

# ASTORIA

## APPLICATIONS

- Interior walls
- Fireplace surrounds and cooktop areas (temperature must not exceed 338° F)
- Shower walls and tub surrounds are acceptable **except in any submerged water area (or anywhere water can accumulate)**
- Not suitable for steam showers, pools or fountains.

## HANDCRAFTED CHARACTERISTICS

Variation in metallic texture and color are natural characteristics of this product. **Small imperfections (lines, dots, wrinkles) in the backing may be present and can be visible once installed.** It may also be possible to “see through” the clear glass on certain angles which can appear as a line along the edges of the glass. These are all natural characteristics of Astoria and do not affect the integrity of the tile.

## MATERIAL INSTALLERS & INSPECTION

**Select installers for Astoria with great consideration and care as proper installation is critical. Make sure the installer understands the variation noted above as well as the specific guidelines for cutting Astoria glass.**

All glass should be unpacked, inspected and reviewed prior to installation. Any questions as to acceptability must be resolved before installation. Sonoma Tilemakers is in no way responsible for the installation of our tiles or thereafter. The responsibility for correct installation rests with the end user.

## BEFORE INSTALLATION

### SUBSTRATES - GENERAL

Substrates must be sufficiently flat to allow uniform adhesive application and avoid excess adhesive thickness. Glass tile should not be installed over single float (no scratch coat) mortar beds over structural framing.

The following recommendations refer to Tile Council of North America’s (TCNA) “2018 Handbook for Ceramic Tile Installation”. When selecting TCNA handbook substrate preparation recommendations, factors, such as, sub-structure, locations, setting materials and intended uses may determine the appropriate methods.

**NOTE:** All cement mortar beds must be cured 7 days minimum. Concrete substrates must be cured a minimum of 28 days.

## ACCEPTABLE SUBSTRATES

### Walls – Acceptable Substrates

- Cement Mortar Bed (cured 7 days) W211-18, W221-18 or W231/241-18
- Cementitious Backer Units (CBU) W244C-17, W244F-17
- Fiber & Glass Mat Water Resist Backer Boards 245-17, W247-17, W248-17
- Gypsum Board (Dry areas only) W243-18

### Walls - Wet Areas – Acceptable Substrates

- Cement mortar beds (cured 7 days) B411-18 (tub enclosures) B414-18 (shower walls)
- Cementitious Backer Units (CBU) – B412-18 (tub enclosures), B415-18 (shower walls)

**Caution:** Membrane meeting ANSI A108.2-3.8 must be installed BEHIND mortar beds or CBUs in wet areas. CBU joints must be spaced no less than 1/8” no more than 1/4”; filled with acceptable adhesive and taped with the manufacturer recommended 2” alkali resistant mesh tape. Cure taped CBU joints 24 hours prior to glass tile installation. Mortar beds must be cured 7 days or longer prior to glass tile installation.

## UNACCEPTABLE SUBSTRATES

- Single-Float mortar walls over wood or metal framing not having a cured scratch coat.
- Cement mortar beds lacking appropriate reinforcing per ANSI A108.1 (B) 2012.
- All wood products, including Luan, plywood, MDF, MDX press boards and composites.

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## THIN-SET

### ANSI A-108.15 Adhesives

#### Custom Building Products:

- Glass Tile Premium Thin-Set Mortar
- MegaLite Crack Prevention Thin-Set
- MegaLite Rapid Set Crack Prevention Thin-Set

#### Laticrete:

- Glass Tile Adhesive Lite Mortar
- 254 Platinum Multipurpose Thin-Set Mortar

#### Mapei:

- Adesilex P10 mixed with Keraply liquid admixture.
- GraniRapid Thin-Set Mortar mixed with GraniRapid admixture

#### TEC(H.B. Fuller):

- SuperFlex Premium Universal Latex Modified Thin-Set

**NOTE: Site and climactic conditions can affect the performance of all setting systems. Special consideration shall be given when using rapid setting materials particularly in hot climates.**

### Unacceptable Adhesives

- Organic adhesives (mastic)---due to low bond strengths and discoloration.
- Epoxy adhesives---due to lack of flexibility and high compression strength.

## INSTALLATION

1. To ensure order acceptability of the glass tile, open all boxes and inspect the material.
  2. Initiate the adhesive coat by firmly applying the setting material onto the substrate with the flat side of a trowel.
  3. With additional setting material, use a 1/4"x1/4"x1/4" square notch trowel to comb full notches in a horizontal pattern onto the substrate establishing the proper depth of the adhesive. Smooth notches to achieve a flat, consistent setting bed approximately 3/16" thick.
  4. Clean the back of unmounted glass tile with a dry, clean cloth. For mesh mounted products, make sure packing paper is removed from mounted glass tiles leaving the mesh backing intact. Follow by applying a thin, even coat of adhesive to the back of glass using a rubber grout float to avoid damaging the finish.
  5. Check to assure adhesive is fresh (not skinned over, dull or not wet to the touch) prior to setting glass tile onto the setting bed, push in using firm, even pressure to a maximum depth of 1/8". Remove excess adhesive from the grout joints and surrounding edges, spacing glass tile a minimum of 1/8" from other tiles or surrounding materials.
  6. Cure installation a minimum of 48 hours prior to cleaning and grouting.
- \* Grouting: Do not use epoxy grouts. Additionally, due to the numerous grouts available, and ways to apply it, no adjustments will be made for glass damaged by grout.\* Grouts tested include Custom Building Products Polyblend Sanded Grout • Laticrete PERMACOLOR SANDED GROUT • MAPEI Keracolor S Sanded Grout • TEC Accucolor Sanded Grout**
7. Test selected grout and grouting process prior to grouting to confirm selected grout does not adversely affect glass. Use only soft rubber, wall, grout floats to apply grouts. Metal, plastic and hard rubber epoxy grout floats increase the chances of some grouts damaging the glass tile face during grouting and cleaning.

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8. Mix grout according to grout manufacturer's instructions. Apply grout with a rubber wall grout float, forcing grout into the grout joints until full. Due to the impervious nature of glass, the grout may take longer to set than with more porous materials. When the grout has set (turned dull), clean with a lightly damp sponge.

**NOTE:** During initial grout cleaning, the sponge should be rinsed often and wrung out well as excess hydration may result in "washed out" or low grout joints. In very damp and cold climates cheese cloth or a micro fiber towel may be a better option for the initial cleaning.

9. Grout joints shall be full and uniformly finished. For final polishing of excess grout haze use clean, dry cheesecloth or micro-fiber.

10. Consult grout manufacturer for grout sealing recommendations.

### MOVEMENT JOINTS

Movement joints are essential for the success of tile installations. Follow recommendations on movement joints EJ 171-17 in the "2017 TCNA Handbook for Ceramic Tile Installation". Movement joint requirements will vary depending on substrata, climate and size of installation. An architect or design professional should be consulted when specifying the exact number, location and size of each movement joint.

#### How to Cut Astoria Video:

Visit [sonomatilemakers.com/astoria/#downloads](https://sonomatilemakers.com/astoria/#downloads) for a video demonstrating how to cut Astoria.

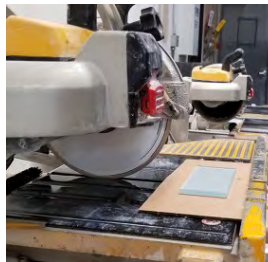
### IMPORTANT!

We recommend wet cutting or the "score and snap" method during the installation process. Do not dry cut using power tools during the installation process. Improper installation techniques could expose installer to harmful dust.

### CUTTING

**IMPORTANT:** Astoria glass tile needs particular tools and methods to cut successfully. Cut very slowly and use a high quality, wet tile saw equipped with 10", continuous, smooth-rim, wet, diamond blade made specifically for cutting glass tile, such as: 10" Alpha Vetro and 10" MK 215 GL.

Mark the top of the glass to the dimensions desired (remove mounted tile from netting prior to cutting).



With tile face up, place a piece of cardboard between the glass tile backing and the wet-saw table. The cardboard keeps the glass from getting scratched.



Make sure the wet saw has abundant water flow and cut slowly at 30 seconds or more per inch. Use a new piece of cardboard for cutting each tile. Keep saw table clean.

**NOTE:** The use of a poorly maintained tile saw, or a blade not intended for cutting glass, is unsafe and may cause the tile's backing to chip excessively. Always cut slowly. Make sure water flow is abundant and balanced, saw table slot centered and squared to the blade and blade depth is correct, prior to cutting glass tile. Wet tile cutting blades need to be dressed often.



Use a wet tile blade dressing stone for this purpose.



This will remove sediment from the blade without knocking the diamonds off. Cutting a small piece of the stone is all that's needed.

**NOTE:** Due to the residual tension of large format glass (6x12), cracking may occur when cutting tile in more than one direction (such as cutting around electrical boxes). Cuts must be tested in advance.

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## Glass Edges

To slightly soften the glass tile's cut edges, for a more refined look and feel, use wet granite polishing devices. Always apply polishing device to the cut edges carefully with rotation starting from the finish side out at a slight angle. Completely clean and dry all tile prior to applying back butter during the installation process.

## DRILLING

Drilling shall be done with a high quality smooth rim, diamond matrix, water fed, fractional core bit, made for drilling glass in conjunction with a water swivel. This set up provides a continuous flow of water to lubricate and cool the smooth diamond core bit to reduce over-heating and chipping. Using a drill guide will help keep the drill centered. A minimum margin of 1" must be maintained to avoid cracking large format glass (6x12) during drilling.

**Note:** All hardware, such as towel racks, plumbing fixtures etc. must have structural support in the framing and a rubber gasket between the fixture and the glass tile. All anchors, screws and similar materials must have a minimum 1/8" clearance to the glass tile. Do not over tighten screws or other securing hardware otherwise you may crack the glass tile.

## MAINTENANCE

When using cleaning products always follow manufacturer's directions and use personal protection equipment.

## New Installations

Wait to clean new installations for a minimum of 24 hours after completing the grouting process.

- After 24 hours remove loose dirt by vacuuming or sweeping.
- Prepare a cleaning solution using warm water and a liquid dish soap or a neutral pH cleaner. Thoroughly clean the glass tile, including the grout joints, using a nylon scrub brush or white nylon scrub pad. Rinse with clean water and towel dry.
- A second rinsing may be needed.

## Cleaning Cement Based Grout or Thin-Set Haze

- Wait 10 days after the grout has been installed then use a Sulfamic Acid cleaner such as C-Clean or Custom Clean. Follow the manufacturer's directions using a nylon scrub brush or white nylon scrub pad. Rinse thoroughly with clean water and towel dry.
- A second rinsing may be needed.

## Latex Based Smears

1. Stone and tile strippers will work to clean latex smears not removed by acid-based cleaners. Follow grout manufacturer's cure times and directions prior to use.
2. Rinse thoroughly with clean water and towel dry. A second rinsing may be needed.

## Sealing Recommendations

- Sealers are beneficial for cementitious grout and natural stone; however, they will not penetrate the glass tile due to the impervious nature of glass. Consult grout manufacturers for their sealing recommendations.
- To reduce the possibility of grout sealer smears, buff sealer off glass tile with dry, clean towels before it dries.
- Always test a product on your tile/grout installation in an inconspicuous area before treating the entire tile installation.
- Protect surrounding non-tiled surfaces when using products recommended for tiled areas. When using cleaning products always follow manufacturer's directions and use personal protection equipment.

## CLEANING & MAINTENANCE

- For everyday cleaning use warm water and neutral pH liquid dish soap or a neutral pH cleaner
- For hard to clean tubs and showers use DESCUM Soap Scum Remover & Renovator
- Use a non-abrasive cloth/sponge for cleaning
- For any cleaning products, always test a small inconspicuous area first to make sure it doesn't affect the tile's surface
- Clean up any spills or stains immediately not allowing them to dry
- Grout lines can be cleaned with warm water and soft bristle cleaning brush