



CONFLOOR 5200

Two Component Polyurea Flooring

PRODUCT DESCRIPTION

Confloor 5200 is Two component, self-leveling, VOC compliant, elastic, 100 % solids, very fast curing Polyurea, non-slip flooring system applied as a wet slurry mortar that is spread and then allowed to level to provide a smooth flooring surface. It is resistant to extreme hot and cold changes in temperature and does not support bacterial growth and it can avoid risks of ignition due to electrostatic charge. It is suitable for flooring in breweries and wineries, pharmaceutical Plants, commercial Kitchens and Restaurants, processing Areas and loading bays etc.

ADVANTAGES

- Resistant to extreme hot and cold changes in temperature
- Withstands severe heavy traffic
- It is Non slip when wet
- Confloor 5200 exhibit excellent UV resistance, chemical resistance, wear / abrasion resistance and is typically used in light to heavy traffic areas.
- Provides hydro-isolation, anti-rust and top coat paint properties.
- Does not support bacterial growth.
- Very good adhesion on concrete, steel, aluminum, fibers, wood, foam etc.
- Excellent thermal stability
- Long lasting (minimum 25 years service life)
- Resistant to extremely high levels of relative humidity in substrates.
- 100% solid, VOC free, no solvents
- Can be applied to a wide range of substrate
- Indoor air quality compliant
- Excellent crack bridging properties
- Thermal shock resistant

AREA OF USES

- It is suitable for flooring in breweries and wineries, pharmaceutical Plants,

commercial Kitchens and Restaurants, processing Areas and loading bays etc.

- All food & beverage industries
- Meat/poultry & dairy processing
- General warehouse & manufacturing facilities
- Automotive service bays
- Cold storage facilities
- Museums, Office Buildings & Galleries
- Lounges, Lobbies, Nightclubs & Foyers
- Laboratories

APPLICATION INSTRUCTION

Surface Preparation

Surface preparation strongly affects coating performance. Remove all contaminants and weak laitance on the concrete substrate with appropriate degreasers and shotblasting for the final profile or use other mechanical means, washing the surface or sanding is not acceptable. Key all termination points and around all drains. Honor all joints in the concrete slab. Concrete must be at least 14 days old. A working vapor barrier on all on grade substrates is recommended.

Priming

Priming for concrete substrate is required. Priming can be done with either Costar Primer10 ,20 or equal approved. Allow the primer to cure once applied and curing time may vary with temperature and humidity. Once first coat primer is tack free apply subsequent coats. Ensure that the primer is pore-free, pinhole-free and provides uniform and complete coverage over the entire substrate.

Application

- Polyurea application must be carried out within 12-24 hours of priming. A two-component high pressure and heat spray machine should be adopted for use in spraying the Isocyanate prepolymer and amine resin over primed substrate and the machine should be able to spray the components in 1:1 volume ratio.





CONFLOOR 5200

Two Component Polyurea Flooring

- Both components must be heated above 70 °C. In order to achieve good performance, the temperature and pressure should stay same during the application and must be controlled regularly.
- Diluting of any component of the Polyurea system is not allowed under any circumstances.
- Stir amine component for at least 30 minutes prior to usage using a barrel mixer until a homogenous mixture and color is obtained.

TECHNICAL PROPERTIES

Packaging	Component A	Component B	Total set
	Amine component	Iso component	Flow-able
	200 kg barrel	225 kg barrel	425kg
Density	Comp A (1,02±0,02)gr/cm ³ Comp B (1,11±0,03)gr/cm ³ (ASTM D 1217)		
Viscosity	Com B=700-800 (mPa.s), Com A=300-600 (mPa.s) ASTM D 4878		
Solid content (ISO 1768)	100%		
VOC (volatile organic comp)	0g/l comp A + 0g/l comp B		
Tensile strength	≥16 N/mm ²		
Elongation at break %	≥350 ASTM D638		
Pull off bond strength	2,0 N/mm ² (EN 1542)		
Pull off strength (N/mm ²)	Concrete: ≥2 Steel: ≥6 (ASTM D 4541)		
Gel time	5 – 10 (sec)		
Abrasion resistance	< 200 (H22, 1000 cycle) , (EN ISO 5470-1)		
Non Stick (Tack-free) Time	15-30 (sec)		
Minimum walk-able time	after 24 hour		
Fire class	BFL S1 EN 13501 Euro norm- (Class E)		
Full mechanical load	5days		
Thermal Shock Resistance	Resistant		
Curing	Shrink-free		
Curing time	24 h at +20 °C		
Hardness (Shore A)	85 -95 (ASTM D2240)		
Hardness (shore D)	39 – 45 (ASTM D2240)		
Chemical Structure	Component A: Amine Resin Component B: MDI Prepolymer		
Color	Standard color is medium grey. Custom colors in any RAL numbers are available upon request.		
Thermal Resistance	-25 °C-120°C		
Recoat time	0 - 12 hours (without pretreatment)		
Mix Ratio	By Volume (A=100 B=100) By Weight (A= 112 B= 100)		
	≤0,5*10 ⁹ (fullfills the requirement for coating systems) (DIN IEC 61340)		





CONFLOOR 5200

Two Component Polyurea Flooring

Theoretical Consumption

Primer: 0.4-0.6 kg/m²

Quartz sand: 1-1.5 kg /m²

Polyurea coating: 1.0- 1.2 kg/m² /mm (recommended film thickness is minimum 2 mm.)

Note: Aromatic polyurea coating systems are UV stable but are not color stable and the cured coating may exhibit discoloration when exposed to sunlight. However, this does not influence the performance and physical properties of the material. If the color stability required is achieved, an aliphatic top coat must be applied within 12 hours of applying base coat.

SHELF LIFE

Shelf life is 9 months provided the temperature is kept within tolerable limits of 5°C to 50°C.

STANDARD COMPLIANCE

Conforms to the requirement of EN 13813, ISO 2555, ISO 1768.

LIMITATION

- Only mix whole complete units to assure the performance criteria in this data sheet.
- Do not use partial units or try to break down the unit as the performance will be compromised.
- If the aggregate is not thoroughly mixed and all Portland cement is not thoroughly mixed in the slurry, blisters may develop in the finished floor.
- Some chemicals may cause discoloration but this will not affect the performance of the floor. Test for discoloration before use is this is a concern.

LEGAL NOTE

The information and recommendations relating to the application of Costarchem products, are given in good faith based on current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with the stated recommendations in the product datasheets. Whilst Costarchem endeavors to ensure that any advice, recommendation, specification of information it may give is accurate and correct, it cannot, because it has no direct or continuous control over where or how its products are applied, accept any liability either directly or indirectly arising from the use of its products, whether or not in accordance with any advice, specification, recommendation of information given by it. The user of the product must test the product's suitability for the intended application and purpose. Costarchem reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

CLEANING OF EQUIPMENT

Immediately after product application, all equipment / tools used can be cleaned with a suitable thinner (Xylene / MEK / Acetone) or any appropriate etching agent.

Precaution

- The moisture content of probed substrate should be measured and put to fall within acceptable limit.
- Be aware of condensation; the substrate must be at least 3 °C above dew point to reduce the risk of condensation of the coating.
- Relative air humidity for application should be lower than 85%.

HEALTH & SAFETY

Confloor 5200 should not come in contact with skin or eyes or be swallowed. Ensure adequate ventilation and avoid inhalation of vapors. Some people are sensitive to resins, hardeners and solvents. Wear suitable protective clothing, gloves and eye protection. Please refer SDS

ADDITIONAL INFORMATION

Costarchem manufactures a complete range of constructionchemical products which include:

- Concrete admixtures
- Waterproofing system
- Flooring system
- Cementitious and epoxy precision grouts
- Damp-proofing products
- Sealants and adhesives
- Repair and refurbishment systems

For more information on any of our products, please contact Costarchem global or regional office.

