

APPROPRIATE AREAS OF USE

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

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 Slabs.

HANDLING

The use of devices designed especially for moving large sized slabs 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 panel.

SURFACE PREPARATION**Substrate Preparation**

Appropriate substrates: concrete, masonry, 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 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 slab 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 Slab 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

WALL OR FLOOR SETTINGS

Gauged Porcelain 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 panels 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 slab backing. A scratch coat of mortar must be applied to both the substrate and slab backing to ensure a solid bond. Notched mortar is to be applied in straight ridges and in a direction toward the slab's shortest side. Substrate and slab ridges must be run parallel. Place slab while mortar is wet, working time will vary based on mortar selected and climate conditions. As slabs 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 of the panel and slowly work outward. Floor slab bedding is accomplished by walking on tiles. Bed wall slabs by using a weighted float, such as the Raimondi Beating Block.

Lippage Tuning: Large porcelain panels/ slabs require the inclusion of lippage tuning devices to maximize panel to panel 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

Process Nuvola 12 mm slabs using water-cooled machinery suitable for processing natural stones, marbles and bonded materials.

- The work top must be stable, perfectly flat and clean.
- The cutting blade must be in good condition and suitable for cutting porcelain stoneware. We recommend a 16" Evogres Plus.
- The slab must be fed in the same direction as the disc rotation.
- Incorrect feed speed, blade, operating pressure, and unsuitable planarity of the support surface, as well as movements or vibrations could cause breakage of the slab during cutting.

Nuvola slabs in size 63" x 126" have non-squared external edges. Start the fabrication by squaring off all four sides (removing about 1").

CUTTING PARAMETERS

- The lower the feed speed, the greater the cutting quality.
- A lower feed speed ensures finishing with reduced chamfer on the edge.
- The in and out speed must always be 50% less than nominal working speed.
- Use the maximum amount of water as possible.
- Keep depth of blade below thickness of slab as minimal as possible (no more than 1 mm below).
- For "L" cuts, first make a hole at the angle, and then make the straight cuts. The last part near the hole must be cut by hand using a grinder.

For further information on disc cutting, drilling, waterjet and CNC applications, please contact your sales representative.

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.

If edges are exposed for countertop and sink applications, we recommend the following sealants:

- FILA MP90 (solvent based)
 - FILA MP(I) (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 daily cleaning, lukewarm water and possibly a household detergent are recommended. After use, rinse well with plenty of water.

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

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 deter-

mined 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.