"Original Tadelakt" - Builders and Designers: substrate, application and expectations.

Tadelakt substrate, application and expectations: basically SOLID is the answer concrete, brick, rendered brick, are best, anything that will not flex under the heat of hot water or swell / warp if wet. etc. (Bathrooms) I have done bathrooms over timber frame however the builder will sheet these with double lined 7mm cement sheeting / or tongue and groove 16-18 mm MGO board, with staggered joints (laminated together with 'Epirez'- a two pack epoxy) glued and screwed, heads covered with Megapoxy. The corners made solid by herringboning the sheets and applying the two pack epoxy between then so I can grind the sharp corner back.

(Benches) These are generally built from layers of 18 mm and 9 mm cement sheeting laminated together or built up in layers at the edge, sometimes fixed around a steel frame however, each one is different and requires collaboration with the builder or cabinet maker to create a substrate suitable to be coated, corners are Arrissed to enable a pencil round and preventing cracks along the edge. If an even more organic shaping is required Heable is a great product to build from and can be shaped more easily.

(Bathrooms) Everything is then waterproofed to Aus standards by your waterproofer. I then roll on a further coat of "Laticrete Hydroban" fibre re-enforced waterproofing, mixed with silica sand over the whole room to give even suction in all areas and add a slightly gritty surface (compatibility studies would be carried out with the chosen waterproofing product, or Hydroban could be specified for the whole job)

Following this I mesh and render the entire area to be coated with a mixture of lime and a cement based tile adhesive, or sometimes in non wet areas Ardex A950 renovation render, (which I import from Germany) This is roughened with a texturing tool to give a rough base coat, which is absorbent, able to give a good mechanical bond and (in bathrooms lime based) to increase depth of the lime which gives the "tadelakt" its hydrophobic properties.

If the floor is being coated in a different product (polished concrete or tiled) I would first add a small 4 mm shadow line around the bottom of the whole room by use of a 6mm angle affixed to the wall which is also waterproofed over, to prevent pooling and wicking up the wall of water giving a beautiful sharp separation between the softly undulating walls and the hardness of the floor coating. Then the work can begin!

The Tadelakt is applied thick, the consistency of wet Weet-Bix and left to set for a while to harden before shaping and compressing, first with wet wooden trowels to draw up the fine lime, then small plastic Japanese trowels t compress again. When it is felt that the surface has stiffened up enough it is further compressed and polished with small hard stones, shaped for the purpose. This disperses the fine lime further closing and compressing the surface.

At the right time olive soap is introduced in advancing strengths of solution with water and soaked into the surface penetrating deep into the lime creating the hydrophobic layer. Polishing with the stones continues until the desired lustre is achieved. Only small areas can be applied each day (around 4m2) and processed over the next few days while the adjacent areas are being applied.

On completion everything is detailed and I return to soap and compress the walls during the initial 28 days of curing, leaving it covered in fine plastic to help it sweat then compressing the fine cracks and micro fissures that appear as it slowly hardens. Full curing continues for three to six months however showers can be used after four weeks. Benches require longer and are more prone to damage during this curing stage. Repairs can be carried out but are never invisible and best avoided by protection. Applying topical sealers too early can prevent full curing leaving it more prone to damage

Chopping boards should be used and spills wiped up immediately as with all limestones. I can return to apply a topical sealer after it has has cured sufficiently (the slower lime dries the harder it becomes) to reduce staining or etching from spills. This can change the "feel" of the product and some people prefer to just use olive soap and let it age naturally like the reminder of a "life well lived."

The fine crazing is still apparent in the finish and over time if left in its natural state recrystallises into tiny crystal rivers. These become visible while wet and then disappear as it dries out again, a living breathing surface, visually textured by the blooming of the lime, oxides used to create the beautiful patinas of colour and the fine micro fissures, smooth to the touch as the softest river stone, honed over the passage of time. It is however not to everyone's taste and will not suit all styles or applications, but I personally love it ...

Hard as Marble - Soft as Silk ... Tadelakt!