

CLIENT: FenceTrac Fence Systems
11124 E Marshall
Tulsa, OK 74116

Project No: MED-2058a

Report Date: November 6, 2024

SAMPLE ID: Steel Privacy Fence with Composite Infill

SAMPLE DESCRIPTION: 6'-1" (73") by 6'-6" (78") high; See page 3 for full description.

SAMPLING DETAIL: The test sample manufactured by **FenceTrac Fence Systems** was submitted directly to QAI by the client. Samples were not independently selected for testing.

DATE OF RECEIPT: Samples were received at the QAI Miami, Laboratories on April 22, 2024.

TESTING PERIOD: October 22, 2024, through October 25, 2024.

TESTING LOCATION: QAI Laboratories – Miami, Florida, USA

AUTHORIZATION: QAI proposal number 24AM03203 dated March 20, 2024, signed by Tony Thompson Commercial Manager of FenceTrac Fence Systems, dated March 22, 2024.

TEST PROCEDURE: Testing to the following requirements:

- ASTM E330/E330M-14 Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference
- ASTM E1886-02 Standard Test Method for Performance of Exterior Windows, Curtain Walls, Doors, and Storm Shutters Impacted by Missile(s) and Exposed to Cyclic Pressure Differentials

TEST RESULTS: The Steel Privacy Fence with Composite Infill has **MET** Large missile impact level D when evaluated to ASTM E1886 and +/- 55.0 psf when evaluated to ASTM E330 (loads). Results are outlined within this report.

CONTENTS: Test report pages 1 through 5.

Prepared By

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Signed for and on behalf of
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Jose Sanchez
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DESCRIPTION OF SAMPLE	
Model Designation:	Steel Privacy Fence with Composite Infill
Overall Size:	6'-1" (73") by 6'-6" (78") high
Configuration:	O
Number of Panels:	One infill panel
Size of Panel:	6'-0 1/2" (72") by 6'-0 1/2" (72 1/2") high
Size of Boards in Panel:	6" wide by 6' long (12 each per panel)
Sample A-1	

Additional Information
The infill panel consisted of twelve 1" by 6" by 6' long boards set in 2" by 6' galvanized steel channels at the left and right and 3" by 6' galvanized steel channels at the top and bottom. All corners where the vertical and horizontal channels meet was mechanically fastened using one 1/4-20 by 1 1/2" round square neck carriage bolt with one 1/4-20 by 1 1/2" hex head with nut located 6", 18 1/2", 29", 42 1/4", 54 1/4", and 66 1/4". Vertical channels were fastened to the 3" by 3" by 12: gauge posts using a No. 10 by 5/8" self-tapping screws located 6" from top and bottom of the infill panel and 12" on center.

Sample Installation
The vertical posts were set into a 6" diameter hole with a 4 1/2" embedment into a 4,000-psi concrete test slab using **Quickcrete.

Sample: A-1	Temperature: 80.0°F	Barometric Reading: 30.0 inches Hg
Title of Test	Pressure	Notes
1/2 Structural Load Test Positive Load	41.3 psf	
	Results	Passed

Sample: A-1	Temperature:	80.0°F	Barometric Reading: 30.0 inches Hg	
Title of Test		Pressure	Notes	
Design Load Test Positive Load		55.0 psf		
See appendix A				
Reading#	Deflection	Permanent Set	Results	Add. Info
1	4.250"	0.178"	Passed	

Sample: A-1	Temperature: 80.0°F	Barometric Reading: 30.0 inches Hg
Title of Test	Pressure	Notes
1/2 Structural Load Test Negative Load	41.3 psf	
	Results	Passed

Sample: A-1	Temperature: 80.0°F	Barometric Reading: 30.0 inches Hg		
Title of Test		Pressure	Notes	
Design Load Test Negative Load		55.0 psf		
See appendix A				
Reading#	Deflection	Permanent Set	Results	Add. Info
1	4.250"	0.250"	Passed	

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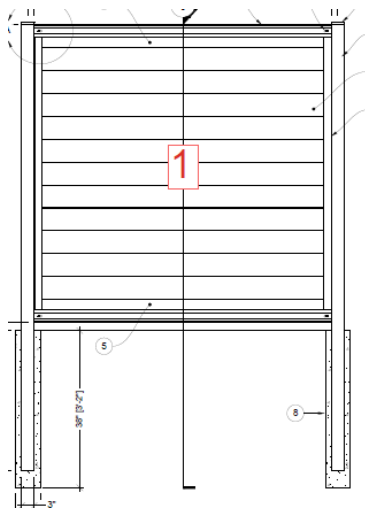


Sample: A-1	Temperature: 80.0°F	Barometric Reading: 30.0 inches Hg
Title of Test	Pressure	Notes
Uniform Structural Test Positive Load	82.5 psf	
See appendix A		
Reading#	Deflection	Permanent Set
1	6.500"	0.281"
Results	Add. Info	
Passed		

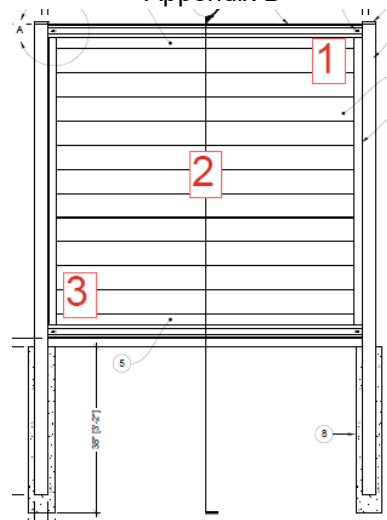
Sample: A-1	Temperature: 80.0°F	Barometric Reading: 30.0 inches Hg
Title of Test	Pressure	Notes
Uniform Structural Test Negative Load	82.5 psf	
See appendix A		
Reading#	Deflection	Permanent Set
1	7.000"	0.375"
Results	Add. Info	
Passed		

Sample: A-1	Temperature: 80.0°F	Barometric Reading: 30.0 inches Hg	
Title of Test		Notes	
Large Missile Impact Test			
Missile Weight		Missile	
9.25 pounds		2" by 4" by 92"	
See appendix B			
Impact	Speed	Results	Add. Info
1	49.8 ft/sec	Passed	
2	49.8 ft/sec	Passed	
3	49.0 ft/sec	Passed	

Appendix A



Appendix B



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Drawings referenced in this document are an integral part of this report, therefore, are required when distributing this test report. Test results obtained represent the actual value of the tested specimens and do not constitute opinion, endorsement or certification by this laboratory.

At conclusion of above tests, there was no apparent damage to sample, glass or fasteners. Test specimens were covered with 1.5 mil plastic sheeting to seal from air leakage when load test was performed, however this had no effect on above results.

REVISION HISTORY:

11/6/2024: Initial report release

12/3/2024: Corrected series name

12/10/2024: Corrected channel size

12/20/2024: Corrected typographical error under additional information

*****END REPORT*****

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