

Kemfloor E45

Chemical and Abrasion Resistant Solvent-Free Epoxy Resin Floor Coating

Description	Kemfloor E45 is solvent-free, high build epoxy coating, colored two-pack epoxy flooring. Kemfloor E45 is ideal for all heavy traffic area due to its durability and chemical resistant, it will protect and brighten concrete and make cleaning process much easier.	
Where to use	Kemfloor E45 is a hard wearing, easily cleaned, attractive colored floor coating (non-slip if required) with abrasion resistance and high chemical resistance finish. Kemfloor E45 is used for: • Industrial flooring subjected to normal or moderately heavy loads • Food factories • Pharmaceutical factories and textile plants • Power stations • Basements	
Advantages	• Solvent free, seamless • Non slip for safety of personnel • Easy to apply pre-weighed packing • Easy to clean • Good adhesion to substrate • High chemical resistance • Durable and hard wearing • Available in a wide range of colors	
Properties		
Specific Gravity	1.57 ±0.06	
Solids Content	100 % (by volume)	LEED NC-2016, IEQC 4.3, LEM
Tensile Strength	20 – 25 N/mm²	
Compressive Strength	40 – 47 N/mm²	
Pot Life @ 23 °C	40 minutes	
Dry to Recoat	12 - 48 Hours	
Fully Cured	7 days	
Flexural Strength	20 – 27 N/mm²	
Impact Resistance	Excellent	
Bond Strength to Concrete	> 2 N/mm²	
Hardness (Shore D)	78 – 85	
Abrasion Resistance	64 – 68 mg loss	
Elasticity Modules	260 – 270 N/mm²	
Tests	Testing is done on samples cured for 7 days at 23 °C and R.H – 50 – 60% Complying with ASTM C-579, 580, 882 and D-4060, 638, 2240,1259	

Surface Preparation	New poured concrete: • Allow to fully cure 28 days prior to application • Remove any curing membrane by sanding or etching with a strong detergent • The compressive strength should not be less than 25 N/mm² • Tensile strength is 1.5 N/mm² Old concrete: Thoroughly clean the surface with a grease 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 bonding layer using Kembond EP Steel surface: • The surface should be blasted to Sa 2 1/2 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, for about 2 to 3 minutes • Be careful not to introduce any air bubbles while mixing until a uniform consistency is obtained • Kemfloor E45 should be used immediately after mixing
Application	• Application at temp. +10°C / +30 °C & R.H 85% • Kemfloor E45 can be applied by brush, roller, or airless spraying gun to get a uniform coating • 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	Clean all tools and equipment immediately after use with Prosolve EP
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 at a theoretical consumption of 0.2 – 0.25 Kg/m² • Apply Kemfloor E45 at 0.25 – 0.3 Kg/m² for a D.F.T of 150 – 200 micron • 2 coats are always recommended • For Anti-Slip Applications or Multi-Layer Systems Kemfloor Aggregate: 1 - 2 Kg/m²

Packaging	20 Kg pails, part (A+B) 5 Kg pails, part (A+B)
Shelf life & storage	Kemfloor E45 has a shelf life of 12 months if kept in their original and undamaged packages in suitable conditions
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 and seek medical attention • 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 structure. PROKEM designs tailor made products should there be critical application that requires specific properties rather than our main range, then and for our customer's satisfaction PROKEM reserves the right to change the properties of its products. All orders are accepted subject to our current term 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 a proper handling of our product.