Thanks for purchasing ARTO concrete tiles and wall veneer, handmade in Southern California since 1966. ARTO concrete tiles are delivered unfinished and must be sealed to protect the finish and minimize staining.

PRODUCTS

- Artillo Tiles
- Roman Tiles
- Thin Brick Veneer
- 3D Impressions Wall Veneer

GENERAL TIPS

- Concrete tiles are porous and must be sealed for best performance.
- Cover pallets or store indoors to protect from the elements and other trades.
- Water intrusion can damage tiles and the installation. Waterproofing membranes are strongly recommended for exterior installations and mandatory for wet areas.
- Concrete tiles should never be used in waterline or submerged applications.
- Do not use acids, alkalis, or other harsh chemicals to clean tiles before, during, and after installation.

SUBSTRATE PREPARATION

- The substrate is the surface to which your ARTO tile will be stuck.
- Approved substrates include cementitious backer boards, concrete masonry units, concrete panels.
INSTALLATION – CONCRETE WALL TILES

• Bonding direct to drywall or wood substrates is not recommended.
• Gypsum backer boards should not be used for exterior applications, wet areas, or anywhere moisture is a concern.
• Concrete substrates must be clean, dry, and free of contaminants.
• Concrete substrates should have roughened surface for best bonding.
• All substrates must meet minimum deflection requirements L/360.

• **Movement joints**
  o Must be included per the TCNA Handbook\(^1\) and are mandatory for walls and floors.
    ▪ Interior: 20’ to 25’ in each direction
    ▪ Exterior: 8’ to 12’ in each direction
    ▪ Interior: 8’ to 12” in each direction (areas exposed to sun or moisture)
  o Do not tile over movement joints
  o Soft joints are required at perimeters and transitions to different materials.

MORTAR

• **Large format mortar is recommended for most concrete tiles**\(^2\). Thin set mortar may be used for thin brick veneer or smaller tiles.
• **Do not apply mortar thicker than recommended** in order to repair substrates, level tiles, create transitions, or for any other purpose.
• Mix mortar and clean cool water using a variable speed electric drill or mixer with a birdcage mixing attachment.
• Stir occasionally with trowel to keep fluffy. Do not retemper (add water) to already mixed mortar.

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\(^1\) Section EJ171 of the TCNA Handbook provides more details and extended discussion.
\(^2\) Large format mortar is recommended for tiles weighing more than 5 pounds per square foot or with any edge 15” or greater.
INSTALLATION – CONCRETE WALL TILES

• Use ½” square or ¾” rounded notched trowel to spread mortar on the substrate using the flat side of the trowel.
• Form grooves in one direction under each tile using the notched side of the trowel.
• Using the flat side of the trowel, spread mortar on the back of each tile to achieve 100% mortar coverage.
• Place tiles by moving them perpendicular to the mortar ridges so that the ridges collapse and all voids are filled.

GROUTING

• Make sure grout selected is appropriate for grout joint width.
• Unglazed tiles and textured glazes can be presealed to ease grout clean up.
• Clean grout promptly with wet sponge to avoid staining.
• Using a grout bag is recommended to fill the joints rather than floating or smearing grout.
• Fill grout bag and twist until slack is taken up. Roll the bag tighter to maintain constant pressure.
• Squeeze bag in order to completely fill each joint slightly higher than the tile surface.
• When grout begins to set up, tool the joint to compact the grout.
• Clean excess grout before it hardens on the tile surface.
• Do not use too much water when cleaning as it can weaken grout and cause cracking.
• Damp curing by misting the grout joints two or three times daily is strongly recommended. This will help minimize grout shrinkage and cracking.
• Allow grout to cure for 72 hours.

SEALING

• Seal tiles with penetrating or topical sealer depending on application and desired appearance.
  o Penetrating – matte, “invisible” finish that protects below surface
  o Topical – glossy or satin, coats surface to create barrier
INSTALLATION – CONCRETE WALL TILES

• Make sure sealer selected is appropriate for installation type and location.
• Apply sealer per the sealer manufacturer’s instructions.
• Two coats of sealer are typically needed.
• Make sure to allow sealer the recommended time to cure in between coats and before allowing traffic.
• Water should initially bead up on surface when tiles are sealed.
• Stains should be cleaned promptly, sealer does not waterproof tile and stains will eventually penetrate or etch sealer.
• Floor polish, wax, or other finishes can be used indoors to protect sealed tiles but will need to reapplied regularly.

CLEANING

• Clean regularly with warm water and pH-neutral cleanser.
• Do not use acids, alkalis, or other harsh chemicals for regular cleaning.
• A mild acid or alkali cleanser may be used for spot cleaning. Make sure to test first on a small, unobtrusive area to ensure desired results.
• Do not use chemical or mechanical abrasives including stiff bristle and wire brushes, sandpaper, or power washing.