



Irish Blue Limestone Fixing Guide No. 4

ThinLine® Tiles

ThinLine® tiles are specifically designed for easy, fast and risk-free fixing. They can be fixed on an existing floor, plaster work (walls), or even wooden floor board when using appropriate flexible, cement-based adhesive.

Preparation of Floor or Wall Surfaces

Before fixing, ensure that:

- ▶ **Underground is dry:** it is essential that no residual moisture is trapped beneath the natural stone tile. For equalisation layers (sand – cement), or plaster work in new buildings, Kilkenny Limestone recommends the following rule of thumb:
 - ▶ Wait 1 week per 10 mm thickness before fixing *ThinLine®* tiles e.g. floor equalising layer 70 mm : wait 7 weeks plaster work, +/- 20 mm : wait 2 weeks
- ▶ **Fixing surface is sufficiently even:** Typical thickness for cement- based adhesive is +/- 3 mm. This allows only minimal room to compensate for unevenness in the floor surface. When using special 'thick layer' cement-based adhesives, the layer thickness can be increased to max. +/- 7 mm.

Adhesives

We recommend following products for fixing of *ThinLine®* tiles

- ▶ **'weber.set rapid'** (white) by [Weber](#).
 - ▶ White powder to be mixed with water.
 - ▶ Consumption : +/- 2.5 kg/m
- ▶ **'Stone-Flex'** or **'Stone-Flex Rapid'** (white) by [Bostik](#).
 - ▶ White powder to be mixed with water.
 - ▶ Consumption : +/- 2.5 kg/m
- ▶ **'Granirapid'** (white) by [Mapei](#).
 - ▶ 2 components adhesive
 - ▶ Powder is mixed with special latex, no addition of water
- ▶ Other cement-based adhesives may be considered. These should be suitable for use with natural limestone, have high flexibility and 'open time'.

Use of Adhesives

Use a 6mm comb to evenly distribute adhesive over the floor surface:

- ▶ Ensure slightly more than the surface of the tile is covered before inserting it.
- ▶ The position of the comb determines the thickness of the adhesive layer:
 - › more vertical: thicker layer
 - › more horizontal: thinner layer
- ▶ Tiles should be pressed, compressing the adhesive layer by +/- 1.5 mm (or 50%) to ensure good contact.

Tile Installation

As *ThinLine*® tiles are a natural product, diversity within the tiles is an inherent characteristic. Colour variations, as well as differences in smoothness, calcite veins, and fossil concentrations all contribute to this richness in diversity.

SUGGESTION: When fixing, use tiles from different packing simultaneously so that there is a good distribution of lighter and darker shades, more and less fossils etc. to form a rich and coherent floor surface.

- ▶ Ensure the back of tiles are clean and dust-free.
- ▶ Plastic spacers can be used to obtain joints of min. 3 mm or more. These spacers are positioned at every corner of the tiles. Ensure they are sufficiently deep to be hidden when joints are filled.
- ▶ Tiles can be cut to size using a diamond disc for natural stone or a grinding disc suitable for concrete.

Filling Joints

- ▶ This can be done 2 to 3 days after fixing. Kilkenny Limestone recommends waiting 1 week however before filling joints.
- ▶ Kilkenny Limestone recommends using pure white (or grey) cement and some *Compactuna* mixed with water for filling joints. Other coloured joint fillers are also available. The colour of the joint will considerably influence the overall effect. It is therefore advisable to seek advice at local ThinLine distributors.
- ▶ To avoid discoloration of tile edges, coloured joint fillers should be suitable for porous natural materials, such as marble and limestone. Mix the dry powder with water until it is sufficiently liquid to fully penetrate the joints. Pour a small amount of the mixture over the tiles and spread diagonally over the tiles, using a rubber wiper until all joints are filled.
- ▶ Use a cloth dampened with warm water to remove any excess cement and to clean the tile surface:
 - › Start removing excess cement immediately after filling the joints.
 - › Divide the floor into areas of +/- 10m² for filling joints followed by removal of excess cement to prevent cement drying on top of the tile surface.

- › Clean the cloth on a regular basis using clean water to avoid a cement veil forming on the tile surface.
- › Avoid rubbing in the direction of the joint as this will re-open the joints. Instead, use the cloth in circular movements, thereby covering a greater surface area.
- › Finish off with a dry cloth to polish and enhance the tile surfaces.
- › Close doors and windows to prevent drafts during the drying out period.

IMPORTANT: Never use cement veil removers. These products can permanently damage your tile floor. Make sure that excess cement is removed shortly after the joints have been filled. Continue cleaning thoroughly until the floor is completely free from cement and dust.

Expansion Joints

With floor surfaces over +/- 40 m, or floor lengths over 8m, it may be necessary to include a flexible joint. In this case, Kilkenny Limestone recommends seeking advice from a qualified natural stone tile fixer.

Floor Heating

ThinLine® tiles are suitable for use with floor heating systems.