

L. Roberto Lomas P.E.

1432 Woodford Rd.
Lewisville, NC 27023
434-688-0609
rlomas@lrlomaspe.com

Engineering Evaluation Report

Report No.: 512566E

Manufacturer: Solar Innovations, Inc
31 Roberts Road
Pine Grove, PA 17963

Product Line: Series SI3000 Impact FGW 3x8 Panel Radius Wall

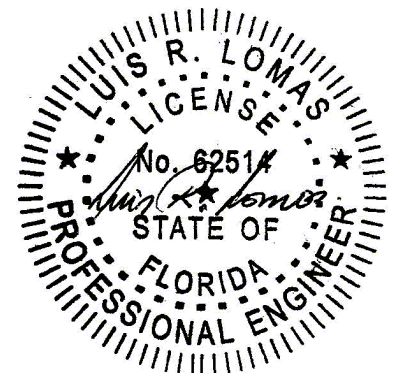
Compliance:

The above mentioned product has been evaluated for compliance with the requirements of the Florida Department of Business and Professional Regulation for Statewide Acceptance per Rule 61G20-3.005 method 1(d). The product listed herein complies with requirements of the Florida Building Code.

Supporting Technical Documentation:

1. Approval document: drawing number 08-01877 Revision C, prepared, signed and sealed by Luis Roberto Lomas P.E.
2. Test report No.: NCTL 110-15540-1 signed and sealed by Robert H Zeiders P.E.
National Certified Testing Laboratories, York, PA
TAS 201 Large Missile Impact Test, Level D, Wind Zone 4
TAS 202 Uniform Static Air Pressure, ±70.0psf design pressure, 9.0psf water penetration.
TAS 203 Cyclic Pressure loading ±80.0psf design pressure
3. I-Strut Testing:
 - a. Test report ETC-07-1043-19094.0, signed and sealed by Joseph Labora Doldan P.E.
ETC Laboratories, Rochester, NY, ASTM D638
Tensile strength of unexposed samples 10,390psi
Tensile strength of 4500 hour Xenon Arc exposed samples 11,004psi
 - b. Test report ETC-08-1043-20974.0 signed and sealed by Joseph Labora Doldan P.E.
ETC Laboratories, Rochester, NY, ASTM D1929 Self ignition 740°F
 - c. Test report ATI 61261.01-106-18 signed and sealed by Joseph Reed P.E.
Architectural Testing Inc. York, PA
ASTM D635 Rate of burning classification: CC1 (23.9mm/min, .94in/min)
ASTM D2843 Smoke density rating: 2.1
4. EPDM testing:
Test report No.: PN 105435 Signed by Jim Drummond
Akron Rubber Development Laboratory, Inc. Akron OH an A2LA accredited testing laboratory.
Certificate numbers 255.01 and 255.02

| | |
|------------|--------------------------------------------------------------------|
| ASTM D2240 | Hardness, Shore A: 71 durometer |
| ASTM D395 | Compression set, 22 h @ 100 C, max. %: 22 |
| ASTM D1149 | Ozone resistance, 100 MPa, 100 h @ 40 C, 20% elongation: No cracks |
| ASTM D412 | Tensile strength: 1410 psi |
| ASTM D412 | Elongation @ rupture, min. %: 266 |
| ASTM D573 | Heat aging, 70 h @ 100 C: +4 |
| ASTM D573 | Hardness increase, max. duro. Points |
| | Change in tensile strength, max. %: +8% |
| | Change in elongation, max. %: -21% |
| ASTM D624 | Tear strength, min: 126.2 lbf/in |
| ASTM D746 | Brittleness temperature, 3 minutes @ -40 C: No cracks |
| ASTM D925 | Non-staining: No migratory stain |
| ASTM C1166 | Flame propagation: No limit |
5. Anchor calculations, report number 512566-1B, prepared, signed and sealed by Luis Roberto Lomas P.E.
6. Comparative analysis, report number 512566-2, prepared, signed and sealed by Luis Roberto Lomas P.E.



L. Roberto Lomas P.E.

1432 Woodford Rd.

Lewisville, NC 27023

434-688-0609

rlomas@lrlomaspe.com

Engineering Evaluation Report

Report No.: 512566E

Limitations and Conditions of use:

- Maximum design pressure: Refer to installation instructions.
- Approved configurations: Unlimited number of panels in unlimited configurations are approved as long as individual panel area does not exceed 24.06 ft² and uses vertical conditions as shown in approval document.
- Units must be glazed per ASTM E 1300, according with glazing details in approval drawing.
- This product is rated to be used in the HVHZ.
- This product is impact resistant and does not require impact protection in wind borne debris regions.
- Frame material to be Extruded Aluminum 6063-T6

Installation:

Units must be installed in accordance with manufacturer's installation instructions and approval document, 08-01877 Revision C.

Certification of Independence:

Please note that I don't 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 don't have nor will acquire a financial interest in any other entity involved in the approval process of the listed product(s).

