

## ECO-CEM™ - Floors & Walls

### Preparation & Installation

#### Transport and Storage

ECO-CEM™ panels are extremely impact resistant and require minimal packaging. During transportation, use stable flat pallets the same dimension as the panels. When moving panels, lift in order to prevent scratches on the panel surface. Store in an enclosed area protected against heat and humidity. For horizontal storage provide support along the entire bottom surface area with a protective layer between the pallet and the panels as well as on top. For vertical storage provide same protection with additional support for height.

#### Existing Substrates

ECO-CEM™ must be installed on a level surface.

Leveler - The leveling of old surfaces can be achieved with a professional, non-shrink leveling product.

#### a) Concrete

At the time of installation, the substrate must be cured, free from hygrometric shrinkage, and must be even, compact, clean, and have a residual humidity of equal to or less than 2%. For the direct installation to a concrete slab, with the exception of leveling compounds, it is necessary to wait for a period of 1 month for the concrete to cure. For slabs subject to flexural strain, the allowed sag may exceed 1/360 of the total span of the structural system of support.

#### b) Iron

Surfaces in iron must be accurately cleaned and all residual traces of oil removed. If the iron is painted, check the degree of adhesion of the paint to evaluate the convenience of completely removing it by means of abrasives or a paint-stripper.

#### c) Wood

Check the dimensional stability of the support and its sensitivity to humidity. If the wood is painted or varnished, remove the coloring completely with appropriate paint stripping agents or abrasives.

#### Cutting

ECO-CEM™ panels are cut with a diamond tip blade, same as would be used for Granite. Eco Cem may be cut dry but this method will create a lot of dust. ~~Preferably use a wet saw.~~ When finished with cutting, clean up the material immediately as it will absorb the water and stain, this goes especially for lighter colors.

Sealer may be applied prior to cutting otherwise material will need to be let dried completely before application of sealer.

## Installation

ECO-CEM™ panels are easy to install and line up smoothly onto the adhesive. It is necessary to pound the material with a rubber hammer and press against the corners. After laying it is recommended to cover the area with plastic sheets and place weights - about 22 pounds (or more) of weight - for 24 hours to be placed on each corner. When applying the adhesive it is important to be certain that all corners are sufficiently coated underneath. Recommended adhesive for installation of Eco Cem is Kerakoll Superflex.

The installation of ECO-CEM™ panels requires freshly applied adhesive. Spread Kerakoll's SUPERFLEX, a two-component, high-elasticity, polyurethane adhesive over the substrate with a 3/8" (10 mm) toothed trowel. Press down with care to obtain best results. For large formats, it is advisable to install with the "buttering and floating" method of spreading the adhesive over the substrate with a suitable toothed trowel, then smoothing the back of the slab.

It is necessary to keep exposed all pre-existing expansion joints of the surface. In addition, it is necessary to leave 1/8"-1/4" inch of free space around the entire perimeter of the area to allow for overall surface expansion. This allowance will be covered by the skirting board and will not be visible. Please consult with your structural engineer for more detailed information.

Once a panel has adhered to the surface it is difficult to remove. If a panel gets soiled by fresh adhesive it can be cleaned with alcohol or toluene. If the adhesive has hardened it can be removed by scraping the surface with a chisel or steel wool. The quantity of adhesive needed may vary according to the surface area (approximately 0.4 to 0.5 pounds per square foot).

## Fastening

ECO-CEM™ can easily be nailed or screwed to framing. All fasteners used to attach panels to supports must be corrosion resistant. Do not use standard phosphate treated black drywall screws. Fasteners should maintain maximum spacing along supports of 16" o/c. Centerline of fasteners should maintain a minimum of 3/4" from the edge of ECO-CEM™ panels. Screw heads should be flush with surface of panel. For electric screwdrivers use variable speed 2,500 RPM maximum.

## Grouting

ECO-CEM™ joints smaller than 3mm should be grouted with a non-sanded grout, for larger joints one should use sanded grout. Recommended grout joint width is 0.5% of the longest side of the tile (i.e. for a tile 24"x48" the joint width should be 1/4"). There are many good materials for use as grout. Please refer to your installer for products and specific installation instructions.

The grout cleaning must be done before complete hardening. Use a soft sponge with clean water and pass over the surface various times.

**Completion**

Once ECO-CEM™ floor boards have been installed; they require a minimum of 48 hours to set before use. In addition to the 48 hours, we recommend the new flooring be protected with plastic sheeting from any construction related traffic until the entire project is completed.

**Sealer**

To enhance the appearance of ECO-CEM™ and/or to help prevent staining and moisture absorption, various Sealant products may be used. The following products may be used with Eco Cem and have been recommended by its manufacturer for use with ECO-CEM™

<b>Sealer</b>	Natural Look	Eco friendly Fila W 68	Standard MP 90 or Fila FOB
	Matt enhancer Wet Look enhancer	n/a Fila Tone Up	Fila Stone Plus Fila Wet

It is strongly recommended that a small sample of Eco Cem be tested with the sealer before an entire installation is sealed.

**Surface Preparation for Sealer**

All surfaces must be clean, dry, and free of dirt, dust, loose sand, mildew, efflorescence and any other foreign matter. Please refer to manufacturer's instructions.

**Disclaimer**

Proper preparation and installation is the responsibility of the user. These recommendations are supplied as a technical service and may be subject to change.

Sealer recommendations are based on information provided by the manufacturer of the product. Although this document makes reference to Fila there are other products on the market which may be used. For detailed questions as well as purchasing of the sealer products please contact the manufacturer directly.