ARDEX UI 720™ FLEXBONE®

Floating Uncoupling Membrane

FLEXBONE® - The only unbonded uncoupling solution available!

True 100% uncoupling

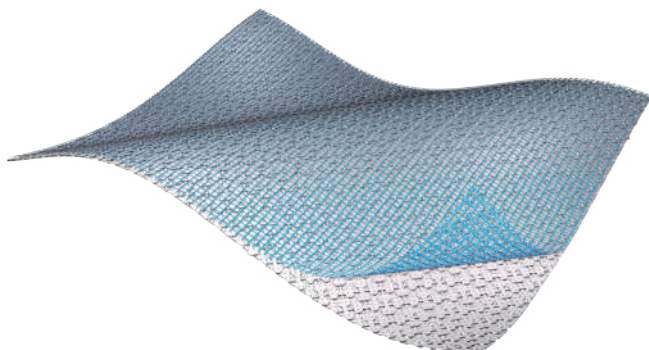**Use with porcelain, ceramic, quarry and natural stone tiles**

Up to 50% time savings

Helps to prevent grout joint and tile damage

Vapor pressure equalization

Perfect for use over difficult substrates

Ideal for frequently-changed floor coverings

Available in rolls and sheets

ARDEX UI 720™ FLEXBONE®
Floating Uncoupling Membrane

Description

ARDEX UI 720™ FLEXBONE® Floating Uncoupling Membrane is a revolutionary, loose-laid floating system that provides 100% uncoupling. The membrane's separation from the underlying substrate results in significant time and cost savings through minimal required substrate preparation. ARDEX UI 720 FLEXBONE has a unique bone-shaped pattern with GripLock Technology for the highest level of mortar-to-membrane bond strength. The membrane is constructed of a highly durable, flexible plastic and a laminated, topside glass fiber mesh that contains self-sticking overlaps for easy seam connection. The membrane also contains more than 1,000 perforations per square foot for improved vapor pressure equalization.

For Use In

- Offices
- Hotel Rooms
- Medical Offices
- Residential Properties
- Boutique Retail Shops
- Car Showrooms

Ideal for going over difficult indoor substrates, including

- Linoleum and vinyl floor coverings
- Oil contaminated floors
- Existing and cracked tile
- Painted floors
- Resin-Modified OSB
- Cutback adhesive
- Mixed substrates
- Epoxy and polished concrete floors
- Fresh, slightly damp concrete
- Wooden substrates and dry concrete

Recommended Tools

Drywall square, straight edge and utility knife.

Accessories

- ARDEX UD 146™ Edge Insulation Strip,
- ARDEX UD 156™ Movement Joint Tape
- ARDEX UD 158™ Seam Reinforcement Mesh Strip

Preparation

Deliver all material to the jobsite in its original, unopened packaging under proper storage conditions.

It is the responsibility of the installation contractor to inspect the ARDEX UI 720 FLEXBONE for visual defects and to verify that it is the correct thickness and type before beginning the tile or stone installation. Refer to the tile or stone manufacturer's specific recommendations.

Acclimate the installation area, setting material, ARDEX UI 720 FLEXBONE and tile or stone in an enclosed building at a minimum of 65°F (18°C) for at least 24 to 48 hours before, during and for 24 to 48 hours after installation. Lay the ARDEX UI 720 FLEXBONE flat during acclimation.

Substrate Preparation

Substrates must be load-bearing, flat and structurally sound. Vacuum or sweep away all dust and debris. All substrates must be flat with a maximum variance of 1/4" in 10' (6 mm in 3 m) from the required plane per TCNA or TTMAC guidelines or as recommended by the tile or stone manufacturer (default to the most stringent requirement).

Should pre-leveling or subfloor repair be required, use one of the materials listed below, as appropriate. Observe the instructions and dry times in the ARDEX technical data sheets.

Product	Substrate	Interior
ARDEX A 38™ Rapid Set Screed or ARDEX A 38 MIX™ Rapid Set, Premixed Screed	Concrete	X
	Wood	X*
ARDEX AM 100™ Rapid Set Pre-Tile Smoothing and Ramping Mortar	Concrete	X
	Wood	
ARDEX Liquid BackerBoard® Self-Leveling Underlayment for Interior Wood and Concrete Subfloors	Concrete	X
	Wood	X
ARDEX TL 1000™ Self-Leveling Underlayment	Concrete	X
	Wood	
ARDEX TL PATCH® Tile Leveler, Underlayment Patch and Skimcoat	Concrete	X
	Wood	X

*Refer to the ARDEX A 38 and ARDEX A 38 MIX technical data sheets for further instructions.

For more detailed information on substrate preparation, please refer to the ARDEX Substrate Preparation Technical Data Sheet at www.ardexamericas.com.

NOTE ON ASBESTOS CONTAINING MATERIALS: Please note that when removing existing flooring, any asbestos-containing materials should be handled and disposed of in accordance with applicable federal, state and local regulations.

Approved Substrates

- Concrete substrates
- Wood subfloors**
- Moisture-sensitive substrates, including gypsum
- Substrates with problem adhesion, such as coatings or hard, plastic coverings
- Load-bearing mixed substrates made of different types of materials

**When installing natural stone over wood subfloors, two layers of plywood are required. The wood subfloor must

be constructed according to prevailing building codes and in accordance with TCNA or TTMAC guidelines. Wooden subfloors must be solid and securely fixed to provide a rigid base free of undue flex. Any boards exhibiting movement must be properly fastened to create a sound, solid subfloor. Vacuum or sweep away all dust and debris.

Moisture-Sensitive Substrates

In intermittent wet areas or where waterproofing is required, moisture-sensitive substrates, such as gypsum, must be protected from water damage by priming with ARDEX P 51™ Primer and installing ARDEX 8+9™ Rapid Waterproofing and Crack Isolation Compound.

Moisture-sensitive substrates require two applications of ARDEX P 51. Make an initial application of ARDEX P 51 mixed with 3 parts water by volume. Apply evenly with a soft push broom. Do not use paint rollers, mops or spray equipment. Do not leave any bare spots. Brush off puddles and excess primer. Let dry thoroughly (1 - 3 hours), and install a second application of ARDEX P 51 mixed 1:1 with water as stated above. Allow primer to dry to a clear, thin film (min. 3 hours, max. 24 hours).

Once the primer is completely dry, install ARDEX 8+9. Refer to the appropriate technical data sheets for complete installation instructions.

Note: When installing moisture-sensitive natural stone tile, use ARDEX UI 740™ FLEXBONE® Uncoupling Membrane (bonded application) in conjunction with approved ARDEX mortars. Please refer to the ARDEX UI 740 FLEXBONE technical data sheet for more details.

Joints and Cracks

All existing expansion joints, isolation joints and construction joints must be honored up through the substrate, uncoupling membrane and tile or stone as indicated by TCNA or TTMAC guidelines.

Perimeter movement joints are essential for door areas, thresholds between rooms and geometric offsets. Arrange perimeter movement joints in accordance with industry standards. Interior areas exposed to direct sunlight, such as floors in front of floor-length windows, as well as underfloor heating areas require additional joints as required by TCNA or TTMAC guidelines.

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 UD 146 Edge Insulation Strips, which have a self-sticking adhesive foot.

As needed, dormant cracks and dormant control joints can be filled with ARDEX TL PATCH, following the instructions in the technical data sheet.

Uncoupling Mat Installation

Remove the shrink-wrap from the roll of ARDEX UI 720 and unroll it onto the floor. Shaking the material once as it is unrolled can help it to relax.

Loosely place the ARDEX UI 720 FLEXBONE with the glass fiber mesh weave facing upwards so that it is perpendicular to the subsequent installation direction of the tile or stone installation. 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. Except for joint areas, edges must contact, but not overlap.

Around columns, pipes, cabinets and other floor penetrations and restraining structures, an expansion joint through the entire covering thickness, including ARDEX UI 720 FLEXBONE, of about 5/16" - 3/8" (8 - 10 mm) width must be formed with the ARDEX UD 146 Edge Insulation Strip.

The joint areas of the individual lengths are secured by overlapping the mesh weave at the sides. Joint areas at the top ends as well as any cut areas are bonded using the self-adhesive ARDEX UD 158 Seam Reinforcement Mesh Strip. If ARDEX UI 720 FLEXBONE is installed with the intent to remove it, use a plastic sheet laid crease-free to act as a separating layer between the substrate and the membrane to protect against adhesion from any mortar used during the tile or stone installation.

Structural, expansion and field perimeter joints are formed by dividing the ARDEX UI 720 FLEXBONE to the required width. The joints in the mats are to be covered with self-adhesive ARDEX UD 156 Movement Joint Tape to protect against the entry of mortar and grout. The arrangement of the expansion joints in the tile or stone installation must be aligned with the divisions of the mats.

Do not mechanically fasten any material through the ARDEX UI 720 FLEXBONE, as this will compromise its uncoupling capabilities.

Note: Note: In wet areas where the uncoupling mat is intended to simultaneously function as a waterproof membrane, ARDEX UI 740 FLEXBONE (bonded application) should be used.

For installations of ARDEX UI 720 FLEXBONE, ARDEX 8+9 should be used where waterproofing is required. Refer to the appropriate technical data sheet for instructions on the installation of ARDEX 8+9.

Flooring Installation

Installation of tile or natural stone materials*** may occur with one of the following ARDEX mortars****:

- ARDEX X 78™ MICROTEC® Semi-Pourable Tile and Stone Mortar
- ARDEX X 77™ MICROTEC® Fiber Reinforced Tile and Stone Mortar
- ARDEX N 23™ MICROTEC® Rapid Set Natural Stone and Tile Mortar
- ARDEX X 7 R™ Rapid Set, Flexible Tile and Stone Mortar
- ARDEX X 5™ Flexible Tile and Stone Mortar

- ARDEX X 32™ MICROTEC® Universal Rapid Setting and Drying Thin-to-Thick Bed Mortar
- ARDEX FB 9 L™ Pourable ShearFlex® Mortar

Tile and stone can be immediately installed over the ARDEX UI 720 FLEXBONE and should proceed in accordance with ANSI 108.5 or TTMAC standards. After mixing the appropriate ARDEX mortar, apply the mortar to the ARDEX UI 720 with the flat side of a notched trowel (keying in) to fill in the bone-shaped cavities. Ensure that the mortar is flush with the upper surface of mesh. Comb additional mortar "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 tile or stone on top. Follow the recommendations of the TCNA or TTMAC for the proper transfer of setting materials. Periodically remove and check tile or stone to ensure full coverage.

The mortar thickness between the top of the ARDEX UI 720 FLEXBONE and the tile side must not exceed 1/4" (6 mm). Using the correct notched trowel will provide proper thickness.

Where the tile or stone installation ends, metal tile edge trims and reducers are to be fastened to the load absorbing, underlying substrate. A soft expansion joint should be created between the floor covering and ARDEX UI 720 FLEXBONE membrane and the metal edging strip. The metal edging strip should be finished flush with the tile or stone covering installed over the ARDEX UI 720 FLEXBONE membrane.

Note: The ARDEX UI 720 FLEXBONE must not be bonded at any point, as otherwise thermally caused buckling may occur.

Never expose ARDEX UI 720 FLEXBONE to jobsite traffic. Avoid foot traffic during installation and until the mortar has cured. Prior to installing tile or stone, ARDEX UI 720 FLEXBONE should be protected with boards in areas where foot traffic is necessary.

For grouting, use ARDEX FL™ Rapid Set, Flexible, Sanded Grout, ARDEX FH™ Sanded Wall and Floor Grout or ARDEX WA™ High Performance, 100% Solids Epoxy Grout and Adhesive. For soft and expansion joints, use ARDEX SX™ 100% Silicone Sealant.

Note: Due to the properties of plastic membranes, mortar type, tile type, tile size and climactic conditions, the mortar curing time required prior to grouting may vary. However, the ARDEX mortars allowable for use with ARDEX uncoupling membranes typically permit grouting in 3 - 24 hours.

Please refer to the appropriate ARDEX technical data sheets for complete grout installation instructions.

Robinson Test Results

ARDEX UI 720 FLEXBONE received a Light Commercial Rating.

Warranty

ARDEX Engineered Cements Standard Limited Warranty. Also eligible for the ARDEX SystemOne™ 10-Year Limited Warranty when used in conjunction with select ARDEX mortars and grouts. Failure to follow written directions will void the warranty. For complete warranty details, please contact our Customer Service Center at 888-512-7339.

Notes

FOR PROFESSIONAL USE ONLY.

This product is not a waterproofing system and will allow liquid water infiltration.

Rolls are shipped vertically. Protect in a dry area free of sunlight.

Store in temperatures from 32°F (0°C) to 72°F (22°C). Temperature resistance is from -22°F (-30°C) and up to 158°F (70°C) for brief periods only.

Dispose of packaging and residue in accordance with federal, state and local waste disposal regulations.

***Ceramic tile size must be a minimum of 8" x 8" x 3/8" (20.3 cm x 20.3 cm x 10 mm). Porcelain tile must be a minimum of 8" x 8" x 5/16" (20.3 cm x 20.3 cm x 8 mm) and natural stone must be a minimum of 8" x 8" x 9/16" (20.3 cm x 20.3 cm x 15 mm).

****ARDEX recommends a polymer modified tile and stone mortar with an ISO 13007 C2 designation and/or that complies with ANSI A118.4, ANSI A 118.11 or ANSI A118.15 to install tile or stone on top of the ARDEX UI 720 FLEXBONE. ARDEX tile and stone mortars are highly recommended due to their unique hardening and curing capabilities. In addition, the use of an ARDEX tile and stone mortar with the appropriate ARDEX grout qualifies the installation for an ARDEX SystemOne™ 10-Year Limited Warranty.

Precautions

Carefully read and follow all precautions and warnings on the product label. For complete safety information, please refer to the Safety Data Sheet (SDS) available at www.ardexamericas.com.

Installation Guide

Step 1

Check the substrate for load-bearing qualities, evenness and structural soundness. If leveling is necessary, a product such as ARDEX Liquid BackerBoard may be used.

Step 2

Sweep or vacuum debris from the substrate. In intermittent wet areas or where waterproofing is required, moisture-sensitive substrates, such as gypsum, must be protected from water damage by priming with ARDEX P 51 and installing ARDEX 8+9.

Step 3

Along the perimeter walls and penetration of the covering, use ARDEX UD 146 Edge Insulation Strips with a self-sticking adhesive foot.

Step 4

After cutting the membrane to size, unroll the ARDEX UI 720 FLEXBONE and loosely lay it over the substrate.

Step 5

Butt joint the membrane sections with the protruding edges of the self-adhesive mesh weave. Overlap onto the adjacent membranes.

Step 6

Use the self-adhesive ARDEX UD 158 Seam Reinforcement Mesh Strip to bond seams at the ends and cut areas of the membrane where there is no overlapping self-adhesive mesh.

Step 7

5/16" - 3/8"

Leave a joint minimum width of 5/16" - 3/8" (8 - 10 mm) for expansion and field perimeter joints that sub-divide large areas, doorways, etc.

Step 8

Cover the joints with self-adhesive ARDEX UD 156 Movement Joint Tape to protect against the entry of mortar and grout.

Step 9

Using the flat side of a trowel, fill and smooth ARDEX UI 720 FLEXBONE with the appropriate ARDEX mortar so that the mortar is flush with the top of the mesh.

Step 10

Use the appropriate notched trowel to comb the mortar, then install the tile or stone directly onto the membrane.

Step 11

Due to properties of plastic membranes, mortar type, tile type, tile size and climactic conditions, the mortar curing time required prior to grouting may vary. ARDEX mortars allowable for use with ARDEX uncoupling membranes typically permit grouting in 3 - 24 hours.

Step 12

Fill movement and perimeter joints with an appropriate soft joint filler such as ARDEX CA 20 P or ARDEX SX.

Sizes and Coverages Available:

1/8" (3 mm) Uncoupling Mat
39" wide x 65.6' long
(1 m wide x 20 m long) roll
Coverage: 215 sq ft. (20 sq. m.)

Roll:

1/8" (3 mm) Uncoupling Mat
39" wide x 65.6' long
(1 m x 20 m long)
Coverage: 215 ft^2 (20 m^2)

Individual Sheet:

1/8" (3 mm) Uncoupling Mat
39" wide x 78.75" long
(1 m x 2 m long)
Coverage: 21.5 ft^2 (2 m^2)

If exchanging the floor covering is desired, spread a polyethylene sheet over the substrate prior to installing ARDEX UI 720 FLEXBONE. The sheet acts as a separating layer between the substrate and the membrane to protect against adhesion from any mortar used during the floor covering installation.

Made in Germany.

Visit www.youtube.com/ARDEX101 to watch ARDEX Americas product videos.

For easy-to-use ARDEX Product Calculators and Product Information On the Go, download the ARDEX App at the iTunes Store or Google play.

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