

# Tiling Floors Subject to High Point Loadings

i.e. car showrooms, garages, shopping malls and driveways

## Priming

Packaging    Mixing



Application



## Tiling

Packaging    Mixing



Application



## Grouting

Packaging    Mixing



Application



Uses



## Substrates

Concrete floors

## Materials

**Primax** (two-pack primer), **Kemgrip Floor & Wall** (cement-based, ceramic tile adhesive), **Elastacrete** (water-based, flexible, acrylic additive), **Monoflex** (polymer-modified, cement adhesive), **Kemgrout** (ceramic tile grout), **Primebond** (additive to **Kemgrout**).

## Workmanship

Apply products in accordance with the manufacturer's written instruction, good trade practice and the Standard.

## Surface Preparation

### Existing Concrete

The surface must be clean and structurally sound and be free of dust, oil, grease, wax, paint and other contaminants. Remove oil, grease etc., with an industrial detergent e.g., Tri Sodium Phosphate or caustic soda solution. Wire brush or abrade to remove previous coating. Smooth concrete must be roughened mechanically and washed thoroughly and allowed to dry. Contaminated surfaces must be mechanically abraded.

### New Concrete

Must be finished with a wood float and be allowed to cure for a minimum of 28 days before tiling. The surface must be free of dirt, dust, grease and release agents prior to tiling.

## Priming

Prime all surfaces. Apply **Primax** to the substrate with a hard bristled broom.

## Application

Adhere the tiles with **Kemgrip Floor & Wall** mixed with **Elastacrete** at a rate of 5-6 litres of liquid to

20kg **Kemgrip Floor & Wall** or use **Monoflex** (areas subject to heavy vehicle traffic must use **Kemgrip Floor & Wall** mixed with **Elastacrete**). The adhesive will flex, accommodating possible movement difference between the tile and the concrete whilst being sufficiently rigid to accommodate the stress and point loading of the weight of vehicles or pallet trucks. The adhesive will accommodate pedestrian traffic 24 hours after application. Driveways and car showrooms must set for 14 days @ 23°C @ 50% relative humidity before use, longer in cold conditions. Tiles must be a heavy duty, commercial grade (Rating 5) and be approved by the tile manufacturer for vehicle traffic.

Apply with a notched trowel. For tiles 400mm x 400mm or greater use a 12mm notch and butter tile back (as per the Australian Standard AS3958.1). The final bed thickness must not be less than 2mm for walls and 3mm for floors, to accommodate movement. Spread about 1 metre at a time. Tiles must be set in place while the adhesive is still wet on the surface. Press tiles firmly into the adhesive using a slight sliding motion. Tiles must be firmly bedded into the adhesive so no voids occur (100% adhesive coverage) beneath the tiles.

**Do not** spot fix. Movement joints (5mm) to be at 5 metre grids, corners and room perimeters are filled with **Colour Seal** or **Sealflex**.

**Do not tile over movement joints in the floor.**

## A guide to tile joint sizes

Internal minimum 2mm, external minimum 4mm or as specified by the tile manufacturer and AS3958.1. **Do not** fix tiles with tight joints. When grouting joints of less than 3mm we recommend mixing the grout with **Primebond**. Greater care is needed to place the grout deep into joints before pointing the joints to compact the grout surface.

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