



# NON-METALLIC GLASS INSTALLATION INSTRUCTIONS

#### **APPROPRIATE AREAS OF USE**

- Wall use only
- Interiors Backsplashes
- Fireplace Surrounds
- •Wet Areas including Steam Shower
- Pools and exteriors (glass tiles must not exceed 4 square inches in surface dimension)

#### **SURFACE PREPARATION**

# **Substrate Preparation**

Appropriate substrates: concrete, masonry, existing well bonded ceramic tile, proper tiling underlayment such as drywall, cement backer board or foam backer board 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 ½" in 10' is required for all tile and stone installations per TCNA installation guidelines.

#### **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**

Tiles may only be installed in pools with concrete substrates. Use ARDEX AM 100™ to flatten and smooth all walls prior to installing a waterproofing membrane. Apply 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.

# **Substrate Preparation Products**

- ARDEX AM 100™ Rapid Set Pre-Tile Smoothing and Ramping Mortar
- ARDEX SKM<sup>TM</sup> Skimcoat Patch & Finishing Underlayment (interior only)

- ARDEX 8+9<sup>™</sup> Rapid Waterproofing and Crack Isolation Compound
- ARDEX SK 175™ Waterproofing Membrane and Vapor Retarder for Tile & Stone Installations (required for Steam Room applications).

For complete information regarding substrate preparation requirements, material selection, required installation tools and application, visit 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 glass. We recommend the Husqvarna Superlok Glass+ blade.

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

For tiles, starting with the face of the glass, cut halfway through the material, then flip and cut through the back. For mosaics, cut through the material in one pass and install quickly, as water may loosen the mosaic from the mesh. Cut only once. Use the tile saw blade or polishing pad to smooth the residual cutting marks from the tile or mosaic.

#### **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, trowel apply mortar to the substrate. Flatten trowel marks to achieve a smooth, consistent setting bed. Back-butter glass tiles with thinset/epoxy. Place tiles while material is wet and offers transfer. A minimum coverage of 80% for interior dry areas and 95% coverage for exterior and wet areas must be achieved. 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<sup>TM</sup> 100% Silicone Sealant for Tile and Stone Applications).

White thinset/epoxy is recommended for all glass products. Ensure all grout joints are completely cleaned out prior to grouting.

**Pool Installation:** It is not recommended to install glass tiles/mosaics larger than 4 square inches in exterior tile installations. When installing in fully submerged pool applications, it is recommended to adhere the AKDO glass tiles with ARDEX WA™ Epoxy Adhesive. If the tiles are to be installed on pool "splash-line", ARDEX X 77™ + ARDEX E 90™ can be used as a cementitious setting material. Once tiles are set, grouting can proceed using ARDEX FG-C™ MICROTEC™ Unsanded Grout and the pool can be filled with water after 7-days.

#### **Recommended Mortar and Adhesives**

- ARDEX X 77™ MICROTEC® Fiber Reinforced Tile and Stone Mortar (for interior applications)
- ARDEX X 77<sup>TM</sup> + ARDEX E 90<sup>TM</sup> Mortar Admix Tile and Stone Mortar Enhancer (for pool splash line)
- ARDEX S 48™ Rapid-Set Mortar / Mastic Hybrid (for interior applications)
  ARDEX WA™ High Performance, 100%
- ARDEX WA<sup>TM</sup> High Performance, 100% Solids Epoxy Grout and Adhesive (for submerged applications)

#### **Recommended Grout**

 ARDEX FG-C™ MICROTEC® Unsanded Grout

#### Caulking

• ARDEX SX<sup>TM</sup> 100% Silicone Sealant for Tile and Stone Applications

See complete setting material product technical information and installation instruction at ardexamericas.com.

# **SEALING**

There is no need to seal glass tiles, however check with your grout manufacturer to see if your grout should be sealed.

(guidelines continued on next page)



#### **Recommended Grout Sealer:**

•FILAGROUT PROOF

For complete information regarding sealant products from FILA, visit filasolutions.com or call 844-FILA123

#### **CARE & MAINTENANCE**

For day-to-day cleaning, apply a pH neutral cleaner and scrub with a soft brush or soft pad. Remove the residue with a clean cloth or wet vac and rinse thoroughly.

#### **Recommended Cleaners**

- FILACLEANER
- FILACLEANER Spray

For complete information regarding care & maintenance products from FILA, visit 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 Glass 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 Glass product.