MANDARIN STONE

Monmouth Head Office
Unit 1, Wonastow Road Industrial Estate East, Monmouth NP25 5JB
T: 01600 715444 | E: info@mandarinstone.com | W: mandarinstone.com

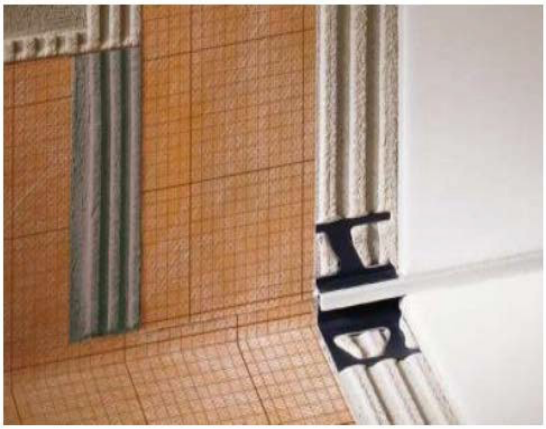
How to tile wet room installations with Schluter and Ardex products

Preparation

It is best to begin with a substrate that will not be affected by moisture at all, such as waterproof/water resistant backer board or a solid concrete screed. Before fixing, the substrate should be suitably even, load bearing, dry, clean, rigid and prepared as necessary. Schlüter tanking materials should be fixed with a cement-based adhesive suitable for the substrate such as ARDEX X 7 R S1 Tile Adhesive. Any fall for drainage should be incorporated into the substrate.

Schlüter produce a large range of floor drains both in linear and square formats for a variety of installations as well as compatible pre-formed shower bases. Before installing the waterproofing membranes, the floor or shower tray drain should be installed as per the relevant instruction sheet.

Schlüter -DITRA should be fixed to the floor with an adhesive suitable for the substrate. This should be applied with a 3x3mm or 4x4mm notched trowel in order to give more coverage below the matting. Individual courses of matting should be cut to size and the anchoring fleece solidly bedded into the adhesive with the smooth side of a notched trowel or a float. When initially positioning Schlüter -DITRA it is advisable to align it precisely (lift one end, pull lightly, and place the stretched membrane). Installation is made easier with a second person.



The side edges and ends of individual strips should be cut straight and butted together. Where the Schlüter-DITRA meets the installed drain, a hole should be cut to accommodate the drain bonding flange so that they butt up together. When Schlüter-DITRA is being used as a waterproofing membrane, Schlüter-KERDI-KEBA (joint sealing tape) should be adhered over the joints with Schlüter-KERDI-COLL (waterproof sealing adhesive) to form a waterproof joint.

Schlüter-KERDI 200 should be adhered to the walls by the same method as above. Where courses of Schlüter-KERDI 200 meet they should be overlapped by 50mm. This overlap should be sealed with Schluter-KERDI-COLL. At the junction of walls and floors Schlüter-KERDI 200 should be overlapped onto the Schlüter-DITRA by at least 50mm and this join adhered with Schlüter-KERDI-COLL. At corners or intersections, Schlüter-KERDI 200 should be cut to form, and any overlap sealed with Schlüter-KERDI-COLL. After the adhesive has dried (3 hours approx.) then tiling can commence.

Setting out

The general rule is to work from the centre outwards. Measure the width and length of the room and draw a cross in the centre. From this central cross lay out the dry tiles with a suitable width of grout gap (minimum 3mm) to allow for movement stresses between the tiles during use of the floor. If laying a mix of sizes such as an opus pattern, the grout gap will vary, and the degree of variation can be ascertained before fixing begins. If laying an uncalibrated material, the thickest tile should be found and be the first to be fixed as this will set the level of the floor, with all other tiles being bedded up. From the dry laying process, make sure there are no awkward cuts and then some adjustments may be required. Always be aware of how the floor will look when you enter the room and put aside any tiles which you do not want in the centre of the floor for use in cuts around the edge of the room.

To counteract movement stresses, which can result in tiles cracking and/or de-bonding, a perimeter movement joint should be provided around the edge of the room. This should consist of a gap a minimum of 6mm wide, and the depth

of the tile should be left at the junction of walls and floor. This should be filled with a suitable flexible seal, such as ARDEX ST Neutral Cure Silicone Sealant, in order to accommodate any movement or if being covered with skirting, kitchen units etc. may be left open. In larger floor areas, intermediate movement joints may be required at suitable intervals in both directions.

Fixing

Fix tiles using a suitable adhesive such as ARDEX X 7 R S1 Rapid-Set Flexible Tile Adhesive, or ARDEX X 7 Standard Set Flexible Tile Adhesive. The colour of adhesive to be used is dependent on the stone colour and the grout to be used i.e. if fixing a pale coloured stone with pale grout, then a white adhesive should be used to prevent any shadowing through the stone and grout from the adhesive below. Mix the adhesive as per the instructions by adding the powder to clean water and stir until a smooth, lump free consistency is obtained. Mix only enough adhesive which can be used within the pot life of the product
(5 hours with X 7 or 30 minutes with X 7 R at 20°C Using a suitable, solid-bed notched floor trowel held at a 45° angle, spread the adhesive onto the floor to form parallel ribs into which the tiles should be pushed with a firm twisting action. This will collapse the ribs of adhesive and produce a 3-4mm solid bed of adhesive beneath the tiles. Work in small areas and discard any adhesive that begins to dry or 'skin over'. Tiles with deeply keyed back profiles, such as some Travertine (due to voids present), porcelain and some large format tiles, may require the back of the tile to be 'buttered' with adhesive. Every so often, lift a tile to ensure that it is in full contact with the adhesive and that no voids are left in the adhesive bed. Any adhesive residue on the surface of the tiles should be wiped off with a damp sponge before the adhesive sets. If this is not done it can prove tricky to remove dried on residue.

Cutting tiles

Cutting should be carried out using water cooled, diamond bladed bench power saw. It must however be noted that the final aesthetic finish achieved will depend greatly upon the choice of cutting mechanism and level of skill used by the operator. Equipment and bladed specifically for cutting of the chosen material should be used.

The cutting blade should be water suppressed whenever cutting the material to control dust and cool the blade.

Please note that high quality diamond blades should be utilised at all times. If a blunt or worn blade is used, shelling or chipping of the tile edge could occur.

Sealing and cleaning

Once the adhesive has dried, but before grouting, the tiles should be cleaned thoroughly with a dilution of Fila Cleaner and allowed to dry completely before, in the case of stone, having one coat of the initial sealant applied. This would tend to be Fila MP90 Eco Xtreme. This initial coat helps to prevent any pigment from the grout bleeding into the tiles, although a small inconspicuous area should always be trialled first to ensure that no staining occurs. Additional coats of sealant can then be applied as directed after the grout has dried. Porcelain and Ceramic tiles do not generally require sealing, but intermediate cleaning should still be carried out: after fixing, the grout should be sealed with Fila Fugaproof.

Tiles should be cleaned thoroughly with dilute Fila Cleaner prior to every stage of the installation process (fixing, initial seal, grouting etc.) to ensure that no stage of installation adversely affects any other (i.e. polymers from grout preventing penetration of base sealant. grout residue being sealed onto surface).
Due to the high usage and demanding nature of shower/wet areas, products used may require additional sealing more often than in other environments and more regular cleaning. It may be necessary to re-apply sealants as frequently as every 12 months.

Grouting

Allow the adhesive to dry: The tiles should be grouted with the appropriate colour of either Ardex Flex FL Wall & Floor Grout or Ardex Flex FS Wall & Floor Grout. Clean out any dirt, dust and adhesive from the joints and ensure that they are dry.

Grout should be mixed as per instructions by adding the powder to the water. The grout should be manually mixed to reduce the amount of air incorporated.

The method of grouting will vary slightly depending on the tile type e.g. Unfilled Travertine and some Antique Limestones will need to be slurry grouted by holding a soft rubber grout float at 45° to the tile surface and sweeping the mixed grout diagonally across the tiles, ensuring that the grout is pushed fully into the joints and any surface voids present.

As grouting progresses, clean off as much grout as possible from the surface of the tile and allow the grout to become touch dry. Clean off the grout residues with a lightly damp sponge wiped diagonally across the tiles. Allow the tiles to dry and buff the surface with a dry cloth. Fila Instant Remover can be used at this stage for porcelain tiles.

For natural stone, any stubborn residues should be cleaned off with a dilution of Fila Cleaner mixed with warm water within 24 hours of grouting, although ensuring all grout residues are removed during the application is key.

Where there is requirement for a more flexible joint, such as at junctions of walls, walls & floors or where tiling meets baths or shower trays, a suitable colour of ARDEX ST Neutral Cure Silicone Sealant should be used.

NB. Showers should not be used for at least 14 days after completion of tiling.

Further information

For technical advice please contact Mandarin Stone on 01600 715444
or by email info@mandarinstone.com