Stone Masonry

SANDSTONE: Sandstone as its name implies, is grain-sized rock, bound together by pressure from sediment deposits in the earth, over time. Often called "brownstone", it was a common 19th century building material used for lintels, foundations, ornamentation and occasionally whole building facades. Its use was prolific in Troy. It is notoriously prone to deterioration. Sills can become fragile and stone blocks often have their corners and surfaces eroded away. Making matters worse, sandstone elements were often installed improperly resulting in more rapid deterioration.

With the help of an experienced mason, or preservation specialist, one can determine the best course of action. If the sandstone has not deteriorated past a certain point it may be best to do nothing. Whether repairs are made or not, always mitigate whatever is causing the deterioration, like salt, snow or rain.

Sandstone can be patched if deterioration is not too severe. Never paint it or patch it with bagged concrete from the hardware store. These band-aids don’t work. A number of companies make ‘restoration’ mortar that best matches sandstone in color and texture. It can be used to rebuild the stone to its original dimensions and appearance. The mason should prepare sample panels to determine the most appropriate texture and color mix before doing the actual repairs. Sandstone elements are usually about 3 or 4 inches in depth and backed up with brick masonry.

CLEANING

There is often a strong temptation to clean stone masonry. If light-colored stone has become heavily blackened by grime, cleaning may be appropriate. But a moderate amount of soot is acceptable on a 100-year old building. Professional cleaning with a chemical agent can be expensive. It is only recommended when a professional determines it is necessary. Start by cleaning a sample area with a soft bristle brush and mild detergent, like dish soap. Conventional pressure washers are too strong. A garden hose is sufficiently strong to clean and rinse the building. Cleaning should be done as part of a project that repairs the mortar joints to prevent water infiltration.

Replacing deteriorated sandstone is an expensive proposition. Very few quarries remain.

Appropriate Treatment Guide

All repairs and replacements are subject to HRC review and Planning Commission approval. Submit photos of your property with your application for review. Reviewers can help you in determining whether repair or replacement is appropriate.

- Never patch sandstone with concrete mix
- Never paint stone. Sandstone, terra cotta, granite and limestone can be found in the district. Never paint them unless advised by a preservation expert.
- Always prepare sandstone mix samples to test for color and texture. The color changes as it dries.
- Cleaning should be done by professionals and only as part of a project that repairs the mortar joints to prevent water infiltration.

When masonry is clean, the detail is enhanced, and the craftsmanship can be fully appreciated.

Cleaning and Water-Repellent Treatments for Historic Masonry Buildings
Repointing Mortar Joints in Historic Masonry Buildings

Cast Stone is a smooth concrete mix formed and pigmented to imitate the original stone.

Stone building components that are beyond repair can be replaced with more durable materials, such as cast stone, glass fiber reinforced concrete and, in rare occasions, a resin component may be used.