

MonniSeal PU25

Single Component Polyurethane Joint Sealant

Product Description

MonniSeal PU25 is 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

MonniSeal PU25 can be used in a wide range of application in the construction industry including:

- ▶ Sealing internal & external floor expansion joints of heavy wheeled, traffic flicked area places subjected to heavy industrial use, up to 50% movement joints.
- ▶ Precast concrete panel joints.
- ▶ Perimeter caulking for parapets windows, doors, aluminum panels, metal cladding, wooden-frames.
- ▶ As general elastic adhesive for materials with dissimilar properties and thermal expansion coefficients
- ▶ Recommended for bonding clay and concrete roof tile.
- ▶ Weather sealant for facade elements, interior and exterior

Advantages

- ▶ Specially developed for sealing expansion joints 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.

Usage Instructions

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 Monneli concrete repair products.

On sound, clean, well prepared totally dry joint surfaces, Primer is not required. In case that primer is needed, use MonniPrime for porous surface and seal MonniPrime NP for non-porous surfaces.

In order that joint sealant function correctly, the sealant must bond only to the sides of the joint and not to the bottom. Place MonniCord PE 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 adhesive backed 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 MonniPrime 1K 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 porous substrates such as steel or glass, use MonniPrime NP for optimum adhesion. Allow the primer to be tack free prior to application of the sealant.

Application

MonniSeal PU25 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 joint, 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

- ▶ MonniSeal PU25 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.

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

Cleaning

Clean tools immediately after application with water.

Standards Compliance

- ▶ BS 5212: Part 1
- ▶ ASTM C920, type S, class NS, class 25, utilier NT, G,T,M,O TT-S-00230 C Class A, Type II
- ▶ CANICGSB 19.13-M87
- ▶ ISO 11600 Class F25LM
- ▶ ISO 8339
- ▶ ISO 7390
- ▶ ISO 868

Technical Data

Properties	Result Pouring Grade
Appearance	Thixotropic Paste
Color	Grey, beige, white (other colors available upon request with minimum quantity requirement)
Density	1.25 kg/L @ 25°C
VOC	66 g/L
Skimming Time @ 25°C	Approximately 1 ½ hours
Elongation (ASTM D 412-06a)	>500%
Tensile Strength (ASTM D412-06a)	1.0 N/mm ²
Modulus of Elasticity at 100% (ASTM D412-06a)	0.30 N/mm ²
Shore A Hardness (ASTM D2240)	25
Water Retention Average Moisture Loss (ASTM C156-03)	0.42 kg/m ²
Joint movement capacity (MAF)	±50%
Service Temperature	5°C to 80°C
Sagging	None
Cure time @ 25°C and 50% RH	2-3 mm/24 hours
Temperature of application	+5°C to 35°C
Temperature resistance	-40 to +80 °C
Tear Resistance (ISO 34)	Env. 6.5 N/mm

All values are subject to 5-10% tolerance

Consumption

The table below includes the coverage consumption in linear meter for 600mL pack (not including wastage)

Packaging

600 mL sausage, 20 sausages per box.

Storage

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

Recommendations

- ▶ MonniSeal PU25 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
- ▶ Do not use MonniSeal PU25 with permanent water immersion.

Health & Safety

MonniSeal PU25 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.

Legal disclaimer

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VER.1.2019