

Kemfloor E43

Chemical and Abrasion Resistant, Solvent – Free Epoxy Floor Coating

Description	• Kemfloor E43 is a solvent-free, high build colored epoxy coating • Kemfloor E43 is ideal for all heavily trafficked areas and car parking's • Kemfloor E43 is durable and chemical resistant so it will protect and brighten concrete and make cleaning much easier	
Where to use	Kemfloor E43 is a hard wearing, easily cleaned, attractive colored floor coating (non-slip if required) with abrasion resistance and high chemical resistance Kemfloor E43 is used for: - • Industrial flooring subjected to normal or moderately heavy loading • Food industries • Pharmaceutical industries and textile plants • Power stations • Basements	
Advantages	• Solvent free, seamless finish • Non-slip for safety of personnel • Easy to apply pre-weighed packing • Easy to clean • Good adhesion to substrate • High chemical resistance • Durability 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 — 21 N/mm ²	ASTM D638
Compressive Strength	55 — 57 N/mm ²	ASTM C579
Flexural Strength	35 — 37 N/mm ²	ASTM C580
Pot Life @ 23 °C	40 minutes	
Dry to Recoat	24 hours	
Fully Cured	7 days	
Impact Resistance	Excellent	
Bond Strength to Concrete	6 N/mm ² – Concrete Failure	ASTM D4541
Shore D Hardness	80 — 82	ASTM D2240
Abrasion resistance	82 – 87 mg loss	ASTM D4060 CS-17/1000/1000
Elasticity modulus	500 N/mm ²	ASTM D638
Flexural modulus	64 N/mm ²	ASTM D790
Water absorption	0.1%	ASTM C413
Tests	Tests were done on samples cured for 7 days @ 23 °C and R.H – 50 – 60%	

Surface Preparation	For new poured concrete: Allow to fully cure 28 days prior to application. Remove any curing membrane by sanding and remove the etching with a strong detergent. The compression strength should not be less than 25 N/mm² and the tensile strength is at 1.5 N/mm². For the 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, then 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 steel 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 of 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 E43 should be used immediately after mixing
Application	• Application at temperature +10°C / +30 °C & R.H 85% • Kemfloor E43 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
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 E43 0.2 – 0.25 Kg/m² 2 coats are always recommended For Anti-Slip Applications or Multi-Layer Systems Kemfloor Aggregate: 1 - 2 Kg/m²
Cleaning	Clean all tools and equipment immediately after use with PROKEM special solvent

Packaging	5 Kg Pail (A, B) 20 Kg Pail (A, B)
Shelf Life & Storage	Kemfloor E43 has a shelf life of 12 months if kept in their original and undamaged packing in a dry condition
Health and Safety	• This product is of low toxicity but normal precautions should be observed • Use gloves and breathing mask when applying • Apply forced ventilation in confined spaces • Skin splashes to be removed with hand cleanser, soap and water • Eye splashes to be removed with plenty of water • Ensure adequate ventilation in confined spaces and use breathing aids • If ingested, drink milk 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