



EVALUATION REPORT

FLORIDA BUILDING CODE, 7TH EDITION (2020)

Manufacturer: ATLAS ROOFING CORPORATION
 2000 Riveredge Parkway, Suite 800
 Atlanta, GA 30328
 (770) 612-6267
www.atlasroofing.com

Issued August 12, 2021

Quality Assurance: PRI Construction Materials Technologies, LLC (QUA9110)

SCOPE

Category: Roofing
Subcategory: Underlayments
Code Edition: Florida Building Code, 7th Edition (2017) including High-Velocity Hurricane Zones (HVHZ)
Code Sections: 1507.1.1, 1518.4, 1523.1.1, 1523.6.5.2.1
Properties: Physical properties

REFERENCES

| <u>Entity</u> | <u>Report No.</u> | <u>Standard</u> | <u>Year</u> |
|---|-------------------|-----------------|--------------|
| PRI Construction Materials Technologies (TST6049) | ATL-033-02-01 | ASTM D 226 | 2009 |
| PRI Construction Materials Technologies (TST6049) | ATL-068-02-01 | ASTM D 1970 | 2015a |
| | | ASTM D 4798 | 2011(2016) |
| | | TAS 110 | 2000 |
| PRI Construction Materials Technologies (TST6049) | ATL-069-02-01 | ASTM D 1970 | 2015a |
| PRI Construction Materials Technologies (TST6049) | ATL-149-02-01 | ASTM D 1970 | 2015a |
| PRI Construction Materials Technologies (TST6049) | ATL-164-02-01 | ASTM D 1970 | 2015a |
| PRI Construction Materials Technologies (TST6049) | ATL-254-02-01 | ASTM D 1970 | 2015a |
| PRI Construction Materials Technologies (TST6049) | ATL-255-02-01 | ASTM D 1970 | 2015a |
| PRI Construction Materials Technologies (TST6049) | BWR-534-02-01 | ASTM D 1970 | 2015a |
| | | ASTM D 4798 | 2011(2016) |
| | | TAS 110 | 2000 |
| PRI Construction Materials Technologies (TST6049) | BWR-543-02-01 | ASTM D 1970 | 2015a |
| PRI Construction Materials Technologies (TST6049) | MSA-004-02-01 | ASTM D 1970 | 2015a |
| PRI Construction Materials Technologies (TST6049) | MSA-007-02-01 | UL 1897 | 2012 |
| PRI Construction Materials Technologies (TST6049) | MSA-026-02-01 | ASTM D 1970 | 2015a |
| PRI Construction Materials Technologies (TST6049) | WRMI-011-02-01 | ASTM D 1970 | 2015a |
| PRI Construction Materials Technologies (TST6049) | MSA-004-02-01 | ASTM D 1970 | 2015a |
| PRI Construction Materials Technologies (TST6049) | MSA-007-02-01 | UL 1897 | 2012 |
| PRI Construction Materials Technologies (TST6049) | MSA-026-02-01.1 | ASTM D 1970 | 2015a |
| PRI Construction Materials Technologies (TST6049) | MSA-030-02-01 | ASTM D 1970 | 2015a |
| PRI Construction Materials Technologies (TST6049) | MSA-047-02-01 | ASTM D 1970 | 2015a |
| PRI Construction Materials Technologies (TST6049) | MSA-054-02-01.1 | TAS 103 | 2020 |
| | | TAS 110 | 2000 |
| PRI Construction Materials Technologies (TST6049) | MSA-057-02-01 | ASTM D 1970 | 2015a |
| PRI Construction Materials Technologies (TST6049) | MSA-062-02-01.1 | ASTM D 1623 | 2017 |
| PRI Construction Materials Technologies (TST6049) | 1085T0002 | TAS 110 | 2000 |
| PRI Construction Materials Technologies (TST6049) | 1085T0007 | ASTM D 1623 | 2017 |
| PRI Construction Materials Technologies (TST6049) | 117T0001 | ASTM D 1623 | 2017 |
| PRI Construction Materials Technologies (TST6049) | 117T0004 | TAS 110 | 2000 |
| PRI Construction Materials Technologies (TST6049) | 117T0005 | UL 1897 | 2012 |
| PRI Construction Materials Technologies (TST6049) | 117T0039 | ASTM D 1970 | 2015a |
| PRI Construction Materials Technologies (TST6049) | 117T0040 | UL 1897 | 2012 |
| PRI Construction Materials Technologies (TST6049) | 1085T0011 | ASTM D 1623 | 2017 |
| | | TAS 103 | 2020 |
| UL LLC (TST1740) | 02-NK40952 | ASTM D 1970 | 2015a |
| UL LLC (TST1740) | 02-NK40952 | ASTM D 226 | 2009 |
| UL LLC (TST1740) | 02-NK40952 | ASTM D 2626 | 2004(2012)E1 |

| <u>Entity</u> | <u>Report No.</u> | <u>Standard</u> | <u>Year</u> |
|------------------|-------------------|-----------------|---------------|
| UL LLC (TST1740) | 02-NK40952 | ASTM D 4869 | 2016 |
| UL LLC (TST1740) | 02-NK40952 | ASTM D 6380 | 2003 (2013)E1 |

PRODUCT DESCRIPTION

| | |
|---|---|
| #15 Specification Felt | ASTM D 226, Type I asphalt saturated organic felt underlayment for use in the HVHZ. |
| #30 Organic Saturated Felt | ASTM D 4869, Type II asphalt saturated organic felt underlayment <u>for use in the non-HVHZ only.</u> |
| #30 Specification Felt | ASTM D 226, Type II asphalt saturated organic felt underlayment for use in the HVHZ and non-HVHZ. |
| #43 Base Sheet | ASTM D 2626 asphalt saturated and coated, non-perforated, organic felt underlayment for use in the HVHZ and non-HVHZ. |
| #90 Mineral Surface Roll Roofing | ASTM D 6380, Class M asphalt-saturated organic roll roofing sheet for use in the HVHZ and non-HVHZ. |
| Gorilla Guard® EVERFELT 30 | Asphalt-saturated organic felt underlayment reinforced with glass fiber that meets the performance requirements of ASTM D 226, Type I for use in the HVHZ. |
| Slate/Tile Underlayment | ASTM D 6380, Class M asphalt-saturated organic roll roofing sheet for use in the HVHZ and non-HVHZ. |
| WeatherMaster® Ice and Water 100 | ASTM D 1970 SBS modified, self-adhering underlayment reinforced with a fiberglass mat and a granular surface for use in the HVHZ and non-HVHZ. The self-adhesive side is covered with a release film, which is removed during installation. |
| WeatherMaster® Ice and Water 200 | ASTM D 1970 SBS modified, self-adhering underlayment reinforced with a fiberglass mat and a granular surface for use in the HVHZ and non-HVHZ. The self-adhesive side is covered with a split-release film, which is removed during installation. |
| WeatherMaster® Ice and Water 216 | ASTM D 1970 SBS modified, self-adhering underlayment reinforced with a fiberglass mat and a granular surface for use in the HVHZ and non-HVHZ. The self-adhesive side is covered with a split-release film, which is removed during installation. |
| WeatherMaster® Flexible Ice and Water | ASTM D 1970 SBS modified, self-adhering underlayment with plastic film surface for use in the HVHZ and non-HVHZ. The self-adhesive side is covered with a split-release film, which is removed during installation. |
| WeatherMaster® Pro-Grade Ice and Water | ASTM D 1970, TAS 103, and FRSA/TRI <i>Florida High Wind Concrete and Clay Tile Installation</i> Manual, Sixth Edition compliant compliant SBS modified, self-adhering underlayment with a fiberglass mat reinforcement and a poly-fabric surface for use in the HVHZ and non-HVHZ. The self-adhesive side is covered with a release film, which is removed during installation. |
| WeatherMaster® Tile | ASTM D 1970, TAS 103, and FRSA/TRI <i>Florida High Wind Concrete and Clay Tile Installation</i> Manual, Sixth Edition compliant compliant SBS modified, self-adhering underlayment with a fiberglass mat reinforcement and a poly-fabric surface for use in the HVHZ and non-HVHZ. The self-adhesive side is covered with a release film, which is removed during installation. |

APPLICATION METHOD

Installation shall be in accordance with the published manufacturer's installation instructions, the FBC, and the requirements below.

Deck substrates shall be clean, dry, and free from any irregularities and debris. All fasteners in the deck shall be checked for protrusion and corrected prior to underlayment application.

The roof deck shall be constructed of closely fitted plywood sheathing for new or existing construction. Plywood deck shall be installed in accordance with FBC requirements.

Exposure of the underlayments shall be limited to a maximum 30 days except as follows:

- a) #15 Specification Felt, #30 Specification Felt, and #40 Base Sheet – exposure for greater than 24 hours may adversely affect product performance
- b) WeatherMaster® Ice and Water 100, WeatherMaster® Ice and Water 200, WeatherMaster® Ice and Water 216 – maximum 45 days
- c) WeatherMaster® Pro-Grade Ice and Water – maximum 180 days
- d) WeatherMaster® Tile – maximum 180 days

Self-adhering underlayments may be adhered to primed or unprimed plywood substrates in the non-HVHZ. WeatherMaster® Ice and Water 100, WeatherMaster® Ice and Water 200, WeatherMaster® Ice and Water 216 may be adhered to OSB or wood plank sheathing.

Roof coverings shall be mechanically fastened through the underlayment to the roof deck except as follows (or as indicated in other current FBC product approval documents):

- a) WeatherMaster® Pro-Grade Ice and Water – DAP Touch 'n Seal Storm Bond Roof Tile Adhesive or DuPont Tile Bond
- b) WeatherMaster® Tile – DAP Touch 'n Seal Storm Bond Roof Tile Adhesive or DuPont Tile Bond

Allowable Roof Coverings:

| Underlayment | Asphalt Shingles | Metal Roof Panels and Shingles | Composite or Photovoltaic Shingles | Wood Shingles and Shakes | Slate Shingles | Clay and Concrete Tile |
|--|------------------|--------------------------------|------------------------------------|--------------------------|----------------|------------------------|
| #15 Specification Felt (HVHZ only) | Y | Y | N | Y ² | Y | N |
| #30 Organic Saturated Felt | Y | Y | Y | Y | Y | N |
| #30 Specification Felt | Y | Y | Y | Y | Y | Y |
| #43 Base Sheet | Y | Y | Y | N | Y | Y |
| #90 Mineral Surface Roll Roofing | Y ¹ | N | N | N | N | Y |
| Gorilla Guard® EVERFELT 30 | Y | Y | Y | Y ² | Y | N |
| Slate/Tile Underlayment | Y ¹ | N | N | N | N | Y |
| WeatherMaster® Ice and Water 100 | Y | Y | Y | N | Y | N |
| WeatherMaster® Ice and Water 200 | Y | Y | Y | N | Y | N |
| WeatherMaster® Ice and Water 216 | Y | Y | Y | N | Y | N |
| WeatherMaster® Flexible Ice and Water | Y | Y | Y | N | Y | N |
| WeatherMaster® Pro-Grade Ice and Water | Y | Y | Y | N | Y | Y |
| WeatherMaster® Tile | Y | Y | Y | N | Y | Y |

Notes: 1) Open valley applications per 1507.2.9.2
2) Wood shingles only

WIND RESISTANCE OF ROOF TILE UNDERLAYMENT SYSTEMS (NON-HVHZ ONLY)

The *Allowable Design Pressures* below shall be used in accordance with the FRSA/TRI *Florida High Wind Concrete and Clay Tile Installation Manual*, Sixth Edition for the selected underlayment system. The *Allowable Design Pressures* shown below were calculated using a 2:1 margin of safety per FBC Section 1504.9.

Underlayment System No.1 – Direct Deck Application

Roof Deck: Min. 15/32-inch CDX plywood attached to wood supports spaced a maximum 24" o.c.

Underlayment: **WeatherMaster® Tile** shall be fully adhered to the plywood deck.

Allowable Design Pressure: -135 psf

Underlayment System No.2 – Direct Deck Application

Roof Deck: Min. 15/32-inch APA plywood attached to wood supports spaced a maximum 24" o.c.

Underlayment: **WeatherMaster® Pro-Grade Ice and Water** shall be backnailed 12-inches o.c. to the plywood deck using min. 12ga, 1-1/4" galvanized, ring shank roofing nails with min. 32ga 1-5/8" diameter tin caps.

Allowable Design Pressure: -105 psf

LIMITATIONS

- 1) Fire Classification is not within the scope of this evaluation.
- 2) Roof slope limitations shall be in accordance with FBC requirements.
- 3) Installation of the evaluated product 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.
- 4) Products described within this report may be used as described in other current FBC product approval documents.
- 5) Roof coverings shall not be adhered directly to the underlayment unless otherwise approved in this or other current FBC product approval documents.
- 6) The roof deck shall be designed by others in accordance with FBC requirements to resist the design wind load pressures for components and cladding.
- 7) 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) 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 8/12/2021.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

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