

# BoMetals, inc.®

concrete and masonry accessories



Waterstops



Keyway

Dowel Systems



Masonry





Since 1989, BoMetals has earned a reputation in the concrete and masonry accessory market for continuous innovation, enthusiastic customer service and dedication to the construction industry.

BoMetals serves the concrete accessory market by manufacturing a wide variety of products used in both commercial and residential construction. These products include a comprehensive offering of PVC and TPER Waterstop to meet the needs of any job. We also supply Mastic and Hydrophilic Waterstops. BoMetals is also the nations top manufacturer of keyjoint systems. They include QuickKey™, the only galvanized joint system that features square dowel knockouts and Pro-Key™, with a patented positive stake-to-key interlock. Other concrete products include Keyway Caps, Expansion Board Caps, Zip Joint, Chamfer and Radius Formers plus much more.

BoMetals also serves the masonry market with a complete line of PRO-SLOT™ and Dovetail Anchors, and Control Joint which are available in PVC and Rubber. We also manufacture Block Cap & Weep Tubes.

All BoMetals products are available through a national network of distributors and warehouses. A trained and knowledgeable sales or engineering staff offer personalized service unparalleled in the industry today.

Sincerely,



**LIMITED WARRANTY AND LIMITATION ON LIABILITY**

BoMetals, inc warrants that each product described herein shall be free from defects in materials and workmanship, ordinary wear and tear excepted, for one year from the date of delivery thereof, provided that such product is used and installed properly and is not interchanged or used with the products of other manufacturers. BoMetals' sole obligation, and buyer's exclusive remedy, under this warranty shall be limited to, at BoMetals' option, full refund of the purchase price of the nonconforming product or replacement of the nonconforming product. For full details on our warranty, please contact us at 800-862-4835

**PRODUCT SELECTION DISCLAIMER**

BoMetals is happy to assist in your product selection; However, BoMetals disclaims any responsibility for the selection of a particular product. Product selection is the sole responsibility and decision of the buyer. The suitability of any material for a specific application requiring fluid resistance is best determined by specific testing for the application. BoMetals urges the Buyer to conduct its own testing.

**RETURN/CANCELLATION POLICY**

Any return must have a Return Goods Authorization Number (RGA#). BoMetals will only issue credit for what is received with a RGA# and found to be in resalable condition within 90 days from invoice date. 20% restocking fee applies & return freight is prepaid by shipper. BoMetals cannot issue credit for damaged or lost items during transit. Purchase Orders cannot be cancelled for any custom item after the manufacturing process has begun. For full details on Return/Cancellation Policy, please call 800-862-4835.

## PVC WATERSTOPS

### TYPES OF CONCRETE JOINTS

#### Expansion (Isolation) Joint

A joint that separates the slab structurally from other building elements such as walls, columns, foundations, drain pipes, to accommodate differential horizontal and vertical movement.

#### Contraction (Control) Joint

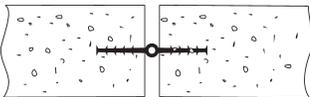
A formed, sawed or tooled groove in a concrete structure to create a weakened plane and regulate the location of cracking resulting from the dimensional change of different parts of the structure.

#### Construction Joint

A joint placed in concrete where construction operations are concluded for the day.

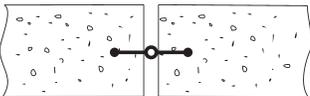
—Reprinted with permission, American Concrete Institution, CCS-1, Slabs on Grade, Mary K. Hurd, Editor.

### WATERSTOPS FOR MOVING JOINTS



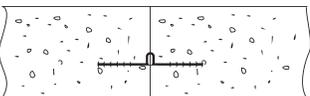
#### Ribbed Center Bulb

Used in expansion joints where normal movement between members is anticipated. **Also available in split shapes.**



#### Dumbbell with Center Bulb

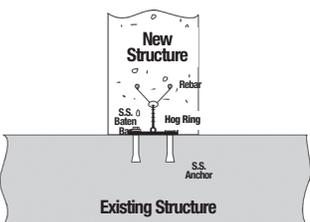
Used in expansion joints where longitudinal and transverse movement is anticipated.



#### Tear Web

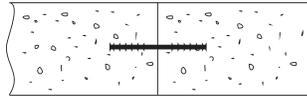
Used in expansion joints where large joint movements are expected.

### RETROFIT APPLICATIONS



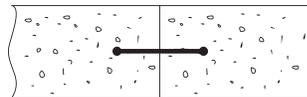
Used to provide a watertight seal when attaching a new construction project to an existing one.

### WATERSTOPS FOR NON OR LIMITED MOVEMENT JOINTS



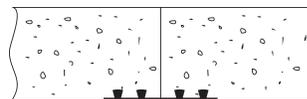
#### Flat Ribbed

Used in construction joints where little or no movement is anticipated and where high bond strength is desired.



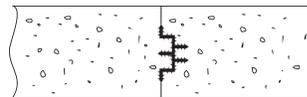
#### Dumbbell

Used in construction joints where little or no movement is anticipated. **Also available in split shapes.**



#### Base Seal

Used in grade construction between concrete walls and slabs, in backfilled retaining walls and in keyed construction joints in walls and slabs.



#### Multi Rib

Used in construction joints in vertical applications where key action is desired.

### TYPICAL PROPERTIES OF PVC WATERSTOPS MEET OR EXCEED CRD-C 572-74, 100% VIRGIN RESIN

Typical Properties	Minimum Value	ASTM
Water Absorption, %	0.15 max	D-570
Tear Resistance, lb/in (kg/cm)	300 (53.5)	D-624
Specific Gravity, (+/-0.05)	1.38	D-792
Hardness, Shore A (+/-5, 10 sec. delay)	80	D-2240
Tensile, psi (kg/cm <sup>2</sup> )	2000 (140.6)	D-638, Type IV
Elongation, %	350	D-638, Type IV
Low Temperature Brittleness, °F (°C)	-35(-37) Passed	D-746
Stiffness in Flexure, psi (kg/cm <sup>2</sup> )	600 (42.1)	D-747
<b>Accelerated Extraction, CRD-C 572</b>		
Tensile, psi (kg/cm <sup>2</sup> )	1600 (112.4)	D-638, Type IV
Elongation, %	300	D-638, Type IV
<b>Effect of Alkali, CRD-C 572</b>		
Weight Change, %	-0/+0.25	-----
Change in Hardness, %	+/-5	D-2240

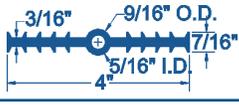
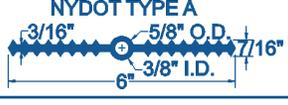
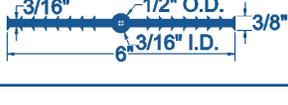
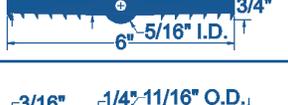
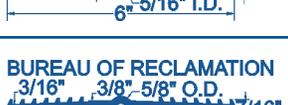
IMPORTANT: The technical data herein is believed to be accurate. It is offered for your consideration, investigation and verification. All testing and test data has been prepared by independent laboratories. NO WARRANTY, EXPRESS OR IMPLIED, IS MADE as to the accuracy or completeness of the technical data herein and the use thereof for any particular purpose.

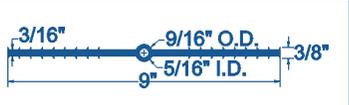
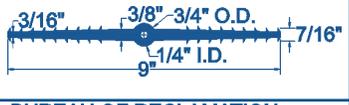
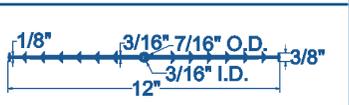
\*This may be a special order product with minimum quantities. Please call 800.862.4835 for more details.

## PVC WATERSTOPS

Available in TPER & Arctic Grade

### Ribbed Center Bulb

Catalog Number	Head Pressure	Lbs./ LF	Profile
RCB-4316	65'	.40	
RCB-4316CA	65'	.50	
RCB-4316LB	65'	.74	
RCB-4316NT	65'	.60	
RCB-6316	100'	.73	
RCB-6316A	100'	.92	
RCB-6316NT	100'	.86	
RCB-6316T	100'	.68	
RCB-612	150'	1.90	
RCB-614	100'	.98	
RCB-638	125'	1.16	
RCB-638BR	125'	1.19	
RCB-638LB	125'	1.63	
RCB-638NT	125'	1.55	

Catalog Number	Head Pressure	Lbs./ LF	Profile
RCB-714*	100'	1.44	
RCB-912	200'	2.42	
RCB-9316	100'	1.20	
RCB-938	175'	1.76	
RCB-938BR	175'	2.65	
RCB-938LB	175'	2.25	
RCB-938M*	125'	1.93	
RCB-938NT	175'	2.45	
RCB-938VLB	150'	2.73	
RCB-1212	225'	4.32	
RCB-1212BR*	225'	3.24	
RCB-1212T	225'	3.60	
RCB-12316	150'	1.56	

\*Denotes special terms see page 3.

PVC WATERSTOPS

Available in TPER & Arctic Grade

Flat Ribbed

Catalog Number	Head Pressure	Lbs./ LF	Profile
FR-4316	65'	.45	
FR-5316*	35'	.64	
FR-538	125'	1.23	
FR-6316	75'	.81	
FR-638	125'	1.50	
FR-638RT	125'	1.70	
FR-638T	125'	1.30	
FR-9316	100'	1.20	
FR-938	175'	2.37	
FR-938T	175'	2.07	

Split Ribbed Center Bulb

Catalog Number	Head Pressure	Lbs./ LF	Profile
SR-4316	65'	.52	
SR-6316	100'	.75	
SR-638	125'	1.54	
SR-938	150'	2.04	
SR-1212	200'	3.18	

Dumbbell

Catalog Number	Head Pressure	Lbs./ LF	Profile
DB-4316	65'	.49	
DB-6316	75'	.71	
DB-6316LB	75'	.93	
DB-614	100'	1.11	
DB-638	125'	1.59	
DB-9316	100'	1.17	
DB-912*	200'	3.13	
DB-938	150'	2.17	
DB-938LB	150'	2.55	
DB-1212*	225'	4.06	
DB-1238	200'	2.99	

Split Dumbbell

Catalog Number	Head Pressure	Lbs./ LF	Profile
SD-638	125'	1.51	
SD-938	150'	2.20	

Multi Rib

Catalog Number	Head Pressure	Lbs./ LF	Profile
MR-314	25'	.84	
MR-412	50'	1.24	

\*Denotes special terms see page 3.

## PVC WATERSTOPS

Available in TPER & Arctic Grade

### Retro Fit

Catalog Number	Head Pressure	Lbs./ LF	Profile
RF-4316	N/A	.89	
RF-638	N/A	2.15	
RF-814*	N/A	1.71	
RF-825*	N/A	1.73	
RF-912	N/A	4.84	
RFL-3316	N/A	.90	

### Dumbbell With Center Bulb

Catalog Number	Head Pressure	Lbs./ LF	Profile
DBC-2518*	10'	.27	
DBC-614	100'	1.41	
DBC-638	100'	1.68	
DBC-938	150'	3.10	
DBC-938L	150'	3.70	

### Retro Fit Accessories - Epoxy, SS Bars & Bolts



### Base Seal

Catalog Number	Head Pressure	Lbs./ LF	Profile
BS-618	100'	.89	
BS-618CI	100'	1.07	
BS-718	100'	.85	
BS-718E	100'	1.16	
BS-72518	75'	.88	
BS-9316	100'	1.72	
BS-9532	100'	1.53	
BS-13316	175'	2.04	
BS-17532	N/A	2.75	
CU-912	N/A	4.53	
IBS-110CI & IBS-19518	N/A	2.18	

## PVC WATERSTOPS

### Tear Web

Catalog Number	Head Pressure	Lbs./ LF	Profile
CTW 1-2	35'	1.10	
TW-618	65'	.78	
TW-918	100'	1.00	
TW-938	150'	3.78	
TW-10316*	75'	2.10	

## WATERSTOP ACCESSORIES

### FIELD SPLICING TOOLS



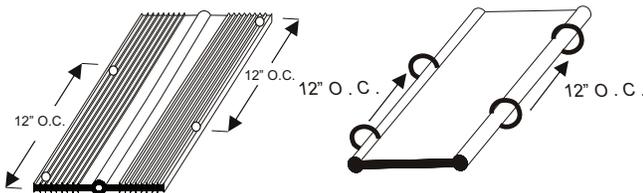
Dimensions: 2" x 14" x 1" (#SI-214)  
4 1/2" x 14" x 3/4" (#SI-414)  
6" x 20" x 3/4" (#SI-620)

100% factory tested, adjustable temperature, heavy duty vinyl grip, teflon peel and stick cover, standard 110-120 VAC/8 Amp, 8' power cord, UL Listed. Additional Splicing Covers available.

Splicing Video



### HOG RING OR EYELET INSTALLATION



BoMetal can install Hog Rings or Eyelets to virtually any Waterstop profile. Please call 800-862-4835 for profile specific quotes.

We are also able to supply Hog Rings direct to you for field installation.

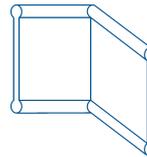
## WATERSTOP ACCESSORIES

### CUSTOM SPLICES

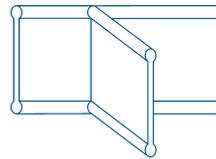
An important factor in the watertightness of any waterstop is the reliability of splices. With BoMetals fittings, you are guaranteed greater strength and efficiency with ease of field installation. The following factory made splices are available in PVC & TPER. BoMetals is also capable of manufacturing other custom splices specifically to fit your specifications.



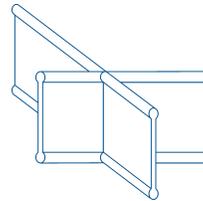
Custom Fabrication Video



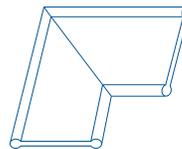
Vertical Ell



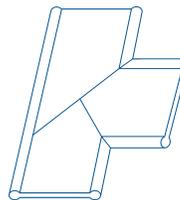
Vertical Tee



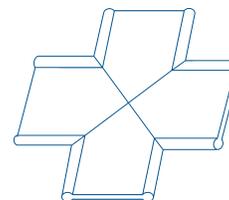
Vertical Cross



Flat Ell



Flat Tee



Flat Cross

# INTERNATIONAL PVC WATERSTOPS

## INTERNAL STYLE EXPANSION JOINTS

<p><b>ICB-15010</b></p> <p>WEIGHT: 1.14 Kg.LM      20 LM/ROLL</p>	<p><b>ICB-15020</b></p> <p>WEIGHT: 1.67 Kg.LM      20 LM/ROLL</p>	<p><b>ICB-20015</b></p> <p>WEIGHT: 1.38 Kg.LM      20 LM/ROLL</p>
<p><b>ICB-20020</b></p> <p>WEIGHT: 1.97 Kg.LM      20 LM/ROLL</p>	<p><b>ICB-25015</b></p> <p>WEIGHT: 1.75 Kg.LM      15 LM/ROLL</p>	<p><b>ICB-25025</b></p> <p>WEIGHT: 2.64 Kg.LM      16 LM/ROLL</p>

## EXTERNAL STYLE EXPANSION JOINTS

<p><b>ITW-15020</b></p> <p>WEIGHT: 1.51 Kg.LM      20 LM/ROLL</p>	<p><b>ITW-20020</b></p> <p>WEIGHT: 2.16 Kg.LM      20 LM/ROLL</p>	<p><b>ITW-20017</b></p> <p>WEIGHT: 1.74 Kg.LM      15 LM/ROLL</p>
<p><b>ITW-25019</b></p> <p>WEIGHT: 2.74 Kg.LM      16 LM/ROLL</p>	<p><b>ITW-25025</b></p> <p>WEIGHT: 2.74 Kg.LM      16 LM/ROLL</p>	

## INTERNAL STYLE CONSTRUCTION/CONTRACTION JOINTS

<p><b>IFR-15010</b></p> <p>WEIGHT: 0.83 Kg.LM      20 LM/ROLL</p>	<p><b>IFR-15020</b></p> <p>WEIGHT: 1.61 Kg.LM      20 LM/ROLL</p>
<p><b>IFR-20020</b></p> <p>WEIGHT: 1.96 Kg.LM      20 LM/ROLL</p>	<p><b>IFR-25025</b></p> <p>WEIGHT: 2.60 Kg.LM      16 LM/ROLL</p>

## EXTERNAL STYLE CONSTRUCTION/CONTRACTION JOINTS

<p><b>IBS-15020</b></p> <p>WEIGHT: 1.32 Kg.LM      20 LM/ROLL</p>	<p><b>IBS-20020</b></p> <p>WEIGHT: 1.97 Kg.LM      20 LM/ROLL</p>
<p><b>IBS-25019</b></p> <p>WEIGHT: 2.17 Kg.LM      15 LM/ROLL</p>	<p><b>IBS-25025</b></p> <p>WEIGHT: 2.49 Kg.LM      16 LM/ROLL</p>

PAVING CAP SEAL



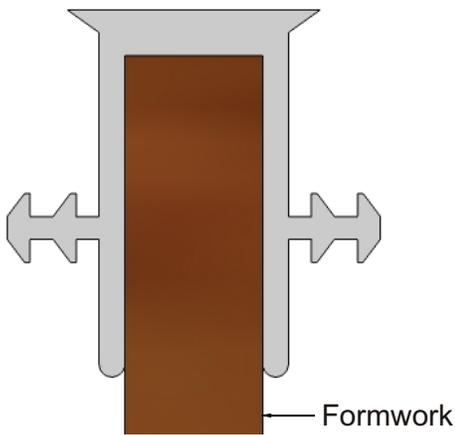
# B-SEAL

## PAVING CAP SEAL



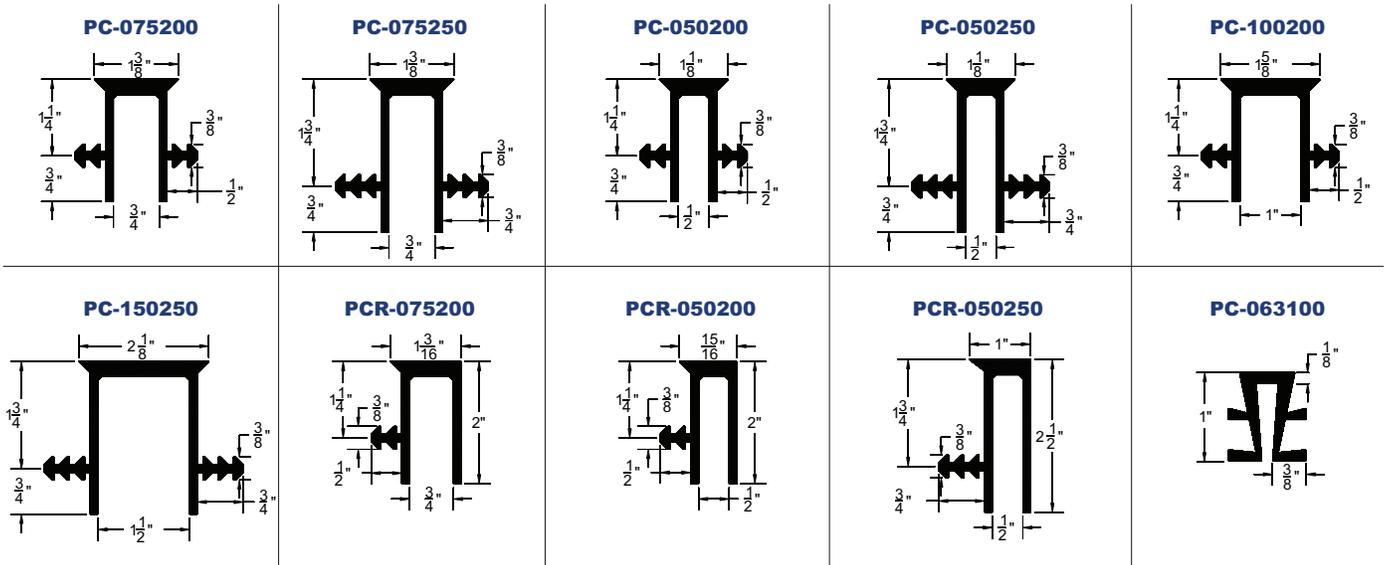
B-SEAL is one of the most advanced Paving Cap Seal System in the industry. BoMetals uses specially formulated PVC to provide a durable sealing system for a maintenance free joint.

- Same continuous look throughout joint
- Protects against debris
- Can be used in the screeding process
- Also available in TPER



Typical Properties	Nominal Value	ASTM Method
Tensile Strength, psi	2500 min	D-412
Elongation, %	300 min	D-412
Hardness Shore A, ±3	85	D-2240
Oil Swell, Change in Volume/Weight ASTM#3 Oil, 70 hrs. @ 212F	±10% by volume max. ±15% by weight max.	D-471
Abrasion Resistance 10,500 cycles, 1000 grams load	Material Loss - 0.4 gms. max.	D-3884
Ozone Resistance, 20% Strain 300 ppm, 70 hrs. @ 104F	No Cracking	D-518
Results after Heat Aging 24 hrs. @ 70F	Tensile Strength Retained: 90% min. Elongation Retained: 90% min Hardness Changed: 3%	D-573

IMPORTANT: The technical data herein is believed to be accurate. It is offered for your consideration, investigation and verification. Buyer assumes all risk of use, storage and handling of the product. NO WARRANTY, EXPRESS OR IMPLIED, IS MADE INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OR MECHANABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Nothing contained herein shall be construed as a license to operate under or recommendation to infringe any patents.



## CHEMICAL RESISTANT WATERSTOP



### TPER AVAILABLE IN EVERY PROFILE ON PAGE 3-9

Chemical Resistant Waterstop is available in virtually every PVC Profile. BoMetals TPER is made of a specially formulated Thermoplastic Vulcanizate which is fully cross-linked compound. TPER should be used to provide a fluid tight diaphragm in, secondary and tertiary, above and below grade containment facilities. This is accomplished by offering a product for concrete expansion and construction joints that greatly expands its resistance to petro-chemical, solvents, aqueous acids, and chemicals listed as hazardous by the EPA. BoMetals many selections will allow precise waterstop design for each critical application. The physical design and the field installation adversities should be considered when specifying and designing waterstop installation.

### Physical Properties of TPER Waterstop

Properties	Nominal Value	ASTM
Hardness Shore A, ±3	90	D-2240
Specific Gravity	0.96	D-792
Tensile Strength, psi (MPa)	2300 (15.9)	D-412 D-1171
Elongation, %	530	D-412
Brittle Point, °F (°C)	-65 (-54)	D-746
Stress @ 100% Elongation, psi (MPa)	1000 (6.9)	D-638
Ozone Resistance	Passed with no cracking at 500 pphm	

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### TPER Retro Fit Accessories - Epoxy, SS Bars & Bolts



### Popular Chemical Resistant Profiles

<b>TCB-4316</b>	
<b>TCB-4316NT</b>	
<b>TCB-6316</b>	
<b>TCB-6316NT</b>	
<b>TCB-638LB</b>	 CH2M H, MWH, BLACK & VEATCH
<b>TDB-4316</b>	
<b>TDB-6316</b>	
<b>TDB-638</b>	
<b>TFR-4316</b>	
<b>TFR-638</b>	
<b>TSR-6316</b>	

BOMETALS CAN MANUFACTURE CHEMICAL RESISTANT WATERSTOP FROM VIRTUALLY ANY PROFILE ON PAGES 3-9

## ADEKA ULTRASEAL HYDROPHILIC WATERSTOP

MC-2010MN is a 20mm x 10mm (approx. 0.8" x 0.4") chemically modified natural rubber (non-vulcanized) product which is NSF 61 certified. The manufacturing process chemically bonds a hydrophilic agent to the rubber. This product is used in below grade cast-in-place concrete joints where water intrusion must be prevented. This expansion capability provides a "double locking" waterstop. It also has a stainless steel mesh embedded with the material which eliminates unnecessary expansion in the length and width dimensions. 1 roll of 82 feet / case



P-201 is a water swelling, single component, elastic sealant which expands up to 2 times by volume (100%). It is used in variety of places such as cold/construction joints, expanded metal forms, piping penetration, etc. P-201 is used as a waterstop in new construction and in repair applications which can be placed on damp or uneven surfaces and functions in a wide range of temperatures and ground water conditions. It comes 24ea- ~11oz cartridges / case or 3.17 gal / pail.

KBA-1510FP is a 15mm x 10mm (approx. 0.6" x 0.4") chemically modified natural rubber (vulcanized) product. The manufacturing process chemically bonds a hydrophilic agent to the rubber. It is used in concrete joints, precast structures containment curbs piping penetrations in areas needing less than 25 feet of hydrostatic head. It performs in a wide range of solutions such as seawater or cement water. This material does not contain any toxic substance or heavy metals and is environmentally safe. 1 roll of 82 feet / case.



MC-2005T is a 20mm x 5mm (approx. 0.8" x 0.2") chemically modified natural rubber (non-vulcanized) product. The manufacturing process chemically bonds a hydrophilic agent to the rubber. This product is used in concrete joint work where hydrostatic head does not exceed 50 feet. It performs in a wide range of solutions such as seawater or cement water. This material does not contain any toxic substance or heavy metals and is environmentally safe. It comes 320 feet / case.

KM-String is a chemically modified natural rubber (vulcanized) product. The manufacturing process chemically bonds a hydrophilic agent to the rubber. It is used for sealing existing joints and for repairing leads in sheet piles interlock. It performs in a wide range of solutions such as seawater or cement water. It will expand approx. 3 times by volume. It is available 4mm - 30mm (special order on sizes above 6mm).



Other Adeka products such as KM-3030M, KM-4040M, A-30, & 75BRTAPE are available!  
Not available in Colorado



**SYNKO-FLEX (SF-302)** Waterstop is a non-expansive, single-component, self-sealing plastic adhesive compound, extruded in a square cross-section between two quick-release protective wrappers. It bonds to cured concrete surfaces and fuses with fresh concrete during the hydration and curing process to achieve a watertight seal. Once adhered, Synko-Flex is unaffected by rain, snow or infiltrating ground water which may be present during the installation period.

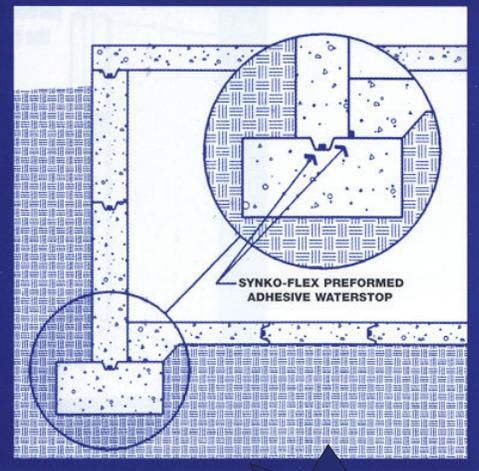
**SYNKO-FLEX's** unique formula and packaging provides a simple, easy-to-install solution for effective waterstop sealing. It is also resistant to acids, alkalis and hydrogen sulfide gases over the life of the structure.

**SYNKO-FLEX** has been used since 1968 as a waterstop for cold joints in highway tunnels, airport terminals, marine animal theme parks, hospitals, performing art theaters, parking garages, hotels, office buildings, fish hatcheries, enclosed potable water reservoirs, warehouses sports complexes and wastewater plants.

## Preformed Plastic Adhesive Waterstop

### SYNKO-FLEX ADHESIVE WATERSTOP APPLICATION DETAILS...

- UNDERGROUND STRUCTURES
- TANKS
- TUNNELS
- FOUNDATION WALLS



Now available  
Fuel resistant  
Synko-Flex  
(SF-312)

### Packaging

Size	1"x1"x3ft.
No Strips	35 Strips
Lineal Ft/Carton	105 ft.

### Primer

**SYNKO-FLEX PRIMER (SF-311)** is a thin penetrating solution for premium selected asphalt base in a petroleum solvent. The primer readily penetrates the pores and seals dusty concrete surfaces to provide an optimal surface for the adhesion and bonding of Synko-Flex preformed adhesive waterstop. Primer is designed for application by brush.

**SYNKO-FLEX EMULSION PRIMER (SF-300)** penetrates concrete surfaces to provide an optimal surface for the adhesion and bonding of Synko-Flex® or Hydro-Flex® preformed adhesive waterstops, and Ram-Nek® joint sealants. Formulated with a thin, environmentally safe solution of mineral colloid asphalt emulsion.

**Packaging:** 1 gallon cans

### Hydro-Flex® Waterstop

**HYDRO-FLEX (HF-302)** is a flexible, preformed adhesive coil specially formulated butyl rubber. It swells in the presence of water, filling voids in unfinished or poorly consolidated concrete surfaces providing a lasting, watertight compression seal in non-moving joints. Because of its special butyl rubber composition it remains flexible and easy to handle during cold weather conditions.



**Packaging:** 1 carton contains 100 lineal feet (6 coils, 16'8" each)  
(1/2" x 1 1/8")

# Concrete Joint Sealants

Supplying the Pipe and Precast Industry for More Than 50 Years

# Henry

#1 CHOICE OF PROFESSIONALS

Waterstop



## Ram-Nek® Preformed Flexible Plastic Gasket RN101



- Ram-Nek is produced from blends of refined hydrocarbons resins and plasticizing compounds reinforced with inert mineral fillers
- Contain no solvents
- Used for sealing the following precast products: storm sewer pipe, box culverts, manholes, septic tanks, utility and burial vaults
- Meeting the following National Specification: Federal Specification SS-S-210A AASHTO M-198 75 1, ASTM C990
- **Strip Sizes:**  
3/4" x 2.5' (RN-99)  
1" x 2.5' (RN-54)  
1" x 1/4" x 3.5' (RN-90)  
1-1/2" x 3.5' (RN-89)  
1-3/4" x 3.5' (RN-88)  
2" x 3.5' (RN-86)

## BUTYL-NEK®

## Butyl-Nek® Preformed Flexible Joint Sealant BN109



- Special blend of butyl rubber and refined hydrocarbons resins and plasticizing compounds, extruded into convenient coil lengths
- Contain no solvents
- Used for sealing the following: precast products: storm sewer pipe, box culverts, manholes, septic tanks utility and burial vaults
- Meet the following National Specifications: Federal Specification SS-S-210A AASHTO M-198 75 1, ASTM C990
- **Coil Sizes:**  
3/4" x 14.5' (BN-85)  
1" x 14.5' (BN-84)  
1-1/4" x 14.5' (BN-82)

## RUB'R-NEK®

## Rub'R-Nek® LTM Coils RU106



- Butyl rubber flexible gasket-type sealant for utility vaults, sewer manholes, waste water structures, storm sewer pipe and culverts, wet wells, etc
- Provides exceptional shape retention, in combination with outstanding adhesion and cohesion
- Meets the following National Specifications: Federal Specification SS-S-210A AASHTO M-198 75 1, ASTM C990
- **Coil Sizes:**  
1/2" x 21.7' (RU-98)  
3/4" x 18' (RU-97)  
1" x 14.5' (RU-96)  
1-1/4" x 14.5' (RU-95)  
1-1/2" x 10.5' (RU-80)  
2" x 7.4' (RU-94)

## Ram-Nek® Preformed Flexible Plastic Gasket RN103



- Ram-Nek is produced from blends of refined hydrocarbons resins and plasticizing compounds reinforced with inert fillers
- Contain no solvents
- Used for sealing the following precast product: storm sewer pipe, box culverts, manholes, septic tanks, utility and burial vaults
- Meets the following National Specifications Federal Specification SS-S-210A AASHTO M-198 75 1, ASTM C990
- **Coil Sizes:**  
3/4" x 14.5' (RN-85)  
1" x 14.5' (RN-84)  
1-1/4" x 14.5' (RN-82)  
1-1/2" x 10.5' (RN-81)

## Ram-Nek® FR RN109



- Fuel and oil resistant sealant
- To seal joints in utility vaults, above and below ground fuel containment structures, airport projects, concrete pipe and manholes, septic tanks, grease pits, and other high risk applications
- Provides a permanently flexible watertight seal in environments where hydrocarbons such as gasoline, jet fuel, and/or oil are present
- **Coil Sizes:**  
1" x 14.5' (RN-96)  
1-1/2" x 10.5' (RN-67)

## Rub'-Nek® FR External Concrete Joint Wrap RU116



- Elastomeric-based product
- Blends, extrudes and bonds synthetic elastomers and resins to a high strength plastic film
- Easy to apply protective film that self heals against punctures and has excellent mechanical strength, abrasion resistance, and dimensional stability
- **Roll Sizes:**  
6' x 50' (RU-93)  
9' x 50' (RU-92)  
12' x 50' (RU-91)



## USES

- ❖ Used in concrete flatwork as a control or construction joint
- ❖ Tongue & Groove design provides excellent load transfer characteristics
- ❖ Used as a screed rail to finish the concrete



## ADVANTAGES

- ❖ Quickey™ is only galvanized joint system that features knockouts for square dowels, which provide better load transfer over round dowels & also reduces edge curl on the slab.
- ❖ Knockouts sizes meet both ACI and PCA recommendations for the design of tongue and groove key joint
- ❖ Saves on installation time... stake quickly interlocks at any point with key joint, reducing to place stakes precisely.
- ❖ Stiffened ribs are designed for increased rigidity while installing
- ❖ LOCKING TAB™ stakes provide a positive interlock between stake & key joint to eliminates floating or rising from the stake, minimizing high spots.
- ❖ Stake profile features a non-twist design with allows the stake to be driven at a straight angle



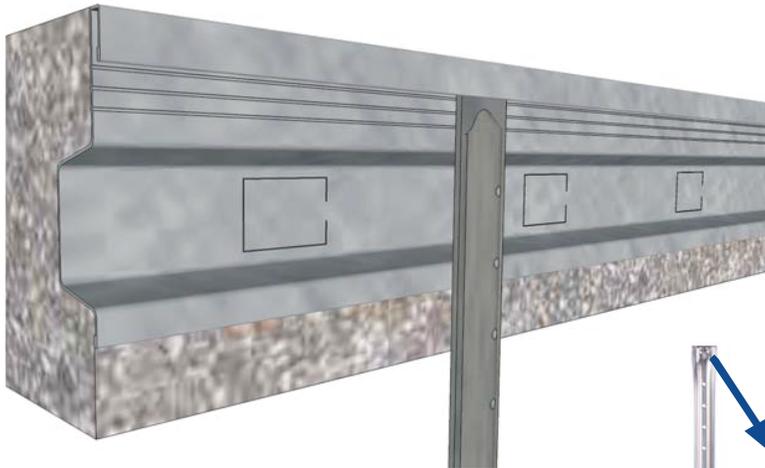
Installation  
Video

## MATERIAL

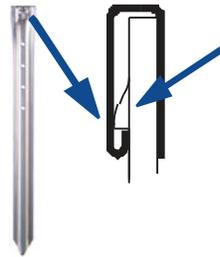
- ❖ Quickey™ Keyway is made from 24 gauge G60 HDMG Steel
- ❖ Square knockouts every 6 inches
- ❖ Available in 10ft lengths for 4", 5", 6", 8" & 10-12" slabs
  
- ❖ LOCKING-TAB™ Stakes are made from 13 gauge HRPO steel
- ❖ Available in 12" (QK12), 15" (QK15), 18" (QK18), 24 (QK24) & 30" (QK30) lengths
- ❖ Removable and Non-Removable Keyway caps are made from Flexible PVC materials



# QUICKEY™ SYSTEM



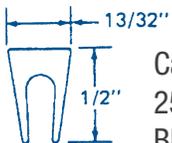
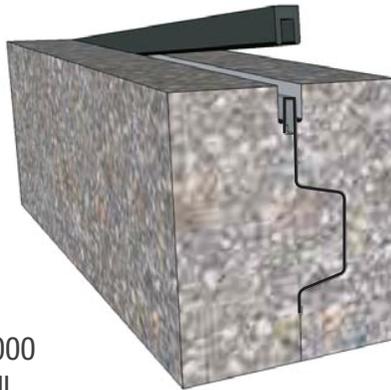
Stake **QUICKLY** interlocks at any point with Quickey, **REDUCING** time to place stakes precisely.



Inserting **LOCKING TAB™** stakes produces an audible click which indicates the interlock between stake and key joint.

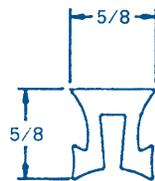
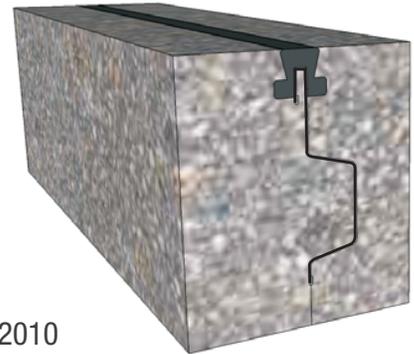
Keyway

Quickey™ PVC Removable Cap yields straight void ready for sealing.



Cat# 2000  
250' roll  
Black

Quickey™ PVC Non-Removable Cap seals the joint because it stays in place.



Cat# 2010  
200' roll  
Gray

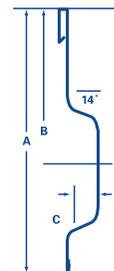


Quickey™ Splice  
Cat# 2020  
200ea / box



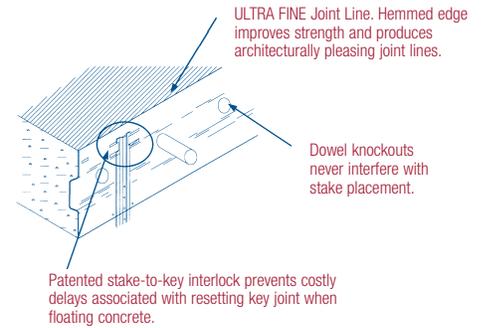
Quickey™ Clip  
Cat# 2021  
200ea / box

Cat. #	Slab Thickness	A	B	C	Knockout Size
QK35	4"	3 1/8"	2"	3/4"	7/8" x 1 3/8"
QK45	5"	4 1/8"	2 1/2"	3/4"	7/8" x 1 3/8"
QK55	6"	5 1/8"	3"	3/4"	1 1/4" x 1 1/2"
QK75	8"	7 1/8"	4"	1"	1 1/4" x 1 1/2"
QK95	10" - 12"	9 1/8"	5"	1"	1 1/4" x 1 1/2"



**USES**

- ❖ Used in concrete flatwork as a control or construction joint
- ❖ Tongue & Groove design provides excellent load transfer characteristics
- ❖ Used as a screed rail to finish the concrete

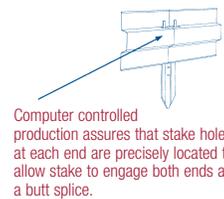


**ADVANTAGES**

- ❖ Positive stake-to-key lock of PRO-KEY™ prevents costly delays associated with resetting key joint when floating concrete. Stakes interlock with slots to prevent the key form rising off the stakes.
- ❖ Location of the key is 1/2 depth of slab as specified by ACI & PCA
- ❖ Radius formed key eliminates the sharp angles that produce spalling tendency.
- ❖ ULTRA FINE profile at top edge eliminates surface voids, reduced spalling and produces architecturally pleasing joint lines in the finished slab.
- ❖ PRO-KEY™ LOCK SLOT™ Stakes double as a butt splice

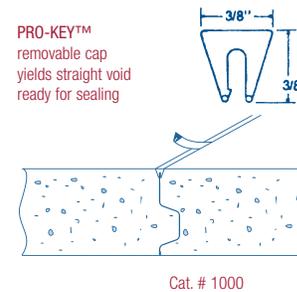


Installation Video



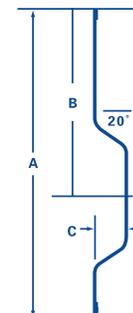
**MATERIAL**

- ❖ PRO-KEY™ Keyway is made from 24 gauge G60 HDMG Steel
- ❖ Dowel knockouts every 6 inches
- ❖ Available in 10ft lengths for 4", 5", 6" 8" & 10-12" slabs
- ❖ LOCKING-SLOT™ Stakes are made from 16 gauge HRPO steel
- ❖ Available in 12" (1200), 15" (1500), 18" (1800) and 24" (2400) lengths
- ❖ Removable Keyway caps are made from Flexible PVC materials

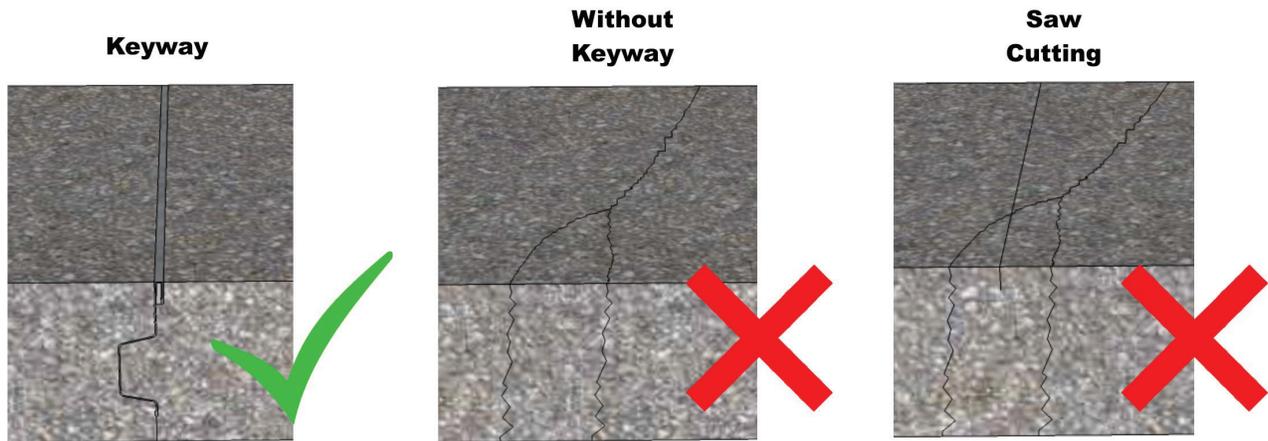


Cat. # 1000

Cat. #	Slab Thickness	A	B	C	Knockout Dia.
3500	4"	3 1/8"	2"	3/4"	7/8"
4500	5"	4 1/8"	2 1/2"	3/4"	7/8"
5500	6"	5 1/8"	3"	3/4"	7/8"
7500	8"	7 1/8"	4"	3/4"	1 1/4"
9500	10" - 12"	9 1/8"	5"	3/4"	1 1/4"

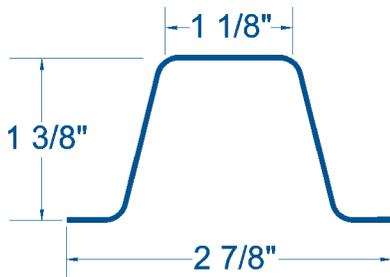


## KEYWAY INSTALLATION



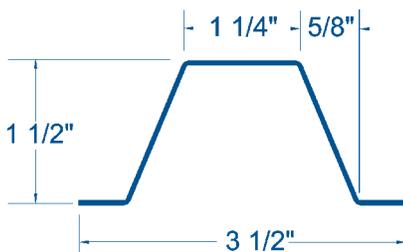
Keyway

## METAL NAIL-ON KEYWAY



- Made of high quality hot dipped mill galvanized steel
- A 1:4 slope that meets both ACI & PCI recommendations
- Folded over to eliminate sharp edges
- All knockouts are on 6" center
- Two knockout size of 9/16" (MNK) or 7/8" (MNK-78)
- 5,000ft/sk, 25 bundles of 200ft ea, 10ft lengths

## PLASTIC NAIL-ON KEYWAY



- Plastic Nail-On Keyway (PNK) is nailed to a form prior to pouring
- Installed in tilt-up work, industrial floors, curbs or wherever specified
- Simple to use, lightweight and reusable
- BoMetals quality that you've come to recognize
- 10-foot lengths, 400 feet per box

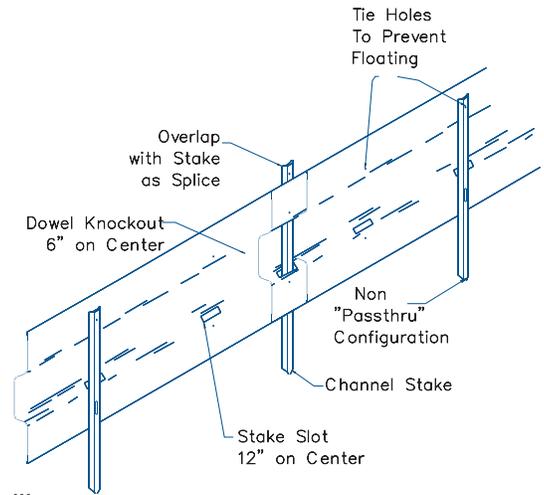
## HIGHWAY CENTER STRIP KEYWAY SYSTEM

### USES

- ❖ Used in concrete flatwork as a control or construction joint
- ❖ Tongue & Groove design provides excellent load transfer characteristics
- ❖ Used as a screed rail to finish the concrete

### ADVANTAGES

- ❖ Eliminates costly form stripping and saw cutting.
- ❖ Radius formed key eliminates the sharp angles that produce spalling tendency
- ❖ ULTRA FINE profile at top edge eliminates surface voids, reduced spalling and produces architecturally pleasing joint lines in the finished slab.
- ❖ Channel Stakes double as a butt splice

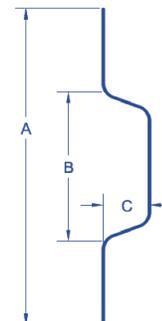


### MATERIAL

- ❖ Keyway is made from 20 gauge HDMG Steel
- ❖ Dowel knockouts every 6 inches
- ❖ Available in 10ft lengths for 5", 6" 8" 9" & 10" slabs
- ❖ Channel Stakes are made from 16 gauge HRPO steel
- ❖ Available in 12" (HK12), 15" (HK15), 18" (HK18), and 24" (HK24) lengths



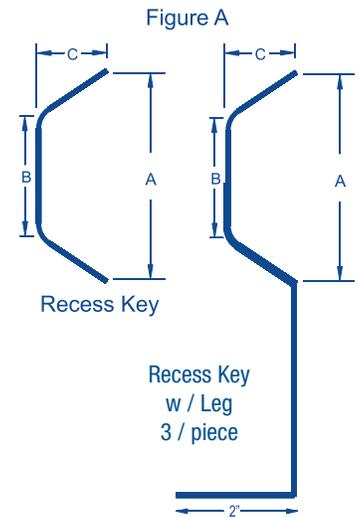
Product Code	Slab Thickness	A	B	C	Knockout Diameter
HK45	5"	4 1/2"	2 3/4"	1"	7/8"
HK55	6"	5 1/2"	2 7/8"	1"	7/8"
HK65	7"	6 1/2"	3"	1"	7/8"
HK75	8"	7 1/2"	3 1/4"	1"	1 1/4"
HK85	9"	8 1/2"	3 1/2"	1"	1 1/4"
HK95	10"	9 1/2"	3 3/4"	1"	1 1/4"



## RECESS KEY PRODUCT LINE

BoMetals **RECESS KEY** Product Line is used to make a key in the concrete to provide load transfer across the concrete joint. BoMetals is proud to announce that we have 3 different types of Recess Key. The main differences between the designs is dowel spacing. All Recess Key is made of 24 gauge and legs are made of 20 gauge hot dipped, mill galvanized steel. Recess Key with leg is also available which can be determined by the thickness of the concrete slab. All the different designs will have the same style profile as you see in Figure A.

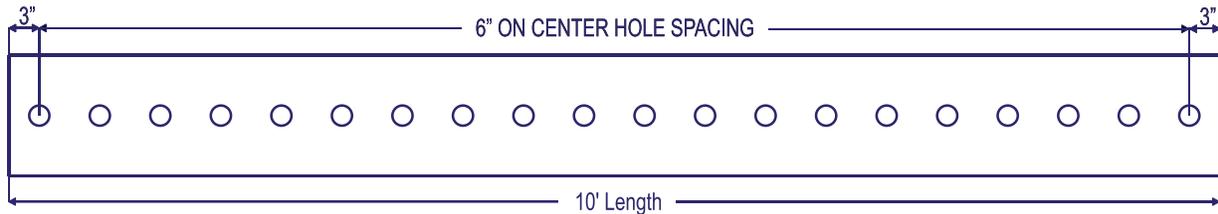
Recess Key w/o Legs	A	B	C	Hole Size
RK4	2"	1"	1"	7/8"
RK 5	2 1/2"	1 1/2"	1"	7/8"
RK 6	2 1/2"	1 1/2"	1"	1"
RK 7	2 3/4"	1 3/4"	1"	7/8"
RK 8	3"	2"	1"	1 1/4"
RK 9	3 1/4"	2 1/4"	1"	1 1/4"
RK 10	3 1/2"	2 1/2"	1"	1 1/4"



Keyway

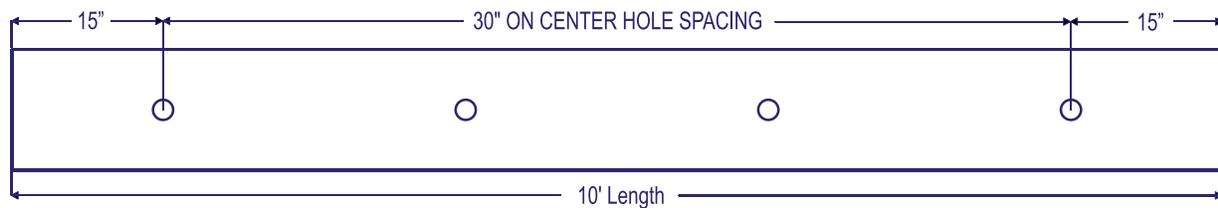
### UNIVERSAL KEY (RK) & UNIVERSAL KEY WITH LEG (RKL)

This design can use any 6" increment on center spacing whether you butt up the ends or overlap the first dowel holes.



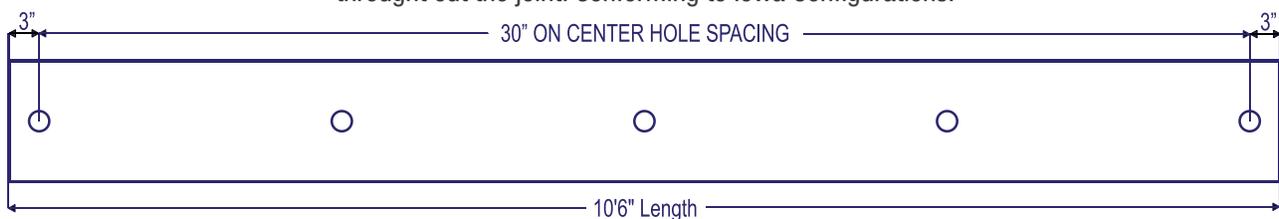
### MO-KEY (RKM) & MO-KEY WITH LEG (RKML)

This design would be used to butt the end together to maintain a 30" on center spacing through out the joint. Conforming to Missouri Configurations.



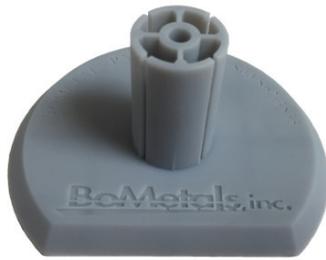
### IA-KEY (RKI) & IA-KEY WITH LEG (RKIL)

This design would be overlapped at the ends to maintain a 30" on center spacing through out the joint. Conforming to Iowa Configurations.



**QUICSLEEVE SYSTEMS**

**MADE IN USA**



**QuicDowel™**

QuicDowel™ is a two-component sleeve system that is made of high density polypropylene.

Uses

QuicDowel™ System is used in construction joint to provide a void for dowels/rebar to keep dowel aligned during concrete pour for load transferring purposes.

Advantages

QuicDowel™ utilizes reusable bases for multiple uses.

Base Product Code	Sleeve Product Code	Smooth Round	Rebar Size	Sleeve Length	Dowel Length
QB-050 (250/box)	QL-05005 (250/box)	1/2"	#3	5"	10"
	QL-05009 (250/box)	1/2"	#3	9"	18"
QB-0625 (200/box)	QL-062509 (200/box)	5/8"	#4	9"	18"
	QL-062512 (125/box)	5/8"	#4	12"	24"
QB-075 (200/box)	QL-07505 (200/box)	3/4"	#5	5"	10"
	QL-07509 (200/box)	3/4"	#5	9"	18"
	QL-07512 (125/box)	3/4"	#5	12"	24"
QB-100 (175/box)	QL-10009 (175/box)	1"	#7	9"	18"
QB-125 (125/box)	QL-12509 (125/box)	1-1/4"	#9	9"	18"

Dowels



**QuicLoad™**

QuicLoad™ is a single component sleeve system that is made of high density polypropylene.

Uses

QuicLoad™ is used in expansion joints that is secured by locking to the stay-in-place formwork to provide align dowels for load transferring.

Advantages

QuicLoad™ has Locking Tabs to securely anchor into stay-in-place formwork. As this is a stay in place system, it allows for a continuous pour for multiple slabs which provides for a quick installation.

Product Code	Diameter	Sleeve Length	Dowel Length	Packaging
QL-05005	1/2"	5"	1/2" x 10"	250/box
QL-05009	1/2"	9"	1/2" x 18"	250/box
QL-062509	5/8"	9"	5/8" x 18"	200/box
QL-062512	5/8"	12"	5/8" x 24"	125/box
QL-07505	3/4"	5"	3/4" x 10"	200/box
QL-07509	3/4"	9"	3/4" x 18"	200/box
QL-07512	3/4"	12"	3/4" x 24"	125/box
QL-10009	1"	9"	1" x 18"	175/box
QL-12509	1-1/4"	9"	1 1/4" x 18"	125/box

QuicPlate™ Flat Plate System is a high density ABS Sleeve void former and high strength A-36 steel plate.

Uses

QuicPlate™ is used in construction joints to provide load transferring across the joint.

Advantages

QuicPlate™ provide lateral & axial movement and non tapered plate for consist load transferring capability.



**QuicPlate™**

Product Code	Thickness	Plate Size
QP-025	1/4"	4" x 6"
QP-038	3/8"	4" x 6"

## Smooth Round Dowels



- Meets ASTM A 615 Grade 60 Steel & ACI 302.1R-04 3.2.7

- Sawn for close tolerances & Computerized Length

- Custom diameters & lengths available

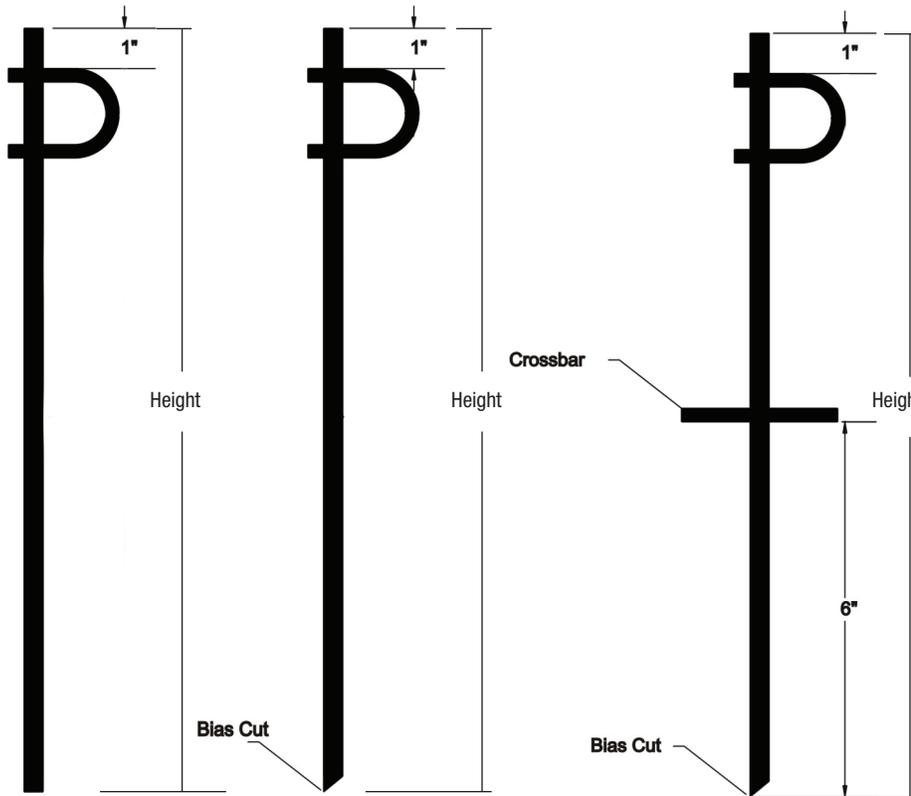


Product Code	Size	Weight/pc (lbs)	pcs/ bundle	pcs/ skid
SRD-05012	1/2"x12"	0.67	10	5,040
SRD-05018	1/2"x18"	1.00	10	3,640
SRD-05024	1/2"x24"	1.34	10	2,400
SRD-062512	5/8"x12"	1.05	10	3,240
SRD-062518	5/8"x18"	1.57	10	2,160
SRD-062524	5/8"x24"	2.09	10	1,280
SRD-07512	3/4"x12"	1.50	10	2,400
SRD-07518	3/4"x18"	2.26	10	1,600
SRD-07524	3/4"x24"	3.01	10	1,040
SRD-10012	1"x12"	2.67	5	1,200
SRD-10018	1"x18"	4.01	5	800
SRD-10024	1"x24"	5.34	5	650
SRD-12518	1-1/4"x18"	6.26	5	480
SRD-12524	1-1/4"x24"	8.35	5	400
SRD-15018	1.5"x18"	9.02	5	320
SRD-15024	1.5"x24"	12.01	5	240



**P STAKES**

**STANDARD 0.306" STEM & 0.1875" CROSSBAR & LOOP**

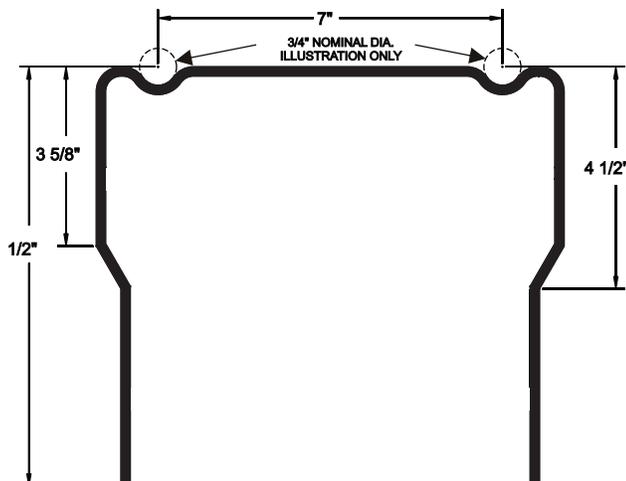


- Dowel and tie bar support
- Standard with 0.306" Wire for stem
- With/without crossbar
- With/without bias cut
- 0.1875" Wire Dia. for Crossbar and Loop
- Loop = Bar Size + 0.125"
- Standard 1" Stem above Loop

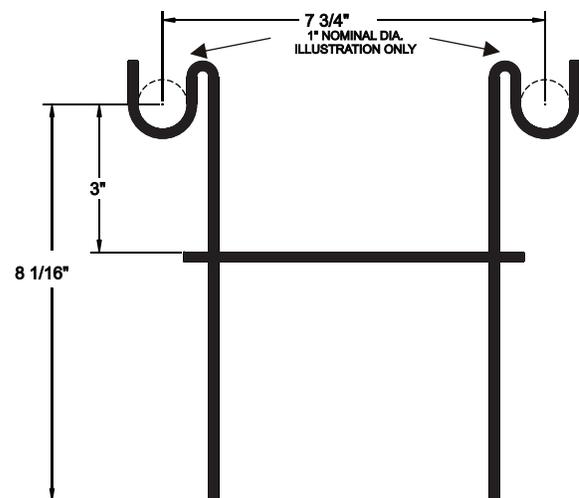
**WIRE BAR STAKES**

**3/16" Nominal Wire - 100 per box**

**2 BAR WIRE STAKE  
WBS-1**



**2 BAR WIRE STAKE  
WBS-2**



## PREMIUM NAIL STAKES - FULL SIZE (WITH AND WITHOUT HOLES)

BoMetals Nail Stakes are primarily used to secure wood or metal forms for concrete placement jobs and in outside concrete forming.



### 3/4" Full Size, High Tensile, Round with Holes (NH - no holes also available)

Code	Size	pcs / skid	wt / skid
NS-3412	3/4" x 12"	1500	2,100
NS-3418	3/4" x 18"	1000	2,100
NS-3424	3/4" x 24"	750	2,175
NS-3430	3/4" x 30"	600	2,100
NS-3436	3/4" x 36"	500	2,150
NS-3442	3/4" x 42"	400	2,000
NS-3448	3/4" x 48"	300	1,710

### 7/8" Full Size, High Tensile, Round with Holes (NH - no holes also available)

Code	Size	pcs / skid	wt / skid
NS-7812	7/8" x 12"	1500	2,226
NS-7818	7/8" x 18"	1000	2,226
NS-7824	7/8" x 24"	750	2,305
NS-7830	7/8" x 30"	600	2,226
NS-7836	7/8" x 36"	500	2,279
NS-7842	7/8" x 42"	400	2,120
NS-7848	7/8" x 48"	300	1,815

## GRADE STAKES

- Pre drilled holes for tie wire
- Termite proof
- Each stake has a pointed, sharp tip for easy installation
- Will not split like wood
- Can be used as rebar support
- Available in 12" (GS-12) , 18" (GS-18), 24" (GS-24) or 30" (GS-30) lengths
- 100 pieces per box
- Made from 16 gauge HRPO steel



## REBAR STAKES

BoMetals Rebar Stakes (BS-12) are used to hold one end of a tie-bar or dowel bar while the bar is going through a dowel hole in the keyway or timber form work.

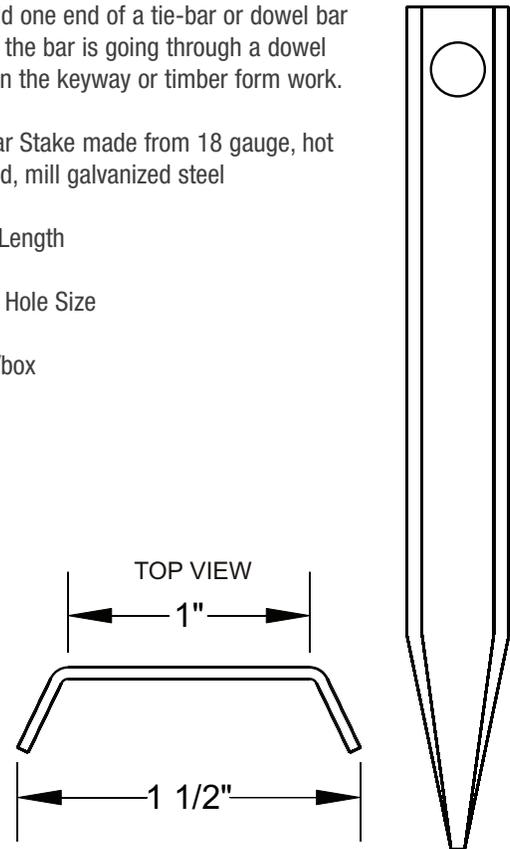
-Rebar Stake made from 18 gauge, hot dipped, mill galvanized steel

-12" Length

-7/8" Hole Size

-100/box

FRONT VIEW



## SAFETY FENCE STAKES

- One step installation! Simply weave vertically through fence, drive into the ground and place top of fence behind stake ears.
- Fence can be positioned in place without additional use of cable ties or staples
- Each stake has a pointed, sharp tip for each installation
- Works with all types of fences including tree barrier and diamond.
- Will not split like wood.
- Available in 5' or 6' lengths
- Made from 13 gauge HRPO steel
- 10 pieces per bundle.
- Pallet quantities:  
5' (SFS5) - 1,600 each or 160 bundles  
6' (SFS6) - 1,400 each or 140 bundles



## CONCRETE HOPPERS & ACCESSORIES

### ELEPHANT TRUNK

Size	Part #	Weight / Roll
8' x 50'	ET-08	44#
12" x 50'	ET-12	65#

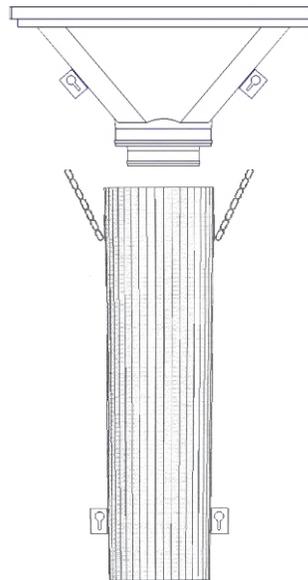


### HOPPERS

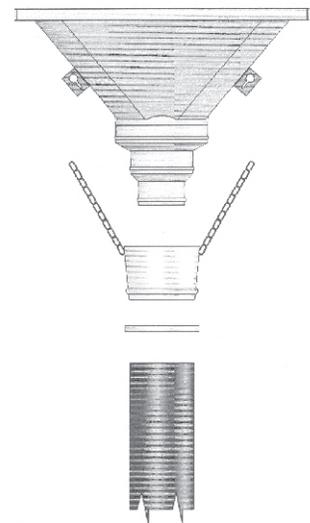
Size	Discharge	Part #	Weight / Roll
36" x 36" Stanard	6" - 8"-12"	HPR-LD	HPR-LD
36" x 36" Stanard	8" - 12"	HPR-HD	HPR-HD

We supply a Standard, Light Duty, 3-Way Hopper and a Heavy Duty, Steel Reinforced Hopper.

**Reinforced, Heavy Duty Hopper 8"/12"**



**Standard, Light Duty Hopper 6"/8"/12"**



### PVC TREMIE PIPE

Size	Part #	Weight
8" dia. x 4'	TP-08	9#
12" dia. x 4'	TP-12	11#

They taper from 9" to 8" or from 13" to 12".

### ELEPHANT TRUNK STEEL COLLARS

Size	Part #	Weight
8"	ETC-08	4#
12"	ETC-12	5#

Supplied with chains to quickly attach and detach Elephant Trunks from the Hopper.

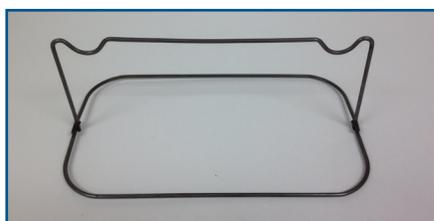
### STEEL ADJUSTABLE BAND CLAMPS

Size	Part #	Weight
Fits 8"-12" discharge	ETB	1#

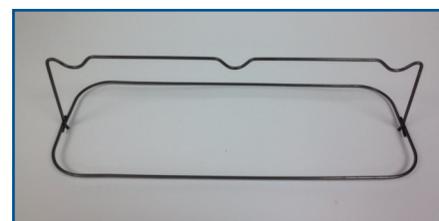
### BAR FOUNDATION CHAIRS

Bar Foundation Chairs are widely used to support rebar when pouring footers. They are simple to use, inexpensive, and convenient. As you see below, we have a 2-Bar and a 3-Bar manufactured from 12-gauge wire. There are 100 per box.

2-BAR (BFC-2)  
8" wide x 3" high  
Bar supports at 6" spacing



3-BAR (BFC-3)  
12" wide x 3" high  
Bar supports at 5" spacing



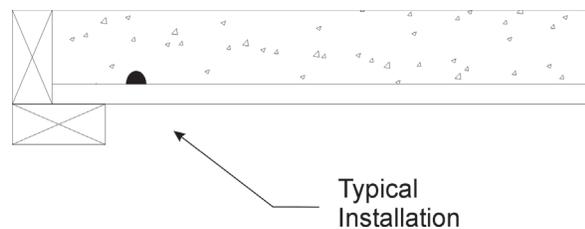
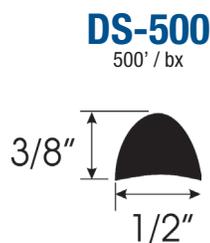
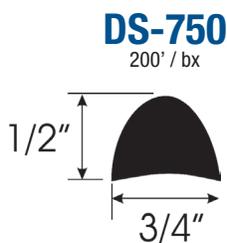
## FLEXIBLE PVC CHAMFER AND RADIUS FORMERS

BoMetals Chamfer and Radius formers are designed to create outside corners on columns, piers, beams or walls and provide a clean, smooth finished edge.

<p><b>1/2" Chamfer Former</b> CS -500</p> <p>500 ft./roll 42 lbs</p>	<p><b>1/2" Chamfer Former w/Leg</b> CL -500</p> <p>10 ft. length 500 ft/ctn 54 lbs</p>	<p><b>1/2" Radius Former w/Leg</b> RL -500</p> <p>10 ft. length 500 ft/ctn 33 lbs</p>
<p><b>3/4" Chamfer Former</b> CS -750</p> <p>200 ft./roll 39 lbs</p>	<p><b>3/4" Chamfer Former w/Leg</b> CL -750</p> <p>10 ft. length 300 ft/ctn 68 lbs</p>	<p><b>3/4" Radius Former w/Leg</b> RL -750</p> <p>10 ft. length 300 ft/ctn 39 lbs</p>
<p><b>1" Chamfer Former</b> CS -1000</p> <p>10 ft. length 300 ft/ctn 101 lbs</p>	<p><b>1" Chamfer Former w/Leg</b> CL -1000</p> <p>10 ft. length 300 ft/ctn 116 lbs</p>	<p><b>1" Radius Former w/Leg</b> RL -1000</p> <p>10 ft. length 300 ft/ctn 59 lbs</p>
<p><b>1-1/2" Chamfer Former</b> CS -1500</p> <p>10 ft. length 150 ft/ctn 113 lbs</p>	<p><b>1-1/2" Chamfer Former w/Leg</b> CL -1500</p> <p>10 ft. length 150 ft/ctn 121 lbs</p>	<p><b>1-1/2" Radius Former w/Leg</b> RL -1500</p> <p>10 ft. length 150 ft/ctn 56 lbs</p>
<p><b>2" Chamfer Former</b> CS -2000</p> <p>10 ft. length 100 ft/ctn 134 lbs</p>	<p><b>2" Chamfer Former w/Leg</b> CL -2000</p> <p>10 ft. length 100 ft/ctn 139 lbs</p>	<p><b>2" Radius Former w/Leg</b> RL -2000</p> <p>10 ft. length 100 ft/ctn 63 lbs</p>

## DRIP STRIP

BoMetals Drip Strips are designed to provide an even, smooth drip groove on the underside of porches and overhangs. The Drip Strip is nailed to the form and easily removed from the concrete to be reused in your next application.



## STANDARD NON CROSS LINKED FOAM



### Applications:

BoMetals Foam (FEJ) expansion joint filler can be used in all standard concrete construction, such as highway, runways, parking garages, driveways, sidewalks, and floor slabs.

BoMetals Foam can also be used as a buffer between dissimilar materials such as columns, manhole covers, and adjacent constructions.

Physical Properties	Test Method	Value*
Recovery (%)	ASTM D545-05	97.8%
Extrusion (in)	ASTM D545-05	0.12
Compressive Strength (psi)	ASTM D545-05 @ 50%	14.9
Compression Set (%)	ASTM D3575-00 Suffix B	18.3%
Tensile Stress (psi)	ASTM D3575-00 Suffix T	103 / 68
Tear Resistance (lb/in) md/cmd	ASTM D3575-00 Suffix G	14 / 24
Density (lb/ft <sup>3</sup> )	ASTM D3575-00	1.7 (nominal)
Water Absorption (lb/ft <sup>2</sup> )	ASTM 545-00	0.001
Meets Application Requirements of: ASTM D 4819 Type II		

\* While values shown are typical of these products, they should not be construed as specification limits

Standard Packaging	
Colors*	Gray
Thicknesses*	¼", ", ½", ¾", 1", 2", 3"
Width (Height)*	2" to 48"
Length of ¼" Rolls	100'
Length of ", ½" Rolls	50'
Length of Planks	9'

\* Some exceptions apply. Custom thicknesses, and widths available, please inquire about availability and lead times.

## CLOSED CELL CROSSLINKED POLYETHYLENE FOAM JOINT MATERIAL

BoMetals HT (Chemically) & HTI (Irradiation) cross-linked closed cell polyethylene foam is manufactured as a continuous sheet, which can then be supplied as either rolls or sheet of foam.

BoMetals HT/HTI provide all the same reliable characteristics of standard foam, but is compatible with hot applied sealants and exposure to a broader range of solvents.

BoMetals HT up to 1/2" thick is available with or without a peel off top.

### Features:

- Extruded from a high quality, closed cell Crosslinked polyethylene foam.
- Tear-Off Strip- Available upon request, but can be special ordered without.
- Flexibility- Will not break or crack when used around curves or columns.
- Accepted- Currently used by both residential & commercial contractors.
- Durable- With near zero water absorption, HT/HTI Foam will not rot over time.
- Economical- Easily cut & handled on any jobsite with no waste.

Physical Properties	HT Foam	HTI Foam
Nominal Density (PCF)	2.0	2.0
Tensile Strength (PSI)	43	44
Elongation (% to break)	120	150
Tear Resistance (lb/in)	11	13
Compression Strength (PSI) 25%	6	7
Compression Set (% of original thickness)	24	22
Thermal Stability (% of chg @ 158° for 24 hrs)	<.5	<.6
Thermal Conductivity (btu/hr/inch ft/°F)	.26	.27
Working Temp Range	-70°F to 175°F	
Water Absorption (lb/ft/ °F)	<.06	<.06
Flammability (MVSS302)	Pass	

\* While values shown are typical of these products, they should not be construed as specification limits.

## STANDARD BACKER ROD



BoMetals Standard Backer Rod (FBR) is a ideal non absorbent compressible polyethylene material inserted into a joint to control sealant depth, creating a backstop to allow proper sealant tooling. It can also be used as a temporary joint seal.

### Technical Data

Sealant Use	Cold-Applied
Absorption	Non-Absorbing
Out-Gassing	Out-Gassing*
Temperature Range	-45°F to +160°F ASTM D 5549 Type 3

\*When punctured

## SOFT BACKER ROD



BoMetals Soft Backer Rod (FBRS) is a patented, round flexible polyethylene foam that is used in, but not limited to, expansion & contraction joints, window glazing, curtain wall construction, parking deck, bridge construction, modular home gasketing, & log home chinking.

### Technical Data

Sealant Use	Cold-Applied
Absorption	Non-Absorbing
Outgassing	Non-Gassing
Temperature Range	-45°F to +160°F
ASTM	C 1330 Type B

## HOT BACKER ROD



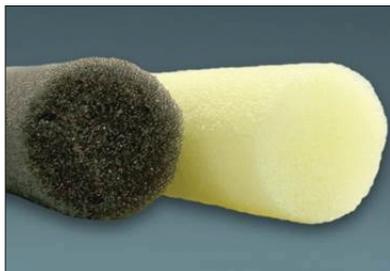
BoMetals Hot Backer Rod (FBRH) is round, flexible continuous lengths of cross-linked polyethylene that is used for backing both hot & cold applied sealants.

### Technical Data

Sealant Use	Cold- and Hot-Applied
Absorption	Non-Absorbing
Outgassing	Out-Gassing*
Temperature Range	-45°F to +410°F
ASTM TYPE	D 5249 Type 1

\*when punctured

## OPEN CELLED BACKER ROD



BoMetals Open Celled Backer Rod (FBRO) is round, flexible, continuous lengths of open celled polyurethane for use with elastomer and other cold-applied sealants.

### Technical Data

Sealant Use	Cold- and Hot-Applied
Absorption	Absorbing
Outgassing	Non-Gassing
Temperature Range	-65°F to +400°F
ASTM Type	C 1330 Type O

## NEOPRENE SPONGE RUBBER WITH/WITHOUT PSA



BoMetals Neoprene Sponge Rubber is used to help prevent clogging of expansion joint with mortar and is accepted for brick and block expansion joint fillers.

### Technical Data

Density	4.5 PCF
Compression Deflection	4 PSI @ 25%
Water Absorption	5% by weight
Flame Resistance (FMVSS302)	PASS
***Multiple Densities/Types Available	

ASTM D 1056 Specification

## FLEXIBLE REBONDED RUBBER



BoMetals Rebonded Rubber is used in almost any residential or commercial application including Corps of Engineer project such as dams, levees and water treatment facilities

### Technical Data

Density	~30 PCF
Recovery	90%
Weathering	No Disintegration
Compression	50 PSI TO 1500 PSI

ASTM D 1752 TYPE1

## AASHTO & COMMERCIAL BEARING PAD



BoMetals Bearing Pad is used in variety of applications like absorb vibration and prevent sound transfer, while reducing the destructive action of vibration between movable and stationary members.

AASHTO Grade - AASHTO-M-251

Commercial Grade

## STANDARD & SELF EXPANDING CORK



### Standard Cork:

BoMetals Standard Cork used as joint filler for roads, bridge and traffic surfaces.

ASTM D 1752-84 TYPE II

### Self Expanding Cork:

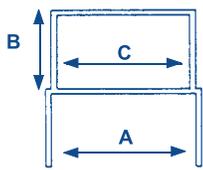
BoMetals Self Expanding Cork is used for sealing the expansion joints in water structures, irrigation canals, culverts, dams & etc.

ASTM D 1752-84 TYPE III

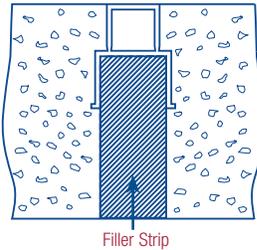
## JOINT FORMERS

### EXPANSION BOARD CAPS

Expansion Board Caps provide clean, sharp lines for sealants. They eliminate the difficulty of removing wooden formers.

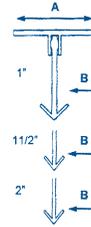


Cat. #	A	B	C
1018	3/8"	3/8"	5/16"
1019	1/2"	3/8"	5/16"
1020	1/2"	1/2"	7/16"
1021	3/4"	1/2"	5/8"
1022	1"	1/2"	7/8"



### ZIP JOINTS

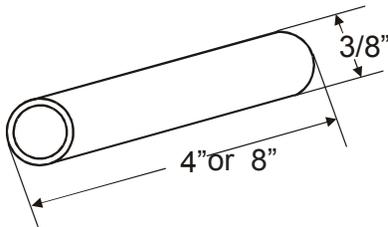
Zip Joints are easily installed joint formers designed to provide positive control of transverse construction or expansion joints. The two-part assembly is designed to permit removal of the top portion after the concrete has hardened, thereby creating a clean, neatly defined void for application of caulk or sealant when specified.



Cat. #	A	B
1010	1"	1"
1011	1"	1 1/2"
1012	1"	2"

## MASONRY ACCESSORIES

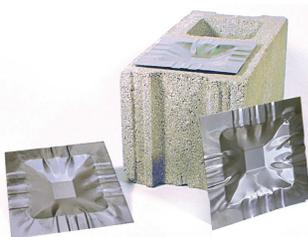
### WEEP TUBES



BoMetals Weep Tubes shall be placed to insure that they are correctly positioned in the masonry joint to guarantee air movement from the cavity to the outside of the wall. Typical placement would be for the one end of the weep tube to be flush with the outside of the joint and the opposite end to project into the cavity of the wall. Typical locations would be no greater than 24" on center. Care should be taken during mortar placement to prevent excessive movement of the weep tubes to insure against displacement. Always thoroughly and systematically inspect mortar around the weep tubes to make certain that the weep tube is free from obstruction.



### BLOCK CAPS



BoMetals Block Caps (2025) are preformed metal inserts that sturdily lock between concrete block voids to stop mortar infiltration. We package them 200 / bx at 54 boxes per skid.

## MASONRY CONTROL JOINTS

Cracking in buildings normally results from restrained movement. This movement may originate within a building material due to temperature change or shrinkage, or may result from movement of adjacent building elements. In most cases, movement is inevitable and must be accounted for during design if cracking is to be controlled.

BoMetals Control joints, when placed in concrete masonry walls, are an excellent method of crack control. Control joints are vertical separations built into a concrete masonry wall to reduce restraint and permit longitudinal movement. They are located where cracking is likely to occur due to excessive tensile stress.

### Material

BoMetals Masonry Control Joints are available in both PVC and Rubber compounds. They are standard 4' lengths. Special lengths are available on request.

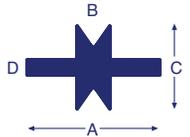
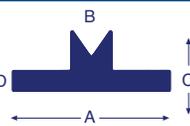
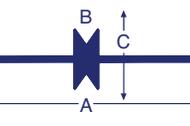
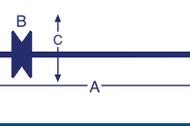
### TYPICAL PHYSICAL PROPERTIES OF PVC CONTROL JOINTS, ASTM D-2287

Properties	Test Method	Nominal Value
Tensile Strength	ASTM D-638	1500 PSI
Elongation	ASTM D-638	300%
Specific Gravity	ASTM D-792	1.40 (+/-0.05)
Hardness Shore A	ASTM D-2240	85 +/- 5

### TYPICAL PHYSICAL PROPERTIES OF RUBBER CONTROL JOINTS

Properties	Test Method	Nominal Value
Tensile Strength	ASTM D-2000	750 PSI
Elongation	ASTM D-2000	300%
Hardness Shore A	ASTM D-2000	70 (+/-5)

**IMPORTANT:** The technical data herein is believed to be accurate. It is offered for your consideration, investigation and verification. All testing and test data has been prepared by independent laboratories. **NO WARRANTY, EXPRESS OR IMPLIED, IS MADE** as to the accuracy or completeness of the technical data herein and the use thereof for any particular purpose.

Catalog #	Material	A	B	C	D	#Lbs./LF	Description
BCJ-1	PVC	2 3/8"	5/8"	1 1/2"	5/16"	.75	
BCJ-8	Rubber	2 3/8"	5/8"	1 1/2"	5/16"	.52	
BCJ-2	PVC	2 3/8"	5/8"	9/16"	5/16"	.60	
BCJ-9	Rubber	2 3/8"	5/8"	9/16"	5/16"	.42	
BCJ-3	PVC	6 7/8"	5/8"	1 1/2"	3/8"	1.00	
BCJ-10	Rubber	6 7/8"	5/8"	1 1/2"	3/8"	.69	
BCJ-4	PVC	10 7/8"	5/8"	7/16"	1 1/2"	1.35	
BCJ-11	Rubber	10 7/8"	5/8"	7/16"	1 1/2"	.94	

## DOVETAIL ANCHOR SLOT & DOVETAIL ANCHORS

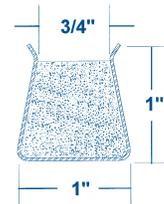
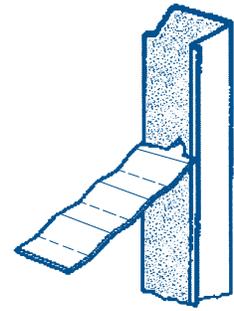
PRO-SLOT™ Anchor Slot is a stay-in-place concrete form used in forming a channel into the face of any cast in place wall or column. By installing Dovetail Anchors into the PRO-SLOT™, you can then anchor brick, block or stone to the concrete surface.

### Material

BoMetals galvanized PRO-SLOT™ Anchor Slot is manufactured of G60 hot dipped mill galvanized steel in 26/28, 24, 22, 20 and 18 gauge. PRO-SLOT™ is offered standard in 10' lengths with custom lengths available on a special order basis. BoMetals' PRO-SLOT™ is standard with a polystyrene foam filler to keep the channel clear of concrete and resist closure due to hydraulic pressure. It is also available without a polystyrene foam. PRO-SLOT™ incorporates continuous nail grooves along the back edge of the profile to help in nailing the slot to the forms.

Dovetail Anchors are manufactured in 16 gauge hot dipped, mill galvanized steel and are furnished in 3 1/2", 5 1/2" and 7 1/2" lengths with a 1" overall width.

PRO-SLOT™ Anchor Slot and Dovetail Anchors are mill galvanized before fabrication and conform to ASTM A 924, ASTM A 653 CQ or LFQ.



### Advantages

- ❖ PRO-SLOT™ Anchor Slot and Dovetail Anchors provide a permanent, fast, flexible and cost effective method of anchoring brick, stone and block to cast-in-place concrete walls and columns.
- ❖ PRO-SLOT™ provides an excellent anchoring system for both cast-in-place and precast concrete.
- ❖ With a heavy, galvanized coating to prevent corrosion, Dovetail Anchors have deep corrugations to increase pull out strength.

### Installation Instructions

- ❖ Nail BoMetals' PRO-SLOT™ Anchor Slot to the inside of the form wall prior to erection. Install vertically, spacing the channels 16", 18" or 24" on center. Use the nail grooves to speed up installation and space nails on 12" center.
- ❖ Dovetail Anchors should be spaced as indicated on drawings or called for in specifications or as recommended by local building codes. Typically, Anchors are spaced 12" to 16" vertically.

Product	Color Code	Description	Feet / Skid	# / Skid
DAS-18*	ORANGE	18ga Anchor Slot STANDARD 10' long	6,000'	2,933
DAS-20*	YELLOW	20ga Anchor Slot STANDARD 10' long	6,000'	2,247
DAS-22*	GREEN	22ga Anchor Slot STANDARD 10' long	6,000'	1,873
DAS-24*	BLUE	24ga Anchor Slot STANDARD 10' long	6,000'	1,508
DAS-26*	RED	26ga Anchor Slot STANDARD 10' long	6,000'	1,068

Dovetail Anchors 16 Gauge		
DTA-35 3 1/2" (500 / box)	DTA-55 5 1/2" (500 / box)	DTA-75 7 1/2" (300 / box)

\*Custom lengths are available. Please call 800.862.4835 for information.

# BoMetals, inc.®

concrete and masonry accessories



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All BoMetals products are available through a national network of distributors and warehouses. A trained and knowledgeable sales and engineering staff offer personalized service unparalleled in the industry today.

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