

Gypsol Practical advice on screed floor preparation



At LKAB Minerals, we pride ourselves on the quality and accuracy of information and advice we offer to not only our direct customers, but also to associated trades and stakeholders. Unfortunately there is a considerable amount of misinformation or misunderstanding about the preparation of floor screeds to receive floor coverings. This is particularly true of calcium sulphate screeds.



It is true to say that some calcium sulphate screeds leave an obvious, friable and loose laitance on the surface which needs to be removed. This is usually achieved by means of light sanding using an STR floor sander with a medium, or 60grit paper, prior to the application of floor covering. The amount of laitance will depend on the mix design at a local level (available sands etc) and it is generally accepted say that this laitance is only an issue from an aesthetic point of view.

To complicate matters, "Low Laitance" option calcium sulphate screeds are available from some screed producers. It is interesting that these are "Low Laitance" not "No Laitance" products. Additionally, some "Low Laitance" formulations result in a very tight closed screed surface, which can make it more difficult for primers and adhesives to find a key. It is therefore just as important that these screeds are sanded. Even the manufacturers of such screeds acknowledge the need for sanding prior to the application of floor coverings.



Good practice dictates that all flooring substrates should receive a light sanding, and vacuuming to remove dust and debris, as part of floor preparation prior to the installation of floor covering. Indeed, page 66 of the guide to contract flooring, produced by the Contract Flooring Association states: "All substrates will require a degree of mechanical cleaning or preparation and a visual inspection or manual sweeping is not adequate under any circumstances..."

Furthermore, most adhesive manufacturers will recommend sanding or abrading the surface of all substrates before the application of their adhesives. These recommendations also include sand/cement screeds and even concrete. For Example Sika Floor 81 datasheet states: "Concrete substrates must be prepared mechanically using abrasive blast cleaning or scarifying equipment to remove cement laitance and achieve an open textured surface." Similarly, F Ball and Co's subfloor preparation datasheet states: "Laitance is always present on new concrete bases and screeds and should be removed."

It is said that sanding the surface of the screed (or other substrate), not only cleans the floor of dirt and debris from the build process, but opens up the surface to allow the penetration of primers. It also provides a "key" for the adhesive to grip onto.

It can be seen from the above that regardless of the presence of any laitance, sanding and vacuuming, is part of the floor preparation process in order to receive floor coverings. Therefore it is wrong to state that calcium sulfate screeds require sanding when other screeds do not. It is however correct to say that any laitance on the screed will be removed during the floor preparation process, and since the floor is to be sanded anyway, this laitance is not an issue.

The floor coverings contractor in general, will have the necessary expertise to determine the level and nature of substrate preparation required for any given floor covering. Additionally, the suitability of the preparation is likely to affect the floor layers ability to offer a warranty. As sanding of the screed is considered by the relevant trade bodies as part of the general floor preparation requirements, it is extremely important to consider carefully who takes contractual responsibility for the sanding operation.

For complete information this guide can be used in conjunction with LKAB Minerals Data sheets regarding "Post Installation", "Ancillary Products" and our useful "Floor Coverings Flow Chart" found at <http://www.gypsol.co.uk/Technical/technical.html>