Glass Tile Premium Thin-Set Mortar Frequently Asked Questions



STANDARDS

Question: Is there a standard for installing glass tile?

Answer: Yes, because glass tiles have performance and aesthetic properties that differ from ceramic

and porcelain tiles, a new standard was adopted beginning in late 2011. ANSI A137.2 defines

glass tile types and establishes aesthetic and performance standards for each type.

Question: What are the primary types of glass tile?

Answer: There are three primary types of glass tiles; cast glass, fused glass and low-temperature-coated

glass. Each type is available as large format, mosaic, and miniature mosaic tiles.

Question: What size glass tile determines large format and mosaic?

Answer: Glass tiles with an overall area greater than 8.95 square inches and less than or equal to 576 square

inches (cast tiles must be less than or equal to 144 square inches). Mosaic glass tiles are greater than 0.68 and less than or equal to 8.95 square inches. Miniature mosaic glass tiles are less than or

equal to 0.68 square inches.

Question: Are there minimum bond strengths for glass tile installations?

Answers: Yes, since glass tiles are used in a variety of installation environments including walls, pools,

entryways and fountains, ANSI A137.2 sets minimum bond strength requirements, which are evaluated in dry and submerged testing. Mortars should be a high-performance mortar with

bond strength greater than 400 psi to porcelain and greater than 150 psi to glass tiles.

Question: Do glass tile installations require a special thin-set or adhesive?

Answer: Glass tiles require the use of a high performance (ANSI 118.4 or better) polymer modified

thin-set mortar. CUSTOM has a variety of mortars acceptable for installing glass tile. CUSTOM's new, Glass Tile Premium Thin-Set Mortar is a color-consistent, bright white, high-performance

mortar, specifically designed for glass tile installations.

Question: Why is color-consistency important?

Answer: Since glass tile are produced in a wide range of opacity, from completely opaque to trans

parent, it is more important for the setting materials to be consistent in color. Also, a bright white

color will enhance the brilliance of the glass.

APPLICATIONS

Question: Can I use CUSTOM Glass Tile Premium Thin-Set Mortar as a thin-set and as a grout?

Answer: No. Glass Tile Premium Thin-Set Mortar is a thin-set only and should not be used as a grout. Use

CUSTOM's FusionPro™ Single Component Grout™, CEG-Lite™ 100% Epoxy Grout or Prism® SureColor®

Grout to grout the installed glass tile.



Question:

What should be used when installing glass tile in a swimming pool or other water feature?

Answer:

Since pools and water features are required to hold water, it is always a good idea to first install a waterproofing membrane such as CUSTOM's RedGard® Waterproofing Membrane on the substrate to help prevent water loss and to maintain the integrity of the assembly. Use CUSTOM's Glass Tile Premium Thin-Set Mortar to install the glass tiles in the pool or water feature. Allow the installation system to sufficiently cure prior to filling pool, fountain, spa, or water feature with water, typically 21 days.

Question:

Which products should I use to install paper-face mounted glass mosaics?

Answer:

With so many glass tiles being sold as mounted assemblies, it is important to check with the mosaic glass tile manufacturer for specific installation material requirements for their glass products. It is common to install paper faced mounted glass mosaics with colored grout; contact Custom's Technical Service Department for details on this type of installation.

Question:

Which products can I use to install rear-mesh mounted glass mosaic tile?

Answer:

Currently, there is no industry standard for the adhesives and meshes used on the back of mosaic tile. In most cases, the adhesives and/or mesh mountings are sensitive to moisture and alkalinity exposure therefore unless the glass manufacturer states, in writing, that the adhesive and mesh are suitable for installation with a polymer-modified thin-set, CUSTOM would only recommend the use of a 100% solids epoxy mortar, specifically CUSTOM's EBM-Lite® Epoxy Mortar.

Question:

Can glass tile be installed in hot weather conditions?

Answer:

Glass tile should not be installed on substrates or when the weather exceeds 90 degrees Fahrenheit. Appropriate steps should be taken to lower the temperature or schedule the installation when temperatures are cooler. Additional options that are commonly used on commercial projects are to provide shade by tenting the installation area and to dampen the substrate about an hour before tile setting.

INSTALLATION

Question: What size trowel should I use to set glass tile?

Answer:

No matter which trowel you select, keep in mind that bonding mortar coverage is the key. For glass tile, specifically large format, 100% coverage is required for all interior and exterior installations. Occasionally pull a tile and check it during the installation to verify coverage. Typically, for tiles up to and including $6" \times 6"$ tile, use a $1/4" \times 1/4" \times 1/4"$ square notch trowel. For tile larger than $6" \times 6"$ up to and including $12" \times 12"$ tiles, a $1/4" \times 3/8" \times 1/4"$ square notch trowel should be used. For tiles larger than $12" \times 12"$ and for substrate variations up to 1/4" in 10" will require a bigger notch such as a $1/2" \times 1/2" \times 1/2"$ square notch trowel.

Question:

How is Glass Tile Mortar spread to achieve 100% coverage and avoid air pockets between the glass and substrate?

Answer:

To avoid air spaces behind the tile, the proper installation method is to trowel the specially formulated glass tile thin-set mortar on the substrate with a notched trowel and knock down the ridges. Then spread or back-butter, an even, thin film approximate 1/16" thick onto the back of the clear glass tile. The two mortared surfaces are pressed together with a back and forth motion to eliminate any voids.

