

Keys to Success for Masonry Construction for Stucco

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There is nothing more beautiful and durable than a masonry home. This look can be achieved with masonry units and/or a combination of block and stucco. When constructing a masonry wall for stucco application, there are a few concerns that need to be addressed so that the stucco will adhere properly. Here are a few keys to success:



Concrete masonry units for stucco application should have an open or coarse texture. This texture allows the stucco to interlock with the surface of the block and provide a good bond.



In order for stucco to adhere to the block, the surface must be clean and free of dust, film, efflorescence, mortar drippings and oil. It is impossible for the stucco to stick to a surface that is not clean. The masonry wall must be cleaned, and all dust and dirt removed. Once the stucco has been applied, water and cement will be absorbed into the block forming a suction bond.



It is imperative that the block provide a good surface for the suction bond. A simple test can be used to identify any issues. Spray the block with water. If the water is absorbed into the block, then a good suction bond can be achieved. However, if the water beads up on the block, it may be harder to get a good bond. In severe cases it may be necessary to use a bonding agent or a metal lath assembly. On hot summer days, the rate of absorption may be extremely fast. If the block absorbs water from the stucco too quickly, it may cause additional shrinkage and cracking. In order to remedy this situation, uniformly wetting the walls and allowing the water to absorb prior to stucco application should increase the absorption time and, therefore, allow time for a better suction bond.



Mortar joints for stucco should be tooled or cut off flush with the block. Although sponging the joints seems like it would be preferred since the surface is then flat, this is, in fact, very detrimental. A good tooled or cut joint is ideal since the mortar is kept in the joint, and the pores of the block remain open and clean. Remember; keep the block clean to achieve a good bond.



Control joints are used to control movement in masonry walls. Because stucco and block are both cementitious materials, they both need to be jointed in the same location. Proper placement is important and should be designed into the wall.



Most masonry construction requires only $\frac{1}{2}$ inch of stucco for complete coverage. This works well with the 2-coat system, $\frac{3}{8}$ for the scratch coat, and $\frac{1}{8}$ for the second coat. With little or no delay between the two coats, there is less chance of shrinkage and improved bond strength.

Exterior walls built of concrete masonry have many documented advantages:

- They do not burn
- They do not rot
- Their structural safety factor is much, much higher than other building systems
- The insurance premiums are typically 15-20% lower
- The chance of termite damage is zero percent
- They are energy efficient

So, what are you waiting for? It is time to build with block!