

# FAQ: EXTERIOR TILE VENEER INSTALLATION



**Question:** What is a veneer?

**Answer:** The International Building Code (IBC) defines thin veneer as “a facing attached to a wall for the purpose of providing ornamentation, protection or insulation, but not counted as adding strength to the wall.”

**Question:** How is a thin porcelain veneer attached to the building wall?

**Answer:** It can be either mechanically attached or it can be directly adhered to the building using an approved adhesive such as an appropriate bonding mortar on an approved backing.

**Question:** Are there any size restrictions for porcelain tile used as veneer?

**Answer:** Yes. The most recent version of the IBC has two codes. If the porcelain tile is between 0.125 inches and 0.250 inches thick, the maximum is 72 inches, with a total facial area of 17.5 sq. ft.

If the porcelain tile is between 0.125 inches and 0.625 inches thick, the maximum is 48 inches, with a total facial area of 9 sq. ft.

**Question:** Why are porcelain tile thin veneers gaining in popularity?

**Answer:** There are many reasons. First, as a design medium it has an almost unlimited palette. It can simulate the look of a natural stone or wood without the maintenance associated with those products. It is a very sustainable product, using less energy and raw materials than many other veneer products. Porcelain tile is unaffected by UV light and never fades, unlike other veneer surfaces.

**Question:** I have seen several failures of adhered veneers in the past. What caused these and can they be avoided?

**Answer:** Yes, failures can be avoided by using the proper materials and installation methods. Porcelain tile is typically installed using Portland cement-based mortar. These bonding mortars are designed for shear strength and have standards that dictate the strength required to ensure performance. By contrast, most mortars used in the masonry industry are designed for compressive strength and not bond strength. This is where we have seen many veneer failures that were due to the incorrect mortar being used to bond the tile to the approved backing.

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**Question:** What is an approved backing for porcelain tile?

**Answer:** Masonry, concrete and cementitious backer board meeting ANSI A118.9 or ASTM C1325 (Type A) are all approved backing for porcelain tile.

**Question:** Is all tile suitable for exterior installation?

**Answer:** The selection of the materials to be used on an exterior tile installation is an important step in ensuring a successful project. The tile should be recommended by the manufacturer for exterior use and specifically for exposure to thermal cycling and other conditions expected.

**Question:** Are there any special design considerations for exterior tile installations?

**Answer:** Yes, there are several. The use of the proper materials and installation methods are critical to the success of the project. In addition, elements like waterproofing, flashing and movement joints will all have an effect on the installation. Consult a structural engineer or a specification professional for advice on how to design this type of installation for maximum results.

**Question:** Which products meet industry requirements for installing veneer?

**Answer:** Custom® Building Products recommends the following products specifically for exterior tile installations.

- WonderBoard® Lite. This backer board meets all of the requirements for a cementitious board required by ANSI A118.9 and ASTM C 1325 (Type A).
- RedGard® Waterproofing and Crack Prevention Membrane. This liquid-applied waterproofing membrane meets and exceeds both ANSI A118.10 and A118.12 and is uniquely suited to exterior applications. It can be applied with a paint roller, or even an airless sprayer, making it ideal for large exterior areas.
- MegaLite® Ultimate Crack Prevention Large Format Tile Mortar. This bonding mortar is one of the strongest in the industry and exceeds ANSI A118.15HT. It has the ability to absorb some movement between the substrate and tile, which is critical for the thermal expansion and contraction expected with exterior installations.
- Prism® Ultimate Performance Cement Grout. Prism grout is a high performance grout meeting the more stringent ANSI A118.7 requirements. One of the characteristics of this type of grout is that it inhibits efflorescence, a common occurrence on exterior tile or stone installations.

**Question:** Does CUSTOM offer a warranty to cover these installations?

**Answer:** Projects using these products as a complete system are eligible for up to a Lifetime Warranty on the complete installation, including replacement of the tile.

For additional information, visit [CustomBuildingProducts.com](https://www.CustomBuildingProducts.com) or call  
CUSTOM Technical Services at 800.282.8786.

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