

Project Number: T174-26

Report Date: April 29, 2026

No. of Pages: 6 (inclusive)

FM 4470

SECTION 4.6 "RESISTANCE TO FOOT TRAFFIC TEST"

Tested on:

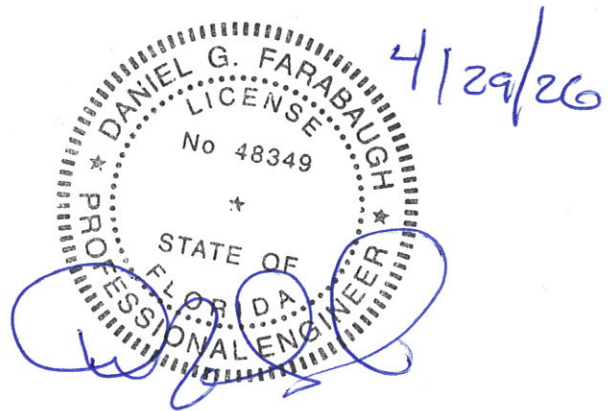
SPARTAN RIB PANEL

36" WIDE X 1-1/2" HIGH X 26 GA. STEEL PANEL
(2 SPANS @ 5'-0")

Tested For: STRUCTURES AMERICA

14369 FM 1314

CONROE, TX. 77302



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AAMA
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LABORATORY



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AA-715

Purpose

The referenced test methods were used to evaluate the panel specimens under concentrated load as provided herein.

Test Specimen

Manufacturer: Structures America
14369 FM 1314
Conroe, TX. 77302

Panel: Spartan Rib Roof Panel, 36" (35.79" coverage) wide x 1-1/2" height x 26 ga. Steel

Test Dates: April 16, 2026

Test Reference

FM 4470 (2016) Section 4.6 "Resistance to Foot Traffic Test"

Installation

- The panels were installed on to 12 ga supports with #12-14 X 1" long tek 3, self- drill, hex head fasteners with 5/8" diameter steel sealing washer at supports. The panel sidejoint was lap joint. The screws were attached with a specified spacing pattern across the width of the panel. See fastening pattern for location of fasteners across width of panel at end and interior support locations.

See attached drawings for assembly details.

Test Equipment

The load device used a hydraulic ram with a calibrated load cell. The bearing surface plate was a 3" X 3" steel plate with rounded corners.

Test Procedure

The test specimen was subjected to a series of 200 lb loads using a 3 in square steel plate base with rounded corners. The 200 lb load was placed on the test specimen at the designated locations, lifted off the specimen, and reloaded additionally for a total of 5 cycles.

CONCENTRATED LOAD TEST DATA

Specimen: Spartan Rib Roof Panel, 36" wide x 1-1/2" height x 26 ga. Steel

Span Condition: Spans @ 5'

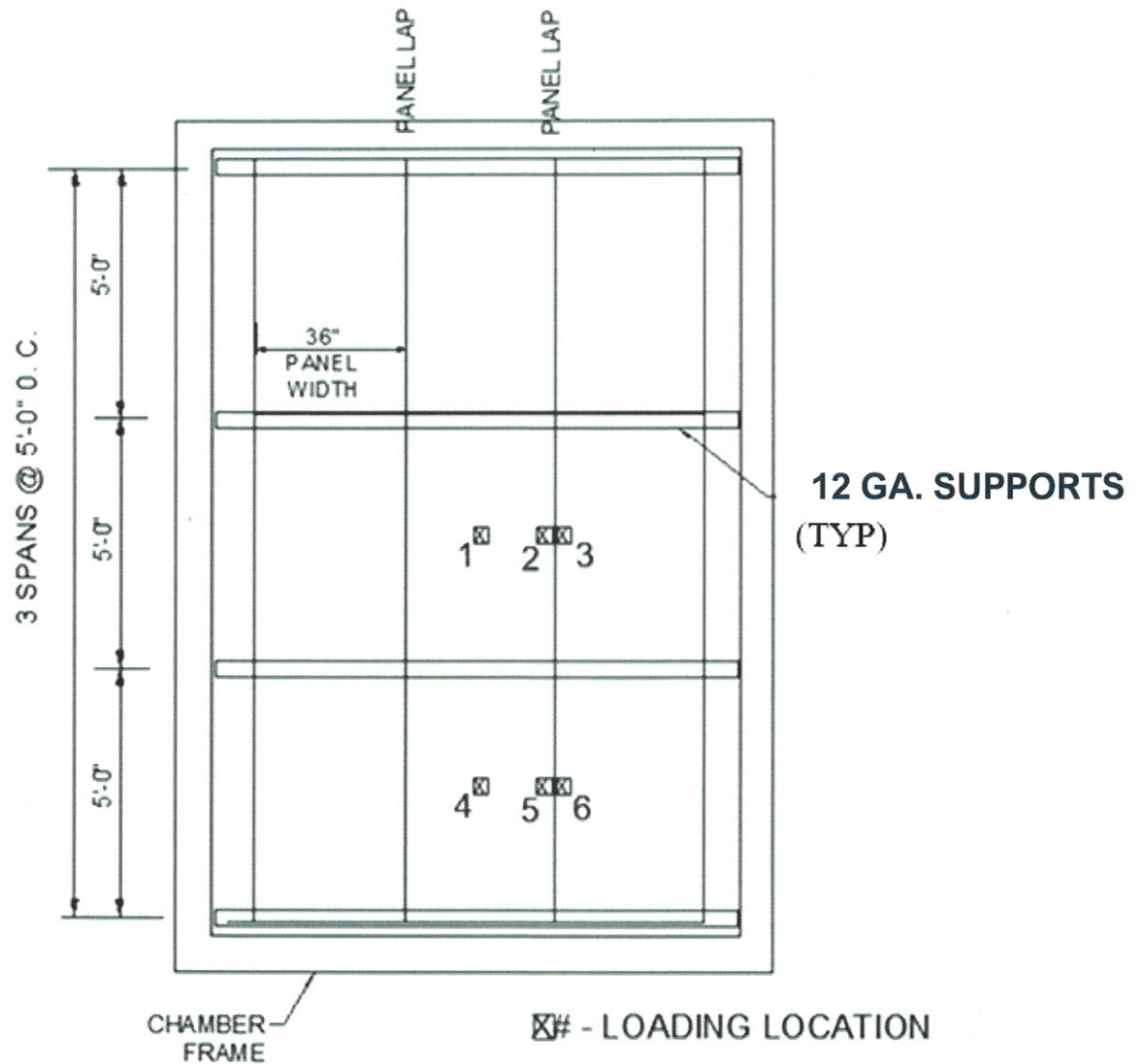
Load Bearing Plate: 3" X 3"

Load Point	Load Location (Reference Plan View)	Test Load	# of Load Cycles
L1	Center of Panel Flat at Mid-Span	200 lb	5
L2	Panel Flat Adjacent to Rib at Mid-Span	200 lb	5
L3	Panel Flat Adjacent to Rib at Mid-Span	200 lb	5
L4	Center of Panel Flat at End-Span	200 lb	5
L5	Panel Flat Adjacent to Rib at End-Span	200 lb	5
L6	Panel Flat Adjacent to Rib at End-Span	200 lb	5

Results

As a result of the loads imposed on the panel specimens, the panels showed no punctures, no visual buckling of the ribs and no visible seam separation after any of the load applications.

TEST SETUP

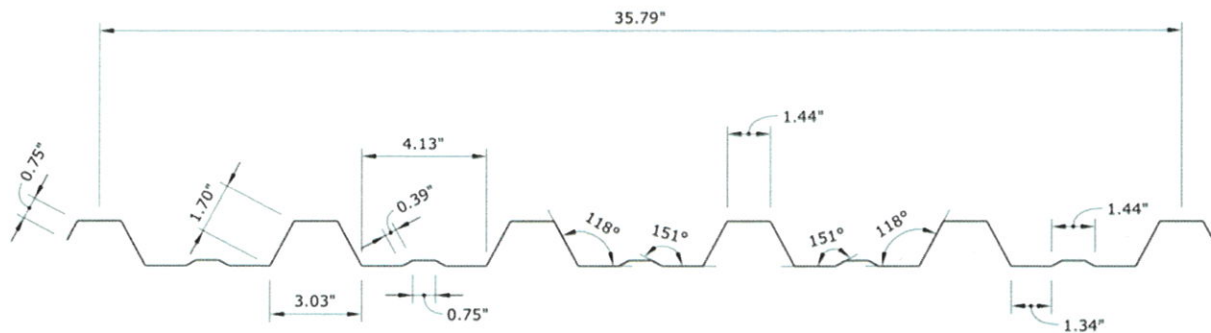
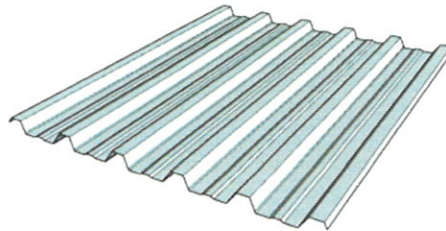


NOTE-200# APPLIED ON 3"
SQUARE BLOCK @ LOADING
LOCATIONS

PLAN VIEW



Spartan Rib

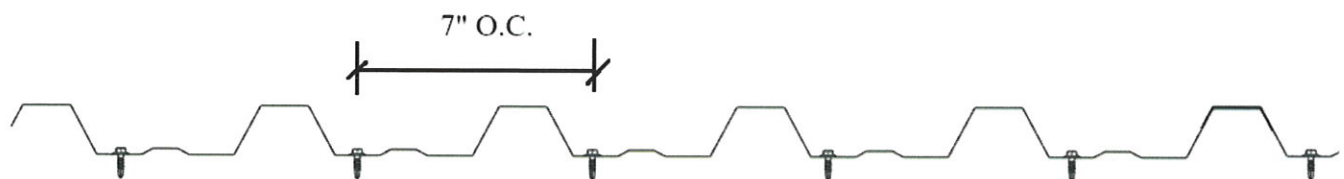


FASTENING PATTERNS

END OF PANEL



FIELD OF PANEL



TENSILE TEST REPORT

Client: Structures America
14369 FM 1314
Conroe, TX. 77302

Test Date: 4/29/2026

Test Method: ASTM A370-10

Specimen: Spartan Rib Roof Panel, 36" wide x 1-1/2" height x 26 ga.

Sample No.	Width (in)	Thickness (in)	Yield Load (lb)	Max. Load (lb)	0.2% Offset Yield Strength (psi)	Tensile Strength (psi)	Elongation (% in 2 inches)
26245	0.493	0.017	474.22	536.37	56,583	63,999	24.4

Equipment Used: Tensile Machine #QT7-061196-020
Extensometer #10311744D

Caliper #1074379
Micrometer #110596927

Report Prepared By:



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Reviewed and Approved By:



Daniel C. Farabaugh

Revision Log

Rev. #	Date	Page(s)	Revision (s)
0	April 29, 2026	6	Original Report Issue

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