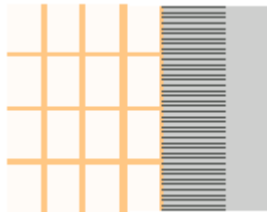


# Tiling onto Metal, Asphalt and Fibreglass

## Metals

Metals can be suitable to receive tiling but the type of metal and form are very important.



### Steel

#### Preparation

Steel can provide a suitable substrate on to which tiles can be affixed. However the base must be rigid and free from any deflection.

It is important to ensure the surface is perfectly dry and clean. Particular attention should be paid to cleaning, ensuring grease, grime and any parting agents are removed.

Where necessary, treat the surface with a rust inhibiting primer or **Bis-Epoprime** sand blinded.

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.

#### Adhesives

For direct application, a rubber crumb adhesive such as **Bis-Flex** should be used. It is important that the substrate is rigid. If there is sufficient vertical deflection the adhesive may remain adhered but the deflection may raise stresses large enough to crack the brittle tile surface.

#### Grouting

It is important that a waterproof grout such as **Speed-E-Poxy** is used. See the grouting section for further information concerning epoxy grouting.

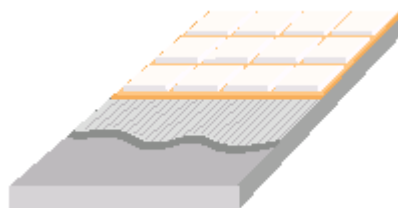
#### Other metals

Soft metals such as lead and copper should not be tiled over directly. With these, there is likely to be some movement within the metal itself. If these types of metal substrate need to be tiled it may be best to cover the surface with plywood to give a false rigid surface on which the tiles can then be satisfactorily applied.

For temporary fixing, however, the surface must be well cleaned and degreased and in wall situations, **Showerproof** will give sufficient grip. It should be stressed that such a fix is likely to be a temporary solution.

If there is any flex or deflection in the metal it will not be suitable for tiling. Aluminium should never be tiled with a cementitious adhesive as a reaction will occur between the metal and the alkaline adhesive resulting in a chemical degradation.

## Asphalt



#### Preparation

Internal flooring grade asphalt that is sound can be used as a suitable substrate for tiling. The asphalt surface must be clean and prior to tiling should be cleaned with a degreasing solution which itself should be removed to

prevent contamination of the bonding interface.

#### Adhesive

Tiles should be applied using an even bed of a cementitious adhesive such as **Vitri-Rapid**, **Vitri-Flex**, **Vitri-Flow**, **Bis-Xtra**,

#### Thin and Thick Bed Adhesive or Fast-Set.

Asphalt is not the strongest of surfaces and an even 3-4 mm bed of tile adhesive should be used. Varying thickness' of adhesive can cause stresses to build up which can result in differential movement and ultimately failure of the tiling.

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.

Alternatively a reinforced decoupling matting system such as **Watec@2E** can also be used. Call 020 8778 9000 for more information. In this situation polymer modified adhesives should always be used.

When using white grouts, light toned marble or natural stone tiles a white adhesive should be used.

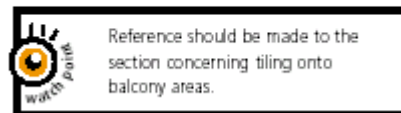
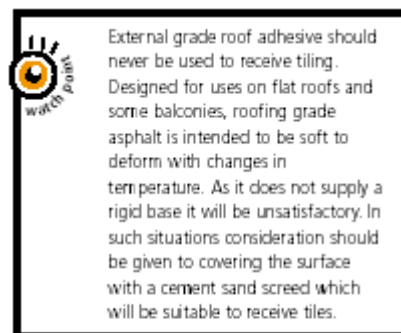
#### Grouting

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 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.



## Fibreglass

Tiles are sometimes required to be fixed to fibreglass in areas such as shower trays and stand alone units. Fibreglass is often very flexible and hence not suited to receiving tiling. If the fibreglass can be made rigid it should be cleaned down thoroughly to remove any parting agents or greases that may be present.



### Preparation

The main consideration with tiles is to ensure the surface is perfectly dry and clean. Particular attention should be paid to cleaning, ensuring grease, grime and any parting agents are removed.

### Adhesives

A rubber crumb adhesive such as **Bis-Flex** should be used, though consideration should be given to the use of an epoxy adhesive. If there is sufficient vertical deflection the adhesive may remain adhered but the deflection may raise stresses large enough to crack the brittle tile surface.

### Grouting

**Vitri-Grout** or **Speed-E Poxy** are suitable depending on the application.