GRANITE PLASTER – Installation Guide

1. Install the relevant primers and base coats prior to starting the GRANITE PLASTER application process. Sanding the last base coat with a 24-grit silicone carbide floor disc.

   Note - it is imperative that the last base coat is fully blinded with 0.3-0.6 Quartz sand and not kiln dried paving sand. The larger grain size assists in holding more HYDRO PLASTER TOP COAT (NATURAL), allowing GRANITE PLASTER to fully bond.

2. GRANITE PLASTER is applied into HYDRO PLASTER TOP COAT (NATURAL) with 10% water per bucket total. This includes any pigment water, meaning that the total water per bucket is 600g including the water used to mix the pigment. Do not exceed this water amount.

The Installation Process – FULL Coverage GRANITE PLASTER

- Mix the HYDRO PLASTER TOP COAT (NATURAL) with the hardener and correct amount of water as listed above. Scrape the sides and bottom of the bucket to ensure full mixing is achieved.

- Apply the HYDRO PLASTER TOP COAT (NATURAL) using a large spatula at grain thickness. The coverage should be in the region of 500g per m2. It is important that the material is worked back and forth across the surface, filling the pores of the 0.3-0.6 quartz fully. The correct amount of HYDRO PLASTER TOP COAT (NATURAL) must be applied to the surface. Applying too little will not allow the granite chippings to stick.

- Whilst the HYDRO PLASTER TOP COAT (NATURAL) is being applied, a second applicator should start the granite application. The first stage is to roll over the freshly applied NATURAL with a black plaster roller / coarse hair roller whilst wearing spiked shoes. The roller removes any trowel lines and ‘plucks’ up the surface of the NATURAL ready to receive the granite chippings.

- Whilst wearing spiked shoes, begin adding the granite flakes into the freshly rolled HYDRO PLASTER TOP COAT (NATURAL). Throw them up into the air to avoid clumping where possible.

  Note – The consumption of the granite is 300g per m2 for full coverage. This is exactly the correct amount, and it is imperative not to run out during the

installation. A two-stage approach should be adopted to this stage of the application. Applying a first initial layer of fine stone first to ensure coverage, before then covering the entire areas to remove any shiny or less covered patches.

Full Coverage GRANITE PLASTER = 300g per m2

Note – It is important the installation team work together and communicate during the application process. The installer applying the HYDRO PLASTER TOP COAT (NATURAL) must work to the speed of the granite applicator, not allowing themselves to get too far ahead. Getting too far ahead of the granite applicator will mean that the HYDRO PLASTER TOP COAT (NATURAL) starts drying before the chippings are added, and they will not stick. It is advisable to cover all windows from direct sunlight, and do not apply if the slab temperature is too hot.

The Installation Process – PART Coverage GRANITE PLASTER

Part coverage GRANITE PLASTER is applied into a HYDRO PLASTER TOP COAT – REFINED, NATURAL or RUSTIC depending on the desired look. Due to the GRANITE only being a light sprinkle / coverage, it does not provide the same level of hiding power as a full coverage application. Part coverage therefore requires an initial layer of HYDRO PLASTER TOP COAT (RUSTIC) to be applied before the final coat, much the same as a standard HYDRO PLASTER TOP COAT application.

- Mix the HYDRO PLASTER TOP COAT (REFINED, NATURAL or RUSTIC) with the hardener and correct amount of water as listed above. Scrape the sides and bottom of the bucket to ensure full mixing is achieved.

- Apply the HYDRO PLASTER TOP COAT (REFINED, NATURAL or RUSTIC) using the preferred trowel at grain thickness and float if required.

- Whilst the HYDRO PLASTER TOP COAT is being applied, a second applicator should start the granite application. The GRANITE flakes should be added as soon as possible into the HYDRO PLASTER TOP COAT as this ensures they bond sufficiently. We do not recommend walking on spikes for this process, and instead the flakes should be added at the same time as the trowel application.

The Sanding Process

- Sweep off and reclaim the loose granite flakes.

- Ensure that the surface has cured sufficiently so that the sanding process can begin. This should be tested by pushing a fingernail into the surface. If you can dig into the granite flakes and make a dent it is not ready for sanding.

- The sanding is completed using 4x 150mm 80 grit sandpaper discs, placed underneath a soft backing pad as per the images below, or with a 17 inch, 60g or 80g silicone carbide disc.

Note - Full coverage should be sanded using the 4x 150mm disc method. It is a softer form of sanding and lowers the risk of burning through the finish.

Part coverage can be sanded with both types of disc, and a partial RUSTIC application will require heavy sanding to ensure it is REFINED enough.

Alternatively, a random orbital dry wall sander and 80 grit sanding discs can be used to sand full coverage GRANITE PLASTER.

Note – The GRANITE PLASTER is extremely 'grippy' when first starting to sand. Sprinkle a handful of reclaimed chippings underneath the sanding disc to help get the sander started / spinning. Be extremely careful not to over sand the finish and create bald spots. Full coverage GRANITE PLASTER in particular does not require a large amount of sanding.

Note – 17-inch diamond pads do not work for sanding GRANITE PLASTER. The diamonds generate too much heat and melt the surface of the granite, producing black marks and swirls.

- The same process should be completed around the edgework using 60g or 80g sanding discs, ensuring the level of smoothness matches. Once completed the floor area should be hoovered clean.

First Sealer

- The surface of GRANITE PLASTER has a pitted, open texture and requires a suitable 'pore filler' to close the texture and ensure the floor surface can be cleaned. In dry applications MONO SMOOTH should be used, and in wet environments PA SEALER & thickening powder should be specified.

  MONO SMOOTH = 1x coat @ 100g per m2 per coat

  PA SEALER & Thickening powder = 1x coat @ 200g per m2

Sanding the MONO SMOOTH

- Once the MONO SMOOTH has dried it should be sanded sufficiently to remove the excess MONO SMOOTH from the surface of the granite, only leaving it within the pores / pits. This reduces the 'plastic look' and creates a smooth finish. The soft, rubber nature of MONO SMOOTH makes it difficult to sand.

- Using 4x 150mm sanding discs attached to a foam buffing / backing pad helps to reduce the overall contact area. In doing so it also reduces the amount of heat generated whilst sanding, meaning that the MONO SMOOTH has less tendency to melt and smear onto the bottom of the sanding disc.

Note - The surface of the MONO SMOOTH can be very grippy when first starting to sand and the machine may not spin. Spinning the pad and discs by hand will help to produce a small amount of dust and take the sharpness away. The machine should then spin once this has been done.

Note - Using standard 17inch mesh screens or silicone carbide discs will result in melted MONO SMOOTH smears sticking to the bottom, and after a short period no sanding will take place.

Note – Small lumps of melted / sanded MONO SMOOTH will form over the surface of the floor whilst sanding and this is normal. They will also attach to the bottom of the foam pad which does not cause an issue. Regular micro fibre mopping of the surface will reduce this and help to prevent melted MONO SMOOTH sticking to the sanding discs. It is advisable to check the condition of the discs every 10m2.

- Hoover and Micro-fibre once the sanding is complete.

Second Sealer

- Apply 1 or 2 coats of the desired polyurethane seal coat:

  DUO SEALER
  DUO SEALER (GLOSS)
  DUO PLUS

  Diamond polished finish can be achieved by polishing the DUO PLUS once it has dried overnight.

- The finished floor surface should be covered with breathable cardboard roll (RAM Board) for a minimum of 14 days. Masking tape should not be applied to the floor surface.

Useful Hints and Tips

1. Applying the correct amount of HYDRO PLASTER TOP COAT is paramount. Applying too thinly will compromise the application.

2. The 0.3 – 0.6 sand blinding is extremely important. We tested kiln dried paving sand (0.1 – 0.3) and it did not hold enough HYDRO PLASTER TOP COAT within the surface texture.

3. Working as a team during the application process is critical. The GRANITE PLASTER must be added into the HYDRO PLASTER TOP COAT whilst the surface is still wet.

4. Do not try to start the sanding process if the surface is still soft.

5. Do not deviate from the process listed above. It took months of testing to fine tune the application process, and we have found that it only takes a small change to result in an unsuccessful application.