



BITU-PU 400

One Component Polyurethane Modified Elastomeric, Anti-bacterial, High movement, medium modulus, low VOC, UV resistant, heavy rain resistant, High Performance Jointover coat able and trafficable Sealant

Product Description

BITU -PU 400 is high performance one component speed curing polyurethane anti-bacterial based elastomeric, High movement, medium modulus, low-VOC, UV-stable, high dust resistant, heavy rain resistant, over coat able, Non-sag and trafficable sealant that adhere strongly to expansion and control joints, precast concrete panel joints, precast and pre-stressed concrete components (PCI) , perimeter caulking (windows, doors, and panels), aluminum, masonry and vinyl sliding. It is formulated to offer a non-slump seal in having a good range of colors. BITU -PU 400 is high performance one component speed curing polyurethane based elastomeric sealant. It is formulated to offer a non-slump seal in good range of color available

Uses

BITU PU-400 is formulated as elastomeric joint sealant for:

- Sealing dynamically moving joints such as expansion and control joints.
- Sealing most building material including concrete, glass, wood, stone, metal, and anodized aluminum.
- Joining Underground piping joints where mineral oil and petroleum oil resistance is required.
- Walls and ceilings
- PCI (precast and pre-stressed concrete components).
- Sealant for prefabricated concrete elements.
- Panel walls.

Product Features

- Easy to apply by application gun.
- Excellent resistance to mineral oils and petroleum oils.
- Over coat able
- Interior and exterior use and trafficable
- High elasticity.
- Excellent recovery.
- High resistance to weather like heavy rains and dust storms.
- Excellent UV resistance and high color stability, thermal resistance.
- Excellent at extreme low temperatures like in inside cold storages.
- Anti-bacterial
- Heavy rain resistant.
- Durable seal.
- Non-staining.
- Primer free.
- Good chemical resistance as diluted acids and alkalis.
- Formulated for the Middle East & tropical Climates.



Standards

BITU -PU 400 is formulated to comply with all requirements of:

- * Federal specification TT-5-001543A, type II, Class A, Type Non-sag.
- * ASTM C 920, Type S , Grade NS, Class 25 , Use NT , M, A, G and O

Technical Properties

Appearance	colored, Non-sag Paste-like liquid
Specific Gravity @ 20 °C (g/cm ³)	1.40±0.05
Hardness (Shore-A)	25-30
Movement Accommodation Factor	±25 %
Elongation at Break	800 %
Elastic recovery	90 %
Tensile Strength	1.5 N/mm ²
Skin Formation @ 25 °C	80 minutes
Service temperature range	-20 to 85 °c
Application Temperature	5°C to 75 °C
Adhesion to Concrete	No adhesion loss
Shrinkage	None
Speed cure (23° 50% RH)	2.5 – 3 mm /24 hrs
Peel Strength	15 N/mm ²
Chemical resistance	
Acids & alkalis	Excellent
UV Resistance	Excellent
Saline solutions	Excellent

Coverage

The following table is a guide for coverage
(Meter / liter)

Joint width (mm) Joint depth (mm)	6.4	9.5	12.7	15.9	19	22.2	25.4
6.4	24.8	16.5	12.4	9.8			
10				6.6	5.5	4.7	4.1
13					4.1	3.5	3

Guide for Applications

Joint Preparation

The Joint profile including arises should be clean, sound dry and free from any de-bonding contaminates to the substrate.



Joint Design

	Maximum	Minimum
Joint width	50 mm	5 mm
Joint depth	25 mm	5 mm

For common applications:

Joint width	Width to depth ratio
Up to 10 mm	1:1
10 to 50 mm	2:1

Application

BITU -PU 400 should be applied by conventional sealant gun ensuring enough sealant is applied to correct width to depth ratio for the joint. After application the sealant must be tooled into place to ensure adhesion with the joint profile is achieved. Finish using a solution of soap and water onto a gloved finger or tooling stick.

Cleaning

Clean immediately the tools & equipment or spillages with solvent (Toluene or Xylene) before curing.

Packaging

BITU -PU 400 is supplied in 600 ml sausages.

Storage & Shelf-life

BITU -PU 400 shall be stored in normal conditions in its original packaging at temperature between 5° to 25° c. shelf life is 18 months if stored properly.

Health and Safety

- BITU -PU 400 is non-toxic and non-flammable and non-hazardous.
- Avoid contact with the skin and eyes.
- If ingested, do not induce vomiting. Seek medical attention immediately.