

# Bostik

## Professional Tiling

## TECHNICAL HELP SHEET -

# CALCIUM SULPHATE SCREEDS

### WHAT IS A CALCIUM SULPHATE SCREED?

A **Calcium Sulphate (often referred to as Gypsum or Anhydrite) screed** is a free flowing screed that utilises a different binder than traditional sand and cement screeds. The binder in it's various forms can collectively known as calcium sulphate.

The use of this material is becoming more widespread as it offers a faster application for the screeding contractor with minimal shrinkage enabling thin applications (compared to sand and cement) and does not require any reinforcement. This is beneficial for the screeding contractor but must be taken into account by the tiler. It is however very difficult for the tiler to be able to identify the calcium sulphate screed to that of a traditional one other than by the colour which generally appears to be lighter.

### WHY DO WE NEED TO BE AWARE?

If the cement based adhesive is applied directly to the screed the cement can react with the gypsum resulting in the formation of a crystal structure called Ettringite. This will result in expansion which will break the bond at this interface resulting in a separation of the two.

### PREPARATION FOR TILING

Where necessary the screeding contractor will usually remove any surface laitance (a shiny, hard crust) prior to any further works being carried out. If laitance is still present this must be resolved first before continuing. The screed should then be vacuumed to remove all dust and friable material so that the surface is clean, dry and sound.

### MOISTURE CONTENT / DRYING

This type of screed usually takes approximately 1mm/day up to 40mm thick and you should add 2 days/mm above 40mm (based on a sealed site with controlled environment). The tiling work should not be undertaken on a screed with a moisture content above 0.5% (or an RH of 75% or below when tested with a Surface Hygrometer).

### SEALING THE SCREED

The screed should be sealed with a primer that will provide a barrier to prevent any contact re the cementitious adhesive and the gypsum screed. We would recommend Screed Master Epoxy primer (further diluted as below). This is a 2 part Epoxy Primer and must be allowed to dry before subsequent work is undertaken (6-12 hrs) to a translucent, tacky film. Subsequent work should be undertaken within 2 days and the surface should be protected from dust and other contaminants.

### THE PRODUCT TO USE.

Laybond Epoxy primer is a two component water dispersible primer.

- Supplied as a 6 kg two component set.
- Will cover on Anhydrite approx 100m<sup>2</sup>
- Quick and easy to apply
- Specified / approved by major manufacturers of these screeds.

For calcium sulphate application Mix the materials in a larger tub mixing Part B (hardener –small 1 kg tub) and Part A (5 kg tub) completely mixed until a uniform colour is obtained, using an electric drill and propeller blade (typically 2 minutes to mix) then slowly add 5 litres of clean cold water whilst continuing mixing

Only mix the components when ready to apply and applied as soon as mixing is completed using brush or roller. Apply adhesives within 48 hrs of priming to achieve best bond.



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5 Ltr of Clean Cold Water