Technical Data Sheet

MEGASEAL PU1

Single Component Flexible **Polyurethane Sealant**

Description:

MEGASEAL PU1 is a high quality, elastomeric, non-sagging, UV resistant, single component, general purpose civil engineering polyurethane moisture cure 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 joints and expansion joints at internal and external applications.

Applications:

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, aluminium 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:

- Resistant to wide range of moderate chemicals.
- Stable colours.
- Durable and low maintenance cost.
- Interior and exterior application.
- 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.

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 inconsistencies.

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 surface 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 a 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 packing rod is tightly packed and devoid of any gaps or spaces at the

MEGASEAL PU1

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.

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 with the sealant dries.

Standards:

MEGASEAL PU1 conforms to:

- ASTM C-920, Type S, Grade NS, Class 35, ASTM C-661
- BS 5212: PART1
- ISO 11600 CLASS F25LM, ISO 8339, ISO 7390, ISO 868

TECHNICAL PROPERTIES		
Appearance	:	Thixotropic Paste
Color	:	Grey, white, beige. Other colors upon request
Compression	:	50% thickness in the initial state: Recovery is 80/84%
Solid Contents	:	100%
Density	:	1.3 kg / lt
MAF	:	±25%
Pot Life @ 25°C	:	1 hours 30 minutes
Setting Time	:	18 hours @ 25°C
Cure Time	:	2 mm / 24 hrs
Elongation at Break	:	150%
VOC	:	40 g/l
Temp. of application	:	+5°C to 35°C
Skinning Time @ 25°C	:	Approx. 1 ½ hours
Shore A Hardness	:	25
Modulus at 100%	:	0.30 Mpa.S
Service Temp.	:	-5°C to +80°C

Cleaning:

Clean tools immediately after application with water.

Packaging:

MEGASEAL PU1 is available in 600 ml universal pack sausage.

Coverage:

MEGASEAL PU1 coverage dependents on joint dimensions. It is calculated in volume as:

Consumption of sealant (ml) per linear meter = joint width (mm) x joint depth (mm) x 1 LM
1 liter = 1000 ml

Shelf Life:

MEGASEAL PU1 can be utilized within 12 months of production date if stored in proper conditions in unopened original packing.

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.

Storage Conditions:

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

Health and Safety:

- Use goggles and gloves during application.
- Avoid contact with eyes or skin.

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