032 1.5” Mechanical Seam

032 Mechanical Seam over 15/32” plywood

Florida Product Approval Number 46540.03-R2

Manufacturer:
Sabre Metals of Florida, LLC
1100 Charles Street, Longwood, FL 32750
Phone: 407-598-0811
www.sabremetalsllc.com

Product: Mechanical seam standing seam panel with nominal rib height of 1.5” and max panel width of 16”.

Material: Nominally 0.032” aluminum or thicker.

Fastener: #10 x 1” pancake-style fastener, compliant with FBC 1506.6 and FBC 1711. (2) per clip.

Clip: Nominally 1.5” tall 26ga fixed clip with nominally 2” x 1” base or larger. Compliant with FBC 1506.7.

Substrate/Deck: Minimum 15/32” thick plywood.

Underlayment: Comply with FBC 1507.1.1/1518.2 where required.

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

Slope: Comply with FBC 1507.4.2/FBC 1515.2 where required. (See note on page 2.)

Metal Hip and Ridge Covers: Comply with FBC 1504.3.1.1 where required.

Max. Allowable Loads & Installation Requirements:
Method A: 56 psf | Install (2) #10 x 1” fasteners per clip with clips at 16” o.c. and panel seamed to 90° seam.
Method B: 108.5 psf | Install (2) #10 x 1” fasteners per clip with clips at 8” o.c. and panel seamed to 90° seam with continuous bead of Bostik 915 or similar sealant applied to top of male leg.
Factor of Safety of 2.0 applied to calculate allowable loads.

Compliance statement: This product as described has demonstrated compliance with Florida Building Code 2026 (9th Edition), Section 1504.3.2 (**non-HVHZ)** and 1518.9.1/1523.6.5.2.4 (**HVHZ**), as required by Rule 61G20-3, method 1D

Evaluated By:
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This item has been digitally signed and sealed by D.E. 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

Max Slope and ASTM E-2140:
In the HVHZ, this panel has been tested to ASTM E-2140 and may be installed at 1:12 – 2:12 slope, with a continuous bead of a Miami Dade Approved Sealant applied along the top of leg of the male panel before attaching and seaming the adjacent panel. Slopes at 2:12 or above do not require sealant for watertightness. Installation outside of HVHZ does not require sealant for watertightness unless compliance with ASTM E-2140 is otherwise required.

Technical Documentation:
This product has been tested to the TAS 125/UL 580 standard by Intertek (TST-1527), report Q5627.01-450-18, to TAS 100, report Q5627.07-450-18, and to ASTM E-240, report Q5627.06-450-18.

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 & Limitations: Design of deck and roof structure (to include deck attachment) 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. Metal hip and ridge covers is outside the scope of this evaluation. 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.
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.

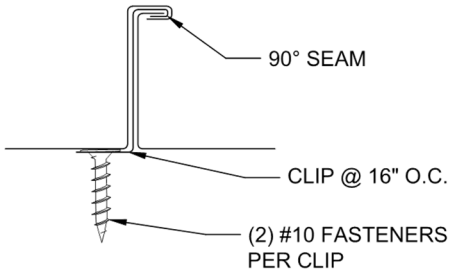
Design Process: The load tables in this report provide several prescriptive options for the fastening requirement for the applicable wind loads for roofs within the parameters described. For roofs outside of the listed parameters, design wind loads shall be determined as required by FBC 1609, ASCE 7, 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
- 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

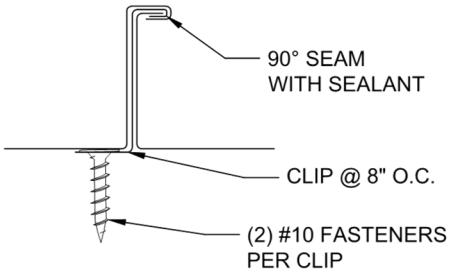
Engineering analysis may be completed by other licensed engineers for project specific approval by local authorities having jurisdiction

Optional 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.
Contact the manufacturer for further information, or consult a licensed design professional.

METHOD A



METHOD B



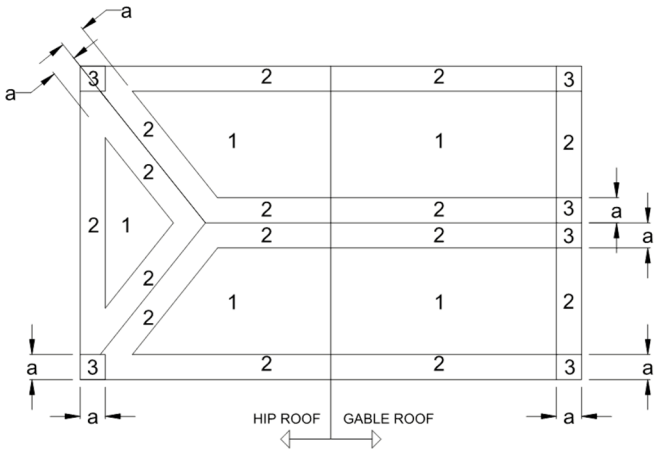
Instructions:

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.

See Note on previous page.



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

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 12:12**
Have a mean Roof Height of **30 feet or less**

FL46540.03: 032 1.5" Mechanical on 15/32" plwyood

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

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 12:12, or gable roof with slope between 4.4:12 & 12:12
Have a mean Roof Height of **30 feet or less**

FL46540.03: 032 1.5" Mechanical on 15/32" plwyood

Wind	105	110	120	130	140	150	160	170	180	190	200
Zone 1:	A	A	A	A	A	A	A	A	B	B	B
Zone 2:	A	A	A	A	A	B	B	B	B	B	B
Zone 3:	A	A	A	A	B	B	B	B	B	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, or gable/hip roof** with **max slope of 12:12**
Have a mean Roof Height of **30 feet or less**

FL46540.03: 032 1.5" Mechanical on 15/32" plwyood

Wind	105	110	120	130	140	150	160	170	180	190	200
Zone 1:	A	A	A	A	B	B	B	B	B	NR	NR
Zone 2:	A	B	B	B	B	NR	NR	NR	NR	NR	NR
Zone 3:	B	B	B	B	NR	NR	NR	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 12:12, or gable roof with slope between 4.4:12 & 12:12
Have a mean Roof Height of **30 feet or less**

FL46540.03: 032 1.5" Mechanical on 15/32" plwyood

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