



## **Installation Guide: Porcelain**

Elon® **ALWAYS** recommends that all installations be done in accordance with local building codes and adhere to Tile Council of North America specifications.

### **Preparation**

*Prior to installation of Porcelain:*

- All Porcelain should be blended from multiple cartons prior to installation.
  - On large jobs, always blend material from multiple pallets to confirm all material is from the same dye lot.
- Note that trim tiles may exhibit slight shade variations compared to field tiles due to different firing processes.
  - Consider trim tiles as complementary pieces rather than exact matches to the field tile.
  - Always conduct a thorough inspection of the material before proceeding with installation.

### **Installation**

*When installing Porcelain:*

- For large-format porcelains:
  - Use latex modified thinset, applying it to the substrate in a single direction to prevent air pockets.
    - Single direction troweling aids in air escape, minimizing lippage.
    - With larger tile sizes, substrate variation is less tolerated from the required plane.
- Porcelain rectangles with sides of 18" or larger to mitigate lippage due to warpage.
  - Follow TCNA recommendations for a staggered pattern joint with a 33% offset or a 1/3 - 2/3 pattern layout.
  - Adhere to an allowable tolerance of 1/32" lippage for joint sizes between 1/16" - 1/14".
- For Extruded Porcelain - Install with ribs or the grain of bisque going in the same direction, particularly crucial for square-shaped sizes like 12" x 12" and 14" x 14" (e.g., *Boston Brick 14" x 14"*).
- When used in showers or tubs, Porcelain should never be set with the bottom course extending into the shower base or tight to tub lip. Always leave a minimum gap of 1/4" above and perpendicular to the floor or lip of the tub or shower base and use a waterproof flexible sealant where they meet per TCNA specification B412-23.
- For pre-scored porcelain or ceramics like "Barcelona":
  - When determining grout joint width during installation, replicate the width of the scored groove in the tile for uniformity.
  - Grout the pre-scored groove with the same grout used between tiles.
- For porcelain field tile and mosaics with fiberglass mesh backs, always use Latex Modified Thinset to ensure proper adhesion to both the porcelain and mesh backing.

## Grouting

### *Grouting Porcelain:*

- When laying out the installation, adhere to Tile Council of North America's recommendation for a minimum 1/16" grout joint.
  - Use Unsanded Grout for joints 1/16" – 1/8" and Sanded Grout for joints 1/8" – 5/8".
- Prior to grouting, pre-seal polished porcelain to seal micro-pores in the polished finish, preventing grout staining.
- Pre-seal glazed porcelain when using contrasting grout colors during grouting.

## Sealing

### *Sealing Porcelain and Grout Joints after installation regardless of the finish:*

- Post-installation, always seal all grout joints to facilitate maintenance by using an item such as *Aqua Mix® Grout Sealer Spray*.

**Installation is Acceptance**

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