

### City of Belle Isle Job Site Card Roof PERMIT 2018-07-055

**PERMIT MUST BE POSTED ON SITE** - A permit expires in 6 months if approved inspections are not recorded /scheduled within that time frame. You are responsible for scheduling and keeping track of all your inspections -

Schedule Inspections via Email at: <a href="mailto:BIDscheduling@universalengineering.com">BIDscheduling@universalengineering.com</a>
SCHEDULE INSPECTIONS BY 3:00 PM CUT OFF TIME
Inspection Results Will Be Sent Out the Following Business Day

"WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR AN ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT."

ROOF	INSPECTOR	DATE	COMMENTS
NEW ROOFS ONLY			
Code 700 Deck Nailing,			
Dry-In, Flashing			
Both new & re-roof			
Code 710 In - Progress			
Both new & re-roof			
Code 720 Final			

Inspection requests are to be emailed to BIDscheduling@UniversalEngineering.com; a confirmation email will be sent back to you upon scheduling. Next-Day Inspection requests must be made by 3:00pm.

Please include the following in your request: Permit #, project address, type of inspection, date of the requested inspection, a contact name & a contact phone number. AM or PM may be requested but cannot be guaranteed.

Universal Engineering Sciences - 3532 Maggie Blvd., Orlando, FL 32811Tel 407-581-8161 \* Fax 407-581-0313 \* www.universalengineering.com



City of Belle Isle
Universal Engineering Sciences 3532 Maggie Blvd., Orlando, FL 32811
Tel 407-581-8161 \* Fax 407-581-0313 \* www.universalergineering.com

### APPLICATION FOR ROOFING PERMIT

WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. A NOTICE OF COMMENCEMENT MUST BE RECORDED AND POSTED ON THE JOB SITE BEFORE THE FIRST INSPECTION. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR AN

ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT.
PLEASE PRINT. The undersigned hereby applies for a permit to make installations as indicated below:
Project Address 5820 WOODBINS DA Belle Isle, FL 32809 32812
Property Owner LAWRENCE HELEN GAINES Phone 321-947-6416
Property Owner's Mailing Address 5820 WOODINE DIL City BE ( 5/E
State F1 Zip Code 32809 Parcel Id Number: 242329530601040
REQUIRED! To obtain this information, please visit http://www.ocpafl.org/Searches/ParcelSearch.aspx
Class of Building: Old  New Type of Building: Residential  Commercial Other Type of Work: New Roof ReRoof  Reroof
REQUIRED! Florida Product Approval Form – NOTE: installation instructions must be posted on-site before your first inspection!!
Please Indicate the nature of work by completing the information below:
Roof Square Footage: 3024 Number of Stories: Job Valuation: \$ Number of Stories:
Type: Asphalt Shingles  Metal  Modified Bitumen  Other:
I hereby certify that the above is true and correct to the best of my knowledge and make Application for Permit as outlined above, and if same is granted agree to conform to all Florida Building Code Regulations and City Ordinances regulating same and in accordance with plans submitted. The issuance of this permit does not grant permission to violate any applicable Town and/or State of Florida codes and/or ordinances. By signing below, I recognize Republic Services is by legal contract the sole authorized provider of garbage, recycling, yard waste, and commercial garbage and construction debris collection and disposal services with the city ilmits of the City. Contractors, homeowners and commercial businesses may contact Republic Services at 407-293-8000 to setup accounts for Commercial, Construction Roll Off, or other services needed. Rates are fixed by contract and are available at City Hall or from Republic Services. The City enforces the contract through its code enforcement office. Fallure to comply will result in a stop work order.
LICENSE HOLDER SIGNATURE LICENSE # CCC1327234
LICENSE HOLDER NAME NO SICOLA COMPANY NAME LOS CONSTRUCTION
Street Address 3205 J- Wang Ave Swite IDL
City Mando State TL Zip Code 3809 Phone Number UU 8598103
Email Address framucis @ vbs voo fing com Zoning Fee \$ 30.00
Email Address framucis @ vbs voo fing. com
Email Address Pranticus & vibros fing com  Zoning Fee \$ 30.00  Building Official: 5M Date 7-26-18 Review Fee \$
Zoning Fee   \$ 30.00
Zoning Fee \$ 30.00  Building Official: 5M Date 7-25-2018 1.5% DCA Fee \$ 2.00  Verified Contractor's Licenses & Insurance are on file Date 7-25-2018 1.5% DCA Fee
Zoning Fee \$ 30.00  Building Official: 5M Date 7-26-18  Review Fee \$ 2.00  1% BCAIB Fee \$ 2.00
Zoning Fee \$ 30.00  Building Official: 5M Date - 26-18  Review Fee \$ 1/00.00  Verified Contractor's Licenses & Insurance are on file Date - 25-20/8  NOTE: The Building Permit Number is required if the Roof Installation is associated with any construction or alteration where a Building Permit
Zoning Fee \$ 30.00  Building Official: SM Date - 25.20 Review Fee \$ 2.00  Verified Contractor's Licenses & Insurance are on file Date - 25.20 Roof Total Permit Fee \$ 134.00  NOTE: The Building Permit Number is required if the Roof Installation is associated with any construction or alteration where a Building Permit has been issued.
Zoning Fee \$ 30.00  Building Official: 5M Date - 26-18  Review Fee \$ 1/00.00  Verified Contractor's Licenses & Insurance are on file Date - 25-20/8  NOTE: The Building Permit Number is required if the Roof Installation is associated with any construction or alteration where a Building Permit

2018,07-05	75
Permit Number:	DOCH 20180437291
Folio/Parcel ID #:	07/24/2018 02:23:28 PM Page 1 of 1
Prepared by: RBS CONSTRUCTION LLC	Rec Fee: \$10.00 Phil Diamond, Comptroller
5205 5. ORANGE AVE # 102	Orange County, FL IP - Ret To: RBS CONSTRUCTION LLC
ORLANDO FI. 32809	IP - Ret To: RBS CONSTRUCTION LLC
Return to: RBS CONSTRUCTION LLC	
NOTICE OF COMMENCEME	FNT
State of Florida, County of Orange	»14 I
The undersigned hereby gives notice that improvement will	If be made to certain real property, and In accordance
with Chapter 713, Florida Statutes, the following information	on is provided in this Notice of Commencement.
1. Description of property (legal description of the property)	erty, and street address if available)
LYNUWOOD Shoess 7/62 LOT	4 BLKA
2. General description of improvement	
REROUF / ASDIALT STICKS	les
3. Owner information or Lessee Information if the Les	see contracted for the Improvement
Name Pichand / HELSN LAWRENCE Address 5820 WOODBWE DA. BE	UE 1518 F1. 32809
Interest in Property OWNERS	WE THE PART SERVI
Name and address of fee simple titleholder (if differ	cent from Owner listed above)
Name	ent from Cwrist listed above)
Address	
	4 24
4. Contractor Name RBS CONSTRUCTION LLC	Telephone Number 407-858-8/63
Address 5205 5. ORMAKS AVE #102	ORLIANOD F1. 32X09
5. Surety (If applicable, a copy of the payment bond is att	
Name	Telephone Number
Address	Amount of Bond \$
6. Lender	
Name /	Telephone Number
Aridress	
7. Persons within the State of Florida designated by	Owner upon whom notices or other documents may
be served as provided by §713.13(1)(a)7, Florida St	tatutes.
Name	Telephone Number
Address	
8. In addition to himself or herself, Owner designates	the following to receive a copy of the Lienor's
Notice as provided in §713.13(1)(b), Florida Statute	38.
	Telephone Number
Address	to the state of manufacture
9. Expiration date of notice of commencement (the ex	xpiration date will be 1 year from the date of recording
unless a different date is specified)	
RNING TO OWNER: ANY PAYMENTS MADE BY THE OWNER AFTER	THE EXPIRATION OF THE NOTICE OF COMMENCEMENT
CONSIDERED IMPROPER PAYMENTS UNDER CHAPTER 713, PAR	T I, SECTION 713.13, FLORIDA STATUTES, AND CAN
SULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PRO CORDED AND POSTED ON THE JOB SITE BEFORE THE FIRST INSPI	PERTY. A NOTICE OF COMMENCEMENT MUST BE
H YOUR LENDER OR AN ATTORNEY BEFORE COMMENCING WOR	K OR RECORDING YOUR NOTICE OF COMMENCEMENT.
70 7	
R + allrene	<u> </u>
nature of Owner or Lessee, or Owner's or Lessee's Authorized Officer/Dire	ector/Partner/Manager Signatory's Title/Office
	men also Biological la amos
e foregoing instrument was acknowledged before me this 🗘	5 day of U/18 by nontrol Gureno
M 1 1 01/	month/year name of person
OUO OV for	Name of party on behalf of whom instrument was executed
Type of authority, e.g., officer, trustee, attorney in fact	Harrie of party of period of whom modeline was executed
$\mathcal{O}(1/2)$	
YVVIOU	
Signature of Notary Public - State of Florida	Print, type, or stamp commissioned name of Notary Public
20 September 120 V	
Personally KnownOR_Produced ID X	***************************************
Type of ID Produced +CU	Notary Public State of Florida
	Franzuas Roman
	My Commission GG 190861

Form content revised: 01/23/14

State of FLORICA, Councy of ORANGE the document as reflected in the Official Records

PMIL DIAMOND ACCUMENT COMMENTS.





### City of Belle Isle

Universal Engineering Sciences 3532 Maggie Blvd., Orlando, FL 32811 Tel 407-581-8161 \* Fax 407-581-0313 \* www.universalengineering.com

## **Product Approval Form**

DATE: 7-25-18	PERMIT # 2018-07-055
PROJECT ADDRESS 5820 Woodlowe Dr	, Belle Isle, FL3280932812

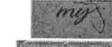
As required by Florida Statue 553.842 and Florida Administrative Code 9B-72m, please provide the information and approval numbers of the building components listed below if they will be utilized on the building or structure. FL Approved products are listed online at <a href="https://www.floridabuilding.org">www.floridabuilding.org</a> or can be obtained from the local product supplier. The following information must be turned in with permit application and available onsite for inspections:

- This Product Approval Cover Sheet
- Internet screen from FloridaBuilding.org showing PA#, approval and code edition stamped
- 3. Manufacturer's installation details from FloridaBuilding.org and requirements for each product stamped

Product Type	Manufacturer	Model/Series	FL Product Approval #	Product Type	Manufacturer	Model/Series	FL Product Approval #
	EXTERIOR	OORS			WALL PAN	IELS	
Swinging				Sliding			
Sliding				Soffits			
Sectional/Rollup				Storefront			
Other				Glass Block			
Ottlei				Other			
	WINDO	ws			ROOFING PRO	DUCTS	
Single/Dbl Hung		District Control		Asphalt Shingles	PLSULY P	Burlainte	a lanaman
Horizontal Slider				Non Struct Metal			
Casement				Roofing Tiles			
				Single Ply Roof			
Fixed		-		Underlayment	Flines 121	1 certaint	ed I and ma
Mullion				Other			
Skylights				-	+		
Other		THE PART HIS WAY		Annah Market	OTHER		10-3-1-5
	STRUCTURAL CO	MIPONENTS			O TITLE	Control Service	P-1-12
Wood Connectors				<b></b>		1	1
Wood Anchors							-
Truss Plates	1						
Insulation Forms						-	1
Lintels						-	-
Other							

It is the applicant's responsibility to verify that specific products have been installed	ed in accordance with their limitations and
with the minimum required design pressures for the structure. Specific compliance	ce will be verified during field inspections.
With the minimum	Date 7/25/18
Applicant Signature	Date 1/20/10

# **Susiness & Professional Regulation**





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Product Approval Menu > Product or Application Search > Application List > Application Detail

Application Type Code Version

Application Status

FL5444-R13

Revision

2017 Approved

Comments

Archived

Product Manufacturer

Address/Phone/Email

CertainTeed Corporation-Roofing

20 Moores Road Malvern, PA 19355 (610) 893-5400

mark.d.harner@saint-gobain.com

Authorized Signature

Mark Harner

mark.d.harner@saint-gobain.com

Technical Representative Address/Phone/Email

Mark D. Harner 18 Moores Road Malvern, PA 19355 (610) 651-5847

Mark.D.Harner@saint-gobain.com

Quality Assurance Representative Address/Phone/Email

Category Subcategory Roofing

Asphalt Shingles

Compliance Method

Evaluation Report from a Florida Registered Architect or a Licensed

Florida Professional Engineer

☐ Evaluation Report - Hardcopy Received

Florida Engineer or Architect Name who developed

the Evaluation Report

Florida License

Quality Assurance Entity

Quality Assurance Contract Expiration Date

Validated By

Robert Nieminen

PE-59166

UL LLC 03/09/2020

John W. Knezevich, PE

☑ Validation Checklist - Hardcopy Received

Certificate of Independence

FL5444 R13 COI 2018 01 COI NIEMINEN.pdf

Referenced Standard and Year (of Standard)

Standard <u>Year</u> **ASTM D3161** 2016 **ASTM D3462** 2010 **ASTM D7158** 2011

Equivalence of Product Standards Certified By

Sections from the Code

Product Approval Method

Method 1 Option D

Date Submitted Date Validated Date Pending FBC Approval

01/24/2018 01/29/2018 01/30/2018 Date Revised

05/30/2018

### Summary of Products

FL#	Model, Number or Name	Description
5444.1	CertainTeed Asphalt Roof Shingles	3-tab, 4-tab, strip (no-cut-outs), laminated and architectural asphalt roof shingles
Limits of Use Approved for use i Approved for use o Impact Resistant: Design Pressure: N Other: Refer to ER S	outside HVHZ: Yes N/A	Installation Instructions FL5444 R13 II 2018 01 FINAL ER CERTAINTEED ASPHALT SHINGLES FL5444-R13.pdf Verified By: Robert Nieminen, PE PE-59166 Created by Independent Third Party: Yes Evaluation Reports FL5444 R13 AE 2018 01 FINAL ER CERTAINTEED ASPHALT SHINGLES FL5444-R13.pdf Created by Independent Third Party: Yes



Contact Us :: 2601 Blair Stone Road, Tallahassee FL 32399 Phone: 850-487-1824

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Under Florida law, email addresses are public records. If you do not want your e-mail address released in response to a public-records request, do not send electronic mail to this entity. Instead, contact the office by phone or by traditional mail. If you have any questions, please contact 850.487.1395. \*Pursuant to Section 455.275 (1), Florida Statutes, effective October 1, 2012, licensees licensed under Chapter 455, F.S. must provide the Department with an email address if they have one. The emails provided may be used for official communication with the licensees. However email addresses are public record. If you do not wish to supply a personal address, please provide the Department with an email address which can be made available to the public. To determine if you are a licensee under Chapter 455, F.S., please click <u>here</u>.

Product Approval Accepts:













### NEMO etc.

Certificate of Authorization #32455 353 Christian Street, Unit #13 Oxford, CT 06478 (203) 262-9245

ENGINEER

**EVALUATE** 

**TEST** 

**CONSULT** 

CERTIFY

### **EVALUATION REPORT**

CertainTeed Corporation
20 Moores Road

Malvern, PA 19355 (610) 651-5847

Evaluation Report 3532.09.05-R14

FL5444-R13

Date of Issuance: 09/22/2005

Revision 14: 01/24/2018

### SCOPE:

This Evaluation Report is issued under **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 and Florida Building Code, Residential Volume. The products described herein have been evaluated for compliance with the **6**<sup>th</sup> **Edition (2017) Florida Building Code** sections noted herein.

### **DESCRIPTION: CertainTeed Asphalt Roof Shingles.**

LABELING: Labeling shall be in accordance with the requirements of the Accredited Quality Assurance Agency noted herein and FBC 1507.2.7.1 / R905.2.6.1

**CONTINUED COMPLIANCE:** This Evaluation Report is valid until such time as the named product(s) changes, the referenced Quality Assurance documentation changes, or provisions of the Code that relate to the product change. Acceptance of this Evaluation Report by the named client constitutes agreement to notify Robert Nieminen, P.E. of any changes to the product(s), the Quality Assurance or the production facility location(s). NEMO|etc. requires a complete review of this Evaluation Report relative to updated Code requirements with each Code Cycle.

**ADVERTISEMENT:** The Evaluation Report number preceded by the words "NEMO|etc. Evaluated" may be displayed in advertising literature. If any portion of the Evaluation Report is displayed, then it shall be done in its entirety.

**INSPECTION:** Upon request, a copy of this entire Evaluation Report 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 Evaluation Report consists of pages 1 through 13.

Prepared by:

Robert J.M. Nieminen, P.E.

Florida Registration No. 59166, Florida DCA ANE1983

S STATE OF

The facsimile seal appearing was authorized by Robert Nieminen, P.E. on 01/24/2018. This does not serve as an electronically signed document.

### **CERTIFICATION OF INDEPENDENCE:**

- 1. NEMO|etc. 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 letc. 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 evaluation reports 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. nor Robert Nieminen, P.E. are, in any way, the Designer of Record for any project on which this Evaluation Report, or previous versions thereof, is/was used for permitting or design guidance unless retained specifically for that purpose.



### **ROOFING SYSTEMS EVALUATION:**

### 1. SCOPE:

**Product Category:** 

Roofing

Sub-Category:

**Asphalt Shingles** 

**Compliance Statement: CertainTeed Asphalt Roof Shingles**, as produced by **CertainTeed Corporation**, have demonstrated compliance with the following sections of the 6<sup>th</sup> **Edition (2017) Florida Building Code** and 6<sup>th</sup> **Edition (2017) Florida Building Code**, **Residential Volume** through testing in accordance with the following Standards. Compliance is subject to the Installation Requirements and Limitations / Conditions of Use set forth herein.

### 2. STANDARDS:

<u>Section</u>	Property	<u>Standard</u>	<u>Year</u>
1507.2.5, R905.2.4	Physical Properties	ASTM D3462	2010
1507.2.7.1, R905.2.6.1	Wind Resistance	ASTM D3161	2016
1507.2.7.1, R905.2.6.1	Wind Resistance	ASTM D7158	2011

### 3. REFERENCES:

<u>Entity</u>	<u>Examination</u>	Reference	<u>Date</u>
UL (TST 1740)	ASTM D3161	94NK9632	05/15/1998
UL (TST 1740)	ASTM D3161	99NK26506	11/23/1999
UL (TST 1740)	ASTM D3161	03CA12702	05/27/2003
UL (TST 1740)	ASTM D3161	03CA12702	06/16/2003
UL (TST 1740)	ASTM D3161	03NK29847	10/03/2003
UL (TST 1740)	ASTM D3161	04CA11329	05/24/2004
UL (TST 1740)	ASTM D3161	04CA32986	12/03/2004
UL (TST 1740)	ASTM D3161	05NK07049	04/15/2005
UL (TST 1740)	ASTM D3161	05NK16778	05/12/2005
UL (TST 1740)	ASTM D3161	05CA16778	05/12/2005
UL (TST 1740)	ASTM D3161	05NK14836	05/22/2005
UL (TST 1740)	ASTM D3161	05NK22800	06/22/2005
UL (TST 1740)	ASTM D3462	R684	09/21/2005
UL (TST 1740)	ASTM D7158	05NK08037	06/28/2006
UL (TST 1740)	ASTM D3161 & D3462	09CA28873	07/23/2009
UL (TST 1740)	ASTM D3462	10CA41303	10/07/2010
UL (TST 1740)	ASTM D3161	10CA41303	10/08/2010
UL (TST 1740)	ASTM D7158	10CA41303	10/27/2010
UL (TST 1740)	ASTM D3161 & D3462	10CA44960	11/11/2010
UL LLC (TST 9628)	ASTM D3161, D3462 & D7158	13CA32897	11/21/2013
UL LLC (TST 9628)	ASTM D3161, D3462	TFWZ.R684	04/22/2014
UL LLC (TST 9628)	ASTM D7158	TGAH.R684	04/22/2014
UL LLC (TST 9628)	ASTM D3161 & D3462	4786334434	09/16/2014
UL LLC (TST 9628)	ASTM D3161 & D3462	4786570826	02/12/2015
UL LLC (TST 9628)	ASTM D3161, D3462 & D7158	4786570717	12/16/2015
UL LLC (TST 9628)	ASTM D3161 & D3462	4787195678	02/09/2016
UL LLC (TST 9628)	ASTM D3161, D3462 & D7158	4787380356	10/26/2016
UL LLC (TST 9628)	ASTM D3462	4787380357	10/13/2016
UL LLC (TST 9628)	ASTM D7158	4787380357	11/08/2016
UL LLC (TST 9628)	ASTM D3161	4787380357	11/09/2016
UL LLC (TST 9628)	ASTM D3161, D3462 & D7158	4787586427	01/25/2017
UL LLC (TST 9628)	ASTM D3161 & D3462	4788042412	11/15/2017
UL LLC (QUA 9625)	Quality Control	Service Confirmation	Exp. 03/09/2020



### 4. PRODUCT DESCRIPTION:

- 4.1 Asphalt Shingles:
- 4.1.1 CT20™, XT™ 25, XT™ 30 and XT™ 30 IR are fiberglass reinforced, 3-tab asphalt roof shingles.
- 4.1.2 Arcadia™, Belmont®, Belmont® IR, Carriage House Shangle®, Grand Manor Shangle®, Landmark™, Landmark™ IR, Landmark™ Pro, Landmark™ Premium, Landmark™ TL, Landmark™ Solaris and Landmark™ Solaris IR are fiberglass reinforced, laminated asphalt roof shingles.
- 4.1.3 **NorthGate™** is a fiberglass reinforced, laminated, SBS modified bitumen roof shingle.
- 4.1.4 Presidential Shake™, Presidential Shake™ IR, Presidential Shake TL™ and Presidential Solaris™ are fiberglass reinforced, architectural asphalt roof shingles.
- 4.1.5 Hatteras™, Highland Slate™ and Highland Slate™ IR are fiberglass reinforced, 4-tab asphalt roof shingles.
- 4.1.6 **Patriot™** is a fiberglass reinforced asphalt roof strip-shingle (with no cut-outs) providing a laminated appearance through an intermittent shadow line with contrasting blend drops for color definition.
- 4.2 <u>Hip & Ridge Shingles</u>:
- 4.2.1 Presidential Accessory, Accessory for Hatteras, Shangle Ridge™, Shadow Ridge™, Cedar Crest™, Cedar Crest™ IR, NorthGate Ridge and NorthGate Accessory are fiberglass reinforced accessory shingles for hip and ridge installation.
- 4.3 Accessory Starter Strips:
- 4.3.1 **SwiftStart® Starter Shingle is** a starter strip for asphalt roof shingles. Its overall size of 15-1/4" x 38-3/4" yields two (2) 7-5/8" x 38-3/4" starter pieces per shingle.
- 4.4 Any of the above listed shingles may be produced in AR (algae resistant) versions.

### 5. LIMITATIONS:

- This is a building code evaluation. Neither NEMO|etc. nor Robert Nieminen, P.E. are, in any way, the Designer of Record for any project on which this Evaluation Report, or previous versions thereof, is/was used for permitting or design guidance unless retained specifically for that purpose.
- 5.2 This Evaluation Report is not for use within FBC HVHZ jurisdictions.
- Fire Classification is not part of this Evaluation Report; refer to current Approved Roofing Materials Directory for fire ratings of this product.
- 5.4 Wind Classification:
- 5.4.1 All shingles noted herein are Classified in accordance with **FBC Tables 1507.2.7.1** and **R905.2.6.1** to **ASTM D3161, Class F** and/or **ASTM D7158, Class H**, indicating the shingles are acceptable for us in all wind zones up to V<sub>asd</sub> = 150 mph (V<sub>ult</sub> = 194 mph). Refer to Section 6 for installation requirements to meet this wind rating.
- Presidential Accessory, Accessory for Hatteras, Shangle Ridge, Shadow Ridge, Cedar Crest, NorthGate Ridge and NorthGate Accessory hip & ridge shingles have been evaluated in accordance with ASTM D3161, Class F. All except NorthGate Ridge and NorthGate Accessory require use of BASF Sonolastic NP 1 adhesive or Henkel PL® Polyurethane Roof & Flashing Sealant, applied as specified in manufacturer's application instructions, for use in wind zones up to V<sub>asd</sub> = 150 mph (V<sub>ult</sub> = 194 mph). Refer to Section 6 for installation requirements to meet this wind rating.
- 5.4.3 **SwiftStart® Starter Shingle** has been evaluated in accordance with **ASTM D3161, Class F**. Refer to Section 6 for installation requirements to meet this wind rating.
- 5.4.4 Classification by **ASTM D7158** applies to **exposure category B or C** and a **building height of 60 feet or less**. Calculations by a qualified design professional are required for conditions outside these limitations. Contact the shingle manufacturer for data specific to each shingle.



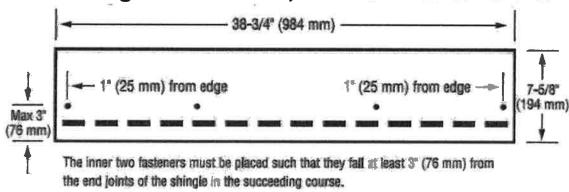
- 5.4.4.1 Analysis in accordance with ASTM D7158 indicates the measured uplift resistance (R<sub>T</sub>) for the CertainTeed asphalt Roof shingles listed in Section 4.1 through 4.6 (except Presidential Solaris™) exceeds the calculated uplift force (F<sub>T</sub>) at a maximum design wind speed of V<sub>asd</sub> = 150 mph (V<sub>ult</sub> = 194 mph) for residential buildings located in Exposure D conditions with no topographical variations (flat terrain) having a mean roof height less than or equal to 60 feet. The shingles are permissible under Code for installation in these conditions using the installation procedures detailed in this Evaluation Report and CertainTeed minimum requirements, subject to minimum codified fastening requirements established within any local jurisdiction, which shall take precedence.
- 5.5 All products in the roof assembly shall have quality assurance audits in accordance with FAC Rule 61G20-3.

### 6. INSTALLATION:

- 6.1 Roof deck, slope, underlayment and fasteners shall comply with **FBC 1507.2 / R905.2** and the shingle manufacturer's minimum requirements.
- 6.1.1 Underlayment shall be acceptable to **CertainTeed Corporation** and shall hold current Florida Statewide Product Approval, or be Locally Approved per **Rule 61G20-3**, per **FBC Sections 1507.2.3**, **1507.2.4** or **R905.2.3**.
- 6.2 Installation of asphalt shingles shall comply with the **CertainTeed Corporation** current published instructions, using minimum four (4) nails per shingle in accordance with **FBC 1507.2.7** or **Section R905.2.6** and the minimum requirements herein.
- 6.2.1 Fasteners shall be in accordance with manufacturer's published requirements, but not less than **FBC 1507.2.6 or R905.2.5**. Staples are not permitted.
- 6.2.2 Where the roof slope exceeds 21 units vertical in 12 units horizontal, use the "Steep Slope" directions.
- 6.3 CertainTeed asphalt shingles are acceptable for use in reroof (tear-off) or recover applications, subject to the limitations set forth in **FBC Section 1511 or R908** and CertainTeed published installation instructions.

6.4 SWIFTSTART® STARTER SHINGLE:

## Fastening: Use four nails, located as shown below





### 6.5 CT20™, XT™ 25, XT™ 30, XT™ 30 IR:

## 

### STEEP SLOPE

Use **four** natis and six spots of asphalt roofing cement for every full shingle (*Figure 11-1*). Asphalt roofing cement meeting ASTM D4586 Type II is suggested.

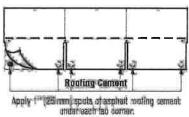


Figure II-s: Use four nails and six spots of asphalt cement on sleep slopes.

CAUTION: Hiscessive use of rooting cement can cause shingles.

to olisten

### 6.5.1 Hip & Ridge for CT20™, XT™ 25, XT™ 30, XT™ 30 IR: Cut Shingles

Figure 11-3: Use four nails for every full shingle.

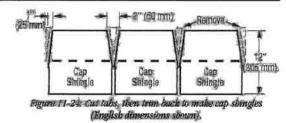




Figure 11-25: Installation of caps along the hips and ridges.

6.5.1.1 For **ASTM D3161, Class F** performance use BASF "**Sonolastic® NP1™**" adhesive or Henkel "**PL® Polyurethane Roof & Flashing Sealant**", in accordance with CertainTeed requirements.

### 6.6 ARCADIA™:

### LOW AND STANDARD SLOPE

Use SIX nails for every full shingle located as shown below.

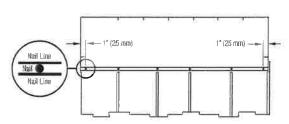


Figure 2: Use six nails for every full shingle.

### STEEP SLOPE

Use SIX nails and FOUR spots of asphalt roofing cement for every full shingle as shown below. Apply asphalt roofing cement 1°(25 mm) from edge of shingle. Asphalt roofing cement meeting ASTM D 4586 Type II is suggested.

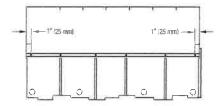


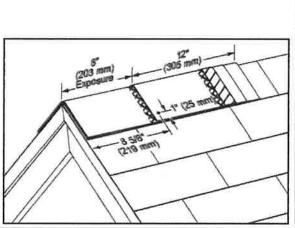
Figure 3: Use six nails and four spots of asphalt roofing cement on steep slopes.

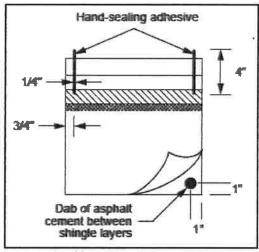


### 6.6.1 Hip & Ridge for Arcadia™: Cedar Crest™, Cedar Crest™ IR

Use two (2), minimum 1%-inch long fasteners per shingle. For the starter shingle, place fastener 1-inch from each side edge and about 2-inch up from the starter shingle's exposed butt edge, ensuring minimum %-inch embedment into the deck, or full penetration through the deck. For each full Cedar Crest shingle, place fasteners 8-5/8-inch up from its exposed butt edge and 1-inch from each side edge.

For ASTM D3161, Class F performance use BASF "Sonolastic® NP1<sup>m</sup>" adhesive or Henkel "PL® Polyurethane Roof & Flashing Sealant", in accordance with CertainTeed requirements, to hand-seal Cedar Crest shingles. Apply NP 1 or PL adhesive from the middle of the shingle's raised overlay on the top piece and extending approximately 4-inch along the sides of the headlap along a line ¾ to 1-inch from each side of the shingle's headlap. Immediately align and apply the overlying shingle, gently pressing tab sides into the adhesive, and install nails. To secure the other side, apply a 1-inch diameter spot of NP 1 or PL adhesive between the shingle layers.

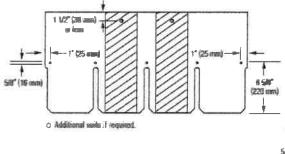




### 6.7 BELMONT® OR BELMONT® IR:

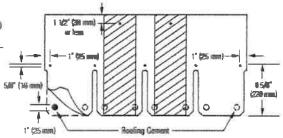
# Low and Standard Slope (2:12 to 21:12):

Use FIVE nails for every full Belmont shingle, located as shown below



### Steep Slope (greater than 21:12):

Use SEVEN nails and EIGHT spots of asphalt roofing cement\*\* for every full Belmont shingle. Apply asphalt roofing cement 1" (25mm) from edge of shingle. See below. Asphalt roofing cement meeting ASTM D4586 Type II is suggested.





- 6.7.1 Hip & Ridge for Belmont® or Belmont® IR:
- Option 1: For Belmont®, refer to instructions herein for Cedar Crest™ or Cedar Crest™ IR hip and ridge 6.7.1.1 shingles. For Belmont® IR, refer to instructions herein for Cedar Crest™ IR hip and ridge shingles.
- Option 2: For Belmont®: Shangle® Ridge 6.7.1.2

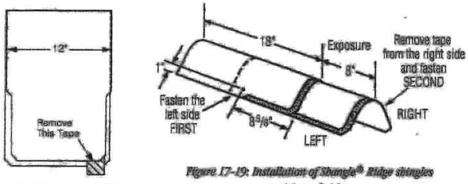


Figure 17-18: Shangle\* Ridge.

on hips and ridges.

6.7.1.3 For ASTM D3161, Class F performance use BASF "Sonolastic® NP1™" adhesive or Henkel "PL® Polyurethane Roof & Flashing Sealant", in accordance with CertainTeed requirements.

#### 6.8 CARRIAGE HOUSE SHANGLE® AND GRAND MANOR SHANGLE®:

### LOW AND STANDARD SLOPE

Use five sails for every full Shangle.

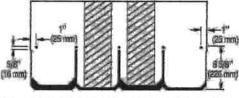
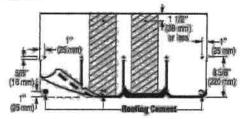


Figure 17-4: Use five nails for every full Grand Manor Shangle, Carriago House Shangle, or Centennial State.

### STEEP SLOPE

Use seven nails and three spots of asphalt roofing cement for every full Grand Manor Shangle. Use five units and three spots of asphaltroofing centers for every full Carriage House Shangle and Centennial. State. Apply asphalt rooting coment 1" (25 mm) from edge of shingle (Figure 17-5). Asphalt roofing coment meeting ASIM D4586 Type II is suggested.



Piguro 17-5: When installing Grand Masor Shangles on steep slope use seven nails and three spots of aspbalt roofing ament.

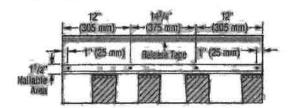
6.8.1 Hip & Ridge for Carriage House Shangle® and Grand Manor Shangle: Refer to instructions herein for Shangle® Ridge hip and ridge shingles



6.9 LANDMARK™, LANDMARK™ IR, LANDMARK™ PRO, LANDMARK™ PREMIUM, LANDMARK™ TL, LANDMARK™ SOLARIS, LANDMARK™ SOLARIS IR, NORTHGATE:

### LOW AND STANDARD SLOPE

### METRIC DIMENSIONS



# LANDMARK TL

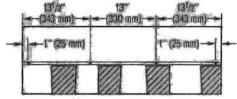
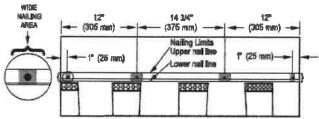


Figure 13-4: Use four units for every full soingle.

### NorthGate:

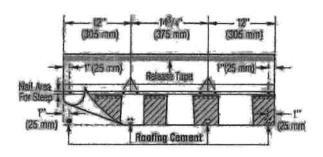


Mailing areas for law and standard slopes (from 2:12 to 21:12)

### STEEP SLOPE

Use six nath and four spots of asphalt rooting cement for every full laminated shingle. See below, asphalt rooting cement should meet ASTM D4586 Type II. Apply 1\* spots of asphalt rooting cement unde each corner and at about 12" to 13" in from each edge.

### METRIC DIMENSIONS



### LANDMARK TL

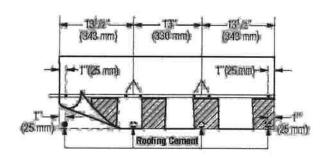
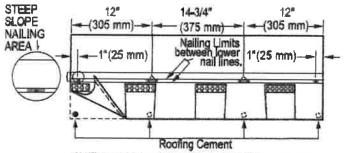


Figure 13-5: Use six nails and four spots of asphalt mofing coment on steep slopes.



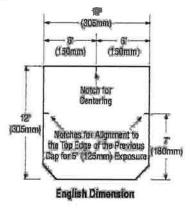
### NorthGate:

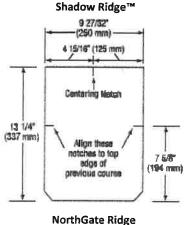


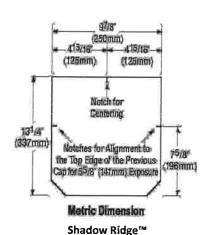
Nailing areas for steep slopes (greater than 21:12) and "Storm-Nailing"

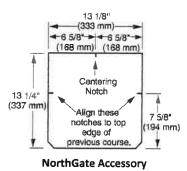
Nail between lower 2 nail lines as shown above.

- 6.9.1 <u>Hip & Ridge for Landmark™, Landmark™ IR, Landmark™ Pro, Landmark™ Premium, Landmark™ TL, Landmark™ Solaris, Landmark™ Solaris IR, NorthGate:</u>
- 6.9.1.1 Option 1: Shadow Ridge™ or NothGate Accessory











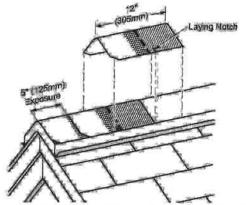


Figure 13-20: Use laying notches to center shingles on bips and ridges, and to locate the correct exposure.

- 6.9.1.2 For **ASTM D3161, Class F** performance use BASF "**Sonolastic® NP1™**" adhesive or Henkel "**PL® Polyurethane Roof & Flashing Sealant**", in accordance with CertainTeed requirements.
- 6.9.1.3 Option 2: Refer to instructions herein for Cedar Crest™, Cedar Crest™ IR hip and ridge shingles.

### 6.10 Presidential Shake™, Presidential Shake™ IR, Presidential Shake TL™, Presidential Solaris™:

### LOW AND STANDARD SLOPE:

For low and standard slopes, use five nails for each full Presidential shingle as shown below.

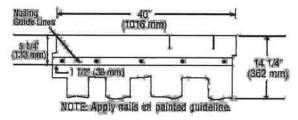


Figure 16-6; Fastening Presidential and Presidential "I. Shake sbingles on low and standard slopes."

### STEEP SLOPE

For steep slopes, use nine nails for each full Presidential shingle and apply 1\* diameter spots of aspiralt roofing cement under each shingle tab. After applying 5 nails in between the nathing guide lines, apply 4 nails 1\* above tab cutouts making certain tabs of overlying shingle cover nails.

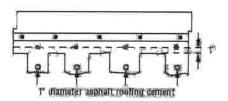


Figure 16-7: Fustening Presidential and Presidential IVI Shake shingles on sleep slopes.

- 6.10.1 <u>Hip & Ridge for Presidential Shake™, Presidential Shake™ IR, Presidential Shake TL™, Presidential Solaris™:</u>
- 6.10.1.1 Option 1: Presidential Accessory

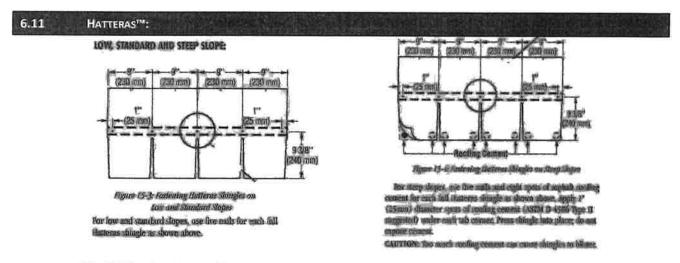
### PRESIDENTIAL ACCESSORY

Presidential accessory shingles can be used for covering hips and ridges. Apply shingles up to the ridge (expose no more than 7" from the bottom edge of the "tooth." Fasten each accessory with two fasteners. The fasteners must be  $1^{3}/4$ " long or longer, so they penetrate either 3/4" into the deck or completely through the deck. Presidential accessory comes in two different sizes: Accessory produced in Birmingham, AL is 12" x 12"; Portland, OR produces  $9^{7}/8$ " x  $13^{1}/4$ " accessory.

6.10.1.2 For **ASTM D3161, Class F** performance use BASF "**Sonolastic® NP1™**" adhesive or Henkel "**PL® Polyurethane Roof & Flashing Sealant**", in accordance with CertainTeed requirements.

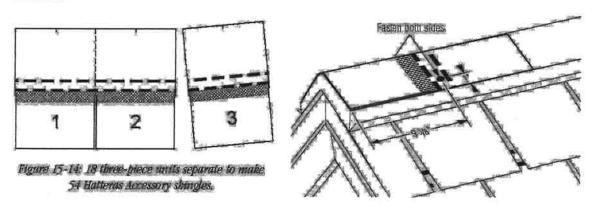


6.10.1.3 Option 2: Refer to instructions herein for Cedar Crest™, Cedar Crest™ IR hip and ridge shingles.

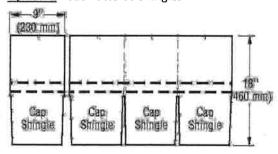


### 6.11.1 Hip & Ridge for Hatteras™:

### 6.11.1.1 Option 1: Accessory for Hatteras



### 6.11.1.2 Option 2: Cut Hatteras Shingles





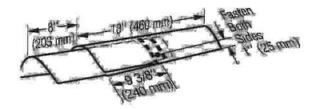


Figure 15-21: Installation of caps along hips and ridges.

6.11.1.3 For **ASTM D3161, Class F** performance use BASF "**Sonolastic® NP1™**" adhesive or Henkel "**PL® Polyurethane Roof & Flashing Sealant**", in accordance with CertainTeed requirements.



### 6.12 HIGHLAND SLATE™, HIGHLAND SLATE™ IR:

### LOW AND STANDARD SLOPE:

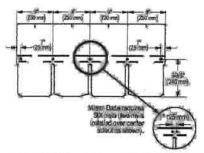
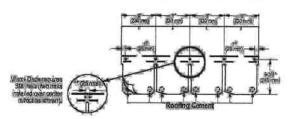


Figure 11-3: Use FIVE nails for every Highland State shingle

### STEEP SLOPE:

Use FIVE nails and RIGHT spots of asphalt rooting ement for each full Highland State shingle. For Maint-Dade, SIX nails are required. Apply 1. diameter spots of asphalt rooting cement under each tab corner Asphalt rooting cement meeting ASTM D4586 Type II is suggested.



ligues II-3A: lise AVE mails and eight spots of asphalt routing coment under each tab comer.

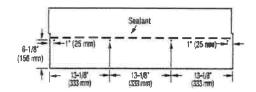
CALITION: Excessive use of rooting cement can cause shingles to blister.

6.12.1 <u>Hip & Ridge for Highland Slate™, Highland Slate™ IR</u>: Refer to instructions herein for Cedar Crest™, Cedar Crest™ IR or Shangle Ridge™ hip and ridge shingles.

### 6.13 PATRIOT<sup>TM</sup>

### LOW AND STANDARD SLOPE

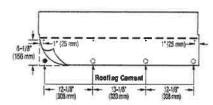
Use FOUR nails for every full shingle located as shown below.



#### STEEP SLOPE

Use FOUR nails and four spots of asphalt roofing cement for every full shingle as shown below. Asphalt roofing cement meeting ASTM D4586 Type II is suggested. Apply 1\*(25 mm) spots of asphalt roofing cement as shown.

CAUTION: Excessive use of roofing cement can cause shingles to blister.



6.13.1 <u>Hip & Ridge for Patriot™</u>: Refer to instructions herein for Cedar Crest™, Cedar Crest™ IR, Shadow Ridge™, NorthGate or Shangle Ridge™ hip and ridge shingles.

### 7. LABELING:

- 7.1 Each unit shall bear a permanent label with the manufacturer's name, logo, city, state and logo of the Accredited Quality Assurance Agency noted herein.
- 7.2 Asphalt shingle wrappers shall indicate compliance with one of the required classifications detailed in **FBC Table 1507.2.7.1 / R905.2.6.1**.



### 8. BUILDING PERMIT REQUIREMENTS:

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

### 9. MANUFACTURING PLANTS:

Contact the named QA entity for information on which plants produce products covered by Florida Rule 61G20-3 QA requirements.

### 10. QUALITY ASSURANCE ENTITY:

UL LLC - QUA9625; (414) 248-6409; karen.buchmann@us.ul.com

- END OF EVALUATION REPORT -

## Business & Professional Regulation



20 Moores Road Malvern, PA 19355 (610) 893-5400

Mark Harner

Mark D. Harner

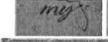
18 Moores Road Malvern, PA 19355 (610) 651-5847

CertainTeed Corporation-Roofing

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FL # FL11288-R17 Application Type Revision Code Version 2017 Application Status Approved

Comments Archived

Product Manufacturer

Address/Phone/Email

Authorized Signature

Technical Representative

Address/Phone/Email

Quality Assurance Representative Address/Phone/Email

Category

Subcategory

Compliance Method

Florida Engineer or Architect Name who developed the Evaluation Report

Florida License Quality Assurance Entity

Certificate of Independence

Quality Assurance Contract Expiration Date

Validated By

Robert Nieminen

Underlayments

Roofing

PE-59166 UL LLC 03/09/2020

John W. Knezevich, PE

Florida Professional Engineer

☑ Validation Checklist - Hardcopy Received

☐ Evaluation Report - Hardcopy Received

Referenced Standard and Year (of Standard)

FL11288 R17 COI 2018 01 COI NIEMINEN.pdf

Standard <u>Year</u> **ASTM D1970** 2015 ASTM D226 2009 ASTM D4601 2012 **ASTM D4798** 2011 **ASTM D4869** 2016 **ASTM D6163** 2008 **ASTM D6164** 2011 ASTM D6222 2011 **ASTM D6757** 2016 FM 4474 2011 FRSA/TRI April 2012 (04-12) 2012

Evaluation Report from a Florida Registered Architect or a Licensed

Equivalence of Product Standards Certified By

Sections from the Code

Product	Approval	Method

### Method 1 Option D

Date Submitted 01/24/2018 01/29/2018 Date Validated Date Pending FBC Approval 01/30/2018 Date Approved 04/10/2018

### **Summary of Products**

FL # Model, Number or Name		Description		
11288.1	CertainTeed Roof Underlayments	Roof underlayments for use below Approved prepared roof coverings.		
		Installation Instructions FL11288 R17 II 2018 01 FINAL ER CERTAINTEED UNDERLAYMENTS FL11288- R17.pdf Verified By: Robert Nieminen PE-59166 Created by Independent Third Party: Yes Evaluation Reports FL11288 R17 AE 2018 01 FINAL ER CERTAINTEED UNDERLAYMENTS FL11288- R17.pdf Created by Independent Third Party: Yes		





Contact Us :: 2601 Blair Stone Road, Tallahassee Ft. 32399 Phone: 850-487-1824

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#### Product Approval Accepts:







### NEMO etc.

Certificate of Authorization #32455 353 Christian Street, Unit #13 Oxford, CT 06478 (203) 262-9245

ENGINEER EVALUATE TEST CONSULT CERTIFY

### **EVALUATION REPORT**

CertainTeed Corporation 20 Moores Road Malvern, PA 19355 (610) 651-5847 Evaluation Report 11610.09.08-R18

FL11288-R17

Date of Issuance: 09/03/2009 Revision 18: 01/24/2018

### SCOPE:

This Evaluation Report is issued under **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 and Florida Building Code, Residential Volume. The products described herein have been evaluated for compliance with the **6**<sup>th</sup> **Edition (2017) Florida Building Code** sections noted herein.

### **DESCRIPTION: CertainTeed Roof Underlayments**

LABELING: Labeling shall be in accordance with the requirements the Accredited Quality Assurance Agency noted herein.

**CONTINUED COMPLIANCE:** This Evaluation Report is valid until such time as the named product(s) changes, the referenced Quality Assurance documentation changes, or provisions of the Code that relate to the product change. Acceptance of this Evaluation Report by the named client constitutes agreement to notify Robert Nieminen, P.E. of any changes to the product(s), the Quality Assurance or the production facility location(s). NEMO|etc. requires a complete review of this Evaluation Report relative to updated Code requirements with each Code Cycle.

**ADVERTISEMENT:** The Evaluation Report number preceded by the words "NEMO|etc. Evaluated" may be displayed in advertising literature. If any portion of the Evaluation Report is displayed, then it shall be done in its entirety.

**INSPECTION:** Upon request, a copy of this entire Evaluation Report 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 Evaluation Report consists of pages 1 through 10.

Prepared by:

Robert J.M. Nieminen, P.E.

Florida Registration No. 59166, Florida DCA ANE1983



The facsimile seal appearing was authorized by Robert Nieminen, P.E. on 01/24/2018. This does not serve as an electronically signed document.

### **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 evaluation reports 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 Evaluation Report, 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

**Compliance Statement: CertainTeed Roof Underlayments**, as produced by **CertainTeed Corporation**, have demonstrated compliance with the following sections of the **6**<sup>th</sup> **Edition (2017) Florida Building Code** through testing in accordance with the following Standards. Compliance is subject to the Installation Requirements and Limitations / Conditions of Use set forth herein.

### 2. STANDARDS:

Section	<u>Property</u>	<u>Standard</u>	<u>Year</u>
1504.3.1	Wind Uplift	FM 4474	2011
1507.2.3 / 1507.1.1	Physical Properties	ASTM D226	2009
1507.2.3 / 1507.1.1	Physical Properties	ASTM D4869	2016
1507.2.3 / 1507.1.1	Physical Properties	ASTM D6757	2016
1507.3.3	Physical properties	FRSA/TRI April 2012 (04-12)	2012
1507.2.4 / 1507.1.1, 1507.2.9.2	Physical Properties	ASTM D1970	2015
1507.10.2	Physical Properties	ASTM D4601	2012
1507.11.2	Physical Properties	ASTM D6163	2008
1507.11.2	Physical Properties	ASTM D6164	2011
1507.11.2	Physical Properties	ASTM D6222	2011
TAS 110	Accelerated Weathering	ASTM D4798	2011

### 3. REFERENCES:

Entity	Examination	Reference	Date
ERD (TST6049)	Physical Properties	C7290.01.08	01/16/2008
ERD (TST6049)	Physical Properties  Physical Properties	C8440.04.08	04/28/2008
ERD (TST6049)	Physical Properties	C9560.05.08	05/25/2008
ERD (TST6049)	Physical Properties	C10080.09.08-R1	03/23/2008
ERD (TST6049)	Physical Properties  Physical Properties	C12960.06.09	06/02/2009
ERD (TST6049)	Physical Properties  Physical Properties	3530.12.05-1-R1	10/05/2009
ERD (1316049)	Wind Uplift		
		C8370.08.08-R1	10/05/2009
ERD (TST6049)	Physical Properties	3523.03.05-R2	01/12/2010
ERD (TST6049)	Physical Properties	C30890.03.10-1	03/17/2010
ERD (TST6049)	Physical Properties	C3500.04.10	04/07/2010
ERD (TST6049)	Physical Properties	C31840.05.10	05/10/2010
ERD (TST6049)	Physical Properties	C31860.05.10	05/18/2010
ERD (TST6049)	Physical Properties	C31850.06.10	06/25/2010
ERD (TST6049)	Physical Properties	C35460.05.11	06/16/2011
ERD (TST6049)	Physical Properties	C34940.09.11-R1	10/04/2011
ERD (TST6049)	Accelerated Weathering	C40840SC	06/11/2012
ERD (TST6049)	Physical Properties	C40050.09.12-2	09/28/2012
ERD (TST6049)	Wind Uplift	C39670.08.12	08/20/2012
ERD (TST6049)	Physical Properties	C31410.10.10-R1	11/02/2012
ERD (TST6049)	Physical Properties	C45240.01.14-1	01/15/2014
ERD (TST6049)	Physical Properties	C32930.01.11-R2	01/20/2014
ERD (TST6049)	Physical Properties	C45240.01.14-2	01/24/2014
ERD (TST6049)	FM 4470	CTR-SC9920.01.16-R1	01/20/2016
ERD (TST6049)	Wind Uplift	CTR-SC10420.01.16	01/25/2016
ERD (TST6049)	FRSA/TRI April 2012, Tile Slippage	CTR-SC11415.11.16	11/28/2016
MTI (TST 2508)	Physical Properties	DX08C4A	03/22/2004
MTI (TST 2508)	Physical Properties	TX14B6A-001	02/27/2006
MTI (TST 2508)	Physical Properties	TX14B6B-002	03/13/2006
MTI (TST 2508)	Physical Properties	TX14B6F-006	03/13/2006
MTI (TST 2508)	Physical Properties	TX14B6E-005	03/13/2006
PRI (TST5878)	Physical Properties	CTC-034-02-01	11/24/2008
PRI (TST5878)	Physical Properties	CTC-075-02-01	02/15/2011
PRI (TST5878)	Physical Properties	CTC-067-02-01	08/08/2011
PRI (TST5878)	Wind Uplift	CTC-112-02-01	12/12/2011
PRI (TST5878)	Physical Properties	CTC-163-02-01 (x3)	05/10/2013
PRI (TST5878)	Physical Properties	CTC-189-02-01	11/18/2013
TC 115			Parant 11610



PRI (TST5878) UL, LLC. (QUA9625) Examination
Physical Properties
Quality Control

Reference CTC-327-02-01 Service Confirmation <u>Date</u> 06/28/2017 Exp. 03/09/2020

### 4. PRODUCT DESCRIPTION:

- 4.1 Self-Adhering Underlayments:
- 4.1.1 WinterGuard™ HT is a glass scrim reinforced, self-adhering, film-surfaced waterproofing underlayment; meets ASTM D1970.
- 4.1.2 WinterGuard™ Sand is a glass mat reinforced, self-adhering, sand-surfaced waterproofing underlayment; meets ASTM D1970.
- 4.1.3 **WinterGuard™ Granular** is a glass mat reinforced, self-adhering, granule-surfaced waterproofing underlayment; meets ASTM D1970.
- 4.1.4 MetaLayment™ is a self-adhering, film-surfaced, waterproofing underlayment; meets ASTM D1970.
- 4.1.5 **Black Diamond Base Sheet** is a self-adhering, glass mat reinforced, fine-mineral surfaced, SBS modified roof underlayment; meets ASTM D1970.
- 4.1.6 **Flintlastic SA PlyBase** is a self-adhering, glass mat reinforced, film-surfaced, SBS modified roof underlayment for use as a base-layer in multi-ply underlayment systems; meets ASTM D1970.
- 4.1.7 **Flintlastic SA Mid Ply** is a self-adhering, polyester reinforced, film-surfaced, SBS modified roof underlayment for use as a base-layer in multi-ply underlayment systems; meets ASTM D6163, Type I, Grade S.
- 4.1.8 **Flintlastic Ultra Glass SA** is a self-adhering, glass mat reinforced, fine-mineral surfaced, SBS modified roof underlayment for use as a base-layer in multi-ply underlayment systems; meets ASTM D6163, Type I, Grade S.
- 4.1.9 **Flintlastic SA Cap FR** is a self-adhering, glass mat reinforced, granule-mineral surfaced, SBS modified roof underlayment; meets ASTM D6163, Type I, Grade G.
- 4.1.10 **Flintlastic SA Cap** is a self-adhering, polyester reinforced, granule-mineral surfaced, SBS modified roof underlayment; meets ASTM D1970, ASTM D6164, Type I, Grade G and FRSA/TRI April 2012.
- 4.2 Torch Applied Underlayments:
- 4.2.1 **Flintlastic GTA** is a torch-applied, polyester reinforced, granule-surfaced, APP modified roof underlayment; meets ASTM D6222, Type I, Grade G.
- 4.3 Asphalt Applied Underlayments:
- 4.3.1 **Flintlastic GMS** is an asphalt-applied, polyester reinforced, granule-surfaced, SBS modified roof underlayment; meets ASTM D6164, Type I, Grade G.
- 4.4 Mechanically Attached Underlayments:
- 4.4.1 **Flintlastic SA NailBase** is a glass mat reinforced, film-surfaced, SBS modified roof underlayment for use as a mechanically attached base-layer in multi-ply underlayment systems; meets ASTM D4601, Type II.
- 4.4.2 **Roofers' Select** is an asphalt-impregnated, organic felt reinforced with glass fibers roof underlayment; meets ASTM D6757.



### 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 Evaluation Report, or previous versions thereof, is/was used for permitting or design guidance unless retained specifically for that purpose.
- 5.2 This Evaluation Report is not for use in FBC HVHZ jurisdictions.
- Fire Classification is not part of this Laboratory Report; refer to current Approved Roofing Materials Directory or test report from accredited testing agency for fire ratings of this product.
- 5.4 **CertainTeed 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 (AHJ) for approval based on this evaluation combined with supporting data for the prepared roof covering.
- 5.5 Allowable Roof Covers:

TABLE 1: ROOF COVER OPTIONS								
Underlayment	Asphalt Shingles	Nail-On Tile	Foam-On Tile	Mortar- Set Tile	Metal	Wood Shakes & Shingles	Slate	
Roofers' Select	Yes	No	No	No	No	No	No	
WinterGuard HT	Yes	No	No	No	Yes	Yes	Yes	
WinterGuard Sand or Granular	Yes	No	No	No	No	Yes	Yes	
Black Diamond Base	Yes	No	No	No	No	Yes	Yes	
Flintlastic SA Cap	Yes	Yes	Yes See 5.5.1	Yes	No	Yes	Yes	
Flintlastic SA Cap FR	No	No	No	No	No	Yes	Yes	
MetaLayment	Yes	No	No	No	Yes	Yes	Yes	
Flintlastic GTA	No	Yes	Yes See 5.5.1	Yes	No	Yes	Yes	
Flintlastic GMS	No	Yes	Yes See 5.5.1	Yes	No	Yes	Yes	

5.5.1 "Foam-On Tile" is limited to use of the following Approved tile adhesives / underlayment combinations.

TABLE 1A: ALLOWABLE TILE ADHESIVE / UNDERLAYMENT COMBINATIONS <sup>1</sup>							
Adhesive	Florida Product Approval	Underlayments					
Dow TileBond™	FL22525	Flintlastic SA Cap or Flintlastic GMS					
ICP Adhesives Polyset® AH-160	FL6332	Flintlastic SA Cap, Flintlastic GTA or Flintlastic GMS					

<sup>&</sup>lt;sup>1</sup> Refer to Tile Manufacturer's or Adhesive Manufacturer's Florida Product Approval for Overturning Moment Resistance Performance.



### 5.6 Allowable Substrates:

### 5.6.1 <u>Direct-Bond to Deck:</u>

WinterGuard HT, WinterGuard Sand, WinterGuard Granular or MetaLayment self-adhered to:

- New or existing plywood
- > FlintPrime or ASTM D41 primed new or existing plywood.

Black Diamond Base, Flintlastic SA PlyBase, Flintlastic SA Mid Ply, Flintlastic Ultra Glass SA, Flintlastic SA Cap or Flintlastic SA Cap FR self-adhered to:

- New or existing plywood;
- > FlintPrime, FlintPrime SA or ASTM D41 primed new or existing plywood;
- > FlintPrime, FlintPrime SA or ASTM D41 primed structural concrete.

Flintlastic GMS in hot asphalt to:

FlintPrime or ASTM D41 primed structural concrete.

Flintlastic GTA torch-applied to:

> FlintPrime or ASTM D41 primed structural concrete.

### 5.6.2 Bond to Mechanically Attached Base Sheet or Adhered Base Ply:

- WinterGuard HT, WinterGuard Sand, WinterGuard Granular or MetaLayment self-adhered to: ASTM D226, Type I or II felt.
- ➤ Black Diamond Base Sheet, Flintlastic SA PlyBase, Flintlastic SA Mid Ply, Flintlastic Ultra Glass SA, Flintlastic SA Cap, Flintlastic SA Cap FR self-adhered to: Flintlastic SA NailBase or ASTM D226, Type I or II felt.
- > Flintlastic SA Cap or Flintlastic SA Cap FR self-adhered to: Flintlastic SA PlyBase or Flintlastic SA MidPly.
- Flintlastic GMS in hot asphalt to: ASTM D226, Type I or II felt, ASTM D4601, Type II base sheet, Black Diamond Base Sheet or Flintlastic Ultra Glass SA.
- Flintlastic GTA torch-applied to: ASTM D226, Type I or II felt, ASTM D4601, Type II base sheet, Black Diamond Base Sheet or Flintlastic Ultra Glass SA.

### 5.6.3 Wind Resistance for Underlayment Systems in Foam-On Tile Applications:

FRSA/TRI April 2012 (04-12) does not address wind uplift resistance of all underlayment systems beneath foam-on or mortar-set tile systems, where the underlayment forms part of the load-path. The following wind uplift limitations apply to underlayment systems that are not addressed in FRSA/TRI April 2012 (04-12) and are used in foam-on or mortar-set tile applications. Maximum Design Pressure 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). Refer to FRSA/TRI April 2012 (04-12), Appendix A, Table 1A or FBC 1609 for determination of design wind loads.

### #1 Maximum Design Pressure = -240 psf:

Deck: Structural concrete to meet project requirements to satisfaction of AHJ.

Primer: FlintPrime or ASTM D41.

Base Sheet: Black Diamond Base Sheet or Flintlastic Ultra Glass SA, self-adhered. Underlayment: Flintlastic GTA, torch-applied or Flintlastic GMS, applied in hot asphalt.

### #2 Maximum Design Pressure = -555 psf:

Deck: Structural concrete to meet project requirements to satisfaction of AHJ.

Primer: FlintPrime, FlintPrime SA or ASTM D41.

Base: (Optional) Flintlastic SA PlyBase or Flintlastic SA Mid Ply, self-adhered.

Underlayment: Flintlastic SA Cap, self-adhered.



### #3 Maximum Design Pressure = -105.0 psf:

Deck:

Min. 15/32-inch plywood to meet project requirements to satisfaction of AHJ.

Primer:

(Optional) FlintPrime, FlintPrime SA or ASTM D41

Base Ply:

(Optional) Flintlastic SA PlyBase or Flintlastic SA Mid Ply, self-adhered.

Underlayment: Flintlastic SA Cap, self-adhered.

### #4 Maximum Design Pressure = -127.5 psf:

Deck:

Min. 19/32-inch plywood to meet project requirements to satisfaction of AHJ.

Primer:

FlintPrime, FlintPrime SA or ASTM D41

Joints:

Min. 4-inch wide strips of Flintlastic SA PlyBase, self-adhered over all plywood joints.

Base Ply:

(Optional) Flintlastic SA PlyBase or Flintlastic SA Mid Ply, self-adhered.

Underlayment: Flintlastic SA Cap, self-adhered.

### #5 Maximum Design Pressure = -37.5 psf:

Deck:

Min. 15/32-inch plywood to meet project requirements to satisfaction of AHJ.

Base Sheet:

ASTM D226, Type II felt or Flintlastic SA NailBase

Fasteners:

12 ga., 1%-inch long galvanized ring shank nails through 32 ga., 15/8-inch diameter tin caps

Spacing:

6-inch o.c. at the 4-inch laps and 12-inch o.c. at two (2) equally spaced, staggered rows in the field of

the sheet

Base Ply:

(Optional) Flintlastic SA PlyBase or Flintlastic SA Mid Ply, self-adhered.

Underlayment: Flintlastic SA Cap, self-adhered.

### #6 Maximum Design Pressure = -45.0 psf\*:

Deck:

Min. 15/32-inch plywood to meet project requirements to satisfaction of AHJ.

Base Sheet:

Glasbase Base Sheet; Flexiglas Base Sheet; Flintlastic Base 20; All Weather / Empire Base Sheet;

Flintlastic Poly SMS Base; Flintlastic Ultra Poly SMS Base or Yosemite Venting Base Sheet

Fasteners:

Simplex MAXX Cap Fasteners

Spacing:

9-inch o.c. at the 2-inch wide side laps and 18-inch o.c. at two (2) equally spaced, staggered center

rows

Underlayment: Flintlastic GMS, applied in hot asphalt or Flintlastic GTA, torch-applied.

### #7 Maximum Design Pressure = -52.5 psf:

Deck:

Min. 15/32-inch plywood to meet project requirements to satisfaction of AHJ.

Base Sheet:

Glasbase Base Sheet; Flexiglas Base Sheet; Flintlastic Base 20; All Weather / Empire Base Sheet;

Flintlastic Poly SMS Base; Flintlastic Ultra Poly SMS Base or Yosemite Venting Base Sheet

Fasteners:

Simplex MAXX Cap Fasteners

Spacing:

9-inch o.c. at the 2-inch wide side laps and 12-inch o.c. at two (2) equally spaced, staggered center

rows.

Underlayment: Flintlastic GMS, applied in hot asphalt or Flintlastic GTA, torch-applied.

### #8 Maximum Design Pressure = -52.5 psf:

Deck:

Min. 15/32-inch plywood to meet project requirements to satisfaction of AHJ.

Base Sheet:

Flintlastic SA NailBase

Fasteners:

Min. 1-inch long, 12 ga. Simplex Metal Cap Nails

Spacing:

6-inch o.c. at the min. 2-inch laps and 6-inch o.c. at four (4) equally spaced, staggered rows in the field

of the sheet.

Base Ply:

(Optional) Flintlastic SA PlyBase or Flintlastic SA Mid Ply, self-adhered.

Underlayment: Flintlastic SA Cap, self-adhered.

### #9 Maximum Design Pressure = -60.0 psf:

Deck:

Min. 19/32-inch plywood to meet project requirements to satisfaction of AHJ.

Base Sheet:

Flintlastic SA NailBase

Fasteners:

12 ga., 1%-inch long galvanized ring shank nails through 32 ga., 1 5/8-inch diameter tin caps

Spacing:

8-inch o.c. at the min. 2-inch laps and 8-inch o.c. at three (3) equally spaced, staggered rows in the

field of the sheet.

Base Ply:

(Optional) Flintlastic SA PlyBase or Flintlastic SA Mid Ply, self-adhered.

Underlayment: Flintlastic SA Cap, self-adhered.



#### #10 Maximum Design Pressure = -67.5 psf:

Min. 15/32-inch plywood to meet project requirements to satisfaction of AHJ. Deck:

Glasbase Base Sheet; Flexiglas Base Sheet; Flintlastic Base 20; All Weather / Empire Base Sheet; Base Sheet:

Flintlastic Poly SMS Base; Flintlastic Ultra Poly SMS Base or Yosemite Venting Base Sheet

Fasteners: Cap nails: 1-inch diameter, 0.032-inch thick metal cap with 0.120-inch shank diameter, annular ring

shank nails

6-inch o.c. at 4-inch lap and 6-inch o.c. at five (5) equally spaced, staggered center rows in the field of Spacing:

the sheet.

Underlayment: Flintlastic GMS, applied in hot asphalt.

### #11 Maximum Design Pressure = -75.0 psf:

Deck: Min. 19/32-inch plywood to meet project requirements to satisfaction of AHJ.

Base Sheet: Flintlastic SA NailBase

Fasteners: 12 ga., 1%-inch long galvanized ring shank nails through 32 ga., 1 5/8-inch diameter tin caps

Spacing: 6-inch o.c. at the min. 2-inch laps and 6-inch o.c. at four (4) equally spaced, staggered rows in the field

of the sheet.

Base Ply: (Optional) Flintlastic SA PlyBase or Flintlastic SA Mid Ply, self-adhered.

Underlayment: Flintlastic SA Cap, self-adhered.

#### #12 Maximum Design Pressure = -90.0 psf:

Deck: Min. 15/32-inch plywood to meet project requirements to satisfaction of AHJ.

Glasbase Base Sheet; Flexiglas Base Sheet; Flintlastic Base 20; All Weather / Empire Base Sheet; Base Sheet:

Flintlastic Poly SMS Base; Flintlastic Ultra Poly SMS Base or Yosemite Venting Base Sheet

Fasteners: Simplex MAXX Cap Fasteners

Spacing: 6-inch o.c. at the 2-inch wide side laps and 6-inch o.c. at two (2) equally spaced, staggered center rows.

Underlayment: Flintlastic GMS, applied in hot asphalt or Flintlastic GTA, torch-applied.

### Maximum Design Pressure = -105.0 psf:

Deck: Min. 15/32-inch plywood to meet project requirements to satisfaction of AHJ.

Base Sheet: Glasbase Base Sheet; Flexiglas Base Sheet; Flintlastic Base 20; All Weather / Empire Base Sheet:

Flintlastic Poly SMS Base; Flintlastic Ultra Poly SMS Base or Yosemite Venting Base Sheet

Fasteners: Simplex MAXX Cap Fasteners

6-inch o.c. at the 2-inch wide side laps and 6-inch o.c. at three (3) equally spaced, staggered center Spacing:

Underlayment: Flintlastic GMS, applied in hot asphalt or Flintlastic GTA, torch-applied.

#### #15 Maximum Design Pressure = -105.0 psf:

Min. 19/32-inch plywood to meet project requirements to satisfaction of AHJ. Deck:

Base Sheet:

Fasteners:

Flintlastic SA NailBase

4-inch o.c. at the min. 2-inch laps and 4-inch o.c. at four (4) equally spaced, staggered rows in the field Spacing:

12 ga., 1%-inch long galvanized ring shank nails through 32 ga., 1 5/8-inch diameter tin caps

of the sheet.

Base Ply: (Optional) Flintlastic SA PlyBase or Flintlastic SA Mid Ply, self-adhered.

Underlayment: Flintlastic SA Cap, self-adhered.

5.6.3.1 All other direct-deck, adhered CertainTeed underlayment systems beneath foam-on or mortar-set tile systems carry a Maximum Design Pressure of -45 psf.

For mechanically attached Base Sheet, the maximum design pressure for the selected assembly shall meet 5.6.3.2 or exceed that required under FRSA/TRI April 2012 (04-12), Appendix A, Table 1A.

Alternatively, the maximum design pressure for the selected assembly shall meet or exceed the Zone 1 design pressure determined in accordance with FBC 1609. In this case, Zones 2 and 3 shall employ an attachment density designed 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 and Roofing Application Standard RAS 117. Assemblies marked with an asterisk\* carry the limitations set forth in Section 2.2.10.1 of FM Loss Prevention Data Sheet 1-29 (January 2016) for Zone 2/3 enhancements.



### 5.7 Exposure Limitations:

Roofers' Select shall not be left exposed for longer than 30-days after installation. Refer to installation instructions specific to anticipated exposure in Section 6.

Black Diamond Base, WinterGuard HT, WinterGuard Sand, WinterGuard Granular or MetaLayment shall not be left exposed for longer than 180-days after installation.

Flintlastic SA Cap, Flintlastic SA Cap FR, Flintlastic GTA or Flintlastic GMS do not have an exposure limitation, unless the prepared roof covering is to be adhesive-set tile atop Flintlastic SA Cap, GTA or GMS, in which case the maximum exposure is 180 days.

Flintlastic SA NailBase, Flintlastic SA PlyBase, Flintlastic SA Mid Ply and Flintlastic Ultra Glass SA, for use as a base-layer in a multi-ply underlayment system, shall not be left exposed for longer than 30-days after installation, prior to placement of subsequent underlayment layer.

### 5.8 <u>Tile Slippage Limitations (per FRSA/TRI April 2012 (04-12))</u>:

When loading roof tiles on the underlayment in direct-deck tile assemblies, the maximum roof slope shall be as follows. These slope limitations can only be exceeded by using battens during loading of the roof tiles.

TABLE 2: TILE SLIPPAGE LIMITATIONS FOR DIRECT-DECK TILE INSTALLATIONS							
Underlayment	Tile Profile	Staging Method	Maximum Slope				
Flintlastic GMS	All	Max. 10-tile stack	4:12				
Flintlastic GTA	All	Max. 10-tile stack	6:12				
Flintlastic SA Cap	Flat	Max. 6-tile stack (4 over 2)	6:12				
	Lugged	Max. 6-tile stack (4 over 2)	5:12				

#### 6. INSTALLATION:

- 6.1 **CertainTeed Roof Underlayments** shall be installed in accordance with **CertainTeed** published installation requirements subject to the Limitations set forth in Section 5 herein and the specifics noted below.
- 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 primed the substrate (if applicable).

### 6.3 Flintlastic SA NailBase, Flintlastic SA PlyBase, Flintlastic SA Mid Ply or Flintlastic Ultra Glass SA:

- 6.3.1 Flintlastic SA NailBase, Flintlastic SA PlyBase and Flintlastic SA Mid Ply are limited to use as a base or midlayer in multi-ply underlayment systems beneath Flintlastic SA Cap or Flintlastic SA Cap FR.
- 6.3.2 **Flintlastic Ultra Glass SA** is limited to use as a base-layer in multi-ply underlayment systems beneath **Flintlastic GTA** or **Flintlastic GMS**.
- 6.3.3 Install the base-layer underlayment to the substrates detailed in **Section 5.6** in accordance with **CertainTeed** published installation instructions, followed by the final underlayment layer in accordance with the instructions outlined below for the particular top-layer underlayment.
- 6.3.4 Roof cover limitations are those are those associated with the top-layer underlayment, as set forth in **Table 1**.



### 6.4 Black Diamond Base, Flintlastic SA Cap or SA Cap FR, WinterGuard or MetaLayment:

6.4.1 Shall be installed in compliance with current **CertainTeed** published installation requirements and **FBC**1507 for the type of prepared roof covering to be installed.

### 6.4.2 Non-Tile Applications:

Shall be fully self-adhered to the substrates noted in **Section 5.6**. Side laps shall be minimum 4-inch and end-laps minimum 6-inch wide, pressed firmly with a seam-roller, and offset end-laps minimum 2 feet from course to course.

Consult **CertainTeed** instructions for use of **FlintBond SBS Modified Bitumen Adhesive**, trowel grade, on the 6-inch end laps and T-seam detailing.

Consult CertainTeed instructions regarding back-nailing requirements.

### 6.4.3 <u>Tile Applications (Flintlastic SA Cap only):</u>

Reference is made to FRSA/TRI April 2012 (04-12) Installation Manual and Table 1 herein.

For mechanically fastened tile roofing over 2-ply system, consisting of Base Sheet and self-adhering top sheet(s), Base Sheet fastening shall be not less than FRSA/TRI April 2012 (04-12), Table 1.

For adhesive-set tile applications, refer to Section 5.6.3 herein.

### 6.5 Flintlastic GTA:

- 6.5.1 Flintlastic GTA shall be installed in compliance with current CertainTeed published installation requirements. For use in tile applications, Flintlastic GTA is for use as an alternate to the Heat Applied "Cap Sheet" in the "Two Ply System" from FRSA/TRI April 2012 (04-12) beneath mechanically fastened or adhered tile roof systems (Base Sheet Limited per 5.6.2)
- 6.5.2 **Flintlastic GTA** shall be fully torch applied to the substrates noted in Section 5.6. Side (horizontal) laps shall be minimum 3-inch and end (vertical) laps minimum 6-inch wide, and offset end-laps minimum 3 feet from course to course. Side and end-laps shall be fully heat-welded and inspected to ensure minimum 3/8-inch flow of modified compound beyond the lap edge.
- 6.5.3 Consult CertainTeed instructions regarding back-nailing requirements.

### 6.6 Flintlastic GMS:

- Flintlastic GMS shall be installed in compliance with current CertainTeed published installation requirements. For use in tile applications, Flintlastic GMS is for use as an alternate to "Mineral Surface Roll Roofing" (ASTM D6380, Class M) in the "Single Ply System" from FRSA/TRI April 2012 (04-12) beneath mechanically fastened tile roof systems or the Hot Asphalt applied "Cap Sheet" in the "Two Ply System" from FRSA/TRI April 2012 (04-12) beneath mechanically fastened or adhered tile roof systems.
- 6.6.2 **Flintlastic GMS** shall be fully asphalt-applied to the substrates noted in Section 5.6. Side (horizontal) laps shall be minimum 3-inch and end (vertical) laps minimum 6-inch wide, and offset end-laps minimum 3 feet from course to course. Side and end-laps shall be fully adhered in a complete mopping of hot asphalt with asphalt extending approximately 3/8-inch beyond the lap edge.
- 6.6.3 Consult CertainTeed instructions regarding back-nailing requirements.



6.7	Roofers' Select:
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- 6.7.1 <u>Standard-Slope Application (4:12 and greater)</u>: Starting at the lower edge of the roof, apply a single layer of Roofers' Select parallel to the eaves, overhanging drip edge by %-inch. Overlap ends (vertical laps) at least 4-inch and sides (horizontal laps) at least 2-inch. Offset end laps from course to course at least 6-feet. Apply flat and unwrinkled, fastening as required to hold in place.
- 6.7.2 Low Slope Application (2:12 up to 4:12): Starting at the lower edge of the roof, cover the entire deck by applying a double layer of Roofers' Select parallel to the eaves. Begin by applying a 19-inch wide starter strip of Roofers' Select along the eaves, overlapping the drip edge by ½-inch. Place a full-width sheet over the starter, with lower edge flush to the starter's lower edge. Apply succeeding 36-inch wide courses up the roof slope, overlapping the previous course by 19-inch in "shingle-fashion". Overlap ends at least 12-inch. Offset end laps from course to course at least 6-feet. Apply flat and unwrinkled, fastening as required to hold in place.
- 6.7.3 <u>Eaves Flashing for Ice Dam Protection (all slopes)</u>: Eaves flashing may be constructed from self-adhering waterproofing underlayment holding Florida Product Approval, or by applying a double layer of Roofers' Select cemented together with asphalt roofing cement (ASTM D 4586, Type II). Eaves flashing should be installed to a level of at least 24-inch inside the interior wall line, or in areas of severe icing, at least up to the highest water level expected to occur from ice dams to the satisfaction of the Authority Having Jurisdiction (AHJ).
- 6.8 Tile Staging (Flintlastic SA Cap, Flintlastic GTA or Flintlastic GMS):
- 6.8.1 Tile shall be loaded and staged in a manner that prevents tile slippage and/or damage to the underlayment. Refer to **Table 2** herein, and CertainTeed published requirements for tile staging.
- 6.8.2 Battens and/or Counter-battens, as required by the tile manufacturer and FRSA/TRI April 2012 (04-12) must be used on all roof slopes greater than 7:12. Precautions should be taken as needed, such as the use of battens or nail-boards, to prevent tile sliding and/or damage to the underlayment during the loading process.

### 7. BUILDING PERMIT REQUIREMENTS:

As required by the Building Official or Authority Having Jurisdiction (AHJ) in order to properly evaluate the installation of this product.

### 8. MANUFACTURING PLANTS:

Contact the noted QA agency for information on product locations covered for **F.A.C. 61G20-3** QA requirements. The following plants have qualified products under their respective physical properties specifications.

Plant	Specification	Product(s)		
	ASTM D1970	WinterGuard HT, MetaLayment, Flintlastic SA PlyBase		
	ASTM D4601	Flintlastic SA NailBase		
	ASTM D6163	Flintlastic SA Mid Ply, Flintlastic Ultra Glass SA, Flintlastic SA Cap FR		
Little Rock, AR	ASTM D6164	Flintlastic GMS		
	ASTM D1970, ASTM D6164 &	Flintlastic SA Cap		
	FRSA/TRI April 2012			
	ASTM D6222	Flintlastic GTA		
Shakopee, MN ASTM D1970 Shreveport, LA ASTM D6757		WinterGuard Sand, WinterGuard Granular, Black Diamond Base Sheet,		
		Roofers' Select		

### 9. QUALITY ASSURANCE ENTITY:

UL, LLC. – QUA9625; (414) 248-6409; karen.buchmann@ul.com

- END OF EVALUATION REPORT -



# DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

CONSTRUCTION INDUSTRY LICENSING BOARD 1940 NORTH MONROE STREET TALLAHASSEE FL 32399-0783

(850) 487-1395

SCOTT, RONALD BRICE RBS CONSTRUCTION LLC 4872 BRIGHTMOUR CIRCLE ORLANDO FL 32837

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STATE OF FLORIDA DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION

CCC1327234

ISSUED: 06/21/2016

CERTIFIED ROOFING CONTRACTOR SCOTT, RONALD BRICE RBS CONSTRUCTION LLC

IS CERTIFIED under the provisions of Ch. 489 FS. Expiration date: AUG 31, 2018 L1606210000827

DETACH HERE

RICK SCOTT, GOVERNOR

KEN LAWSON, SECRETARY

### STATE OF FLORIDA

DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION CONSTRUCTION INDUSTRY LICENSING BOARD

LICENSE NUMBER

CCC1327234

The ROOFING CONTRACTOR Named below IS CERTIFIED Under the provisions of Chapter 489 FS. Expiration date: AUG 31, 2018



SCOTT, RONALD BRICE RBS CONSTRUCTION LLC 4872 BRIGHTMOUR CIRCLE ORLANDO FL 32837



KLOCASALE

ACORD

### CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 06/08/2018

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER. AND THE CERTIFICATE HOLDER.

REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on

lf ti	SUBROGATION IS WAIVED, subjecting certificate does not confer rights to	t to	the	terms and conditions of	f the poli uch endo	cy, certain rsement(s)	policies may				
PRODUCER JP Perry Insurance, Inc 3342 Kori Road Jacksonville, FL 32257					CONTACT NAME:						
					PHONE (A/C, No, Ext): (904) 268-7310 FAX (A/C, No): (904) 900-2222 E-MAIL ADDRESS:					900-2222	
					ADDRES		SUBERIES ACCO	RDING COVERAGE		NAIC#	
					MOUDEO			surance Company		12537	
INC	IRED							Irance Company		40231	
"1436								Irance Company		40231	
	RBS Construction LLC 4872 Brightmour Circle				INSURER C : Amerisafe						
	Orlando, FL 32837				INSURER D :						
					INSURER E:						
-	VERAGES CER	TIEIC	A T E	NUMBER:	REVISION NUMBER:						
T IN C	HIS IS TO CERTIFY THAT THE POLICIE IDICATED. NOTWITHSTANDING ANY RE ERTIFICATE MAY BE ISSUED OR MAY XCLUSIONS AND CONDITIONS OF SUCH F	S OF EQUIF PERT POLIC	INS REMI AIN, CIES.	SURANCE LISTED BELOW ENT, TERM OR CONDITIO THE INSURANCE AFFOR LIMITS SHOWN MAY HAVE	ON OF AN ROED BY BEEN RE	Y CONTRACTHE POLICEDUCED BY	TO THE INSUF CT OR OTHEF IES DESCRIB PAID CLAIMS.	RED NAMED ABOVE FOR T R DOCUMENT WITH RESPE ED HEREIN IS SUBJECT T	ECT TO	WHICH THIS	
INSR	TYPE OF INSURANCE	ADDL S	SUBR	POLICY NUMBER	1	POLICY EFF	POLICY EXP (MM/DD/YYYY)	LIMIT	s		
A	X COMMERCIAL GENERAL LIABILITY							EACH OCCURRENCE	\$	1,000,000	
	CLAIMS-MADE X OCCUR	- 1		DCI0065100		06/10/2018	06/10/2019	DAMAGE TO RENTED PREMISES (Ea occurrence)	\$	100,000	
	X \$10000 Ded BI PD LAE							MED EXP (Any one person)	\$	5,000	
	X \$2500 EB Ded							PERSONAL & ADV INJURY	5	1,000,000	
	GEN'L AGGREGATE LIMIT APPLIES PER:							GENERAL AGGREGATE	\$	2,000,000	
	POLICY PRO- JECT LOC	- 1						PRODUCTS - COMP/OP AGG	\$	2,000,000	
	OTHER:							EMPLOYEE BENEFI	\$	1,000,000	
В	ANY AUTO					-		COMBINED SINGLE LIMIT (Ea accident)	\$	500,000	
				B1P4449E	10/27/2017	10/27/2018	BODILY INJURY (Per person)	\$			
	OWNED AUTOS ONLY X SCHEDULED AUTOS  X HIRED NON-OWNED AUTOS ONLY							BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	\$		
									\$		
	UMBRELLA LIAB OCCUR							EACH OCCURRENCE	\$		
	EXCESS LIAB CLAIMS-MADE				- 1			AGGREGATE	S		
	DED RETENTION\$								\$		
С	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY						X PER OTH-				
	NY PROPRIETOR/PARTNER/EXECUTIVE PFICER/MEMBER EXCLUDED?	N/A		AVWCFL2642272017	1.	10/17/2017	10/17/2018	E.L. EACH ACCIDENT	S	1,000,000	
		N/A						E.L. DISEASE - EA EMPLOYEE	\$	1,000,000	
	If yes, describe under DESCRIPTION OF OPERATIONS below							E.L. DISEASE - POLICY LIMIT	s	1,000,000	
DES	CRIPTION OF OPERATIONS / LOCATIONS / VEHICL	ES (AC	CORD	) 101, Additional Remarks Schedu	ule, may be	attached if mor	e space is requir	ed)			
CE	RTIFICATE HOLDER				CANCE	LLATION					
City of Belle Isle 1600 Nela Ave Belle Isle, FL 32809					SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.						
				ZED REPRESE		and love that the same and a contract described by the same of the lower of the low					
						They a fresh					

**EXPIRES** 

9/30/2018

5000-1058709

5000 **BUSINESS OFFICE**  \$30.00

2017

EMPLOYEE 1806

CERTIFIED ROOFING CO

\$30.00

**EMPLOYEE** 

**TOTAL TAX** PREVIOUSLY PAID TOTAL DUE

\$60.00 \$60.00 \$0.00

SCOTT RONALD BRICE

**RBS CONSTRUCTION LLC** SCOTT RONALD BRICE 5205 S ORANGE AVE STE 102 ORLANDO FL 32837

5205 S ORANGE AVE #102 (MOBILE) N - EDGEWOOD, 32809

PAID: \$60.00 0099-00774096 7/10/2017 cott Randolph, Tax Collector

**Local Business Tax Receipt** Orange County, Florid

s local business tax receipt is in addition to and not in lieu of any other tax required by law or municipal ordinance. Businesses are subject to regulation of zoning, health and o ful authorities. This receipt is valid from October 1 through, September 30 of receipt year. Delinquent penalty is added October 1.

2017

**BUSINESS OFFICE** 5000

\$30.00

**EXPIRES** 9/30/2018

5000-1058709

CERTIFIED ROOFING CO

\$30.00

EMPLOYEE

TOTAL TAX PREVIOUSLY PAID \$60.00 \$60.00

TOTAL DUE \$0.00

5205 S ORANGE AVE #102 (MOBILE) N - EDGEWOOD, 32809

PAID: \$60.00 0099-00774096 7/10/2017

\*SCOTT RONALD BRICE RBS CONSTRUCTION LLC SCOTT RONALD BRICE 5205 S ORANGE AVE STE 102 ORLANDO FL 32837

This receipt is official when validated by the Tax Collector.

CITY OF EDGEWOOD LOCAL BUSINESS TAX RECEIPT RONALD SCOTT BRICE No: (407)859-8163 1845 405 LARUE AVENUE, EDGEWOOD FL 32809-3406 Date: 7/06/17 LICENSE YEAR: OCT 1 2005 SEPT 30, 2018 5205 S. ORANGE AVE STELLE EDGEWOOD FL 32809 CONSTRUCTION OFFICE - ADMIN ONLY CONSTRUCTION OFFICE - ADMIN ONLY **BUS TAX** 98.12 Address: PENALTY TRANSFER Activity: **Total Paid** 98.12 October 1 0.00 Issued to: **RBS CONSTRUCTION LLC** November 1 0.00 RONALD SCOTT BRICE December 1 0.00 5205 S. ÓRANGE AVE STE102 danuary 1 0.00 ORLANDO, FL 32809 MUST BE POSTED CONSPICUOUSLY AT PLACE OF BUSINESS Bea L. Meeks, CBTO, City Clerk