

Self-coloured Plaster Application: Fine Earth and Claytec Plasters

This document is in addition to the Technical Information Sheet on Clay Finish Plaster and Self-Coloured Plaster. It should be read in combination with that document.

Material Differences

The basic difference between the two ranges is that the Fine Earth plasters are made from self-coloured clays and sands, and also include small amounts of pearl sand, while the Claytec plasters use a base of white clays and sands and then use natural pigments to give colour to the plasters. In effect this means that the Fine Earth has a more lively and varied appearance, and benefits from being sponged and then brushed back, as this reveals the grain of the sands and also stabilises the surface. The Claytec plasters on the other hand, do not benefit particularly from being rubbed back, because the pigment, being smaller, is evenly distributed in the plaster and no extra visual effect is achieved. It should be also said that the Claytec plasters are slightly coarser and cannot so easily be reworked once dry as there are less fines and binding material in the product. This is another reason for no sponging and brushing them back. That said, we have found that the Claytec plasters produce an exceptionally hard, durable and attractive finish when polished a little in application.

Application on Boards:

The self coloured plasters, unlike the clay finish plaster, do not contain any fibres, and therefore have less tensile strength than fibre enforced plasters. There is also a small amount of shrinkage in the drying process. Both of these can create problems where there are movement joints, different thicknesses of plaster or differential suction. All three of these conditions occur at the edges of boards, and it is essential therefore that this problem is properly addressed. There are two approaches:

1. The first is to ensure tight joints which are properly filled and scrimmed, prior to the application of the plaster.
2. The second is to apply a fibre undercoat over the whole area first and to either scrim the joints or better to apply a mesh (either jute or fibreglass) over the whole surface. This is a more fool-proof way of ensuring that no joint line cracks appear.

In our opinion the amount of joints should also determine the approach a contractor takes. If clay boards are used then, being smaller an increased number of joints have to be covered and it may well be that the second approach (with full mesh over the whole) is just as quick as the first. If large flat areas of plaster board are to be plastered it may well be that the first is a better option. *It must be said however that there is always more risk of cracks appearing with the first approach.*

Application on all other surfaces apart from clay:

NBT now stock a clay plaster primer which is designed to enable the application of self-coloured and indeed all clay plasters onto any surface. This primer is not required for clay backgrounds. It should also be stated that many other backgrounds, such as plasterboard, lime plaster, certain stones, soft bricks, woodfibre boards etc, can also receive clay plasters without primers, as clay plasters adhere by a mechanical bonding that is extremely effective.

However the primer ensures adhesion, and so in case of any doubt, or in the absence of adequate testing, it should be used. It does enable the use of self-coloured clay plasters onto concrete, and even metal surfaces. It does not affect the breathability of the background material to any significant degree.

Finishing of Self-coloured Plasters:

As stated above the two ranges of plasters have a different visual effect due to their different composition. They also require a different application technique.

Fine Earth Plaster:

This can be finished smoothly, and for this the application process is no different from that of ordinary gypsum. However the product will have a tendency to dust unless sealed.

The recommended method of finishing is therefore that the plaster is sponged when “green” to remove the fines and then brushed to ensure that any loose larger particles (and stray loose fines) are also removed. This ensures a dust free surface and also brings out the full effect of the coloured sands and pearl shell. It must be emphasised that the desired finish is in no way homogenous, but that variability both in colour and texture is part of the innate character of the product.

The technique of sponging requires the applicator to be sensitive to when the plaster is ready. The sponge should be damp but not wet – ie it should be dipped in a bucket of water and then squeezed out gently. The brush should have firm but soft bristles and should be dry. In practice if the plaster is too wet still the sponge will drag the plaster or create swirls and lines in the finish. If the plaster is too dry then the damp sponge will roughen the surface and create a sand paper effect. If the plaster has the correct amount of water in it then the sponge will remove the fines without dragging and at the same time will fill any divots and pock marks.

It should be emphasised therefore that in the initial application of the plasters too much care with the flatness and smoothness of finish should not be taken, as this is a waste of time and effort. A decorator or any competent DIY person should be able to apply Fine Earth plaster and finish it with a sponge and a brush.

Claytec plaster

Claytec self-coloured plasters should be applied and finished in the same way as conventional gypsum plasters. They can be left unpolished or alternatively polished to a fine and smooth surface. This still has an open pore appearance, but feels glassy smooth to the touch. The plasters cannot easily be reworked once they have dried as the fines and binding material do not easily come to the surface without the whole of the plaster being rewetted fully.

Maintenance

Fine Earth

The advantage of this system is that it makes the plasters very easy to maintain. The variable surface and the sponging technique mean that if the plaster is damaged or marked, a damp sponge can be used to work over the area, and retain the overall effect. If large divots have been taken out of the plaster then these should be filled with plaster retained from the original application. Because of the light fast nature of the sands and clays and because of the variable surface, a perfect repair is easily affected.

In the Netherlands where these plasters have now been in use for 18 years, it is common, particularly in public buildings, for the contractors to have a maintenance cycle, which enables the plasters to be repaired where necessary perhaps once a year. Because the colour is light fast and goes right through the plaster, this process could be continued almost indefinitely, still providing a lively finish.

Claytec

These plasters are not so easily repaired because the usual finished surface effect is polished. However with care and effort and some retained plaster a visually acceptable repair is possible. In consequence of this, in situations where Claytec self-coloured plasters are likely to be damaged, particularly by light abrasion (ie in corridors, or public places), a sealant should be considered. We suggest either Ecotec Glaze Medium or Silicate Primer. Both of these are matt and do not affect the appearance of the plasters significantly. They also do not affect the materials vapour permeability to any significant degree.

If you have any questions or queries please do not hesitate to contact Womersley's Limited on Tel 01924 400651 or call in at our workshop.