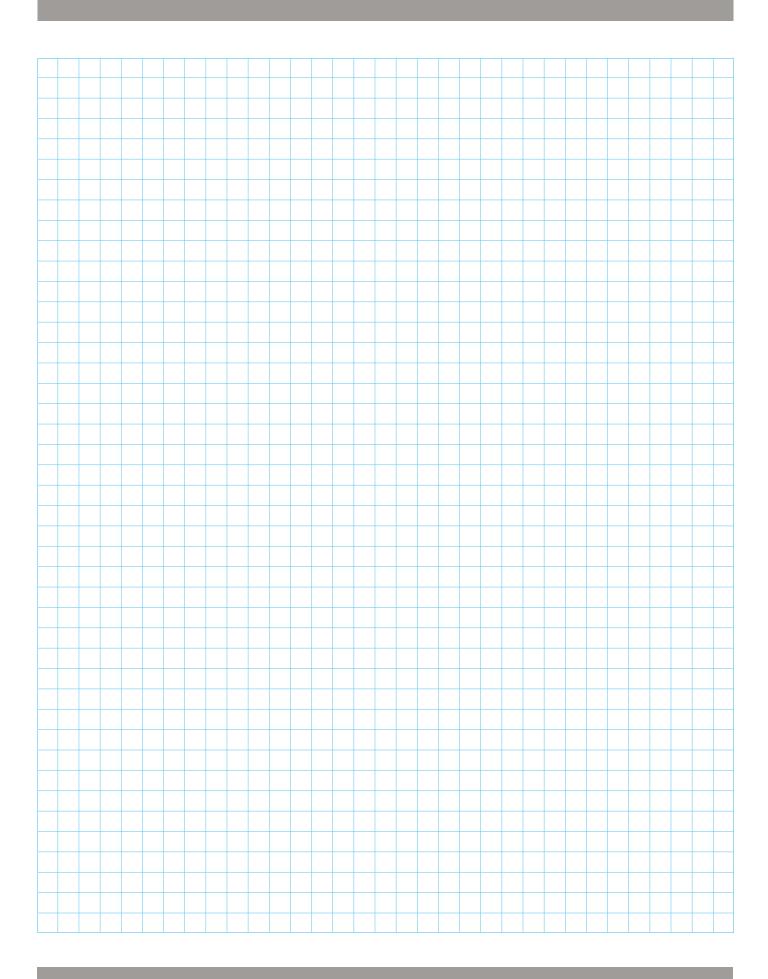


This flexible, highly resilient polystyrene product is used to form and fill horizontal and vertical joint applications. Before concrete placement, install on top of the existing expansion joint material to form precise horizontal and vertical intersections within the concrete. With little clean up, the removable top is then snapped off without any effort, and the result is a permanent channel, ready to receive caulk or sealant.

- Use at any depth, as well as with any other expansion joint product.
- Requires no further maintenance, when installed correctly.
- Ideal for molding concrete to maintain uniform edging.

**Available Sizes:** 1/2" x 1/2", 3/4" x 1/2", 1" x 1/2" X 10' lengths. 50 pieces per box.

## **NOTES**



## MATERIAL CONFORMANCE

## WIRE

MATERIALS:

Carbon steel wire: ASTM A1064/A1064M

(Tensile Strength - 80,000 psi)

Steel wire for masonry joint reinforcement:

ASTM A951/A951M, TMS 402/602 (Building Code for

Masonry Structures)

FINISHES:

Mill Galvanized:

ASTM A641/A641M (0.1 oz/ft2)

ASTM A641/A641M (0.4 oz/ft2) and ASTM A641/A641M

(0.8 oz/ft2) available on special order

Hot-Dip Galvanized:

ASTM A153/A153M-B2 (1.5 oz/ft2)

Stainless Steel:

ASTM A580/A580M - AISI Type 304 (316 on special order)

DIAMETER:

3/16" (.187" or W2.8)

9 Gauge (.148" or W1.7)

## **SHEET STEEL ITEMS**

MATERIALS:

Carbon Steel Sheets: ASTM A1008/A1008M

FINISHES:

Mill Galvanized:

ASTM A653/A653M Class G60 (0.6 oz/ft2)

Hot-Dip Galvanized:

ASTM A153/A153M-B2 (1.5 oz/ft2)

Stainless Steel:

ASTM A666, ASTM A480/A480M, and ASTM A240/A240M

- AISI Type 304 (316 on special order)

Hohmann & Barnard recommends using type 304 or 316 Stainless Steel in all building projects to protect against corrosion and limit thermal transfer in the wall cavity. Please visit www.h-b.com for the most up to date technical information.

Effective Steel Area (in²)	4" wall	6" wall	8" wall	10" wall	12" wall	14" wall	16" wall
#120 Truss							
Standard - 9ga. S/R x 9ga. C/R	.051	.050	.048	.047	.045	.044	.043
Super Heavy Duty - 3/16" S/R x 3/16" C/R	.073	.072	.070	.069	.067	.066	.065
#220 Ladder							
Standard - 9ga. S/R x 9ga. C/R	.0345	.0345	.0345	.0345	.0345	.0345	.0345
Super Heavy Duty - 3/16" S/R x 3/16" C/R	.0554	.0554	.0554	.0554	.0554	.0554	.0554

IMPORTANT: Since each construction project is unique, the appropriate selection and use of any product contained herein must be determined by competent architects, engineers and other appropriate professionals who are familiar with the specific requirements of the project in question.

This catalog is intended as a design aid for use in North America, and on projects world-wide where North American design parameters have been used.

The information in this catalog is provided in good faith. However, anchor and tie adequacy can be adversely affected by on-site workmanship and varying conditions in different geographic locations for which Hohmann & Barnard can accept no responsibility. Similarly, should Hohmann & Barnard products be used in conjunction with channels or components from other manufacturers, there can be no guarantee of performance.

All application illustrations shown in the catalog are for guidance only and should not be taken as working drawings. Hohmann & Barnard reserves the right to amend, withdraw or to make changes to products and specifications at anytime without written notice to customers, designers and users.

It is the policy of Hohmann & Barnard to work with designers, engineers and contractors in providing suggestions and advice for the satisfactory solution of anchoring problems. However, all advice and drawings provided are subject to the approval of the design team, contractor and structural engineer, who take ultimate responsibility for proper product usage.



www.h-b.com 1-800-645-0616



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