

BRIDGE DECK SYSTEM

DEFINITION:

Bitumen mortar containing acrylic fibers specifically designed for waterproofing concrete bridge decks.

APPLICATIONS:

- Concrete bridge decks:
 - The system is applied between the deck and the asphaltic pavement layer(s). The waterproofing layer stands the traffic solicitations indirectly, therefore, a high-quality execution of the application is required.
- Railway viaducts:
 - The system protects the main waterproofing layer from the mechanical efforts induced by the ballast and sub-ballast, especially on high-speed railways.

ADVANTAGES:

- Outstanding adhesion to concrete decks.
- Flexible.
- Continuous waterproofing solution (joint-free).
- Low thermal susceptibility.
- Easy application at room temperature.
- Outstanding durability.

SYSTEM:

- PROMULSIT/IMPRIMUL: Bitumen-based primer.

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- ROADSEAL FIBRE: High viscosity mixture containing controlled size mineral particles, a high stability bitumen emulsion and synthetic fibers.

STRUCTURE OF THE SYSTEM:

- One Promulsit or diluted Imprimul primer layer, approx. dosage: 0,3 kg/m² (depending on the substrate).
- One or two Roadseal Fibre layers, approx. Dosage: 2 kg/m² each.

INSTRUCTIONS FOR USE:

- Make sure that the substrate is clean, free of dust, humidity, and other substances (oil, lime, etc.). The surface to be primed must be cohesive.
- When using the system on hydraulic concrete, the surface must be analyzed to prevent adhesion problems due to excessive polishing, meteorization, humidity, etc. Application in the range 10-35°C is recommended. It is not recommended to apply the system under adverse weather conditions.
- Gently homogenize the products in the container before application. Use a rubber scrap or any other appropriate method to apply a uniform layer and let it dry completely before applying a subsequent layer (24 hours approx., depending on environmental temperature and humidity).
- NEVER add water directly to the products. Adding water would induce the loss of cohesion properties. Nevertheless, the surface may be humidified prior to application for a more comfortable application.
- Working tools can be cleaned with water while the product is not dry.

PERFORMANCE CHARACTERISTICS:

Despite de remining porosity, the permeability tests guarantee the waterproofing behavior of these mortars:

- Flexibility at 4°C: > 150 mm according to standard ISSA 146.
- Permeability: non-permeable according to NLT-327.

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