Installing LATICRETE® HYDRO BAN® Over Rough Surfaces.

Prior to the installation of the HYDRO BAN to out of tolerance walls, they can be dimensionally corrected and made smooth with a LATICRETE parge, skim or render coat to a wood float or light steel trowelled finish. When it comes to floors, these can generally be made smooth by screeding to falls with a LATICRETE mortar or levelled with a LATICRETE self-levelling compound. The use of LATICRETE latex mortars or dry polymer mortars will allow the dimensional correction and flattening of surfaces from a featheredge to any desired thickness. Do not use gypsum or asphalt based levelling products.

The designed dry film thickness of LATICRETE HYDRO BAN® liquid applied waterproof membrane is 0.6 mm – 0.9 mm. This dry film thickness range is required for the membrane to perform as a part of an installation system under ceramic or stone tile. The background/substrate surface smoothness/flatness, planarity of finish or its regularity is an important factor in achieving this design thickness. The flatter the surface, the easier it will be to apply the membrane and the easier it will be to achieve the desired film thickness. Ideally the maximum deviation in plane must not exceed 5mm in 3m and 1.5mm in 300mm for the high spot and surfaces shall be smooth without voids, protrusions or other interruptions in the flat plane.

Differences in the application thickness outside the recommended range caused by surface irregularities, amongst other things, more than likely will result in

1. A variance or extension of curing time of parts of the installation that can leave the membrane vulnerable and subject to damage. Depending on its exposure, risks include rain, substrate moisture or contractor traffic.
2. Possible shrink cracking in thicker sections, including corner junctions.
3. A waste of material. Coverage rates can be severely affected.
4. More difficult applications.

Rough, pitted/voided, sharp, irregular or undulating surfaces make it difficult to apply the membrane to maintain its required even thickness:

1. Rough surfaces make it difficult to apply and maintain even membrane thickness.
2. Pitted/voided surfaces are hard to clean, trap water and air which can leave the membrane unsupported in part, causes blisters/bubbles and promotes pinholes.
3. Sharp or irregular edges are hard to coat with the required thickness and are generally proud and vulnerable, leaving the membrane prone to puncture or tearing.
4. The peaks and troughs of undulating surfaces over small distances keep rollers from making proper contact with the lower part of the substrate to allow even distribution of the membrane.

The above and other like substrate surface conditions need to be rectified prior to the membrane application to provide the opportunity to maintain the designed thickness and facilitate ease of installation.

Given HYDRO BAN is designed for use under tiling, it is important the surface level, regularity, flatness, smoothness, pitch or plane is suitable for both application of the membrane and the tile. However it should be noted that tighter tolerances may be required by designers or the physical properties of the intended finish. For instance a 1000mm x 1000mm porcelain tile may require higher tolerances in surface planarity than the membrane, so in this case the surface should be prepared for the large format tile.

When preparing the substrate for surface planarity, flatness and dimensional tolerances, consider all the individual elements of the system, not just the membrane.