

# Donseal® PU440

One component, non sag, elastomeric polyurethane sealant with high tear and weather resistance



## DESCRIPTION

Donseal PU440 is a one component non sag polyurethane sealant that cures by reacting with air humidity to form a tough and highly elastic low modulus sealant. Donseal PU440 has a very wide service temperature range.

## APPLICATIONS

Donseal PU440 is suitable for vertical and horizontal joints in the following applications:

- › General sealing of construction and expansion joints.
- › Flooring joints.
- › Basement walls.
- › Precast concrete elements.
- › For concrete, wood, marble, aluminum, steel, ceramic, gypsum boards, etc.

## STANDARDS

Donseal PU440 complies with:

- › BS EN 15651-1, F-EXT-INT-CC, 25 HM & ISO 11600, Type F, 25 HM.
- › BS 5212:1990, Type N and F.

Environmental:

- › LEED® EQc 4.1 SCAQMD, Rule 1168.

## METHOD OF USE

### SURFACE PREPARATION

All substrates should be clean, dry, free from dust, oil, grease and any contaminations that could effect the bonding.

If the substrates need to be cleaned, use methyl ethyl ketone (MEK), acetone or grease remover. Always be sure that the substrates are dry before the application.

### PRIMING

Donseal PU440 generally has strong adhesion to common clean, dry and sound substrates without primers. However, Donseal Prime PU can be used on porous substrates in order to achieve optimum bond strength.

For joints of porous substrates which will be continuously submerged in water, it is recommended to use Donseal Prime PU.

## TECHNICAL PROPERTIES:

Colour:	Available in various colours
Density:	1.19 ± 0.03 g/cm <sup>3</sup>
Application temperature:	5 to 50°C
Service temperature:	-30 to 80°C
Shock temperature:	110°C
Curing rate:	≈ 2.5 - 3.5 mm/day
Tack free time:	Up to 4.30 hr @ 23°C & 50% RH
Shore A Hardness:	40 ± 5 @ 21 days
Elongation at break:	≥ 700% @ 7 days
Tensile strength:	≥ 1.9 MPa
Adhesion in peel:	≥ 70 N
Modulus @ 100%: ISO 8339	0.4 MPa
Effects of accelerated weathering: ASTM C793	No cracking
Effects of heat aging: ASTM C1246	Pass at 70°C
Water immersion*: ASTM C1247	Passes 10 weeks with movement cycling
Thermal resistance:	Passed 100 days @ 80°C
Movement accommodation:	± 25%
VOC:	< 75 g/ltr

\* Tested without primer.

## APPLICATION

The recommended application temperature range is 5°C to 35°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.

Tooling and finishing should be carried out immediately after the application of the sealant. For optimum performance, the ratio of width to depth of the sealant should be 2:1. Minimum sealant depth should however be 5 mm.

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## REMAKRS

- » Not recommended for unsound substrates.
- » Although Donseal PU440 is generally paintable, it is recommended test for the specific paint compatibility.
- » Long exposure to UV, will reduce surface gloss, but will not affect sealant performance.

## CLEANING

All tools should be cleaned immediately after finishing with paper towels and then wipe by using Acetone, xylene or other suitable solvents.

## PACKAGING

Donseal PU440 is available in 600 ml sausages and 300 ml cartridges are available on request.

## CONSUMPTION IN JOINTS

(Lineal feet per 600 cc sausage)

Width \ Depth	5 mm	10 mm	15 mm	20 mm	25 mm
5 mm	24	12			
10 mm			4	3	2.4
15 mm					1.6

## STORAGE

Store in original unopened packages at a temperature between 5°C and 25°C in a dry place.

## SHELF LIFE

12 months if stored under good condition.

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

## CAUTIONS

### HEALTH AND SAFETY

If Donseal PU440 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.

### FIRE

Donseal PU440 is nonflammable.

### 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.

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### 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.

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