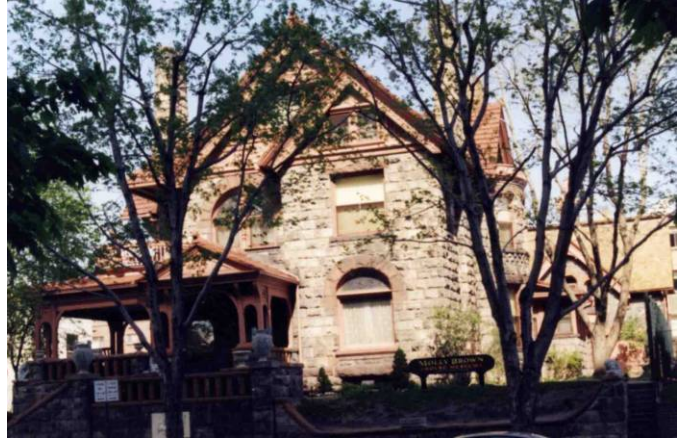


PROJECT

Molly Brown House Museum
Denver, Colorado

CLIENT

Historic Denver
Denver, Colorado



PROJECT DESCRIPTION

Construction of the Molly Brown house was completed in 1890. The three-bedroom house and carriage house are rhyolite stone and brick masonry on a rubble foundation. The house currently functions as a museum commemorating philanthropist and Titanic survivor Molly Brown. The brick masonry of the carriage house had deteriorated near ground level due to site grading and drainage problems. Brick masonry in the boiler room showed extensive deterioration with no apparent cause.

Atkinson-Noland & Associates was retained to diagnose the moisture problems in the boiler room, to perform material tests on brick and mortar from the structure, and to specify replacement materials. The work was funded by Historic Denver.

SERVICES PROVIDED BY ATKINSON-NOLAND

- Brick absorption and strength properties were determined in the laboratory, and specifications for replacement bricks were provided.
- Mortar constituents were determined by chemical analysis and sieving, and specifications for replacement mortars were provided.
- Hardness properties of brick and mortar were measured in situ and relative hardness was used as a criterion for specifying areas that required brick replacement and tuck pointing.
- Moisture content mapping of masonry in boiler room, monitoring of the boiler room after heavy spring rains, and other observations were used deduce that the observed deterioration was caused by conditions that no longer exist.



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