

ABS SCHLUTER 25

UNCOUPLING SYSTEM

ARCHITECTURAL PRODUCT MANUAL




waterproofing
systems

Keeping you watertight

TILING OVER WATERPROOFING ON EXTERIOR TIMBER DECKS

ACCEPTABLE SOLUTION

The New Zealand Building Standard E2 External Moisture determines that tiles can no longer be adhered direct to waterproofing membrane systems over exterior timber decks. (Some councils also do not allow tiles direct to waterproofing over exterior concrete decks that have enclosed areas directly beneath) The Acceptable Solution in E2/AS1 7.3.1.1 Removable surfaces for tiles is the paver support system.

ALTERNATIVE SOLUTION

The ABS Schluter 25 Uncoupling System uses the ABS Schluter 25 Uncoupling mat as a component in this alternative solution in lieu of the tile pedestal system, complying with E2/AS1 7.3.1.1 Removable Surfaces and accepted in the NZ Construction Industry. ABS Schluter 25 Uncoupling System has now been included into the BRANZ Appraisals for the Gripset liquid membrane and duroTUF TPO Membrane systems.

ABS SCHLUTER 25 UNCOUPLING SYSTEM COMPONENTS

ABS Schluter 25 Uncoupling mat	3mm thick	30m long	1m wide	Orange in colour
Schluter self-stick Joint Band	0.6mm thick	20m Long	80mm wide	Black Butyl
Schluter Water Based PSA	4L Pail	TPO	Application rate: 8-10m ² /litre minimum	Fix when clear and tacky
<u>ABS Schluter 25 mat Sealants</u> duroTUF TPO Gripset 2P/38	<u>Type</u> WPS MS40 WPS MS40	<u>Sizes</u> 300ml 600ml	<u>Colours</u> Grey Grey	System location seals the Schluter 25 mat to membrane system
Expansion Joints	Single piece latham type	6mm or 10mm for Heavy trafficable deck	6mm light trafficable deck <40m ²	Placement 3m ² maximum in grid format
Tile Adhesive C2S2	Monoflex	20kg	3-4m ² approx. coverage	Colours as selected
<u>Tile Sealants</u> duroTUF TPO Gripset 2P/38 Construction Chemicals	WPS MS40 WPS MS40 Sealflex	600ml 600ml	Grey Colour match tiles	Applied into the 6mm abutment gap
Tile Grouts	Construction Chemicals	EpegROUT	Epoxy	Colours as selected

PLEASE NOTE: The main purpose of the PSA Glue is to hold the ABS Schluter 25 Uncoupling mat in place while the tiles are laid onto the ABS Schluter 25 Uncoupling mat.

WATERPROOFING SUBSTRATES

The ABS Schluter 25 Uncoupling mat can be installed over duroTUF TPO and Gripset Liquid Membrane systems. When using on an alternative membrane suppliers system, we recommend getting approval by the membrane supplier so as not to void the waterproof membrane warranty.

ABS Schluter 25 Uncoupling System can be directly applied over topping screeds as an anti-fracture system before tiling.

SCHLUTER 25 UNCOUPLING MAT

The ABS Schluter 25 Uncoupling mat is manufactured using high-density polyethylene (HDPE) which does not rot, is water resistant, and highly resistant to solutions containing salts, acids, and alkalis, as well as many organic solvents, alcohols, and oils. ABS Schluter 25 Uncoupling mat is a polyethylene membrane with a grid structure of square dove-tailed recesses. The underside of the ABS Schluter 25 Uncoupling mat is fleece backed.

It is important that the ABS Schluter 25 Uncoupling System is installed just before the tiling begins. Do not install the ABS Schluter 25 Uncoupling mat days/weeks before tiling is due to begin. This is very important in the hottest parts of summer.

Do not leave exposed in direct sunlight.

SUPPORT / LOAD DISTRIBUTION

Since the ABS Schluter 25 Uncoupling System is virtually incompressible within the tile assembly, the advantages of the ABS Schluter 25 Uncoupling mat are achieved without sacrificing the point load distribution capabilities. WPSNZ recommend the application of ceramic/porcelain tiles and natural stone installations to timber and concrete decks. When using the ABS Schluter 25 Uncoupling System there is no requirement for structural porcelain tiles. Tiles starting from 5mm thick can be laid onto the ABS Schluter 25 Uncoupling System. The ABS Schluter 25 Uncoupling System serves as an uncoupling layer, managing moisture beneath the installed tiled finishes.

PRODUCT SPECIFICATION

The ABS Schluter 25 Uncoupling mat, supplied in 1m x 30m rolls, is an easy to install system that provides removable access to any sub waterproofing membrane issues that may arise. The ABS Schluter 25 Uncoupling mat provides excellent moisture drainage should water penetrate between the grid underlayment and the waterproofing membrane, the inter-connecting air channels of the ABS Schluter 25 Uncoupling mat allow water and / or moisture to drain to the drip edge. The ABS Schluter 25 Uncoupling mat offers a cost saving alternative to the traditional pedestal system.

APPROVED APPLICATORS

The ABS Schluter 25 Uncoupling System can only be installed by trained and experienced WPSNZ waterproofing applicators and tilers who hold WPSNZ Certification documentation to install the system.



INSTALLATION PROCEDURE

1. Make sure the waterproof membrane is clean, smooth, free of dust, dirt and any contaminants and dry if necessary.
2. Clean all areas of the waterproof membrane where the WPS MS40 sealant and tiler silicone will be applied to the surface of the membrane. This will be at the wall /floor junction and any other areas where sealant will be applied, check the relevant QC check sheet for the correct cleaning system relevant to what membrane is installed.
3. The ABS Schluter 25 Uncoupling mat is pre-cut, stacked and ready for installation, with the last cut sheet on the top of the stack as this will be the first mat installed in place.
4. The Schluter PSA liquid is stirred well before using and checked to be within "used by" date.
5. The Schluter PSA adhesive is applied on a clean, dry waterproofing membrane substrate at 8m² per litre and is fully tacked off before the ABS Schluter 25 Uncoupling mat is installed.
6. When the Schluter PSA has dried from a white to a clear colour, the ABS Schluter 25 Uncoupling mat is then ready for installation.
7. Install the ABS Schluter 25 pre-cut sheets laying each sheet 6mm clear from all abutments with sheet edges tight butted
8. As the ABS Schluter 25 Uncoupling mat is installed smooth into the Schluter PSA with hand pressure using a wooden float or a steel trowel to ensure a continuous bond.

NOTE: Do not install on hot days or leave exposed directly in the sun.

9. Seal the ABS Schluter 25 Uncoupling mat perimeter edge with WPS MS40 directly onto the waterproofing membrane that has been cleaned, also adhering onto the ABS Schluter 25 Uncoupling mat to create an abutment seal. Seal the drip edge with WPS MS40 sealant.
10. Apply Schluter self-stick Joint Flashing Tape to all ABS Schluter 25 edge butt joints and abutment joints (see website for detail drawings)
11. Over lay the abutment WPS MS40 sealant with Schluter self-stick Joint Flashing Tape, 10mm onto the waterproof membrane upstand over the liquid sealant and the balance onto the ABS Schluter 25 Uncoupling mat. Pressure roll into place.
12. If the specified tiles are black or dark grey, advice WPSNZ before starting the tile install.
13. Using a flat steel trowel, ensure all notched recesses in the ABS Schluter 25 Uncoupling mat are filled with tile adhesive and that all tiles are fully back buttered (no voids or farrow voids) under the tiles. All tile adhesive ooze is cleaned out of the 6mm abutment at the wall thresholds.
14. Using Monoflex tile adhesive, install the selected tiles, keeping a continuous 6mm clearance from the exposed waterproof membrane, keep the 6mm gap clean.
15. Install a 6mm backer rod into the abutment perimeter gap over the Schluter flashing tape.
16. Install Construction Chemicals Sealflex sealant into the 6mm perimeter gap at the abutment over the 6mm backer rod as the finishing sealant
17. Mask off the tiles and the waterproof membrane upstand approximately 3mm higher than the tile finished surface to create water run off slope.
18. On the sealant application completion, carefully remove the masking tape to leave a straight finish sealant line on the waterproof membrane upstand and against tiled finish.
19. Install the Epegrout epoxy grout using the grout which is part of the tile adhesive system.

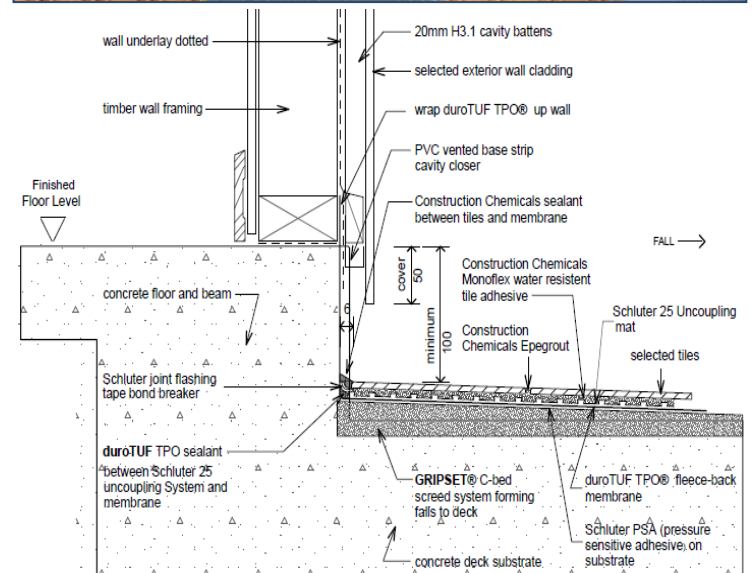
NOTE: It is important that the ABS Schluter 25 Uncoupling System is not installed until the tiling installation is able to follow through over the ABS Schluter 25 Uncoupling System, directly after it's installation.

The ABS Schluter 25 Uncoupling System is lightly bonded to the waterproof membrane substrate using Schluter Water Based Pressure Sensitive Adhesive (PSA) to hold the system in place during installation. The fleece back underside of the ABS Schluter 25 Uncoupling mat ensures a bond with the Schluter Water Based PSA. This is not a permanent bond to the waterproofing membrane substrate. Tiles can then be installed over the ABS Schluter 25 Uncoupling mat using tile adhesive, ensuring all the dovetail recesses are completely filled with tile adhesive to achieve maximum bonding. It is very important that the tiles are fully back buttered with no voids beneath the tiles after installation.

It is best to measure and pre-cut the ABS Schluter 25 Uncoupling mat, allowing the mat to relax for 20 minutes prior to installation.

EXPANSION JOINTS

In heavy foot traffic area expansion joints are to be a minimum of 10mm and placed at a maximum of 3m² in every direction. All other areas such as private decks under 40m², expansion joints are to be a minimum of 6mm and placed at a maximum of 3m². Install single piece latham type expansion joints.



MASTERSPEC SPECIFICATION

Where required, WPSNZ can provide an individual site-specific waterproofing ABS Schluter 25 Uncoupling System Masterspec specification to suit your project. For further information please phone our office on Ph: 09 579 1460 for further technical information.

PLEASE NOTE: Where black or dark coloured tiles are considered or specified for use over ABS Schluter 25 Uncoupling mat, please contact WPSNZ before starting the tile install.

FURTHER APPLICATIONS FOR ABS SCHLUTER 25 UNCOUPLING SYSTEM

- **Green Concrete**
 - No requirement for concrete to be dry where there is a direct fix and no membrane system required.
The ABS Schluter 25 Uncoupling System can be applied to freshly poured concrete as soon as the concrete can be walked on. Tile and/or stone can then be applied immediately to the ABS Schluter 25 Uncoupling System.
 - Note that in this situation the concrete continues to cure allowing for a high MPA.
- **Plywood and Particleboard Floors**
 - The ABS Schluter 25 Uncoupling System can be used directly over Plywood and Particleboard floors without the requirement of cementitious type underlays. Less carry in weight, no nailing, simply spread adhesive and apply.
The ABS Schluter 25 Uncoupling mat also neutralises moisture from the substrate through continuous, open air channels on its underside.
- **Tile Over Tile**
 - The ABS Schluter 25 Uncoupling System can be used as an interface when tiling over in-situ tiles.
 - Interconnected air channels for vapour pressure equalisation
- **Radiant Heated Floors**
 - The ABS Schluter 25 Uncoupling System can be used directly over in-situ floor levelling and/or waterproofing products.
- **Some Other Areas Of ABS Schluter 25 Uncoupling System application**
 - Pre-Stressed and Post Tensioned Concrete
 - Gypsum Based Screeds and I – Joint Systems



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