

Estoflex Solar 790

Hybrid Polyurea Waterproofing Membrane

Description

Estoflex Solar 790 is a ultra-fast spray applied hybrid polyurea, 100% solids pre-heated, flexible, two-component hybrid polyurea elastomeric, designed as a waterproofing and protective coating with excellent resistance to common chemicals. The seamless coating provides an elastic yet tear resistant surface for applications subjected to extreme wear and tear, strong impact and chemical exposure. As with all aromatics, over a period of time colour change will occur if exposed to UV rays. This will not have any negative effect on the physical properties of the product. It is suitable for outdoor applications and available in wide range of attractive colours.

If long term aesthetics and excellent UV resistant is require, then spray/roller apply **Estoflex Solar TC60** as top coat over **Estoflex Solar 790** at a rate of 0.3kg per m². This is recommended for exposed system only.

Uses

Estoflex Solar 790 is suitable for indoor and outdoor applications. It is suitable for the following applications:

- Indoor and outdoor floor slab
- Basement waterproofing
- Anti-corrosion coating for buried and submarine steel pipes
- Sewage treatment plants
- Secondary containment for chemical tanks
- Waste water tanks
- Roof Waterproofing

Advantages

- Environmental friendly – zero VOC
- Seamless and rapid curing.
- Attractive – provides a very smooth and aesthetic surface in a wide range of colours.
- Hard wearing – exhibits excellent abrasion resistance.
- Elastic – bridge cracks on concrete surface.
- Non-skid – excellent grip.
- Chemical resistant – very good resistance to many cleaning chemicals.
- Not sensitive to environmental conditions during application.
- Suitable for extremely temperature (-50°C to +130°C).

Standard Compliance

- **ASTM D412**
- **ASTM D4541**
- **AS/NZS 4548.5**

Physical Properties

Solids, %	100
No. of Coats	1 – 2
Mixing Ratio (by Volume)	1 to 1
Pot Life, sec	10 – 15
Tack Free Time, sec	5 – 15
Trafficable (light duty), min	3 – 5
Full Cure, hrs	12
Recommended Thickness, mm	Min 2.0
Water Resistance	Not permeable
Tensile Strength, N/mm ² ASTM D412	>13
Elongation, % ASTM D412	>300
Tear Strength, N/mm	>50
Shore A Hardness	85 – 95
Density at 25°C, Kg/L	1.1 – 1.2
Viscosity at 25°C	400 – 1,000 cps
Impact Resistance	Excellent
Adhesion to substrate, N/mm ² ASTM D4541	3.0
Static Crack Bridging	min 2mm

Application Instruction

Surface Preparation

Concrete surface should be clean and free from oil, grease and other contaminants. New concrete shall be allowed to cure for at least 28 days before application of primer. The ideal mode of surface preparation for concrete is abrasive blasting. Steel surface shall be free from oil and grease. The surface to be coated shall be dry abrasive blasted to SA2.5 in accordance with ISO 8501-1.

Priming

Recommended to apply **Estoprime PU Primer T-117** at rate of 0.2kg to 0.3kg/m² on the well prepared concrete substrate and allow to dry.

Application

This material is designed for application with heated, plural component airless spray equipment.

The transfer pump of at least 2:1 ratio is required to prevent cavitations of the proportioning pump.

Because of the relatively high viscosity and fast reactivity of this product, pressure of at least 1,600 psi is required to ensure satisfactory mixing.

Top Coat (For Exposed System Only)

Recommended to apply **Estoflex Solar TC60** at the rate of 0.3kg per m² as a top coat for **Estoflex Solar 790** protection for exposed area only.

High Pressure Spray Machine

Output Pressure	Up to 2,000 psi
Minimum Spray Pressure	1600 – 1800 psi
Temperature setting	60°C
Hose Temperature	50 – 55°C

Packaging

Estoflex Solar 790 Part A	210 kg drum
	225 kg drum
Estoflex Solar 790 Part B	200 kg drum
Estoprime PU Primer T117	18 kg can
Estoflex Solar TC60	18kg set

Cleaning

Estoflex Solar 790 should be removed from tools and equipment immediately after use with suitable solvent.

Coverage

Estoflex Solar 790 (DFT)	2.6kg/m ² @ 2.0mm thickness
Estoprime PU Primer T117	0.2 to 0.3kg/m ²
Estoflex Solar TC60 (for exposed area only)	0.3kg per m ²

The coverage will depend on porosity of substrate surface to receive **Estoflex Solar 790**.

Technical Support

Estop offers a technical support package to specifiers, end-user and contractors, as well as on site technical assistance.

Storage

Estoflex Solar 790 has a shelf life of 6 months in unopened containers, kept in a dry store. In high humidity locations, the shelf life may be reduced.

Precautions

Gloves and goggles should be worn. Any splashes to the skin or eyes should be washed off with plenty of clean water. In the event of prolonged irritation, seek medical advice. Application areas must be well ventilated.

Additional Information

Estop manufactures and offer a wide range of complementary products which includes waterstops, waterproofing products, grouts, anchors, specialized flooring products. In addition, a wide range of products formulated for repair and refurbishment of spalled concrete are available.

Important Note

Estop products are guaranteed against defective materials and manufacture and are sold subject to its standard Terms and Conditions of Sale, copies of which may be obtained on request. Whilst Estop endeavors to ensure that any advice, recommendation, specification or information in may give is accurate and correct, it shall not, because it has no direct or continuous control over where or how its products are applied, accept any liability either directly or indirectly arising from the use of its products, whether or not in accordance with any advice, specification, recommendation or information given by it.