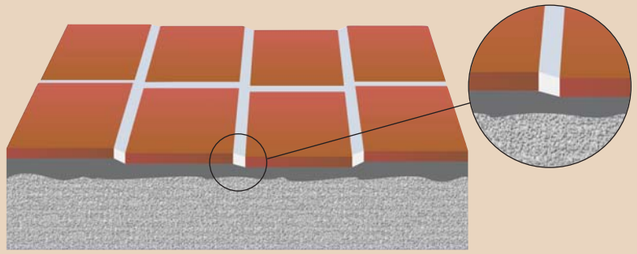
Tiling uneven surfaces

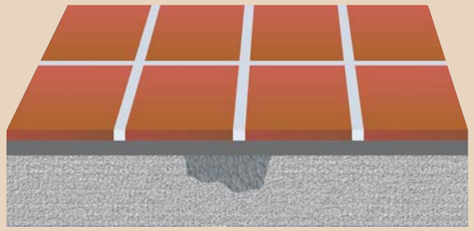
It is important, both for appearance and for safety, that the finished tile surface is flat with no tiles standing higher than the others. Providing the normal tiling practices are followed this is straightforward on flat, level substrates. If the substrate is not flat then a number of problems can arise.

1 Increased difficulty in achieving a flat finished surface on the tiles



A serrated adhesive spreading trowel, when used at a constant angle, enables the even distribution of adhesive onto the substrate. If the tiles are all bedded with a similar force they should be at the same height with only minimal unevenness. However, if the substrate is not level, this is much more difficult to achieve and there is more chance that some edges will be standing proud.

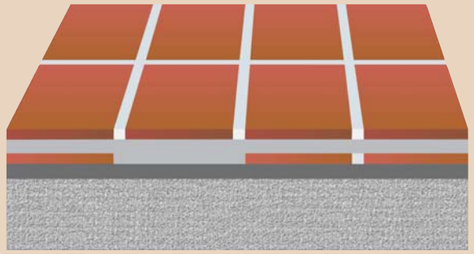
2 Extra time required to fill multiple holes



Localised deep holes may result in a bed thickness that exceeds the specification for a thin-bed adhesive.

Patching such holes can be time consuming if there are more than a few of them.

3 Combination of problems



In some instances, for example when tiling over a layer of existing ceramic tiles, the above mentioned problems may be combined.

Some tiles may need to be removed because they are unsound, whilst others may have been imperfectly fixed and exhibit some variation in height.

4 Some natural stones are not a constant thickness

Uncalibrated natural stones are stones that have been split along natural fracture planes rather than machine cut. The result is a stone that varies in thickness, both from within each stone and from piece to piece.

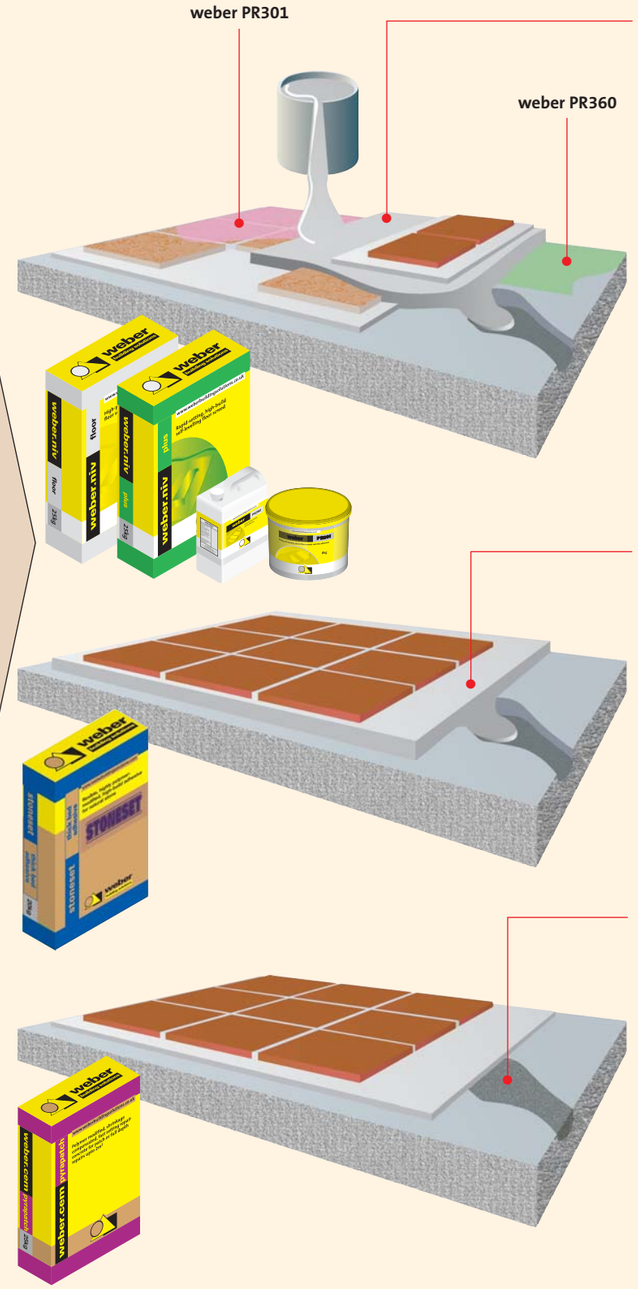
These types of stones require an adhesive that can be applied to greater thickness than normal.

Use correct material depending on condition of substrate and type of tile

There are a number of possible solutions depending on the condition of the substrate. A levelling compound will give a smooth surface but this does not help with uncalibrated stone where a high-build adhesive must be used. Deep holes should be filled first with a repair mortar.

Products required

weber PR360 or **weber PR301**
weber.niv floor or **weber.niv plus**
stoneset thick bed adhesive
weber.cem pyrapatch



Solution 1: Use a levelling compound

A levelling compound can be used to smooth out irregularities, holes and gaps between existing tiles etc. and provide a flat and level surface for tiling.

Ensure that the surface is clean, dry and sound. Any existing tiles, paint etc. must be firmly adhered.

Prime porous surfaces with **weber PR360** and impervious surfaces with **weber PR301**. Allow the primer to dry for a few hours (**weber PR301** should still be tacky).

Pour the appropriate levelling compound to the required thickness (**weber.niv floor** from 1 to 10 mm, **weber.niv plus** from 5 to 25 mm). Make sure that any movement joints in the substrate are carried through the screed and tiling layer.

Fix the tiles using a **weber** cement-based adhesive as appropriate for the type of tile. Allow the adhesive to set fully and then grout the joints.

Solution 2: Use a thick bed adhesive

If the tiles/stones are uncalibrated, a thick bed adhesive must be used. This will also allow for some irregularities in the substrate.

Ensure that any loose or unsound material is removed.

Fix the tiles with **stoneset thick bed adhesive**, which can be built up to 25 mm thick.

Allow the adhesive to cure for at least 24 hours before grouting the joints.

Solution 3: Use a patch repair mortar

For occasional deep holes in an otherwise flat surface, a repair mortar may be the best option.

Ensure that any loose or unsound material is removed and that the edges are cut square, not feathered.

Fill the hole with **weber.cem pyrapatch**. Allow the mortar to cure.

Fix the tiles using a **weber** cement-based adhesive that is appropriate for the type of tile.

Allow the adhesive to cure fully before grouting the joints.

For detailed instructions, please refer to the relevant product data sheet. For further information, please contact our Technical Helpline on 01525 722137.