



EVALUATION REPORT

FLORIDA BUILDING CODE, 7TH EDITION (2020)

Manufacturer: TRI COUNTY METALS
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Trenton, FL 32693
(877) 766-3309
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Issued May 4, 2023

Manufacturing Locations: Trenton, FL

Quality Assurance: PRI Construction Materials Technologies (QUA9110)

SCOPE

Category: Roofing
Subcategory: Metal Roofing
Code Edition: Florida Building Code, 7th Edition (2020) High-Velocity Hurricane Zones (HVHZ)
Code Sections: 1518.9.1, 1523.1.1, 1523.6.5, 1523.6.5.2.4, 1523.6.5.2.4.1
Properties: Wind Resistance


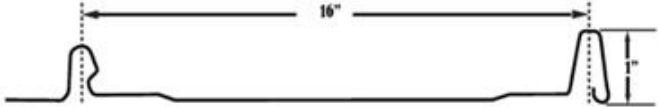

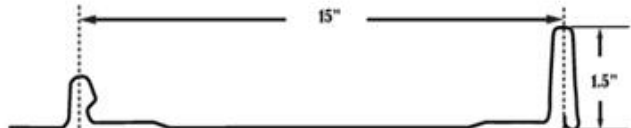
REFERENCES

| <u>Entity</u> | <u>Report No.</u> | <u>Standard</u> | <u>Year</u> |
|---|-------------------|-----------------|-------------|
| PRI Construction Materials Technologies (TST5878) | 945T0002 | ASTM B 117 | 2016 |
| PRI Construction Materials Technologies (TST5878) | 945T0004 | ASTM G 155 | 2013 |
| PRI Construction Materials Technologies (TST5878) | 1272T0002 | ASTM B 117 | 2016 |
| | | TAS 110 | 2000 |
| PRI Construction Materials Technologies (TST5878) | 1272T0003 | ASTM B 117 | 2016 |
| | | TAS 110 | 2000 |
| PRI Construction Materials Technologies (TST5878) | 1272T0005 | ASTM G 155 | 2013 |
| | | TAS 110 | 2000 |
| PRI Construction Materials Technologies (TST5878) | 1272T0006 | ASTM G 155 | 2013 |
| | | TAS 110 | 2000 |
| PRI Construction Materials Technologies (TST5878) | 1930T0001 | TAS 125 | 2003 |
| | | UL 580 | 2006 |
| | | UL 1897 | 2012 |
| PRI Construction Materials Technologies (TST5878) | 1930T0002 | TAS 125 | 2003 |
| | | UL 580 | 2006 |
| | | UL 1897 | 2012 |
| PRI Construction Materials Technologies (TST5878) | 1930T0003 | TAS 125 | 2003 |
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| | | UL 1897 | 2012 |
| PRI Construction Materials Technologies (TST5878) | 1930T0004 | TAS 125 | 2003 |
| | | UL 580 | 2006 |
| | | UL 1897 | 2012 |
| PRI Construction Materials Technologies (TST5878) | 1930T0005 | TAS 100 | 1995 |
| PRI Construction Materials Technologies (TST5878) | 1930T0006 | TAS 100 | 1995 |
| PRI Construction Materials Technologies (TST5878) | 1930T0007 | TAS 100 | 1995 |
| PRI Construction Materials Technologies (TST5878) | 1930T0008 | TAS 100 | 1995 |
| PRI Construction Materials Technologies (TST5878) | 1930T0010 | ASTM B 117 | 2016 |
| | | TAS 110 | 2000 |
| PRI Construction Materials Technologies (TST5878) | 1930T0011 | ASTM G 155 | 2013 |
| | | TAS 110 | 2000 |
| PRI Construction Materials Technologies (TST5878) | 1930T0013 | TAS 125 | 2003 |
| | | UL 580 | 2006 |
| | | UL 1897 | 2012 |
| PRI Construction Materials Technologies (TST5878) | 1930T0016 | TAS 125 | 2003 |
| | | UL 580 | 2006 |
| | | UL 1897 | 2012 |


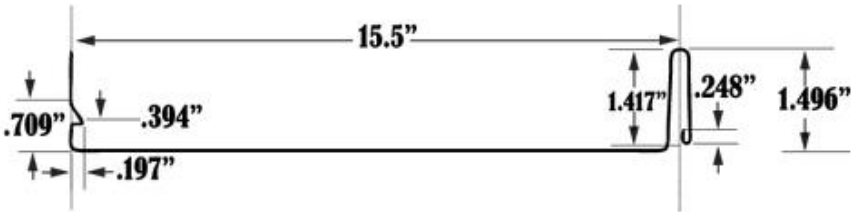

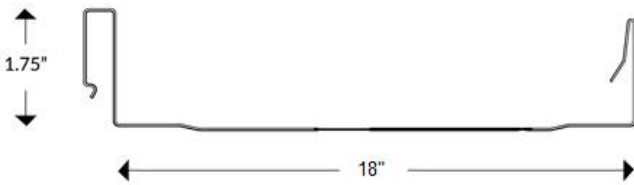
| <u>Entity</u> | <u>Report No.</u> | <u>Standard</u> | <u>Year</u> |
|---|-------------------|-----------------|-------------|
| PRI Construction Materials Technologies (TST5878) | 1930T0018 | TAS 125 | 2003 |
| | | UL 580 | 2006 |
| | | UL 1897 | 2012 |
| PRI Construction Materials Technologies (TST5878) | 1930T0020 | TAS 125 | 2003 |
| | | UL 580 | 2006 |
| | | UL 1897 | 2012 |
| PRI Construction Materials Technologies (TST5878) | 1930T0022 | TAS 100 | 1995 |
| PRI Construction Materials Technologies (TST5878) | 1930T0024 | TAS 100 | 1995 |
| PRI Construction Materials Technologies (TST5878) | 1930T0025 | TAS 100 | 1995 |
| PRI Construction Materials Technologies (TST5878) | 1930T0026 | TAS 125 | 2003 |
| | | UL 580 | 2006 |
| | | UL 1897 | 2012 |
| PRI Construction Materials Technologies (TST5878) | 1930T0027 | TAS 125 | 2003 |
| | | UL 580 | 2006 |
| | | UL 1897 | 2012 |
| PRI Construction Materials Technologies (TST5878) | 1930T0028 | ASTM C 794 | 2001 |
| PRI Construction Materials Technologies (TST5878) | 1930T0029 | TAS 125 | 2003 |
| | | UL 580 | 2006 |
| | | UL 1897 | 2012 |
| PRI Construction Materials Technologies (TST5878) | 1930T0031 | TAS 125 | 2003 |
| | | UL 580 | 2006 |
| | | UL 1897 | 2012 |
| PRI Construction Materials Technologies (TST5878) | 1930T0032 | TAS 125 | 2003 |
| | | UL 580 | 2006 |
| | | UL 1897 | 2012 |
| PRI Construction Materials Technologies (TST5878) | 1930T0034.1 | TAS 125 | 2003 |
| | | UL 580 | 2006 |
| | | UL 1897 | 2012 |
| PRI Construction Materials Technologies (TST5878) | 1930T0036.1 | TAS 125 | 2003 |
| | | UL 580 | 2006 |
| | | UL 1897 | 2012 |
| PRI Construction Materials Technologies (TST5878) | 1930T0037.1 | TAS 125 | 2003 |
| | | UL 580 | 2006 |
| | | UL 1897 | 2012 |
| PRI Construction Materials Technologies (TST5878) | 1930T0038 | TAS 125 | 2003 |
| | | UL 580 | 2006 |
| | | UL 1897 | 2012 |
| PRI Construction Materials Technologies (TST5878) | 1930T0039.2 | TAS 125 | 2003 |
| | | UL 580 | 2006 |
| | | UL 1897 | 2012 |
| PRI Construction Materials Technologies (TST5878) | 1930T0041 | TAS 100 | 1995 |
| PRI Construction Materials Technologies (TST5878) | 1930T0040 | TAS 125 | 2003 |
| | | UL 580 | 2006 |
| | | UL 1897 | 2012 |
| PRI Construction Materials Technologies (TST5878) | 1930T0043 | TAS 100 | 1995 |





PRODUCT DESCRIPTION

| | | |
|--|---------------------|--|
| TCM-LOK 1 in. | Profile: | 1 in. snap lock seam; Max.16 in. coverage |
| | Description: | Non-structural, snap lock standing seam roof panel with 7/8 in. slotted nail strip |
| | Material: | Min. 24 ga. ASTM A653 G90, ASTM A792 AZ50 steel coated with Fluropon® or WeatherXL or ASTM A792 AZ55 steel (F_y = min. 50 ksi); or Min. 0.032 in. ASTM B209, 3105 H22 aluminum coated with Fluropon® (F_y = min. 25 ksi); Shall conform with FBC Section 1507.4.3 |
|   | | |
| TCM-LOK 1.5 in. | Profile: | 1.5 in. snap lock seam; Max. 15 in. coverage |
| | Description: | Non-structural, snap lock standing seam roof panel with 7/8 in. slotted nail strip |
| | Material: | Min. 24 ga. ASTM A653 G90, ASTM A792 AZ50 steel coated with Fluropon® or WeatherXL or ASTM A792 AZ55 steel (F_y = min. 50 ksi); Shall conform with FBC Section 1507.4.3 |
|   | | |


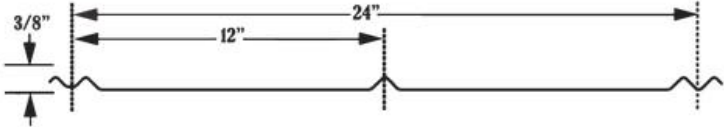

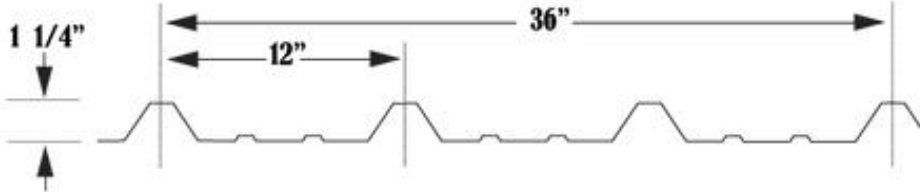


| | | |
|-------------|--|--|
| 1.5 SL-LOK | Profile: | 1.5 in. snap lock seam; Max. 15.5 in. coverage |
| | Description: | Non-structural, snap lock standing seam roof panel |
| | Material: | Min. 24 ga. ASTM A653 G90, ASTM A792 AZ50 steel coated with Fluropon® or WeatherXL or ASTM A792 AZ55 steel (F_y = min. 50 ksi) or Min. 0.032 in. ASTM B209, 3105 H24 aluminum coated with Fluropon® (F_y = min. 25 ksi); Shall conform with FBC Section 1507.4.3 |
| |   | |
| 1.75 SS-LOK | Profile: | 1.75 in. snap lock standing seam; Max. 18 in. coverage |
| | Description: | Non-structural, snap lock standing seam roof panel |
| | Material: | Min. 24 ga. ASTM A653 G90, ASTM A792 AZ50 steel coated with Fluropon® or WeatherXL or ASTM A792 AZ55 steel (F_y = min. 50 ksi); Min. 0.040 in. ASTM B209, 3104 H22 aluminum coated with Fluropon® (F_y = min. 25 ksi); Shall conform with FBC Section 1507.4.3 |
| |   | |


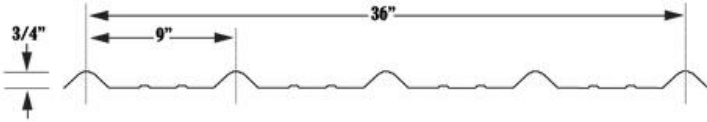


| | | |
|------------|--|--|
| 1.5 MS-LOK | Profile: | 1.5 in. mechanical seam; Max. 16 in. coverage |
| | Description: | Non-structural, standing seam roof panel; 180° double lock mechanical seam |
| | Material: | Min. 24 ga. ASTM A653 G90, ASTM A792 AZ50 steel coated with Fluropon® or WeatherXL or ASTM A792 AZ55 steel (F_y = min. 50 ksi); Shall conform with FBC Section 1507.4.3 |
| |  | |
| 2 MS-LOK | Profile: | 2 in. mechanical seam; Max. 18.75 in. coverage |
| | Description: | Non-structural, through fastened roof panel |
| | Material: | Min. 24 ga. ASTM A653 G90, ASTM A792 AZ50 steel coated with Fluropon® or WeatherXL or ASTM A792 AZ55 steel (F_y = min. 50 ksi); Shall conform with FBC Section 1507.4.3 |
| |  | |



| | | |
|-----|--|--|
| 5V | Profile: | 3/8 in. ribs at 12 in. o.c.; 24 in. coverage |
| | Description: | Non-structural, through fastened roof panel |
| | Material: | Min. 26 ga. ASTM A653 G90, ASTM A792 AZ50 steel coated with Fluropon® or WeatherXL or ASTM A792 AZ55 steel (F_y = min. 50 or 80 ksi); or Min. 0.032 in. ASTM B209, 3105 H22 aluminum coated with Fluropon® (F_y = min. 27 ksi); Shall conform with FBC Section 1507.4.3 |
| |   | |
| PBR | Profile: | 1-1/4 in. ribs at 12 in. o.c.; 36 in. coverage |
| | Description: | Non-structural, through fastened roof panel |
| | Material: | Min. 26 ga. ASTM A653 G90, ASTM A792 AZ50 steel coated with Fluropon® or WeatherXL or ASTM A792 AZ55 steel (F_y = min. 80 ksi); Shall conform with FBC Section 1507.4.3 |
| |   | |



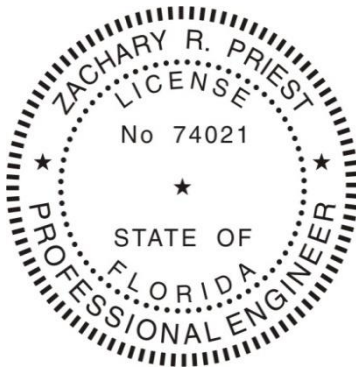
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|--|---------------------|---|
| Ultra Rib | Profile: | 3/4 in. ribs at 9 in. o.c.; 36 in. coverage |
| | Description: | Non-structural, through fastened roof panel |
| | Material: | Min. 26 ga. ASTM A653 G90, ASTM A792 AZ50 steel coated with Fluoropon® or WeatherXL or ASTM A792 AZ55 steel (F_y = min. 80 ksi); Shall conform with FBC Section 1507.4.3 |
|   | | |

LIMITATIONS

1. Fire classification is not within the scope of this evaluation.
2. The roof deck and the roof deck attachment information are provided based on testing. FBC requirements for the rational design of the roof deck, including the attachment, are not within the scope of this evaluation.
3. Roof slope shall be 2:12 or greater.
4. Reroofing shall be in accordance with Section 1521.
5. Installation of the evaluated products shall comply with this report, RAS 133, and the manufacturer's published application instructions. Where discrepancies exist between these sources, the more restrictive and FBC compliant installation detail shall prevail.
6. 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, 7th Edition (2020) High-Velocity Hurricane Zones (HVHZ) as evidenced in the referenced documents submitted by the named manufacturer.



**This item has been
digitally signed and
sealed by Zachary R.
Priest, PE, on 5/4/2023.**

**Printed copies of this
document are not
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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.

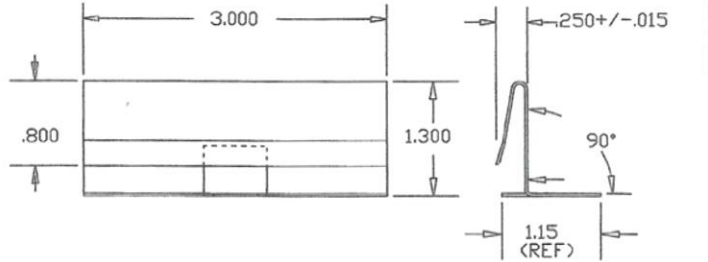
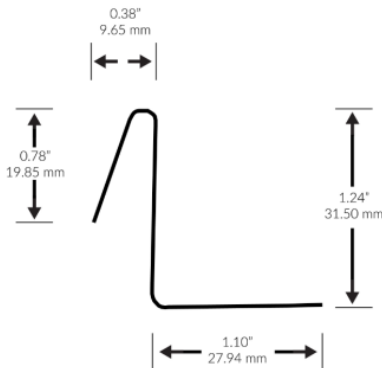
APPENDICES

- 1) APPENDIX A – Installation (3 pages)
- 2) APPENDIX B – Approved Roof Systems (7 pages)
- 3) APPENDIX C – Design Wind Loads (3 pages)

APPENDIX A
INSTALLATION

Note - Refer to the [APPROVED ROOF SYSTEMS](#) section of this report for specific installation details of a selected system.

Unless otherwise specified in this report the following installation details shall be met for the named products:

| Component | Product | Installation Detail |
|---------------|---|--|
| Fasteners | #10-12 Pancake Type A screw | Shall penetrate through the sheathing a minimum 3/8 in. Shall be corrosion resistant in accordance with FBC section 1507.4.4 and 1517.6.1. |
| | #10-9 PanclipSS MTW low profile head wood screw | |
| | #10-9 Panclip MTW low profile head wood screw | |
| | #9-15 Woodgrip HWH wood screw with sealing washer | |
| | #9-15 Evergrip HWH wood screw with sealing washer | |
| | #12-8 Woodgrip XG HWH wood screw with sealing washer | Shall penetrate through the sheathing a minimum 3/8 in. Shall be corrosion resistant in accordance with FBC section 1507.4.4 and 1517.6.1. |
| | #14 PANCLIP SD-L low profile head self-drilling screw | |
| Bearing Plate | Universal Bearing Plate | 4" x 5", 20ga. galvanized steel bearing plate from Direct Metals, Inc. |
| Clips | 1.5 in. DM SL Clip | 24 ga. Direct Metals Inc Snaplock HD 450HD Clip, 1-1/4" – 1-1/2" Utility Snaplock Clip, 1.3 in. tall with 3 in, base  |
| | 1.5 in. SL Continuous Clip | 24 ga. ASTM A792 AZ55 or 0.032" ASTM B209, 3105 H24 Al; , 1.24 in. tall with 1.1 in, base, Min. 10 ft. length  |

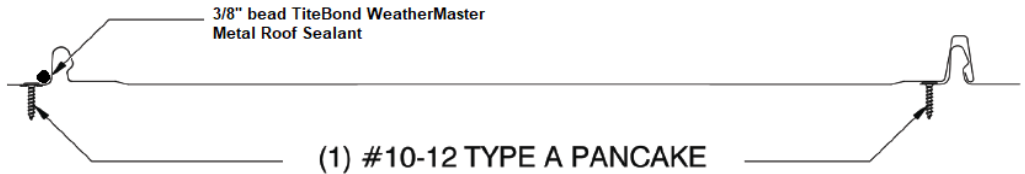
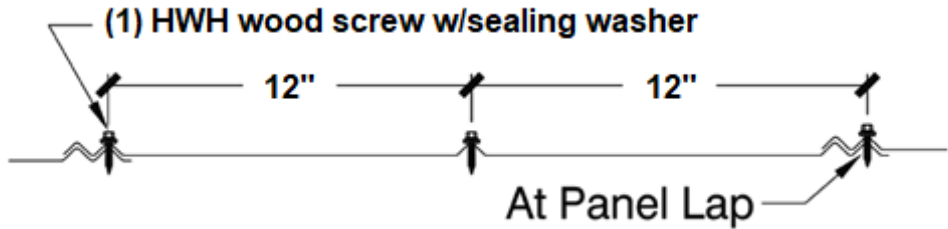
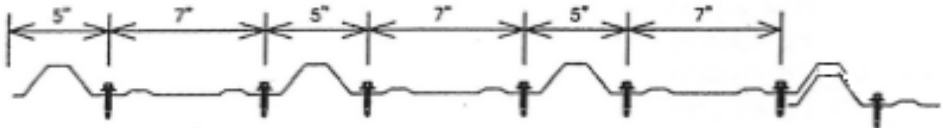
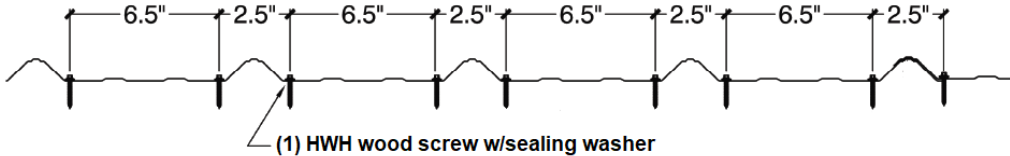
APPENDIX A

| Component | Product | Installation Detail |
|----------------|----------------------|--|
| Clips – Cont'd | 1.75 in. SFS SL Clip | <p>18 ga. SFS 1-3/4 in. Snap Lock Clip; 1.875 in. tall with 3.75 in. base</p> <p>Top view dimensions: (88.9) 3.50, (95.25) 3.75. Side view dimensions: (5.33) .210, (9.32) .367, (47.63) 1.875, (4.45) .175, (3.81) .15. CAD-0728734-X</p> |
| | 1.75 in. DM SL Clip | <p>18 ga. Direct Metals Inc 1-3/4 in. Snap Lock Clip; 1-7/8 in. tall with 3-1/2 in. base</p> <p>Side view dimensions: 1-7/8", 2 1/8". Top view dimensions: 3 1/2".</p> |
| | 1.5 in. ML Clip | <p>1-1/2 in. 1-piece expansion clip; 22 ga. vertical tab; 16 ga. base; 4.5 in. long</p> <p>Vertical Tab</p> <p>Base</p> |
| | 2 in. ML Clip | <p>2 in. 1-piece expansion clip; 22 ga. vertical tab; 16 ga. base; 4.5 in. long</p> <p>Vertical Tab</p> <p>Base</p> |



APPENDIX A

| Component | Product | Installation Detail |
|--------------|---|---|
| Seam Sealant | TiteBond Weathermaster Metal Roof Sealant | Shall be applied in 1/4 in.- 5/16 in. continuous beads on the male rib along the seam |
| | Novaflex Metal Roof Sealant | |

| Fastening Details | |
|-------------------|--|
| Nomenclature | Attachment |
| TCM-LOK |  <p>3/8" bead TiteBond WeatherMaster Metal Roof Sealant</p> <p>(1) #10-12 TYPE A PANCAKE</p> |
| 5V |  <p>(1) HWH wood screw w/sealing washer</p> <p>12" 12"</p> <p>At Panel Lap</p> |
| PBR |  <p>5" 7" 5" 7" 5" 7"</p> |
| Ultra Rib |  <p>6.5" 2.5" 6.5" 2.5" 6.5" 2.5" 6.5" 2.5"</p> <p>(1) HWH wood screw w/sealing washer</p> |

APPROVED ROOF SYSTEMS

The following notes shall be observed when using the assembly tables below.

1. Maximum Design Pressure (*MDP*) was calculated using a 2:1 margin of safety per FBC Section 1523.4.
2. Refer to [LIMITATIONS](#) and sections of this evaluation when using the table(s) below.
3. Refer to [INSTALLATION](#) section of this report for installation detail when the information is not explicitly stated for the selected assembly.
4. The on-center (o.c.) spacing given is the maximum allowable attachment spacing for the rated system.
5. Underlayment shall be installed in accordance with FBC requirements. The minimum underlayment shall be ASTM D 226, Type II installed as described in FBC Section 1518.2.1 with nails and tin caps per 1517.5.
6. Unless otherwise specified, Steel Deck shall be designed by others in accordance with FBC requirements and shall be minimum 22 ga, Wide Rib Deck (Type WR) conforming to ANSI/SDI-RD1.0 & FBC and shall be attached to structural supports spaced 5ft o.c. In no case shall the attachment be less than #12-24 HWH screws at each flute with deck side laps stitched 24" o.c. with 1/4"-14 x 7/8" HWH screws. Panel seams shall be installed perpendicular to the steel deck ribs.
7. Wood Deck shall be designed by others in accordance with FBC requirements and shall be minimum 19/32 in. thick APA Span-Rated plywood sheathing or wood plank at maximum 24 in. span for new construction. Existing construction shall be the minimum plywood sheathing or wood plank thickness at maximum 24 in. span as stated in the approval tables on following pages. In no case shall the attachment be less than 8d ring shank nails spaced as follows:
 - a. 6 in. o.c.
 - b. 4 in. o.c.

| Roof System Numbers and Definitions | |
|-------------------------------------|---|
| L1-AI-W-# | Min. 0.032 Al TCM-LOK 1 in. over Wood Deck (New or Existing) |
| L1-S-W-# | Min. 24ga. steel TCM-LOK 1 in. over Wood Deck (New or Existing) |
| L1.5-S-W-# | Min. 24ga. steel TCM-LOK 1.5 in. over Wood Deck (New or Existing) |
| SL-AI-W-# | Min. 0.032 Al 1.5 SL-LOK over Wood Deck (New or Existing) |
| SL-S-W-# | Min. 24ga. steel 1.5 SL-LOK over Wood Deck (New or Existing) |
| SS-AI-W-# | Min. 0.040 Al 1.75 SS-LOK over Wood Deck (New or Existing) |
| SS-S-W-# | Min. 24ga. steel 1.75 SS-LOK over Wood Deck (New or Existing) |
| 1.5MS-W-# | Min. 24ga. steel 1.5 MS-LOK over Wood Deck (New or Existing) |
| 2MS-W-# | Min. 24ga. steel 2 MS-LOK over Wood Deck (New or Existing) |
| 2MS-S-# | Min. 24ga. steel 2 MS-LOK over Steel Deck (New or Existing) |
| 5V-AI-W-# | Min. 0.032 Al 5V over Wood Deck (New or Existing) |
| 5V-S-W-# | Min. 26ga. steel 5V over Wood Deck (New or Existing) |
| PBR-W-# | Min. 26ga. steel PBR over Wood Deck (New or Existing) |
| RIB-W-# | Min. 26ga. steel Ultra Rib over Wood Deck (New or Existing) |

APPENDIX B

| Approved Systems for Min. 0.032 Al TCM-LOK 1 in. over Wood Deck (New or Existing) | | | | | | |
|---|---|-----------------------------------|---------------------|--|---|-------------|
| System No. | Deck | Fire Barrier | Underlayment | Roof Panel | Panel Attachment | MDP (psf) |
| L1-AI-W-1 | Min. 15/32 CDX plywood (Note 7a) | OPTIONAL Approved fire barrier | As required per FBC | Min. 0.032 Al TCM-LOK 1 in. Max. 16 in. coverage | TCM-LOK attachment with #10-12 Pancake Type A screws spaced 5-1/4 in. o.c. Seam Sealant (see INSTALLATION for list of allowable products) applied to male rib. | -110 |

| Approved Systems for Min. 24ga. steel TCM-LOK 1 in. over Wood Deck (New or Existing) | | | | | | |
|--|---|-----------------------------------|---------------------|---|---|---------------|
| System No. | Deck | Fire Barrier | Underlayment | Roof Panel | Panel Attachment | MDP (psf) |
| L1-S-W-1 | Min. 15/32 CDX plywood (Note 7a) | OPTIONAL Approved fire barrier | As required per FBC | Min. 24ga. steel TCM-LOK 1 in. Max. 16 in. coverage | TCM-LOK attachment with #10-12 Pancake Type A screws spaced 5-1/4 in. o.c. Seam Sealant (see INSTALLATION for list of allowable products) applied to male rib. | -142.5 |

| Approved Systems for Min. 24ga. steel TCM-LOK 1.5 in. over Wood Deck (New or Existing) | | | | | | |
|--|---|-----------------------------------|---------------------|---|---|---------------|
| System No. | Deck | Fire Barrier | Underlayment | Roof Panel | Panel Attachment | MDP (psf) |
| L1.5-S-W-1 | Min. 15/32 CDX plywood (Note 7a) | OPTIONAL Approved fire barrier | As required per FBC | Min. 24ga. steel TCM-LOK 1.5 in. Max. 15 in. coverage | TCM-LOK attachment with #10-12 Pancake Type A screws spaced 5-1/4 in. o.c. Seam Sealant (see INSTALLATION for list of allowable products) applied to male rib. | -122.5 |

| Approved Systems Min. 0.032 Al 1.5 SL-LOK over Wood Deck (New or Existing) | | | | | | |
|--|------------------------|-----------------------------------|---------------------|---|---|-------------|
| System No. | Deck | Fire Barrier | Underlayment | Roof Panel | Panel Attachment | MDP (psf) |
| SL-AI-W-1 | Min. 15/32 CDX plywood | OPTIONAL Approved fire barrier | As required per FBC | Min. 0.032 Al 1.5 SL-LOK Max. 15.5 in. coverage | 0.032 Al 1.5 in. SL Continuous Clips installed over male leg and fastened 6 in. o.c. with one (1) #10-9 PanclipSS MTW low profile head wood screw; Female portion of snap-lock is then engaged over the continuous clip | -101 |

APPENDIX B

| Approved Systems Min. 0.032 Al 1.5 SL-LOK over Wood Deck (New or Existing) | | | | | | |
|--|------------------------|--|---------------------|---|---|---------------|
| System No. | Deck | Fire Barrier | Underlayment | Roof Panel | Panel Attachment | MDP (psf) |
| SL-AI-W-2 | Min. 15/32 CDX plywood | OPTIONAL <i>Approved</i> fire barrier | As required per FBC | Min. 0.032 Al 1.5 SL-LOK Max. 15.5 in. coverage | 0.032 Al 1.5 in. SL Continuous Clips installed over male leg and fastened 6 in. o.c. with one (1) #10-9 PanclipSS MTW low profile head wood screw; 3/8 in. wide, continuous bead of NovaFlex Metal Roof Sealant is applied to backside of continuous clip; Female portion of snap-lock is then engaged over the continuous clip | -108.5 |

| Approved Systems for Min. 24ga. steel 1.5 SL-LOK over Wood Deck (New or Existing) | | | | | | |
|---|------------------------|--|---------------------|--|--|-------------|
| System No. | Deck | Fire Barrier | Underlayment | Roof Panel | Panel Attachment | MDP (psf) |
| SL-S-W-1 | Min. 15/32 CDX plywood | OPTIONAL <i>Approved</i> fire barrier | As required per FBC | Min. 24ga. steel 1.5 SL-LOK Max. 15.5 in. coverage | 1.5 in. SL Clips spaced 12 in. o.c. at the panel seam secured with two (2) #10-12 Pancake Type A screws per clip | -75 |
| SL-S-W-2 | Min. 15/32 CDX plywood | OPTIONAL <i>Approved</i> fire barrier | As required per FBC | Min. 24ga. steel 1.5 SL-LOK Max. 15.5 in. coverage | 1.5 in. SL Clips spaced 6 in. o.c. at the panel seam secured with two (2) #10-12 Pancake Type A screws per clip | -90 |
| SL-S-W-3 | Min. 15/32 CDX plywood | OPTIONAL <i>Approved</i> fire barrier | As required per FBC | Min. 24ga. steel 1.5 SL-LOK Max. 15.5 in. coverage | 24 ga. 1.5 in. SL Continuous Clips installed over male leg and fastened 6 in. o.c. with one (1) #10-12 Pancake Type A screws; Female portion of snap-lock is then engaged over the continuous clip | -146 |

| Approved Systems for Min. 0.040 Al 1.75 SS-LOK over Wood Deck (New or Existing) | | | | | | |
|---|---|--|---------------------|--|--|-------------|
| System No. | Deck | Fire Barrier | Underlayment | Roof Panel | Panel Attachment | MDP (psf) |
| SS-AI-W-1 | Min. 15/32 CDX plywood (Note 7a) | OPTIONAL <i>Approved</i> fire barrier | As required per FBC | Min. 0.040 Al 1.75 SS-LOK Max. 16 in. coverage | 1.75 in. SFS SL Clips spaced 16 in. o.c. at the panel seam secured with two (2) #10-9 PanclipSS MTW low profile head screws per clip | -90 |
| SS-AI-W-2 | Min. 15/32 CDX plywood (Note 7a) | OPTIONAL <i>Approved</i> fire barrier | As required per FBC | Min. 0.040 Al 1.75 SS-LOK Max. 16 in. coverage | 1.75 in. SFS SL Clips spaced 6 in. o.c. at the panel seam secured with two (2) #10-9 PanclipSS MTW low profile head screws per clip | -120 |

APPENDIX B

| Approved Systems for Min. 24ga. steel 1.75 SS-LOK over Wood Deck (New or Existing) | | | | | | |
|--|---|---|---------------------|---|--|-------------|
| System No. | Deck | Fire Barrier | Underlayment | Roof Panel | Panel Attachment | MDP (psf) |
| SS-S-W-1 | Min. 15/32 CDX plywood (Note 7a) | OPTIONAL <i>Approved</i> fire barrier | As required per FBC | Min. 24ga. steel 1.75 SS-LOK Max. 18 in. coverage | 1.75 in. DM SL Clips spaced 18 in. o.c. at the panel seam secured with two (2) #10-12 Pancake Type A screws per clip | -105 |

| Approved Systems for Min. 24ga. steel 1.5 MS-LOK over Wood Deck (New or Existing) | | | | | | |
|---|---|---|---------------------|--|---|-------------|
| System No. | Deck | Fire Barrier | Underlayment | Roof Panel | Panel Attachment | MDP (psf) |
| 1.5MS-W-1 | Min. 15/32 CDX plywood (Note 7a) | OPTIONAL <i>Approved</i> fire barrier | As required per FBC | Min. 24ga. steel 1.5 MS-LOK Max. 16 in. coverage | 1.5 in. ML Clips spaced 16 in. o.c. at the panel seam secured with two (2) #10-9 x min. 1.5 in. Panclip MTW low profile screws per clip; Panels mechanically seamed with 180° double lock | -120 |
| 1.5MS-W-2 | Min. 15/32 CDX plywood (Note 7b) | OPTIONAL <i>Approved</i> fire barrier | As required per FBC | Min. 24ga. steel 1.5 MS-LOK Max. 16 in. coverage | 1.5 in. ML Clips spaced 6 in. o.c. at the panel seam secured with two (2) #10-9 x min. 1.5 in. Panclip MTW low profile screws per clip; Panels mechanically seamed with 180° double lock | -176 |

| Approved Systems for Min. 24ga. steel 2 MS-LOK over Wood Deck (New or Existing) | | | | | | |
|---|---|---|---------------------|---|---|----------------|
| System No. | Deck | Fire Barrier | Underlayment | Roof Panel | Panel Attachment | MDP (psf) |
| 2MS-W-1 | Min. 15/32 CDX plywood (Note 7a) | OPTIONAL <i>Approved</i> fire barrier | As required per FBC | Min. 24ga. steel 2 MS-LOK Max. 18.75 in. coverage | 2 in. ML Clips spaced 16 in. o.c. at the panel seam secured with two (2) #10-9 x min. 1.5 in. Panclip MTW low profile screws per clip; Panels mechanically seamed with 180° double lock | -116.25 |
| 2MS-W-2 | Min. 15/32 CDX plywood (Note 7a) | OPTIONAL <i>Approved</i> fire barrier | As required per FBC | Min. 24ga. steel 2 MS-LOK Max. 18.75 in. coverage | 2 in. ML Clips spaced 8 in. o.c. at the panel seam secured with two (2) #10-9 x min. 1.5 in. Panclip MTW low profile screws per clip; Panels mechanically seamed with 180° double lock | -120 |
| 2MS-W-3 | Min. 15/32 CDX plywood (Note 7b) | OPTIONAL <i>Approved</i> fire barrier | As required per FBC | Min. 24ga. steel 2 MS-LOK Max. 18 in. coverage | 2 in. ML Clips spaced 6 in. o.c. at the panel seam secured with two (2) #10-9 x min. 1.5 in. Panclip MTW low profile screws per clip; Panels mechanically seamed with 180° double lock | -153.5 |

APPENDIX B

| Approved Systems for Min. 24ga. steel 2 MS-LOK over Steel Deck (New or Existing) | | | | | | | |
|--|---|-----------------------------------|---|---------------------|--|---|----------------|
| System No. | Deck | Fire Barrier | Insulation | Underlayment | Roof Panel | Panel Attachment | MDP (psf) |
| 2MS-S-1 | Min. 22ga. steel deck (Note 6) | OPTIONAL Approved fire barrier | Min. 1-inch GAF EnergyGuard Polyiso loose laid | As required per FBC | Min. 24ga. steel 2 MS-LOK Max. 18 in. coverage | 2 in. ML Clips and Universal Bearing Plates spaced 24 in. o.c. at the panel seam secured with two (2) #14 PANCLIP SD-L fasteners per clip; Panels mechanically seamed with 180° double lock | -112.25 |
| 2MS-S-2 | Min. 22ga. steel deck (Note 6) | OPTIONAL Approved fire barrier | Min. 1-inch GAF EnergyGuard Polyiso loose laid | As required per FBC | Min. 24ga. steel 2 MS-LOK Max. 18 in. coverage | 2 in. ML Clips and Universal Bearing Plates spaced 6 in. o.c. at the panel seam secured with two (2) #14 PANCLIP SD-L fasteners per clip; Panels mechanically seamed with 180° double lock | -168.5 |

| Approved Systems for Min. 0.032 Al 5V Crimp over Wood Deck (New or Existing) | | | | | | |
|--|----------------------------------|-----------------------------------|---------------------|---|---|-----------|
| System No. | Deck | Fire Barrier | Underlayment | Roof Panel | Panel Attachment | MDP (psf) |
| 5V-AI-W-1 | Min. 15/32 CDX plywood (Note 7a) | OPTIONAL Approved fire barrier | As required per FBC | Min. 0.032 Al 5V Crimp 24 in. coverage | 5V attachment with #9-15 Evergrip screws with sealing washers spaced 9 in. o.c. | -127.5 |
| 5V-AI-W-2 | Min. 15/32 CDX plywood (Note 7a) | OPTIONAL Approved fire barrier | As required per FBC | Min. 0.032 Al 5V Crimp 24 in. coverage | 5V attachment with #9-15 Evergrip screws with sealing washers spaced 6 in. o.c. | -150 |

| Approved Systems for Min. 26ga. steel 5V Crimp over Wood Deck (New or Existing) | | | | | | |
|---|----------------------------------|-----------------------------------|---------------------|---|---|-----------|
| System No. | Deck | Fire Barrier | Underlayment | Roof Panel | Panel Attachment | MDP (psf) |
| 5V-S-W-1 | Min. 15/32 CDX plywood (Note 7a) | OPTIONAL Approved fire barrier | As required per FBC | Min. 26ga. steel, Grade 80 5V Crimp Max. 24 in. coverage | 5V attachment with #12-8 Woodgrip XG screws with sealing washers spaced 16 in. o.c. | -86.25 |

APPENDIX B

| Approved Systems for Min. 26ga. steel 5V Crimp over Wood Deck (New or Existing) | | | | | | |
|---|---|-----------------------------------|---------------------|--|---|----------------|
| System No. | Deck | Fire Barrier | Underlayment | Roof Panel | Panel Attachment | MDP (psf) |
| 5V-S-W-2 | Min. 15/32 CDX plywood (Note 7a) | OPTIONAL Approved fire barrier | As required per FBC | Min. 26ga. steel, Grade 80 5V Crimp Max. 24 in. coverage | 5V attachment with #9-15 Woodgrip or #12-8 Woodgrip XG screws with sealing washers spaced 12 in. o.c. | -90 |
| 5V-S-W-3 | Min. 15/32 CDX plywood (Note 7a) | OPTIONAL Approved fire barrier | As required per FBC | Min. 26ga. steel, Grade 50 5V Crimp Max. 24 in. coverage | 5V attachment with #12-8 Woodgrip XG screws with sealing washers spaced 12 in. o.c. | -101.25 |
| 5V-S-W-4 | Min. 15/32 CDX plywood (Note 7a) | OPTIONAL Approved fire barrier | As required per FBC | Min. 26ga. steel, Grade 50 5V Crimp Max. 24 in. coverage | 5V attachment with #9-15 Woodgrip or #12-8 Woodgrip XG screws with sealing washers spaced 6 in. o.c. | -120 |
| 5V-S-W-5 | Min. 15/32 CDX plywood (Note 7a) | OPTIONAL Approved fire barrier | As required per FBC | Min. 26ga. steel, Grade 80 5V Crimp Max. 24 in. coverage | 5V attachment with #12-8 Woodgrip XG screws with sealing washers spaced 9 in. o.c. | -120 |
| 5V-S-W-6 | Min. 15/32 CDX plywood (Note 7a) | OPTIONAL Approved fire barrier | As required per FBC | Min. 26ga. steel, Grade 80 5V Crimp Max. 24 in. coverage | 5V attachment with #9-15 Woodgrip or #12-8 Woodgrip XG screws with sealing washers spaced 6 in. o.c. | -135 |

| Approved Systems for Min. 26ga. steel PBR over Wood Deck (New or Existing) | | | | | | |
|--|---|-----------------------------------|---------------------|---|--|---------------|
| System No. | Deck | Fire Barrier | Underlayment | Roof Panel | Panel Attachment | MDP (psf) |
| PBR-W-1 | Min. 15/32 CDX plywood (Note 7a) | OPTIONAL Approved fire barrier | As required per FBC | Min. 26ga. steel, Grade 80 PBR Max. 36 in. coverage | PBR attachment with #12-8 Woodgrip XG screws with sealing washers spaced 24 in. o.c. | -86 |
| PBR-W-2 | Min. 15/32 CDX plywood (Note 7b) | OPTIONAL Approved fire barrier | As required per FBC | Min. 26ga. steel, Grade 80 PBR Max. 36 in. coverage | PBR attachment with #12-8 Woodgrip XG screws with sealing washers spaced 12 in. o.c. | -153.5 |

APPENDIX B

| Approved Systems for Min. 26ga. steel Ultra Rib over Wood Deck (New or Existing) | | | | | | |
|--|---|--|---------------------|---|--|----------------|
| System No. | Deck | Fire Barrier | Underlayment | Roof Panel | Panel Attachment | MDP (psf) |
| RIB-W-1 | Min. 15/32 CDX plywood (Note 7a) | OPTIONAL <i>Approved</i> fire barrier | As required per FBC | Min. 26ga. steel Ultra Rib 36 in. coverage | <i>Ultra Rib</i> attachment with #12-8 Woodgrip XG screws spaced 24 in. o.c | -116.25 |
| RIB-W-2 | Min. 15/32 CDX plywood (Note 7a) | OPTIONAL <i>Approved</i> fire barrier | As required per FBC | Min. 26ga. steel Ultra Rib 36 in. coverage | <i>Ultra Rib</i> attachment with #9-15 Woodgrip screws spaced 12 in. o.c | -135 |

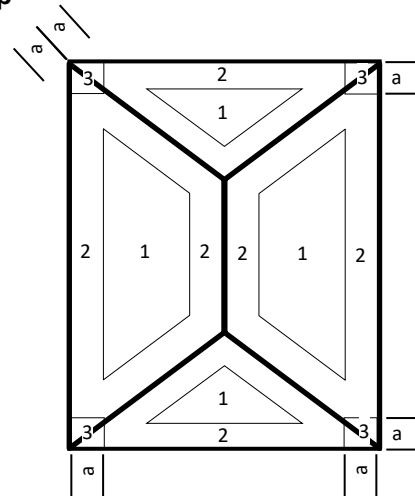
APPENDIX C
DESIGN WIND LOADS

The following tables provide design wind loads for components and cladding in accordance with Section 1620 of the FBC and ASCE 7-16 under the following provisions:

1. Wind speeds for risk category I, II, III, and IV buildings shall be as defined in Section 1620 of the FBC.
2. Exposure C and D shall be as defined in section 1620 of the FBC.
3. Design wind load provided only for gable/hip roofs with roof slopes between 2:12 and 6.1:12
4. All calculations are based on an effective wind area of 10-ft² or less.
5. Topographic factors such as escarpments or hills have been excluded from the analysis
6. Overhangs have been excluded from the analysis.
7. Wind directionality factor, $K_d = 0.85$
8. Design wind loads are calculated using $P_{asd} = 0.6P_{ult}$.
9. Zone 2 is inclusive of Zone 2e, Zone 2n, and Zone 2r
10. Zone 3 is inclusive of Zone 3e and Zone 3r
11. Projects with mean roof heights greater than 60-ft shall be evaluated by a licensed design professional
12. Zones 1, 2, and 3 shall be defined as shown below. Dimension "a" shall be 10% of the least horizontal dimension or (0.4 x *Mean Roof Height*), whichever is smaller, but not less than either 4% of the least horizontal dimension or 3ft

Gable

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 | 2 | 3 | 3 | 2 | 3 | a |
| 2 | 1 | 2 | 2 | 1 | 2 | |
| 3 | 2 | 3 | 3 | 2 | 3 | a |
| a | | a | a | | a | |

Hip


APPENDIX C

| Gable/Hip Roofs in Exposure C in Miami-Dade & Broward County (Roof slopes between 2:12 and 12:12) | | | | | | | | |
|---|------|-----------------------|------------------------|------------|-------------|-------------|------------------|-----------------|
| Building Type | Zone | Mean Roof Height (ft) | Basic Wind Speed (mph) | | | | | |
| | | | Risk Cat I | Risk Cat I | Risk Cat II | Risk Cat II | Risk Cat III, IV | Risk Cat III,IV |
| | | | 156 | 165 | 170 | 175 | 180 | 186 |
| Enclosed/ Partially Open | 1 | 20 | -62.3 | -69.7 | -74.0 | -78.5 | -83.0 | -88.6 |
| | | 25 | -65.1 | -72.8 | -77.3 | -81.9 | -86.7 | -92.6 |
| | | 30 | -67.9 | -75.9 | -80.6 | -85.4 | -90.4 | -96.5 |
| | | 40 | -72.0 | -80.6 | -85.6 | -90.7 | -95.9 | -102.4 |
| | | 50 | -75.5 | -84.5 | -89.7 | -95.0 | -100.5 | -107.3 |
| | | 60 | -78.3 | -87.6 | -93.0 | -98.5 | -104.2 | -111.3 |
| | 2 | 20 | -90.9 | -101.7 | -108.0 | -114.4 | -121.1 | -129.3 |
| | | 25 | -95.0 | -106.3 | -112.8 | -119.5 | -126.5 | -135.0 |
| | | 30 | -99.0 | -110.8 | -117.6 | -124.6 | -131.8 | -140.8 |
| | | 40 | -105.1 | -117.6 | -124.8 | -132.2 | -139.9 | -149.4 |
| | | 50 | -110.1 | -123.2 | -130.8 | -138.6 | -146.6 | -156.6 |
| | | 60 | -114.2 | -127.7 | -135.6 | -143.7 | -152.0 | -162.3 |
| | 3 | 20 | -108.1 | -120.9 | -128.4 | -136.0 | -143.9 | -153.7 |
| | | 25 | -112.9 | -126.3 | -134.1 | -142.1 | -150.3 | -160.5 |
| | | 30 | -117.7 | -131.7 | -139.8 | -148.1 | -156.7 | -167.3 |
| | | 40 | -124.9 | -139.7 | -148.3 | -157.2 | -166.3 | -177.6 |
| | | 50 | -130.9 | -146.5 | -155.5 | -164.7 | -174.3 | -186.1 |
| | | 60 | -135.7 | -151.8 | -161.2 | -170.8 | -180.7 | -192.9 |
| Partially Enclosed | 1 | 20 | -72.9 | -81.6 | -86.6 | -91.8 | -97.1 | -103.7 |
| | | 25 | -76.2 | -85.2 | -90.4 | -95.8 | -101.4 | -108.3 |
| | | 30 | -79.4 | -88.8 | -94.3 | -99.9 | -105.7 | -112.9 |
| | | 40 | -84.3 | -94.3 | -100.1 | -106.0 | -112.2 | -119.8 |
| | | 50 | -88.3 | -98.8 | -104.9 | -111.1 | -117.6 | -125.5 |
| | | 60 | -91.6 | -102.4 | -108.7 | -115.2 | -121.9 | -130.2 |
| | 2 | 20 | -101.5 | -113.6 | -120.6 | -127.8 | -135.2 | -144.3 |
| | | 25 | -106.0 | -118.6 | -125.9 | -133.4 | -141.2 | -150.7 |
| | | 30 | -110.5 | -123.7 | -131.3 | -139.1 | -147.2 | -157.1 |
| | | 40 | -117.3 | -131.2 | -139.3 | -147.6 | -156.2 | -166.8 |
| | | 50 | -123.0 | -137.5 | -146.0 | -154.7 | -163.7 | -174.8 |
| | | 60 | -127.5 | -142.6 | -151.4 | -160.4 | -169.7 | -181.2 |
| | 3 | 20 | -118.7 | -132.8 | -140.9 | -149.3 | -158.0 | -168.7 |
| | | 25 | -124.0 | -138.7 | -147.2 | -156.0 | -165.0 | -176.2 |
| | | 30 | -129.2 | -144.6 | -153.5 | -162.6 | -172.0 | -183.7 |
| | | 40 | -137.1 | -153.4 | -162.9 | -172.6 | -182.6 | -195.0 |
| | | 50 | -143.7 | -160.8 | -170.7 | -180.9 | -191.4 | -204.3 |
| | | 60 | -149.0 | -166.7 | -177.0 | -187.5 | -198.4 | -211.8 |

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This evaluation report is provided for State of Florida product approval under Rule 61G20-3. The manufacturer shall notify CREEK Technical Services, LLC of any product changes or quality assurance changes throughout the duration for which this report is valid. This evaluation report does not express nor imply warranty, installation, recommended use, or other product attributes that are not specifically addressed herein.

APPENDIX C

| Gable/Hip Roofs in Exposure D in Miami-Dade & Broward County (Roof slopes between 2:12 and 12:12) | | | | | | | | |
|---|------|-----------------------|------------------------|------------|-------------|-------------|------------------|-----------------|
| Building Type | Zone | Mean Roof Height (ft) | Basic Wind Speed (mph) | | | | | |
| | | | Risk Cat I | Risk Cat I | Risk Cat II | Risk Cat II | Risk Cat III, IV | Risk Cat III,IV |
| | | | 156 | 165 | 170 | 175 | 180 | 186 |
| Enclosed/ Partially Open | 1 | 20 | -74.8 | -83.7 | -88.8 | -94.1 | -99.6 | -106.3 |
| | | 25 | -77.6 | -86.8 | -92.1 | -97.6 | -103.3 | -110.3 |
| | | 30 | -80.4 | -89.9 | -95.4 | -101.1 | -107.0 | -114.2 |
| | | 40 | -84.5 | -94.5 | -100.4 | -106.3 | -112.5 | -120.1 |
| | | 50 | -88.0 | -98.4 | -104.5 | -110.7 | -117.1 | -125.1 |
| | | 60 | -90.7 | -101.5 | -107.8 | -114.2 | -120.8 | -129.0 |
| | 2 | 20 | -109.1 | -122.1 | -129.6 | -137.3 | -145.3 | -155.1 |
| | | 25 | -113.2 | -126.6 | -134.4 | -142.4 | -150.7 | -160.9 |
| | | 30 | -117.2 | -131.1 | -139.2 | -147.5 | -156.0 | -166.6 |
| | | 40 | -123.3 | -137.9 | -146.4 | -155.1 | -164.1 | -175.2 |
| | | 50 | -128.3 | -143.6 | -152.4 | -161.5 | -170.8 | -182.4 |
| | | 60 | -132.4 | -148.1 | -157.2 | -166.6 | -176.2 | -188.2 |
| | 3 | 20 | -129.7 | -145.1 | -154.0 | -163.2 | -172.7 | -184.4 |
| | | 25 | -134.5 | -150.5 | -159.7 | -169.3 | -179.1 | -191.2 |
| | | 30 | -139.3 | -155.9 | -165.4 | -175.3 | -185.5 | -198.1 |
| | | 40 | -146.5 | -163.9 | -174.0 | -184.4 | -195.1 | -208.3 |
| | | 50 | -152.5 | -170.6 | -181.1 | -192.0 | -203.1 | -216.8 |
| | | 60 | -157.3 | -176.0 | -186.8 | -198.0 | -209.5 | -223.7 |
| Partially Enclosed | 1 | 20 | -87.5 | -97.9 | -103.9 | -110.1 | -116.5 | -124.4 |
| | | 25 | -90.7 | -101.5 | -107.8 | -114.2 | -120.8 | -129.0 |
| | | 30 | -94.0 | -105.1 | -111.6 | -118.3 | -125.1 | -133.6 |
| | | 40 | -98.8 | -110.6 | -117.4 | -124.4 | -131.6 | -140.5 |
| | | 50 | -102.9 | -115.1 | -122.2 | -129.5 | -137.0 | -146.3 |
| | | 60 | -106.1 | -118.7 | -126.0 | -133.6 | -141.3 | -150.9 |
| | 2 | 20 | -121.8 | -136.3 | -144.7 | -153.3 | -162.2 | -173.2 |
| | | 25 | -126.3 | -141.3 | -150.0 | -159.0 | -168.2 | -179.6 |
| | | 30 | -130.8 | -146.4 | -155.4 | -164.7 | -174.2 | -186.0 |
| | | 40 | -137.6 | -154.0 | -163.4 | -173.2 | -183.2 | -195.6 |
| | | 50 | -143.3 | -160.3 | -170.1 | -180.3 | -190.7 | -203.6 |
| | | 60 | -147.8 | -165.3 | -175.5 | -186.0 | -196.7 | -210.1 |
| | 3 | 20 | -142.4 | -159.3 | -169.1 | -179.2 | -189.6 | -202.5 |
| | | 25 | -147.7 | -165.2 | -175.4 | -185.8 | -196.6 | -210.0 |
| | | 30 | -153.0 | -171.1 | -181.6 | -192.5 | -203.6 | -217.4 |
| | | 40 | -160.9 | -180.0 | -191.0 | -202.4 | -214.2 | -228.7 |
| | | 50 | -167.5 | -187.3 | -198.9 | -210.7 | -223.0 | -238.1 |
| | | 60 | -172.7 | -193.2 | -205.1 | -217.4 | -230.0 | -245.6 |