



SpECseal PU25 FR

ENGINEERED SOLUTIONS

1 PART, FIRE RESISTANT POLYURETHANE CONSTRUCTION SEALANT



Medium Modulus



UV Resistant



Adhesion

DESCRIPTION

SpECseal PU25 FR is a one part high performance polyurethane sealant, which cures with atmospheric moisture to form a firm and flexible rubber watertight seal for moderate movement and control joints. SpECseal PU25 FR can be used in both horizontal and vertical applications.

TYPICAL USES

- Concrete expansion joints
- Precast concrete cladding
- Brick cladding
- Perimeter caulking (windows, doors, aluminium frames)
- Expansion and constructions joints in water retaining structures
- Curtain wall joints
- Parapet walls

ADVANTAGES

- Highly resilient with excellent recovery characteristics
- Provides permanent and uniform watertight seal
- Excellent adhesion to most building substrates. Can be used without the use of primer in new substrates
- Non-toxic. Can be used in potable water reservoirs and swimming pools
- Easy to apply, one component sealant. No mixing required
- Overpainting can be done (Rigid paints may crack)

STANDARD COMPLIANCE

ASTM C 920
Type S, Grade NS, Class 2S

TECHNICAL DATA

PROPERTIES	VALUES
Colours	Grey, white, beige and ivory. Other colours subject to minimum quantity
Movement accommodation factor	25%
Consistency	Thixotropic
Specific gravity @ 20°C	1.45 ± 0.05

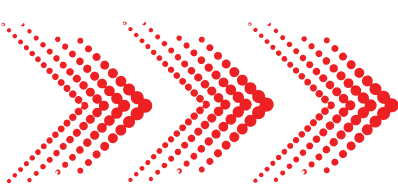


Paint compatibility	Water-based paints. <i>Note: Paints may crack with excessive joint movement.</i>
Skin formation time (23°C %50 R.H.)	120 minutes
Curing speed (23°C %50 R.H.)	3mm/day
Shore A hardness ASTM D2240	35 ± 5
Modulus at %100 Elongation	0.40 ± 0.2 MPa
Temperature resistance	-30 to +70°C
Tensile strength ASTM D412	1.50 ± 0.10 MPa

CHEMICAL RESISTANCE

PROPERTIES	VALUES
Effects of accelerated ageing @300 hours. ASTM 6793	No Deterioration
VOC - US EPA24	<5g/L
Shrinkage	<5%
Ultraviolet light	Good
Dilute acids and bases	Medium
Salt water	Excellent





APPLICATION INSTRUCTIONS

JOINT PREPARATION

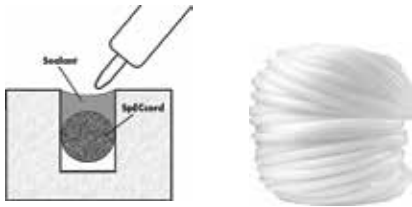
The joint edges must be clean, dry and free from oil, loose particles, cement laitance and other contaminants which may affect the adhesion. A thorough wire brushing, grinding, sand blasting or solvent cleaning may be required to expose a clean and sound substrate. When applied on glazed surfaces like ceramic or terrazzo tiles or porcelain enamel joint surfaces, the glaze should be removed by abrading with sandpaper or wire brush.

BACK-UP MATERIAL

A bond breaking backing rod (SpECcord) shall be inserted into all movement joints to avoid a three sided adhesion. A bond breaking tape may be applied to joints where the depth does not allow the application of the backing rod.

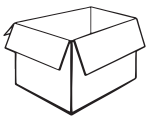
APPLICATION

SpECseal PU25 FR 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 continued to the top. Once the sealant has been installed a suitable rounded tool can be used to achieve a smooth hour glass profile. **DO NOT USE SOAPY WATER SOLUTION.** Any masking tape applied should be removed immediately after the sealant is installed.

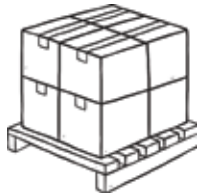


PACKAGING AND YIELD

SpECseal PU25 FR is supplied in 600ml sausage sachets.



20 sausages/box



96 boxes/pallet

One 600 sachet will fill 6 LM of 10mm x 10mm joint. For larger joints a width-to-depth ratio of 2:1 should be maintained. In open joint use SpECcord backer rods to keep a uniform joint depth.

COVERAGE

Length of joints in meters filled per 600 ml sausage of SpECseal PU25 FR

Depth [mm]	Width [mm]				
	6	10	15	20	25
6	16.6	10	6.7		
10		6	4	3	
15			2.7	2	1.6
20				1.5	1.2
25					1

EQUIPMENT CLEANING

SpECseal PU25 FR should be removed immediately from tools using solvent (white spirit) before curing. Cured material can only be removed by mechanical means.

APPLICATION TEMPERATURE RANGE

Minimum +5°C

Maximum +40°C

STORAGE AND SHELF LIFE

SpECseal PU25 FR has a shelf life of 12 months when stored in original packaging at a maximum temperature of 30°C. If stored at high ambient temperatures or at high humidity the shelf life will be reduced by as much as 50 - 60%.

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