

Cleaning masonry, concrete, and stone should never be taken lightly. All materials will react differently to different cleaning solutions. Issues with the durability and final color of the masonry or concrete product will vary greatly depending on the product used and the process to clean. And finally, workmanship plays a big role in the overall final quality of the product, cleaning as the masonry is being installed is paramount to a good, long-lasting installation with less effort cleaning overall, thus producing a high quality, long lasting project.

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- ❑ **Always test each different type of masonry, stone, concrete, etc. with the cleaner and choose different cleaners, if required.**
- ❑ Always test each color of masonry with the cleaner and choose a different cleaner if required.
- ❑ Document the mixing ratio of cleaner to water used on the mockup and take a 2 oz. sample of the concentrated cleaner.
- ❑ **These 2 oz samples are to be kept for reference if something should happen to the masonry.**

- ❑ A natural stone mix might have a simulated stone in the mix...always verify with manufacturer.
- ❑ A proper masonry cleaner will not necessarily be the proper natural stone cleaner.
- ❑ Less is more...it is better to under clean the wall and spot clean as required than to over clean the entire wall.
- ❑ A wall that has been properly cleaned, as the mason installed, might have several hard to remove areas of mortar, the proper cleaner for the wall might be a milder cleaner with spot use of a stronger cleaner for the hard to remove spots.

- ❑ A building that has both concrete and clay masonry might use different type of cleaners, because the cleaner of the clay masonry might harm the concrete masonry.
- ❑ High strength mortar (Type S) and grouts should be cleaned within 3-7 days. Type (N) mortar should be cleaned within 7-21 days.

- ❑ **DO NOT CLEAN MORTAR TOO EARLY, AS IT WILL DAMAGE THE MORTAR JOINTS.**
- ❑ Concrete masonry should be cleaned within 7-21 days and clay masonry should be cleaned within 14-28 days.
- ❑ Focus cleaning effort on the masonry and not the mortar joints; the mortar joints are more prone surface damage.

- ❑ **ALWAYS CONTACT THE MASONRY MANUFACTURER FOR CLEANING INPUT. GET LETTER SHOWING WHICH CLEANER TO USE WITH THEIR PRODUCT & DO THIS EARLY!**

- ❑ **Never clean with muriatic acid.** It is impure, inconsistent in strength and will create a wall with varying color and will etch and stain the masonry, mortar, metals, and glass.
- ❑ **Always pre-wet the wall and make sure that the wall stay wet during the entire process.** Water will fill the pores in the masonry and not allow the cleaner to do damage to the surface of the masonry. A lack of pre-wetting will potentially create chronic efflorescence.

- ❑ Pre-wet and maintain wetness on all surfaces that will come in contact with the cleaner, including the windows, sills, scaffolding and fixtures, etc. Making sure all limestone pieces are extra wet.
- ❑ Use the proper amount of water during rinsing. Not using enough water can leave stains and cleaner residue. The proper amount should be given by the manufacturer of the cleaner.
- ❑ Masonry should be cleaned top to bottom, making sure that the bottom is always wet.
- ❑ Cleaning masonry in cold weather is challenging and should be avoided. Never clean if the temperature is less than 40° F and falling. The chemicals in the cleaners rely on a chemical reaction to dissolve the mortar, etc. and the lower temp the slower the reaction which might force the use of a stronger cleaner, thereby potentially reducing the ability of providing a quality job. Tenting and temporary heating the area might be the only correct solution.
- ❑ If we are installing in mild temperatures and anticipate cleaning in cooler temperatures, perform the cleaning test(s) in cooler temperatures.
- ❑ Make sure that the water spray is constantly moving across the masonry surface and angle the sprayer such that the spray is not hitting the mortar joints at a 90° angle.



Always project metals from cleaning including stainless steel (drip edges) Recommend to use green or blue tape.

- ❑ Tool mortar joints only when the mortar is thumb print hard, this will minimize mortar smears.
- ❑ Always keep the masonry clean and protected before, during, and after installation.
- ❑ Failure to completely rinse masonry from the cleaning solution will potentially cause white scum on the surface, which will probably be mistaken for efflorescence.
- ❑ Applying too much water to the wall will create efflorescence, however, this type should go away once the wall system has dried.
- ❑ Be aware of water infiltration at all time, such as exposed expansion joints.
- ❑ Clean in ± 3' x 3' squares in order to maintain wetness.
- ❑ **Place lime or banking soda on the ground to neutralize the cleaner – very important in planting areas.**
- ❑ Stop all foot and vehicle traffic under the area being cleaned. Remove all cars – this is very important and know and keep track of the wind direction and strength.



Each color stone needs to be verified before the entire wall is washed

Specific Concerns with New Masonry:

Do not use a power washer. This might damage the new joints – use a water hose.

Try to have the cleaning done before the concrete flatwork and landscaping is complete.

We need to address unsealed joints – how to keep the water out during cleaning or sealing the joint before the cleaning takes place.

Cleaning Blasting with Air:

Use 1/4" minimum wood to protect all surfaces not to be cleaned.

Specific Concerns with Wet Restoration Cleaning Liquid and Gels:

Use a power washer at the approved pressure and water flow. A good rule of thumb is 400-1,000 psi at 6/8 gallons per minute.

Specific Concerns with Paste Restoration Cleaning or Trowel Grade:

DO NOT prewet the surface to be cleaned. Apply the paste to the recommended thickness. Place the sheet good as soon as possible. Remove paste with non-metallic trowel. Rinse down with a power washer, water hose, or sponge.



Aluminum frame that has been permanently stained by masonry cleaning