



NEMO|etc.

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ENGINEER

EVALUATE

TEST

CONSULT

P.E. EVALUATION REPORT (PEER)

GAF

1 Campus Drive
Parsippany, NJ 07054
(800) 766-3411

PEER-GAF-010.A.R27

FL10626-R27 (NON-HVHZ)

Date of Issuance: 04/25/2008

Revision 27: 10/18/2023

SCOPE:

This P.E. Evaluation Report (henceforth 'PEER') is issued under **F.A.C. Rule 61G20-3** and the applicable rules and regulations governing the use of construction materials in the State of Florida. The documentation submitted has been reviewed by Robert Nieminen, P.E. for use of the product under the Florida Building Code. The product described herein has been evaluated for compliance with the **8th Edition (2023) Florida Building Code** [sections noted herein](#).

DESCRIPTION: GAF Roof Underlayments (NON-HVHZ)

LABELING: Labeling shall be in accordance with the requirements of the Accredited Quality Assurance Agency noted herein and **FBC 1507.1.1**.

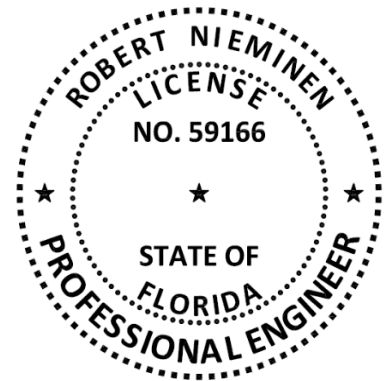
CONTINUED COMPLIANCE: This PEER is valid until such time as the named product(s) changes, the referenced Quality Assurance or production facility location(s) changes, or Code provisions that relate to the product(s) change. Acceptance of our PEERs by the named client constitutes agreement to notify NEMO ETC, LLC of any changes to the product(s), the Quality Assurance, or the production facility location(s). NEMO ETC, LLC requires a complete review of its PEER relative to updated Code requirements with each Code Cycle.

ADVERTISEMENT: The Florida Product Approval Number (FL#) preceded by the words "Nemo P.E. Evaluated" may be displayed in advertising literature. If any portion of the PEER is displayed, then it shall be done in its entirety.

INSPECTION: Upon request, a copy of this entire PEER shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This PEER consists of pages 1 through 9.

Prepared by:



CERTIFICATION OF INDEPENDENCE:

1. NEMO ETC, LLC does not have, nor does it intend to acquire or will it acquire, a financial interest in any company manufacturing or distributing products it evaluates.
2. NEMO ETC, LLC is not owned, operated or controlled by any company manufacturing or distributing products it evaluates.
3. Robert Nieminen, P.E. does not have nor will acquire, a financial interest in any company manufacturing or distributing products for which the PEERs are being issued.
4. Robert Nieminen, P.E. does not have, nor will acquire, a financial interest in any other entity involved in the approval process of the product.
5. This is a building code evaluation. Neither NEMO ETC, LLC nor Robert Nieminen, P.E. are, in any way, the Designer of Record for any project on which this PEER, or previous versions thereof, is/was used for permitting or design guidance unless retained specifically for that purpose.

ROOFING COMPONENT EVALUATION:

1. SCOPE:

Product Category: Roofing
Sub-Category: Underlayment
Product Approval Method: Method 1, Option D – Codified Material, Evaluation by Engineer
Compliance Statement: **GAF Roof Underlayments**, as produced by **GAF**, have demonstrated compliance with the following sections of the **8th Edition (2023) Florida Building Code** through testing in accordance with the following Standards. Compliance is subject to the [Installation Requirements](#) and [Limitations of Use](#) set forth herein.

2. STANDARDS:

SECTION	PROPERTY	STANDARD
1504.3.1	Wind resistance	FM 4474
1504.7	Impact resistance	ASTM D3746
1507.1.1 / R905.1.1	Material standard	ASTM D226
1507.1.1, 1507.2.9.2 / R905.1.1, R905.2.8.2	Material standard	ASTM D1970
1507.1.1 / R905.1.1	Material standard	ASTM D6757
1507.1.1 / R905.1.1	Material standard	ASTM D8257
1507.3.3, R905.3.3	Material standard	FRSA/TRI, 7th Edition
1507.11.2	Material standard	ASTM D6164
TAS 110	Accelerated Weathering	ASTM D4798
TAS 110	Material standard	TAS 103

3. REFERENCES:

ENTITY	EXAMINATION	REFERENCE	DATE
ERD (TST6049)	ASTM D6164 (GA)	G40630.01.14-2B-R2	01/07/14
ERD (TST6049)	ASTM D6164 (GA)	G46160.09.14-3A	09/09/14
ERD (TST6049)	ASTM D1970 (GA)	GAF-SC13285.03.17-3	03/01/17
ERD (TST6049)	ASTM D1970 (GA)	GAF-SC13285.03.17-4	03/01/17
ERD (TST6049)	ASTM D1970 (GA)	GAF-SC13285.03.17-1	03/08/17
ERD (TST6049)	ASTM D1970 (IN)	GAF-SC16440.12.17	12/31/17
NEMO (TST6049)	Physical Properties (ON)	4q-GAF-19-SSMBB-03.A	05/13/19
NEMO (TST6049)	ASTM D1623	4p-DOW-19-SSLAP-01.A-R2	10/01/19
NEMO (TST6049)	ASTM D1970	4j-FTS-20-SSUDL-01.A	12/01/20
NEMO (TST6049)	ASTM D1970	4j-GAF-20-SSUDL-01.A	12/22/20
NEMO (TST6049)	ASTM D4798, TAS 103	4j-GAF-20-SSUDL-02.A	03/15/21
NEMO (TST6049)	ASTM D4798	4j-FTS-21-SSUDL-02.A	06/09/21
NEMO (TST6049)	ASTM D4798, ASTM D3746	4j-GAF-21-SSUDL-02.A	11/19/21
NEMO (TST6049)	ASTM D1623 & FRSA/TRI	4j-GAF-22-SSUDL-01.A	08/09/22
NEMO (TST6049)	ASTM D1970, D4798	4j-GAF-22-SSUDL-02.A	08/29/22
NEMO (TST6049)	ASTM D1970, D4798	4j-GAF-22-SSUDL-05.A	01/03/23
PRI (TST5878)	Wind Uplift	GAF-434-02-01	09/16/13
PRI (TST5878)	Wind Uplift	GAF-434-02-03	09/16/13
PRI (TST5878)	Wind Uplift	GAF-434-02-04	09/16/13
PRI (TST5878)	ASTM D1970 (AL)	MSA-047-02-01	04/11/18
PRI (TST5878)	ASTM D1970 (AR)	376T0032	10/22/19
PRI (TST5878)	ASTM D226 (S-CA)	376T0054	02/18/20
PRI (TST5878)	ASTM D226, Type II	376T0192	09/16/21
PRI (TST5878)	TAS 114(C)	376T0310	07/19/22
PRI (TST5878)	ASTM D8257	376T0162	09/17/21
PRI (TST5878)	ASTM D1970 (IN)	376T0342	12/05/22
PRI (TST5878)	ASTM D8257	376T0428	08/21/23
PRI (TST5878)	ASTM D8257	376T0429	08/21/23

ENTITY	EXAMINATION	REFERENCE	DATE
PRI (TST5878)	ASTM D8257	376T0430	08/22/23
PRI (TST5878)	ASTM D8257	376T0431	08/23/23
PRI (TST5878)	ASTM D8257	376T0162, LTR	09/07/23
PRI (TST5878)	ASTM D8257	376T0428, LTR	09/07/23
QAI (TST9898)	ASTM D8257	RJ8299P-14	03/29/22
QAI (TST9898)	ASTM D8257	RJ8557P-1	05/27/22
QAI (TST9898)	ASTM D8257	RJ8557P-2	05/27/22
NEMO	Traceability	FBC Cross-Listing	04/08/21
UL, LLC (QUA9625)	Quality Control	Service Confirmation	09/28/23
UL, LLC (QUA9625)	Quality Control	Florida BCIS	Current

4. PRODUCT DESCRIPTION:

TABLE 1: EVALUATED UNDERLAYMENTS		
PRODUCT	MATERIAL STANDARD	PLANT(S) ⁱ
Shingle-Mate® Roof Deck Protection	ASTM D226, Type II (Table 1)	ML2B
StormSafe™ Anchor Sheet	ASTM D226, Type II (Table 1)	ML4D
VersaShield® Fire-Resistant Roof Deck Protection	ASTM D226, Type II	ML9
Deck-Armor™ Premium Breathable Roof Deck Protection	ASTM D8257 ⁱⁱⁱ	ML3
FeltBuster® Synthetic Roofing Felt	ASTM D8257 ⁱⁱ	ML3, ML4A/ML4B/ML4C, ML5, ML7A/ML7B or ML7C
Tiger Paw™ Premium Roof Deck Protection	ASTM D8257 ⁱⁱ	ML3 or ML7C
GAF Extended Dry-In Membrane	ASTM D1970 and FRSA/TRI	ML6
LIBERTY™ SBS Self-Adhering Base/Ply Sheet	ASTM D1970	ML1A or ML1B
StormGuard® Film-Surfaced Leak Barrier	ASTM D1970 ⁱⁱⁱ	ML1A or ML1B
WeatherWatch® Mineral-Surfaced Leak Barrier	ASTM D1970	ML1A, ML1B, MD1D or ML8
Ruberoid® Mop Granule	ASTM D6164, FRSA/TRI Manual and TAS 103 (partial)	ML1B
Ruberoid® Mop Granule FR		

5. LIMITATIONS:

- 5.1 This is a building code evaluation. Neither NEMO ETC, LLC nor Robert Nieminen, P.E. are, in any way, the Designer of Record for any project on which this PEER, or previous versions thereof, is/was used for permitting or design guidance. PEERs are not to be construed as representing any attributes not specifically listed, nor are PEERs to be construed as an endorsement of the subject, or a recommendation for its use. There is no warranty by NEMO ETC, LLC or Robert Nieminen, P.E., express or implied, as to any finding or other matter in this PEER, or as to any product covered by the PEER.
- 5.2 This PEER is not for use in FBC High Velocity Hurricane Zone jurisdictions, as defined in FBC Chapter 2 (Broward and Miami-Dade Counties).
- 5.3 This PEER pertains to above-deck roof components. Roof decks and structural members shall be in accordance with FBC requirements to the satisfaction of the Authority Having Jurisdiction.
- 5.4 This PEER does not include evaluation of fire classification. Refer to **FBC 1505** for requirements and limitations regarding roof assembly fire classification. Refer to **FBC 2603** for requirements and limitations concerning the use of foam plastic insulation.
- 5.5 **GAF Roof Underlayments** may be used with any prepared roof cover where the product is specifically referenced within FBC approval documents. If not listed, a request may be made to the Authority Having Jurisdiction for approval based on this PEER combined with supporting data for the prepared roof covering.

5.6 Allowable Roof Covers:

TABLE 2: ROOF COVER OPTIONS							
FBC NON-HVHZ:	1507.2	1507.3		1507.4 & 1507.5		1507.7	1507.8 & 1507.9
UNDERLAYMENT	ASPHALT SHINGLES	CLAY AND CONCRETE TILE		METAL PANELS OR SHINGLES		SLATE OR SLATE-TYPE SHINGLES	WOOD SHINGLES OR SHAKES
		MECHANICAL ATTACH	ADHESIVE-SET				
Shingle-Mate® Roof Deck Protection	Yes	No	No	No	No	No	No
VersaShield® Fire-Resistant Roof Deck Protection	Yes	No	No	No	No	No	No
Deck-Armor™ Premium Breathable Roof Deck Protection	Yes	No	No	Yes	Yes	Yes	No
FeltBuster® Synthetic Roofing Felt	Yes	No	No	No	No	No	No
Tiger Paw™ Premium Roof Deck Protection	Yes	No	No	Yes	Yes	Yes	No
GAF Extended Dry-In Membrane	Yes	Yes	No	Yes	Yes	Yes	Yes ^{iv}
LIBERTY™ SBS Self-Adhering Base/Ply Sheet	Yes	No	No	No	No	No	Yes ^{iv}
StormGuard® Film-Surfaced Leak Barrier	Yes	No	No	Yes	Yes	Yes	Yes ^{iv}
WeatherWatch® Mineral-Surfaced Leak Barrier	Yes	No	No	No	No	No	Yes ^{iv}
Ruberoid® Mop Granule	No	Yes (Cap Sheet in 2-ply system)	Yes (Cap Sheet in 2-ply system) Table 2A	No	No	No	No
Ruberoid® Mop Granule FR	No	Yes (Cap Sheet in 2-ply system)	Yes (Cap Sheet in 2-ply system) Table 2A	No	No	No	No

5.6.1 Adhesive-set is limited to use of following underlayment / tile-adhesive combinations.

TABLE 2A: ALLOWABLE UNDERLAYMENT / TILE-ADHESIVE COMBINATIONS ^v					
UNDERLAYMENT	TILE-ADHESIVE OPTIONS AND FLORIDA PRODUCT APPROVAL				
	DAP GLOBAL		DUPONT	ICP CONSTRUCTION	
	STORMBOND LOW GWP	STORMBOND 2 LOW GWP	TILE BOND	APOC POLYSET AH-160	APOC POLYSET RTA-1
	FL14506	FL14506	FL22525	FL6332	FL6276
Ruberoid® Mop Granule	Yes	Yes	Yes	Yes	Yes
Ruberoid® Mop Granule FR	Yes	Yes	Yes	Yes	Yes

5.7 Allowable Substrates:

TABLE 3: SUBSTRATE OPTIONS FOR ADHERED UNDERLAYMENTS				
UNDERLAYMENT	APPLICATION	SUBSTRATES (DESIGNED TO MEET CODE)		
		TYPE	PRIMER	SUBSTRATES
GAF Extended Dry-In Membrane	self-adhering	Deck/sheathing:	None	plywood
LIBERTY™ SBS Self-Adhering Base/Ply Sheet, StormGuard® Film-Surfaced Leak Barrier or Weather Watch® Mineral-Surfaced Leak Barrier	self-adhering	Deck/sheathing:	(Optional) ASTM D41	plywood
		Base Sheet:	None	ASTM D226 felt, Type II
		Flashing/valley:	ASTM D41	metal
Ruberoid® Mop Granule or Ruberoid® Mop Granule FR	hot asphalt	Deck:	ASTM D41	structural concrete
		Base Sheet:	None	ASTM D226, Type II felt, GAFGLAS® #80 Ultima™ Base Sheet or Ruberoid® 20 Smooth

5.8 **Attachment Limitations:**

5.8.1 For use under mechanically attached NON-TILE prepared roof coverings, attachment shall be in accordance with the manufacturer’s installation instructions, but – for mechanically attached underlayments or base sheets - not less than **FBC 1507.1.1** or **R905.1.1**.

5.8.2 Wind Resistance for Underlayment Systems in Tile Roof Applications:

The following wind uplift limitations apply to tile underlayment systems. The Maximum Design Pressure (‘MDP’) is the result of testing for wind load resistance based on allowable wind loads, and reflects the ultimate passing pressure divided by 2 (the 2 to 1 margin of safety per **FBC 1504.9** has already been applied).

5.8.2.1 Direct-to-Deck:

The maximum design pressure for the selected assembly shall meet or exceed that required under **FRSA/TRI Manual 7th Edition**, Appendix A or the critical (highest) design pressure determined in accordance with **FBC 1609** or **FBC Residential Chapter 3**.

TABLE 4A: ALLOWABLE DESIGN PRESSURES, DIRECT-TO-DECK UNDERLAYMENT IN TILE ROOF APPLICATIONS				
SYSTEM No.	DECK	BASE PLY	CAP PLY	DESIGN PRESSURE (PSF)
1	Plywood, APA rated sheathing, 32/16, Exposure 1, PS1, 15/32 category	None	GAF Extended Dry-In Membrane, self-adhered and back-nailed within the seldedge-edge side laps using corrosion resistant 12 ga. x 1¼” ring shank nails through 32 ga., 1-5/8” diameter tin caps or corrosion resistant 1-inch diameter metal cap nails, max. 12-inch o.c.	-45.0
2	Min. 2,500 psi structural concrete	GAFGLAS #75 Base Sheet, Tri-Ply #75 Base Sheet, GAFGLAS #80 Ultima Base Sheet, GAFGLAS Ply 4, Tri-Ply Ply 4 or GAFGLAS Flex Ply 6 applied in full mopping of ASTM D312, Type IV hot asphalt at 20 to 25 lbs/square	Ruberoid® Mop Granule or Ruberoid® Mop Granule FR applied in full mopping of ASTM D312, Type IV hot asphalt at 20 to 25 lbs/square, and back-nailed in accordance with GAF installation instructions, max. 12-inch o.c.	-442.5

5.8.2.2 Mechanically-Attached Base Sheet:

The maximum design pressure for the selected assembly shall meet or exceed that required under **FRSA/TRI Manual 7th Edition**, Appendix A or the critical (highest) design pressure determined in accordance with **FBC 1609** or **FBC Residential Chapter 3**.

Alternatively, the maximum design pressure for the selected assembly shall meet or exceed at least the Zone 1 design pressure determined in accordance with **FBC 1609** or **FBC Residential Chapter 3**. Elevated pressure zones shall employ an attachment density by a qualified design professional to resist the elevated pressure criteria. Commonly used methods are [ANSI/SPRI](#) WD1, [FM Loss Prevention Data Sheet](#) 1-29 or [Roofing Application Standard](#) RAS 117 or RAS 137. Assemblies marked with an asterisk* carry the limitations set forth in Section 2.2.10.1 of [FM Loss Prevention Data Sheet](#) 1-29 for enhancements.

TABLE 4B: ALLOWABLE DESIGN PRESSURES, 2-PLY UNDERLAYMENT SYSTEMS IN TILE ROOF APPLICATIONS				
SYSTEM No.	DECK	BASE SHEET	CAP PLY	DESIGN PRESSURE (PSF)
3	Plywood, APA rated sheathing, 40/20, Exposure 1, PS1, 19/32 category	GAFGLAS® #80 Ultima™ Base Sheet or Ruberoid® 20 Smooth mechanically attached with 12 ga., min. 1.25-inch long ring shank nails through 32 ga., 1-5/8-inch diameter tin caps spaced 9-inch o.c. at the min. 4-inch wide side laps and 9-inch o.c. at two (2), equally spaced, staggered center rows in the field of the sheet	Ruberoid® Mop Granule or Ruberoid® Mop Granule FR applied in full mopping of ASTM D312, Type IV hot asphalt at 20 to 25 lbs/square, and back-nailed in accordance with GAF installation instructions, max. 12-inch o.c.	-45.0
4	Plywood, APA rated sheathing, 40/20, Exposure 1, PS1, 19/32 category	GAFGLAS® #80 Ultima™ Base Sheet or Ruberoid® 20 Smooth mechanically attached with 12 ga., min. 1.25-inch long ring shank nails through 32 ga., 1-5/8-inch diameter tin caps spaced 8-inch o.c. at the min. 4-inch wide side laps and 8-inch o.c. at three (3), equally spaced, staggered center rows in the field of the sheet	Ruberoid® Mop Granule or Ruberoid® Mop Granule FR applied in full mopping of ASTM D312, Type IV hot asphalt at 20 to 25 lbs/square, and back-nailed in accordance with GAF installation instructions, max. 12-inch o.c.	-75.0
5	Plywood, APA rated sheathing, 40/20, Exposure 1, PS1, 19/32 category	GAFGLAS® #80 Ultima™ Base Sheet or Ruberoid® 20 Smooth mechanically attached with 11 ga., min. 1.25-inch long ring shank nails through 32 ga., 1-5/8-inch diameter tin caps spaced 4-inch o.c. at the min. 2-inch wide side laps and 4-inch o.c. at four (4), equally spaced center rows in the field of the sheet	Ruberoid® Mop Granule or Ruberoid® Mop Granule FR applied in full mopping of ASTM D312, Type IV hot asphalt at 20 to 25 lbs/square, and back-nailed in accordance with GAF installation instructions, max. 12-inch o.c.	-97.5

5.9 Exposure Limitations:

TABLE 5: EXPOSURE LIMITATIONS		
UNDERLAYMENT	PREPARED ROOF COVER INSTALLATION TYPE	MAXIMUM EXPOSURE (DAYS)
Shingle-Mate® Roof Deck Protection, StormSafe™ Anchor Sheet, VersaShield® Fire-Resistant Roof Deck Protection and LIBERTY™ SBS Self-Adhering Base/Ply Sheet	Mechanically attached	30
WeatherWatch® Mineral-Surfaced Leak Barrier	Mechanically attached	60
Deck-Armor™ Premium Breathable Roof Deck Protection, FeltBuster® Synthetic Roofing Felt and Tiger Paw™ Premium Roof Deck Protection	Mechanically attached	30
StormGuard® Film-Surfaced Leak Barrier	Mechanically attached	90
GAF Extended Dry-In Membrane	Mechanically attached	360
Ruberoid® Mop Granule and Ruberoid® Mop Granule FR	Adhesive-set tile roof system	180
	Mechanically attached	UNLIMITED

5.10 Tile Slippage Limitations:

When loading roof tiles on the underlayment, the maximum roof pitch shall be as follows. These pitch limitations can only be exceeded by using battens or loading boards during loading of the roof tiles.

TABLE 6: TILE SLIPPAGE LIMITATIONS FOR DIRECT-DECK TILE INSTALLATIONS			
UNDERLAYMENT	TILE PROFILE	STAGING METHOD	MAXIMUM STAGING PITCH
GAF Extended Dry-In Membrane	Flat or Lugged	10-tile stack	4:12
	Flat or Lugged	6-tile stack (4 over 2)	7:12
Ruberoid® Mop Granule	Flat	Max. 10-tile stack	4:12
	Lugged	battens or loading-boards required	N/A
Ruberoid® Mop Granule FR	Flat or Lugged	battens or loading-boards required	N/A

5.11 All components in the roof assembly shall have quality assurance audit in accordance with **F.A.C. Rule 61G20-3**. Refer to the Product Approval of the component manufacturer for components mentioned herein that are produced by a Product Manufacturer other than the report holder on [Page 1](#) of this PEER.

6. INSTALLATION:

6.1 **GAF Roof Underlayments** shall be installed in accordance with **GAF** published installation instructions subject to the [Limitations of Use](#) set forth herein and the specifics noted below.

6.1.1 Consult GAF requirements for back-nailing at pitch of 2:12 or greater.

6.2 Re-fasten any loose decking panels, and check for protruding nail heads. Sweep the substrate thoroughly to remove any dust and debris prior to application and prime the substrate (if applicable).

6.3 Deck-Armor™ Premium Breathable Roof Deck Protection, FeltBuster® Synthetic Roofing Felt or Tiger Paw™ Premium Roof Deck Protection:

6.3.1 Non-Tile Applications:

Shall be installed in compliance with requirements for a synthetic underlayment (ASTM D8257) in **FBC 1507.1.1.1** or **FBC Residential R905.1.1.1** for the type of prepared roof covering to be installed, and the manufacturer’s installation instructions.

6.4 StormSafe™ Anchor Sheet:

6.4.1 Non-Tile Applications:

Shall be installed in compliance with requirements for an approved mechanically attached underlayment (ASTM D226, Type II) in **FBC Table 1507.1.1.1** or **FBC Residential Table R905.1.1.1** for the type of prepared roof covering to be installed, and the manufacturer’s installation instructions. FBC requirements take precedence over the manufacturer’s installation instructions.

StormSafe™ Anchor Sheet is limited to use as a mechanically attached base layer in 2-ply underlayment systems. One the same day, install LIBERTY™ SBS Self-Adhering Base/Ply; StormGuard® Film-Surfaced Leak Barrier or WeatherWatch® Mineral-Surfaced Leak Barrier over the StormSafe™ Anchor Sheet.

6.5 Shingle-Mate® Roof Deck Protection:

6.5.1 Non-Tile Applications:

Shall be installed in compliance with requirements for an approved mechanically attached underlayment (ASTM D226, Type II) in **FBC Table 1507.1.1.1** or **FBC Residential Table R905.1.1.1** for the type of prepared roof covering to be installed, and the manufacturer’s installation instructions. FBC requirements take precedence over the manufacturer’s installation instructions.

6.6 VersaShield® Fire-Resistant Roof Deck Protection:

6.6.1 Non-Tile Applications:

Shall be installed in compliance with requirements for an approved mechanically attached underlayment (ASTM D6757) in **FBC Table 1507.1.1.1** or **FBC Residential Table R905.1.1.1** for the type of prepared roof covering to be installed, and the manufacturer’s installation instructions. FBC requirements take precedence over the manufacturer’s installation instructions.

6.7 LIBERTY™ SBS Self-Adhering Base/Ply Sheet, StormGuard® Film-Surfaced Leak Barrier or WeatherWatch® Mineral-Surfaced Leak Barrier:

6.7.1 Non-Tile Applications:

Shall be installed in compliance with requirements for an approved self-adhering underlayment (ASTM D1970) in **FBC 1507.1.1.1** or **FBC Residential R905.1.1.1** for the type of prepared roof covering to be installed, and the manufacturer’s installation instructions.

Back-nailing is required. Back-nailing shall consist of Approved cap nails spaced max. 18-inch o.c., encapsulated within min. 4-inch side laps.

When installed over a mechanically attached base sheet of FBC Approved ASTM D226 Type II felt, the felt shall be fastened in accordance with **FBC 1507.1.1** or **R905.1.1**.

6.7.2 LIBERTY™ SBS Self-Adhering Base/Ply Sheet, StormGuard® Film-Surfaced Leak Barrier or WeatherWatch® Mineral-Surfaced Leak Barrier may be installed as a secondary water barrier using minimum 3¼-inch wide strips to seal plywood deck joints prior to installation of the primary underlayment system.

6.8 GAF Extended Dry-In Membrane:

6.8.1 Non-Tile Applications:

Shall be installed in compliance with requirements for an approved self-adhering underlayment (ASTM D1970) in **FBC 1507.1.1.1** or **FBC Residential R905.1.1.1** for the type of prepared roof covering to be installed, and the manufacturer’s installation instructions.

Back-nailing is required. Back-nailing shall consist of Approved cap nails spaced max. 18-inch o.c., encapsulated within min. 4-inch side laps.

6.8.2 Mechanically Attached Tile Applications:

Shall be installed in compliance with the requirements for Self-Adhered Membrane set forth in **FRSA/TRI Manual 7th Edition** and the manufacturer’s installation instructions.

Refer to [Section 5.8](#) herein for attachment limitations.

Refer to [Table 6](#) herein for tile staging limitations.

6.8.3 GAF Extended Dry-In Membrane may be installed as a secondary water barrier using minimum 3¼-inch wide strips to seal plywood deck joints prior to installation of the primary underlayment system.

6.9 Ruberoid® Mop Granule; Ruberoid® Mop Granule FR:

6.9.1 Tile Applications:

Shall be installed in compliance with requirements as an alternate to the “Hot Asphalt Applied Cap Sheet” in the “Two Ply System” in the **FRSA/TRI Manual 7th Edition**, and the manufacturer’s installation instructions.

Refer to [Section 5.8](#) herein for attachment limitations.

Refer to [Table 6](#) for tile staging limitations.

7. BUILDING PERMIT REQUIREMENTS:

As required by the Building Official or Authority Having Jurisdiction to properly evaluate the installation of this product.

8. MANUFACTURING PLANTS:

Contact the named QA entity for manufacturing facilities covered by F.A.C. [Rule 61G20-3](#) QA requirements. Refer to [Section 4](#) herein for products and production locations having met codified material standards.

9. QUALITY ASSURANCE ENTITY:

[\(UL \(QUA9625\)\)](mailto:UL(QUA9625)); (360) 817-5512; bsai.inspections@ul.com

- END OF PEER -

ⁱ Building officials, Designers of Record and other Authorities Having Jurisdiction may contact info@nemoetc.com to obtain manufacturing location information for products evaluated herein.

ⁱⁱ Agreement between purchaser and seller, as set forth in Section 4.3, Note 1 of ASTM D8257-20, should be established as to slip resistance.

ⁱⁱⁱ Agreement between purchaser and seller, as set forth in Section 4.3, Note 1 of ASTM D1970-17, should be established as to slip resistance.

^{iv} Used as min. 3 ¼-inch wide joint-strips per FBC 1507.1.1.1(2) / FBC R905.1.1.1(2) or installed in full-coverage atop ASTM D226, Type II felt, ASTM D4869 Type III or IV felt mechanically attached in accordance with FBC Table 1507.1.1.1 or FBC Residential Table R905.1.1.1

^v Refer to Tile Manufacturer's or Adhesive Manufacturer's Florida Product Approval for Overturning Moment Resistance Performance