

Case 08 Tiling on gypsum plaster

Gypsum plaster can only withstand relatively small/light tiles

Gypsum plaster work should be firmly adhered to its substrate and sufficiently strong to support the specified tiling.

Gypsum plaster is a relatively weak material (in comparison to wood, block work, concrete or other cementitious material). The maximum weight of tiling acceptable on a dry, well-adhered plaster background is of 20 kg/m². Plaster work should be completed at least 4 weeks prior to starting the tiling job. Even if the surface appears to be dry in less than 4 weeks, the layers underneath may not be properly dry nor fully cured.



Gypsum plaster is water sensitive

Gypsum plaster is water sensitive and is therefore not an ideal substrate in wet areas such as bathrooms, showers, kitchens or wet rooms.



Inconsistent quality of finishing

The finished surface of gypsum plaster can be inconsistent and varies depending on the surface conditions and the workmanship.

The surface can be very dusty or, if over trowelled, it can be very dense and shiny.



Cement based adhesives react with gypsum plaster

When gypsum plaster comes into contact with cement, it forms a weak layer of ettringite that can cause the adhesive and plaster not to adhere properly. Careful preparation is needed to prevent this from happening.



Solution 08 *Tiling on gypsum plaster*

Recommended products

Primer + tile adhesive



or

Dispersion tile adhesive



+

Tile grouts



or

1- Substrate preparation

The substrate must be sound, clean and able to bare weight, free from dust, dirt, grease, oil or any contaminating materials prior to fixing tiles and prevent adhesion failure.

It is mandatory to prime the surface with **weber.col prime** when using a cement based adhesive to minimize the risk of chemical reaction.



2- Method of application

Tile adhesive

Before fixing the tiles with a cementitious tile adhesive, the gypsum plaster substrate should be primed with **weber.col prime**.

After priming the substrate, mix **weber.col plus** with the proper amount of water and apply it over the substrate using the selected notched trowel to have a uniform thickness. For large format tiles bigger than 900 cm², it is recommended to use the back buttering method.

Once the tiles are applied, press them firmly, ensuring a good adhesion between the tiles and the substrate.

Tiling on gypsum substrates can be performed without priming using a dispersion tile adhesive such as **weber.col putty**.



Tile grouting

It is recommended to have a minimum joint width of 2 mm around the tiles. Grouting should be done at least 24 hours after fixing tiles, using **weber.joint perfect or weber.joint**.

Apply with a rubber trowel in a diagonal direction to completely fill the joint. Remove excess material from the surface with a damp sponge. When the grout is dry, clean it with a dry cloth.



Important Note

- Gypsum plaster loses nearly its cohesive strength when wet, so it needs to be protected in areas where it could be subject to wetting such as wet areas. Therefore a protection is required when application in wet areas.