



KEM TILE EX 40

High performance multi-purpose adhesive tiles
and natural stone of all types and size.



CLASS	CHARACTERISTICS
C2	TE S1
COMPLIANT WITH EN 12004 STANDARD	



- ✓ Internal & External use only
- ✓ Suitable for Ceramic tile & Stone
- ✓ Thick and Thin Bed Application
- ✓ Perfect adherence
- ✓ Non-skid and Waterproof
- ✓ Extended Open Time



Description

Kem Tile EX 40 is a highly polymer modified, high performance thinset adhesive, for tiles, mosaics and stones, on a variety of surface, for both vertical and horizontal application, in indoor as well as outdoor use. It is supplied as a dry mix mortar to which water needs to be added before application.

Uses

Interior and exterior floor and wall bonding of all types and size of ceramic tiles, natural stone, granite, porcelain, cotton cementitious renders, cementitious screeds and concrete.

Advantages

- Perfect adherence
- Highly Deformable, resistant to temperature changes
- Can be applied on vertical surface even for bonding of heavy tiles without sagging
- Extended open time
- Easy to trowel

Standards

KEM TILE EX 40 meets and exceeds the water resistance and strength requirements of:

ANSI - A 136.1 - 1972.

ANSI - A 118.1 - 1972.

BS - 5980 - TYPE 1 CLASS AA.

Direction for Use

Surface Preparation:

Check that the substrate is solid, clean and able to bear loads. Clean all oil and grease stains and

remove any other residues which may inhibit proper bonding. Clear the substrate surface of any irregularities. Ensure that the minimum age of a cement screed substrate is 28 days and that for concrete is 6 weeks.

Ascertain that freshly applied cement screeds do not have residual moisture content above 4%, anhydrite and/or gypsum based screeds do not have more than 0.5% moisture content. Level the concrete floors with a self-smoothing screed leveler KEM Floor CSL 100. Prime very absorbent cement based substrates and aerated concrete with a suitable acrylic primer, diluted 1:1 with water.

Prime ground anhydrite and/or gypsum based floated screeds as well as gypsum based substrates and mastic asphalt screeds inside buildings with a suitable priming system.

Next, take gauging water in a clean mixing vessel. Add KEM TILE EX 40 powder and mix the mortar with a suitable stirrer. Or use a mixer mounted on an electric drill to achieve a plastic, lump-free consistency. Maintain a water powder ratio of 0.3 - 0.35, i.e. add 7.5 – 8.75 liters water to 25 kg of KEM TILE EX 40, depending upon the temperature. Apply a thin bond coat of KEM TILE EX 40 to the substrate with the smooth edge of the trowel. Comb mortar onto the fresh bond coat with a notched trowel. Try to apply the adhesive bed in one direction only. Check the working time by touching the mortar with fingertips. Position and align the tiles by nudging them neatly into

Products Details

Appearance	Grey & White Powder
Mixing Ratio	7.5 – 8.75 Liters water/ 25 kg powder
Pot Life	6 Hrs.
Temperature range for application	5oC to 35oC
Bed Thickness	<10mm
Open Time	Min. 30 min
Adjustability Time	5 – 15 min.
Adhesion to concrete @28 days	Min.1 N/mm ²
Adhesion shear strength@28days	Min1.5
N/mm² Direct Pull of Test	1.4 N/mm ² at 28 days



Water Vapor Permeability	Reduced by 95%.
Water Absorption (28 days dry curing)	less than 2%
Adhesion for Wet/Dry Cycling (24 hrs immersed in water and 24 hrs. at room temperature)	5 cycles

the adhesive bed after laying mosaic tiles, remove the KEM TILE EX 40 adhesive from the joints down to a uniform depth. This is necessary to ensure proper, stain free grouting afterwards. This is also applicable to front-sided paper faced mosaic. Tools and ceramics should be washed with water immediately after use. Once the product has cured it can be removed by mechanical means only.

Precautions

It is possible to obtain mixtures with a more or less thixotropic consistency, depending on the type of application. Adding extra water does not improve the workability of the product, and may cause shrinkage in the plastic phase of drying and result in less effective final performance with a reduction in compressive and shear strength and adhesion to the substrate.

Coverage

TILE EX 40 (in parts)	Water (in parts)	Coverage (in m ² per 25 kg)	Bed Thickness (in mm)
3	1	5 - 6	3
3	1	3 - 4	6

Packaging

25 Kg moisture-resistant bags

Storage & Shelf Life

Storage: Opened bags must be closed immediately after use. Store in closed shades and in dry place.

Shelf life: 12 months from manufacture if stored in original, unopened bags in dry conditions.

Health & Safety

KEM Tile EX 40 is cementitious alkaline product. Care should be taken to avoid contact with eyes, skin mouth and food stuff. Any splashes on the human body must be washed with plenty of water. Do not apply the mix at temperatures below 5°C and

above 35°C and under extreme hot and windy conditions. The bond coat must be cured prior to the installation of tiles. Mixed KEM Tile EX 40 adhesive can be applied for approx., 40 minutes. At higher temperatures this time is reduced and at lower temperatures the application time is increased. Substrates made of precast concrete elements and / or in-situ concrete must be at least 3 months-old (at +23°C and 50% relative humidity). The instructions of the gypsum manufacturers must be followed in case of gypsum and gypsum based substrates. The open time is reduced in case of absorbent substrates. Never add water or dry powder to stiffened tile adhesive. When laying fully vitrified tiles on outdoor floor, use tile adhesive in the buttering / floating method. Apply the adhesive bed in one direction, as far as possible. Apply only as much mortar as can be covered with tiles during the working time. After laying mosaic tiles it is required to remove the adhesive from the joints down to a uniform depth to ensure proper, stain-free grouting. This also applies to front sided paper-faced mosaic. Tools and ceramics should be washed with water immediately after use. Once the product has cured it can be removed by mechanical means only.

Technical Service

Chembond has established itself in various fields on the basis of its dependable technical service. For this purpose, we maintain a well equipped laboratory for research & quality assurance of all products. Our experienced personnel are always on call and would always be available for product demonstrations and product performance monitoring.

Note: It subject to deformation or staining due to water absorption and on substrates subject to continuous moisture rising.