



ARDEX UI 740

FLEXBONE

Uncoupling Membrane

High load-bearing bonded uncoupling membrane

Ideal for large format tiles and stone in high traffic areas

Use with porcelain, ceramic, quarry and natural stone tiles

Helps prevent grout joint and tile damage from movement and deflection

High shear and tensile bond strength

For use over timber or concrete substrates

Suitable as a waterproofing membrane

For use in high stress areas such as shopping centres, airports, office buildings, car showrooms, hospitals etc.



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DESCRIPTION

ARDEX UI 740 FLEXBONE Uncoupling Membrane is a high load-bearing bonded uncoupling membrane ideal for large format tiles in high traffic areas. The unique bone shaped pattern with GripLock Technology delivers outstanding tensile bond strength. The system helps neutralise underlying substrate movement and supports and distributes heavy loads from above. ARDEX UI 740 FLEXBONE can be used as a waterproof layer in bathrooms and wet areas. For internal applications only.

FOR USE IN

- Shopping centres
- Airports
- Residential buildings
- Office buildings
- Hospitals
- Car showrooms

TO (SUBSTRATES)

- Concrete substrates
- Screeds (incl. green screeds)
- Timber subfloors
- Vinyl floor coverings
- Existing and cracked tiles
- Fresh, slightly damp concrete

SUBSTRATE PREPARATION

The surface being adhered to must be clean, firm and free of dust, dirt, oil, grease, curing compounds, release agents and other barrier materials, as well as being strong enough to support the weight of the tiles being fixed. Ensure surfaces are dry before tiling, with no residue or permanent damp. Should pre-levelling or subfloor repair be required, this should occur before ARDEX UI 740 FLEXBONE installation. For sheeted material eg. particleboard flooring, tape joints with PVC ducting tape. See www.ardexaustralia.com for detailed information and solutions.

Concrete (including early age concrete)

Early age concrete must be a minimum of 7 days old and no less than 20 MPa. Prior to tiling, remove any concrete sealers or curing compounds from the surface, e.g. resin, wax sealers. Steel trowel finished concrete should be roughened mechanically to remove laitance and provide a good key for tiling. The surface should be true and level and pitched to drains where required. Smooth surfaces and/or dense concrete greater than 35 MPa must be mechanically roughened prior to tiling.

Screeds

Screeds should establish a mechanical key and should be pitched to drains where required. Over-watered or otherwise weak surfaces must be cleaned down to sound, solid surfaces by mechanical methods. For time sensitive, non-wet area jobs that would benefit from minimal preparation, or where the cost of substrate preparation for a tile installation may be excessive, please use ARDEX UI 720 FLEXBONE (unbonded application). Refer to the appropriate technical data sheet for complete instructions.

Timber Floors (Sheet Timber)

Particleboard and plywood, with the exception of unbonded

timber such as laminated flooring or strip timber floors (e.g. cypress pine). Timber floors must be structurally sound and the maximum load deflection must not exceed 1/360 (1/500 for tiles > 350mm) of the span. Timber floors must have good underfloor ventilation and underfloor moisture levels must be stable during the life of the flooring system. Timber sheets must be sanded with 40 grit sand paper (or 24 grit if timber is coated/ stained) to the original timber so as to achieve a suitable surface profile and to remove surface contaminants. Strip timber floors must be fibre-cement sheeted prior to tiling.

Compressed Fibre-Cement Sheet (Floors)

Internal Applications

These sheets must be fixed strictly in accordance with manufacturer's instructions and be deemed suitable for the application by the manufacturer.

Existing Ceramic Tiles (Internal Only)

Existing tiles must be firm and stable. Roughen the surface by mechanical means, clean off contamination and dust before tiling. Ensure that at least 80% of the glaze is removed. Alternatively the cleaned tiles can be prepared by priming them with ARDEX P9.

Existing Vinyl Tiles

This applies only to solid vinyl flooring which must be well bonded to the substrate, do not tile over thin vinyl flooring that has foam backing. Clean the existing vinyl with a neutral stripping solution to remove any wax and dirt. Rinse with clean water and allow to dry. Lightly sand the surface with a floor sanding machine and vacuum the dust.

MOVEMENT JOINTS

All existing expansion joints, isolation joints and construction joints must be honoured up through the substrate, uncoupling membrane and tile or stone and must be in accordance with Australian Standards AS 3958. Please note that the tile or stone wall base should not be bonded to the tile or stone flooring. In these areas, proper installation is achieved with ARDEX UD146 Edge Insulation Strips, which has a selfsticking adhesive foot.

UNCOUPLING MAT INSTALLATION

Remove the shrink-wrap from the roll of ARDEX UI 740 FLEXBONE and unroll it onto the floor. Shaking the material once as it is unrolled can help it to relax. Trim the ends of each section as necessary in order to fit the surface area to be covered. Align the lengthwise edge of the material exactly with that of the adjacent section. Using the flat side of a trowel, key in the approved ARDEX adhesive to the substrate. Then, apply the adhesive to the substrate using the appropriate notched trowel. Comb the adhesive out, and use just enough to be covered by the ARDEX UI 740 FLEXBONE membrane during the adhesive open time. ARDEX adhesives should be mixed to the high water ratio. Carefully lay the ARDEX UI 740 FLEXBONE into the wet ARDEX adhesive with the fleece side facing down. DO NOT let the material fall, as this will trap air beneath the material. Using a float, flat trowel or roller, smooth and embed the mat into the bonding adhesive. Gently lift a corner of the membrane to check for proper coverage. Full contact between the fleece and adhesive must be achieved. When approaching walls or other obstacles, cut the mat to the appropriate lengths. Leave approximately 5mm between the mat and the edge of the wall or obstacle to allow for expansion. Structural, expansion and field perimeter joints are formed by dividing the ARDEX UI 740 FLEXBONE to the required width. The joints in the mats are to be covered with self-adhesive ARDEX UD156 Movement

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Joint Tape to protect against the entry of adhesive and grout. The arrangement of joints in the tile or stone installation must be in line with the divisions of the mats.

In waterproofing applications, all seams in the ARDEX UI 740 FLEXBONE wall and floor transitions must be sealed with ARDEX STB Tape and ARDEX WPM 002. The ARDEX STB Tape must overlap the ARDEX UI 740 FLEXBONE at the seams and floor and wall transitions by a minimum of 50 mm in order to secure waterproof integrity. This practice may be appropriate in bathrooms and other areas where an overflow or pipe break may occur. In some cases, the vertical section of the floor or wall transition may not be compatible with bonding using a tile adhesive. Connections to these vertical substrates may otherwise be achieved by using ARDEX CA 20 P Multi-Purpose Construction Adhesive and Sealant or suitable waterproofing materials. Do not mechanically fasten any material through the ARDEX UI 740 FLEXBONE, as this will compromise its waterproofing and uncoupling capabilities.

FLOORING INSTALLATION

Installation ARDEX UI 740 FLEXBONE Uncoupling Membrane may occur with one of the following ARDEX adhesives:

- ARDEX X78 MICROTEC Premium Polymer Modified Tile and Stone Adhesive
- ARDEX X 77 MICROTEC Fibre Reinforced Tile and Stone Adhesive
- ARDEX S28 Neu MICROTEC Large Format Tile and Moisture Sensitive Natural Stone Adhesive
- ARDEX X 17 Flexible Non Slump Wall and Floor Tile Adhesive
- ARDEX X 18 Fibre Reinforced Flexible Non Slump Wall and Floor Adhesive
- ARDEX X 52 Economical Flexible Rubber Modified Tile Adhesive
- ARDEX X 56 Highly Flexible Tile Adhesive

For timber floors (sheet timber) ARDEX P9 Primer should be used prior to the chosen approved tile adhesive. ARDEX Multiprime can be used with ARDEX S28 Neu. ARDEX Optima can be used without primer. After adhesive has cured, tiles or stone can be installed over the ARDEX UI 740 FLEXBONE. After mixing the appropriate ARDEX adhesive, apply the adhesive to the ARDEX UI 740 FLEXBONE with the flat side of a notched trowel (keying in) to fill in the bone-shaped cavities. Comb additional adhesive “wet on wet” over the mat with the appropriate notched trowel for the size of the tile or stone to be installed, and directly lay the tiles or stone on top. Periodically remove and check tiles or stone to ensure full coverage. The adhesive thickness between the top of the ARDEX UI 740 FLEXBONE and tile side must not exceed 6mm. Using the correct notched trowel will provide proper thickness. Install metal edge or transition strips where the tile ends along bordering, lower-lying covering surfaces. Avoid foot traffic during installation and until the adhesive has cured.

GROUTING

Grouting and traffic may be allowed after approximately 24 hours at 23° and 50% humidity. Allow longer for dense tiles/substrates, humid climates and low temperatures.

Only ARDEX epoxy grouts or ARDEX cement based grouts mixed with ARDEX Grout Booster may be used. The gauging mix for the cement based grouts shall be 80:20 (Grout Booster : Water)

PACKAGING

ARDEX UI 740 FLEXBONE is available in rolls of 1m wide x 20m long. Coverage of 20m².

Pay attention to the following:

Never expose ARDEX UI 740 FLEXBONE to jobsite traffic. Avoid foot traffic during installation until the adhesive has cured. Protect in a dry area free of sunlight. Tile size must be a minimum of 50mm x 50mm and have a minimum thickness of 6mm.

Before any substrate preparation, installation or finishing methods relating to ARDEX product are undertaken, please be aware of any potential risks and use appropriate PPE (personal protective equipment). This may involve contacting substrate manufacturers for Safety Data Sheets.

DISCLAIMER

The technical details, recommendations and other information contained in this datasheet are given in good faith and represent the best of our knowledge and experience at the time of printing. It is your responsibility to ensure that our products are used and handled correctly and in accordance with any applicable Australian Standards. Our instructions and recommendations are only for the uses they are intended. Users are advised to confirm that this product is suitable for their application and conforms with the specifications of the system. We also reserve the right to update information without prior notice to you to reflect our ongoing research and development program. Country specific recommendations, depending on local standards, codes of practice, building regulations or industry guidelines, may affect specific installation recommendations. The supply of our products and services is also subject to certain terms, warranties and exclusions, which may have already been disclosed to you in prior dealings or are otherwise available to you on request. You should make yourself familiar with them.

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This data sheet was issued in November 2021 and is valid for 3 years, in some instances a newer version may be published. Always refer to www.ardexaustralia.com for the latest technical data from ARDEX Australia Pty Ltd.