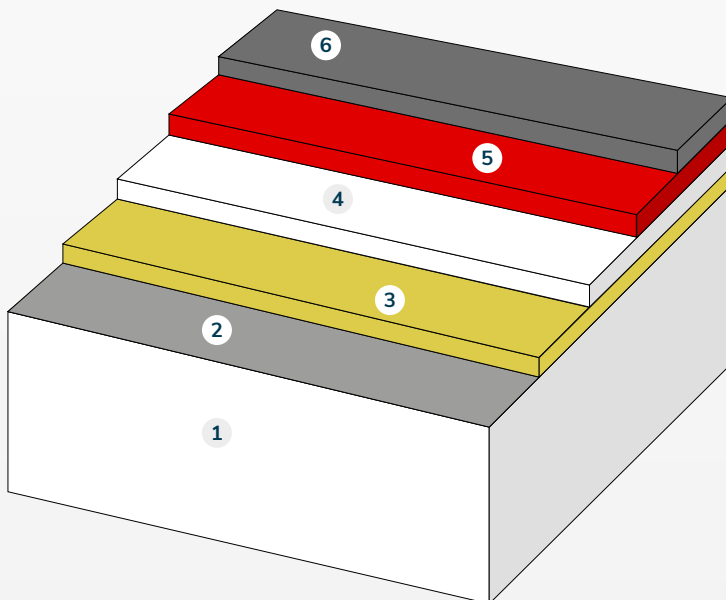


GCP ELIMINATOR®

BRIDGE DECK WATERPROOFING MEMBRANE

ELIMINATOR® is a GCP high performance system for the protection of concrete and steel decks. The Waterproofing Membrane is based on GCP's unique ESSELAC® advanced resin technology and extensive experience in the development of coatings for specialist waterproofing.

ELIMINATOR® Membrane cures rapidly to provide a tough, flexible seamless coating and has an unparalleled track record with thousands of structures waterproofed successfully throughout the world.



- 1 Deck (steel or concrete)
- 2 Primer
- 3 Eliminator® Membrane - 1st coat
- 4 Eliminator® Membrane - 2nd coat (dependent on specification)
- 5 GCP Bond / Tack Coat (Road system only)
- 6 Ballast or Paving



Key Features

- Unaffected by high humidity and cures rapidly even at low temperatures enabling all year-round application
- Fully reactive and does not contain solvents
- Can bridge shrinkage cracks in concrete over a wide temperature range
- Excellent chemical and abrasion resistance and intercoat adhesion
- High bond strength to substrate
- Overcoating time not critical
- Complies with CD358 and ETAG033
- Withstands 250°C pavement placement on the cured membrane
- Range of Bond/Tack Coats available to suit asphalt mix design
- High resistance to ballast and backfill materials
- No critical overcoating time between coats
- Rapid cure allows for early ability to carry load (after 1 hour)
- BBA HAPAS-approved on-site quality assurance programme, including Wet Film Thickness testing during application

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Uses

ELIMINATOR® protects concrete and steel structures from the corrosive effects of water and chloride ions. Typical applications include:

- Concrete Bridge Decks
- Steel Bridge Decks
- Bridge Piers
- Bridge Service Ducts
- Culverts

ELIMINATOR® is installed in conjunction with GCP Applied Technologies proprietary primers, ensuring a high bond between substrate and membrane. For highway bridges a range of compatible tack coats promote adhesion between membrane and surfacing. The membrane can be trafficked for limited durations when required. Please discuss with GCP Technical Services if considering this application.

The system can be adapted to accommodate both high and low ambient temperatures without any detriment to the performance of the system (See table below).

Application

Primer

The substrate must be primed with an appropriate GCP primer prior to application of the ELIMINATOR® membrane. A choice of primers are available depending on the type of substrate and weather conditions.

Membrane

ELIMINATOR® is typically spray applied. The membrane is applied when the primer has cured, typically within 20 minutes. Two distinct color coats are used to aid quality assurance. ELIMINATOR® is typically applied in two coats for maximum security of protection to give a total thickness of 120 mils (3 mm). Single-coat application and aggregate broadcasts can also be provided as required.

Tack Coat / Bond Coat

A tack coat or bond coat must be applied to ELIMINATOR® when it is being used as a waterproofing membrane on road bridges underneath asphalt paving. A range of tack coats and bond coats are available depending upon the pavement specification.

Cleaning

All tools and equipment should be cleaned with acetone before the material is allowed to cure.

Precautions

ELIMINATOR® liquid resin components are classified as flammable liquid (flashpoint 52.7°F, 11.5°C) and must be handled accordingly. Workers should wear appropriate protective clothing. Adequate ventilation must be provided. Please refer to the most recent Safety Data Sheet (SDS) for recommendations.

Safety and Handling

The system is fully compliant with USA Volatile Organic Compound (VOC) regulations and independent risk assessments, carried out in accordance with the UK Control of Substances Hazardous to Health (COSHH) regulations, indicate the application of Eliminator to be a low risk process.

The materials Safety Data sheet must be read, understood and available on site.

Packaging & Storage

Primer - Refer to separate datasheets

ELIMINATOR® Membrane (Part A and Part B) - 46.7 Gallon Drum

All components of ELIMINATOR® system should be stored in cool, dry, protected conditions, out of direct sunlight and accordance with the relevant site Health & Safety regulations. Storage conditions must not exceed 77°F. Do not store near open flames or food.

Stored in unopened containers, under the correct conditions, the components have a minimum shelf life of twelve months. If your product is more than twelve months old contact GCP Technical Services before use.

GCP ELIMINATOR[®]
BRIDGE DECK WATERPROOFING
MEMBRANE



Physical Properties

PROPERTY	TEST METHOD	RESULT
Application Temperature		-10°F to 120°F (-23°C to 50°C)*
Gel Time	Internal	6-11 minutes @ 68°F (20°C)
Overcoating Time	Internal	45 minutes @ 68°F (20°C)
Water Absorption	ASTM D570-81	< 3.5%
Water Vapor Transmission	ASTM E96-00	1 gm/m ² /day (≤1.0 perms)
Tensile Strength (typical)	ASTM D638-91	1,700 psi (11.8MPa)
Elongation At Break (typical)	ASTM D638-91	130%
Low Temperature Flexibility	CAN CGSB	
@ -13°F (-25°C)	37.5 M89, ¼ inch Mandrel	Pass
Resistance To Aggregate Indentation	BD 47	Recovered
Thickness**		
@ 104°F (40°C)		100%
@ 104°F (40°C)		100%
@ 257°F (125°C)		100%
Dynamic Ballast Impact	SNCF 181kN/2x10 ⁶ cycles	No damage or leak
Tensile Bond Strength (minimum)		
Concrete	ASTM D4541-89	100psi (0.7Mpa)
Steel	ASTM D4541-89	290 psi (2.0 MPa)
Shore Hardness	ASTM D6132	≥40D
Volume Resistivity		8.27E+14 Ohms-cm (ER295A)
Surface Resistance		2.45E+13 Ohms (ER295A)



Waterproofing with GCP ELIMINATOR®

- Prolonging life of bridge structures
- Rapid acceleration rates, outputs of 2000m² per day can be achieved
- Application Temperature range -5 to 30°C
- Metrail is an authorised GCP contractor

Explore more technologies



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