BACKER ROD

NAME: HBR® XL

TYPE: 1—Round rods of various diameters intended for use with cold- and hot-applied joint sealants per ASTM D 5249
FORM: Solid Round
TEMPERATURE LIMITS: -45°F to 410°F

NOMACO
"We Can Grow Together"

NOMA SPEC SUBMITTAL SHEET

FEATURES
- Meets all of the requirements of the 1990 Clean Air Act
- Is a "Domestic End Product" as defined in the Buy American Act, Title 41 USC 10.
- Easy to apply
- Chemically inert
- Waterproof
- Will retain its flex or compressibility at high and low temperature extremes

DESCRIPTION
Closed-cell, cross-linked polyethylene foam backer rod that is placed into the joint reservoir of expansion or contraction joints of old or new portland cement, concrete, or asphalt pavement joints.

APPLICATIONS
Expansion/Contraction Joints where hot or cold applied sealants are used.

BENEFITS
Limits depth of the sealant, and prevents excessive sealant use.
Helps sealant assume optimum shape factor to prolong sealant service life.
Will not absorb water or wick water to the joint walls to cause adhesive failure.
Prevents bottom-side adhesion of the sealant

Physical Property Requirements

Property		Type 1	TESTING METHODS
Density, lb./ft^3 (kg/m^3), max		6 lb./ft^3 (96.1)	ASTM D 5249
Tensile Strength, psi (kg/cm^3), min		20 psi (1.41)	ASTM D 5249
Water Absorption, volume, %max		0.5%	ASTM D 5249
25% Compression Deflection force, psi (kg/cm^3), max		15 psi (1.06)	ASTM D 5249
Compression recovery, % min		90%	ASTM D 5249
Heat Resistance	°F °C	392°+/- 5 200°+/- 2.8	ASTM D 5249
Maximum shrinkage, %		10%	ASTM D 5249

TABLE 1
HBR®XL **Product Packaging Information and Recommended Diameter Use for Joint Width**

Nominal Diameter in.—mm		Joint Dimension in.—mm		Linear Ft./ Carton lft.—m		Carton Dimension in.	Carton Weight lbs.—kg	
3/8"	10	1/4"	6	3600	1097	18"x18"x31"	12	2
1/2"	13	3/8"	10	2500	762	18"x18"x31"	12	2
5/8"	16	1/2"	13	1550	472	18"x18"x31"	12	2
7/8"	22	5/8"	16	850	259	18"x18"x31"	12	2
1"	25	3/4"	19	550	168	18"x18"x31"	12	2
1 1/4"	32	7/8"	22	400	122	18"x18"x31"	12	2
1 1/2"	38	1 1/8"	29	552	168	12"x22"x74"	18	8
2"	51	1 5/8"	41	360	110	12"x22"x74"	18	8

SIZE SELECTION (Table 1)
Proper size selection is important, as it controls the depth of the sealant bead. It must be oversized to fit tightly into the joint, and function as a bondbreaker to prevent bottom-side adhesion of the sealant.

JOINT PREPARATION
Pavement joints should be dry, clean of all scale, dirt, dust, curing compound, and other foreign matter. The sidewalls of the joint space to be sealed should then be thoroughly sandblasted, blown clean of loose sand by high-pressure air, and sealed. If joints are cleaned by jet waterblasting, the jet waterblast machine shall be capable of discharging water up to 10,000 psi (69 MPa) pressure and 22 gal. of water/min. Joints shall be thoroughly dry before installation of bond breaker or joint sealant material is applied

INSTALLATION & SEALANT PLACEMENT
Just prior to placing the backer rod, clean all joints with high-pressure compressed air. Air compressors used for this purpose must be equipped with traps for removal of oil and moisture. Install the backer rod at the depth recommended by the sealant manufacturer. The backer rod can be installed by hand, but an easily constructed roller device will simplify and expedite installation. It will also ensure a consistent, uniformly placed backer rod at the proper depth. The sealant bead must be applied at least 1/4" below the pavement surface (refer to the sealant manufacturer's recommendations).

PRECAUTIONS
Do not puncture, over compress or stretch HBR® XL during insertion. Tests for outgassing of cold applied sealants shall be made in accordance with ASTM Test Method C 1253. Sealant compatibility should be confirmed by the sealant manufacturer. Compatibility characteristics of sealants in contact with sealant backings can be determined by ASTM Test Method C 1087.

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