

## Flex-o-Seal

### Polyurethane Sealant

#### Product Description

Pioneer Pro Flex-o-Seal is a permanently elastic, one component, gun-grade polyurethane construction sealant. It cures under the influence of atmospheric moisture to form a low modulus sealant with excellent adhesive properties and resistance to ageing and weathering.



#### Key Features

- Permanently elastic over a wide range of temperatures
- Non-sag consistency
- Non-sticky/ does not pick up dirt
- Short cut-off string
- Easy to gun, can be easily smoothed and levelled out
- Good adhesion on all typical construction materials
- Good resistance to ageing, weathering and immersion in cleansing agents, sea water, lime water and dilute caustic solutions
- Over-paintable with many water and solvent based paints (preliminary tests recommended)

#### Applications

1. Bonding old concrete to freshly poured 1. Sealing expansion and construction joints in vertical and horizontal applications.
2. Joints in precast elements
3. External walling and cladding joints.
4. Weather proofing of joints between brickwork, block-work, masonry, wood and concrete or metal frames.
5. Joints in walls, floors, balconies, around window or door frames
6. Joints in water channels and suitable for hydraulic general sealing with contact with water.
7. Retaining walls
8. Roofing

#### Product Specifications / Typical Properties / Physical Characteristics

Table 1.

##### Physical Properties, Uncured State

Parameters	Results
Appearance	Gray, Thixotropic Paste
Curing mechanism	Moisture-Curing
Curing time (using 2 mm)	1 day @ 23°C, 50% RH
Specific gravity	1.16-1.21
Tack Free time	43-54 mins @ 28°C, 50% RH
Slump	Nil

Table 2. Physical Properties, Cured State

Parameters	Results
Tensile Strength	1.5-2.0 N/mm <sup>2</sup>
Elongation	≥600%
Movement Accommodation Factor	25% movement total capacity
Application Temperature	From +5 to +40°C
Temperature Resistance	-40/90°C

#### Application Procedure

##### Surface Preparation

Surfaces must be clean, dry, free of water, oil, grease or rust and of sound quality. Remove all loose particles or residues with a jet of compressed air, sandpaper or hard brush. Glass, metal and other non-porous surfaces must be free of any coatings and wiped clean with solvent. Pre-cast panels using form-release agents other than polyethylene film must be sandblasted or mechanically abraded and dust free. Flex-o-Seal has very good adhesion properties without the use of primer on most common building materials. Consequently, the use of the primer is not necessary if the support to be sealed is properly prepared and consolidated. However, varieties of brick, natural stone, plastics, paints, coatings and other treatments of surfaces often presents a difficult surface to which to adhere. Due to the number of unpredictable natures of these substrates, a preliminary test is recommended. If necessary, apply a coating of primer on the joint walls.

## Method

Recommended application temperatures: 15°-25°C. For easier use or cold weather application it is recommended that the material is to be stored at approximately 25°C prior to use. In order to guarantee free movement of sealant in joints, it is imperative that the sealant does not adhere to the bottom of the joint, therefore for correct joint making a closed-cell polyethylene bead (joint backing rod) is to be placed at the proper depth. Apply appropriate primer to joint sides and observe waiting time to avoid that trapped solvent, in condition of rising temperature, can blow bubbles in the uncured sealant. For best performance, sealant should be gunned into joint when the joint slot is at mid-point of its designed expansion and contraction. Firmly extrude sealant into the joint making sure that it is in full contact with the sides of the joint and with the backing rod at the bottom. Keep the nozzle in the sealant, continue on with a steady flow of sealant preceding the nozzle to avoid air entrapment. Avoid overlapping of sealant to eliminate entrapment of air. For the successful sealing of joints it is essential that the following guidelines on joint configuration are observed:

- For joints up to 12 mm wide, width to depth ratio = 1 : 1
- For joints over 12 mm wide, width to depth ratio = 2 : 1

## Application Equipment

Sausage gun

## Packaging

600 mL sausage

## Storage

Keep away from direct sunlight and moisture, between +10°C and +25°C

## Shelf Life

12 months if stored in its original package

## Health and Safety Precautions

**PERSONAL PROTECTIVE MEASURES:** If skin contact occurs, remove immediately and wash with soap and water.

**KEEP OUT OF REACH OF CHILDREN.**

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