The Installation of Agglomerate Stone

What is agglomerate stone?

Agglomerate stone, also known as conglomerate or composite stone, is essentially a man-made factory produced material.

In a typical process, graded marble or quartz is selected, compressed and blended together with a resin.

Large blocks are produced from this blend, which are later cut to size and given the required surface finish.

In this way agglomerate tiles are produced.

Does agglomerate stone behave differently to natural stone?

Yes it does. Ceramic and porcelain tiles are relatively stable materials.

Agglomerate stone products are generally more susceptible to heat and moisture. They can often expand considerably when exposed to heat - e.g. from heated floors or when used in conservatories that catch a lot of sun. They can also expand and curl if exposed to moisture e.g. from damp substrates or the use of excessive amounts of water when cleaning.

Agglomerate stone tiles should therefore be treated differently to ceramic or porcelain tiles when they are being fixed.

See step by step installation guide overleaf









The installation of agglomerate stone tiles

How can agglomerate stone be safely installed?

- Ensure that all substrates are fully dry before fixing the stone tiles. This
 means that concrete, screed, render, plaster etc. must not still be damp.
 Ensure that all floors have a functioning DPM beneath the base slab to
 prevent rising damp.
- 2) Ensure that heated floor systems have been fully commissioned before fixing the tiles. This is a requirement for all tiled finishes but is extremely crucial when fixing agglomerate stone. This means that they should have been heated up and allowed to cool down. When using the heating system avoid rapid temperature rises. Always raise and lower temperatures gradually.
- 3) Expansion joints will generally need to be inserted at more frequent intervals than with ceramic / porcelain tiled floors. They must also be adequately elastic. This is especially important in areas where heat is expected, such as with underfloor / undertile heating systems and in conservatories.
- 4) Allow the stone to acclimatise to the conditions in which they will be used i.e. store in the same location they will be fixed. Do not bring them straight from a cold garage into a warm conservatory immediately prior to laying.
- 5) Always follow the cleaning and maintenance instructions given by the manufacturer. Apply any sealers as recommended.

Which type of adhesive should be used to bond agglomerate stone?

- 1) The adhesive should be able to accommodate the characteristics of these synthetic tiles.
- 2) A rapid setting adhesive with minimal water content should be used. Those adhesives with a latex additive keep water to an absolute minimum. This is to reduce the risk of curling. A rapid setting adhesive reacts faster and water is used up faster therefore spending much less time in contact with the stone.
- 3) The adhesive should have a high bond strength and a certain amount of flexibility.
- 4) Use a white adhesive for lighter coloured agglomerate stone.

Mapei Granirapid, a rapid-setting two-part S1 flexible adhesive is the ideal product for these types of tiles.

Which type of grout should be used with agglomerate stone?

- 1) For the same reason as stated in the adhesive selection section, a rapidsetting material would be the optimum choice as the water used in mixing is used quickly with less time in contact with the agglomerate stone.
- 2) A rapid-setting grout is also less likely to cause 'picture framing' effects due to the speed of the set.

Mapei Ultracolor Plus, a rapid-setting, flexible, colourfast, highly advanced grout is the ideal product for these types of tile.



Mapei Granirapid is the ideal product for installing agglomerate stone.



Use a white adhesive for lighter coloured agglomerate stone.



Mapei Ultracolor Plus advanced grout is ideal for use with agglomerate stone.



