



ARDEX X 77™ MICROTEC®

Premium Microfiber Reinforced Polymer Modified Thin Set Mortar

Use for setting porcelain, glass, quarry, moisture insensitive stone, ceramic and all types of mosaic tile

Use over exterior concrete and masonry surfaces, and over common interior surfaces, including exterior grade plywood

Use for interior and exterior floors, walls and countertops

Highly Flexible

Excellent Sag Resistance

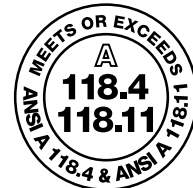
Specially suited for exterior porcelain tile installations

Ideal for high traffic installations and for use in swimming pools

Easy To Mix and Apply

Up to 60 minutes open time

3 hour pot life



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ARDEX X 77™ MICROTEC®

Premium microfiber reinforced polymer modified thin set mortar

Description and Usage

Premium, microfiber reinforced, polymer modified, thin set mortar for installing porcelain, glass, quarry, moisture-insensitive stone, ceramic and all types of mosaic tile over interior and exterior concrete and masonry floor and wall surfaces. Also for interior applications over exterior-grade plywood. May be used on floors with in-floor heating systems, in swimming pools and in fountains.

ARDEX X 77™ MICROTEC® Premium Thin Set Mortar is formulated to provide high bond strength and flexibility, making it ideal for installation in high traffic areas and on exterior building façades.

Substrate Preparation

ARDEX X 77 MICROTEC® adheres to both dry and damp substrates that are structurally sound, solid and free from any contaminant that can act as a bond breaker. Plywood substrates must be dry, APA-rated, Type 1 exterior-grade plywood. Refer to ANSI A 108 AN-2 "General Requirements for Subsurfaces" and the Tile Council of North America's "Handbook for Ceramic Tile Installation" for detailed information on surface preparation and guidelines for substrate construction. Wallboards must be dry, sound and solidly anchored to structural components in the wall. The plane of wall surfaces must be plumb and true. Floor surfaces must have minimal variation in the plane or slope.

Should interior pre-leveling or subfloor repair be required, use ARDEX AM 100™, ARDEX TL PATCH™, ARDEX EB 2™, ARDEX Liquid BackerBoard™ or ARDEX TL 1000™, as appropriate.

ARDEX X 77 MICROTEC® will bridge dormant cracks up to 1/8" wide. Expansion joints must be provided over existing moving joints and cracks, and where substrate materials change composition or direction, per ANSI A 108 AN-3.7.

Highly absorbent substrates must be treated with a scratch coat of ARDEX X 77. Allow the scratch coat to harden overnight before proceeding with the tile installation. Alternatively, apply ARDEX P 51™ PRIMER diluted 1:3 with water (interior applications in dry areas only).

Existing tiles, metal, glass and other non-porous surfaces must be primed with ARDEX P 82™ ULTRA PRIME (interior applications in dry areas only). For exterior applications or wet areas, non-porous substrates must be coated with ARDEX waterproofing compounds.

Mixing and Application

For one 40 lb bag of ARDEX X 77 MICROTEC® use 8 1/4 to 8 3/4 quarts of clean water. To mix smaller quantities by hand, use 2 parts powder to 1 part water by volume. Pour water in the mixing container first, and then add the ARDEX X 77 MICROTEC® while mixing for 2 to 3 minutes. For best results, mix with an ARDEX T-2 Ring Paddle and 1/2" heavy-duty drill. Just prior to application on the substrate, the mixture should be stirred again to ensure a creamy, smooth, lump-free consistency. The pot life of ARDEX X 77 MICROTEC® is approximately 3 hours at 70°F (21°C). If surface skinning occurs within this time, remix before using.

Installation should proceed in accordance with ANSI A 108.5. After mixing, apply the mortar to the substrate with the flat side of a trowel to obtain a solid mechanical bond. Apply to an area no greater than that which can be covered with tile while the mortar remains plastic. Do not set tile into skinned over mortar. Comb the mortar with a notched trowel of sufficient depth to ensure that the tiles are covered uniformly over their entire surface. The type and size of the tiles will dictate the size of the notched trowel to be used. The position of the tiles may be corrected for approximately 15 minutes after installation.

Grouting

Wall tiles can be grouted after 8 hours; floor tiles after 24 hours. ARDEX recommends the use of ARDEX FLEX™ or ARDEX WA™ grouts in accordance with ANSI A 108.10.

Notes

The pot life of ARDEX X 77 MICROTEC® is roughly 3 hours at 70°F (21°C). Jobsite conditions and temperature may affect pot life. If the material begins to harden within this time, retemper with a drill and mixing paddle. **DO NOT ADD MORE WATER!**

When setting certain types of tiles, it may be necessary to trowel a layer of mortar on the back of each tile prior to placement on the combed mortar bed in order to achieve the required mortar-to-tile contact. Press the tile firmly into the freshly combed mortar to ensure maximum mortar contact with the tile.

In cases requiring waterproofing, refer to the ARDEX Technical Brochures for ARDEX waterproofing compounds.



For setting moisture-sensitive stones on interior applications, use ARDEX S 16™, ARDEX S 20™ or ARDEX WA™ EPOXY GROUT AND ADHESIVE, as appropriate.

ARDEX X 77 MICROTEC® is intended for use at material and surface temperatures between 50° and 85° F (10° to 29° C). Do not install below 50°F (10°C) surface and air temperatures. For warm weather installation instructions, please contact the ARDEX Technical Service Department.

Never mix with cement or additives other than ARDEX approved products. Observe the basic rules of tile work.

ARDEX recommends the installation of test areas to confirm the suitability of the product for the intended use.

Precautions

ARDEX X 77 MICROTEC® contains Portland cement and sand aggregate. Avoid eye and skin contact. Mix in a well-ventilated area, and avoid breathing powder or dust. **KEEP OUT OF REACH OF CHILDREN.** Carefully read and follow all cautions and warnings on product label. For complete safety information, please refer to the Material Safety Data Sheet or visit our website at www.ardex.com.

Technical Data According to ARDEX Quality Standards

All data based on a mixing ratio of 2 parts powder to 1 part water by volume at 70°F (21°C).

Mixing Ratio:	8 1/4 to 8 3/4 quarts per 40 lb bag 2 parts powder to 1 part water by volume
Coverage (approx.):	1/8" x 1/8" V-Notch trowel 220 sq. ft. per bag 1/4" x 1/4" x 1/4" Sq.-Notch 110 sq. ft. per bag 1/4" x 3/8" x 1/4" Sq.-Notch 82.5 sq. ft. per bag 1/2" x 1/2" x 1/2" Sq.-Notch 55 sq. ft. per bag
Open time:	Up to 60 minutes
Pot Life:	3 hours
Time to Grout:	Walls: 8 hours Floors: 24 hours
Color:	Gray
Packaging:	40 lb/18 kg bag net weight
Storage:	Store in a cool dry area. Do not expose bags to sun.
Shelf Life:	One year if unopened
Warranty:	Please see the ARDEX Tile & Stone Installation System Warranty Brochure

ANSI A 118.4 SHEAR BOND (28 DAYS)

Porcelain Tile	300 psi
Wall Tile	500 psi

ANSI A 118.11 SHEAR BOND (28 DAYS)

Quarry Tile on plywood	225 psi
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