## APPROPRIATE AREAS OF USE

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

**Refer to ANSI A108.19 and A137.3 for complete detail of application requirements. Installed must have mastered these ANSI standards before installing any Gauged Porcelain Tiles.**

## HANDLING

The use of devices designed especially for moving large sized tiles is recommended. To increase rigidity and limit twisting, use a system composed of parallel and transverse guides.   When using manpower to transport gauged porcelain onto the moving devices, it is recommended to have at least one person at each edge of the tile.

## 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. Gauged Porcelain Tiles and Gauged Porcelain Panels/ Slabs require a substrate deflection rating of L/720. Overly absorbent as well as non-absorbent substrates require priming prior to installation. A surface flatness of 1/8" in 10' with no more than 1/16" variation in any 24" span is required for all gauged porcelain tile installations.

### 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.

### Substrate Preparation Products

- ARDEX Liquid BackerBoard® Self-Leveling Underlayment for Interior Wood and Concrete Subfloors
- ARDEX TL 1000™ Self-Leveling Underlayment
- 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 and view the individual product technical data sheets or contact ARDEX technical service at (888) 512-7339**

## INSTALLATION TOOLS

Use of the proper tools and equipment is critical to Gauged Porcelain Tile installation. The following tools are required (not limited to):
- Safety Equipment (gloves, glasses, steel toe boots)
- Suction Cups and Large Slab Carrying Equipment
- Fabrication Table
- Self-Collapsing Notched Trowels such as the Euro Notch trowel
- Score and Snap Cutting Equipment
- Diamond Pads
- Non-Oscillating Vibrating Palm Sander
- Lippage Tuning Clips

## SETTING

Gauged Porcelain Tiles and Panels/ Slabs must be installed in accordance with the ANSI A108.19 Installation Standard.

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.

A layer of thin-set mortar is to be applied to the substrate and tile backing. A scratch coat of mortar must be applied to both the substrate and tile backing to ensure a solid bond. Notched mortar is to be applied in straight ridges and in a direction toward the tiles shortest side. Substrate and tile ridges must be run parallel. Place tiles while mortar is wet, working time will vary based on mortar selected and climate conditions. As larger tiles require more time to spread mortar over larger areas, selecting a mortar with adequate working time is critical.

Remove air and maximize coverage but starting in the center or the tile panel and slowly work outward. Floor tile bedding is accomplished by walking on tiles. Bed wall tiles by using a weighted float, such as the Raimondi Beating Block.

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 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

### 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.**

**(guidelines continued on next page)**

## CUTTING & DRILLING

Basic field fabrication can be completed by using a score and snap designed for porcelain panels. Surface must be stable, flat and inflexible. Cut edges can be smoothed with a diamond polishing pad.

Guaged Porcelain tiles can also be water jet.

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

To achieve a cutout from the middle of a tile, first draw guidelines for the cutout and drill small holes in the corner of the shape. Then use an angular grinder to cut along the guidelines.

## SEALING

Through body unglazed matte finish porcelain and glazed porcelains do not need to be sealed. Polished porcelains in commercial 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 MP() (water based)
- FILA Groutproof (for sealing grout)
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 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 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.