Cleaning Masonry

Years ago when I was a mason contractor, we used to have a masonry cleaner who was very proficient at cleaning masonry. Muriatic acid was the chemical, the bucket and brush method was the means, but I think that frequently a little more acid and a little less bucket & brush would be how the cleaning happened. Most of the time there were favorable results, but I remember seeing one job that, after it was cleaned, looked quite different than anticipated. The concrete block actually turned a different color!

In seminars that talk about cleaning, I have heard more than once that the person designated the cleaner, is not always just another bricklayer, but one who maybe did not excel at bricklaying and the cleaner job ended up in his lap, like he picked the short straw. In those same seminars it is explained that the bricklayer designated as the cleaner has more responsibility in preforming the cleaning job, paying attention to surrounding materials, site conditions, identifying the correct chemical and method used to properly clean different masonry materials. This job preformed correctly will reveal the beauty that people admire about masonry as well as its intended color and texture and prove to be one of the most important parts of the masonry project.

A couple of years ago, I was on a job where the mason sprayed water on the wall, then some sort of acidic solution, which was supposed to stay on the wetted wall for 3-5 minutes (dwell time), then hosed off with clean water. VOILA! Without any scrubbing? The wall was clean. This cleaning method, called pressurized water cleaning, does actually work and reduces the time required to clean vs. the old bucket & brush method. This took me by surprise as I always thought the bucket & brush was the preferred way to clean.

Today muriatic acid is not recommended to clean masonry. This chemical is too caustic and has done more damage by etching, bleaching, streaking and burning masonry than good. There are other cleaning products made by several manufacturers such as Diedrich, EaCo Chem, Prosoco that are milder, safer for the environment, safer for the cleaner and each company offers good technical support to back up their product line. Currently it is recommended to clean new masonry within 14-28 days from installation for type N mortar and 3-7 days for type S mortar. Our company had a policy to clean masonry after the roof was installed or at least an assurance that no rain water would penetrate the wall and cause efflorescence.
Cleaning Masonry (continued)

Other methods to clean are:

**Poultice** - By applying a poultice which includes mixing up a paste or using some type of media in direct contact with a stain until it hardens for a time period, then scrapped away or cleaned away to remove a stain.

**Abrasive Blasting** - Another method of cleaning is abrasive blasting such as with a sand blaster, not really recommended as safe for masonry. No control!

**Micro Abrasives** – This is a gentler method than abrasive blasting which uses different types of media and a low air or water pressure to clean.

**Laser** – This method uses a level of light to remove stains, but requires expensive equipment and specialized contractors to make this work. This method has been used to successfully restore statues and very detailed stone handiwork from the past.

When cleaning masonry, clean the sample for the job to depict what the final result will be. If no sample exists, it is always a good idea to test an indiscrete area of the wall with the milder cleaner used first to display what the cleaned wall will look like.