

MEGASEAL PU1

Single Component Flexible Polyurethane Sealant

Description:

MEGASEAL PU1 is a high quality, elastomeric, non-sagging, UV resistant, single component, general purpose moisture cure polyurethane joint sealant. When cures it forms a flexible, weather proof rubber like seal, weather proof joint sealant with superior adhesion with most substrates. MEGASEAL PU1 is suitable for movement and expansion joints internal and external applications.

Uses:

MEGASEAL PU1 can be used in a wide range of applications in the construction industry including:

- Internal and external expansion and control joints with up to 25% movement.
- Perimeter caulking for parapets, windows, doors, aluminum panels, metal cladding, wooden frames, etc.
- Car parks expansion joints.
- Joints in storage areas and hangers.
- Movement joints of high rise towers.
- Precast panels joints.
- Movement joints in subways and bridges.

Advantages:

- Highly resilient with excellent recovery characteristics.
- Provides permanent and uniform watertight seal.
- Excellent adhesion to most joint substrates.
- Has exceptional movement capability.
- Fast curing skin formation which significantly reduces dirt collection.
- Resistant to wide range of moderate chemicals.
- Can be applied for both horizontal and vertical surfaces.
- Durable and low maintenance cost.
- Interior and exterior application.
- Compatible with water-based paints.

Instructions for Use:

Surface Preparation:

Proper surface preparation is essential to grant a good bonding between the sealant and the substrate. All the side surfaces of the joint must be dry, smooth, clean, free from dust, laitance or loose

materials. To ensure proper cleaning, it is highly recommended to use compressed air or a wire brush in order to remove further dirt, oil stains and other contaminants. New concrete or cementitious surfaces should be allowed to cure and have moisture content not exceeding 4%.

Surface defects at edges and corners of the joints should be repaired using appropriate MATEX Repair Products. Allow the repairing product to cure as specified in the data sheet. Ensure that the side surface of the joint is totally dry before applying the primer. On sound, clean, well prepared totally dry joint surfaces, primer is not required. In case that primer is needed, use MEGAPRIME for porous surfaces and MEGAPRIME SP for non-porous surfaces. Apply the primer to both side of the joint faces prior to installation of backer rod or bond breaking. Apply a thin coat of primer as too much primer may act as bond breaker. Allow the primer to be tack free prior to application of the sealant.

Joint Design:

- MEGASEAL PU1 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.

Application:

MEGASEAL PU1 is ready to use in a self-contained sausage which can be loaded onto a barrel gun. Apply a masking tape to the sides of the joint before priming, to preserve the joint edges from contamination. In order that joint sealant function correctly, the sealant must bond only to the sides of the joint and not to the bottom. Ensure that the expansion joint filler and/or backing rod is tightly packed and devoid of any gaps or spaces at the base of the sealing slot. The use of a bond breaker tape is not required in expansion joints containing polyethylene foam joint filler. For construction or contraction joints, polyethylene bond breaker tape must be used.

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Apply MEGASEAL PU1 with a manual extrusion gun. Apply the sealant into the joint by placing the nozzle of gun into bottom of the joint and fill the entire space. Keep the nozzle in the sealant and continue on with a steady flow of material preceding the nozzle to avoid air entrapment. Once the sealant has been applied in place a suitable rounded tool can be used to achieve a smooth profile. Remove the masking tape before the sealant dries.

Standards:

- ASTM C920, Type S, Grade NS, Class 25
- ASTM C681, D412, D2240
- BS 5212: PART1
- ISO 11600 CLASS F25LM, ISO 8339, 7390, 868

TECHNICAL PROPERTIES	
Appearance	Thixotropic Paste
Color	Grey, white, beige. Other colors upon request
Solid Content	100%
Density	1.24 ± 0.03 kg/lit
Temp. of Application	+5°C to 35°C
Setting Time@ 25°C	18 hours
Cure Time (+23°C/50% R.H)	2-3 mm / 24 hrs
Skinning Time (+23°C/50% R.H)	60 min
Movement Capability	±25%
Elongation at Break (ASTM D412)	500%
Modulus of Elasticity (+23°C/50% R.H) (ASTM D412)	0.4 N/mm ² at 100% elongation
Elastic Recovery (+23°C/50% R.H)	>70%
Shore A Hardness (+23°C/50% R.H) (ASTM D2240)	30 after 28 days
Service Temp.	-30°C to +70°C
VOC	40 g/l

*Values indicated may vary depending on the environment and conditions of the material. Figures given are tested according to standard laboratory conditions.

Packaging:

MEGASEAL PU1 is available in 600 ml universal pack sausage.

Consumption:

The approximate linear meter consumption per liter can be determined from the following formula

Sealant consumption per linear meter
= W x D/1000

W: joint width (mm), D: Joint Depth (mm)

Storage Conditions:

Store in original packing in dry conditions away from direct sunlight. Temperature of storage area not to exceed 25°C.

Shelf Life:

MEGASEAL PU1 can be utilized within 9 months of production date if stored in proper conditions in an unopened original packing.

Cleaning:

Clean tools immediately after application with ARMOSOLVENT. Hardened materials can only be removed mechanically.

Remarks:

- MEGASEAL PU1 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 MEGASEAL PU1 with permanent water immersion.
- Do not apply MEGASEAL PU1 on rubber, bituminous, or EPDM substrates.

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Health and Safety:

- Avoid contact with eyes and skin. Wear suitable protective clothing such as coveralls, goggles, dust mask and gloves. Use barrier cream. Ensure that there is adequate ventilation. Do not breathe vapor or spray mist.

FIRST AID:

Eyes:	In the event of accidental splashes, flush with warm water and seek medical advice.
Skin:	Wash skin thoroughly with soap and water
Inhalation:	Remove to fresh air, keep patient rested
Ingestion:	Do not induce vomiting. Seek immediate medical attention.

For further safety information, please refer to MGEASEAL PU1 Material Safety Data Sheet.

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