

Rules for New Construction Clean Down

By Jim Lucas

When I started in the masonry industry, 90% of the work was clay brick, with or without a CMU structural wall and accented with Indiana Limestone. Most of the rest of the buildings were Indiana Limestone facades.

Today, we see split face block, burnished block, concrete brick, manufactured stone, calcium silicate, cast stone, a resurgence of terra cotta, porcelain tile and natural stones including varieties of marble, limestone, travertine, onyx, sandstone, granite, schist, gneiss, quartzite, and slate from the four corners of the earth used in addition to clay brick on building facades.

While all of this is masonry, it is all chemically very different.

Fortunately, the industry has responded. It is now recommended that removal of excess mortar occur 7 – 28 days after laying and, if Type S mortar was used, cleaning can take place as soon as 3 days after laying.

Clay brick, terra cotta, porcelain tile, most sandstones, granite, schist, gneiss, quartzite and slate are very acid resistant.

Burnished Block, calcium silicate, manufactured stone and polished limestone, travertine and marble are all very acid sensitive.

Split face block, cast stone, unpolished limestone and some sandstones are somewhat acid sensitive.

Concrete brick's sensitivity depends on the manufacturer. All are acid sensitive to some degree.

In addition to acid sensitivity, clay brick and natural stone may contain metallic salts that are reactive with soe, but not all, acids.

You can no more use a single masonry cleaner for the removal of excess mortar than a family can use a single bathroom cleaner for glass, porcelain fixtures, his body and hair, her body and hair.

In that regard, a man and a woman are far more alike than clay and concrete brick.

As a result, removal of excess mortar is more challenging than ever before.

Masons and cleaning contractors have at least two cleaners based on hydrochloric acid (HCI) for removal of excess mortar from new clay brick and unpolished Indiana Limestone and at least one cleaner based on phosphoric acid (H3PO4) for use when the substrate is calcium silicate, concrete brick, burnished block or onyx.

Split face and smooth concrete masonry create a new problem in that the water demand is much higher for prewetting and rinsing if a standard brick cleaner is used. As a result, special cleaners that are both stronger and require less water for prewetting and rinsing have been developed for these applications. That enables the washer to do everything exactly the same way to get acceptable results.

There is one more special case ...

Often, the job is so small or the job is grinding and pointing that it would be of benefit to be able to clean quicker than 3 days after the mortar is placed. For this application, very mild products have been developed for cleaning 1-7 days after placing of the mortar.

In all cases, a mock up is indicated.

Removal of excess mortar requires thought, care and skill to avoid those interesting jobsite meetings.

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