

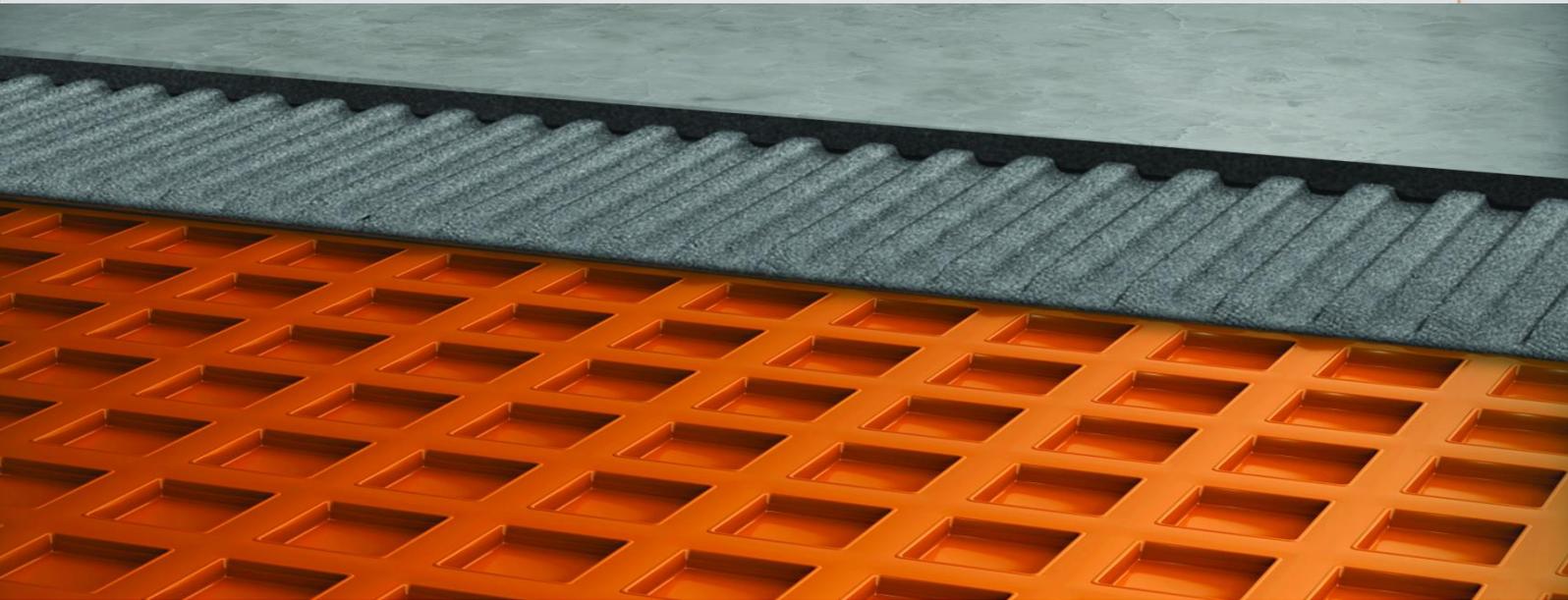


# **ABS un-coupling systems Tiling Solutions**

*AN ABS ALTERNATIVE SOLUTION FOR TILING TO EXTERNAL DECKS*

**with 20 Year history in New Zealand**

## **ARCHITECTURAL PRODUCT BROCHURE**



**Associated Building Systems**

*STONE AND TILE SOLUTIONS*

## 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 on 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. An alternative solution complying with E2/AS1 is the ABS UNCOUPLING SYSTEM using Schluter Ditra 25 mat and related system components over existing waterproofing membrane system installed.

### ALTERNATIVE SOLUTION

The ABS UNCOUPLING SYSTEM use's Schluter Ditra 25 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 as such by NZ. ABS Uncoupling System has now been included into the BRANZ Appraisals for the Waterproofing Systems Gripset and TPO Membrane systems.

### ABS UNCOUPLING SYSTEM COMPONENTS

Schluter Ditra 25 mat	3mm thick	30m long	1m wide	Orange in colour
ABS self stick Joint Band	0.06mm Thick	20m Long	80mm wide	Black Butyl
ABS Solvent Based PSA	10kg Pail	TPO & EPDM	30m <sup>2</sup>	Fix when Tacky
<u>ABS mat Sealants</u> TPO Gripset 2P/38 EPDM	<u>Type</u> TPO Gripset SB Episeal	<u>Sizes</u> 300ml 600ml 300ml	<u>Colour</u> Grey White Black	System location seals the ABS UNCOUPLING mat to membrane system
Expansion Joints	Single piece latham type	6mm or 10mm for Heavy trafficable deck	6mm light trafficable deck <40m <sup>2</sup>	Placement 3Lm <sup>2</sup> maximum in grid format
Tile Adhesive C2S2	Laticrete 4 XLT Monoflex	22kg 20kg	3-4m <sup>2</sup> approx. coverage	Colours as selected
<u>Tile Sealants</u> TPO Gripset 2P/38 EPDM	TPO 100% Silicone MS Sealant	300ml 600ml 300ml	Colour match tiles & grout	Applied into the 6mm abutment gap
Tile Grouts	Laticrete Construction Chemicals	Spectralock Pro Epigrout	epoxy	Colours as selected

## WATERPROOFING SUBSTRATES

The ABS UNCOUPLING MAT can be installed over TPO, PVC, SBR, Acrylic and EPDM wide span rubber membrane systems. We recommend getting an approval by the membrane supplier so as not to void the waterproof membrane warranty if not a WPSNZ system.

ABS UNCOUPLING SYSTEM can be directly applied over topping screeds as an anti-fracture system before tiling.

### ABS SCHLUTER DITRA 25 UNCOUPLING MAT

The ABS SCHLUTER DITRA 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. Schluter Ditra 25 mat is a polyethylene membrane with a grid structure of square dove-tailed recesses. The underside of the ABS UNCOUPLING MAT is fleece backed.

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



### SUPPORT / LOAD DISTRIBUTION

Since the ABS UNCOUPLING SYSTEM is virtually incompressible within the tile assembly, the advantages of the ABS UNCOUPLING MAT are achieved without sacrificing the point load distribution capabilities. ABS recommend the application of ceramic/porcelain tiles and natural stone installations to timber and concrete decks. The ABS UNCOUPLING SYSTEM serves as a uncoupling layer managing moisture beneath the installed tiled finishes.

### PRODUCT SPECIFICATION

The ABS UNCOUPLING MAT, supplied in 1mtr x 30mtr rolls, is an easy to install system that provides removable access to any sub waterproofing membrane issues that may arise. The ABS 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 UNCOUPLING MAT allow water and / or moisture to drain away. At a minimal thickness of only 3mm, the ABS UNCOUPLING MAT is able to provide a cost saving alternative to the traditional pedestal system. Unlike the tile pedestal system, any sized exterior rated tile may be used with the ABS UNCOUPLING SYSTEM.

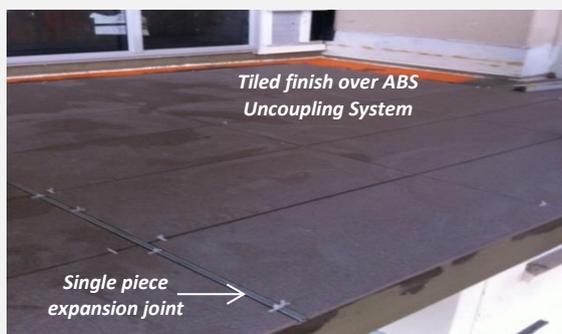
## APPROVED APPLICATORS

The ABS UNCOUPLING MAT can only be installed by trained and experienced Waterproofing Systems NZ Ltd waterproofing applicators, and tilers who hold ABS Certification documentation to install the system.

## INSTALLATION PROCEDURE

1. Ensure the substrate is clean and free of dirt, dust and any contamination.
2. Apply the ABS Solvent Based PSA to the substrate at a rate of 15m<sup>2</sup>/litre.
3. Install the ABS UNCOUPLING MAT (Schluter 25) onto the ABS Solvent Based PSA, setting out with 6mm clearance from all abutments. Keeping all sheet edges tight butted. Apply hand pressure with float so that the ABS UNCOUPLING MAT embeds into the ABS Solvent Based PSA to achieve a smooth surface.
4. Install the sealant appropriate for the membrane substrate into the 6mm gap, dressing onto the ABS UNCOUPLING MAT.
5. Install the ABS Joint Band to all sheet joints and to perimeter abutments, 10mm onto the wall upstand, over the sealant onto the ABS UNCOUPLING MAT.
6. Install tiles directly onto the ABS UNCOUPLING MAT, keeping 6mm back from all abutments, with all tiles fully back buttered, ensuring no voids beneath the tiles. Wash out any tile adhesive ooze from the abutment gap.
7. Install the appropriate sealant to suit the membrane system, between the tiles and wall membrane abutment.
8. Grout all tiles with epoxy grout.
9. Install single pieces of latham type expansion joints at 3m<sup>2</sup> in every direction. (6mm for a deck under 40m<sup>2</sup>, 10mm for a deck over 40m<sup>2</sup>).

NOTE: It is important that the ABS UNCOUPLING SYSTEM is not installed until the tiling installation is able to follow through over the ABS UNCOUPLING SYSTEM directly after it's installation. DO NOT INSTALL in hot direct sunlight conditions.



The ABS UNCOUPLING SYSTEM is bonded to the waterproof membrane substrate using ABS Solvent Based Pressure Sensitive Adhesive (PSA). The fleece back underside of the ABS UNCOUPLING MAT ensures a bond with the ABS Solvent Based PSA. This is not a permanent bond to the waterproofing membrane substrate. Tiles can then be installed over the ABS 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.

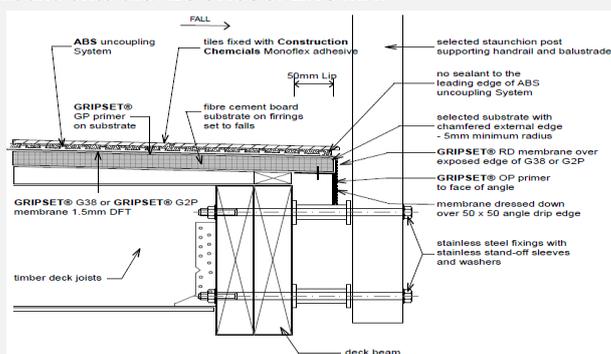
It is best to measure and pre-cut the ABS UNCOUPLING MAT, allowing the mat to relax for 20 minutes prior to installation.

## EXPANSION JOINTS

In heavy foot traffic area expansion joints are to be a minimum of 10mm and placed at a maximum of 3m. All other areas such as private decks under 40m<sup>2</sup>, expansion joints are to be a minimum of 6mm and placed at a maximum of 3m. Use of latham type joints are recommended.

## ABS JOINT FLASHING TAPE

Apply the 80mm ABS self-stick Joint Flashing Tape to all ABS UNCOUPLING MAT joints. At the wall junctions, install the ABS self-stick Joint Band 10mm onto the wall upstand, carefully removing the backing release paper, dressing the joint band over the 6mm perimeter joint and onto the ABS UNCOUPLING MAT.



## TILING OVER THE ABS UNCOUPLING SYSTEM

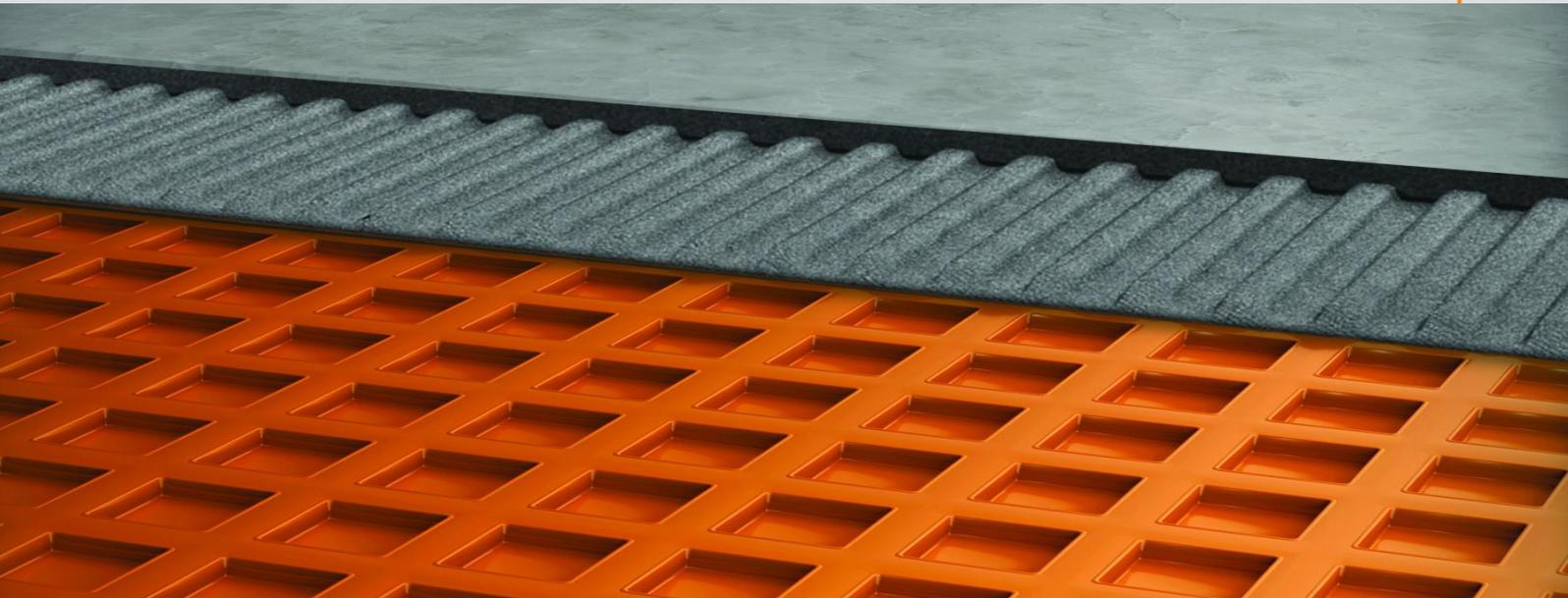
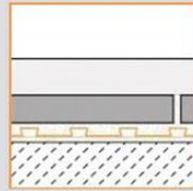
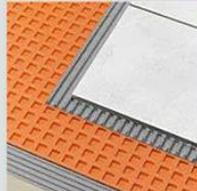
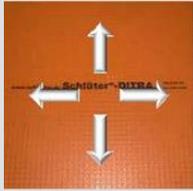
1. **INSTALL CERAMIC TILES OVER ABS UNCOUPLING SYSTEM**  
Using the selected tiles, install directly onto the ABS UNCOUPLING SYSTEM using Monoflex water resistant and rubber based tile adhesive. Keep all tiles consistently 6mm clear from the wall abutment, washing out any tile adhesive ooze, keeping the 6mm gap clean. Ensure all tiles are fully back buttered and installed with no voids. Generally follow the BRANZ good tiling book.
2. **TILE GROUTING**  
Grout all joints with Epegrout, a 3 part epoxy tile grout ensuring the 6mm abutment gap at the wall junctions remains clean at all times. Install as per the Epegrout data sheet and clean of all access grout, leaving the tiled finish clean and tidy.
3. **TILE PERIMETER SEALANT**  
Install Construction Chemicals sealant into the 6mm perimeter gap filling the void down to the 6mm Backer and finishing flush with the tile surface and 2mm higher than the tile surface on the ecoTUFF® TPO membrane system.

## ABS ACOUSTIC SYSTEMS

Where an acoustic system is required, in conjunction with the ABS UNCOUPLING SYSTEM. A job specific specification will need to be put together, taking into account the substrate and other related factors to achieve the IIFC (Impact Insulation Field Class) a test result for compliance required by the local city council.

## PROJECT SPECIFICATION

Where required ABS can design an individual site-specific waterproofing ABS UNCOUPLING SYSTEM specification to suit your project. For further information please phone one of our representatives on Ph: 09 579 1460 for further technical information.



## FURTHER APPLICATIONS FOR ABS UNCOUPLING SYSTEM

- **Green Concrete**
  - No requirement for concrete to be dry. The ABS 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 uncoupling system.
  - Note that in this situation the concrete continues to cure allowing for a high MPA.
- **Plywood and Particleboard Floors**
  - The ABS 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 uncoupling mat also neutralises moisture from the substrate through continuous, open air channels on its underside.
- **Tile Over Tile**
  - The ABS 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 uncoupling system can be used directly over in-situ floor levelling and/or waterproofing products.
- **Some Other Areas Of ABS uncoupling system application**
  - Pre-Stressed and Post Tensioned Concrete
  - Gypsum Based Screeds and I – Joint Systems



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