

X-Seal 3C AF

Cold caulking cord

40220508

Product Description

X-Seal 3C AF is a unique cold caulking cord supplied as a ready for use cord. The product is dampened, packed into the joint and tightly consolidated with a hammer and caulking tool to form a solid pressure resistant joint. The fiber reinforcement enables the joint to withstand hydrostatic pressure immediately the product is compacted. The product can accommodate vibration and normal deflection, as well as expansion and contraction caused by temperature variations.

Composition

X-Seal 3C AF consists of a mixture of chemical resistant cements and asbestos free non degradable fibers braided to form a pliable cord.

Advantages

- 30 year track record
- Asbestos free
- Supplied ready for use, no mixing required
- Quick and easy to apply
- Can be used in variety of situations
- Can be used in damp and wet conditions
- Can be used in waste water structures
- Provide an immediate seal
- Withstands pressures in excess of 1000 psi (7MPa)
- Accommodates vibration and normal deflections
- Resistant to biological degradation
- No wastage

Uses

X-Seal 3C AF has been designed for sealing dry and wet joints subject to back pressures and where the seal may be subjected to fractional movements and where an immediate seal is required. The product is also used to provide confinement of hydrophilic water stops.

Typical Application

- Spigot and socket pipe connections
- Pipe entries
- Joints in sheets piles
- Manholes
- Leaking cracks in walls and tanks
- Tunnel segments
- Box culvert joints

Technical Data

Tensile strength	>1160 psi (8MPa) at 28 days
Flexural strength	>2180 psi (15MPa) at 28 days
Compressive strength	>4350 psi (30MPa) at 28 days
Vibration	No leakage after 1 million cycles
Movement accommodation	80 mils (2mm)
Deflection accommodation	Up to 2 inches (50mm)
Working pressures:	
Time after installation	0hr 24hrs 48hrs 72hrs 7days
Max. pressure psi	44 145 218 363 1015
Max. pressure MPa	0.3 1.0 1.5 2.5 7.0

Application Properties

Application temperature	41°F to 212°F (5°C to 100°C)
Service temperature range	-40°F to 230°F (-40°C to 110°C)

Guide to Quantities

Joint size (inches) (mm)	Lft per tin (Lm per tin)	Lbs per tin (Kg per tin)
¼ x 1 (6 x 25)	36.8 (12.0)	0.19 (0.26)
½ x 1 (12 x 25)	18.4 (5.9)	0.38 (0.53)
½ x 1 ½ (12 x 40)	12.0 (3.7)	0.58 (0.85)
1 x 1 ½ (25 x 40)	6.1 (1.8)	1.15 (1.76)
1 x 2 (25 x 50)	4.5 (1.4)	1.54 (2.2)
1 ½ x 1 ½ (40 x 40)	4.1 (1.1)	1.73 (2.8)

Packaging

7lbs (3.125 kg) per tin, 8 tins 56lbs (25kg) per box.

Shelf life

2 years when stored in original containers in cool, dry conditions.

Joint Design Considerations

X-Seal 3C AF may be applied in gaps up to 2 inches (50mm) in width. Joints subject to high pressure and to movement should be designed with a width:depth ratio of 1:4 or greater.

Installation Guidelines

X-Calibur provides detailed method statements on all its products for use in various applications. These must be referred to prior to starting work. The information below is a summary intended for guidance only.

Joint Preparation

Ensure all surfaces are free from all mud, dust, dirt and debris clean thoroughly. Clean water should be liberally applied by brush or hand spray to the joint surfaces immediately before the caulking compound is installed.

Application

Cut the required length of cord, lay on clean surface and completely dampen with a brush dipped in clean water or hand spray. Select the maximum thickness of caulking tool that will comfortably fit the joint, allowing a 40 to 80mil (1 to 2mm) clearance. Press the dampened cord into the bottom of the sealing slot and insert into the joint firmly using a caulking tool and hammer until fully compacted. Keep the X-Seal 3C AF caulking compound moist during the operation by dipping the caulking tool into water or by spraying or brushing water into the joint. Do not use excess water. Continue adding and caulking further lengths of cord until the gap is completely filled or has reached the required width:depth ratio of 1:4 for high pressure joints. To ensure a homogenous seal, X-Seal 3C AF must be caulked sufficiently to break up the supporting braid. For narrow joints, it may be necessary to flatten the damped cord prior to insertion. Smooth off the fully caulked joint with the flat edge of the caulking tool. Cure the finished joint for 48 hours by covering with polythene sheet sealed at the edges with tape. Clean up using water.

Limitations

X-Seal 3C AF is not suitable for sealing plastic or clay pipes.
Do not use excessive water when installing the cord.
A minimum depth of 2 inches (50mm) is required when used to confine hydrophilic waterstops.
Do not apply or allow to cure temperatures below 41°F (5°C).
Do not expose to aggressive chemicals.

Health and Safety

This product is for industrial use only by trained operatives. It is potentially hazardous if not used correctly. Please refer to the Material Safety Data Sheet (MSDS) prior to the purchase and use of this product. The MSDS can be obtained via our website www.x-calibur.net.

Authorized Technical Specialist

Please note that only X-Calibur Authorized Technical Support Specialists ('ATSSs') are permitted to change any of the information in this data sheet or to provide written recommendations concerning the use of this product. Visit www.x-calibur.net for a full list of X-Calibur ATSSs.

Datasheet Validity

X-Calibur makes modifications to its product datasheets on a continuous basis. Please check the datasheet update section on www.x-calibur.net to ensure you have the latest version.

Warranties

X-Calibur supplies products they comply with the Properties shown on the current datasheets. In the unlikely event that products supplied are proved not to comply with these properties, then we will replace the non-compliant product or refund the purchase price. X-Calibur does not warrant or guarantee the installation of the products as it does not have control over the installation or end use of the products. Any suspected defects must be reported to X-Calibur in writing within five working days of being detected. X-Calibur Construction Systems Inc. **makes no warranty as to merchantability or fitness for a particular purpose and this warranty is in lieu of all other warranties express or implied.** X-Calibur Construction Systems Inc. shall not be liable for damages of any sort including remote or consequential damages, down time, or delay.

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