Quality Needs Quality

Kemfloor

Chemical and Abrasion Resistant Solvent–Free Epoxy Floor Coating

Description	**Kemfloor** is a solvent-free, high-build epoxy coating, transparent or colored two-pack epoxy flooring. **Kemfloor** is ideal for all heavily trafficked areas and car parking's. Durable, and chemical resistant, it will protect and brighten concrete and make cleaning much easier. It is available in two grades
Where to use	**Kemfloor** is a hard-wearing, easily cleaned, attractive colored floor coating (non-slip if required) with abrasion resistance & high chemical resistance finish used for: • Industrial flooring subjected to normal or moderately heavy loading • Food industries • Pharmaceutical industries & textile plants • Power stations • Basements
Advantages	**Kemfloor** provides the following advantages: • Solvent-free and seamless • Non-slip for the safety of personnel • Easy to apply pre-weighed packing • Easy to clean • Good adhesion to the substrate • High chemical resistance • Durability and hard-wearing • Available as transparent and in a wide range of colors • Resistant to fire and smoke spread (Special version)

Properties

Density	Colored: 1.6 ±0.06 gm/cm³ Transparent: 1.07 ±0.05 gm/cm³	
Solids content by volume	100 %	
Pot life @ 23 °C	40 minutes	
Fully cured	7 Days	
Adhesion to concrete	1.8 N/mm²	EN ISO 4624
Tensile strength	25 – 30 N/mm²	
Compressive strength	Grade I 80 – 85 N/mm² Grade II 70 – 75 N/mm²	ASTM C579
Flexural strength	30 – 33 N/mm²	
Water absorption	0.128%	ASTM C413
Impact resistance	40 Kg height 2 m (no failure)	
Shore Hardness	83	ASTM D2240
Abrasion resistance	63 mg loss – Used wheel CS 17	ASTM D4060
Water vapor transmission	$1.23x10^{-3}$ g/h.m²	ASTM E96
Modulus of elasticity in tensile	334.3 N/mm²	ASTM D638
Modulus of elasticity in flexure	268.9 N/mm²	ASTM D790
VOC	340 **LEED NC-2016, IEQC 4.3, LEM**	ASTM D2369

Surface Preparation	**New poured concrete:** • Concrete compressive strength >25 N/mm² & bond strength >1.5 N/mm² • Allow to fully cure 28 days prior to application • Remove any curing membrane by sanding or etching with a strong detergent • Moisture content must be less than 4% • For wet concrete apply **Wetseal** as a priming coat **Old concrete:** • Thoroughly clean the surface with a grease-cutting detergent to remove grease and oils, and remove any loose or unsound concrete by chipping, scarifying, shot blasting, sanding, or grinding. Proceed as for newly poured concrete **Previously coated concrete:** • Remove any peeling or degraded paint by sanding or using a paint stripper • For intact paint, thoroughly clean the surface with a strong detergent, then lightly sand to remove any gloss • Treat any areas worn down to the original concrete as bare concrete • All damaged areas, cracks, and surface irregularities must be repaired and smoothed first by using **Kemrepair EP** and a bonding layer using **Kembond EP** **Steel surface:** • The steel surface should be blasted to Sa 2 ½ surface quality to remove rust and mill scale
Expansion Joints	Shall be installed in accordance with local building codes Never bridge an expansion, contraction, or construction joint
Mixing	• It is important to remember that this coating has a limited pot life (40 minutes). Therefore, it is wise to check and make sure everything is in order before starting the mixing sequence • Stir the contents of pack A to disperse settlement, then add pack B and mix with a very low-speed mixer, until completely blended. This will take about 2 to 3 minutes • Be careful not to introduce any air bubbles while mixing until a uniform consistency is obtained • **Kemfloor** should be used immediately after mixing
Application	• Application at temp. +10°C / +30 °C & R.H 85% • **Kemfloor** can be applied by brush, roller, or airless spraying gun to get a uniform spread • Being solvent-free, there is no limit to film thickness • Anti-slip finish may be achieved by broadcasting a specially graded silica sand in excess • For the application on green and damp concrete, the substrate must be primed using **Wetseal**
Cleaning	Tools and equipment should be cleaned with **PROKEM** special solvent immediately after use
Theoretical coverage	Prime the prepared surface using **Sealer E43** at a theoretical consumption of 0.15 – 0.2 Kg/m² *In the case of wet or green concrete substrates **Wetseal** can be used Apply **Kemfloor** 0.25 – 0.3 Kg/m² for a D.F.T of 150 – 200 micron for colored version 0.16 – 0.215 Kg/m² for a D.F.T of 150 – 200 micron for transparent version 2 coats are always recommended For Anti-Slip Applications or Multi-Layer Systems **Kemfloor Aggregate**: 1 - 2 Kg/m²

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Packaging	5 & 20 Kg Pails (A+B)
Shelf life & storage	**Kemfloor** has a shelf life of 12 months if kept in its original packs in a dry condition
Health and Safety	This product is of low toxicity but normal precautions should be observed Wear gloves, and if working overhead or spraying, wear goggles Wash off any skin splashes with soap and water Irrigating the eye with an eye bathing solution should treat eye contamination Ensure adequate ventilation in confined spaces and use breathing aids If ingested, drink milk or water and seek medical attention
Additional Information	**PROKEM** provides the construction industry with a comprehensive range of construction chemicals and specialty products answering the queries of modern engineers for trouble free durable structures **PROKEM** designs tailor made products should there be a critical application that requires specific properties rather than our main range. For our customer's satisfaction **PROKEM** reserves the right to change the properties of its products All orders are accepted subject to our current terms of sale & 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 **PROKEM** extends technical services to include after sales support to assist users in the proper handling of our products