



## Subject: DURUS™ Brick Rainscreen Mortar Cleaning

If mortar installation is carefully executed, there will be little need for cleaning other than to remove the small amount of mortar from the edge of the joint following tooling. This can be done with a stiff medium bristle brush after the mortar has dried, but before its initial set (1-2 hours). Mortar that has hardened can usually be removed with a tool. Gun or hand applied mortar generally yields less waste and little to no cleaning. Grout or mortar pump applications may require chemical cleaning due to additional waste or spillage onto brick surfaces.

Further cleaning is best accomplished with plain water and natural bristle or nylon brushes. If chemicals must be used, they should be selected with extreme caution. Improper cleaning can lead to deterioration of the masonry units, deterioration of the mortar, mortar smear, and efflorescence. New mortar joints are especially susceptible to damage because they do not become fully cured for several months. Chemical cleaners, particularly acids, should never be used on dry masonry. The masonry should always be completely soaked with water before chemicals are applied. After cleaning, the walls should be flushed again with plain water to remove all traces of the chemicals.

Several precautions should be taken if a new wall is to be cleaned. First, the mortar should be fully hardened before cleaning. Twenty-Eight (28) days is usually sufficient, depending on weather and exposure; as mentioned previously, the mortar will continue to cure even after it has hardened. Test panels should be prepared to evaluate the effects of different cleaning methods. Generally, on newly installed Desana Brick Rainscreen walls, only very low pressure (100 psi) water washing supplemented by stiff natural bristle or nylon brushes should be used, except on glazed or polished surfaces, where only soft cloths should be used.

New construction "bloom" or efflorescence occasionally appears within the first few months of repointing and usually disappears through the normal process of weathering. If the efflorescence is not removed by natural processes, the safest way to remove it is by dry brushing with stiff natural or nylon bristle brushes followed by wet brushing. Hydrochloric (muriatic) acid is generally ineffective, and it should not be used to remove efflorescence. It may liberate additional salts, which, in turn, can lead to more efflorescence.

Please consider the following general masonry guidelines when installing bricks in the system.

1. Never use muriatic acids. Only use masonry cleaners like NMD80 strictly following manufacturer's instruction.
2. Clean with cleaners from well established companies and confirm cleaner is approved for use on lime based mortars without Portland cement. Follow all cleaner safety precautions and guidelines. Always test clean a small inconspicuous area first.
3. Do not clean until mortar has cured. The best time to clean is 14-28 days after mortar installation. Mortar smears get tougher to clean the longer they're on the surface but cleaning prior to 14-28 days may damage joints. Always test clean an area and be sure to clean in delineated sections or zones. Desana Partners recommends a full 28 day cure time – use precaution and gentle wash procedures if cleaning in 14 days.
4. Pre-wet all surfaces to be cleaned. Work from the top-down and pre-wet as you go.
5. Thoroughly rinse or flood all cleaned surfaces, use water pressures of 100 psi max.
6. Do not clean in cold weather, be sure temperatures are 40°F (4°C) and above throughout the cleaning and drying process.

If there are any questions please contact Desana Partners.

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