

Seire

SEIRE WP 400

Pure polyurea waterproofing membrane for universal use

Continuous, seamless waterproofing

Adaptable to any geometry of the substrate

Very fast polymerization time (3-5 s), reaches its final properties and final mechanical very quick

Good chemical resistance

High resistance to hydrolysis, puncture, abrasion and ageing

Minimum application temperature: 5°C (in absence of condensation)

Working temperature: from – 40°C to +180°C

Suitable for contact with drinking water R.D. 140/2003

Sheet as a Radon barrier, Certified by LaRUC



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Product description:

SEIRE WP 400 is a highly elastic, abrasion and chemical resistant, pure polyurea waterproofing hot applied liquid membrane. Once dry forms a continuous waterproof membrane, without joints or overlaps or need of reinforcement (only the singular points of encounters with other building elements). Has a permanent elasticity, even at very low temperatures, able to absorb movements of the substrate.

Its high rate of polymerization provides the ability to adapt to any surface and to reach its waterproofing properties before three hours (optimal conditions reach after 12 hours).

Suitable for contact with potable water according to R.D. 140/2003.

Applications:

- Waterproofing and / or rehabilitation of decks, roofs, terraces and balconies.
- Flooring where waterproofing and high mechanical/chemical resistance are required.
- Parking decks.
- Waterproofing of metal roofs.
- Waterproofing of pools and ponds.
- Waterproofing of reservoirs and irrigation canals.
- Encapsulation of asbestos cement decks.
- Realization of Radon gas barrier sheets.

Substrate preparation:

The substrate to be coated must be clean, sound and completely dry. The presence of moisture in the substrate can impact adhesion.

Remove all traces of release agent, previous coatings, laitance and any other contaminant that might compromise adhesion. Recommended methods include high-pressure water-blasting, blasting and milling.

In order to remove dust and loose particles caused by the previous mechanical treatment, wash the substrate thoroughly with pressured potable water.

Remove water ponds and/or excess water from the substrate with an appropriate appliance and wait for the substrate to dry out completely before applying SEIRE WP 400.

To prepare metal substrates, sandblasting up to Sa 2½ grade is recommended. After sandblasting the surface must be cleaned using a proper solvent. Allow the solvent to dry completely before applying SEIRE WP 400.

Carry out repairs and fill any holes, cracks and joints using the SEIRE product most suitable for the purpose.

Properly treat and seal all joints or gaps in the concrete substrate where differential movement is expected (for example expansion joints). Apply a reinforcement band where required - this is especially important on metallic substrates (consult SEIRE's Technical Department).

Primer:

For optimum adhesion, the substrate must be previously primed with SEIRE WP PRIMER roller applied with a consumption of 100-300 g/m².

Where surfaces are very porous and to ensure sufficiently effective bonding and absence of air bubbles, more than one layer of SEIRE WP PRIMER may be required to achieve uniform priming which is free from pores and dry areas, and which compensates for differences in absorption between different areas of the substrate.

The second coat is applied as soon as the first is sufficiently cured. The curing time varies depending on ambient temperature and the surface (at least 6 hours).

SEIRE WP PRIMER Can be applied to damp substrates up to 8% R.H. On surfaces with higher humidity, consult the SEIRE's Technical Department.

Method of application:

SEIRE WP 400 is provided in two separate components of predetermined weight (A + B).

It is recommended to mix up well the component B (amine) because it contains pigments and additives that might be separated.

When applied at low temperature it is recommended to use heaters for drums.

Connect the drums of components A and B to the spray equipment. Use airless, high pressure, bi-mixer equipment better if PLC controlled for dosing functions.

The bi-mixer airless equipment must have preheating deposits (30°C-65°C) and hose heaters.

Best performance is achieved with a temperature of 75-80 ° C (product) and pressure of 180-190 bars.

Due to the high rate of polymerization of SEIRE WP 400, it must conduct the mixing of the two components thereof, directly on the output point of aforesaid application equipment. For this reason, in the outlet nozzle, there must be a dynamic and / or static mixer suitable for this use.

The nozzle, the mixer inside and the application procedure are critical to achieve the expected end result in both the technical characteristics of the coating and finishing. The product must be sprayed at an angle of 90° with the surface to be coated and at about 80 cm to prevent the occurrence of irregularities in the membrane.

The application of a sheet of SEIRE WP400 as a Radon barrier requires a minimum dry thickness of 1.5mm.

Consumption:

Consumption of SEIRE WP 400 is 2-3 kg/m² (depending on substrate, application process and requests).

Limitations:

SEIRE WP 400 is not stable to UV rays, profoundly changing its colour. To protect SEIRE WP 400 from UV rays, use SEIRE WP FINISH, SEIRE WP200 aliphatic polyurethane paints or SEIRE WP500 polyaspartic paint between 2 and 12 hours following application of SEIRE WP 400 membrane.

SEIRE WP FINISH is the only finishing paint suitable for permanent immersion in water.

The protection layer may also give the system an anti-slip finish by mixing in micronized plastic particles or glass beads (up to 8%). Do not use SEIRE WP 400 where ambient and/or substrate temperatures are less than 5°C or less than 3°C above the dew point.

The application of SEIRE WP 400 must be carried out in the absence of humidity or water coming from the substrate, both at the time of application and afterwards (phreatic pressure).

On very porous substrates, the product's reactivity can cause a sharp rise in temperature which may result in holes throughout the thickness of the membrane due to overheated air trapped in the treated surface. For this reason, ensure that the substrate to be waterproofed is properly primed.

Tool and equipment cleaning:

SEIRE WP 400 components can be cleaned immediately after use using a solvent. If the product is allowed to harden, it will have to be removed mechanically. For a more detailed information refer to the Application Guide.

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Residues/spillages:

Any spillage from any of the components must be removed immediately with sand, vermiculite or other inert material and collected in a suitable container for proper handling and treatment.

Residues from spillage and empty containers must be dealt with in accordance with local regulations.

For more information see product safety sheet.

Storage:

SEIRE WP 400 can be stored for up to 6 months in its original unopened packaging. The product should be stored in a dry place between 15°C and 25°C. Keep away from frost, direct sunlight, and sources of heat.

In case of CA freezing, which is manifested by the appearance of whitish deposits and cloudiness of the liquid, the crystals must be melted by controlled heating before use. For more details on the process to follow, contact the SEIRE's Technical Department.

Precautions:

Causes irritation to eyes and skin, depending on sensitivity. Aerosol protection mask must be worn.

Avoid contact with eyes and skin. In case of contact with eyes, rinse immediately with plenty of clean water and seek medical attention.

Wear safety goggles and gloves while mixing and during application.

Application restricted to professional use.

For further information, see the product safety sheet.

Technical Data

(from trials in our laboratory according to current regulations)

Mixing ratio	1 : 1 by volume
Density:	Approx. 1,1 kg/L
Dry Extract:	>99%
Minimum application temperature (substrate/ambient):	+5 °C
Gel-time:	Approx. 3-5 seconds
Total curing time:	±12 hours
Shore D (DIN 53.505):	>50
Tensile Strength (23°C) (UNE EN ISO 527) :	23 MPa
Elongation at break (23°C) (ISO 527):	>400 %
Working temperature:	-40°C to +180°C
Anti roots:	Yes
Packaging:	Kit of 435 Kg
Storage:	Approx. 6 months in a dry place between +15°C and + 25°C and in original unopened packaging.

Seire takes responsibility for the quality of its products. The application recommendations given are based on tests and practical experience. We will not be held responsible for the product or its application in case of any dosage or application other than as described and recommended. For any questions about this product, please contact our Technical Department. This data sheet remains valid until a new edition is issued. Seire will not be held responsible for the content of technical data posted on websites other than the official Seire website (www.seire.net)

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