

PROJECT

Washington, Pease, and Fannin
Elementary Schools
Masonry Wall Grout Injection

CLIENT

Midland Independent School District
Midland, Texas

Right: Collar joint grout injection
underway at Pease Elementary School.



PROJECT DESCRIPTION

A project conducted for the Midland Independent School District involved remedial work to correct construction deficiencies on three elementary school buildings. The buildings were constructed of load-bearing concrete masonry with a brick veneer facing. The two wythes were separated by a collar joint with average thickness of 3/4 inch. Inadequate masonry materials and construction techniques led to the recommendation that empty masonry collar joints and head joints be filled by grout injection.

Atkinson-Noland & Associates teamed with Masonry Solutions International for this project. All cavities were filled with a cement-based grout using a small crew and mobile injection equipment. Grout injection did not interrupt normal building operations and the school buildings continued to operate during the entire process. Following injection, grout penetration was verified by nondestructive impact-echo testing and borescopic examinations.

SERVICES PROVIDED BY ATKINSON-NOLAND

- Condition assessment prior to commencing grout injection
- Veneer tie location
- Borescopic evaluation of collar joint
- Specification of grouting procedure
- Grout mix formulation
- Training and certification of grout injection personnel
- Impact-echo testing for verification of grout penetration



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