

**APPROPRIATE AREAS OF USE**

- Wall • Floor • Pool
- Wet Areas including Steam Shower
- Interiors • Exteriors • Backsplashes
- Fireplace Surrounds

**SURFACE PREPARATION****Substrate Preparation**

Appropriate substrates: concrete, masonry, existing well bonded ceramic tile, proper tiling underlayment over wood or steel framed construction.

**General Substrate Requirements**

All substrates must be flat, smooth and free of all surface contaminants that could act as a bond breaker. Overly absorbent as well as non-absorbent substrates require priming prior to installation. A surface flatness of 1/4" in 10' is required for all tile and stone installations per TCNA installation guidelines. Large-Format Tiles: Any tile larger than 15" in any facial dimension requires a surface flatness of 1/8" in 10' and no more than 1/16" variation in any 24" span.

**Crack Isolation**

All existing substrates cracks as well as any area susceptible to future surface cracking requires the installation of a crack isolation membrane meeting ANSI 118.12.

**Wet Areas**

Wet Areas require the installation of a waterproofing membrane meeting ANSI 118.10 prior to installation. Steam Rooms (continuous use): require a waterproofing and vapor retarding membrane with a perm rating of .05 perms or less.

**Pool Installation**

Use ARDEX 8+9™ Rapid Waterproofing and Crack Isolation Compound (3 coats) or ARDEX SK 175™ Waterproofing Membrane and Vapor Retarder (1 layer) to ensure your swimming pool is watertight and free from leaks. Install porcelain tiles with X 77™ MICROTEC® Fiber Reinforced Tile and Stone Mortar, ARDEX X 78™ MICROTEC® Semi-Pourable Tile and Stone Mortar or ARDEX X 90 OUTDOOR™ MicroteC3 Rapid-Set, Flexible Tile and Stone Mortar to ensure a durable, long-lasting bond. ARDEX FL™ Rapid Set, Flexible, Sanded Grout or ARDEX WA™ High Performance, 100% Solids Epoxy Grout and Adhesive are

recommended for grouting.

**Substrate Preparation Products**

- ARDEX Liquid BackerBoard® Self-Leveling Underlayment for Interior Wood and Concrete Subfloors
- ARDEX A 38™ MIX Rapid-Set Pre Mixed Screed
- ARDEX AM 100™ Rapid Set Pre-Tile Smoothing and Ramping Mortar
- ARDEX SKM™ Skimcoat Patch & Finishing Underlayment
- ARDEX 8+9™ Rapid Waterproofing and Crack Isolation Compound (Shower Walls)
- ARDEX SK 175™ Waterproofing Membrane and Vapor Retarder for Tile & Stone Installations (Steam Room Applications)

**For complete information regarding substrate preparation requirements, material selection, required installation tools and application, visit [www.ardexamericas.com](http://www.ardexamericas.com) and view the individual product technical data sheets or contact ARDEX technical service at (888) 512-7339**

**CUTTING & DRILLING**

Use a diamond wet saw blade meant for cutting porcelain. Alternately, a snap tile cutter can be used. Rail saws can be used to achieve a mitered edge.

To create holes, use a 3/8" drill with a water swivel attachment. Drill using diamond drill bit made for porcelain, at a slow speed.

To achieve a bullnose on the edge of the tile, use a bullnose blade meant for porcelain.

**SETTING**

Before installation, dry lay all material to inspect for quality and to determine the best blend of the material. All materials must be acclimated prior to installation, and air and surface temperature must be between 50 F and 80 F during installation. Be sure to clean tiles to remove any dust, dirt or packing contaminants prior to installation.

Per ANSI A108.5, apply mortar to the substrate using an appropriate notch trowel, and place tiles while material is wet and offers transfer. Larger tiles may require the use of a specialty notch trowel to ensure

proper mortar ridge collapse. A minimum coverage of 80% for interior dry areas and 95% coverage for wet areas must be achieved. Working time: As larger tiles require more time to spread mortar over larger areas, selecting a mortar with adequate working time is critical. Lippage Tuning: All tiles greater than 36" in any dimension require the inclusion of lippage tuning devices to maximize tile to tile edge flatness. Once setting materials have adequately set (see product specifications for dry time) grouting can proceed. Honor all expansion and moving joints in accordance with TCNA EJ 171. In addition, all perimeter and change of plane areas must be filled with an appropriate flexible sealant (ARDEX SX™ 100% Silicone Sealant for Tile and Stone Applications).

**Recommended Mortar and Adhesives**

- ARDEX X 5™ Flexible Tile and Stone Mortar
- ARDEX X 77™ MICROTEC® Fiber Reinforced Tile and Stone Mortar
- ARDEX X 78™ MICROTEC® Semi-Pourable Tile and Stone Mortar
- ARDEX S 28™ MICROTEC® Rapid-Set, Rapid-Dry, Super-Format Tile and Uncoupling Membrane Mortar
- ARDEX X 32™ MICROTEC® Universal Rapid Setting and Drying Thin-to-Thick Bed Mortar
- ARDEX X 90 OUTDOOR™ MicroteC3 Rapid-Set, Flexible Tile and Stone Mortar

**Recommended Grout**

- ARDEX FL™ Rapid Set, Flexible, Sanded Grout
- ARDEX WA™ High Performance, 100% Solids Epoxy Grout and Adhesive

**Caulking**

- ARDEX SX™ 100% Silicone Sealant for Tile and Stone Applications

**See complete setting material product technical information and installation instruction at [ardexamericas.com](http://ardexamericas.com).**

**SEALING**

Through body unglazed matte finish porcelain and glazed porcelains do not need to be sealed. Polished porcelains in commer-

**(guidelines continued on next page)**

cial settings should be sealed prior to grouting to avoid difficult grout cleanups and staining. Sealing is especially important for epoxy and urethane grout installations. Cementitious grout should always be sealed. Some modified grouts, as well as epoxy or urethane grouts, do not require sealing.

#### **Recommended Sealant**

- Fila MP90 (solvent based)
- Fila MP90 Eco Plus (water based)
- Fila GroutProof - for sealing grout

**For complete information regarding sealant products from FILA, visit [filasolutions.com](http://filasolutions.com) or call 844-FILA123**

#### **CARE & MAINTENANCE**

For day-to-day cleaning, apply a pH neutral cleaner and scrub tile with a brush, or floor scrubber and soft pad. Remove the residue with a mop or wet vac and rinse thoroughly. Grouts can be effectively and safely cleaned with an alkaline cleaner

#### **Recommended Cleaners**

- FILACLEANER
- FILACLEANER Spray
- GroutNet for cleaning grout

For organic stains (grease, coffee, wine, epoxy residue, adhesives, wax) use a strong alkaline cleaner.

#### **Recommended Organic Stain Removers**

- Fila PS87
- PS87 Gel
- PS87 Spray

For inorganic stains (grout haze, rust, paint, soap scum, hard water spots, limescale) use a buffered acid cleaner.

#### **Recommended Inorganic Stain Removers**

- Fila Deterdek
- Deterdek Spray

#### **Recommended Excess Sealer Remover**

- No Paint Star - ProStrip

**For complete information regarding care & maintenance products from FILA, visit [filasolutions.com](http://filasolutions.com) or call**

#### **844-FILA123**

#### **CAUTION**

AKDO will not accept claims for any reason after the material has been cut, modified or installed.

You have chosen to install your own Porcelain product. Neither AKDO Intertrade, Inc. ("AKDO") nor the manufacturer shall have any responsibility for damage to property or for personal injury resulting from or related to the installation process. You have determined the appropriate product and measurements for your needs. Except as otherwise set forth in writing, AKDO disclaims any and all representations and warranties regarding the suitability of the product for its intended use or the accuracy of measurements.

Please read all instructions with care before beginning installation. These instructions are considered a guide, to help prevent problems caused by errors in installation. The instructions should not be considered complete. Many details of installation are learned through experience and general construction knowledge, which we cannot provide. The installation guidelines are intended to be recommendations only, and they are not intended to serve as a step-by-step installation checklist.

Selection of an experienced installer is your sole responsibility. You should consult with a professional installer to determine the best installation procedure for your project. Installers should refer to the most current industry standards and specifications for installation. You assume all risks of loss or damage in connection with the installation and use of the Porcelain product.