



**Apartment Building**  
New England  
2008

Investigation:  
Water Intrusion



The apartment building, built around 1900 as a church, is a wood-framed stucco building that had been converted to an affordable multi-family apartment building in 1992. BSC was retained by the owner to investigate evidence of water damage - cracking of stucco around the replacement windows and peeling of paint on some facades - that had occurred since the conversion. Using on-site investigation of cladding details, review of the original construction drawings, and discussions with the owners about the history of the building, BSC analyzed the building enclosure and window details for problems with water intrusion. The analysis showed that while there was no major structural damage, there was potential for recurring problems because of water infiltration in certain areas and because of the failure to provide adequate drainage once water was behind the cladding. Details for recommended repairs were developed for each of the following areas: drainage for stucco cladding; flashing and sealant at the horizontal trim band; retrofitting of the replacement window details; better water management detail at the eave, and repair of paint. In most cases, a series of options - from less to more extensive - were provided with the benefits and disadvantages of each explained. BSC provided field inspection during the repairs.

