# CROSSLINKED CLOSED CELL POLYETHYLENE BACKER ROD FOR HOT POUR SEALANT APPLICATIONS

# **MANUFACTURER** — Industrial Thermo Polymers Ltd.

CANADA

153 Van Kirk Drive Brampton, Ontario L7A 1A4

Tel: (905) 846-3666 Fax: (905) 846-0363

www.tundrafoam.com

U.S.A.

2316 Delaware Avenue Suite #216

Buffalo, New York 14216 Tel: 1 (800) 387-3847 www.tundrafoam.com

## PRODUCT DESCRIPTION

Basic Use: Hot Rod XL is an ideal non-absorbant compressible backup material inserted into a joint to control sealant depth, create a backstop to:

- Allow proper sealant tooling;
- Allow proper sealant wetting of the joint surfaces;
- Insulate underside of sealant;
- And yield proper bond breaker between the backup material and the sealant

It can also be used as a temporary joint seal.

Specific Uses: Backup material for most hot pour sealants used to fill contraction and expansion joints of concrete highways, runways, driveways and parking lots. (See application procedures below)

Compatibility: Hot Rod XL is compatible with most rubber-asphalt and coal tar-rubber polymer thermoplastic compounds.

Composition and Material: Hot Rod XL is an extruded round, closed cell, low-density polyethylene foam material which has been specially cross linked to withstand temperatures in excess of 400°F. This material is available in beige only and a wide variety of diameters. (See Table I)

# TABLE I

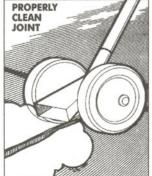
# STOCK SIZES AVAILABLE

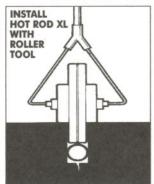
Rod Diameter	Feet / Carton	Metric Size	Meters / Carton
**3/8"	2100	9mm	640
*1/2"	2500	12mm	762
*5/8"	1550	15mm	472
*3/4"	1100	19mm	335
7/8"	850	22mm	259
1"	600	25mm	182
1-1/4"	400	31mm	121
1-1/2"	420	38mm	128
2"	240	50mm	73

**Hot Rod XL Sizes** 1-1/2" (38mm) to 2" (50mm) are furnished in easy to handle 6 ft. (1.83m) lengths. Rectangular cartons are ideal for warehousing and handling. All have convenient hand holes for carrying ease. UPS and most other package express services will accept all cartons for re-shipment. Truckload quantities furnished on pallets and may be warehoused two pallets high to maximize space.

\*\*Baby Backer Rod Carton - Minimum 2 carton purchase. \*Available 2 spools per carton.

# How to Use Hot Rod XL Backer Rod













#### **TECHNICAL DATA**

Hot Rod XL is chemically inert and will resist oil, gasoline and most other solvents. This material will not stain, soak up moisture, nor adhere to sealant materials and is non-exuding. (Refer to Table II for Typical Physical Properties).

# **INSTALLATION**

The joint depth must be great enough to allow for the proper installation of the Hot Rod XL bond breaker and hot pour sealant. The joint width will be determined by the appropriate thermal expansion coefficient as related to anticipated temperature variances. Joint walls must be as smooth and even as possible and be free of any loose residues or foreign materials. Joints should also be dry and frost-free. Using Table III select proper rod diameter and cut to length or use directly from spool. With a sized rubber tool, blunt instrument or by hand, install rod at the level recommended by the sealant manufacturer, specifier or governmental agency involved.

## **PURCHASING AND PRICING**

Hot Rod XL is widely available throughout the United States and Canada. Please contact Industrial Thermo Polymers Ltd. for the name and address of your local distributor. This source will provide you with samples and pricing information as required.

# **TECHNICAL ASSISTANCE**

Industrial Thermo Polymers Ltd. has qualified representatives available to assist users of the various backer rod materials referenced herein. Please contact your local ITP distributor should assistance be required.

#### TABLE II

#### \*\* PHYSICAL PROPERTY ANALYSIS

PROPERTY	VALUE	TEST METHOD
Density Tensile Strength Compression Water Absorption (1)	2 lbs/cu ft. (nominal) 31.4 PSI 4.7 PSI @ 25% 0.03 gm/cc	ASTM-D-1622 ASTM-D-1623 ASTM-D-1621 ASTM-C-1016
Water Absorption (2) *Temperature	0.02% by volume 410°F	ASTM-C-509 No Melting of Rod
(maximum value tested)	3.4	ASTM-C-335-84

\*A well known and widely employed rubber asphalt sealing compound was employed at various temperatures between 390°F and 410°F. Water Absorption (1) "Determination of water absorption by sealant (ioint filler) materials."

(joint filler) materials."

Water Absorption (2) Standard specification for cellular elastomeric preformed gasket and sealing material.

# TABLE III

## HOT ROD XL SIZE-TO-JOINT WIDTH

Joint Width	Rod Diameter
3/16" - 1/4"	3/8"
1/4" - 3/8"	1/2"
3/8" - 1/2"	5/8"
5/8" - 3/4"	7/8"
3/4" - 7/8"	1"
7/8" - 1"	1-1/4"
1" - 1-1/4"	1-1/2"
1-1/4" - 1-1/2"	2"

For metric joint widths under 25mm, it is recommended the backer rod diameter be at least 3mm larger (oversized). For metric joint width above 25mm, it is recommended the backer rod diameter be between 6mm and 13 mm larger (oversized).

## OTHER ITP BACKUP MATERIALS ALSO AVAILABLE

- TUNDRA FOAM Open-Cell Backer Rod. Sizes 3/8" to 2"
- STANDARD BACKER ROD CLOSED CELL POLYETHYLENE FOAM. Sizes 1/4" to 6"
- SOFT-TYPE BACKER ROD Sizes 3/8" to 4"
- TUNDRA FOAM FILLER --Packaged Closed Cell Backer Rod Insulation.

#### TABLE IV

# **CARTON SIZES AND WEIGHTS**

Rod Diameter	Weight / Carton	Carton Measurement
1/4" to 3/8"	6 lbs.	18" x 18" x 15"
6mm to 9 mm	2.7 kgs.	458mm x 458mm x 381mm
1/2" to 1-1/4"	11 lbs.	18" x 18" x 30"
12mm to 31mm	5 kgs	458mm x 458mm x 762mm
1-1/2" to 4"	14 lbs.	17" x 10" x 74"
38mm to 101mm	6.4 kgs	432mm x 254mm x 1880mm

# ALSO AVAILABLE FROM INDUSTRIAL THERMO POLYMERS

PIPE INSULATION NOODLES (WATER TOYS)

SEALANT JOINT BACKER ROD
CUSTOM PROFILES

® REGISTERED TRADEMARKS OF INDUSTRIAL THERMO POLYMERS LTD.

## **GUARANTEE / WARRANTY**

Industrial Thermo Polymers Limited believes the information and recommendations herein to be accurate and reliable and the products are reasonably fit for the applications mentioned. However, as uses, conditions and application methods are not within the sellers control, ITP does not guarantee nor warrant these products nor results from the use of these products or information given. It is therefore the responsibility of the buyer to determine the suitability of these products in applications intended and determine the appropriateness of the products. Sizes and lengths per spool are those at times of packaging and may vary with climatic conditions after manufacture.