175SL

1.75” SNAP-LOK 032 ALUMINUM
032 Aluminum (min) 1.75” Snaplock over 22ga (min) B Deck

Metal Alliance, Inc:

2120 SW Poma Dr | Palm City FL 34990
Produced by Metal Alliance’s Network of Approved Regional Manufacturers

Product Description

Snaplock, clip-anchored panel with a 18” maximum panel width and a nominal rib height of 1.75”

Product Material

Nominally 0.032” aluminum or thicker.

Fastener

#15 2-inch pancake style fastener and nominally 3.5” long x 1.75” tall 18ga clip with (2) fasteners per clip.
Compliant with FBC 1506.6 where required.

Substrate/Deck

22ga (min) B Deck or similar style steel deck

EVALUATED BY:

David Eng, PE
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Digitally signed by David E Eng
Date: 2024.03.03 22:18:40-05'00'

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.

DAVID E. ENG
LICENSE
No. 81377
STATE OF FLORIDA
PROFESSIONAL ENGINEER

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.

Insulation: ISO board or other insulation is permitted between steel deck and panels. Increase fastener length to ensure full penetration into steel deck. Tested condition was 3.5” insulation, 0.5” gypsum board with 6” screws.

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

Technical Documentation: This product has been tested to the TAS 125 / UL 580 standard by Intertek Testing (TST-1527), report J6368.10-450-44 R0 and to TAS 100 under report J6368.08-450-44 R0.

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

Maximum Allowable Loads & Installation Requirements:

Method	Fastener Pattern	Clip Spacing	Other Requirements	Allowable Pressure
Method A	(2) #15 x 2” fasteners per clip	17” o.c.	Install over self-adhering underlayment	-123.5 PSF
Method B	(2) #15 x 2” fasteners per clip	10” o.c.	Install over self-adhering underlayment	-153.5 PSF

A factor of safety of 2 has been applied.

Design Process: Compare the maximum allowable loads on page 2 to the ASD uplift pressures for the project to determine sufficiency and installation requirements.

Alternatively, as an option, the load tables in this report provides one prescriptive option for the fastening requirement for the applicable wind loads for roofs within the parameters described.

For roofs outside of the listed parameters, design wind loads shall be determined as required by FBC 1609, ASCE 7, or other design code in force, using allowable stress. These load tables are based on ASCE 7-22. Use of these tables assumes that the structure is: Enclosed and conforms to wind-borne debris provisions and is a regular shaped building and is not subject to across-wind loading, vortex shedding, or instability; nor does it have a site location for which channeling or buffeting warrant consideration

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 supplied by Metal Alliance or its formally approved manufacturing partners. Other manufacturers, distributors, installers, engineers, architects, or other parties relying on this approval for any product not supplied by Metal Alliance 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. Metal Alliance assumes no liability for non-compliance or product performance for any product relying on this approval but not supplied by Metal Alliance.

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.

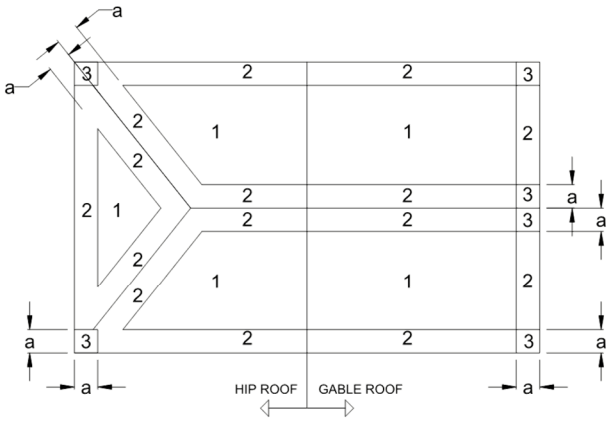
OPTIONAL ENGINEERING LOAD TABLES

175SL FL30780.05 – R5 *HVHZ*

Use of Load Tables: These load tables are provided as a courtesy to provide one possible prescriptive option for a generic, typical structure without calculating the design pressures.

For structures outside the parameters of these load tables (e.g. height above 30 feet), calculate the required allowable design pressure and compare to the maximum allowable loads shown on page 2. These load tables shall not be construed to in any way limit the installation of this product to the cases shown.

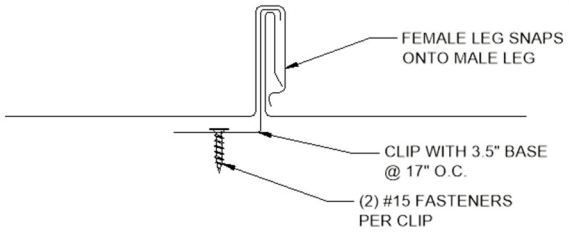
Instructions: Select the appropriate load table that applies to the structure in question. Determine the design wind speed for the project location. Use the attachment method indicated for that windspeed within each roof zone.



a: 10% OF LEAST HOIZONTAL DIMENSION OR 0.4h, WHICHEVER IS SMALLER, BUT NOT LESS THAN EITHER 4% OF LEAST HORIZONTAL DIMENSION OR 3FT (0.9M). OR AS DETERMINED BY DESIGN OR OTHER APPLICABLE CODE.

ROOF ZONES FOR GENERIC BUILDING

METHOD A



Use this load table for structures which meet the following criteria:
Are located in **Exposure B** area
Have either a **flat roof, or gable/hip roof** with **max slope of 45°**
Have a mean Roof Height of **30 feet or less**

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Wind	105	110	120	130	140	150	160	170	180	190	200
Zone 1:	A	A	A	A	A	A	A	A	A	A	A
Zone 2:	A	A	A	A	A	A	A	A	A	A	A
Zone 3:	A	A	A	A	A	A	A	A	A	B	B

Use this load table for structures which meet the following criteria:
Are located in **Exposure B** area
Have either a **flat roof less than 7°, hip roof** with
max slope of 45°, or gable roof with slope between 20° and 45°
Have a mean Roof Height of **30 feet or less**

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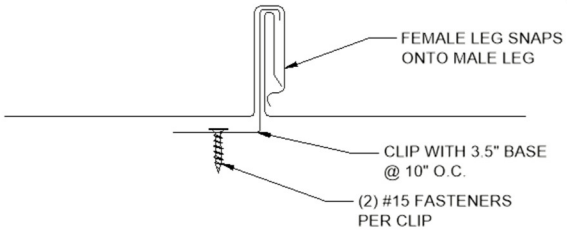
Zone 1:	A	A	A	A	A	A	A	A	A	A	A
Zone 2:	A	A	A	A	A	A	A	A	A	A	A
Zone 3:	A	A	A	A	A	A	A	A	A	A	B

METHOD B



Use this load table for structures which meet the following criteria:
Are located in **B, C, or D exposure** area
Have either **a flat roof, or gable/hip roof** with **max slope of 45°**
Have a mean Roof Height of **30 feet or less**

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Wind	105	110	120	130	140	150	160	170	180	190	200
Zone 1:	A	A	A	A	A	A	A	A	A	A	B
Zone 2:	A	A	A	A	A	A	A	B	B	NR	NR
Zone 3:	A	A	A	A	A	B	B	NR	NR	NR	NR

Use this load table for structures which meet the following criteria:
Are located in **B, C, or D exposure** area
Have either a **flat roof less than 7°, hip roof** with
max slope of 45°, or gable roof with slope between 20° and 45°
Have a mean Roof Height of **30 feet or less**

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Wind	105	110	120	130	140	150	160	170	180	190	200
Zone 1:	A	A	A	A	A	A	A	A	A	A	A
Zone 2:	A	A	A	A	A	A	A	A	B	B	NR
Zone 3:	A	A	A	A	A	A	B	B	NR	NR	NR