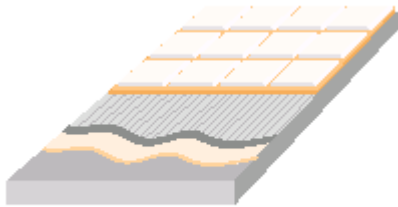


Tiling onto Screed

Tiling onto Cement Based Screeds

Screeds are traditionally relatively straightforward materials onto which to apply tiles. The conventional screed is a mix of cement and sharp sand used to cover a rough concrete in order that a flat level surface can be provided onto which the floor coverings can be affixed. Like concrete there are some basic differences between applying an adhesive to an existing cementitious screed and a new cementitious screed.



Existing sand cement screed

Preparation

As the existing screed is not fresh no additional drying period is required. It is assumed that a damp proof membrane is sited below the concrete to prevent moisture rising into the screed. If no DPM is sited below the concrete the provision of a surface membrane such as **SDPM** should be considered as a barrier between the screed and the tiling layer. The screed should be sound, clean and free from loose deposits of dirt, dust, grease and residual adhesives. If the surface of the screed is poor, the affixing of ceramic tiles may result in a loose top layer, or laitance, being removed exhibiting itself as a tiling failure.

Whenever possible, existing screed surfaces should be mechanically abraded to ensure a sound clean bond can be achieved with the adhesive. If the surface of the screed is too rough, consideration should be given to the application of a self levelling screed prior to application of the tiles.

If the screed is dusting or the porosity is high priming is required. **Flexibond** at a dilution rate of 1: 5-6 parts clean water, or **LFP5** should be used and applied using a mop or brush. Coverage will depend on porosity and regularity of the surface. The drying period would be best judged on site, and will also depend on the ambient temperature and humidity.

Adhesives

Vitri-Rapid, **Biscem Fast-Set** or **Thin and Thick Bed Adhesive** should be used in all areas except when using white grouts, light toned marble or translucent natural stone tiles a white adhesive should be used.

When using porcelain or vitrified tiles, **Vitri-Rapid** or **Vitri-Flex** should always be used. This will enhance the bond strength at the adhesive/tile interface.

Grouting

Grouting may commence once the adhesive bed has firmed up. Any grout may be used to suit the situation.

When using porcelain or vitrified tiles **Vitri-Grouts** should be used as this will

enhance the bond strength at the tile/grout interface. Drying will vary according to the site and ambient conditions.

Movement Joints

Any movement joints visible in the screed should be followed through the tiling to the surface. Failure to do this may result in excessive movements within the structure being transferred to the tiles with the likelihood of resultant failure of the system. Owing to the complexity of this subject please refer to Technical Bulletin TB4.

New Sand/Cement Screeds

Preparation

Newly laid sand cement screeds should be allowed to dry out as slowly as practicable after curing to reduce the risks of curling. The elimination of construction moisture in structural concrete is considered to take 6 weeks after curing before either a screed or tile bed is applied to it. A longer period may be necessary in poor drying conditions. Sand/cement screeds should be cured for at least 7 days by covering with polythene or other impermeable membrane and be subject to continuous air drying after curing for at least 2 weeks before tiling is applied.

If screeds are not sufficiently cured by covering, differential drying and shrinkage across their depth can cause them to lift and curl. If this happens after tiles have been applied, the associated shrinkage will result in a failure of the tiling system.

Alternatively a reinforced decoupling matting system such as **Watec@2E** or **Watec@3E** externally can also be used. Call 020 8778 9000 for more information. In this situation a polymer modified adhesive should always be used. If the substrate is dusting or the porosity is high, priming will be required. Use **Flexibond** at a dilution rate of 1: 5-6 parts clean water and apply using a mop or brush. Coverage would depend on porosity and regularity of the surface.

Drying period would be best judged on site, this would also depend on temperature and humidity

Adhesives

Vitri-Rapid, **Fast-Set** or **Thin and Thick Bed Adhesive** should be used in all areas except using white grouts, light toned marble or translucent natural stone tiles where a white adhesive should be used. When using porcelain or vitrified tiles, **Vitri-Rapid** or **Vitri-Flex** should be used. This will enhance the bond strength at the adhesive/tile interface.

Grouting

Grouting may commence once the adhesive bed has firmed up. Any grout may be used to suit the situation, but it must be remembered that all floor grouts require a minimum grout width of at least 3mm. If smaller grout joints are required then a wall grout should be used. When using porcelain or vitrified tiles **Vitri-Grouts** should be used as this will enhance the bond strength at the tile/grout interface. Drying will vary according to the site and ambient conditions.

Movement Joints

Any movement joints visible in the screed should be followed through the tiling to the surface. Failure to do this may result in excessive movements within the structure being transferred to the tiles with the likelihood of resultant failure of the system. Owing to the complexity of this subject please refer to Technical Bulletin TB4.

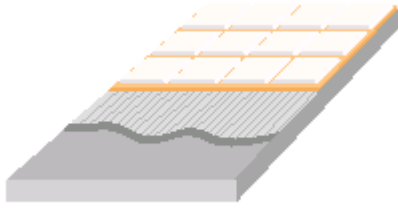


Any falls within the floor should be formed within the concrete sub base and never within either the screed or the adhesive bed.



Poorly compacted and cured screeds are likely to fail in service. Before tiling a screed it is important to know the product is sound and stable.

Latex Floor Screeds



Any falls within the floor should be formed within the concrete sub base and never within either the latex screed or the adhesive bed.

Preparation

Latex screeds are generally used to even out rough textures in sub bases and can be laid from as little as 1mm to as much as 30 mm in conjunction with a bulking aggregate. Designed for fast track application they can be covered after 24 hours with impermeable coverings such as tiles.

The screed should be sound, clean and free from loose deposits of dirt, dust, grease and residual adhesives. If the latex screed is an old recently uncovered screed and is dusting or the porosity is high, priming will be required. Use **Flexibond** at a dilution rate of 1: 5-6 parts clean water or **LFP5** and apply using a mop or brush. Coverage would depend on porosity and regularity of the surface. Drying period would be best judged on site, this would also depend on temperature and humidity.

Adhesives

Vitri-Rapid, Fast-Set, Vitri-Flow or **Thin and Thick Bed Adhesive** should be used in all areas except when using white grouts or light toned marble, natural stone tiles where a white adhesive should be used.

When using porcelain or vitrified tiles, **Vitri-Rapid** or **Vitri-Flex** should be used. This will enhance the bond strength at the adhesive/tile interface.

Grouting

Grouting may commence once the adhesive bed has firmed up. Any grout may be used to suit the situation.

When using porcelain or vitrified tiles **Vitri-Grouts** should be used as this will enhance the bond strength at the tile/grout interface.

Drying will vary according to the site and ambient conditions.

Movement Joints

Any movement joints visible in the screed should be followed through the tiling to the surface. Failure to do this may result in excessive movements within the structure being transferred to the tiles, with the likelihood of resultant failure of the system. Owing to the complexity of this subject please refer to Technical Bulletin TB4.