

Kemfloor ESL

Heavy Duty, Self-Leveling Epoxy Floor Topping

Description	Kemfloor ESL is a solvent-free 3 components binder based on epoxy resin. Due to its extra low viscosity, and the perfect balance of selected aggregate; a self-smoothing mixture can be produced. It can be applied at the thickness of 1 – 3 mm without loss of self-leveling properties	
Where to use	• Self-smoothing epoxy floor for moderate and heavy industrial use • For the production of self-smoothing epoxy floor on concrete and cement screed with excellent chemical resistance and attractive appearance • Pharmaceutical plants • Food industries • Bottling plants • Diaries	
Advantages	• Easy to apply pre-weighed packing • Easy to clean • Good adhesion to substrate • Easy to lay • Excellent abrasion resistance • Very good chemical resistance • No over coating, achieved in single operation • Available in a wide range of colors to enhance the working environment	
Properties		
Color	White, grey and other colors are available on request	
Solids by volume	100 %	LEED NC-2016, IEQC 4.3, LEM
Specific gravity	1.75 ±0.05	
Flash point	140 °C	
Chemical resistance	See Prokem chemical resistance tables	
Pot life @ 23 °C	45 minutes	
Fully cured	7 Days	
Abrasion resistance	60 mg loss	ASTM D4060 (CS 17/1000/1000)
Technical information (at 23 °C after 7days):		
Compressive strength	50 – 60 N/mm ²	ASTM C579
Flexural strength	30 – 35 N/mm ²	
Bond strength	1.5 N/mm ² Concrete Failure	
Tensile strength	15 – 17 N/mm ²	ASTM D638
Impact resistance (2 mm/ 2 Kg)	No Cracks	EN ISO 6272

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
	Old concrete Thoroughly clean 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 new 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
	Generally, for concrete surfaces - 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 using Kemrepair EP and 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 joint	- Shall be installed in accordance with local building codes - Never bridge an expansion, contraction or construction joint
Mixing	- Stir the contents of pack A to disperse any settlement, add pack B and mix thoroughly until homogeneous mixture is achieved - Add the filler C gradually to the mixed A + B and continue mixing for 2 – 3 minutes until all components are thoroughly mixed
Application	- Apply a primer coat for the whole surface using Sealer E43 with a consumption of 0.15 – 0.2 Kg/m² – make sure the whole area is primed and no visible pinholes – repeat when needed - Apply the Self-Smoothing mixture of Kemfloor ESL with a toothed trowel and remove any entrapped air with a spiked roller Kemfloor ESL should not be exposed to water, chemicals, or mechanical stresses before it is fully cured - Substrate moisture ≤ 4% - Min substrate temperature +10 °C - Max substrate temperature +30 °C - Max relative humidity 85 % - Can be walked on after 24 hours
Cleaning	Tools and application equipment should be cleaned with a special solvent immediately after use
Theoretical Coverage	1.75 – 5.25 Kg /m ² / 1 – 3 mm
Packaging	10 & 40 Kg packages Part (A+B+C)
Shelf life & storage	12 months if stored in unopened containers in cool, dry condition

Health and Safety

- Use gloves and a breathing mask when applying
 - Apply forced ventilation in confined spaces
 - Skin splashes to be removed with hand cleanser, soap, and water
 - Eye splashes are to be removed with plenty of water
 - If ingested seek medical advice
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**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
