

# Hybrid Polyurethane Sealant

# FlexSeal®



## Description

**FlexSeal®** is a high performance one component gun grade sealant . **FlexSeal®** is ideal for sealing most types of joints in construction structures and buildings with excellent weathering resistance and excellent adhesion to most building materials.

## Uses

- Bonding different building materials with permanent elastic bond.
- Sealing of expansion, contraction & construction joints in buildings and other construction structures.
- Sealing of dynamic structural cracks.
- Glazing joints of windows, door frames and curtain walls.

## Features

- Tough, elastic, rubber-like seal.
- Paintable
- Excellent weatherability .
- Silicone and PVC free.
- Stays resilient even at high temperature.
- Excellent resistance to water, oils, grease, most solvents, mild acids and alkalis.
- Tenacious adhesion to metal, wood, glass, stone, ceramic, aluminium, and stainless steel.

## Technical Properties

Open time	>25min. @ 25°C
Tack free time	120 min. @ 25°C
Full cure time	7 days
Density	$1.8 \pm 0.05 \text{ gm/cm}^3$
Shore A	40 $\pm$ 5
Tensile strength	$\approx 3.4 \text{ N/mm}^2$
Adhesion loss to concrete	$\approx 1.7 \text{ N/mm}^2$
Adhesion loss to glass	$\approx 2.0 \text{ N/mm}^2$
Adhesion loss to steel	$\approx 3.8 \text{ N/mm}^2$
Adhesion loss to aluminum	$\approx 4.2 \text{ N/mm}^2$
Color	grey ,black, beige, white other colors upon request



## Standards

ASTM C 719

ASTM C 920

ASTM D 2240 Shore A-Hardness

ASTM C 794 Adhesion to peel

## Application procedure

### Surface Preparation:

- Surface preparation is the most important step before applying any type of adhesive and/or sealant to get best results and to avoid adhesion failure.
- The surface to receive **FlexSeal®** must be dry, free from dust, coatings, bituminous mastics, concrete curing agents, mold release agents, oils, greases and loose particles. for expansion joints avoid weak building materials such as cement mortar, aerated concrete or rigid foam
- Clean the joint surface by wire brush and sanding with emery paper if needed in order to remove all traces of release agents, or curing compounds.
- Remove dust by compressed air or paint brush.
- Wipe out oil and grease by solvent soaked cloth such as Xylene, Toluene or Acetone.

### Application:

- Proper joint profile is 2:1 width to depth ratio with minimum joint depth of 8 mm and maximum width of 50 mm. For 10 mm wide joints proper width to depth ratio is 1:1.
- Insert compressible polyethylene rod as backup material to control depth of sealant in the joint and to provide support for tooling of the sealant.
- Apply tape to both edges of the joint.

# Hybrid Polyurethane Sealant

# FlexSeal<sup>®</sup>



- Tool sealant to ensure full contact with joint walls and remove air entrapment. For best results in tooling the sealant, use a spatula and liquid soap diluted 1 : 10 with water (for smoothing). Avoid contact with alcohol and other solvents during cure period (7 days).

## Storage & Packing

Store under cover, out of direct sunlight and protect from extreme temperatures. In tropical climates the product must be stored in air-conditioned environment for up to 6 month.

**Avialable in 7 kg, 10 kg, 15 kg pails and 600 ml sausage.**

## Health and safety

As with all construction chemicals products caution should always be exercised. Protective clothing such as gloves and goggles should be worn. Treat any splashes to the skin or eyes with fresh water immediately. Should any of the products be accidentally swallowed, do not induce vomiting, but call for medical assistance immediately.

## Legal Notes

The information provided in this data sheet, are given in good faith based on our current knowledge and experience of the product when properly stored, and applied by professional applicator, and under normal conditions in accordance with the mentioned recommendations. In practice under actual site condition differences are such that no warranty can be issued nor any liability can be taken, arising out of any legal relationship whatsoever. The product must be tested onsite to check its suitability for the intended application and purpose



[www.FlexSeal.Site](http://www.FlexSeal.Site)