

Technical Data Sheet





X-Pruf PU2

Two component polyurethane liquid applied waterproofing membrane

60060713

Product Description

X-Pruf PU2 is a two component, 100% solids chemically curing unmodified polyurethane. It does no contain any tar or asphalt.

Uses

Waterproofing of:

- Wet areas
- Planters
- Roofs
- Plaza decks
- Slab foundations

Advantages

- Meets SCAQMD Rule 1113 & LEED VOC Limits
- Formaldehyde free
- Liquid applied, continuous and seamless
- Elastomeric
- Does not allow tracking
- Secure waterproof penetrations
- Can be used in congested areas
- VOC compliant
- Easy to use
- · Easy to repair
- · Does not contain tar

Standards Compliance

SCAQMD Rule 1113 LEED NC2009 IEQ 4.2 Conforms to ASTM C836

Laboratory Test Data

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Property	Test Method	Typical Results
Hardness shore	ASTM D2240	75 A
Tensile strength	ASTM D412	1.5MPa
Elongation	ASTM D412	>300%
Adhesion to concrete	ASTM D4541	>1.5MPa

Application Thickness: 0.5mm to 2mm per coat

Two coats recommended

Application Properties

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	25C	35C
Pot Life	30 to 45min	20 to 30min
Max Recoat Time	24h	16h
Initial Cure	6 to 12h	4 to 8h
Full Cure	7d	5d

Service Temperature

-10C to 60C

Volatile Organic Content

VOC = <50 g/L

Color

Grey. (Black and dark grey available subject to minimum order quantity).

Chemical Resistance

Fully cured X-Pruf PU2 is resistant to the spillage of the following chemicals provided good housekeeping is followed:

- Diesel
- Gasoline
- Motor Oil
- · Hydrochloric Fluid
- Jet Fuel
- 10% Hydrazine
- 10% Sulfuric Acid
- 10% Nitric Acid
- 20% Sodium Hydroxide
- Vegetable Oil
- Sea Water
- Distilled Water
- Synthetic Brine

Theoretical Coverage

1.0 liter per m² at 1 mm dft. Actual coverage will vary with surface profile

Packaging

19 liter packs

Shelf Life

12 months when stored between 5 and 35C under shade in a dry environment.

Installation Guidelines

X-Pruf PU2 should be applied by experienced waterproofing crews. X-Calibur provides detailed method statements on all its products for use in various applications. These must be referred to prior to starting work. The information below is a summary intended for guidance only.

Surface Preparation

Concrete must be at least 14 days old and structurally sound (ASTM D4541, >200psi and dry (ASTM D4263, <5% or Rapid RH Test<75%). It must have a water vapor transmission of less than 3lbs/24hr/1000ft². The concrete surface should be prepared by abrasive or hydro blast to a minimum of CSP3 as defined in ICRI Guide 03732. Fill all bug holes and cracks with X-Shield BugFill.

If the concrete is less than 14 days old or the moisture content is outside the above limits then X-Shield MT Primer must be used.

Priming

Prime the surface using X-Shield SF Primer (10m²/L) or X-Shield MT Primer (6m²/L) and allow to dry before applying X-Pruf PU2. Ensure that no ponding of the primer occurs and that it is not applied too thick. If the primer is left to dry for more than 24 hours the surface will have to be re-primed. Porous substrates may require a two coat application. Mix X-Shield SF or MT Primer by adding the hardener 'Part B' into the base 'Part A' and mix using a slow speed drill (500 rpm) with a X-Shield Coating Mixing Paddle for 3 minutes or until both components have fully dispersed and are uniform in color. Be sure to rotate the mixer throughout the drum. Mix only full packs.

Mixing

Thoroughly mix Part A for a minimum of 2 minutes. Add Part B and mix slowly to minimize the vortex and to prevent trapping air. Thoroughly mix both parts with a slow-speed drill (500 rpm) with a X-Shield Coating Mixing Paddle for 3 minutes. Mix only full packs.

Application

Apply to horizontal surfaces in a single coat at a wet film thickness of 0.5 to 2mm, by brush, squeegee, phenolic core roller or airless spray. Apply to vertical surfaces in two coats. The second coat must be applied within 12 to 24 hours at 25C and 50% R.H. If the recoat time is exceeded, the base coat must be mechanically abraded, cleaned with X-Shield Solvent RC1 and allowed to dry before applying additional coats. Once the product has fully cured, carry out a water flood test to check for

leaks.

In areas subject to high stress, such as 90 degree turns, provide a 45 degree cant and reinforce using X-Shield Reinforcing Fabric.

Clean Up

Clean up using X-Pruf Solvent. Cured material can only be removed by mechanical means.

Limitations

Do not apply in rain or wet conditions.

Do not apply at temperatures below 5C.

Do not apply at temperatures above 50C or within 3C of the dew point.

Protect from wear and abrasion.

Avoid skin contact.

Do not discard into the water system.

Health and Safety

This product is for industrial use only by trained operatives. It is potentially hazardous if not used correctly. Please refer to the Material Safety Data Sheet (MSDS) prior to the purchase and use of this product. The MSDS can be obtained via our website www.x-calibur.us.

Authorized Technical Specialist

Please note that only X-Calibur Authorized Technical Specialists ('ATSs') are permitted to change any of the information in this data sheet or to provide written recommendations concerning the use of this product. Visit www.x-calibur.us for a full list of X-Calibur ATSs.

Datasheet Validity

X-Calibur makes modifications to its product datasheets on a continuous basis. Check the datasheet update section on www.x-calibur.us to ensure you have the latest version.

Warranties

X-Calibur supplies products that comply with the properties shown on the current datasheets. In the unlikely event that products supplied are proved not to comply with these properties, then we will replace the non-compliant product or refund the purchase price. X-Calibur does not warrant or quarantee the installation of the products as it does not have control over the installation or end use of the products. Any suspected defects must be reported to X-Calibur in writing within five working days of being detected. X-Calibur Construction Systems Inc. makes no warranty as to merchantability or fitness for a particular purpose and this warranty is in lieu of all other warranties express or implied. X-Calibur Construction Systems Inc. shall not be liable for damages of any sort including remote or consequential damages, down time, or delay.