INSTALLATION INSTRUCTIONS

These instructions are provided as a general guideline for the installation of Oceanside Glass & Tile tape-faced mosaic, paper-faced mosaic and unmounted cast glass tile. An experienced, professional tile installer, who has read and understands these instructions, should perform the work. Some installations require a more detailed specification.

For product installation videos, recommended applications and test results, please visit www.installogt.com. For additional information, contact Oceanside Glass & Tile Installation Support at 877-648-8222 or techsupport@glasstile.com.

MATERIAL INSPECTION

Oceanside Glass & Tile products are handmade. Variation in color, shade, tone and size is normal. In many cases, there will be folds, wrinkles and bubbles in the glass. These surface characteristics are inherent to the cast glass manufacturing process and should be expected. Upon delivery open and inspect each box of tile. The owner or owner's representative is responsible for determining the acceptability of the product prior to installation as well as approve the first five square feet of installed tile prior to the tile installer proceeding with the installation.

- **Mosaic tile** - verify sheet-to-sheet color consistency by first comparing each sheet, from the backside, to one another. Next, compare the face of the sheets by laying them adjacent to one another and comparing the visible portion (edge) of the mosaic tiles.
- **Unmounted & Mesh-Mounted Tile** - verify color acceptability prior to installation. Translucent tile should be inspected and compared to one another on a white background. Prior to or during installation, blend the entire order to promote a visually consistent installation.

No adjustments will be made after installation.

In general, there are four types of acceptable substrates for Oceanside Glass & Tile products:

- Concrete - Cured a minimum of 28 days, may require additional surface preparation
- Cement Mortar - Cured a minimum of 7 days
    - Walls: Two-coat cement mortar bed reinforced with 2.5lb galvanized metal lath
    - Floors: Wire reinforced cement mortar bed over membrane or bonded cement mortar bed
- Cement Backer Board (CBU) - Durrock, Fiberock, Hardibacker, PermaBase, Wonderboard
- Drywall - Dry locations only

The tile installation's substructure, location and substrate type (i.e. CBU or concrete) will influence the details of how the substrate should be prepared. The following substrate preparation methods are detailed in the Tile Council of North America's "TCNA Handbook for Ceramic, Glass, and Stone Tile Installation" and are organized by alphanumeric designation (i.e. W244C). Use the following chart to identify which TCNA method is appropriate for your installation and refer to the current edition of the TCNA Handbook for details. *The TCNA handbook is available for purchase at www.tcnatile.com.*

FLOORS	INTERIOR			EXTERIOR		
	Backer Board	Mortar	Concrete	Backer Board	Mortar	Concrete
Wood Sub-Floor	F144	F145 F141	N/A	N/A	N/A	N/A
Concrete (Slab on Grade)	N/A	F111 F112	F113	N/A	F121 [1]	F102
Concrete (Elevated or Post-Tensioned)	N/A	F111	N/A	N/A	F121 [1]	N/A

WALLS	INTERIOR			EXTERIOR		
	Backer Board	Mortar	Drywall	Backer Board	Mortar	Drywall
Wood Studs	W244C W244F	W231	W243	W244E	W231	N/A
Metal Studs	W244C W244F	W241	W243	W244E	W241	N/A
Solid Backing (Masonry)	N/A	W221	N/A	N/A	W201	N/A

SPECIALTY	Backer Board	Mortar
Bathtub Walls [2]	B412	B411
Shower Receptor [2] Floors/Walls	B415	B414
Steam Shower Receptor Floors/Walls (opaque tile only)	SR614	SR613
Swimming Pools [4]	N/A	N/A
Countertops	C513 [3]	C511

[1] This method is not recommended for freeze-thaw applications. Proper drainage and a pre-sloped waterproof membrane (ANSI A1118.10) are required BELOW the mortar bed
[2] Wood or Metal
[3] Use only Cementitious Backer Unit (CBU) or Fiber Cement Board
[4] Refer to the "Pool & Water Feature Installation" document at www.installgt.com

UNACCEPTABLE SUBSTRATES
- Single-float mortar bed walls (cement mortar beds, which do not employ cured scratch coats)
- Cement mortar beds reinforced with metal lath less than 2.5 lb per square yard (i.e. chicken wire)
- Wood Products such as plywood, luan, MDF, pressboard and composites

SUBSTRATE REQUIREMENTS
- Shower receptor floors require the waterproofing below the mortar bed be sloped 1/4" per foot toward the drain and the weep holes be unobstructed per TCNA B414 and B415.
- For unmounted glass tile, install horizontal, solid blocking in the framing at a maximum spacing of 36" on center and such that all edges of the CBU are continuously supported.
- Solid blocking for the anchoring of fixtures, such as shower doors and towel bars, must be installed prior to installing the tile substrate.
- A vapor barrier membrane (asphalt laminated paper, 4 mil polyethylene, etc.) is required behind CBU and mortar beds in wet or exterior applications.
- Installing translucent glass tile over crack isolation/waterproof membranes or non-absorptive substrates (e.g. steam showers, coated glass mat gypsum, coated foam backerboards, etc.) is generally not recommended. Contact Installation Support for recommendations at 877-648-8222.
- Cement mortar beds must be cured a minimum of 7 days prior to tile installation.
- Treat CBU joints with mesh-tape and thin-set per the CBU manufacturer's instructions and allow to cure 48 hours prior to tile installation.

SUBSTRATE BUILD-UP *(installing glass tile next to thicker tile materials)*
When installing Oceanside Glass & Tile products adjacent to thicker materials, with the intention of the two tiles finishing in the same plane (flush), the substrate must first be brought up to a level such that the glass tile can be installed with the appropriate amount of thin-set. Refer to the "Substrate Build Up" document at www.installgt.com for multiple substrate build-up methods.
Caution: Installing glass tile over fresh excessively built-up thin-set mortars may result in tile cracking due to mortar shrinkage.

THIN-SET

The use of specific white thin-sets are recommended for the installation of Oceanside Glass & Tile products (see list below), however, these products will vary in their degree of whiteness and color consistency. Due to the translucent nature of glass tiles, the color of the thin-set will affect the installed tile's appearance. Some of the thin-sets listed below are specifically manufactured for use with translucent glass tile and are marketed as "bright-white" and controlled for bag-to-bag color consistency. Confirm the thin-set color is acceptable prior to installation. For projects that require multiple bags of thin-set, select a color controlled product or confirm bag-to-bag color consistency. Carefully follow manufacturer's mixing instructions and measure liquid/powder to achieve maximum performance.

ACCEPTABLE THIN-SETS

The thin-set mortars listed below are recommended for use in interior, exterior, dry and/or intermittent wet installations. Refer to the "Pool & Water Feature Installation" document at www.installogt.com for the list of products recommended for use in submerged applications.

- ARDEX: X77 Tile & Stone Mortar
- BOSTIK: Glass-Mate mixed with 425 Admixture*
- CUSTOM BUILDING PRODUCTS: Glass Tile Premium Thin-Set* †
- LATICRETE: Glass Tile Adhesive *
- MAPEI: Adesilex P10 Bright White Thin-Set Mortar mixed with Keraply Mortar Additive * †
- TEC SPECIALTY PRODUCTS: Super Flex Thin-Set Mortar

*Bright White
† Color controlled bag-to-bag consistency.

NOTES:
- Organic adhesives (mastic) are not recommended due to low bond strength and yellowing.
- Epoxy adhesives are generally not recommended, however, in certain applications they may be acceptable. Contact Installation Support for recommendations at 877-648-8222.

GROUT SELECTION

The type of grout recommended for an Oceanside Glass & Tile installation will vary by tile product line, opacity and the installation's exposure to water. In all applications, cement-based, sanded grouts are compatible with our products (will not scratch the tile). However, in some specific instances, unsanded grout or urethane-based grout may be an option. Refer to the "Grout Selection" document at www.installogt.com for a complete list of recommended grouts.

CEMENT-BASED SANDED GROUT

- ARDEX: FL Sanded Grout
- BOSTIK: Ceramic Tile Grout
- BOSTIK: Hydroment Vivid
- CUSTOM BUILDING PRODUCTS: Polyblend Sanded Grout
- CUSTOM BUILDING PRODUCTS: Prism SureColor Grout
- LATICRETE: 1500 Sanded Grout
- LATICRETE: PermaColor or PermaColor Select Grout
- MAPEI: Keracolor S
- MAPEI: Ultracolor Plus FA
- TEC: AccuColor Premium Sanded Grout
- TEC: Power Grout

CRACK ISOLATION/WATERPROOFING MEMBRANES

There are a wide variety of crack isolation and waterproofing membranes available for use in tile installations. Each membrane product will vary in type, application and performance; consult the membrane manufacturer for specific recommendations and limitations.
Some common membrane materials are:

- ARDEX: 8+9
- BOSTIK: GoldPlus
- CUSTOM BUILDING PRODUCTS: RedGard
- LATICRETE: Hydro Ban
- MAPEI: Mapelastic AquaDefense
- TEC SPECIALTY PRODUCTS: HydraFlex

Caution: The use of topical crack isolation/waterproof membranes directly behind the tile bond coat (thin-set) is not recommended when installing translucent glass tile.

MOVEMENT JOINTS

Movement joints are essential for the success of most tile installations. Follow recommendations on Movement Joints EJ171 in the current edition of the "TCNA Handbook for Ceramic, Glass and Stone Tile Installation".

Movement joint requirements will vary based on substrata, climate and size of installation. An architect or design professional should be consulted when specifying the exact number and location of each movement joint. Not all sealants are recommended for submerged or heavy water use; consult sealant manufacturer for use recommendations.

Photo Credit:
Greg Andrews Tile Inc. Agoura Hills, CA

FILM-FACED MOSAIC INSTALLATION (Mosaics equal to or greater than 1/4" nominal thickness)

For mosaics with a side longer than 2", use a 1/4" x 1/4" square-notch trowel. For all other mosaic products, use a 3/16" x 1/4" v-notch trowel. When installing film-faced mosaics less than 1/4" nominal thickness, refer to the "Devotion Mosaic Installation Instructions" at www.installogt.com.

STEP 1
To initiate the bond coat, use the flat side of a trowel and firmly apply thin-set to the substrate.

STEP 2
To establish the proper depth of the setting bed, use a notch trowel to apply additional thin-set and comb full notches in one direction.

STEP 3
Use the flat side of the trowel to flatten the notches and achieve a smooth, consistent thin-set setting bed.

STEP 4
Apply mosaic sheets to the thin-set setting bed, plastic film side out, with light, even pressure. Periodically, check thin-set for skinning (slight drying). If skinning occurs, remove thin-set and reapply.

STEP 5
To achieve the flattest possible surface, lightly tap the sheets with a wooden beating block and a finish hammer. To unify sheet transitions, tap from one sheet to the next.

STEP 6
After a full 24 hours (some installations may require extended cure times) starting at the corner; peel the plastic from the tile.

STEP 7
If necessary, remove excess thin-set from the grout joints with a razor knife prior to grouting.

STEP 8
Grout application and cleaning process will vary based on the type and brand of grout. Refer to grout manufacturer's instructions for details.

STEP 9
Allow grout to set-up (firm) and smooth finish with a damp sponge. After approximately 2 hours remove grout haze with a lightly damp sponge.

STEP 10
For final removal of grout haze, polish with a clean, soft cloth.

STEP 11
Seal cement-based grout and natural stone with Oceancare High Performance Penetrating Sealer.

STEP 12
Apply sealer with spray bottle, paint brush or sponge applicator.

STEP 13
Allow sealer to penetrate for 1-3 minutes. Buff unabsorbed sealer from the surface with a clean cloth.

UNMOUNTED TILE INSTALLATION

STEP 1

To initiate the bond coat, use the flat side of a trowel and firmly apply thin-set to the substrate.

STEP 2

To establish the proper depth of the setting bed, use a 1/4"x 1/4" square-notch trowel to apply additional thin-set and comb full notches in one direction.

STEP 3

Use the flat side of the trowel to flatten the notches and achieve a smooth, consistent thin-set setting bed.

STEP 4

Thoroughly clean the back of each tile using a clean, dry cloth. Never wet the tile prior to setting.

STEP 5

Back-butter each tile using additional thin-set. Prior to setting translucent tile, check the face to verify 100% coverage has been achieved.

STEP 6

Press the tile into the fresh setting bed using firm, even pressure. Remove excess setting material from the edges and space a minimum of 1/8" between tiles and all abutting surfaces.

STEP 7

After a full 24 hours (some installations may require extended cure times) remove spacers and apply grout. Grout application and cleaning process will vary based on the type and brand of grout. Refer to grout manufacturer's instructions for details.

STEP 8

Allow grout to set-up (firm) and smooth finish with a damp sponge. After approximately 2 hours remove grout haze with a lightly damp sponge.

STEP 9

For final removal of grout haze, polish with a clean, soft cloth.

STEP 10

Seal cement-based grout and natural stone with Oceancare High Performance Penetrating Sealer.

STEP 11

Apply sealer with spray bottle, paint brush or sponge applicator.

STEP 12

Allow sealer to penetrate for 1-3 minutes. Buff unabsorbed sealer from the surface with a clean cloth.

For Geologie mosaics (mix of glass and slate) or any mosaics with a side longer than 2", use a 1/4" x 1/4" square-notch trowel. For all other mosaic products, use a 3/16" x 1/4" v-notch trowel.

STEP 1
To initiate the bond coat, use the flat side of a trowel and firmly apply thin-set to the substrate.

STEP 2
To establish the proper depth of the setting bed, use a notch trowel to apply additional thin-set and comb full notches in one direction.

STEP 3
Use the flat side of the trowel to flatten the notches and achieve a smooth, consistent thin-set setting bed.

STEP 4
Apply mosaic sheets to the thin-set setting bed, paper side out, with light, even pressure. Periodically, check thin-set for skinning (slight drying). If skinning occurs, remove thin-set and reapply.

STEP 5
To achieve the flattest possible surface, lightly tap the sheets with a wooden beating block and a finish hammer. To unify sheet transitions, tap from one sheet to the next.

STEP 6
After 15-30 minutes, (floors can be removed sooner) lightly wet the paper. Keep the paper wet by wiping with a damp sponge several times over a 5-10 minute period. After the paper has absorbed the water, the glue will release.

STEP 7
Peel the paper from the tile starting at the corner. Removing the paper while the setting material is still fresh allows for individual tile adjustment and re-inspection of color consistency.

STEP 8
Straighten individual tiles and press-in any pieces that have not achieved 100% contact. To eliminate the sheet pattern pay particular attention to sheet transitions.

STEP 9
After a full 24 hours (some installations may require extended cure times) use water and a nylon scrub-brush to remove residual glue from the tile. Clean rinse and towel dry.

STEP 10
Grout application and cleaning process will vary based on the type and brand of grout. Refer to grout manufacturer's instructions for details.

STEP 11
Allow grout to set-up (firm) and smooth finish with a damp sponge. After approximately 2 hours remove grout haze with a lightly damp sponge.

STEP 12
For final removal of grout haze, polish with a clean, soft cloth.

STEP 13

Seal cement-based grout and natural stone with Oceancare High Performance Penetrating Sealer.

STEP 14

Apply sealer with spray bottle, paint brush or sponge applicator.

STEP 15

Allow sealer to penetrate for 1-3 minutes. Buff unabsorbed sealer from the surface with a clean cloth.

Note - A video demonstration of "How to Install Paper Face Mounted Glass Tile Mosaic" is available at www.installogt.com.

MESH-MOUNTED MOSAICS

Oceanside Glass & Tile mesh-mounted products should be installed using a 1/4" x 1/4" square-notch trowel and standard thin-bed tile installation practices (ANSI A108.5) in conjunction with the Material Inspection, Substrate Preparation, Installation Materials and Sealing & Maintenance specifications found within this document.

SEALING & MAINTENANCE

Oceanside Glass & Tile installations should be sealed, protected and maintained with Oceancare Products. For detailed maintenance recommendations, refer to the Oceanside Glass & Tile Maintenance document, which is included with each order and is available for download at www.installogt.com. For product pricing and availability, contact an Oceancare Products dealer or visit oceancareproducts.com.

WARNING: Certain acids will damage glass tile and natural stone. DO NOT allow products that contain hydrofluoric, hydrochloric, muriatic or phosphoric acid to come in direct contact with the tile.

SEALING

Glass tile is impervious and does not need to be sealed. However, cement-based grout and natural stone should be sealed to protect against staining. Seal all installations that include cement-based grout or natural stone with either **Oceancare High Performance Penetrating Sealer** (natural look) or **Oceancare High Performance Enhancing Sealer** (color enriching).

RESEALING

To maintain optimal performance, sealers should be periodically reapplied. The recommended period for reapplication will vary by installation location, environmental exposure and maintenance. As a general guideline, tile and/or grout installed in any exterior, wet or high traffic installations should be resealed every 12-24 months. All other installations should be resealed every 36-48 months.

WET CUTTING MOUNTED MOSAIC TILE

Oceanside Glass & Tile products can be cut to meet jobsite dimensions with the use of a high-quality wet tile saw equipped with a continuous, smooth-rim, diamond glass tile blade. The cutting process detailed below can be used with face-mounted mosaics to fully support the tile, reduce chipping and protect the mounting system from saw overspray. Additional information and a video demonstration of wet cutting face mounted mosaics is available at www.installogt.com.

STEP 1

Cover the saw tray with a piece of cement board. This provides continuous support for the sheet and prevents pieces from falling into the tray's cutting channel.

STEP 2

Adjust the blade height so the blade cuts through half of the cement board thickness.

STEP 3

Cut another piece of cement board that is larger than a sheet of mosaics. Apply a strip of self-adhesive foam weather-strip to one edge of the cement board.

STEP 4

With the saw turned off, place the mosaic sheet, paper side up, on the cement board covered saw tray and align the cut.

STEP 5

Place the second piece of cement board on top of the mosaic sheet. Cover the portion of the sheet that is to be installed (keeper) with the weather-strip side down and against the blade. The board will protect the sheet from saw overspray.

STEP 6

Place downward pressure on the top layer of cement board, turn the saw on and cut slowly. The pressure shoud be sufficient enough to compress the weather-strip and prevent water from flowing under the board.

STEP 7

Once cutting is complete, turn the saw off, carefully remove the top layer of cement board and quickly towel dry the mounting paper.

STEP 8

Towel dry the back of the sheet and install as normal.

RECOMMENDED GLASS TILE BLADES

• Alpha Professional Tools - Vetro
• Husqvarna - Superlok Glass+
• Lackmond - Pro Series Glass Tile Blade
• MK Diamond - MK 215GL or MK 215GL-XL
• Montolit - CPV
• Rockstar Diamond - G Series Blade
• Rodia - Glass Tile Blade
• Saw Master – Cheetah Series Glass Blade (Fine)
• World Diamond Source – Pro Series Glass Tile Blade

Note - To maintain cut quality, periodically dress the diamond blade with a dressing stone.

WARNING: DO NOT DRY CUT TILE. Dry cutting causes excessive chipping/cracking and can produce harmful dust.

DRILLING

Oceanside Glass & Tile products can be drilled using a diamond core bit designed for drilling dense materials (e.g. glass or granite). Use sufficient water to keep the bit cool and lubricated during drilling. The diameter of all drilled holes must be large enough to allow a fastener to pass through the tile and substrate without making contact. Detailed information regarding drilling is available at www.installogt.com.