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Waterproofing

WOODEN BRIDGES

TECHNICAL PROBLEMS

Wooden bridges suffer from extreme exposure to the elements (rain, snow, sun). The wood can suffer greatly and be damaged over a short time, undermining the stability of the structure and, for safety reasons, it may be necessary to add a non-slip coating to pedestrian walkways or vehicle access zones. The water seal on bridges can also be an issue if you need to keep water away from the bridge's structural components.

TRADITIONAL SOLUTION

Normally, wooden bridges aren't protected at all, mostly due to a lack of any suitable, effective and long-lasting solutions.

SOUPLETHANE TECHNIQUE

SOUPLETHANE boasts excellent adhesion to wood, and provides effective and long-lasting protection:

- Water seal: applied to the wood, the joints are bridged and the suppleness of the SOUPLETHANE provides a continuous, unbroken film over the support - even after exposure to vibrations, foot traffic, etc. What's more, SOUPLETHANE acts as a vapour barrier too. As water vapour can no longer penetrate the wood, there is less risk that it will be deformed (movement caused by moisture absorption is limited exclusively to the interior of untreated wood).
- Wear resistance: SOUPLETHANE offers impeccable resistance to normal traffic conditions (perforation caused by footfall or stress caused by vehicle traffic). 1 mm of SOUPLETHANE offers the same resistance as 1 cm of concrete. As a result, it offers good mechanical protection for the wood.
- SOUPLETHANE can also be made non-slip, improving the safety conditions on wooden bridges which are exposed to the elements (snow, black ice, etc.). Apply a non-slip coating by adding a final layer of corundum granules, sealed into the SOUPLETHANE by a thin layer of resin applied to the surface.
- Please note too that snow and ice do not adhere to SOUPLETHANE, making it easier to clean and maintain the bridge while ensuring that the bridge structure is not overloaded by snowfall.

TESTS AND CERTIFICATIONS

- CTB Bordeaux.
- RVI/Vénissieux: mechanical resistance and adhesion tests
- UV ageing tests: LCPC



SPECIFICATION

prepare the substrate:

- Dry the wood,
- Lightly sand, clean and carefully dust.

apply SOUPLETHANE

In a layer of around 1.5 mm thick, either manually with a roller or using a twin-component high-pressure airless sprayer.

The non-slip treatment must be applied to the final coat, ensuring that the previous coats are sufficiently polymerised so the particles cannot penetrate the film.



WORK REFERENCES

- Cyclamen Bridge (OCAN).
- Truck flooring: Wonder.
- The stage at the Palais de Chaillot.
- Nantes