

JOINT SEALANTS

MONNELI ELASTOSEAL PU40

Single Component Polyurethane Joint Sealant

Product Description

A high performance, single component moisture curing polyurethane, elastomeric joint sealant. When cures it forms a flexible, weather proof joint sealant with superior adhesion to most substrates.

Uses

ELASTOSEAL PU40 can be used in a wide range of application in the construction industry including:

- Internal and external expansion and control joints with up to 25% movement
- Precast concrete panel joints
- Perimeter caulking for parapets windows, doors, aluminum panels, metal cladding, wooden frames, etc.

Advantages

- Specially developed for sealing expansion joints
- Can be applied for both horizontal and vertical surfaces
- Fast curing skin formation which significantly reduces dirt collection
- Has exceptional movement capability
- High resistance to weather condition
- Excellent adhesion to most joint substrates
- Compatible with water based paints

Instruction for Use

Surface Preparation

Proper surface preparation is essential to grant a good bonding between the sealant and the substrate. Joint edges must be clean, dry, free from oil, dust, grease or any other contaminants materials that might affect bonding. Joint sides should be cleaned with wire brush. Sand blasting is recommended in case of deep contamination.

Damaged concrete edges of joint should be repaired with COLMEF's range of concrete repair products.

Joint surfaces that are sound, clean, well prepared and totally dry, primer is not required. However, porous surfaces where primer is needed, SEALPRIME should be used. For non-porous surfaces, use SEALPRIME NP.

To have the joint sealant function correctly, the sealant must bond only to the sides of the joint and not to the bottom. Place CORDOFLEX, a Polyurethane closed cell backers at the bottom of the joint to ensure intimate contact of sealant with joint sides and to control sealant depth during application. In case that fixing of backing rod is not possible due to depth limitation, use adhesivebacked polyurethane tape (bond breaker tape) to prevent joint bottom adhesion.

To be able to keep the joint edges clean, use masking tape on the joint sides and remove immediately after the sealant application has finished.

Priming

Apply SEALPRIME single component Polyurethane to both side of the porous joint faces prior to installation of backer rod or bond breaking tapes by brushing in a thin uniform coat. Avoid applying too much primer as it may act as bond breaker.

For the non-porous substrates such as steel or glass, use SEALPRIME NP for optimum adhesion. Allow the primer to be tack free prior to application of the sealant.

Application

ELASTOSEAL PU40 is available in a ready to use self-contained sausage which can be loaded onto a barrel gun. Start extruding the sealant into the joint firmly by maintaining an even pressure on the trigger of the gun. On vertical joints, sealant extrusion shall start from the bottom of the joint and continue to the top. Once the sealant has been installed a suitable rounded tool can be used to achieve a smooth profile.

Do not use soapy water solution. Excess sealant and smears adjacent to the joints should be removed before sealant cures.

Joint Design

- ELASTOSEAL PU40 can be applied up to 40mm wide and 25mm deep joints.
- Minimum width and depth of any sealant should be 6x6 mm.
- Sealant depth is equal to width for joints that are less than 13 mm wide.
- Sealant depth should be approximately one half of joint width for joint more than 13 mm wide

Cleaning

Clean tool with SOLVENTE 10 promptly before material hardens. Cured material must be mechanically removed.

Recommendations

- ELASTOSEAL PU40 is not suitable for chemical exposures, or food stuff contacts.
- For application on marble or natural stone, compatibility of sealant with adjacent tiles should be tested in order not to have coloring effects on the tile.
- Color fading may occur as a result of environment effect such as high temperature or UV radiation.
- Color deviation, however, does not affect the sealant properties.
- Do not use ELASTOSEAL PU40 with permanent water immersion.
- Do not apply ELASTOSEAL PU40 on rubber, bituminous or EPDM substrates

Technical Data

Properties	Results			
Appearance	Thixotropic paste			
Colour	Grey, beige, white (other colors available upon request with minimum quantity requirement).			
Density at 25°C	1.25 kg/L			
Skinning time at 25°C	Approx. 1 ½ hours			
Shore A hardness	40			
Elongation at break (ISO 8339)	600%			
Modulus at 100% (ISO 8339)	0.52 MPa			
Joint movement capacity	±25%			
Sagging	None			
Cure time at 25°C and 50% RH	2 mm / 24 hours			
Temperature of application	+5°C to 35°C			
Service temperature	-5°C to +80°C			

All values are subject to 5-10 % tolerance

Applicable Standards

- BS 5212: PART1
- ASTM C920
- ISO 11600 CLASS F25LM
- ISO 868
- ISO 7390
- ISO 8339

Consumption

Below table includes the coverage consumption in linear meter for 600mL pack (not including wasteage).

Joint Depth (mm)	Joint Width (mm)							
(,	6	9	12	15	20	25	30	
6	16			6.5				
9		7.4		4.5	3.3			
12			4.2		2.5	2		
15				2.7	2.1	1.7	1.3	

Packaging

600 ml sausage, 20 sausages per box.

Storage

Keep the product stored in a dry and covered area with temperature not more than 25°C. The product maintains its stability for 9 months if stored as recommended.

Health & Safety

ELASTOSEAL PU40 does not contain any hazardous substances.

During application, wear appropriate protective clothing, goggles, gloves and respiratory equipment if necessary.

In case of contact with skin, rinse with water and again wash thoroughly with soap and water. In case of contact with eyes, rinse with plenty of water and seek medical advice accordingly.

If ingested, obtain medical attention immediately. Do not induce vomiting.

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