

# CIKOflex TPU

## Two components liquid applied elastomeric waterproofing coating

### Description

CIKOflex TPU is two components solvent free, liquid applied tar extended Polyurethane water proofing coating for horizontal and vertical applications on concrete; mortar and cement block masonry surfaces. The cured material provides excellent elastomeric properties and can be used on a wide range of porous and non-porous substrates. It forms a seamless and watertight elastomeric membrane after curing.

### Properties

- Solvent free, Cold applied by brush, roller or spray.
- Elastomeric and flexible seamless membrane.
- High strength and elongation.
- High abrasion resistance.
- Good chemical resistance.
- Suitable for applications on irregular surface.
- Resistant to salts, oil and alkaline solutions.
- Provides excellent bond strength on a wide range of substrates.
- Cured material is non-toxic and non-flammable.
- Easy to repair damaged areas.

### Application area

CIKOflex TPU is a high quality waterproof membrane coating for,

- Roof waterproofing.
- Wet area waterproofing beneath bathroom and kitchen tiles.
- Terrace and roof garden waterproofing.
- Use as moisture barrier coating under cladding.

### Applicable standards

- Complies with Qatar Construction Specifications

### Physical properties

Form	Two component system Part-A : Liquid Part-B : Liquid
Colour	Black and grey
VOC	<50g/l
Solids	>90%
Mixing ratio	Pre-weighed packs
Pot life @ 25 °C	30-40 minutes
Drying time	24 hours
Total curing	7 days
Service temperature	-5°C to +80°C
Elongation % @ break ASTM D 412	>350
Tensile strength N/mm2 ASTM D-412	>4
Bond Strength N/mm2 ASTM D-412	>1.5
Shore A Hardness ASTM D2240	70±3
Water Penetration BS EN 12390	No water penetration after applying water pressure of 200KPa @ 72 hours

### Coverage

CIKOflex TPU will provide coverage of 1m<sup>2</sup> per litre at 1mm thickness.

Note : The coverage depends on the substrate condition and finish. Consult our technical service department for assistance.

### Application instructions

#### Surface preparation

The substrate shall be free from all loosely adhered particles, efflorescence, dust, oil, grease or any other contamination. In case of oil spillage, proper treatment should be carried out on the surface. All pot holes and wider cracks must be repaired using suitable material. The surface must be free from dampness and standing water.

Oil grease, varnishes rust, dust, mould on metal surfaces shall be removed by wire or stiff brushing and grit blasting than wipe with CIKOSOL .

### Priming

For immersed area, substrate should be primed using epoxy primer.

For normal application, diluted CIKOflex TPU with CIKOSol can be used as primer.

The primer should be left to dry before applying CIKOflex TPU.

Note: New concrete or cementitious surfaces should be at least 28 days old and have moisture content of the substrate less than 4%

### Application

CIKOflex TPU is two component systems and requires proper mixing with a slow speed drill-paddle assembly.

The contents of base (part A) should be mixed thoroughly to disperse any possible settlement. The entire content of hardener should be stirred and added to base container.

Mix thoroughly for 2-3 minutes taking extra care to avoid air entrapment, Mix until a homogenous mixture is attained.

Improper mixing may result in product failure once mixed the material must be used in its pot life.

On the primed surface Apply CIKOflex TPU using brush, roller or spray. Subsequent layers could be done only after first layer has been cured tack free.

Apply Second coat of CIKOflex TPU over first coat at the rate of 0.5 litres per square meter.

Care should be taken to coat the surface without leaving any gap. In below ground structures, wet areas and roofs, the application thickness should be min 1.2 mm.

A layer of fibre glass mesh can be used for additional strength.

Broadcast CIKOquartz over the final wet coat of CIKOflex TPU , before fixing and installing tiles .Tiling and floor installation should be carried out as soon as possible after full curing of membrane is established .

### Packaging

CIKOflex TPU is available in 4 ltr and 15 ltr can.

### Shelf life

CIKOflex TPU has a shelf life of 12 months if stored in accordance with the recommended storage conditions.

### Storage

CIKOflex TPU should be stored in original packing in a cold and dry storage at temperatures between 5 – 25<sup>0</sup>C.

### Precautions

- Do not to use on surfaces with a risk of rising dampness.
- Don't apply the product with imminent rain forecast.
- Don't use more material than can be used within the pot life of mixture.
- Incorrect assessment treatment of cracks may lead to a reduced service life and reflective cracking.
- Moisture content of substrate should be less than 4%
- Avoid using in Exposed areas.
- The application temperature shall be between 5–40<sup>0</sup>C and surface temperature must be +3<sup>0</sup>C above dew point.

### Health & safety

CIKOflex TPU should not come in contact with eyes or to be swallowed. Ensure adequate ventilation and avoid inhalation of vapours.

Applicator should wear suitable cloths, gloves and goggles. Use barrier creams recommended providing additional skin protection. If comes in contact with eyes flush with plenty of fresh water and seek medical advice.

Refer Material Safety Data Sheet for further details.

### Technical Support

For further technical support, do not hesitate to contact CIKO team at any time as CIKO offers on and off site services to end users, specifier and contractors.

### More from CIKO Middle East

A wide range of construction chemical products are manufactured by CIKO Middle East which includes:

- Concrete admixtures and additives
- Waterproofing and damp proof coatings
- Surface treatments
- Flooring and toppings
- Grouts and anchors
- Tile adhesives and grout
- Concrete repair materials
- Adhesives and bonding agent
- Protective coating
- Joint Sealants and Moulding compounds
- Ancillaries

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Note: The information presented herein based on the best of our knowledge and expertise for which every effort is made to ensure its reliability. Although all the products are subjected to rigid quality tests and are guaranteed against defective materials and manufacture, no specific guarantee can be extended because results depend not only on quality but also on other factors beyond our control

