



**INTEGRITY METALS**  
Architectural Fabrication

# FLORIDA PRODUCT APPROVAL

## FL 28113.01 – R4 HVHZ

### IM 450SL

032 Aluminum (min) 1.5" snaplock panel over 15/32" (min) plywood



**Product Description:** Snaplock, clip-anchored panel with a 15.5" maximum panel width and a nominal rib height of 1.5".

**Product Material:** Nominally 0.032" aluminum or thicker.

**Fastener:** #10 1-inch pancake style fastener, 2 fasteners per clip. *Compliant with FBC 1506.6 where required.*

**Clip:** Nominal 3" long x 1.3" tall 24ga clip. *Compliant with FBC 1506.6 where required.*

Larger diameter and longer length fasteners are acceptable. Stainless fasteners are acceptable.

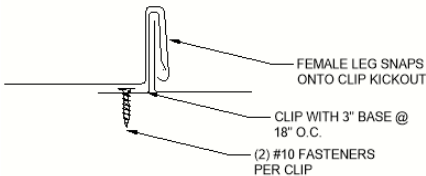
**Substrate/Deck:** 15/32" (min) plywood or 3/4" (min) thick wood plank (min S.G. of 0.42)

**Maximum Allowable Loads & Installation Requirements:**

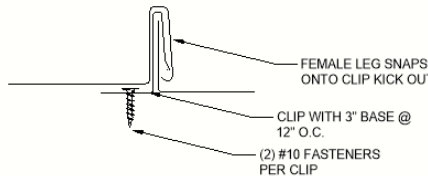
Method	Fastener Pattern	Clip Spacing	Allowable Pressure
Method A	(2) #10 x 1" fasteners per clip	18" o.c.	-92.25 PSF
Method B	(2) #10 x 1" fasteners per clip	12" o.c.	-131 PSF
Method C	Continuous, full-length clip. Fasteners at 6" o.c.	Full-length clip	-161 PSF

*A factor of safety of 2 has been applied.*

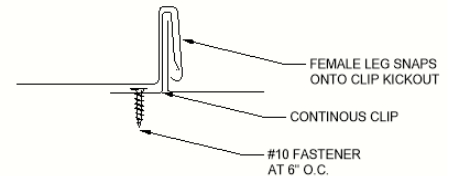
#### METHOD A



#### METHOD B



#### METHOD C

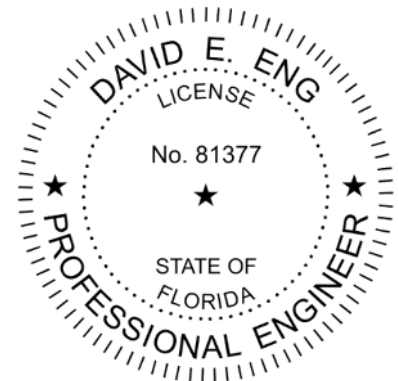


**EVALUATED BY:**

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*Digitally signed by David E Eng*  
Date: 2023.09.03 11:47:13-04'00'

This item has been digitally signed and sealed by David Eng, PE on the date indicated. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.





**Underlayment:** Comply with local building code or FBC 1507.1.1/1518.2 where required.

**Slope:** Comply with local building code or FBC 1507.4.2/FBC 1515.2 where required. Outside the HVHZ, FBC 1507.4.2 minimum slope is 1/4:12. In the HVHZ, FBC 1515.2 minimum slope is 2:12.

**Re-Roofing:** This panel may be installed over a single layer of existing shingles as permitted by local building code or FBC 1511/1521, provided the existing roof meets the conditions required by the applicable code.

**Fire Barrier:** Comply with FBC 1516.1 and 1516.2 where required.

**Technical Documentation:** This product has been tested to the TAS 125 / UL 580 standard by Intertek Testing (TST-1527), report K0525.08-450-44 R0 and to TAS 100 under report K0525.03-450-44 as referenced in FL30780.01R0. Tests used with permission.

**Compliance Statement:** This product as described has demonstrated compliance with Florida Building Code 2023, 1504.3.2 (**non-HVHZ**) and 1518.9.1/1523.6.5.2.4 (**HVHZ**), as required by FL Rule 61G20-3, method 1D. This product as described has been tested and demonstrated compliance with:

- UL580 – Test for Uplift Resistance of Roof Assemblies
- UL 1897 – Uplift test for roof covering systems
- TAS 125 – Standard Requirements for Metal Roofing Systems
- TAS 100 - Wind and Wind-Driven Rain

**High Velocity Hurricane Zone (HVHZ):** This product is approved for installation in Miami-Dade & Broward counties, and other jurisdictions which require HVHZ or NOA approvals.

**Design Process:** Compare the maximum allowable loads on page 1 to the ASD uplift pressures for the project to determine sufficiency and installation requirements. Determine project uplift pressures using ASCE 7-22, FBC R301, project design documents, guidance from local building department, or other design professionals. Engineering analysis may be completed by other licensed engineers for project specific approval by local authorities having jurisdiction.

**Notice to Other Entities:** This product approval applies only to metal panel products produced by Integrity Metals. Without a valid purchase order from Integrity Metals as documentation, this product approval shall not be used to demonstrate compliance for any project. Integrity Metals assumes no liability for non-compliance or product performance for any product relying on this approval but not manufactured by Integrity Metals. Other manufacturers, distributors, installers, engineers, architects, or other parties relying on this approval for any product not produced by Integrity Metals assume full, strict product liability. Traceability of coil, audited quality assurance programs, and compliance with FAC 61G20-3 are solely the responsibility of the entity relying on this approval for any product not produced by Integrity Metals.

**CERTIFICATION OF INDEPENDENCE:** David Eng, PE and Timberlake Cove, LLC do not have, nor will acquire a financial interest in any company manufacturing or distributing products under this evaluation. The same entities do not have, nor will acquire, a financial interest in any other entity involved in the approval process of the product.

**EXCLUSIONS AND LIMITATIONS:** Design of deck and roof structure (to include attachment of plywood or wood plank) shall be completed by others. Fire classification and shear diaphragm design are outside the scope of this evaluation. Accelerated weathering/salt spray is outside the scope of this evaluation.

This report is limited to compliance with structural wind load requirements of FBC 1504.3.2, as required by Rule 61G20-3. Neither Timberlake Cove nor the manufacturer shall be responsible for any conclusions, interpretations, or designs made by others based on this evaluation report. This report is limited solely to documenting compliance with Rule 61G20-3, and makes no express or implied warranty regarding performance of this product. Installation shall be subject to the local building code and authority having jurisdiction; this report shall not be construed to supersede local codes in force.

