INSTALLATION OF TECHNOKOLLA WATERPROOFING & TILING SYSTEM OVER DRAGON BOARD MSG04	
PREPARED FOR	DRAGON BOARD MSG04
GENERIC – FOR A SITE-SPECIFIC SPECIFICATION, PLEASE CONTACT DRAGON BOARD OR TRADE SUPPLIES LIMITED	
This document outlines a Technokolla System Specification for waterproofing and tiling over DragonBoard MGS04.	
This is for internal wet and dry applications for walls and floors and the suitability of floor levelling compound over	
DragonBoard MGS04.	
DragonBoard MGS04 is manufactured from a combination of Magnesium Oxide, Magnesium Sulphate and fibre	
reinforcements, which is deemed suitable for use as an internal structural floor or ceiling panel.	
DragonBoard MGS04 must be primed with Technokolla Primer T or Technokolla Primer 101 (or when using Strataflex,	
Nac Tac Primer) before using any Technokolla products.	
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This Specification is intended for the above-listed products, and all products must be installed in accordance to this	

1. GENERAL

- **1.1.** *MANUFACTURERS DOCUMENTS:* All documents referring to the materials specified are on file and available from Trade Supplies Limited (T/A Surtec).
- **1.2. MANUFACTURER:** SIKA ITALIA SPA, Via Radici In Piano 558 41049 Sassuolo (MO) Italy. Phone: +39 0536 809711 <u>export tk department@it.sika.com</u> <u>www.sika.it</u>

product specification and the Technical Data Sheet (TDS) of the products listed herewith.

- **1.3. BRANZ APPRAISAL:** All tile adhesives specified in this document have been documented and guaranteed compatibility with all **BRANZ Appraised** waterproofing membranes specified.
- **1.4. STANDARDS COMPLIANCE:** AS3740 Fall rates 1:50 and 1:60 for internal wet areas
- **1.5.** STANDARDS REQUIREMENTS: E3/AS2 IWAM Code of Practice.

The information in this Specification relating to the application and use of Technokolla products is provided in good faith based on Trade Supplies Limited's current knowledge and experience of the Product when appropriately stored, handled and applied under recommended conditions as per the information in the Product TDS. In practice, the differences in application conditions, substrates, materials, and site environments are such that no guarantee regarding consumption or fit for a particular purpose can be concluded from the information in this Specification or any other written or verbal recommendations. The Applicator of the Product must assess the substrate and the Product's suitability for the intended application and final service provision of the Product or product system.

 The Technokolla Waterproofing & Tiling System is supplied throughout New Zealand by Surtec.

 Contact: Trade Supplies Limited (T/A Surtec)

 30 Porana Road, Wairau Valley, Auckland, 0627

 <u>contact@surtec.co.nz</u>

 0800 NZ TRADE



The information in this Specification is consistent with the information in the Product Technical Data Sheets (TDS). If further information is required, Trade Supplies Limited recommends referring to the Product TDS or seeking advice from Trade Supplies Limited.



2. PRODUCT SELECTION

The products used and descriptions are as follows. Note this is a full specification and not all products will be required depending on the condition of the substrate.

2.1. UNDER TILE HEATING (UTH) Techno HEAT under-tile heating element and control system

2.2. FLOOR LEVELLING COMPOUND.

Option 1: PLAN-10-N High-performance, ultra-quick setting self-levelling mortar used in layers 1 to 10 mm thick.

Option 2: PLAN-40 EXT High-performance is a multipurpose levelling compound with very low shrinkage and high thickness (3-40 mm).

2.3. PRIMERS

Option 1: PRIMER-T synthetic resin-based primer for preparing gypsum or cement-based substrates.

Option 2: PRIMER 101 Monocomponent epoxy primer for non-absorbent substrates, such as ceramic tiles (glazed bricks, polished stoneware, etc.), stone materials, PVC, and linoleum. And absorbent or fairly absorbent surfaces, such as concrete, cement-based screeds, gypsum, plasterboard, anhydrite, wood and chipboard, before applying adhesives, skimming plaster or cement-based self-levelling mortar.

2.4. WATERPROOFING MEMBRANES

Option 1: RASOGUM+ is a liquid-applied membrane that can be used for internal wet areas and complies with AS4858 for product performance. A fast-drying, ready-to-use polymer-enhanced acrylic membrane that is both robust and flexible. With 400% elongation over both floor and wall substrates, screeds, floor levelling compounds, and under-tile heating, it will provide a fully sealed surface that can be tiled upon.

Option 2: RASOLASTIK ADVANCE High flexible two-component cementitious waterproofing product for application with brush, roller, or spray in swimming pools, terraces and balconies and is a class II membrane with a crack bridging ability of ~1.35mm and complies with AS4858 for membrane performance.

Option 3: Strataflex is a high-strength, 40-millimeter, self-adhering, elastomeric sheet-applied membrane designed for use under interior and exterior flooring surfaces that require waterproofing protection. Strataflex features a 2' double-stick lap joint that creates a watertight seal, providing exceptional waterproof protection. Strataflex is permanently adhered to the substrate with an NAC primer.

2.5. WATERPROOFING TAPES AND APRONS Technokolla RL80 Adhesive sealing strip for joints and corners, A two-part band with a 100% non-woven polypropylene fibre fabric over a Butyl rubber self-adhesive tape. RL300 is a 300mm x 300mm apron used for application over waste leak control flanges and wall cavity protectors. It is a two-part band with a 100% non-woven polypropylene fibre fabric over a Butyl rubber self-adhesive sheeting.

2.6. TILE ADHESIVES

Option 1: TECHNO STAR is a C2, TE, S1 adhesive and can meet S2 requirements when mixed with Techno TC Lastic. Techno Star is a tile adhesive suitable for porcelain, ceramic, quarry and natural stone/engineered stone (not moisture sensitive). Techno Star meets ISO13007 and EN12004 requirements.

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Option 2: TECHNO S-ONE is a highly deformable monocomponent powder adhesive to fix ceramic tiles and natural stone in large sizes. Fixing on façades, heating screeds, swimming pools and industrial floors

2.7. **GROUTS**

Option 1: Technokolla SKY COLOR Two-component epoxy grout/adhesive with delicate finishes in a wide colour range. Ideal for places that must always be perfectly hygienic and all wet areas. For 2 to 20 mm joints.

Option 2: Technocolors Cement-based grouting for 1 to 8 mm joints, with fine finish and bright colour. Microshield system provides active protection that helps to prevent the growth of bacteria, fungi and mould, which can cause stains and deterioration of the grouting.

2.8. SEALANT ACESIL-310 Acetic flexible silicone sealant. Mould-resistant. Acid cure technology. Highly elastic and great bond strength. Interior/exterior use for movement joints and areas of expected building movement.

3. INSTALLATION METHODOLOGY.

- **3.1. SUBSTRATE PREPARATION** All substrates must be prepared to form a sound and solid platform.
- **3.2.** SHOWER & BATHROOM FALLS in showers must comply with AS3740 and meet 1:50 for shower areas and, where practical, 1:80 as per AS3740 for wet areas outside a shower, where there is no ability to meet the 1:80 fall rates outside of the shower the bathroom floor must be tanked as per IWAM Code of Practice, and a secondary waste must be installed. The doorway must have a water-stop installed, and it is advisable to either have a raised threshold across the door or the doorway tiles should have a retaining slope added within the tile installation.
- **3.3. UNDER TILE HEATING** must be covered by an appropriate floor levelling compound and protected by a waterproof membrane. Under-tile heating should be monitored by an alarm system alerting the user of any damage to cables. Cables should be installed on a clean, dust-free substrate, with cables installed at approx. 60mm apart and should not be installed under a toilet. If cables are to be installed into a shower, the cables must be covered by a cementitious product and then a membrane.
- **3.4. MEMBRANE APPLICATION** must be applied over a substrate free from contamination without residual moisture. Membranes must be installed per the TDS, and substrates must be free from contamination and primed with an appropriate Technokolla primer.
 - 3.4.1. Rasogum+ must be applied per the IWAM Code of Practice and the product TDS. Rasolastic Advance must be applied as per the IWAM Code of Practice and the product TDS.
 - 3.4.2. Strataflex must be applied per the TDS with overlapping joints to create a waterproof seal.
 - 3.4.3. Water stops must be installed per IWAM Code of Practice pages 56, 57, 3.7.3. Penetrations and

leak control flanges must be sealed, and the appropriate RL300 bandage.

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- 3.7.4. All membranes must be installed by trained applicators through the Technokolla education program. Once the surface that is to have the membrane applied to has been primed, the RL 80 & 300 band should be installed, ensurings no creases or areas where the band is not properly adhered to the substrate.
- 3.7.5. The membrane should then be mixed to form a consistent paste and applied per the TDS requirements with attention to correct dry film thickness (DFT). Once the first coat is applied and has had sufficient time to cure, a second coat can be applied in the opposing direction as the first coat (First Coat: North/South) (Second Coat: East/West). Allow sufficient time for the second coat to dry.
- 3.7.6. Protect the membrane from damage before tile installation and flood test.
- 3.7.7. Flood test the membrane application by blocking the waste outlet and filling the water up to the height of the water-stop, leaving for 24 hours before releasing the water. Check water levels and any signs of leakage; if leakage exists, fix noted areas and test again; if no leakage exists, tile the area.
- **3.5.** *TILE INSTALLATION* Techno Star tile adhesive or Techno S-ONE tile adhesives can be used for installation.
 - 3.5.1. Tile installation must follow AS3958 and the BRANZ Good Practice Guide Tiling section 10. 3.8.2. Tiles are
 - to be installed over correctly mixed tile adhesive, mix the adhesive with the correct water/powder ratios, allow to stand and then re-mix. Apply the adhesive to the substrate using the appropriate sized "notched" trowel, and then apply the same adhesive to the back of the tile using the "flat" side of the trowel, forming a wet-on-wet connection between the tile and substrate.
 - 3.8.3. Place the tile onto the wet adhesive press firmly and slide the tile from side to side, compressing the adhesive notches. Remove an excess adhesive. Allow to cure and grout.
- **3.6. GROUTING AND FINISHING** Technokolla SKYCOLOR Epoxy grout can be used for grout application to all floor and wall tiling. SKYCOLOR Epoxy grouts should be mixed and applied in accordance with the TDS information. Refer to the BRANZ Good Practice Guide Tiling in section 11.
 - 3.6.1. Sealant finishing work can be done by using ACESIL-310 sealant. All sealants should be placed in internal/external corners and, if required, expansion joints. Tiles should be cut in all internal corners to leave a 2-3mm joint where the sealant can be applied. The sealant should be smoothed using a smoothing agent.

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