

RECOMMENDED INSTALLATION METHODS FOR BETONA™ FLEXIBLE CONCRETE TILE

General Information: These guidelines apply to the installation of Betona™ Flexible Concrete Tile. Interior concrete and masonry surfaces, as well as over common interior surfaces, including Plywood substrates must be 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. The plane of wall surfaces must be plumb and true. Floor surfaces must have a minimal variation in the plane or slope. Please note: The appropriate Ardex setting material will dictate what substrate the tile can be installed over. Consult manufacturer for applications subjecting Betona Tile to unusual moisture or chemical exposure

Material Handling & Site Conditions:

- A. Material Handling –Deliver materials in manufacturer’s original unopened and undamaged cartons with identification labels intact. Protect tiles from exposure to harmful environmental conditions such as direct flow of heat from hot air registers, radiators or other heating fixtures or devices and cold air vents.
- B. Site Conditions – The installation environment and the tile must be allowed to condition at a minimum of 55 degrees and a maximum of 80 degrees 48 hrs prior to installation, during installation and 7 days post installation. Protect installed product from traffic from other trades with suitable floor covering protection.

Substrate Preparation:

In accordance with ASTM F 710 substrates must be clean, sound, and solid free of oil, dirt, paint, drywall, adhesive, sealers, wax, grease, and any other contaminants that could act as a bondbreaker. Minimum requirements for surface flatness are specified a maximum deviation of 1/8” in 10’ in all directions. Where surface does not meet required flatness use polymer modified Portland cement based underlayment to prepare surface, such as those manufactured by ARDEX Engineered Cements. Gypsum based underlayments are unacceptable.

- A. **Concrete Substrates** – As necessary to provide a suitable substrate, prepare surface by mechanical means such as shot blasting, scarifying or similar. . Repair surface irregularities shall be filled or smoothed with a polymer modified Portland cement patching material

Moisture Testing – ALL concrete substrates should be tested for moisture vapor in accordance with ASTM F 1869 and/or ASTM F 2170. Isolation, expansion, construction and control joints must be honored through the tile by providing a soft joint in the tile installation as detailed in the Tile Council of North America’s “Handbook for Ceramic Tile Installation”. Additionally, soft joints in the tile installation must be installed periodically as detailed in the Tile Council of North America’s “Handbook for Ceramic Tile Installation”.

- B. **Wood Floors** – Suitable wood substrates include, 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
- C. **Radiant Heat** – Use ARDEX Liquid BackerBoard Self-Leveling Underlayment for Interior Wood Subfloors

Installation General - Verify that site and substrate conditions are suitable for the installation of Betona tiles. Do not proceed with installation until all unsuitable conditions are corrected.

Installation must comply with all applicable building codes and comply with installation practices as given by the Tile Council of North America 2009 TCA Handbook for Ceramic Tile Installation.

Waterproofing – Waterproof all common substrates in commercial and residential bathrooms, showers and kitchens prior to the installation of Betona Tile with ARDEX Waterproofing Compound – Refer to manufacturer’s installation guidelines.

Crack Isolation – ARDEX 8+9 can be used as a crack isolation membrane in accordance to ANSI A 118.12. ARDEX 8+9 will isolate minor, in plane substrate cracking up to 1/16” when used without mesh and up to 1/8” when used with mesh.

Tile Cutting: Betona™ Tile can be cut using a standard ceramic wet saw or standard VCT tile cutter as manufactured by Roberts Consolidated or equal.

Tile Laying: Tile selection from packaging shall be “shuffled” between a minimum of 3 cartons for any given area. Shuffling 2 Cartons is acceptable only where square footage does not allow for the use of 3 cartons. Consult Polycem for special or custom product installation such as mosaics.

Thin Set Application:

Floors - Apply tile installation materials in accordance with the tile setting material recommendations. Approved products include the specified materials manufactured by

ARDEX Engineered Cements with a recommended trowel notch size of 1/8" D X 1/8" W X 1/8" A square notch trowel. The recommended installation materials include:

ARDEX X 9™ PREMIUM *SHEARFLEX*• THIN SET MORTAR

ARDEX FB 9 L™ POURABLE *SHEARFLEX*® MORTAR (Floors Only)

ARDEX X 77™ *MICROTEC*• PREMIUM THIN SET MORTAR

ARDEX X 78™ *MICROTEC*• PREMIUM POURABLE THIN SET MORTAR

ARDEX S 48™ UNIVERSAL INTERIOR TILE ADHESIVE

Walls - Apply tile installation materials in accordance with the tile setting material recommendations. Approved products include the specified materials manufactured by ARDEX Engineered Cements with a recommended trowel notch size of 1/8" D X 1/8" W X 1/8" A square notch trowel. The recommended installation materials include:

ARDEX X 9™ PREMIUM *SHEARFLEX*• THIN SET MORTAR

ARDEX X 77™ *MICROTEC*• PREMIUM THIN SET MORTAR

ARDEX S 48™ UNIVERSAL INTERIOR TILE ADHESIVE

Grout: Grout joint widths are to be 1/8" W. The recommended grout material is ARDEX Flex Sanded™ Grout. The recommended caulk for soft joints is ARDEX Flex Caulk.

Warranty:

Polycem LLC warrants to the original purchaser only that it will supply replacement tile for any defective tile if the claim for warranty is presented to Polycem LLC on or before the five (5) year period following the date of purchase. Except as provided above, Polycem LLC makes no representation or warranty, expressed or implied, relating to the condition of Polycem's products including without limitation any implied or expressed warranty of merchantability, fitness for a particular purpose or conformity to models or samples of products, or any defect or errors in installation. Polycem LLC shall not be liable for incidental, consequential or indirect damages and Polycem's sole liability shall be to replace goods as set forth above