

L. Roberto Lomas P.E.

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Engineering Evaluation Report

Report No.: 512711D

Manufacturer: NovaTech Wall Systems
390 Old Spartanburg Highway
Wellford, SC 29385

Product Line: R-Trac HVHZ by NovaTech Wall Systems/RMAX/ALPOLIC MCM Wall

Compliance:

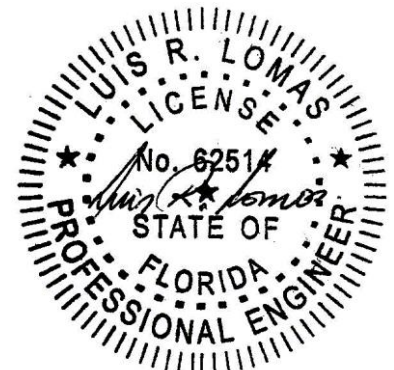
The product listed herein complies with requirements of the current Florida Building Code.

Supporting Technical Documentation:

1. Approval document: drawing number 08-01998 revision D, prepared, signed and sealed by Luis Roberto Lomas P.E.
2. Report No.: C5743.01-550-18 signed and sealed by Vinu J. Abraham, P.E.
Architectural Testing Inc. Lithia Springs, GA
TAS 201/ TAS 203 Large Missile Impact Test, Level D, Wind Zone 4
Cyclic Pressure loading ± 120.0 psf design pressure
TAS 202 Uniform Static Air Pressure, ± 120.0 psf design pressure, 18.0psf water penetration.
3. Report No.: C1134.01-550-36 signed by Ryan K. Hedgepeth.
Architectural Testing Inc. Lithia Springs, GA
ASTM E330 Test Uniform load: +200.0/-60.0psf
4. Report No.: C2063.01-550-36 signed by Ryan K. Hedgepeth.
Architectural Testing Inc. Lithia Springs, GA
ASTM E330 Test Uniform load: -120.0psf
5. Report No.: C3034.01-550-44 signed by Ryan K. Hedgepeth.
Architectural Testing Inc. Lithia Springs, GA
ASTM E330 Test Uniform load: -130.0psf
6. Report No.: C3691.01-550-44 signed by Ryan K. Hedgepeth.
Architectural Testing Inc. Lithia Springs, GA
ASTM E330 Test Uniform load: -190.0psf
7. Report No.: C3691.02-550-44 signed by Ryan K. Hedgepeth.
Architectural Testing Inc. Lithia Springs, GA
ASTM E330 Test Uniform load: -130.0psf
8. Report No.: C3691.03-550-44 signed by Ryan K. Hedgepeth.
Architectural Testing Inc. Lithia Springs, GA
ASTM E330 Test Uniform load: -190.0psf
9. Polyethylene and Thermoplastic core testing:
Report No.: 01-8361-038 signed by Alex B. Wenzel.
Southwest Research Institute, San Antonio TX
Report No.: 01-8361-320 signed by Alex B. Wenzel
Southwest Research Institute, San Antonio TX
Report No.: 01-43055.02 signed and sealed by Joseph A. Reed P.E.
Architectural Testing Laboratories, York, PA.

Results for Polyethylene Core:

Description	Tests	Results
Tensile Strength	ASTM E8	7452 PSI
Punching Shear Resistance (1" dia)	ASTM D732	4637 PSI
Punching Shear Max Load	ASTM D732	1920 PSI
Bond Integrity Vertical Pull	ASTM C297	1806 PSI
Drum Peel	ASTM D1781	33.6 IN – LB/IN
Flatwise Shear	ASTM C273	1225 PSI
Rate of Burning	ASTM D635	CCI
Flame Spread Index	ASTM E84	00
Smoke Developed Index	ASTM E84	00
Self Ignition Temperature	ASTM D1929	752°F
Flash Ignition Temperature	ASTM D1929	716°F



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Results for Thermoplastic Fire Retardant Core:

Description	Tests	Results
Tensile Strength	ASTM E 8	5693PSI
Punching Shear Resistance (1" dia)	ASTM D732	4637 PSI
Punching Shear Max Load	ASTM D732	2259 PSI
Bond Integrity Vertical Pull	ASTM C297	427 PSI
Drum Peel	ASTM D1781	27.6 IN-LB/IN
Flatwise Shear	ASTM C273	949 PSI
Rate of Burning	ASTM D635	--
Flame Spread Index	ASTM E84	00
Smoke Developed Index	ASTM E84	10
Self Ignition Temperature	ASTM D1929	837°F
Flash Ignition Temperature	ASTM D1929	811°F

10. Anchor calculations and comparative analysis, report number 512711-2, prepared, signed and sealed by Luis Roberto Lomas P.E.

Limitations and Conditions of use:

- Design pressure: Refer to installation instructions.
- Panel size: 59 1/4"x143"
- This product is rated to be used in the HVHZ.
- Qualified panel thickness: 4mm(minimum)
- Panel material to be manufactured by Mitsubishi Plastics composite with 3105-H14 aluminum face .020" minimum thickness with Polyethylene or fire retardant core.
- Panels maybe obtained under the following brand names and manufacturers:
 - Alpolic by Mitsubishi Plastics.
 - Alfrex FR by Alfrex, LLC

Installation:

Units must be installed in accordance with manufacturer's installation instructions and approval document 08-01998, Revision D.

Certification of Independence:

Please note that I do not have nor will acquire a financial interest in any company manufacturing or distributing the product(s) for which this report is being issued. Also, I do not have nor will acquire a financial interest in any other entity involved in the approval process of the listed product(s).

