



PROJECT PROFILE

COLGATE UNIVERSITY ALUMNI HALL MASONRY FACADE REPAIR

Awards

American Concrete
Institute of
Central New York
Excellence in Masonry
Design & Installation
2007 Bronze Award

Site, Engineering and Construction Phase Services:

Klepper, Hahn & Hyatt

General Contractor:

Raymond E. Kelly, Inc.

Owner:

Colgate University

Completion Date:

November 2007

Project Cost:

\$1,000,000



Alumni Hall South and West Elevations at Colgate University - Hamilton, New York

SCOPE OF SERVICES

Alumni Hall is a three-story, stone masonry bearing wall building constructed in 1859. This restoration project focused on investigating the cause of problems which had become evident in the façade, and finding the best way to correct those issues to preserve the building and ensure its longevity.

Upon casual review the façade appeared to be in good condition. The building had been repointed in the 1960s with a very hard Portland mortar that appeared to be intact. With closer inspection, the façade exhibited numerous bulges, wall cracks, and broken stone sills. Upon removal of the pointing mortar, we found the original lime mortar to be deteriorated eight inches to 12 inches deep within the 24-inch-thick walls in many areas of the

building. The deterioration was due to moisture trapped behind the dense Portland mortar, which caused freeze/thaw damage to the interior mortar. Removal of all Portland pointing mortar was recommended, which allowed solidification and pointing of the walls with a mortar that matched the strength and appearance of the original lime putty mortar. This greatly lightened the color of the walls and restored the building to its original appearance.

Bulges in the wall were caused by deep mortar deterioration and the loss of compressive strength, resulting in a buckling of the façade. KHH removed the deteriorated mortar and injected the walls with a flowable lime mortar that filled the voids and solidified the walls with a minimum of reconstruction.