



EVALUATION REPORT

FLORIDA BUILDING CODE 6TH EDITION (2017)

Manufacturer: L.V. THOMPSON, INC.
dba Thompson Architectural Metals Company (TAMCO)
5015 E. Hillsborough Ave
Tampa, FL 33610
(813) 248-3456
<http://www.tamcometalroof.com>

Issued April 3, 2020

TM-LOCK
FL16667.3

Manufacturing: Tampa, FL

Quality Assurance: PRI Construction Materials Technologies (QUA9110)

SCOPE

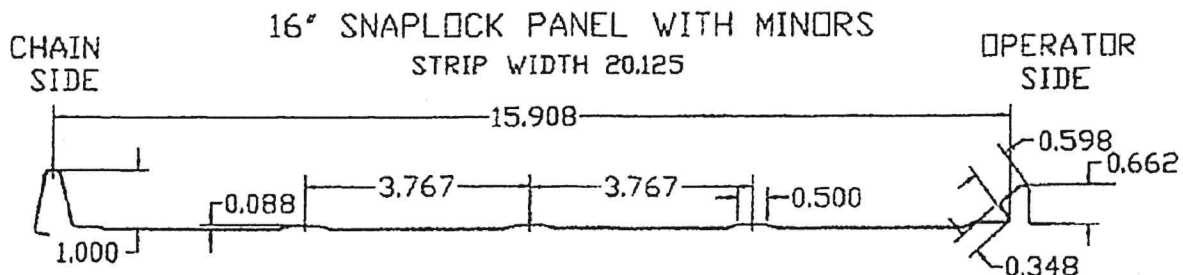
Category: Roofing
Subcategory: Metal Roofing
Code Sections: 1504.3, 1518.9.1, 1523.1.1, 1523.6.5.2.4, 1523.6.5.2.4.1
Properties: Wind Resistance

REFERENCES

Entity	Report No.	Standard	Year
Hurricane Test Laboratory, LLC (TST1527)	0297-0602-02	TAS 125	2003
		UL 580	2006
		UL 1897	2012
PRI Construction Materials Technologies (TST5878)	LVTI-023-02-01	TAS 100	1995
PRI Construction Materials Technologies (TST5878)	LVTI-023-02-02	TAS 125	2003
		UL 580	2006
		UL 1897	2012
PRI Construction Materials Technologies (TST5878)	LVTI-023-02-03	UL 580	2006

PRODUCT DESCRIPTION

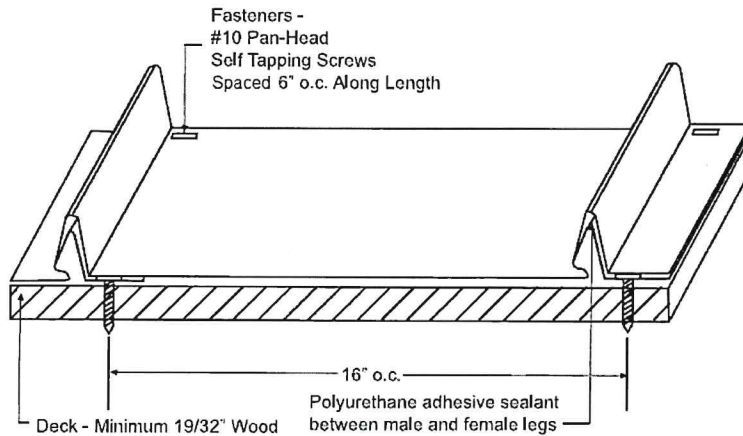
Panel: TM-Lock
Description: Preformed, snap lock panel with integrated fastening strip; 1-inch seam; Maximum 16-inch coverage; Non-structural application
Material: Min. 26 ga. ASTM A792 AZ55 (non-HVHZ only) or ASTM A653 G90 steel (F_y = min. 50 ksi); Shall conform with FBC Section 1507.4.3



TM-Lock Panel Profile

APPROVED ASSEMBLIES

TM-Lock System 1:	
Slope:	Shall be in accordance with FBC.
Roof Deck:	Solid or closely fitted min. 19/32 in. plywood sheathing for new and existing construction at max. 24 in. span; Designed by others in accordance with FBC requirements.
Underlayment:	Installed in accordance with FBC requirements. In the HVHZ, the minimum underlayment shall be ASTM D 226, Type II installed in accordance with Sections 1518.2 and 1518.4 or any approved underlayment for use in the HVHZ.
Attachment:	One (1) #10-12 x minimum 1" Pan-Head Self-Tapping Screw shall be applied maximum 6 in. o.c. along the fastening strip. Apply a continuous 3/8-inch bead of 3M Scotch-Seal adhesive along the male rib before snapping panels together. Fasteners shall penetrate the deck a minimum 3/16-inch and shall conform to FBC Sections 1507.4.4 and 1506.6.
Maximum Design Pressures:	-102.5 psf <i>Pressure calculated using 2:1 margin of safety per 1504.9</i>



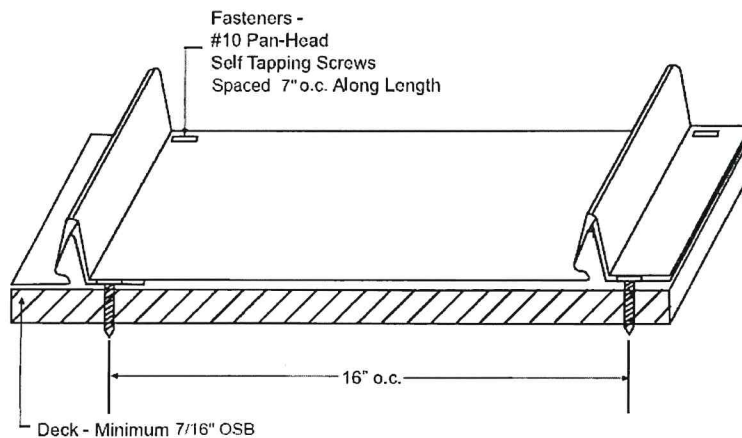
Maximum Mean Roof Heights for Gable/Hip Roofs
Slopes 2:12 – 6.1:12 and >6.1 – 12:12 (Gable Roofs only)

Exposure	Basic Wind Speed (mph)								
	120	130	140	150	160	170	180	190	200
Zone 1									
B	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft
C	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft
D	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft
Zone 2									
B	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft
C	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft	40 ft
D	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft	52 ft	28 ft	19 ft
Zone 3 ^A									
B	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft	44 ft	30 ft
C	60 ft	60 ft	60 ft	60 ft	52 ft	28 ft	19 ft	NA	NA
D	60 ft	60 ft	60 ft	46 ft	22 ft	NA	NA	NA	NA

Notes: 1) Exposure category for the structure location shall be as defined in the Florida Building Code 2) Limitations are based on an effective wind area of 10ft² or less 3) Topographic factors such as escarpments or hills are not included in the above assessment 4) Applicable for Enclosed Buildings without overhangs 5) NA = "Not Allowed" 6) $K_d = 0.85$ 7) Projects with mean roof heights of greater than 60 ft shall be evaluated by a licensed design professional 8) See page 6 for details for dimensions and locales of Zone 1, 2, and 3 9) V_{ult} is shown in the tables above. Design wind loads are calculated using $V_{asd} = V_{ult} \cdot 0.6$ per 1609.3.1.

^AFor hip roofs 2:12 to 5.6:12, Zone 3 shall be treated as Zone 2.

TM-Lock System 2: (non-HVHZ only)	
Slope:	Shall be in accordance with FBC.
Roof Deck:	Minimum 7/16-inch APA span rated OSB sheathing, minimum 15/32-inch APA span rated plywood sheathing or wood plank for new and existing roof deck. Deck shall be designed by others in accordance with FBC requirements.
Underlayment:	Installed in accordance with FBC requirements.
Attachment:	One (1) #10 x minimum 1" Pancake Head Screw, Type 17 point shall be applied maximum 7 in. o.c along the fastening strip. Fasteners shall penetrate the deck a minimum 3/16-inch and shall conform to FBC Sections 1507.4.4 and 1506.6.
Maximum Design Pressures:	-45 psf <i>Pressure calculated using 2:1 margin of safety per 1504.9</i>



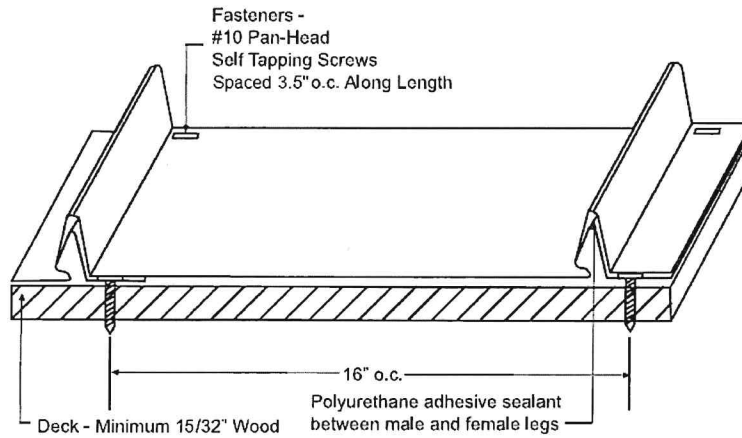
Maximum Mean Roof Heights for Gable/Hip Roofs
Slopes 2:12 – 6.1:12 and >6.1 – 12:12 (Gable Roofs only)

Exposure	Basic Wind Speed (mph)								
	120	130	140	150	160	170	180	190	200
Zone 1									
B	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft	48 ft	35 ft
C	60 ft	60 ft	60 ft	60 ft	60 ft	35 ft	20 ft	NA	NA
D	60 ft	60 ft	60 ft	55 ft	27 ft	NA	NA	NA	NA
Zone 2									
B	60 ft	60 ft	60 ft	50 ft	31 ft	NA	NA	NA	NA
C	60 ft	48 ft	23 ft	NA	NA	NA	NA	NA	NA
D	50 ft	20 ft	NA	NA	NA	NA	NA	NA	NA
Zone 3 ^A									
B	60 ft	35 ft	NA	NA	NA	NA	NA	NA	NA
C	19 ft	NA	NA	NA	NA	NA	NA	NA	NA
D	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: 1) Exposure category for the structure location shall be as defined in the Florida Building Code 2) Limitations are based on an effective wind area of 10ft² or less 3) Topographic factors such as escarpments or hills are not included in the above assessment 4) Applicable for Enclosed Buildings without overhangs 5) NA = "Not Allowed" 6) $K_{z1} = 0.85$ 7) Projects with mean roof heights of greater than 60 ft shall be evaluated by a licensed design professional 8) See page 6 for details for dimensions and locales of Zone 1, 2, and 3 9) V_{ult} is shown in the tables above. Design wind loads are calculated using $V_{asg} = V_{ult} \sqrt{0.6}$ per 1609.3.1.

^AFor hip roofs 2:12 to 5.6:12, Zone 3 shall be treated as Zone 2.

TM-Lock System 3:	
Slope:	Shall be in accordance with FBC.
Roof Deck:	Minimum 15/32-inch APA span rated plywood sheathing or wood plank for new and existing roof deck at max. 24 in. span; In the HVHZ, new construction shall be min. 19/32 in. plywood at max. 24 in. span. Deck shall be designed by others in accordance with FBC requirements.
Underlayment:	Installed in accordance with FBC requirements. In the HVHZ, the minimum underlayment shall be ASTM D 226, Type II installed in accordance with Sections 1518.2 and 1518.4 or any approved underlayment for use in the HVHZ.
Attachment:	One (1) #10 x minimum 1" Pancake Head Screw, Type 17 point shall be applied maximum 3.5 in. o.c along the fastening strip. Apply a continuous 3/16-inch bead of Bostik 70-05a adhesive along the male rib before snapping panels together. Fasteners shall penetrate the deck a minimum 3/16-inch and shall conform to FBC Sections 1507.4.4 and 1506.6.
Maximum Design Pressures:	-82.5 psf <i>Pressure calculated using 2:1 margin of safety per 1504.9</i>



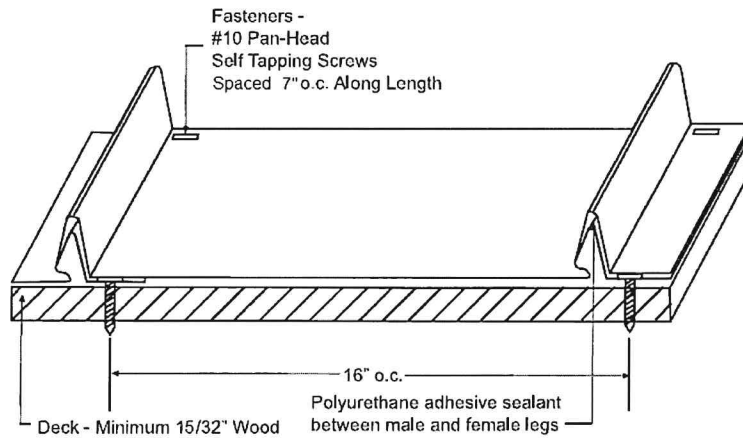
Maximum Mean Roof Heights for Gable/Hip Roofs
Slopes 2:12 – 6.1:12 and >6.1 – 12:12 (Gable Roofs only)

Exposure	Basic Wind Speed (mph)								
	120	130	140	150	160	170	180	190	200
Zone 1									
B	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft
C	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft
D	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft
Zone 2									
B	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft	57 ft
C	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft	38 ft	23 ft	NA
D	60 ft	60 ft	60 ft	60 ft	60 ft	30 ft	19 ft	NA	NA
Zone 3 ^A									
B	60 ft	60 ft	60 ft	60 ft	60 ft	44 ft	30 ft	NA	NA
C	60 ft	60 ft	60 ft	35 ft	19 ft	NA	NA	NA	NA
D	60 ft	60 ft	30 ft	NA	NA	NA	NA	NA	NA

Notes: 1) Exposure category for the structure location shall be as defined in the Florida Building Code 2) Limitations are based on an effective wind area of 10ft² or less 3) Topographic factors such as escarpments or hills are not included in the above assessment 4) Applicable for Enclosed Buildings without overhangs 5) NA = "Not Allowed" 6) $K_d = 0.85$ 7) Projects with mean roof heights of greater than 60 ft shall be evaluated by a licensed design professional 8) See page 6 for details for dimensions and locales of Zone 1, 2, and 3 9) V_{ult} is shown in the tables above. Design wind loads are calculated using $V_{asg} = V_{ult} \sqrt{0.6}$ per 1609.3.1.

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TM-Lock System 4:	
Slope:	Shall be in accordance with FBC.
Roof Deck:	Minimum 15/32-inch APA span rated plywood sheathing or wood plank for new and existing roof deck at max. 24 in. span; In the HVHZ, new construction shall be min. 19/32 in. plywood at max. 24 in. span. Deck shall be designed by others in accordance with FBC requirements.
Underlayment:	Installed in accordance with FBC requirements. In the HVHZ, the minimum underlayment shall be ASTM D 226, Type II installed in accordance with Sections 1518.2 and 1518.4 or any approved underlayment for use in the HVHZ.
Attachment:	One (1) #10 x minimum 1" Pancake Head Screw, Type 17 point shall be applied maximum 7 in. o.c along the fastening strip. Apply a continuous 3/16-inch bead of Bostik 70-05a adhesive along the male rib before snapping panels together. Fasteners shall penetrate the deck a minimum 3/16-inch and shall conform to FBC Sections 1507.4.4 and 1506.6.
Maximum Design Pressures:	-75 psf <i>Pressure calculated using 2:1 margin of safety per 1504.9</i>



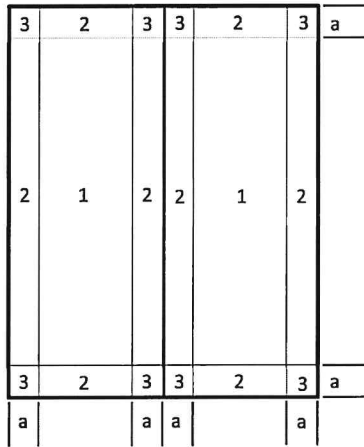
Maximum Mean Roof Heights for Gable/Hip Roofs
Slopes 2:12 – 6.1:12 and >6.1 – 12:12 (Gable Roofs only)

Exposure	Basic Wind Speed (mph)								
	120	130	140	150	160	170	180	190	200
Zone 1									
B	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft
C	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft
D	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft	38 ft
Zone 2									
B	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft	60 ft	57 ft	40 ft
C	60 ft	60 ft	60 ft	60 ft	60 ft	42 ft	25 ft	NA	NA
D	60 ft	60 ft	60 ft	60 ft	35 ft	19 ft	NA	NA	NA
Zone 3 ^A									
B	60 ft	60 ft	60 ft	60 ft	48 ft	31 ft	NA	NA	NA
C	60 ft	60 ft	42 ft	21 ft	NA	NA	NA	NA	NA
D	60 ft	40 ft	19 ft	NA	NA	NA	NA	NA	NA

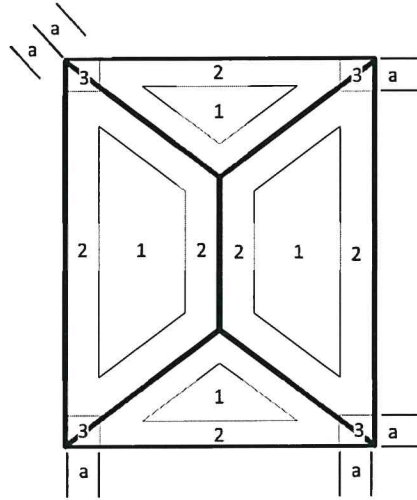
Notes: 1) Exposure category for the structure location shall be as defined in the Florida Building Code 2) Limitations are based on an effective wind area of 10ft² or less 3) Topographic factors such as escarpments or hills are not included in the above assessment 4) Applicable for Enclosed Buildings without overhangs 5) NA = "Not Allowed" 6) $K_d = 0.85$ 7) Projects with mean roof heights of greater than 60 ft shall be evaluated by a licensed design professional 8) See page 6 for details for dimensions and locales of Zone 1, 2, and 3 9) V_{ult} is shown in the tables above. Design wind loads are calculated using $V_{asd} = V_{ult} \sqrt{0.6}$ per 1609.3.1.

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Gable



Hip



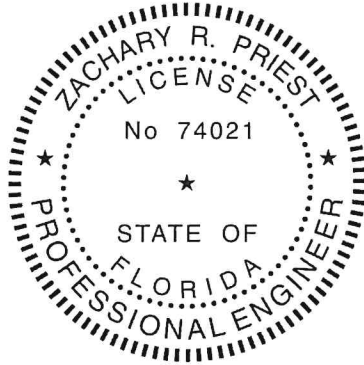
Dimension "a" shall be 10% of the least horizontal dimension or $(0.4 \times \text{Mean Roof Height})$, whichever is smaller, but not less than either 4% of the least horizontal dimension or 3ft.

LIMITATIONS

1. Fire classification is not within the scope of this evaluation.
2. The roof deck and the roof deck attachment shall be designed by others to meet the minimum design loads established for components and cladding and in accordance with FBC requirements.
3. Reroofing shall be in accordance with FBC Section 1511 outside the HVHZ or Section 1521 within the HVHZ.
4. Installation of the evaluated products shall comply with this report, the FBC and RAS 133 within the HVHZ, and the manufacturer's published application instructions. Where discrepancies exist between these sources, the more restrictive and FBC compliant installation detail shall prevail.
5. All products listed in this report shall be manufactured under a quality assurance program in compliance with Rule 61G20-3.

COMPLIANCE STATEMENT

The products evaluated herein by Zachary R. Priest, P.E. have demonstrated compliance with the Florida Building Code, 6th Edition (2017) as evidenced in the referenced documents submitted by the named manufacturer.

A handwritten signature of Zachary R. Priest in black ink.

2020.04.03
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Zachary R. Priest, P.E.
Florida Registration No. 74021
Organization No. ANE9641

CERTIFICATION OF INDEPENDENCE

CREEK Technical Services, LLC does not have, nor will it acquire, a financial interest in any company manufacturing or distributing products under this evaluation.

CREEK Technical Services, LLC is not owned, operated, or controlled by any company manufacturing or distributing products under this evaluation.

Zachary R. Priest, P.E. does not have, nor will acquire, a financial interest in any company manufacturing or distributing products under this evaluation.

Zachary R. Priest, P.E. does not have, nor will acquire, a financial interest in any other entity involved in the approval process of the product.

END OF REPORT