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| Prepared for: | Woodland Lifestyle |
| Project: | Various |
| Environment: | New Installations |

Introduction

GenieMat RST is an acoustic underlayment for floors. It is made from 94% recycled rubber content and can be used directly under tile, vinyl plank/ tiles and wood flooring. It is used when superior sound control is required in multi-family housing, high-rises, or commercial buildings and protects ceramic tile, porcelain, and stone from substrate cracks. GenieMat RST acoustic underlayment engineered for direct adhered floor coverings such as tile, stone, wood, and vinyl floor coverings.

Substrate Preparation

ARDEX Technical Bulletin TB058 describes the different preparation methods that can be used to remove all contaminants and weak surfaces from concrete substrates to achieve a clean surface with profile to CSP3 standard.

Remove by mechanical means (e.g., grinding or scabbling) all existing floor finishes, and/or surface contaminants (such as laitance and/or curing compounds) and any applied waterproofing membranes to fully expose the existing concrete structural substrate.

A moisture test must be undertaken to determine the levels of moisture in the substrate to ensure they are at a level that is ok as per ARDEX product datasheets. The moisture content of all concrete substrates shall be determined by the methods described in **NZS1884-2013**, **Appendix A**. The relative humidity within (at 40% slab thickness) the concrete is determined (over 72 hours) and where the result is less than 75% RH, the levelling cement and/or sheet vinyl may be installed. Where the result is greater than 75% RH, the concrete is too damp for the installation of levelling compounds and sheet vinyl and a moisture barrier will be required.

PH Testing shall also be carried out in accordance with **NZS 1884:2013 Appendix C**. Three test shall be done in the first 100m2 and at least one addition test for each further 100m2. Records must be kept in regard to location and results of moisture and Ph Testing. Advise ARDEX if any readings exceed those set out in NZS 1884:2013.





Vacuum to remove all dust prior to proceeding. Cracks in the substrate must be repaired. These repairs are best completed and then the surface ground flat to achieve the smooth surface for the membrane application.

Crack Repair- Concrete

Cracks to be repaired in accordance with engineers' recommendations. The cracks must be opened with an angle grinder to create a 10 - 15mm 'V' chase. The purpose is to provide a well (above the crack) which will allow the liquid material to be gravity fed into the crack.

Vacuum along the opened cracks to remove dust, then blow with compressed air to remove any remaining loose particles. If the crack is through the total slab thickness, fine sand can be placed to fill the bottom and prevent the resin filler from seeping under the slab.

The three main crack repair products are packaged in 470ml twin cartridge packs They require the use of a Dual Cartridge Caulking gun.

The wet surface of the injected product should be sprinkled with sand to promote the adhesive of subsequent products.

SUITABLE PRODUCTS FOR CRACK WIDTHS

| 0.05 – 3mm | ARDEX RA142 |
|------------|-------------|
| 3 – 6mm | ARDEX RA144 |
| 6 – 10mm | ARDEX RA146 |

Alternatively <u>ARDEX RA 56</u> may be used for non-structural cracks up 5mm wide. <u>ARDEX A46</u> is to be used to fill any large deviations and damaged areas.

Control, Movement and Construction Joints

These shall be treated in accordance with <u>ARDEX Technical Bulletin 050.</u> It should be noted that movement joints need to be constructed in a manner that it allows movement to occur and these are transferred through to the finished flooring system.





Concrete Containing Moisture Exceeding Allowable Limits

Concrete containing moisture exceeding the allowable limits should be treated with a suitable ARDEX moisture control system these can include <u>ARDEX WPM</u> <u>300 Hydrepoxy</u>, <u>ARDEX MC Rapid</u>, <u>ARDEX P38</u>.

Recommendation (Tile)

- The GenieMat RST is to be installed using <u>ARDEX AF180 MS</u> adhesive this should be spread using an appropriate notched trowel (ref to data sheet).
- Waterproofing (if required): <u>ARDEX WPM155</u> Water-based polyurethaneacrylic waterproofing membrane developed for high performance undertile waterproofing. Or <u>ARDEX WPM 002</u> (Superflex Bathroom and Balcony Two Part) is a tough, fast drying two component waterproofing membrane specifically designed for use under tiles. The product has been uniquely formulated with synthetic microfibres to increase its strength and eliminate the need for a separate reinforcement mat. <u>ARDEX WPM 002</u> is based on the most advanced acrylic polymer technology and is totally resistant to re-emulsification.
- Install tiled finishes using <u>ARDEX X 18</u> tile adhesives. Acoustic performance may vary marginally depending on the adhesive used. Ensure solid bedding of the tiles by occasionally removing tiles and checking there are no voids in the adhesive layer. Where the tile size exceeds 400mm in size, apply more adhesive by buttering the back of the tile and/or using a larger size notched trowel to spread the adhesive on the GenieMat RST.
- Tile Adhesive: <u>ARDEX X18</u>, a high-performance, polymer-modified, flexible tile adhesive that is compatible with ARDEX waterproofing membranes and offers excellent adhesion and coverage. Areas subject to higher stress may require an addition of <u>ARDEX E90</u>. The <u>ARDEX E90</u> should be only dosed in accordance with relevant data sheets.
- Grout: <u>ARDEX FG8</u>, <u>ARDEX FSDD</u> or <u>ARDEX EG15</u>, both high-quality, polymer-modified, cement-based grouts that are easy to apply and clean, and offer a range of colours to suit the design. <u>ARDEX Grout Booster</u> should be used in ARDEX FG8 AND FSDD grouts.





• Silicone: <u>ARDEX ST</u> or <u>ARDEX SE</u>, both mould-resistant, and colourmatched silicones that provide a professional finish and seal the joints and perimeters.

Recommendation (Engineered Timber)

- The GenieMat RST is to be installed using <u>ARDEX AF460 MS</u> adhesive this should be spread using an appropriate notched trowel (ref to data sheet min A2 notch).
- Waterproofing (if required): <u>ARDEX WPM 002</u> (Superflex Bathroom and Balcony Two Part) is a tough, fast drying two component waterproofing membrane specifically designed for use under tiles. The product has been uniquely formulated with synthetic microfibres to increase its strength and eliminate the need for a separate reinforcement mat. ARDEX WPM 002 is based on the most advanced acrylic polymer technology and is totally resistant to re-emulsification.
- The ARDEX WPM002 must be covered with <u>ARDEX K60 (Arditex NA)</u> to a min depth of 3 mm. No priming is required.
- Install the engineered timber using ARDEX AF460 MS
- If no waterproofing is required, the engineered timber can be installed directly to the GenieMat RST using <u>ARDEX AF460 MS</u>

Recommendation (Sheet Vinyl and LVT)

- The GenieMat RST is to be installed using <u>ARDEX AF145</u> if below 4mm in depth if over 4mm <u>ARDEX AF180 MS</u> is the adhesive, this should be spread using an appropriate notched trowel (ref to data sheet).
- Waterproofing (if required): <u>ARDEX WPM 002</u> (Superflex Bathroom and Balcony Two Part) is a tough, fast drying two component waterproofing membrane specifically designed for use under tiles. The product has been uniquely formulated with synthetic microfibres to increase its strength and eliminate the need for a separate reinforcement mat. ARDEX WPM 002 is based on the most advanced acrylic polymer technology and is totally resistant to re-emulsification.
- The ARDEX WPM002 must be covered with <u>ARDEX K60 (Arditex NA)</u> to a min depth of 3 mm, or <u>ARDEX FEATHER FINISH</u>. No priming is required.





Sheet Vinyl

• Sheet vinyl can be installed using <u>ARDEX AF145</u> or <u>ARDEX AF180 MS</u>.

LVT

• LVT can be installed using ARDEX AF175 or ARDEX AF180 MS

If no water proofing is required, consideration should be given for a skim coat of **ARDEX FEATHER FINISH**.

Sheet Vinyl

• Sheet vinyl can be installed using <u>ARDEX AF145</u> or <u>ARDEX AF180 MS</u>.

LVT

• LVT can be installed using **ARDEX AF175** or **ARDEX AF180 MS**





Important Notes

It is also important to follow the manufacturer's instructions and recommendations for each product, including the mixing, application, curing, and storage conditions. The products should be used within their shelf life and expiry date and stored in a cool and dry place.

The GenieMat RST should be installed by qualified and experienced installers, who have the necessary tools and equipment, and follow the relevant industry standards and codes of practice. The system should be inspected and tested for sound insulation performance after installation, and any defects or issues should be reported and rectified promptly.

This recommendation is generic regarding top coverings (tiles vinyl etc) please contact ARDEX NZ technical services for specific information.

This recommendation is based on the matting being dimensionally stable, not moisture sensitive and fit for purpose.

If underfloor heat is part of the system, please refer to ARDEX NZ technical services.

This recommendation has been provided in good faith by ARDEX New Zealandthe quality and control of products that are not ARDEX are the responsibility of the supplier.





Report Basis Conditions

- 1. All constructions and installations shall comply with the relevant sections of the most recent edition of the New Zealand Building Code 2004 (NZBC). Ardex reserves the right to make observations of non-conformance where reference has been made to the relevant sections of the NZBC.
- 2. All flooring installations shall comply with the relevant sections of the most recent edition of AS1884 (resilient) or AS/NZS2455 (textile). Ardex reserves the right to make observations of non-conformance where reference has been made to the relevant sections.
- 3. All ceramic tile related installations shall comply with the most recent edition of the Australian Standard AS3958 and where applicable ISO13007. Ardex reserves the right to make observations of non-conformance where reference has been made to the relevant sections.
- 4. All waterproofing related installations or products shall comply with the relevant sections of the most recent editions of the Australian Standards AS/NZS4858 (performance), NZBC E2/AS1 Ardex reserves the right to make observations of non-conformance where reference has been made to the relevant sections.
- 5. Any local/area specific guidelines must be followed.
- 6. Ardex reserves the right to reference external materials such public domain documents on the internet, professional literature and textbooks, and government or professional body data.
- 7. Where Ardex/Dunlop Technical Bulletins and Datasheets are discussed, they can be sourced from the website www.ardex.co.nz and are considered 'public domain documents'.
- 8. This is a site-specific document and is intended for use with this site and can't be applied to another site without written approval from ARDEX. This document is not all encompassing and is intended to be read with ARDEX Technical Datasheets and other literature.
- 9. This document is valid for 2 years. It must be reviewed if the work is not completed in that time.
- 10. ARDEX is not responsible for third party products and systems that are part of the installation or interactions resulting therefrom.
- 11. This recommendation is made in good faith on the basis of supplied information to ARDEX representatives and what may have been observed on site
- 12. ARDEX are not qualified designers, and this document is only designed to assist such a professional in formulating their site-specific legal documents.
- 13. All products mentioned are compatible with each other and warranted as fit for purpose.



