



Building Envelope
Systems Specialist:
Klepper, Hahn & Hyatt

Owner:
Syracuse University

Location:
Syracuse, NY

Completed:
Fall 2012



Watson Hall Exterior Masonry Repair

The Watson Hall complex consists of the original West and East Halls, the 1989 South Addition, and the North Theater Complex. These wings of the complex create a courtyard enclosed on four sides.

The buildings are chiefly concrete-encased, steel-framed constructions. They are primarily clad in brick veneer, with the north elevation dominated by glass block window walls. The five-story South Wing is cast-in-place concrete.

This project was initiated to correct observed façade masonry issues and repair distressed areas. These areas included cracks in the face brick, crashed limestones, open weathered joints of the veneer elements, face bricks shifted off the steel lintels, deteriorated parapets, and deteriorated concrete canopies.

The majority of the problems in the façade masonry were because of brick expansion and the lack of movement joints. The parapets deteriorated because of moisture infiltration through failed joints. Moisture also penetrated the concrete canopies and created an environment conducive to steel rusting and concrete jacking.

Corrective measures included providing additional vertical and horizontal movement joints, replacing aged sealant, saw cutting existing joints that were bridged with mortar and not performing properly, replacing damaged face brick areas and individual bricks, repointing open masonry joints, replacing or repairing damaged limestones, and replacing damaged glass block units. Where the expanded face brick shifted outward, steel angles were extended, and the steel was painted where indicated. Helical masonry ties were installed to insure anchoring of those expanded areas to the CMU backup.