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# ARDEX S 48™

## Rapid-Set Thin Set Mortar/ Mastic Hybrid

The ultimate bond for setting GLASS TILE  
and so much more!

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Ideal for fast setting of glass tiles and backsplashes

Highly versatile

Use to set porcelain, glass, mosaic, quarry, ceramic and most natural stone tiles\*

Grout in just 1 to 5 hours; install tile and grout in the same day\*\*

Unique consistency; cement based but creamy and smooth like a mastic

Excellent bond strength

Outstanding flexibility

Great coverage; up to 80 sq. ft. per 10 lb. bag

Perfect for quick fixes and unexpected tile repairs

Ideal for intermittent wet areas, such as residential kitchens and bathrooms

Use for interior floors, walls and countertops

Use over all common substrates, including drywall, wood, plastic laminates and concrete



**SystemOne™**

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# ARDEX S 48™

## Rapid-Set Thin Set Mortar/Mastic Hybrid

### Description and Usage

ARDEX S 48™ is the most versatile tile setting material available for interior applications. A polymer modified blend of Portland cement and other hydraulic cements, ARDEX S 48 is a thin set mortar that is ideal for the rapid setting of glass tiles and backsplashes. Can be used to install porcelain, glass, ceramic, quarry and most natural stone\* tiles over all interior common substrates, including drywall, wood, plastic laminate and concrete. It is suitable for use in intermittent wet areas, including residential bathrooms and kitchens. It is excellent for installing glass tile and for quick fixes of unexpected repairs.

When mixed, ARDEX S 48 has a creamy, smooth consistency similar to a pre-mixed mastic adhesive. It is easy to use, highly flexible and very strong.

### Substrate Preparation

ARDEX S 48 adheres to dry 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 as outlined by the Tile Council of North America.

Should pre-leveling or subfloor repair be required, use ARDEX Liquid BackerBoard™ Self-Leveling Underlayment for Interior Wood and Concrete Subfloors, ARDEX AM 100™ Rapid Set Pre-Tile Smoothing and Ramping Mortar, ARDEX TL 1000™ Tile Leveler, Self-Leveling Underlayment, ARDEX TL PATCH® Tile Leveler, Underlayment Patch and Skimcoat or ARDEX EB 2™ Fast Setting Screed Cement, as appropriate. Observe the instructions and dry times in the ARDEX technical brochures.

ARDEX S 48 will isolate dormant cracks up to 1/8" wide. Expansion joints must be provided over existing moving joints and moving cracks and where substrate materials change composition or direction per ANSI A 108 AN-3.7.

### Priming/Treating the Substrate

Highly absorbent substrates, such as plaster, existing tiles and certain non-porous substrates must be primed or treated as detailed below before proceeding with the tile installation.

### HIGHLY ABSORBENT SUBSTRATES

**Option 1:** Apply a scratch coat of ARDEX S 48. Allow the scratch coat to harden and dry completely before proceeding with the tile installation.

**Option 2:** Prime with ARDEX P 51™ Primer diluted 1:3 with water and allow this course to dry thoroughly (min. 3 hours, max. 24 hours) before proceeding with the tile installation.

### EXISTING TILES (TILE OVER TILE APPLICATIONS)

**Option 1:** Apply a scratch coat of ARDEX S 48, and let the scratch coat harden and dry completely before proceeding with the tile installation.

**Option 2:** Apply a coat of ARDEX 8+9™ Waterproofing and Crack Isolation Compound, which must dry 1-2 hours before proceeding with the tile installation.

**Option 3:** Prime the existing tiles with ARDEX P 82™ ULTRA PRIME, and allow this course to dry thoroughly (min. 3 hours, max. 24 hours) before proceeding with the tile installation.

### EXISTING METAL, GLASS, AND CERTAIN OTHER NON-POROUS SURFACES

**Option 1:** Apply a coat of ARDEX 8+9 Waterproofing and Crack Isolation Compound, which must dry 1-2 hours before proceeding with the tile installation.

**Option 2:** Prime with ARDEX P 82 ULTRA PRIME, and allow this course to dry thoroughly (min. 3 hours, max. 24 hours) before proceeding with the tile installation.

For more information, refer to the ARDEX Substrate Preparation Brochure at [www.ardexamericas.com](http://www.ardexamericas.com).

### Recommended Tools

Margin trowel, mixing container, ARDEX T-2 Ring Mixing Paddle, 1/2" (12 mm) heavy-duty drill (min. 650 rpm) and appropriate notched trowel.

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## Mixing and Application

For one 10 lb. (4.5 kg) bag of ARDEX S 48, use 3 quarts (2.8 L) of clean water. Pour water in the mixing container first, and then add the ARDEX S 48 while mixing for 2 to 3 minutes. For best results, mix with an ARDEX T-2 Ring Mixing Paddle and 1/2" heavy-duty drill (12 mm, min. 650 rpm). To mix smaller quantities by hand, use 2 parts powder to 1 part water by volume. Use a margin trowel, and mix vigorously for 2 to 3 minutes. Just prior to application on the substrate, the mixture should be stirred again to ensure a creamy, smooth, lump-free consistency.

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 or stone into skinned over mortar. Comb the mortar with a notched trowel of sufficient depth to ensure that the tile or stone is covered uniformly over the entire surface. Follow the recommendations of the Tile Council of North America for proper transfer of ARDEX S 48 from the substrate to the tile or stone. The type and size of the tile or stone will dictate the size of the notched trowel to be used to achieve proper transfer. The position of the tile or stone may be corrected for 10-20 minutes after installation.

## Grouting

Wall tiles can be grouted after 1 to 3 hours; floor tiles after 5 hours in accordance with ANSI A 108.10 using the appropriate ARDEX grout.

## Notes

FOR PROFESSIONAL USE ONLY.

The pot life of ARDEX S 48 is approximately 30 minutes 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 tile or stone, it may be necessary to trowel a layer of mortar on the back of each tile or stone prior to placement on the combed mortar bed in order to achieve the required mortar-to-tile contact. Press each tile firmly into the freshly combed mortar to ensure maximum mortar contact with the tile.

For cases requiring waterproofing, please refer to the ARDEX 8+9 Waterproofing and Crack Isolation Compound technical data sheet and the ARDEX 8+9 "5 Step Application Guide."

ARDEX S 48 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. 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.

\*For setting moisture-sensitive natural stone or agglomerate tile, use ARDEX X 32™ MICROTEC® Fiber Reinforced Rapid Setting Thin to Thick Bed Mortar or ARDEX S 16™ Rapid Setting Thin Set Mortar for Marble & Stone (interior, dry applications only).

## Precautions

Carefully read and follow all precautions and warnings on the product label. For complete safety information, please refer to the Material Safety Data Sheet available at [www.ardexamericas.com](http://www.ardexamericas.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). Physical properties are typical values and not specifications.

<b>Mixing Ratio:</b>	3 quarts (2.8 L) of water per 10 lb. (4.5 kg) bag For smaller batches, use 2 parts powder to 1 part water by volume
<b>Approximate Coverage:</b>	5/32" V-Notch Trowel 80 sq. ft. (7.4 sq. m) 1/4" x 1/4" x 1/4" Sq. Notch Trowel 30 sq. ft. (2.7 sq. m)
<b>Open Time:</b>	Approx. 20 minutes
<b>Pot Life:</b>	30 minutes
<b>Working Time:</b>	10 - 20 minutes
<b>**Time to Grout:</b>	Walls: 1 to 3 hours Floors: 5 hours
<b>Color:</b>	White
<b>VOC:</b>	0
<b>Packaging:</b>	10 lb. (4.5 kg) net weight bag
<b>Storage:</b>	Store in a cool, dry area. Do not leave bags exposed to sun.
<b>Shelf Life:</b>	1 year, if unopened
<b>Warranty:</b>	ARDEX Engineered Cements Standard Limited Warranty applies. Also eligible for the ARDEX SystemOne™ Warranty when used in conjunction with ARDEX grouts and ARDEX caulks.

ANSI A 118.4 SHEAR BOND (28 DAYS)	
Porcelain Tile	500 psi (3 N/mm <sup>2</sup> )
Wall Tile	800 psi (6 N/mm <sup>2</sup> )
Quarry Tile	415 psi (3 N/mm <sup>2</sup> )
ANSI A 118.11 SHEAR BOND (28 DAYS)	
Quarry Tile	300 psi (2 N/mm <sup>2</sup> )
ISO/EN C2 FT S2	

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