

Eurotaff 320 Consolidating Waterproofing

Single component polyurea based on polyester, amines and MDI resins

Eurotaff 320 is a single-component, aromatic waterproofing coating system which is designed to provide a continuous barrier to the passage of water and vapour permeation. Eurotaff 320 is applicable where linings to potable water tanks and pipelines, below ground concrete protection and corrosion protection to metal surface is required. Single-Component versatile product which can resolve many problems related to damp patches and waterproofing. Eurotaff 320 is in liquid state and can simply penetrate into concrete and porous substrates and create capillary crystalline networks through concrete and substrate. It turns yellow due to its aromatic nature. Eurotaff 320 is Compatible with silica in thicknesses between 0.5 and 1.5 mm where mixture of them is required for application. Applications with less thicknesses result in inadequate bonding and adhesion to the substrate. Eurotaff 320 has a Drying time of 5 hours but this can be accelerated up to 20 minutes by using a reagent. You can use it as a primer and vapours barrier for all types of applications; it is completely water resistant and provides a mirror layer. Due to smooth and slick surface, to overcoat Eurotaff 320, (0.5 to 1.5) mm silica sand or coloured quartz should be added to Eurotaff 320 to create proper mechanical key. In the presence of moisture, the active chemical additives in Eurotaff 320 penetrate concrete and react chemically with free lime to produce insoluble crystals.

Advantages

- ❖ Environmentally friendly- 60% solids
- ❖ Manual applied or airless
- ❖ Excellent chemical resistance, thermal stability
- ❖ Slow turn-around time,
- ❖ Special for concrete
- ❖ Significantly enhances the durability of reinforced concrete
- ❖ Colour stability when coated with Eurotaff 500 aliphatic as a topcoat
- ❖ Can be applied at ambient temperature from 5° C to 40° C

Applications

- ❖ Car park decks
- ❖ Corrosive and erosive environments
- ❖ Heavy duty environments
- ❖ Wastewater treatment
- ❖ Oil & gas tank, reservoir and pipeline coating
- ❖ Load bearing application such as bridges and railway decks
- ❖ Creating dry mortars
- ❖ Waterproofing concrete and clay tile terraces by capillary action
- ❖ Binding agent and consolidation of concrete.
- ❖ Creating mortars for wet situations
- ❖ Anti-skid floors
- ❖ Multi-layer floors
- ❖ Chemically resistant special varnish for spill containment areas
- ❖ Painting floors, adding paste pigments
- ❖ Consolidation of deteriorated stone
- ❖ Priming for hot and cold applied polyurea, sprinkle silica 0.5 to 1.5 mm thick
- ❖ Vapour barrier
- ❖ Consolidation of damp patches due to capillary rise
- ❖ Waterproofing walls with damp patches, as well as basements
- ❖ Tunnel lining

Eurotaff 320 Consolidating Waterproofing

Physical properties at 23° c

Features	Standards	units
Adhesion to concrete	ISO 4624	3,9 MPA
Adhesion to steel	ASTM D4541	3589 Psi
Adhesion to timber	ASTM D4541	428 Psi
Abrasion membrane	ASTM D4060-90	115 Gm
Durometer harness	ASTM D2240	Shore D 60-65
Tear propagation	DIN 53507	5 N/mm
Tensile strength	UNE-EN ISO 527-3	17,5 Mpa
Flammability	Self-Extinguishing	Euroclase E
Water Vapour Transmission Speed	ISO 7783 Clase I	Sd>9 m
Not migration to Potable Water	EU98/93/CE	Not Able
Foot Contact, Soils Walls	EN 1186:1:2002	Not Able
Elongation	ASTM DA 12-92	10 %
Recommended Thickness	-	3 layer (100microns)
Temperature resistant in asphaltic	-	80 8 hours

Instructions for application

Surface preparation

All surface must be clean, dry and in sound condition. Eurotaff 320 should be sprayed satisfactorily on cold a substrates. Further, the substrate should be free from grease, oil, dirt or other contaminants that will interfere proper adhesion.

Steel: Steel surfaces should be degreased and grit blasted to SA2½ immediately prior to application. It is recommended that specifiers follow the guidelines for surface preparation from the data sheet for the primer selected. The primer surface must be free from grease, oil, dirt and other loosely adhering materials.

Concrete: Remove all laitance, form oil, curing compounds, grease and other surface contaminants. Apply diamond grind or light shot-blast to provide smooth profile. Remove all dust by vacuum cleaning. Fill any large voids exposed using Eurotaff 300 Primer with (0.0-0.2) mm silica sand mixed in. Cement based substrates should be at least 21 days old and moisture content should not exceed 5% prior to coating.

Substrate & application preparation guideline

Substrate	Environment	Preparation	1 st coat	2 nd coat
Steel	Immersive/ chemical	Blast (75-200)mic	100 microns EUROTAF 320	100 microns EUROTAF 320
Steel	Abrasive	Blast (75-200)mic	100 microns EUROTAF 320	100 microns EUROTAF 320
Concrete	Immersive/ Chemical	Blast (75-200)mic	100 microns EUROTAF 320 +SILICA 0.5-1 mm	100 microns EUROTAF 320
Concrete	Abrasive	Blast (75-200)mic	100 microns EUROTAF 320+ SILICA 0.5-1 1mm	100 microns EUROTAF 320

Eurotaff 320 Consolidating Waterproofing

Priming

All surfaces should be primed with **Eurotaff 320**. For other surfaces consult Eurotaff. For concrete substrate, application thickness is 200 mics. For steel substrates, suggested thickness is 200 mics. A broadcast of kiln-dried sand is recommended for optimum adhesion properties.

Colour Stable Topcoat

If colour stability is required, a minimum 100 mics film of **Eurotaff 500** should be applied as a topcoat.

Quality control criteria

The typical physical properties given above are derived from controlled laboratory testing of Eurotaff 320 Primer, applied in accordance with the Eurotaff Method Statement. Results derived from testing field-applied samples may vary depending on:

- ❖ Equipment condition
- ❖ Product temperature
- ❖ Weather conditions
- ❖ Film thickness
- ❖ Age of tested sample

Curing

Gel time	0.50 hours
Light Traffic	6 hours
Curing starts	48 hours
Total curing	14 days

Storage

Eurotaff 320 has a shelf life of 12 months if kept in a dry and clean warehouse. Air conditioned store between +20° C and +30° C in the original unopened containers. Any changes in colour have no negative effect on reactivity and physical properties of the coating.

Packaging and equipment

- ❖ 250 kg drum
- ❖ 22 kg drum
- ❖ Airless machine or similar
- ❖ Hand roller

Technical support

Eurotaff offers a comprehensive technical support service to specifiers, end users and contractors. Eurotaff is also able to offer on-site technical and laboratorial assistance, field based R&Ds and professional specification assistance whole around the world.