

Kemfloor E45

Chemical and Abrasion Resistant Solvent-Free Epoxy 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 areas. Durable and chemical resistant, it will protect and brighten concrete and make cleaning 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/mm ²
Compressive Strength	40 – 47 N/mm ²
Pot Life @ 23 °C	40 minutes
Dry to Recoat	24 Hours
Fully Cured	7 days
Flexural Strength	20 – 27 N/mm ²
Impact Resistance	Excellent
Bond Strength to Concrete	> 2 N/mm ²
Hardness (Shore D)	78 – 85
Abrasion Resistance	64 – 68 mgm loss
Elasticity Modules	260 – 270 N/mm ²
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/mm ² , and the tensile strength is 1.5 N/mm ²
	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. 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 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 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.
	Prime the prepared surface using Sealer E43 at a theoretical consumption of 0.15 – 0.2 Kg/m ² *In the case of wet or green concrete substrates Wetseal can be used Apply Kemfloor E45 0.25 – 0.3 Kg/m ² 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/m ²
Cleaning	Clean all tools and equipment immediately after use with PROKEM special solvent.
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. 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. 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.