

CHEMFIT BACKING ROD

Extruded Polyethylene Based Sealant Back Up Material – For Cold Applied Sealants to Give Correct Thickness

PRODUCT DESCRIPTION

ChemFit Backing Rod is a flexible, extruded, closed-cell polyethylene foam joint backing material. It is specifically designed as a back-up material for cold-applied sealants to ensure the correct joint depth and promote proper sealant adhesion. This material is virtually non-absorbent, chemically inert to most solvents, and will not stain or adhere to sealant compounds. It is fully compatible with acrylic, butyl, polyurethane, polysulfide, silicone, and most other cold-applied sealants. The closed-cell structure prevents air or moisture entrapment and ensures the sealant does not stick to the back of the joint, a condition known as three-sided adhesion.

PRIMARY APPLICATIONS

ChemFit Backing Rod is recommended for use in conditions such as:

- Back up material for cold applied sealants to give correct thickness and depth control
- Forces sealant against joint sidewalls to provide maximum adhesion
- Serves as a bond breaker to prevent three-sided adhesion failure
- Commonly used in expansion, isolation, control, and pavement joints
- Suitable for glazing operations, copings, precast panels, door and window perimeters

KEY FEATURES AND BENEFITS

- **Closed-cell foam** – Does not absorb water or wick moisture; prevents air entrapment
- **Chemically inert** – Compatible with all major cold-applied sealant types
- **Non-staining** – Will not stain or react with construction substrates
- **Compressible** – Installs easily and stays in place; fits a variety of joint sizes
- **Lightweight** – Easy to handle and transport
- **Controls sealant depth** – Ensures proper joint design ratio (typically 2:1 width to depth)
- **Available in various diameters** – For joint widths from 4 mm to 76 mm and larger

APPROVALS AND STANDARDS

- Conforms to **ASTM C1330**, Type C (Closed-cell polyethylene backer rod for cold-applied joint sealants)
- Conforms to **ASTM D5249**, Type 3
- Extruded polyethylene based sealant back up material, compatible with major cold-applied sealant types
- Suitable as back up material for cold applied sealants to give correct thickness

TECHNICAL DATA

Property	Specification
Material	Extruded closed-cell polyethylene foam
Density	24 – 30 kg/m ³ (1.5 – 1.9 lb/ft ³)
Water Absorption	< 0.5% by volume
Compression Recovery	> 90%
Compression Deflection	~0.03 MPa (5 psi)
Tensile Strength	> 0.2 MPa (29 psi)
Temperature Resistance	-40°C to +80°C (continuous service)
Compatibility	Acrylic, Butyl, Polyurethane, Polysulfide, Silicone, STPE

SIZE SELECTION AND COVERAGE

Select a rod diameter approximately 25% larger than the joint width to ensure a tight, friction-fit installation.

BACKER ROD DIAMETER	RECOMMENDED JOINT WIDTH
6 mm (1/4")	4 – 5 mm
10 mm (3/8")	6 – 8 mm
12 mm (1/2")	8 – 10 mm
16 mm (5/8")	10 – 12 mm
20 mm (3/4")	12 – 15 mm
25 mm (1")	15 – 20 mm
30 mm (1-1/4")	20 – 25 mm
38 mm (1-1/2")	25 – 30 mm
50 mm (2")	35 – 40 mm
75 mm (3")	50 – 60 mm
100 mm (4")	70 – 80 mm

Packaging: Available on demand in spools, coils, or cut sticks. Contact **ChemFit** for specific lengths and packaging options.

APPLICATION GUIDELINES

Surface Preparation:

- Joint or opening must be clean, dry, and free from dust, oil, grease, laitance, curing compounds, and loose particles
- Remove all old sealant or debris from repair joints

Installation:

- Select the proper rod diameter (oversize the rod by approximately 25-50% relative to joint width to ensure a tight fit)
- Cut rod to length or feed directly from the spool
- Using a blunt instrument or roller (do not use sharp objects), uniformly install rod to the depth recommended by the sealant manufacturer
- General rule: Depth of joint after rod is installed should be half the joint width (2:1 width-to-depth ratio)
- Ensure rod is seated evenly without twisting, puncturing, or excessive compression

Limitations:

- Do not tear, puncture, twist, or overly compress the backer rod during installation
- Avoid creating voids that could trap air/moisture between backer rod and sealant
- For dynamic joints, ensure the backer rod is sized to remain in contact with joint walls without being forced out of position

HEALTH AND SAFETY

ChemFit Backing Rod is chemically inert and generally regarded as safe for normal handling. Cutting or abrasion may create static charge or dust; use adequate ventilation. Avoid open flame. Use gloves and safety glasses when handling. Refer to the Safety Data Sheet for detailed information.

CLEANG OF TOOLS

No special cleaning required. The backing rod is disposable. Joints should be cleaned of debris before installation.

LEGAL NOTES

All technical data provided in this Product Data Sheet is based on laboratory testing under controlled conditions. Actual field performance may vary due to differences in substrates, application methods, site conditions, and environmental factors. ChemFit makes no warranty of merchantability or fitness for a particular purpose. Users shall conduct their own trials to validate product suitability for the intended application. ChemFit reserves the right to modify product specifications without prior notice. For the most current documentation, request the latest Product Data Sheet and Safety Data Sheet from ChemFit.

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