

Chelfix PU 100 2K

Polyurethane-Bitumen Based Waterproofing Material



Product Description

Bitumen-Polyurethane based, two component, fast curing liquid membrane material. It forms a very elastic film by sticking strongly to almost any kind of surface.

Areas of Usage

- All constructions are basic, curtain walls, terrace roof, balcony, car park, bridge tops and so on It is used as insulation material against moisture, pressureless and pressurized water in waterproofing of areas.
- It is applied as waterproofing material in wet volume insulation, insulation of plant root strength areas, modification of old water insulation coatings

Features and Benefits

- High performance on large terraces and deep grounds,
- Creates seamless, super elastic insulation layer,
- Complex details can be easily solved with a comfortable application consistency,
- It provides excellent adhesion even on difficult surfaces.
- It shows high resistance to water ponding and frost,
- It is resistant to detergents, oils, sea water and domestic chemicals.

Application Instructions

The surfaces must be clean, smooth, solid, free from any antiadhesive substance such as dust, oil, dirt, rust, mold oil, detergent and waste. If there is segregation in concrete, it should be discarded and loose parts should be removed, weak parts should be removed. If there is crack, hollow on the floor or wall to be applied, it should be repaired with appropriate repair mortars. CHELFIX PU 100 2K should be applied after 3-4 days.

CHELFIX PU 100 2K If there is a dilatation of the structure before applying BITUMEN, it is firstly necessary to isolate the dilatation using Champer Tapes . Later isolation of dilatations is more difficult and costly.

All overheads and grooves, straps must be insulated using beveled bands.

The surface to be insulated must be dry. Water puddles should be removed if there is pond watering.

The concrete should be applied as a primer with a two component, epoxy-based primer brush or roller as 0,20 - 0,40 kg/m². Primer consumption varies according to the quality and absorption of the concrete. Make sure that the lining is completely cured and hardened. It should be waited for at least 4 hours and at most 48 hours for the water insulation to be done on it.

TCHELFIX PU 100 2K In a clean container, free from all kinds of adhesion, or in its own container, the component A is mixed before the Component B is added. The product is mixed with a low speed mixer until a homogeneous mixture without lumps is obtained. Mixing time should be minimum 3 min.

The mixture is applied to the surface with finished, ready to use product, hard bristle brush or spraying machine. After the material completes the reaction, 2. coat application is made in the perpendicular direction of the first coat application. The waiting time between coats is at least 5 hours, and after the first coat has been applied, it can be passed to the other coats when there is no mark on the fingers in the manual control. If desired, it can be used as carrier glass fiber, reinforcement throughout the floors.

Application Notes / Restrictions

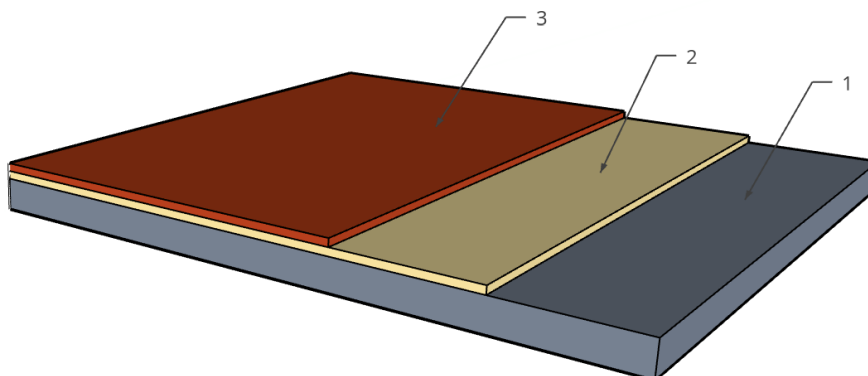
- Since the product does not have UV resistance, it is absolutely necessary to use heat insulation plates, protection plates, geotextile felt and so on. should be covered with.
- It must be protected after application against adverse weather conditions such as direct sunlight, high air temperature (above +35°C), rain and frost. The product should be cleaned thoroughly with water and detergent before it is fully cured and hardened.
- Immediately after application, before hardened, the equipment should be cleaned with Thinner. After the product is hardened, it should be cleaned by mechanical methods.
- Application surface moisture should not be more than 5%
- Foreign materials should not be added.
- The two components must only be mixed well with the mechanical mixer. Care should be taken that the product does not mix even at the edges of the packaging during the mixing process
- Should be applied in two coats.
- It should not be applied in the rain.
- The product should not be diluted, use is ready.
- Newly applied material is finished to cure, etc. until rain. it must be protected against weather conditions.

Technical Data

General Information		
Appearance/Color	Black	
Storage Conditions / Shelf Life	12 months	
Package	34 kg set	
Density (kg/lit)	1,00 ± 0,05 kg / lit	
Ignition Point	> 40°C	
Application Information		
Last Resistance Period	7 days	
Pot Life	~ 35 min	
Consumption	1,0 kg (for 1 mm)	
Performance Information		
Shore A Hardness	35 - 40	ASTM D 2240
Concrete Adhesion Strength	≥ 2,0 N/mm ²	ASTM D 903
Elongation at Break	> 2000%	DIN 52455
Tensile Strength	≥ 2,5 N/mm ²	DIN 53504
Service Temperature	-40°C to 80°C	
Humidity Tolerance	Max. 5	



Annex A



- 1: Substrate
- 2: Primer
- 3: Waterproofing Layer – CHELFIX PU 100 2K

Classification of the Roof Waterproofing System “CHELFIX PU 100 2K”

Classification to Use Categories According to EAD 030350-00-0402:		
Working Life		W3 (25 Years)
Climatic Zones		S (Severe Climate)
Resistance to Mechanical Damage (Perforation)		Compressible and Con-Compressible Substrates: P-1 P3 (From Low to Normal)
Roof Slope		S1 to S4 (Each Roof Slope)
Lowest Surface Temperature		TL4 (-30 °C)
Highest Surface Temperature		TH2 (60 °C)
Use Category Regarding BWR 3		S/W 2
Performances of the Product:		
Reaction to fire	EN 13501-1	Class E
External Fire Performance	EN 13501-5	B _{ROOF} (t1)*
Water Vapour Diffusion Resistance Factor		μ = 3204
Watertightness		Passed
Resistance to Fatigue Movement		W3
Resistance to Ageing Media (Heat and Water)		W3
Release of Dangerous Substances		See Chapter 3.3
Root Resistance		No Penetration of Sealing by Roots, Watertight
Resistance to Wind Loads		≥ 50 kPa for Tear-Resistant Substrates
Slipperiness		NPD