Retrofit Inspection

Pineville, NC

6 story motel

Summary of facts:

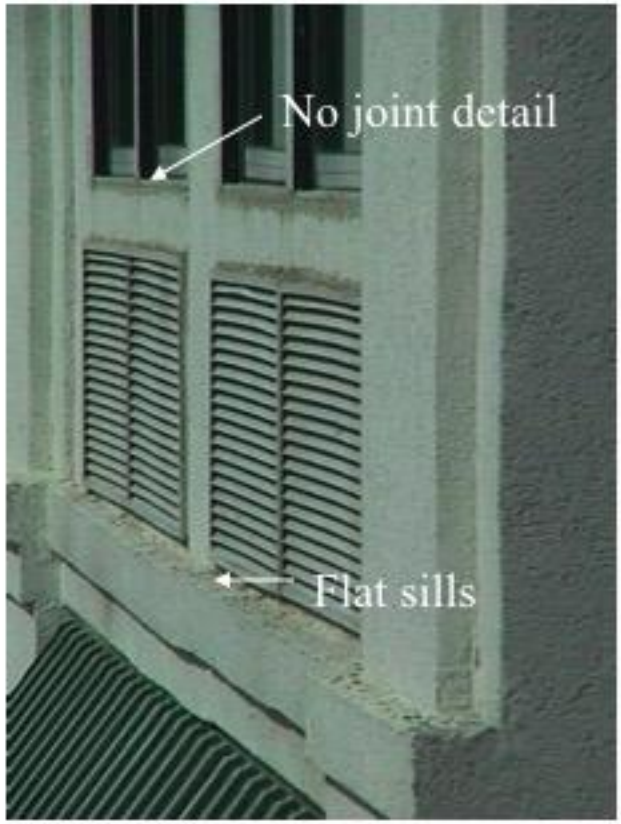
- Building finished in 2 1/2 years prior to start of retrofit
- Extensive water entry at windows and A/C sleeves resulted in mildew to an extent that the hotel was condemned for rental
- Steel framing on exterior wall did not comply with wind load requirements of the building code - the entire interior finish of the exterior walls was stripped and an additional stud was added at each stud space
- All EIFS around the windows and A/C units was stripped to the framing.
- All floor line aesthetic joints were cut out and rebuilt

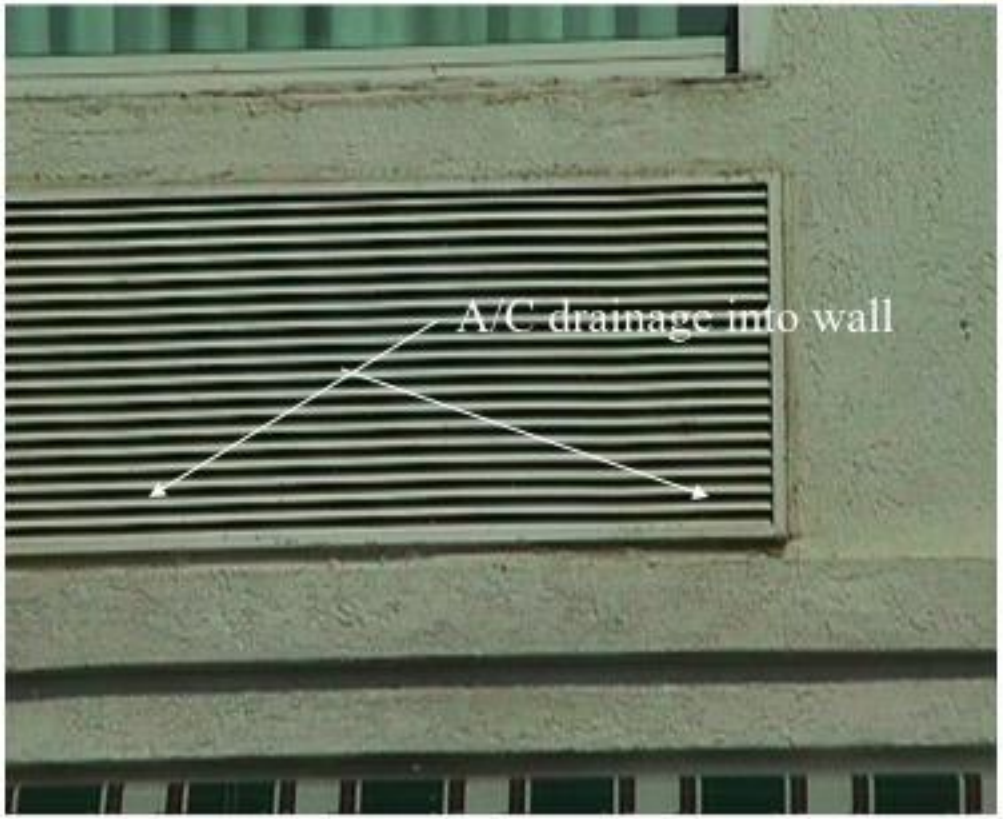
The Building

North Elevation

Areas not to be replaced are refastened and a new base, fabric, and finish coat are installed.

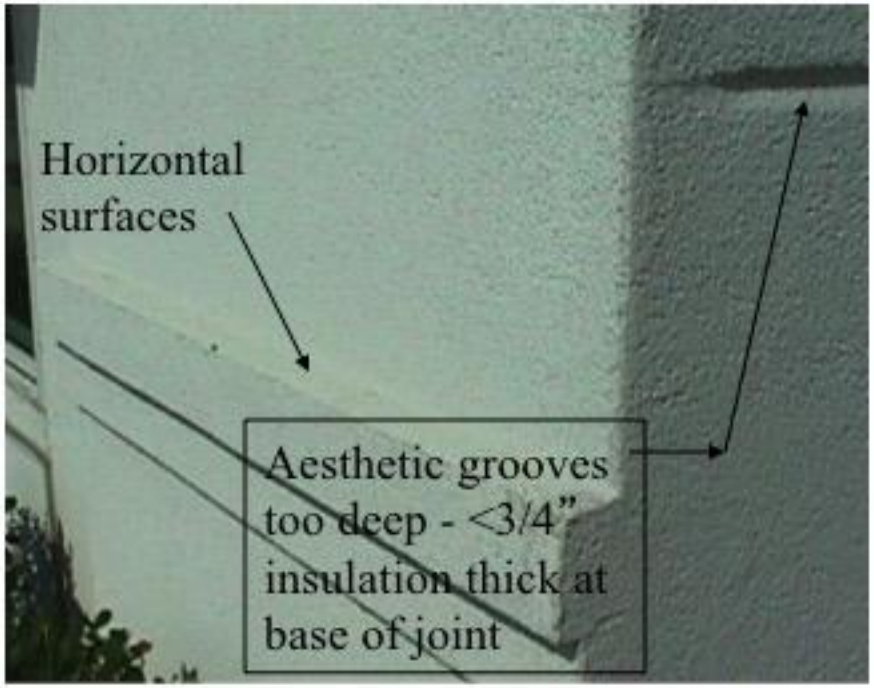
Windows - original condition

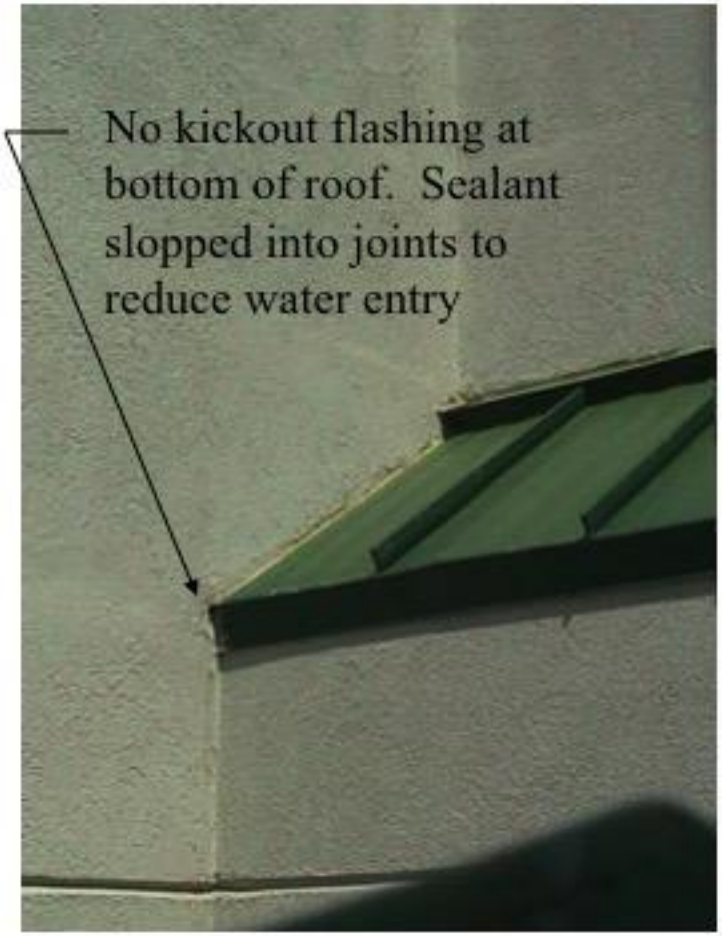




Windows had no sealant joints. There were flat sills under the A/C units and the A/C sleeves were draining behind the face of the EIFS.

Other Original Conditions





Windows Repair

- All windows and A/C sleeves to be stripped to framing
- Windows, A/C' s, A/C sleeve' s were removed
- New sheathing and sills installed
- Windows, A/C sleeve' s, and A/C units were reinstalled

Rebuilt Window & A/C

This finished rebuilt detail took lots of work to accomplish. On the surface the joints now exist and appear to be ready for sealant. There are new Jamsill brand sill flashings in place. The slides that follow highlight the details of the failed workmanship.

Sealant joints - windows & A/C

Window joints vary in width from closed to open making sealant almost impossible to accomplish correctly

Sloppy finish and filled joint will result in failure in joint sealant

A/C sleeves rebuild

Close up of the weep holes. New flashing is to reduce depth of weep by 1/2 to allow backer rod and sealant to be installed behind front of the flashing.

Crucial detail at weep holes at bottom of A/C sleeves

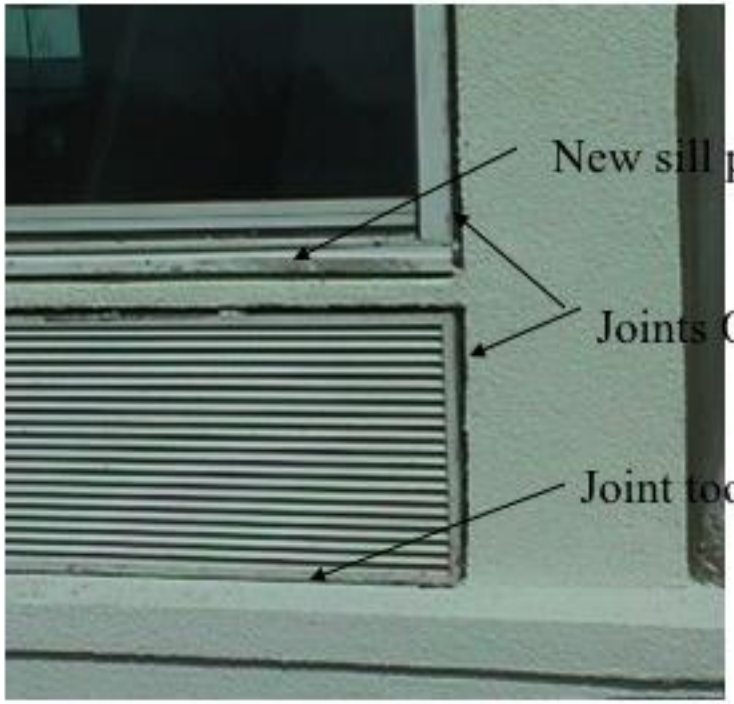
Two A/C problems

The window on the right did not have the new A/C sleeve flashing installed resulting in drainage behind the EIFS

At the second and fifth floor the flat shaped insulation is too flat and the joint is too tight to install the backer rod and sealant

The A/C "Solution"

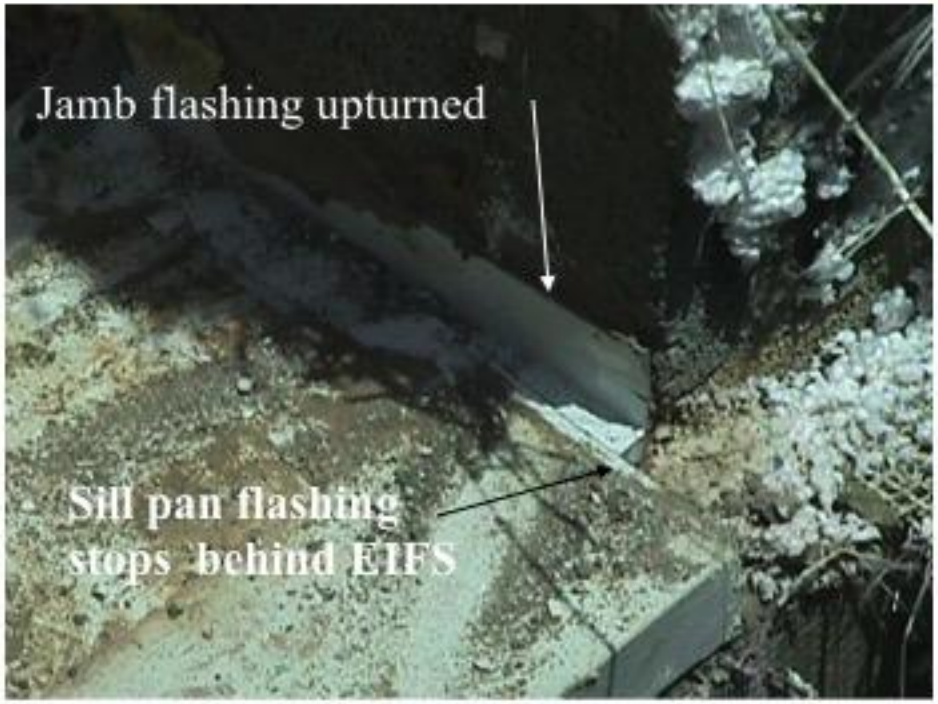
Installed metal sill pan below sleeve in case sealant is not 100%. Also cut greater slope on foam shapes.



Finished window and A/C unit show new backwrapped joints. A/C sleeve sill too tight to install sealant system

Fixed Glass on 1st Floor

Original sill pan evidences water below sill/jamb corner



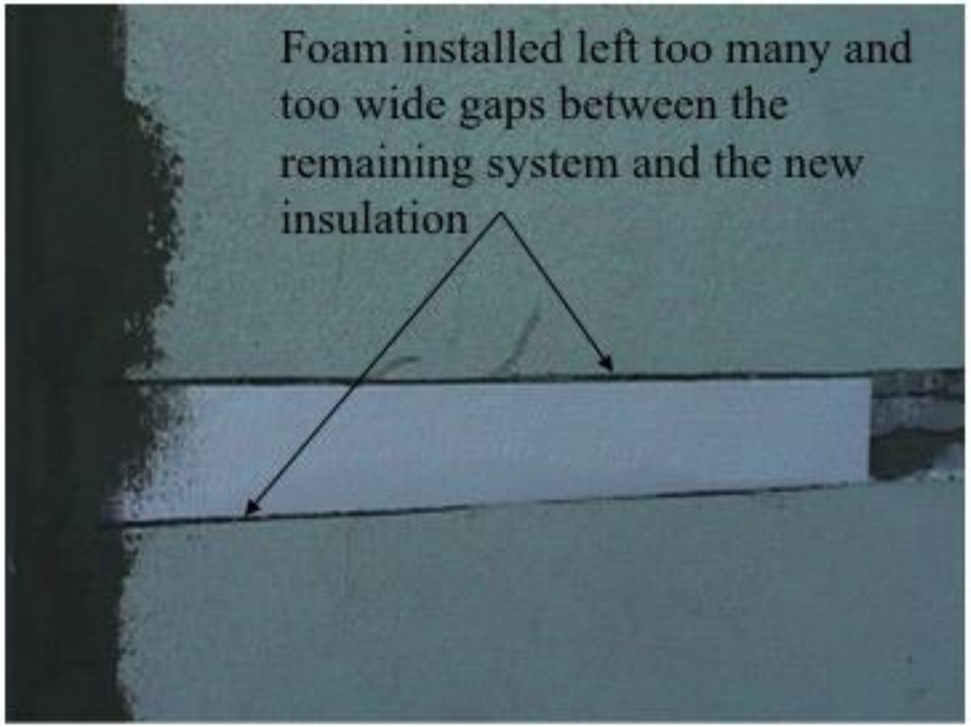
When torn apart the reason is that the jamb upturn stops and deposits all water in pan behind EIFS.

Framing Issues

Note no fasteners between studs and track. Also there were too few fasteners in sheathing. Bright studs are new studs to achieve wind load capacity.

The framing on the exterior walls is very poor.

Floor Line Reconstruction



Floor line grooves are too deep. They were cut out 12" and new foam, base coat, and finish was installed.

Miscellaneous Details

Very rough corner joint with fabric bridged and gaps in base coat.

This is a finished corner. The wall on the left is a frame wall and the wall on the right is concrete block. There should be a joint in the corner. There is a crack there now.

Roof Parapet Detail

Parapets are simply ended with no counterflashing.
The cap flashing is caulked to the wall.

Note: This photo is not from this project. But this condition did occur 8 times!