



POOL AND WATER FEATURE INSTALLATION

These instructions are provided as a general guideline for the installation of Pool by Jeffrey Court glass, paper-faced mosaics over concrete tanks. Some installations require a more detailed specification. An experienced, professional tile installer, who is familiar with the following procedures, should perform the work. Please read and understand these instructions before beginning any work.

For detailed product use information, including ASTM test results and recommended applications, please refer to www.jeffreycourt.com. Tiles with any edge longer than 5" or trim tile with any edge longer than 2.5" are not recommended for use in pools and water features. For additional information, contact Jeffrey Court Customer Service at (951)340-3383 or info@jeffreycourt.com

MATERIAL INSPECTION

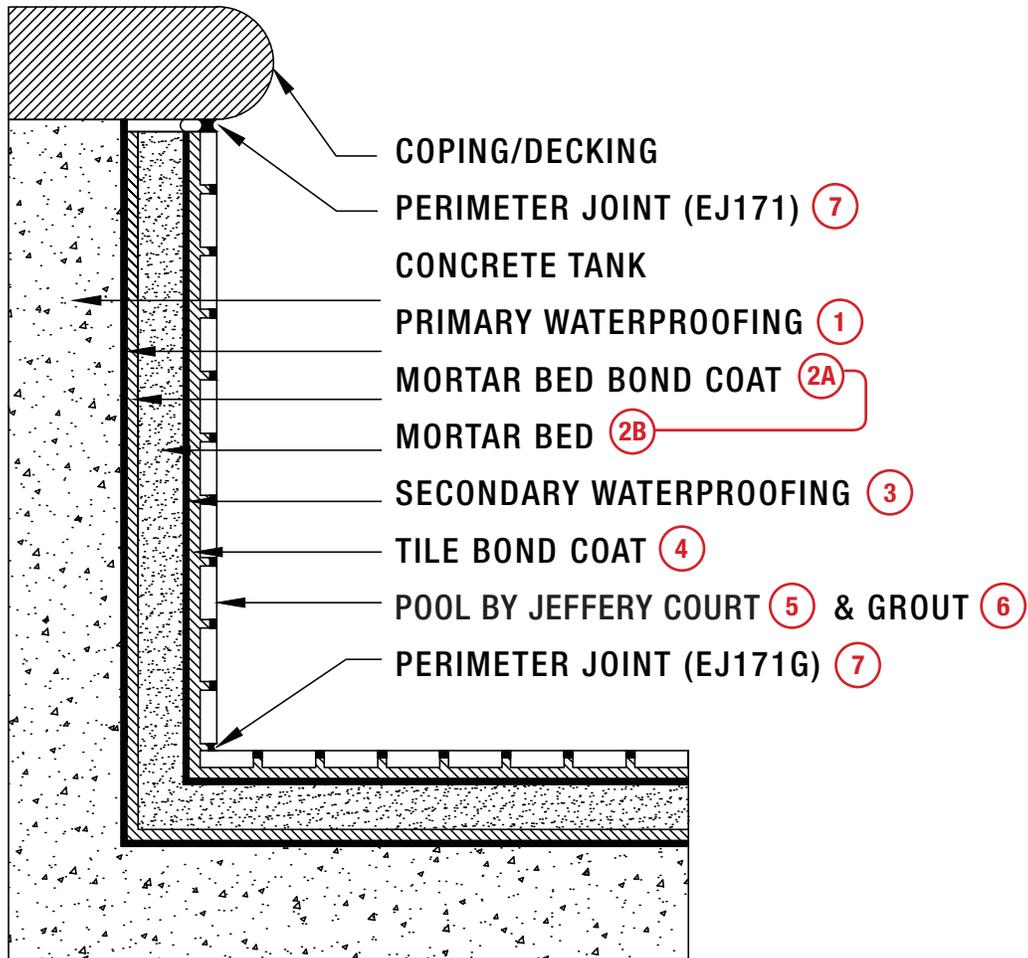
Pool by Jeffrey Court glass tile products are handmade. Variation in color, shade, tone and size is normal. In many cases, these will be folds, wrinkles and bubbles in the glass. These surface characteristics are inherent to the cast glass manufacturing process and should be expected. Upon Delivery open 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 approving the first five square feet of installed tile prior to the tile installer proceeding with installation.

- **Mosaic Tile** - verify sheet-to-sheet color consistency by first comparing each sheet, from backside, to 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.

No adjustments will be made after installation.

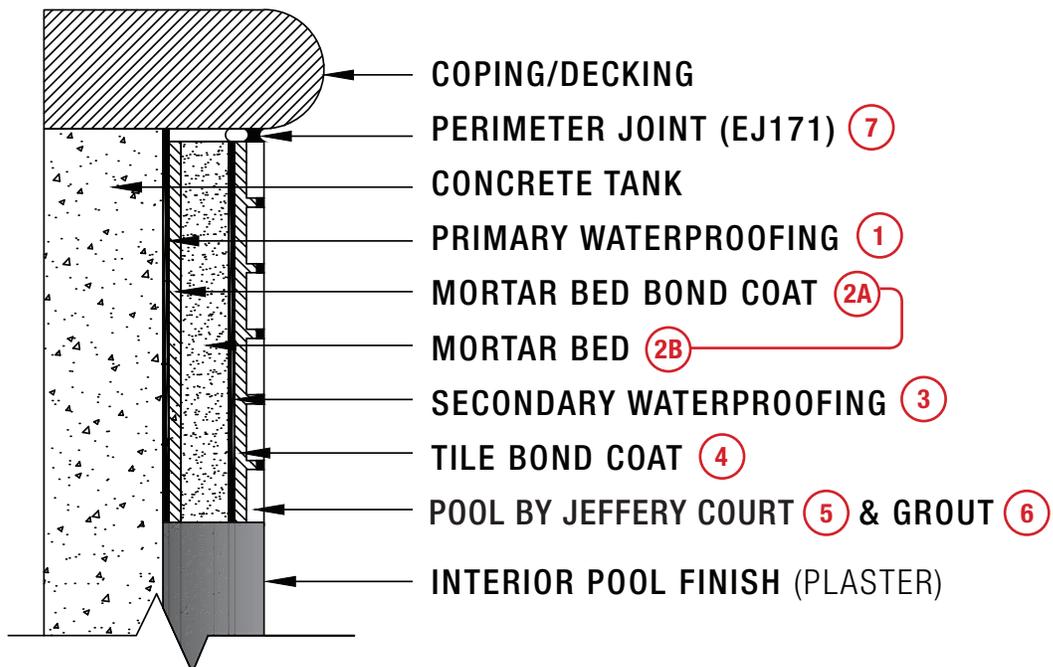
FULL COVERAGE

Full Coverage applications are those completely covered with tile.



PARTIAL COVERAGE

Partial coverage applications are those in which tile is used in conjunction with another pool finish (e.g. plaster).

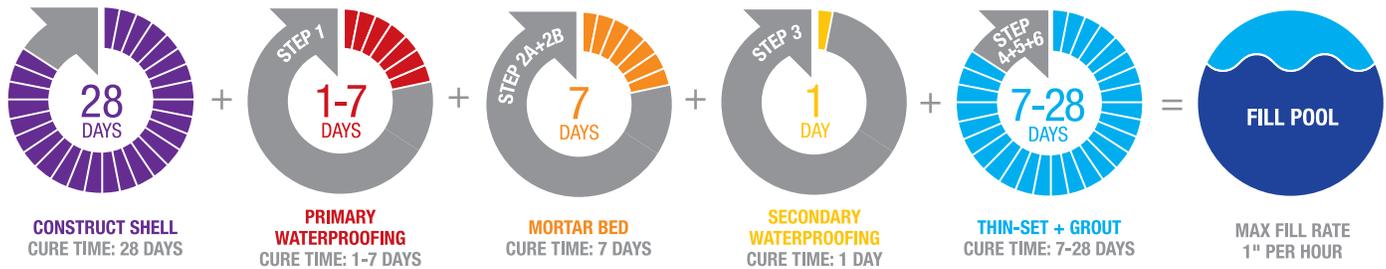


PROJECT REQUIREMENTS

- Pool tank construction must be reinforced concrete meeting the cast concrete standards described in the American Concrete Institute's ACI 318 and/or sprayed concrete standards described in ACI 506R-16 and the American Shotcrete Association's (ASA) Position Papers #1-6
- Defects in the concrete tank (e.g. cracks, active water leaks, unsound concrete, etc.) must be repaired prior to the commencement of tile work
- Concrete tank surface must be free of grease, oil, wax or other coatings; pressure wash if necessary
- Concrete mortar beds must be cured a minimum of 7 days prior to glass tile installation
- The ideal working temperature for most thin-set and grout products is between 50°F and 90°F. Tile installations must be protected during installation and curing from direct sunlight, excessive heat, wind, rain and freezing temperatures

CURE TIMES

The following cure times are based on industry standards, manufacturer's directions and average climatic conditions. Manufacturer's directions will vary and should always be followed. Stated cure times begin at the completion of each stage of construction and the time needed to execute each stage is not included in the chart below. Tile installations must be protected during curing from direct sunlight, excessive heat, wind, rain and freezing temperatures.



All submerged applications must be cured a minimum of 21 days prior to submersion or heavy water use, unless otherwise specified by the thin-set and grout manufacturer. If shorter cure time is required, contact Jeffrey Court Customer Service for Specific recommendations.

MOVEMENT JOINTS

Install movement provisions according to the current edition of the "TNCA Handbook for Ceramic, Glass & Stone Tile Installation" method EJ171.A flexible sealant, recommended for submerged applications, is required between the tile and all restraining abutments (e.g. the decking/coping), at all inside corners and directly over any joints in the concrete tank. For glass tile, in-field movement joints are required at a maximum spacing of 8' on center. For porcelain or ceramic installations, in-field movement joints are required at a maximum spacing 12' on center.

RECOMMENDED INSTALLATION PRODUCTS

1 PRIMARY WATERPROOFING

- AQUORON CPSP
- Basecrete BC Pool Shell Plus
- Miracote MiraPrime Aqua-Blok XL
- Multicoat Vapor Shield
- Valcon Industries Restructor

WARNING: The use of hydrophobic, crystalline concrete waterproofing additives or treatments may result in bond loss of subsequent tile assembly layers

2A MORTAR BED BOND COAT

- Thin-set mortar meeting one of the following, ANSI A118.4, ANSI A118.15, ISO C2 or better.

2B MORTAR BED (Nominal Thickness - Walls 3/4", Floors 1 1/4")

- 4:1 Site Mix (by volume) – 4 parts ASTM C-144 sand to 1 part ASTM C-150 portland cement mixed with water or an acrylic/latex cement-mortar additive.

NOTE: Adding an acrylic or latex polymer cement-mortar additive to a site mixed mortar will increase the Mortar Bed's strength, moisture resistance and resistance to freeze-thaw damage. DO NOT add lime to the cement-mortar.

- Custom Building Products Thick Bed Mortar mixed with Thin Set Mortar Additive
- Bostik Mud-In-A-Bag mixed with 425 Acrylic Latex Admixture
- Laticrete 3701 Fortified Mortar mixed with water
- MAPEI 4 to 1 Mud Bed Mix mixed with Planicrete AC
- Miracote Mortar Bed 2000 mixed with water
- TEC Floor Mud mixed with Acrylbond Acrylic Mortar Additive

3 SECONDARY WATERPROOFING

For either Partial or Full Coverage tile applications

- Basecrete (white or gray)
- Bostik Ultra-Set Advanced
- MAPEI Mapelastic 315
- Miracote Membrane C (white or gray)
- TEC Triple Flex
- Valcon Industries Flexcrete (white or gray)

For Full Coverage tile applications only

- Bostik GoldPlus
- Custom Building Products RedGuard
- Laticrete Hydroban
- MAPEI AquaDefense
- TEC HydraFlex

4 TILE BOND COAT

Due to the translucent nature of glass tile, the color of the thin-set (tile bond coat) will affect the appearance of the installed tile. We recommend the use of specific white thin-sets, some mixed with a specific latex admix (see list below). However, these products will vary in their degree of whiteness and 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.

- Bostik Glassmate* mixed with 425 Acrylic Latex Admixture
- Custom Building Products Premium Glass Tile Thin-Set Mortar*
- Laticrete Glass Tile Adhesive*
- MAPEI Adesilex P10 Bright White Thin-Set Mortar*† mixed with Keraply Mortar Additive
- TEC Super Flex Ultra Premium Thin-Set Mortar

** The thin-set mortars marked with an asterisk are bright white and specifically manufactured for use with translucent glass tile
† This product is color controlled for bag-to-bag color consistency*

5 POOL BY JEFFERY COURT

For detailed product use information, including recommended applications, please refer to the “Application Chart” document, which is available for download at www.JeffreyCourt.com/Pool.

NOTE: Tiles with any edge longer than 5” or trim tile with any edge longer than 2.5” are not recommended for use in pools and water features.

6 GROUT

In all pool & water feature applications cement-based, sanded grouts are compatible with our products (will not scratch the tile). However, in some specific instances, unsanded grout, urethane-based grout or epoxy grouts may also be an option. For additional information, contact Jeffrey Court Customer Support.

NOTE: Blue, green and red grouts may not be appropriate for submerged applications; consult grout manufacturer for specific use recommendations and limitations.

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

7 PERIMETER & MOVEMENT JOINT SEALANT

- Custom Building Products Commercial 100% Silicone Sealant
- Laticrete Latasil 100% Silicone Sealant with 9118 Primer
- MAPEI Mapesil T 100% Silicone Sealant
- TEC Accucolor 100 100% Silicone Sealant

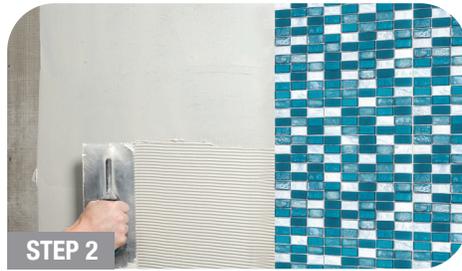
PAPER-FACED MOSAIC INSTALLATION

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.



STEP 1

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



STEP 12

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



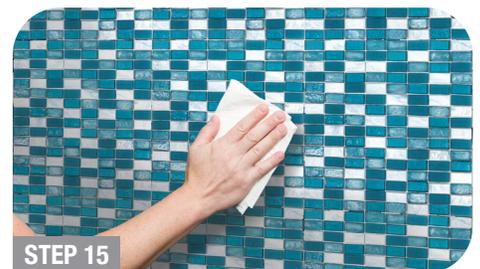
STEP 13

Seal cement-based grout and natural stone with a penetrating sealer like 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.

WET CUTTING MOUNTED MOSAIC TILE*

Pool by Jeffrey Court Glass Tile products can be cut to meet jobsite dimensions with the use of 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.



STEP 1

Cover the saw tray with a piece of 1/4" 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 1/4" 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 should 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.

IMPORTANT: Installation Instructions

We recommend wet cutting or the score and snap method during the installation process. Improper installation techniques could expose installer to inhalation of harmful silica dust. Do not dry cut product using power tools during the installation process. Using dry cutting methods could present a risk of acute lung injury. If adequate ventilation cannot be achieved, wear a mask or respirator. For more information, see the SDS at www.jeffreycourt.com.

DRILLING

Pool by Jeffrey Court Glass Tile products can be drilled using 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.

MAINTENANCE

Proper care and maintenance is crucial to the long-term appearance and performance of pools and water features. The following information outlines recommended products and techniques for the maintenance of most pool and exterior tile and is general in nature. For detailed water balance and maintenance information refer to the Jeffrey Court "Pool Tile Maintenance Guide".

NEW INSTALLATIONS

- 1 Seal grout with Oceancare **High Performance Penetrating Sealer** (prevents staining)
- 2 Protect tile & grout with Oceancare **Glass & Tile Shield** (inhibits calcium build-up)
- 3 Clean tile & grout regularly with Oceancare **All Purpose Cleaner & Degreaser**
- 4 Every 6-12 months clean tile & grout with Oceancare **Calcium Releaser** and reapply **Glass & Tile Shield**



EXISTING

- 1 Remove calcium deposits with Oceancare **Calcium Releaser** (heavy deposits may need to be media blasted)
- 2 If needed, restore faded/etched tile with Oceancare **Pool Tile Restorer**
- 3 Protect tile & grout with Oceancare **Glass & Tile Shield** (inhibits calcium build-up)
- 4 Clean tile & grout regularly with Oceancare **All Purpose Cleaner & Degreaser**
- 5 Every 6-12 months clean tile & grout with Oceancare **Calcium Releaser** and reapply **Glass & Tile Shield**



PREVENTING CALCIUM BUILD-UP

To inhibit the bond of calcium deposits, we suggest applying Oceancare **Glass & Tile Shield** to new and/or clean pool tile. Tile treated with Glass & Tile Shield will be easier to maintain and most calcium deposits will be removed with water and a nylon scrub brush, eliminating the need for additional calcium cleaners. For optimal results, regularly brush the tile and reapply **Glass & Tile Shield** every 6 months.

GENERAL CLEANING

To remove waterline scum and grime, we suggest applying Oceancare **All Purpose Cleaner & Degreaser** to the tile and scrub with a nylon bristle scrub brush or a 3M White or Blue nylon scrub pad. To remove mineral scale and calcium deposits, we suggest applying Oceancare **Calcium Releaser** to the tile surface and scrub with a nylon bristle scrub brush or a 3M White or Blue nylon scrub pad. **DO NOT** use pumice stones, steel bristle brushes, abrasive or acidic cleaners.

WARNING: Certain acids will damage tile glaze and iridescent glass tile. Care should be taken to protect tile surfaces when using acids in the pool finishing process and when adding acid to the pool water. **DO NOT** allow products that contain hydrofluoric, hydrochloric, muriatic or phosphoric acid to come in direct contact with the tile. In the case of accidental contact, neutralize immediately with baking soda and water(1lb: 3 gallon)