

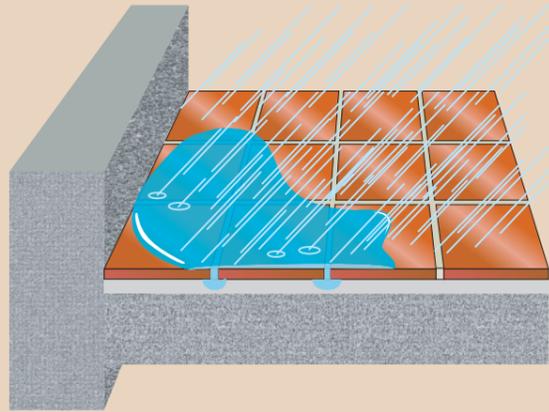
## Tiling onto balconies

Balconies can be difficult substrates to tile. The substrate and tiles will be subject to many extremes of weather from high temperatures in the

summer to freeze/thaw cycling in the winter. Dark tiles will heat up quicker and to greater temperatures thus creating greater stresses. Larger tiles

will also create greater stresses than smaller tiles. Without the correct design and application, the tiles are likely to debond or crack.

### 1 Design of the balcony

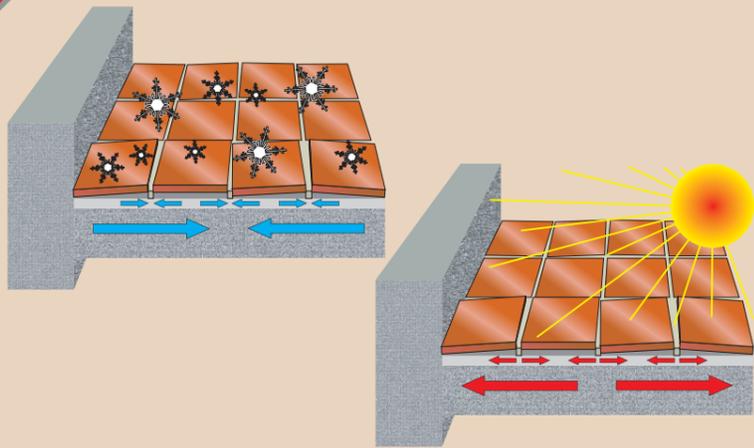


The balcony should be designed in such a way that there is a slope to allow drainage. Water should not be allowed to pool.

The structure must be strong enough to support the expected load including tiles, adhesive, grout and a screed if needed, without undue movement.

Wooden balconies are not suitable for tiling.

### 2 Extremes of weather

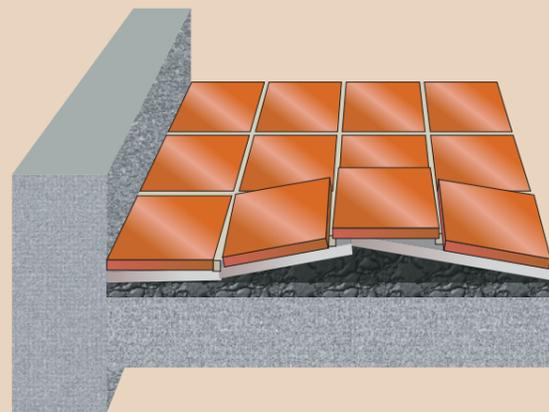


Balconies will receive a full array of weather conditions from freeze/thaw in the winter to direct sunshine in the summer.

Screed or adhesive that is constantly saturated with water will freeze and expand causing it to break up.

Direct sunlight onto tiles will cause them to warm up and expand causing stresses to form between the tile, adhesive and screed.

### 3 Asphalt-covered balconies



External grade asphalt should not be tiled directly onto. The asphalt is not a stable base as it is very soft and malleable. Due to the oils naturally present in the asphalt, it is also very difficult to adhere to.

## Use polymer-modified adhesives and grouts

The existing design of a balcony should be of rigid concrete construction with a gradient of 1.5mm/m towards drainage points. The construction should be capable of withstanding the extra load of adhesive,

grout and tiles (consult a structural engineer). Polymer-modified adhesives and grouts offer better adhesion strengths and reduced porosity. Therefore, they offer greater resistance to frost and thermally

induced movement. Dark coloured tiles absorb more heat than light coloured tiles and therefore experience greater thermal movement. Smaller tiles create less stresses than larger tiles.

### Products required

**weber.set SPF, weber.set rapid SPF**  
**weber.joint wide flex**  
**weber.joint pro**  
**weber.joint silicone**

### 1: Preparation

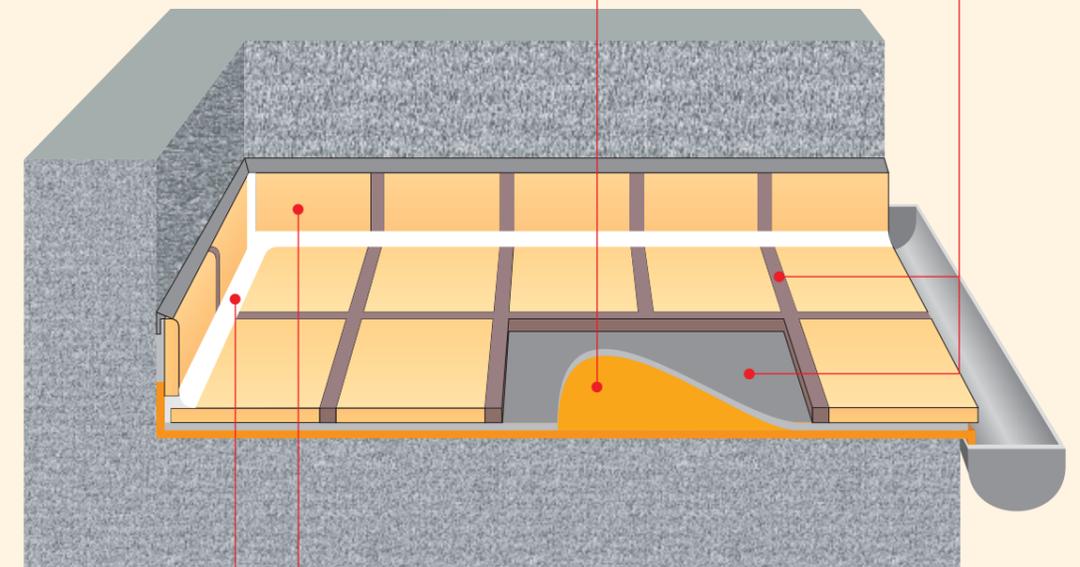
The surface of the balcony should be flat, slope towards drainage points and be free from dust, grease or any other contaminating layer. Any existing loose or damaged tiles should be removed and the resulting hole filled with a suitable material and allowed to cure. Balconies with an asphalt residue can only be tiled when an uncoupling membrane is used between asphalt and tile adhesive.

### 2: Uncoupling and waterproofing

An uncoupling membrane should be fitted to the balcony so that it runs 30mm up surrounding balcony walls and overlaps the edge of the balcony by the same amount. Gaps between sheets of uncoupling membrane should be sealed with a waterproof tape. The fitting of a gutter should be considered at the balcony edge to prevent dripping.

### 3: Fixing and grouting

Fix the tiles using **weber.set SPF** or **weber.set rapid SPF**, leaving grout joints at least 3 mm wide and ensuring that a solid bed of adhesive at least 3 mm thick is achieved. It is good practice to occasionally remove a tile during fixing to ensure that the appropriate contact is being achieved. A movement joint of approximately 6 mm should be left at all internal corners to allow for thermal movement. Grout the tiles with **weber.joint wide flex** or **weber.joint pro**.



### 4: Protecting against water ingress

A layer of skirting tiles should be fixed along surrounding walls and the top edge should be protected by a waterproof trim to prevent water ingress. A gap of approximately 6 mm should be left at the bottom of the skirting tile to allow for movement.

All perimeter joints should be filled with **weber.joint silicone** to provide a watertight seal.

