# EXTERIOR INSTALLATION OF EMSER® LIMESTONE – CHAMPAGNE LIGHT STRIATED AND CHISELED 12" x 24" TILES

Emser's Champagne Light Limestone tile is striated and chiseled to give it a natural stone appearance. This tile is suitable for exterior walls of both residential and commercial projects. Limestone is a very porous, calcite-based stone and can be easily stained and damaged by common staining agents. The installation of this tile should be maintained and protected with a penetrating sealer such as Aqua Mix® Sealer's Choice® Gold.

### SURFACE PREPARATION

Custom® Building Products offers products to assist in preparing the surface for the installation of tile:

- WonderBoard® Lite Backerboard is used to prepare framed walls for the installation of natural stone tile.
- Skim Coat & Patch Cement Underlayment is a trowel-applied patching and smoothing compound that should be used to eliminate imperfections in walls. It can be used to bring the surface into the acceptable tolerance.

Once the surface is properly smoothed, it may be necessary to waterproof or treat cracks in the substrate before the installation of the tile.

 RedGard® Waterproofing and Crack Prevention Membrane can be applied to a dry film thickness of 30 mils for general waterproofing.

### **TILE INSTALLATION**

We have found that the Emser Champagne Light Striated & Chiseled Limestone tile is sensitive to water and moisture. Exposure to water and moisture may cause the limestone tile to warp, crack or become unbonded. To prevent this, we recommend pre-sealing the tiles with Aqua Mix Penetrating Sealer.

It is important to observe all building codes and TCNA requirements in the tile installation. In particular, all movement joints should be properly placed in the tile installation and filled with the appropriate soft jointing material, such as CUSTOM's Commercial 100% Silicone Caulk. See TCNA EJ171 details for additional information.

### LIMESTONE PRE-SEALING

Aqua Mix Penetrating Sealer should be used to pre-seal all six sides of the limestone tile. Begin by fully immersing the limestone tile in the Aqua Mix Penetrating Sealer for 10 seconds. The sealer-treated limestone tile should then be supported so that air movement can reach all sides of the tile and stored overnight in a conditioned environment (72°F and 50% rh). Storing treated tiles in other conditions can lengthen the time required for the penetrating sealer to fully dry and cure.

## **TILE BONDING**

The large 12" x 24" size of these limestone tiles dictates that they should be installed with a medium bed mortar capable of bonding at a thickness up to ¾-inch. This will allow minor adjustments in the field for variations in the substrate and tile. CUSTOM recommends several different mortars for the installation of these limestone tiles:

- ProLite® Large Format Tile & Stone White Mortar is ideal for installation on walls. Its non-sag formula will support the tiles without mechanical assistance.
- MegaLite® Crack Prevention White Mortar develops higher bond strength for demanding applications and aids in crack prevention.

If a rapid setting mortar is desired to ensure early development of the bond, CUSTOM recommends the following products:

- ProLite Rapid Setting Large Format Tile & Stone White Mortar is ideal for fast installation of large tiles on walls.
- MegaLite Rapid Setting Crack Prevention White Mortar develops higher, earlier bond strength for demanding applications and aids in crack prevention.

Limestone tiles should be installed per ANSI A108.5 and CUSTOM's current product installation procedure. The appropriate notched trowel should be used to assure 95% coverage to the back of the tile. The Marble Institute of America's Dimension Stone Design Manual can help with installing limestone in certain specialty design cases.



**Technical Bulletin** 

Technical Services 800-282-8786 custombuildingproducts.com

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## **GROUTING**

Grouting of the Emser® Champagne Light Striated & Chiseled Limestone tile may be difficult using the traditional methods due to the irregular surface of the tile. It may be necessary to use a grout bag to fill the joints and strike off the joints with an appropriate tool. An alternative method is to color the bonding mortar with colored grout. The back and edges of the stone are coated with a thick layer of the colored mortar and firmly set into the mortar spread on the substrate; this will result in the colored bonding mortar being squeezed up in the joints between the tiles. The joints can then be struck off to a smooth finish. Five pounds of Polyblend® colored grout can be added to 50 pounds of bonding mortar. Selecting a dark colored grout will result in a light complementary color grout in the joints. A pre-test of the grout will aid in determining the proper grout color.

 Polyblend Sanded Grout is available in 48 colors for joints up to ½-inch wide.

### **MAINTENANCE**

Although the tiles have been pre-sealed before installation, it is important to keep the Emser Champagne Light Striated & Chiseled Limestone tile sealed to sustain the beauty of the installation. Aqua Mix® Sealer's Choice® Gold should be routinely applied and the sealed limestone should be cleaned with a neutral pH cleaner. Acidic materials and cleaners can damage the limestone, so CUSTOM recommends Aqua Mix Concentrated Stone and Tile Cleaner for safe routine cleaning.

## WARRANTIES

Custom Building Products provides warranties for installations utilizing a full system of CUSTOM tile installation products. Projects installed with Emser Champagne Light Striated & Chiseled Limestone tile using the above surface preparation (as required), including ProLite® Large Format Tile & Stone Mortar and Polyblend grout, are eligible for a 15-year system warranty. See details and limitations of CUSTOM's system warranties at www.custombuildingproducts.com.

Proper installation of Emser Champagne Light Striated & Chiseled Limestone will assure a beautiful, durable installation for years. For additional assistance with installation, please contact CUSTOM's Technical Services at 800-282-8786.

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