Handmade in the USA by **CAL-GA-CRETE**

NOTICE TO THE INSTALLER

Carefully read this Notice and Installation Recommendations before installing these tiles. Cal-Ga-Crete concrete paver tiles are <u>NOT</u> to be installed using a "ceramic tile method"**. For setting use an ungauged stone method and for grouting use a brick method. Failure to comply may lead to tile bonding failure, grout cracking or significant surface discoloration. The information contained below may be updated anytime without prior notice. Please request current copies at (310) 639-8960.

- STACK BOXED OR LOOSE TILES ON EDGE. FACE STACKED TILES MAY CRACK.
- STORE BOXED OR UNBOXED TILES INDOORS IN A CONSISTENTLY COOL PLACE. STORAGE IN EXCESSIVE DRY HEAT MAY CAUSE HAIRLINE CRACKS IN TILES.
- EXTERIOR STORAGE MAY PERMANENTLY CHANGE SURFACE COLOR.
- TILES ARE WET CAST. BOXED TILES ARE INTENTIONALLY MOIST AND MAY APPEAR SIGNIFICANTLY DARKER IN COLOR TONE UNTIL DRY.
- TILES ARE NOT FACTORY SEALED. RECOMMENDED GROUTING PROCEDURE ELIMINATES NEED FOR PRE-SEALING.
- DIMENSIONAL AND COLOR VARIATIONS ARE INTENTIONAL AND TYPICAL DUE TO THE HANDMADE STYLE.
- REPORT APPEARANCE OR ANY OTHER ISSUES PRIOR TO INSTALLATION. INSTALLED MATERIALS CONSTITUTES ACCEPTANCE AS IS.
- SLAB MUST FEATURE APPROPRIATE MOVEMENT JOINTS PER "TCA" SPECS.
- TEST SLAB FOR CONTAMINATES. REMOVE <u>ALL</u> CONSTRUCTION DEBRIS, DUST AND BOND-BREAKING COATINGS. SLAB SURFACE MAY REQUIRE SCARIFYING.
- MOISTEN SLAB AND TILE SURFACE BEFORE MORTAR APPLICATION. TROWEL TO MEDIUM BED DEPTH USING FLAT SIDE FIRST, AND THEN TROWEL NOTCHED SIDE IN PARALLEL MOTION COVERING IMMEDIATE SETTING AREA 100%.
- PUSH TILES INTO MORTAR WITH A SLIGHT BACK AND FORTH MOTION UNTIL ELIMINATION OF ALL AIR VOIDS. LEVEL TILES USING STRAIGHT EDGE.
- PLACE GROUT DIRECTLY INTO JOINTS WITH GROUT BAG OR POINTER TROWEL. AVOID AIR POCKETS. "SPREAD GROUTING" MAY LEAVE SURFACE HAZE.
- IN DESERT CLIMATE OR MOIST EXTERIOR AREAS, USE WATERPROOF ANTI-FRACTURE MEMBRANE SUBSTANTIALLY LIMITING WATER-VAPOR EMISSION, EFFLORESSENCE, MINERAL CONTAMINATION AND COLOR FADING.
- TCA F101-03 FLOATED INSTALLATION: OPTIONAL MEMBRANE IS MANDATORY.
- NEVER USE ANY TYPE OF ACID OR CLEANERS WITH ACID CONTENT.
- TILES AND GROUT MUST BE THOROUGHLY DRY PRIOR TO SEALING.
- SEALER MUST BE RATED TO PENETRATE 7000 PSI CONCRETE SURFACE. FOR EXTERIOR, USE U.V. RATED, PENETRATING SEALER ONLY.

** Ceramic tile method refers to using ¼" notched trowel, chalk lining and tile spacers. Use a stone setter's method instead using ½" or ¾" notched trowel, mason's line to mark grout joints and straight edge to level surface. This method applies to job mixed mortar or sacked "thin set" materials.

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INSTALLATION RECOMMENDATIONS

Preparation:

New concrete slab: No sealers, curing compounds or other coatings shall be applied. Light broom finish is preferred. New slabs shall cure for minimum 2 weeks prior to tile installation. Appropriate movement joints must be present.

Existing concrete slab: Test Concrete surface for curing compounds, sealers, adhesives, paint overspray and other potential "bond breakers". Slab surface must be free of dust and debris contaminants prior to bond coat mortar application. Scarify contaminated, machine or steel-troweled slabs. Check for proper movement joint location.

Wood/resilient sub-floor: Do not apply mortar bond coat directly on wood. Apply per TCA specifications. Mortar bond coat may be applied over resilient flooring in good condition. Remove wax residues and slightly sand resilient surface.

Tile preparation: Tiles are shipped unsealed. Pre-sealing is not required. Immediately before setting, wet backside of tiles with a sponge. Installation in dry hot climates may require soaking of tiles.

Installation:

Mortar: Prepare a rich mortar bond coat (2-3 parts graded, washed plaster sand to 1 part Portland Cement). Sacked, prepared suitable masonry mortar mixes and "thin sets" may be used. Add high quality acrylic additives per manufacturer recommendations. Acrylic and latex additives may not cure properly in consistently damp areas. Certain "thin sets" are not suitable for medium bed or exterior use. Contact manufacturer for details.

Setting tile: Mortar must be applied using the flat side of the trowel first. Move notched side of trowel (minimum $\frac{1}{2}$ x $\frac{1}{2}$ ", preferably "U" shaped) in a parallel pattern allowing for air to escape. Bond coat must be applied over the entire setting surface even in the grout joints. "Back-butter" paver tiles 100% with 1/8" thick mortar for full mortar to mortar contact. Position tile on mortar bond coat using a slight back and forth motion. Mortar must "squeeze up" minimum 1/8" in grout joints along tile edges and corners eliminating air voids. Level tiles using a straight edge or taught string (tile thickness varies slightly). Color fading, mineral deposits and associated symptoms are caused by continued or excessive moisture vapor emission. Sealers can not prevent this phenomena. To significantly reduce or prevent moisture vapor emission, carefully eliminate bond coat and grout air voids plus set the paver tiles and bond coat over an ANSI compliant waterproof crack isolation membrane. Membranes are most pertinent in landscaping settings or interior and exterior desert climate installations.

Bond Coat Curing: Do not allow any foot traffic for 24 hours minimum. Premature foot traffic may cause bonding failure. If pre-sacked mortar bond coat is used follow respective manufacturer's curing instructions.

Grouting: Dampen grout joints prior to grout insertion. For jobsite made grout, mix 2½ parts graded plaster sand with 1 part Portland cement. Sacked, prepared, sanded grout mixes may be used. Wide joints may require modification of sacked, prepared grouts. Check with respective grout manufacturer. Do not exceed grout manufacturer's recommended grout width. Install grout using a grout bag or a tuck pointer. Tool the joint with a round tool ("spoon") or brick jointer. Allow excess grout to set up briefly until it can be swept off using a stiff brush or broom. For final cleaning use cheesecloth, clean damp sponge or when necessary, steel wool. Replace cleaning water frequently. Cleaning with dirty water may lead to grout haze. Do not use any acidic cleaners to remove excess grout or grout haze (check "Cleaning" paragraph below).

Final curing: To prevent cracking, grout may need to be damp-cured depending on local climatic conditions. Do not allow foot traffic for a minimum of 24 hours. For sacked grouts follow manufacturer's instructions.

Cleaning: A neutral rinse or cleaner approved for concrete paver tile surfaces may be used. <u>WARNING: Under no</u> <u>circumstances use muriatic or other acidic cleaners.</u> Acid will permanently and visibly wear surface. Residual acid may conflict with sealers. Request detailed instructions from your sealer manufacturer or hire an experienced sealing professional.

Sealing: Use sealer formulated for 7000 PSI concrete surfaces (sealers formulated for concrete slabs, interlocking pavers, brick and terracotta tile may not penetrate Cal-Ga-Crete surfaces). Choose sealer manufacturer with prior Cal-Ga-Crete experience. Follow manufacturer's instructions. Exterior applications require UV resistant and breathable penetrating sealer. Do not use "topical" sealers on exterior surfaces. Allow entire surface to dry before applying sealer. Color enhancing sealers (gloss, wax, patina finish, etc.) may be used on interior applications. *Test sealers on a sample prior to application.*

Post installation care:

Maintenance: Re-sealing cycles: Interior every 5 to 10 years, exterior every 1 to 3 years. Use mild cleaners and pressure washing for regular maintenance. Do not use acidic cleaners or abrasive machine cleaning devices.

<u>SPECIAL NOTICE:</u> Concrete paver tiles are installed according to CTMA, ANSI and TCA specifications. Only use installation mortar, thin set, grout, membranes or sealers complying with ANSI, the CTMA Handbook or Cal-Ga-Crete's recommendations. This document describes the "concrete paver tile method". Do not use a "thin set method" a.k.a. "ceramic tile method" for installing Cal-Ga-Crete products. When using bagged mortars (aka thin set) comply with all literature referenced above. Contact Cal-Ga-Crete or the respective third party material manufacturer / supplier for further details. <u>Cal-Ga-Crete accepts no responsibility for installations failing to conform to our "Notice to the Installer" and "Installation Recommendations". Installed Cal-Ga-Crete materials constitutes acceptance as is. To resolve any product quality or color issues, you must contact the factory prior to installation.</u>