



TWIN CITY TESTING
AND ENGINEERING LABORATORY, INC.

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REPORT OF: TENSILE TEST OF METAL STUDS FROM COMPOSITE WALL PANEL

PROJECT: MATERIAL EVALUATION

DATE: June 27, 1985

REPORTED TO: ECS
Attn: Dale Johnson
13330 Newlander
Lindstrom, MN 55045

FURNISHED BY:

COPIES TO:

LABORATORY No. 4113 86-181

GENERAL:

On June 12, 1985, we received three 6" x 14 ga metal studs removed from a 9'-10 1/2" wide by 21'-4" high concrete/metal stud wall panel. A load test was conducted on the composite wall panel, and the results were reported on our Laboratory Number 4-5792 dated March 5, 1985 (revision date). The metal studs were submitted to determine if the mechanical properties conformed to a Grade 50 classification as listed in ASTM:A570.

A reduced-section tensile specimen was removed from each stud and tested to determine conformance with the material specification requirements. The specimens were machined and tested according to ASTM:E8.

TENSILE TEST RESULTS:

<u>Sample Number</u>	<u>Material Thickness</u>	<u>Yield Strength (0.2% Offset), psi</u>	<u>Tensile Strength, psi</u>	<u>Elongation in 2", %</u>
1	0.0769	59,500	80,700	22.5
2	0.0782	58,700	76,400	21.0
3	0.0788	57,100*	76,000	19.5

* A definite yield point was observed.

The above mechanical properties meet the requirements of a Grade 50 classification as listed in ASTM:A570.

REMARKS:

The test material will be retained for thirty days.

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.

Lewis M. DeG...
Date 6-28-85 Reg. No. 016929-7

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Twin City Testing and Engineering Laboratory, Inc.

By Daniel A. G...