

Donseal PU445 SL

One component elastomeric self-levelling polyurethane sealant [Formerly known as Flexseal SL445]



DESCRIPTION

Donseal PU445 SL is a one component self leveling polyurethane based elastomeric sealant which cures under the effect of atmospheric humidity to form a flexible and resistant joint.

APPLICATIONS

Donseal PU445 SL is used to seal horizontal expansion joints expansion joints in concrete and cementitious slabs such as:

- » Driveways, garages, sidewalks and pavements.
- » Civil structures.

ADVANTAGES

- » Single component.
- » Easy to apply.
- » Pourable self-leveling sealant.
- » UV resistant.
- » Solvent free.
- » Excellent adhesion to concrete.
- » Convenient packaging.

METHOD OF USE

SUBSTRATE PREPARATION

- » Concrete must be even, clean, dry, free of dust, oil, grease and any other contaminants that could harm bonding. All traces of poorly adherent paints or coatings should be systematically removed beforehand.
- » It is recommended to clean concrete with a metal brush and to dust it off using air blowers.

PRIMING

- » Donseal PU445 SL generally has strong adhesion to common clean, dry and sound substrates without primers. However, for stronger adhesion, Strongcoat Primer or Flexprime Universal can be used on porous and nonporous surfaces in order to achieve optimum adhesion strength.
- » Using a small brush apply one thin coat at the joint sides and avoid over priming. Apply Donseal PU445 SL over the primed surface while still tacky to achieve optimum adhesion strength.

TECHNICAL PROPERTIES:

Colour:	White
Density @ 20°C:	1.40 ± 0.05 g/cm ³
Hardness Shore A: ASTM D2240	30 ± 5
Application temperature:	5 up to 50°C
Tack-free time: ASTM C679	1.5 – 2.5 hr @ 23°C & 50% RH
Cure rate:	2 mm/day ± 0.05 @ 23°C & 50% RH
Final cure:	7 days
Elongation: ASTM D412	≥ 350%
Tensile strength: ASTM D412	≥ 1 MPa
UV resistance:	Good

APPLICATION

The recommended application temperature range is 5°C to 50°C. For cold weather application, store the product in a heated area at 20°C for 24 hours prior to use.

Install polyethylene joint backing rod to control the sealant depth. For optimum performance in expansion joints, the ratio of width to depth of the sealant should be 2:1. Minimum sealant depth should however be 5 mm.

For optimum performance, Donseal PU445 SL should be applied when the joint is at mid-point of its designed expansion and contraction.

Use a utility knife to cut/trim the nozzle cap diagonally so that it fits the joint width. Open the tip of the cartridge by using a pin to cut the seal (Caulking guns usually have a pin tool to be used).

Extrude and dispense firmly into the joint while ensuring complete contact between the applied sealant and joint walls. Maintain a steady flow of sealant to avoid air entrapment, and avoid overlapping the sealant. Tooling and finishing should be carried out immediately after the application of the sealant.



Donseal PU445 SL

LIMITATIONS

- » Can be applied by a manual or pneumatic gun. This product should be used within 24 hours of opening the cartridge; otherwise, the sealant could harden in the cartridge.
- » Do not apply at a temperature under 5°C. In cold weather, store the cartridges at 20°C before use.
- » Not recommended for unsound substrates.

CLEANING

Clean tools and equipment first with paper towels and then wipe by using Acetone, xylene or other suitable solvents.

PACKAGING

Donseal PU445 SL is available in 300 ml tubes.

CONSUMPTION IN JOINTS

(Linear meters per 300 ml cartridges)

Width Depth	5 mm	10 mm	13 mm	15 mm	20 mm	25 mm
5 mm	12.00					
7.5 mm				2.67		
10 mm		3.00			1.50	
12 mm						1.00
13 mm			1.78			

STORAGE

Donseal PU445 SL has a shelf life of 12 months for the 300 ml cartridges from date of manufacture if stored at temperatures between 5°C and 25°C in the original, unopened packaging.

If these conditions are exceeded, contact DCP Technical Department for advice.

CAUTIONS

HEALTH AND SAFETY

If Donseal PU445 SL comes into contact the eyes, flush with copious volumes of cold water and obtain medical attention.

Product is non-hazardous once cured.

For further information, refer to the Material Safety Data Sheet.

MORE FROM DON CONSTRUCTION PRODUCTS

A wide range of construction chemical products are manufactured by DCP which include:

- » Concrete admixtures.
- » Surface treatments
- » Grouts and anchors.
- » Concrete repair.
- » Flooring systems.
- » Protective coatings.
- » Sealants.
- » Waterproofing.
- » Adhesives.
- » Tile adhesives and grouts.
- » Building products.
- » Structural strengthening.

Note:

We endeavour to ensure that any information, advice or recommendation we may give in product literature is accurate and correct. However, because we have no control over where and how products are applied, we cannot accept any liability arising from the use of the products.