

# ShaliPolyUrea<sup>®</sup> 40

2K Liquid Applied Hybrid PolyUrea System



STP Limited

## Description

**ShaliPolyUrea<sup>®</sup> 40** is a two component, elastic, cold applied polyurethane liquid membrane system for water proofing and protection.

It conforms to ASTM C836 and C 898.

## Characteristics - Physical

Composition	Polyurethane resin and Catalyst	Resistance to water Pressure	No Leak, 1 M water column 24 hrs
Solid content, %	100	Mixing ratio	Unit pack
Tack Free Time, hrs	2 ± .5	Service Temperature °C	(-) 40 to (+) 120
Theoretical Coverage, m <sup>2</sup> / mm WFT, L *	1	Pot Life @ 30 °C, RH 60%, minutes	40
Recoat time, hr	6 – 8	Trafficable time, hr	After 24

\* Depending upon surface condition.

## Characteristics - Technical

Elongation at Break (%)	ASTM D-412	400 ± 50
Hardness (Shore A)	ASTM D-2240	70 ± 5
Tensile Strength (MPa)	ASTM D-412	8 ± 0.5
Water Absorption (%)	ASTM D-471	< 0.5
Tear strength, MPa	ASTM D-624	> 12

## Application

- Bridge deck waterproofing.
- Roofs and terraces.
- Podium.
- Retaining Walls.
- Swimming Pool.
- Tunnels.

## Advantages

- Easy to apply.
- Excellent adhesion / tensile
- Resistant to water, frost, mild acid and alkali.

## Application Methodology

### ➤ Surface Preparation

- Remove all loose gravel, dirt, oil, grease and foreign matter by jet of dry air and clean the surface mechanically or by grinding to make it smooth before application. Ensure that new concrete must be 28 days old.
- Repair all cracks by cutting “V” groove and fill with PMC mortar prepared in the ratio of ShaliCrete : Cement : Sand (1 : 2 : 5).
- Provide 50 mm x 50 mm coving made out of PMC mortar as above.

- Ensure that the moisture content in the prepared surface does not exceed 5% immediately before application of **ShaliPolyUrea® 40**.

#### ➤ **Material Preparation**

- Stir Component B (Catalyst) by a slow speed mixture (approx. 400 rpm) at least for five minutes fitted with a suitable mixing paddle to ensure a homogenous mix.
- Mix Component A into Component B.
- Stir for at least 5 minutes with a suitable mixing paddle to ensure a homogenous mix.
- After stirring, wait for the product to settle in order to let entrapped air escape.

#### ➤ **Application of Material**

- Prime the surface with ShaliPrime WP SB a mixture and apply @ 400 gm / m<sup>2</sup> of the mixture and allow it to touch dry. ShaliPrime WP SB, a tar extended waterproofing primer, imparts anti-root properties to the waterproofing system.
- Apply 1<sup>st</sup> coat of **ShaliPolyUrea® 40** @ 0.65 kg / m<sup>2</sup> by brush / roller / airless spray while the primed surface is tacky.
- Allow 1<sup>st</sup> coat to dry for 6 - 8 hr.
- Apply second coat of **ShaliPolyUrea® 40** @ 0.65 kg / m<sup>2</sup> by brush / roller / airless spray for final DFT of 1000 micron in two coats (theoretical coverage depending on surface conditions).

#### ➤ **Protection Layer**

- For best result, spread ShaliGeoText 150 gsm with overlap of 50 mm in both directions on fully cured surface.
- Protect surface with 50 mm PCC admixed with ShaliPlast LW+ and a gradient of 1 : 100.

### **Health & Safety**

- Avoid contact with skin / eyes, and avoid swallowing.
- Ensure adequate ventilation and avoid inhalation of vapor.
- Wear suitable protective clothing, gloves and eye protection.
- In case of contact with skin, rinse with plenty of clean water, then cleanse with soap and water. Do not use solvent to clean the contacted area.
- In case of contact with eyes, wash immediately with plenty of clean water and seek medical advice.
- If swallowed seek medical attention immediately. Do not induce vomiting.

### **Packing**

Available in 10 L combo pack.

### **Storage**

Store in a cool dry place under shed away from heat.

### **Shelf Life**

6 months in original unopened sealed condition.

---



**Advisory Cell**  
STP Limited  
**+91 81302 81114**  
Waterproofers to the Nation

**STP's Businesses**  
Waterproofing & Insulation  
Road Surfacing  
Pipeline Coating  
Protective / Anti-Corrosive Coating  
GARA (Grouts & Admixtures)  
Sealant & Additives  
Repairs & Rehabilitation  
Epoxy Flooring

