

TECHNICAL DATA SHEET

DOLPHIN FIRE-STOP SILICONE SEALANT

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PRODUCT DESCRIPTION

Dolphin Fire-Stop Silicone is an ultimate fire protection solution. It is powerful & flexible single component, neutral cure, gun – grade fire sealant providing optimum unprimed adhesion to different construction substrates. It is an elastomeric, high performance sealant capable of meeting the joint movement requirements in fire – rated joints and pipe penetrations. Dolphin Fire – Stop is tested for up to 4 hours fire rating at Efectis and UAE Civil Defence approved laboratories, and is approved for both penetrations and joint applications in horizontal and vertical fire segments.

TECHNICAL PROPERTIS



Properties	Test Method	Unit	Specifications
Chemical Base			1-C Silicone
Cure Mechanism			Moisture
Cure Type			Neutral
Joint Movement	ASTM C 719	%	± 50
As Supplied @ 25°C, 50% RH			
Color			Black, Grey, White
Consistency			Homogeneous paste
Density	ASTM D 1475		1.18 ± 0.02
Flow Properties	ASTM C 639	mm	0 (Non-sag)
Skin Over Time	ASTM C 679	minutes	Approx. 6
Tack Free Time	ASTM C 679	minutes	Approx. 10
Depth Cure, 24 Hrs	Lab Test	mm	~ 2.4
As Cured - 7 Days @ 25°C, 50% RH			
Hardness (Shore A)	ASTM D 2240	Points	30 – 35
Tensile Strength	ASTM D 412	N/mm ²	≤ 0.50
Elongation	ASTM D 412	%	≤ 500
Young's Modulus	ASTM D 412	MPa	≤ 0.30
Service Temp.		°C	-25 to + 400 (Based on the backer segments)
Application Temp.		°C	5 to 45

Note:

* Curing time (Skin Over Time & Tack Free Time) may vary depending on climatic condition during application.

* Information on this data sheet is subject to change without prior notice and should not be used for writing specifications

TYPICAL USES

Penetrations:

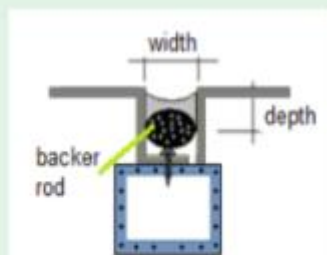
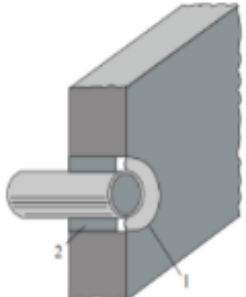
- Steel, Copper and EMT
- Fiberglass pipe insulation


Construction joints:

- Cables Building Assemblies
- Concrete and CMU
- Gypsum Wallboard
- Sealing of horizontal and vertical linear joints assemblies and fire rated floors. Suitable for dynamic and static construction joints.

KEY FEATURES

- Non-Corrosive
- Non-Stain
- UV, Water & Weather resistance upon curing
- Antifungal & Antibacterial
- Heat-Resistance up to 400°C
- High-Flexibility

COLOR	DOLPHIN Fire-Stop Silicone Sealant is available in White, Black and Grey. RAL* colors are available upon request. *Special color orders may require lead time and minimum order quantities.
PACKAGING	DOLPHIN Fire-Stop Silicone Sealant is available in standard caulking cartridges (280 ml), packed sausages (600 ml) and 200 Liter drum
SURFACE PREPARATION	The substrate areas that will be in contact with sealant must be clean, dry and free of all loose materials, dust, dirt, rust, oil and other contaminants. Non - porous substrates should be cleaned with a solvent and a clean, lint - free, cotton cloth. Wipe dry immediately with another such cloth before the solvent evaporates from the surface. Porous surfaces may need to be grinded, free of dust and cleaned
JOINT DESIGN	<p>For General Use</p> <ul style="list-style-type: none"> • joints up to 12 mm wide, width to depth ratio = 1:1 $\frac{\text{width}}{\text{depth}} = \frac{1}{1} \text{ or } w = d$ • joints over 12 mm wide, width to depth ratio = 2:1 $\frac{\text{width}}{\text{depth}} = \frac{1}{0.5} \text{ or } w = 2d$  <p>MAXIMUM WIDTH FOR SILICONE SEALANT IS 30 MM Install backing material, spacer, or joint filler to ensure correct depth to width ratio is achieved according to design. Apply masking tapes to areas adjacent to joints to ensure neat sealant lines.</p>
COVERAGE	COVERAGES IN LINEAR METER = $\frac{\text{MATERIAL VOLUME (ML)}}{\text{WIDTH (mm) X DEPTH (mm)}}$
BACK UP MATERIAL	The backing material shall be closed cell polyethylene foam backer rod
PENETRATION DESIGN	 <p>DOLPHIN Fire-Stop Silicone Sealant has been developed for use in small penetration seal applications where it should be used in conjunction with specified backing material</p> <ol style="list-style-type: none"> 1) Dolphin Fire-Stop Silicone Sealant 2) Dolphin Fire Retardant PU Foam, PE foam, rockwool
SURFACE REPERATION	The substrate areas that will be in contact with sealant must be clean, dry and free of all loose materials, dust, dirt, rust, oil and other contaminants. Non - porous substrates should be cleaned with a solvent and a clean, lint - free, cotton cloth. Wipe dry immediately with another such cloth before the solvent evaporates from the surface.

APPLICATION INSTRUCTION	Application surface should be dry and dust, rust and grease-free. Cut the nozzle at an angle of 45° and apply sealant on a substrate. Tool immediately to spread the sealant against the surface to give it a smooth finish. For additional information please consult the corresponding product data sheets.
TOOLING AND FINISHING	Immediately tool sealant after application and before skin formation. Tooling of sealant should be done in one continuous stroke. Remove masking tape immediately after tooling is completed.
CLEANUP AND REMOVAL	Uncured sealant may be removed from tools, equipment and non-porous surfaces with solvents. For porous substrates, allow the sealant to cure before removal by peeling or other mechanical means. Cured sealant can only be removed mechanically.
LIMITATION	Not paintable. Transportation temperature should be 5°C to 40°C.
STORAGE AND SHELF LIFE	When stored in original unopened container at or below 77°F (25°C) in dry warehouse conditions, DOLPHIN Fire-Stop Silicone Sealant has a shelf life of 12 months from manufacturing date. Containers should always be kept sealed when not in use.
HANDLING PRECAUTIONS	Use in well-ventilated area. Direct contact of uncured sealant may irritate eyes and skin. Over exposure to vapor may irritate eyes, nose and throat. Do not handle contact lenses with sealant on hands. In case of eye contact, flush eyes with water for 15 minutes. Obtain medical attention. In case of skin contact, remove from skin and flush with water.
Certification	 <p>IFC certification Certificate No: IFCC1076</p> <p>IFC certification Certificate No: IFCC 1323</p> <p>Efectis</p>

KEEP OUT OF REACH OF CHILDREN • KEEP CONTAINER TIGHTLY CLOSED • FOR INDUSTRIAL & PROFESSIONAL USE

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