



EVALUATION REPORT

FLORIDA BUILDING CODE, 8TH EDITION (2023)

Manufacturer: PERFORMANCE ROOF SYSTEMS, INC.
A SOPREMA Group Company
4800 Martin Luther King Jr. Blvd.
Kansas City, MO 64130
(800) 727-9872
www.performancerooftsystems.us

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Manufacturing Plants: Kansas City, MO

Quality Assurance: UL LLC (QUA9625)

SCOPE

Category: Roofing
Subcategory: Waterproofing
Code Edition: Florida Building Code, 8th Edition (2023) including High-Velocity Hurricane Zones (HVHZ)
Code Sections: 1504.3.1, 1504.6, 1507.11, 1515.1.1, 1515.1.4, 1523.1.1, 1523.6.2
Properties: Wind Resistance, Physical Properties

REFERENCES

<u>Entity</u>	<u>Report No.</u>	<u>Standard</u>	<u>Year</u>
PRI Construction Materials Technologies (TST5878)	PRS-029-02-01	ASTM D 6222	2016
		TAS 110	2000
		ASTM G 155	2013
PRI Construction Materials Technologies (TST5878)	PRS-030-02-01	ASTM D 6223	2016
		TAS 110	2000
		ASTM G 155	2013
PRI Construction Materials Technologies (TST5878)	PRS-048-02-02	FM 4474(B)	2011
		TAS 114(D)	2011
Trinity ERD (TST6049)	P20080.07.11-2	ASTM D 6509	2016

PRODUCT DESCRIPTION & APPLICATION

Use	Products	Description
Primer	PRS Asphalt Roof Primer	Asphaltic based ASTM D 41 primer applied at a rate of 1-2 gal/100ft ²
Base/Ply Sheets	Derbibase Ultra	ASTM D 6509 APP modified bitumen glass fiber base sheet; Torch adhered with min. 4-inch wide side laps and min. 6-inch wide end laps
	Derbicolor P FR	ASTM D 6222 mineral surfaced, fire resistant, APP modified bitumen polyester reinforced membrane; Torch adhered with min. 4-inch wide side laps and min. 6-inch wide end laps
Overburden Attachment	ANSI A118.1 Thin-Set Mortar	Applied with 1/4" x 1/4" x 1/4" square notched trowel

APPROVED SYSTEMS

The following notes shall be observed when using the waterproofing systems from the tables below.

1. *Maximum Design Pressures* were calculated using a 2:1 margin of safety per FBC Section 1504.9.
2. Refer to **LIMITATIONS** section of this evaluation when using the table(s) below.
3. Refer to **PRODUCT DESCRIPTION & APPLICATION** section of this report for installation detail when the information is not explicitly stated for the selected roof system.
4. The on-center (o.c.) spacing given is the maximum allowable attachment spacing for the rated system.

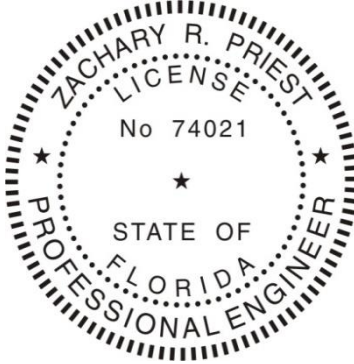
Assemblies with Adhered Membranes over Concrete Deck (New or Existing)					
Deck Detail	Waterproofing System			Overburden	Max. Design Pressure (psf)
	Base Sheet	Ply Sheet	Insulation		
Min 2500 psi concrete primed with PRS Asphalt Roof Primer	Derbibase Ultra fully torch adhered	Derbicolor P FR fully torch adhered	-	Minimum 12" x 12" tiles complying with ANSI A137.1 secured in ANSI A118.1 Thin-Set Mortar	-497.5 (Lim. 9)
Min 2500 psi concrete primed with PRS Asphalt Roof Primer	Derbibase Ultra fully torch adhered	Derbicolor P FR fully torch adhered	-	Minimum 12" x 12" precast concrete pavers secured in ANSI A118.1 Thin-Set Mortar	-502.5 (Lim. 9)

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. Foam plastic insulation shall be installed in accordance with the FBC Section 2603.4.1.5 and 2603.6.
4. In the HVHZ, fastener spacing for insulation attachment is determined using a Minimum Characteristic Force (F') of 275 lbf as demonstrated via testing to TAS 105. If the field tested fastener value is below 275 lbf, then insulation attachment shall not be acceptable.
5. In the HVHZ, fastener spacing for base sheets or membrane attachment shall meet the minimum fastener resistance value and the *MDP* for the specified roof system. It is permissible for a qualified professional to submit a revised fastener spacing utilizing the withdrawal resistance value obtained from TAS 105 testing and calculations performed in accordance with RAS 117 and/or RAS 137, when the fastener resistance is found less than required.
6. In the HVHZ, if mechanical attachment through the lightweight insulating concrete to the structural deck is proposed, a field fastener withdrawal test shall be conducted in compliance with TAS 105 to determine equivalent or increased attachment densities. Revised fastener densities shall be submitted utilizing the withdrawal resistance value obtained from TAS 105 testing and calculations performed in accordance with RAS 117 and/or RAS 137.
7. For assemblies containing mechanical attachment, the allowable uplift pressure for the selected roof system shall meet or exceed the minimum design loads as determined in accordance with the FBC Chapter 16. For perimeter and corner roof zones 2 and 3, the attachment density may be increased by a qualified design professional, as necessary, to meet the design pressure requirements in these areas. In the HVHZ, calculations shall be conducted in compliance with RAS 117 and/or RAS 137. Outside the HVHZ, commonly used standards include RAS 117, FM LPDS 1-29, or ANSI/SPRI WD-1.
8. Reroofing applications shall be examined in accordance with FBC Section 1511 outside of the HVHZ and FBC Section 1521 within the HVHZ. For mechanically fastened systems, a field withdrawal resistance test (TAS 105 in the HVHZ; ANSI/SPRI FX-1 or TAS 105 in the non-HVHZ) shall be conducted by a qualified professional to ensure the fastener meets the minimum design load requirements of the system. For adhered systems, a field uplift resistance test (TAS 124 in the HVHZ; ASTM E 907, FM LPDS 1-52, ANSI/SPRI IA-1, or TAS 124 in the non-HVHZ) shall be conducted to confirm conformance of the existing to the minimum design loads.
9. For assemblies containing fully adhered or ribbon adhered attachment, or where extrapolation of the roof system is not permitted, the *MDP* for the selected roof system shall meet or exceed the minimum design loads as determined in accordance with the FBC Chapter 16 without augmentation.
10. Installation of the evaluated products shall comply with this report, the FBC, and the manufacturer's published application instructions. Where discrepancies exist between these sources, the more restrictive and FBC compliant installation detail shall prevail.
11. The minimum roof slope shall be 1/4:12 for new construction in accordance with Section 1519.16.
12. The AHJ may require integrity flood testing (ASTM D 5957) or Electric Field Vector Mapping testes of all waterproofing systems prior to placement of the overburden material. Testing, if required, should be conducted by a qualified design professional. In the HVHZ, the waterproofing system shall be flood tested in accordance with Section 1519.16.6.
13. All products listed in this report shall be manufactured under a quality assurance programs 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, 8th Edition (2023) including 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 8/8/2023.

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CREEK Technical Services, LLC

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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.

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END OF REPORT