



SpECseal PU40

ENGINEERED SOLUTIONS

1 PART, HIGH MODULUS POLYURETHANE CONSTRUCTION SEALANT



High Modulus



UV Resistant



Adhesion

DESCRIPTION

SpECseal PU40 is a one part high performance polyurethane sealant, which cures on absorption of atmospheric moisture to form a firm and flexible rubber watertight seal for moderate movement and control joints. SpECseal PU40 can be used in both horizontal and vertical applications.

TYPICAL USES

- Versatile sealing and bonding for building industry applications.
- Effective sealing of shrinking joints in concrete floors.
- Secure bonding of roof tiles.
- Diverse construction sector bonding solutions.
- Robust elastic bonding for vibrating constructions.
- Structural bonding tailored for vibrational stability.

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)
- Chem. resistance: sewage, sabkha, mineral acids & alkalis

TECHNICAL DATA

PROPERTIES

VALUES

Colours
Black, grey, white, beige and ivory.
Other colours subject to minimum quantity

Movement accommodation factor 25%

Consistency Thixotropic

Specific gravity @ 20°C 1.50



Elongation at break ASTM D412	150%
Solid Content	100%
Paint compatibility	Water-based paints. <i>Note: Paints may crack with excessive joint movement.</i>
Skin formation time (23°C %50 R.H.)	6 hours
Curing speed (23°C %50 R.H.)	3mm/day
Shore A hardness ASTM D 2240	40 ± 5
Modulus at %100 Elongation (ISO 8339)	0.4 MPa
Temperature resistance	0 to 90°C

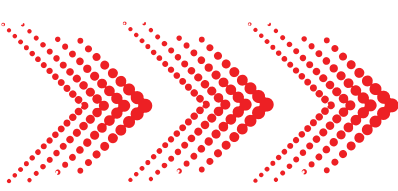
CHEMICAL RESISTANCE

PROPERTIES

VALUES

Ultraviolet light Good
Dilute acids and bases Medium
Salt water Excellent





APPLICATION INSTRUCTIONS

JOINT PREPARATION

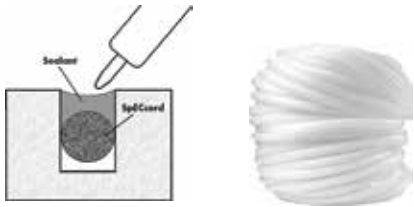
The joint edges must be clean, dry and free from oil, loose particles, cement laitance and other contaminants which may affect the adhesion. A thorough wire brushing, grinding, sand blasting or solvent cleaning may be required to expose a clean and sound substrate. When applied on glazed surfaces like 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.

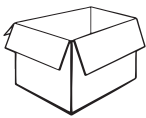
APPLICATION

SpECseal 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 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.

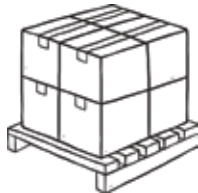


PACKAGING AND YIELD

SpECseal PU40 is supplied in 600ml sausages.



20 sausages/box



96 boxes/pallet

For submerged conditions a firm backing and good adhesion to joint sides are essential. Concrete must be fully cured (4 weeks) and use of SpECtop Primer EP121 is recommended.

One 600 sausage 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 PU40

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 PU40 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 PU40 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%.

HEALTH AND SAFETY

SpECseal PU40 contains isocyanate and should not come into contact with skin or eyes. If swallowed, **DO NOT** induce vomiting. Seek medical attention immediately. Wear protective gloves and goggles.

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Whilst the information and/or specifications given are, to the best of our knowledge, true and accurate, no warranty is given or implied in connection with any recommendations or suggestions made by us, our representatives, agents or distributors as the conditions of use and labour involved are beyond our control.

If it is proven that the product does not perform as described in our TDS, SpEC's liability extends solely to the free replacement of product, once the claim has been accepted after due investigation by SpEC. SpEC will not entertain any claims involving any form of consequential costs or damages such as shipping costs, custom duties, damages to third parties, damages to structures, penalties from delay of a project or any other form of consequential damage.

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