



# City of Belle Isle

Universal Engineering Sciences 3532 Maggie Blvd., Orlando, FL 32811  
 Tel 407-581-8161 \* Fax 407-581-0313 \* [www.universalengineering.com](http://www.universalengineering.com)

## PERMIT CARD – PLEASE POST AT JOB SITE

THIS DOCUMENT BECOMES YOUR PERMIT WHEN PROPERLY VALIDATED

Per FBC 105.3.3: An enforcing authority may not issue a building permit for any building construction, erection, alteration, modification, repair or addition unless the permit either includes on its face or there is attached to the permit the following statement: **"NOTICE: In addition to the requirements of this permit, there may be additional restrictions applicable to this property that may be found in the public records of this county, and there may be additional permits required from other governmental entities such as water management districts, state agencies, or federal agencies."** The issuance of this permit does not grant permission to violate any applicable City, Orange County, State of Florida and/or Federal codes and/or ordinances. Separate permits are required for Signs, Roofing, Electrical, Gas, Plumbing and Mechanical services. This permit becomes VOID if the work authorized is not commenced within 6 months, or is suspended or abandoned for a period of 6 months after commencement. **WORK SHALL BE CONSIDERED SUSPENDED IF AN APPROVED INSPECTION HAS NOT BEEN MADE WITHIN A 6 MONTH PERIOD.** PERMISSION IS GRANTED TO DO THE FOLLOWING WORK ACCORDING TO THE CONDITIONS HEREON AND THE APPROVED PLANS AND SPECIFICATIONS, SUBJECT TO COMPLIANCE WITH THE ORDINANCES OF THE CITY OF BELLE ISLE, FLORIDA.

<p><b>Scope of Work:</b> ROOF – re-roof 4200 sf asphalt shingles</p> <p><b>Comments:</b> None</p> <p><b>Project Information</b>        Address: 6320 Gibson Dr , Belle Isle, FL 32809        Parcel ID: 24-23-29-0600-02-040        Property Owner: Elferdink, Larry        Phone Number: 321 246 6969        *****        Company Name: George P. Barnett, Inc        Contractor Name: Barnett, George        License Number: CCC1326231        Address: 2842 Gleason Ave, Orlando, FL 32826        Phone Number: 407 765 5284</p>	<p style="text-align: right;"><b>Permit Number: 2017-04-053</b></p> <p style="text-align: right;">Date of Application: <b>04/14/2017</b>        Date Permit Issued: <b>04/18/2017</b></p> <p><b>WARNING TO OWNER:</b> "YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOU 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." ON THE JOB INSPECTION(S) MUST BE MADE BEFORE PROCEEDING WITH SUBSEQUENT WORK. THIS CARD MUST BE DISPLAYED OUTSIDE AND BE PROTECTED FROM THE WEATHER WHILE BEING VISIBLE FROM THE STREET UNTIL THE FINAL INSPECTIONS HAVE BEEN APPROVED.</p>
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## BUILDING FEATURES

<p><b>IMPACT FEES</b></p> <p>Traffic \$        School \$</p> <p><b>ZONING FEES</b></p> <p>Zoning Fee \$30.00</p> <p><b>UNIVERSAL ENG - BUILDING FEES</b></p> <p>Boat Dock \$        Boat House \$        Building \$        Demo \$        Door(s) \$        Driveway \$        Electrical \$        Fence \$        Gas \$        Irrigation \$        Low Voltage \$        Mechanical \$        Plumbing \$        Pool \$        Roofing \$85.00        Screen Encl \$        Shed \$        Temp Pole \$        Window(s) \$</p> <p><b>SURCHARGE FEES</b></p> <p>Surcharge Fee \$2.00        Surcharge Fee \$2.00</p> <p style="text-align: center;"><b>TOTAL FEES \$119.00</b></p> <p><b>Date Paid</b> 4-20-17</p> <p><b>CC or Check #</b> ANEX NOV5</p> <p><b>Amount Paid</b> 119.00</p> <p>The person accepting this permit shall conform to the terms of the application on file and construction shall conform to the requirements of the Florida Building Code (FS 553).</p>	<p style="text-align: center;"><b>BUILDING INSPECTOR USE ONLY</b></p> <p>IF APPLICABLE:        Have Zoning Approval Conditions Been Met? YES NO    Have Stormwater Approval Conditions Been Met? YES NO    Silt fencing in place? YES NO    Turbidity Barrier in place? YES NO</p> <p><input type="checkbox"/> <b>BUILDING</b></p> <p>1<sup>st</sup> _____ (Footing/Foundation)        Survey specific foundation plan must be onsite before slab pour. Approved Plan on Site? ____</p> <p>2<sup>nd</sup> _____ (Slab)</p> <p>3<sup>rd</sup> _____ (Lintel)(Wall Reinforcing on Masonry Building)</p> <p>4<sup>th</sup> _____ (Exterior Framing)(Roof/Wall Sheathing)</p> <p>5<sup>th</sup> _____ (Framing) (To be made after Plumbing/ Mechanical/ Electrical Rough-Ins &amp; Windows/Doors Installed)</p> <p>6<sup>th</sup> _____ (Insulation to be Made After Roof Installed)</p> <p>7<sup>th</sup> _____ (Drywall)</p> <p>8<sup>th</sup> _____ (Sidewalk/Driveway)</p> <p>9<sup>th</sup> _____ (Other)</p> <p>10<sup>th</sup> _____ (Final – After MEP and Other Applicable Finals)</p> <p><input type="checkbox"/> <b>ROOFING</b>    <b>OSHA APPROVED ACCESS MUST BE MADE AVAILABLE TO INSPECTOR</b></p> <p>1<sup>ST</sup> ROOFING Deck Nailing/Dry-in/Flashing _____</p> <p>2<sup>nd</sup> ROOFING Covering In-Progress _____</p> <p>3<sup>rd</sup> ROOFING Covering Final _____</p> <p><input type="checkbox"/> <b>PLUMBING</b> (Pool-Piping, Solar, Irrigation, Water Treatment Equip, Etc...)</p> <p><input type="checkbox"/></p> <p>1<sup>ST</sup> _____ (Underground)    2<sup>nd</sup> _____ (Sewer)</p> <p>3<sup>rd</sup> _____ (Rough-In/Tub Set)    4<sup>th</sup> _____ (Final)</p> <p><b>CHECK APPROPRIATE BOX</b></p> <p><input type="checkbox"/> <b>GAS</b> ___ Natural ___ LP    <input type="checkbox"/> <b>MECHANICAL</b>    <input type="checkbox"/> <b>ELECTRICAL</b>    <input type="checkbox"/> <b>LOW VOLTAGE</b></p> <p>1<sup>st</sup> _____ (Rough-In)    2<sup>nd</sup> _____ (Final)</p>
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Inspection requests are to be emailed to [BD scheduling@UniversalEngineering.com](mailto:BD scheduling@UniversalEngineering.com); a confirmation email will be sent back to you upon scheduling. **Next-Day Inspection requests must be made by 4pm.** 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.

For a copy of your permit, or to check inspection results, please visit <https://universalengineering.sharefile.com>  
 login ID = [cobi@universalengineering.com](mailto:cobi@universalengineering.com)    password = universal13

**RECEIVED**  
**APR 14 2017**



**City of Belle Isle**

Universal Engineering Sciences 3532 Maggie Blvd., Orlando, FL 32811  
 Tel 407-581-8161 \* Fax 407-581-0313 \* [www.universalengineering.com](http://www.universalengineering.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.

**DATE OF APPLICATION:** \_\_\_\_\_ **ROOF PERMIT NUMBER** 2017-04-053  
 PLEASE PRINT. The undersigned hereby applies for a permit to make installations as indicated below:

Project Address 6320 Gibson Dr, Belle Isle, FL  32809  32812  
 Property Owner LARRY ELFERDINK Phone 321 246 6969  
 Property Owner's Mailing Address 6320 Gibson Dr City Belle Isle  
 State FL Zip Code 32809 **Parcel Id Number:** 29-23-29-0600-02-040  
 REQUIRED! To obtain this information, please visit <http://www.ocpafi.org/Searches/ParcelSearch.aspx>

**Class of Building:** Old  New  **Type of Building:** Residential  Commercial  Other   
**Type of Work:** New Roof  ReRoof

- **REQUIRED!** Florida Product Approval Screen Printout from [www.floridabuilding.org](http://www.floridabuilding.org) showing the Code Version
- **REQUIRED!** Florida Product Approval Installation Instructions from [www.floridabuilding.org](http://www.floridabuilding.org) (not the manufacturer instructions)
- **REQUIRED!** Copies of your General Liability & Worker's Comp Insurance Certificate & State and Local Licenses

Please indicate the nature of work by completing the information below:

Roof Square Footage: 4200 Number of Stories: 1 Job Valuation: \$ 9,500 IS = 12,600  
 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 I 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 limits 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. Failure to comply will result in a stop work order.

LICENSE HOLDER SIGNATURE George P Barnett LICENSE # CCC1326231  
 LICENSE HOLDER NAME George P Barnett COMPANY NAME George P Barnett Inc  
 Street Address 2842 Gleason Ave  
 City Orlando State FL Zip Code 32826 Phone Number 407 765 5884  
 Email Address PATBARNETT55@gmail.com

**Building Official:** JCA Date 4-19-17  
 Verified Contractor's Licenses & Insurance are on file (Signature) Date 4-14-17

Zoning Fee \$ 30.00  
 Permit Fee \$ 85.00 ✓  
 Review Fee \$ 0.00  
 3% Florida Surcharge \$ 4.50  
 Total Permit Fee \$ 119.50

**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.

15 IK  
12x5  
25  
60  
85

Building Permit Number \_\_\_\_\_



Permit Number: \_\_\_\_\_  
 Folio/Parcel Identification Number: 24-23-29-0600-02-040  
 Prepared by: PAT BARNET



Return to: 2892 Gleason Ave  
Orlando FL 32826

**NOTICE OF COMMENCEMENT**

State of Florida, County of Orange  
 The undersigned hereby gives notice that improvement will be made to certain real property, and in accordance with Chapter 713, Florida Statutes, the following information is provided in this Notice of Commencement.

1. **Description of property** (legal description of the property, and street address if available)  
Single family 6320 Gibson Dr Belle Isle FL 32809 4/8 lots 4-8 BK D
2. **General description of improvement**  
Re-Roof 4x52 5/12 architectural shingle
3. **Owner information or Lessee information if the Lessee contracted for the improvement**  
 Name LARRY EITZDINK  
 Address 6320 Gibson Dr Belle Isle FL 32809  
 Interest in Property \_\_\_\_\_  
**Name and address of fee simple titleholder** (if different from Owner listed above)  
 Name \_\_\_\_\_  
 Address \_\_\_\_\_
4. **Contractor**  
 Name George P Barnet Telephone Number 407 765 5281  
 Address 2892 Gleason Ave Orlando FL 32826
5. **Surety** (if applicable, a copy of the payment bond is attached)  
 Name \_\_\_\_\_ Telephone Number \_\_\_\_\_  
 Address \_\_\_\_\_ Amount of Bond \$ \_\_\_\_\_
6. **Lender**  
 Name \_\_\_\_\_ Telephone Number \_\_\_\_\_  
 Address \_\_\_\_\_
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 Statutes.**  
 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 Statutes.**  
 Name \_\_\_\_\_ Telephone Number \_\_\_\_\_  
 Address \_\_\_\_\_
9. **Expiration date of notice of commencement** (the expiration date may not be before the completion of construction and final payment to the contractor, but will be 1 year from the date of recording unless a different date is specified) \_\_\_\_\_



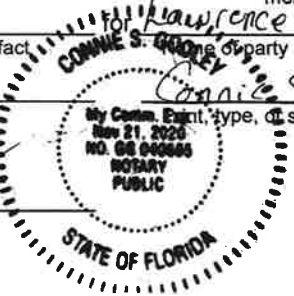
State of Florida, County of Orange  
 I hereby certify that this is a true copy of the document as reflected in the Official Records  
 PHIL DIAMOND, COUNTY COMPTROLLER  
 BY: C Sampson D.C.  
 DATED: 4-14-17

**WARNING TO OWNER: ANY PAYMENTS MADE BY THE OWNER AFTER THE EXPIRATION OF THE NOTICE OF COMMENCEMENT ARE CONSIDERED IMPROPER PAYMENTS UNDER CHAPTER 713, PART I, SECTION 713.13, FLORIDA STATUTES, AND CAN 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 COMMENCING WORK OR RECORDING YOUR NOTICE OF COMMENCEMENT.**

**Under penalty of perjury, I declare that I have read the foregoing notice of commencement and that the facts stated in it are true to the best of my knowledge and belief.**

Lawrence E Eitzdink \_\_\_\_\_ owner \_\_\_\_\_  
 Signature of Owner or Lessee, or Owner's or Lessee's Authorized Officer/Director/Partner/Manager Signatory's Title/Office

The foregoing instrument was acknowledged before me this 12 day of 04/2017 by Lawrence E Eitzdink  
 as owner \_\_\_\_\_  
 Type of authority, e.g., officer, trustee, attorney in fact \_\_\_\_\_  
 \_\_\_\_\_  
 Signature of Notary Public - State of Florida \_\_\_\_\_  
 \_\_\_\_\_  
 Signature of party on behalf of whom instrument was executed \_\_\_\_\_



Personally Known \_\_\_\_\_ OR Produced ID \_\_\_\_\_  
 Type of ID Produced Driver's licence



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### Product Approval Form

DATE: 4/14/2017

PERMIT # 2017-04-053

PROJECT ADDRESS 6320 Gibson Pr

Belle Isle, FL  32809  32812

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 [www.floridabuilding.org](http://www.floridabuilding.org) or can be obtained from the local product supplier. The following information must be turned in with permit application and available onsite for inspections:

1. This Product Approval Cover Sheet
2. 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 #
<b>EXTERIOR DOORS</b>				<b>WALL PANELS</b>			
Swinging				Sliding			
Sliding				Soffits			
Sectional/Rollup				Storefront			
Other				Glass Block			
				Other			
<b>WINDOWS</b>				<b>ROOFING PRODUCTS</b>			
Single/Dbf Hung				Asphalt Shingles	<u>Certantec</u>	<u>LANDMAIL</u>	<u>FL5944AR</u>
Horizontal Slider				Non Struct Metal			
Casement				Roofing Tiles			
Fixed				Single Ply Roof			
Mullion				Other			
Skylights				<u>underlayment</u>	<u>12328</u>	<u>5259</u>	
Other							
<b>STRUCTURAL COMPONENTS</b>				<b>OTHER</b>			
Wood Connectors							
Wood Anchors							
Truss Plates							
Insulation Forms							
Lintels							
Other							

It is the applicant's responsibility to verify that specific products have been installed in accordance with their limitations and with the minimum required design pressures for the structure. Specific compliance will be verified during field inspections.

Applicant Signature [Signature]

Date 4/14/2017



**Product Approval**  
USER: Public User

License efficiently. Regulate fairly.

[Product Approval Menu](#) > [Product or Application Search](#) > [Application List](#) > **Application Detail**

OFFICE OF THE  
SECRETARY

**FL #:** FL5444-R8  
**Application Type:** Revision  
**Code Version:** 2014  
**Application Status:** Approved



**Comments:**  
Archived

**Product Manufacturer:** CertainTeed Corporation-Roofing  
**Address/Phone/Email:** 18 Moores Road  
 Malvern, PA 19355  
 (610) 651-5847  
 mark.d.harner@saint-gobain.com

**Authorized Signature:** Mark Harner  
 mark.d.harner@saint-gobain.com

**Technical Representative:** Mark D. Harner  
**Address/Phone/Email:** 18 Moores Road  
 Malvern, PA 19355  
 (610) 651-5847  
 Mark.D.Harner@saint-gobain.com

**Quality Assurance Representative:**  
**Address/Phone/Email:**

**Category:** Roofing  
**Subcategory:** 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:** Robert Nieminen  
**Florida License:** PE-59166  
**Quality Assurance Entity:** UL LLC  
**Quality Assurance Contract Expiration Date:** 07/03/2017  
**Validated By:** John W. Knezevich, PE  
 ✓ Validation Checklist - Hardcopy Received

**Certificate of Independence:** [FL5444\\_R8\\_COI\\_2015\\_01\\_COI\\_Nieminen.pdf](#)

Referenced Standard and Year (of Standard)	Standard	Year
	ASTM D3161, Class F	2009
	ASTM D3462	2009
	ASTM D7158, Class H	2008

**Equivalence of Product Standards Certified By:**

**Sections from the Code**

Product Approval Method

Method 1 Option D

Date Submitted

03/16/2015

Date Validated

03/23/2015

Date Pending FBC Approval

03/26/2015

Date Approved

06/23/2015

**Summary of Products**

FL #	Model, Number or Name	Description
5444.1	CertainTeed Asphalt Roofing Shingles	3-tab, 4-tab, strip (no-cut-outs), laminated and architectural asphalt roof shingles
<b>Limits of Use</b> <b>Approved for use in HVHZ:</b> No <b>Approved for use outside HVHZ:</b> Yes <b>Impact Resistant:</b> N/A <b>Design Pressure:</b> N/A <b>Other:</b> Refer to ER Section 5 for Limits of Use		<b>Installation Instructions</b> <a href="#">FL5444 R8 II 2015 03 FINAL ER CERTAINTEED Asphalt Shingle FL5444-R8.pdf</a> Verified By: Robert Nieminen, PE PE-59166 Created by Independent Third Party: Yes <b>Evaluation Reports</b> <a href="#">FL5444 R8 AE 2015 03 FINAL ER CERTAINTEED Asphalt Shingle FL5444-R8.pdf</a> Created by Independent Third Party: Yes

[Back](#)

[Next](#)

Contact Us :: [1940 North Monroe Street, 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 licensee. 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 here](#).

Product Approval Accepts:







**EXTERIOR RESEARCH & DESIGN, LLC.**

*Certificate of Authorization #9503*  
353 CHRISTIAN STREET, UNIT #13  
OXFORD, CT 06478  
PHONE: (203) 262-9245  
FAX: (203) 262-9243

**EVALUATION REPORT**

**CertainTeed Corporation**

20 Moores Road  
Malvern, PA 19355

**Evaluation Report 3532.09.05-R11**

**FL5444-R10**

**Date of Issuance: 09/22/2005**

**Revision 11: 12/08/2016**

**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 **5<sup>th</sup> Edition (2014) Florida Building Code** sections noted herein.

**DESCRIPTION: CertainTeed Asphalt Roofing 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. if the product changes or the referenced Quality Assurance documentation changes. Trinity|ERD 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 "Trinity|ERD 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 12.

**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 12/08/2016. This does not serve as an electronically signed document. Signed, sealed hardcopies have been transmitted to the Product Approval Administrator and to the named client

**CERTIFICATION OF INDEPENDENCE:**

1. Trinity|ERD 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. Trinity|ERD 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 Trinity|ERD 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 Roofing Shingles, as produced by CertainTeed Corporation, have demonstrated compliance with the following sections of the 5<sup>th</sup> Edition (2014) Florida Building Code and 5<sup>th</sup> Edition (2014) 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>	<u>Property</u>	<u>Standard</u>	<u>Year</u>
1507.2.5, R905.2.4	Physical Properties	ASTM D3462	2009
1507.2.7.1, R905.2.6.1	Wind Resistance	ASTM D3161, Class F	2009
1507.2.7.1, R905.2.6.1	Wind Resistance	ASTM D7158, Class H	2008

**3. REFERENCES:**

<u>Entity</u>	<u>Examination</u>	<u>Reference</u>	<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 (QUA 9625)	Quality Control	Service Confirmation	Exp. 07/03/2017



#### 4. PRODUCT DESCRIPTION:

- 4.1 **CT20™, XT™ 25, XT™ 30 and XT™ 30 IR** are fiberglass reinforced, 3-tab asphalt roof shingles.
- 4.2 **Arcadia™, Belmont™, Carriage House Shingle®, Grand Manor Shingle®, Landmark™, Landmark™ IR, Landmark™ Pro, Landmark™ Premium, Landmark™ TL, Landmark™ Solaris and Landmark™ Solaris IR** are fiberglass reinforced, laminated asphalt roof shingles.
- 4.3 **NorthGate™** is a fiberglass reinforced, laminated, SBS modified bitumen roof shingle.
- 4.4 **Presidential Shake™, Presidential Shake™ IR, Presidential Shake TL™ and Presidential Solaris™** are fiberglass reinforced, architectural asphalt roof shingles.
- 4.5 **Hatteras™, Highland Slate™ and Highland Slate™ IR** are fiberglass reinforced, 4-tab asphalt roof shingles.
- 4.6 **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.
- 4.7 **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.
- 4.8 Any of the above listed shingles may be produced in AR (algae resistant) versions.

#### 5. LIMITATIONS:

- 5.1 This is a building code evaluation. Neither Trinity|ERD 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 the HVHZ
- 5.3 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 use in all wind zones up to  $V_{asd} = 150$  mph ( $V_{ult} = 194$  mph). Refer to Section 6 for installation requirements to meet this wind rating.
- 5.4.2 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  $V_{asd} = 150$  mph ( $V_{ult} = 194$  mph).**
- 5.4.3 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.
- 5.4.3.1 **Analysis in accordance with ASTM D7158** indicates the measured uplift resistance ( $R_T$ ) for the CertainTeed asphalt roofing shingles listed in Section 4.1 through 4.6 (*except Presidential Solaris™*) exceeds the calculated uplift force ( $F_T$ ) at a maximum design wind speed of  $V_{asd} = 150$  mph ( $V_{ult} = 194$  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 the Florida Building Code and F.A.C. Rule 61G20-3.

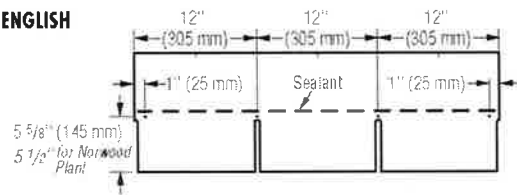
**6. INSTALLATION:**

- 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 1510** and CertainTeed published installation instructions.

**CT20™, XT™ 25, XT™ 30, XT™ 30 IR:**

**LOW AND STANDARD SLOPE**

**ENGLISH**



**METRIC**

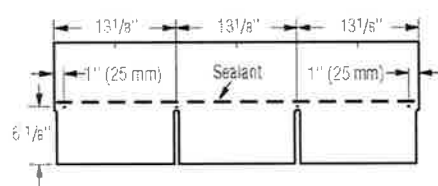
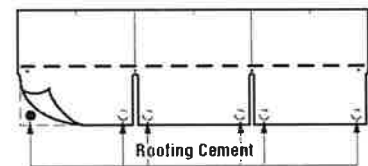


Figure 11-3: Use **four** nails for every full shingle.

**STEEP SLOPE**

Use **four** nails and six spots of asphalt roofing cement\* for every full shingle (Figure 11-4). Asphalt roofing cement meeting ASTM D4586 Type II is suggested.



Apply 1" (25 mm) spots of asphalt roofing cement under each tab corner.

Figure 11-4: Use **four** nails and six spots of asphalt cement on steep slopes.

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

**6.4.1 Hip & Ridge for CT20™, XT™ 25, XT™ 30, XT™ 30 IR: Cut Shingles**

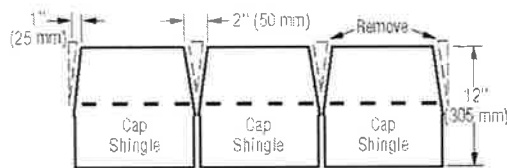


Figure 11-24: Cut tabs, then trim back to make cap shingles (English dimensions shown).

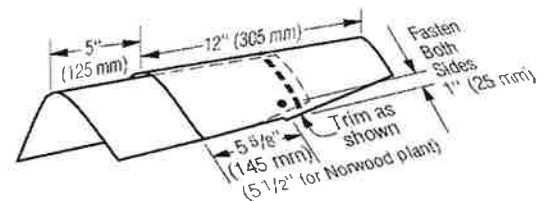


Figure 11-25: Installation of caps along the hips and ridges.

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

6.5

**ARCADIA™:**

**LOW AND STANDARD SLOPE**

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

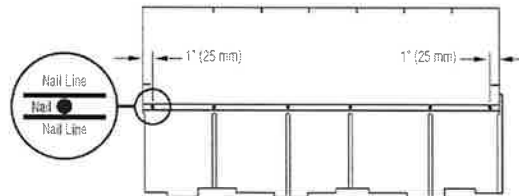


Figure 2: Use six nails for every full shingle.

**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.

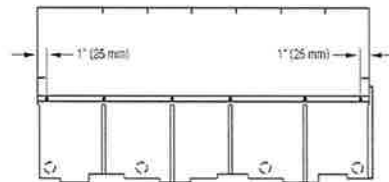


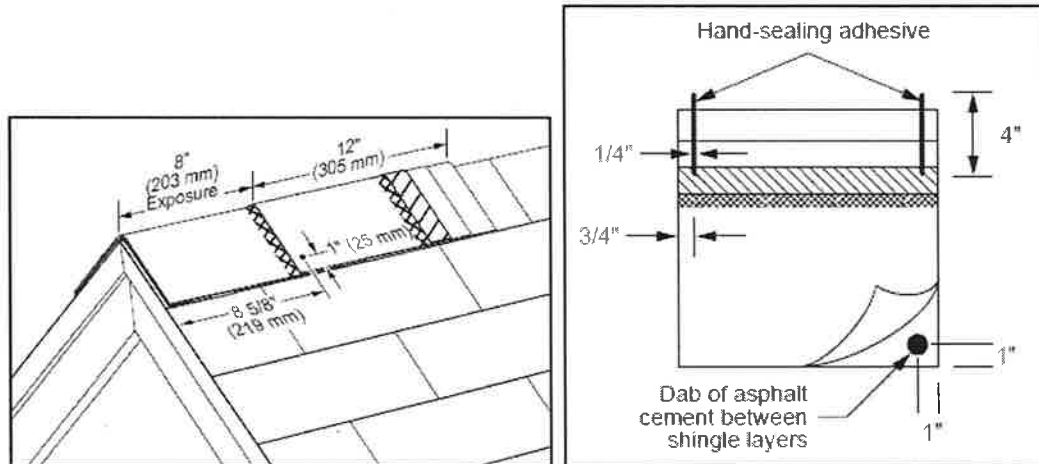
Figure 3: Use six nails and four spots of asphalt roofing cement on steep slopes.

6.5.1

**Hip & Ridge for Arcadia™: Cedar Crest™, Cedar Crest™ IR**

Use two (2), minimum 1¾-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 ¾-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™" 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.

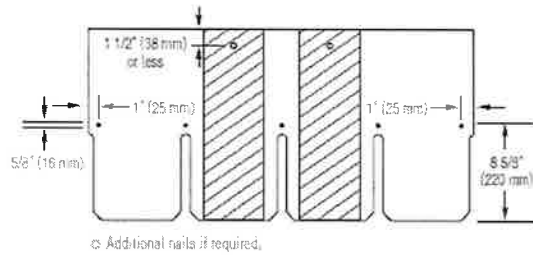


6.6

**BELMONT™:**

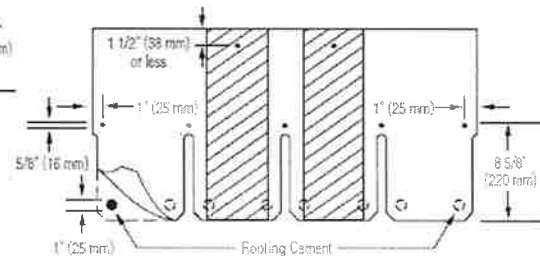
**Low and Standard Slope  
(2:12 to 21:12):**

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.



6.6.1 **Hip & Ridge for Belmont™:**

6.6.1.1 **Option 1:** Refer to instructions herein for Cedar Crest™, Cedar Crest™ IR hip and ridge shingles.

6.6.1.2 **Option 2: Shangle® Ridge**

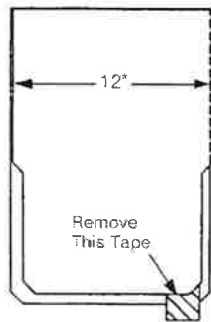


Figure 17-18: Shangle® Ridge.

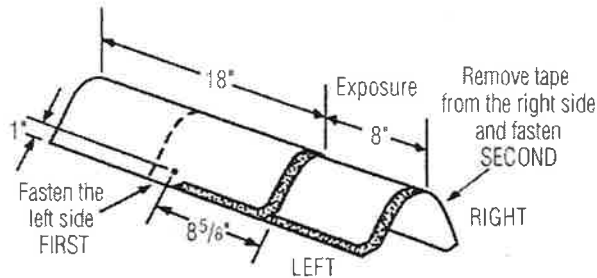


Figure 17-19: Installation of Shangle® Ridge shingles on hips and ridges.

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



6.7

**CARRIAGE HOUSE SHANGLE® AND GRAND MANOR SHANGLE®:**

**LOW AND STANDARD SLOPE**

Use five nails for every full Shingle.

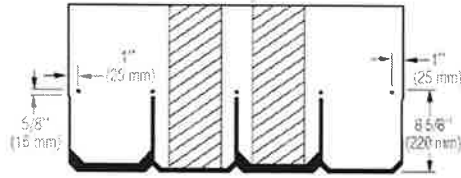


Figure 17-4: Use five nails for every full Grand Manor Shingle, Carriage House Shingle, or Centennial Slate.

**STEEP SLOPE**

Use seven nails and three spots of asphalt roofing cement for every full Grand Manor Shingle. Use five nails and three spots of asphalt roofing cement for every full Carriage House Shingle and Centennial Slate. Apply asphalt roofing cement 1" (25 mm) from edge of shingle (Figure 17-5). Asphalt roofing cement meeting ASTM D1586 Type II is suggested.

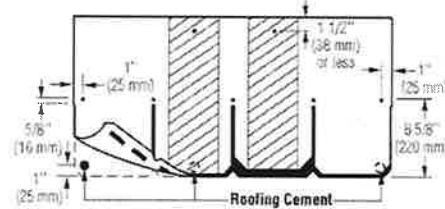


Figure 17-5: When installing Grand Manor Shingles on steep slopes, use seven nails and three spots of asphalt roofing cement.

6.7.1

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

6.8

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

**LOW AND STANDARD SLOPE**

**LANDMARK TL**

**METRIC DIMENSIONS**

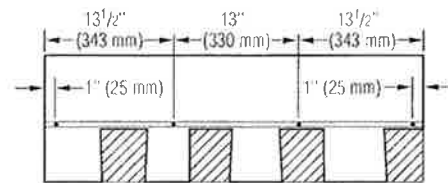
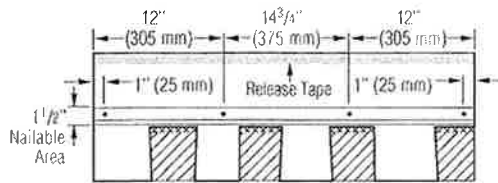
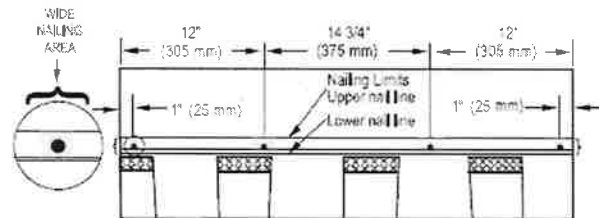


Figure 13-A: Use four nails for every full shingle.

**NorthGate:**

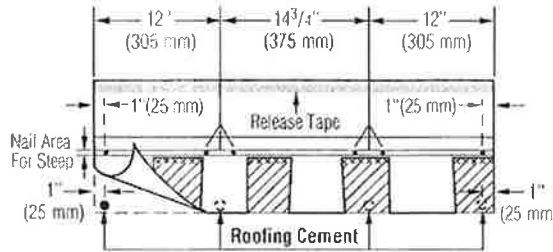


Nailing areas for low and standard slopes (from 2:12 to 21:12)  
Nail between upper & lower lines as shown above.

**STEEP SLOPE**

Use six nails and four spots of asphalt roofing cement for every full laminated shingle. See below. Asphalt roofing cement should meet ASTM D4586 Type II. Apply 1" spots of asphalt roofing cement under each corner and at about 12" to 13" in from each edge.

**METRIC DIMENSIONS**



**LANDMARK TL**

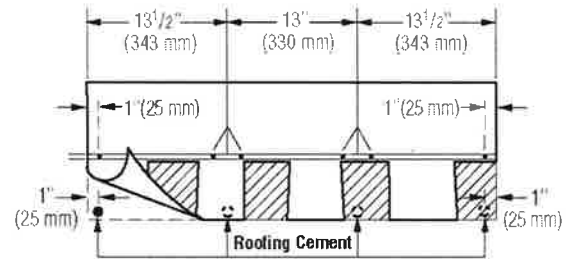
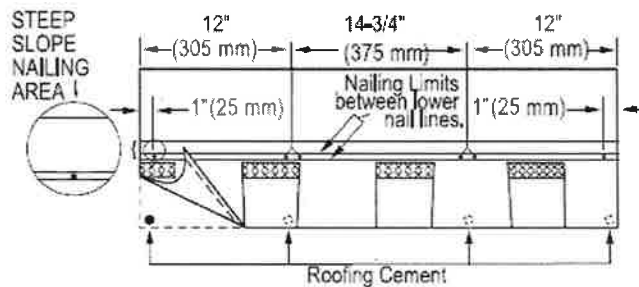


Figure 13-5: Use six nails and four spots of asphalt roofing cement on steep slopes.

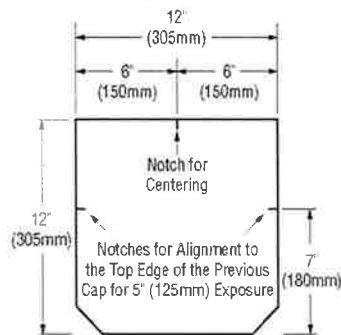
**NorthGate:**



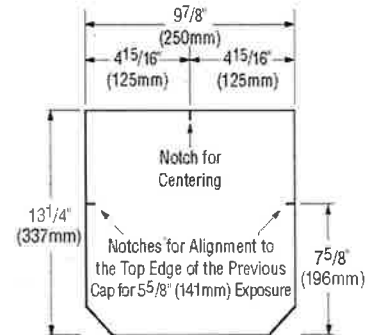
Nailing areas for steep slopes (greater than 21:12) and "Storm-Nailing"  
Nail between lower 2 nail lines as shown above.

**6.8.1 Hip & Ridge for Landmark™, Landmark™ IR, Landmark™ Pro, Landmark™ Premium, Landmark™ TL, Landmark™ Solaris, Landmark™ Solaris IR, NorthGate:**

**6.8.1.1 Option 1: Shadow Ridge™ or NorthGate Accessory**



**English Dimension  
Shadow Ridge™**



**Metric Dimension  
Shadow Ridge™**

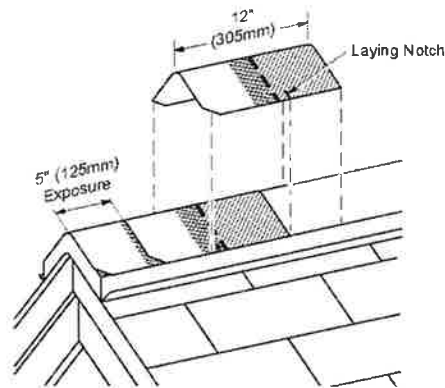
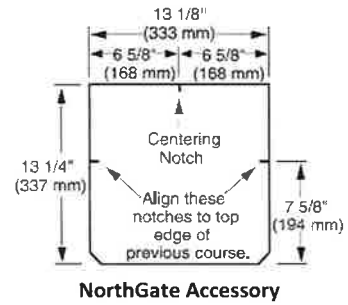
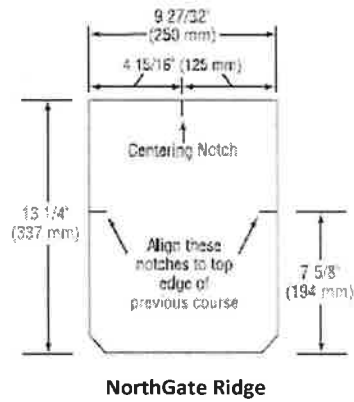


Figure 13-20: Use laying notches to center shingles on hips and ridges, and to locate the correct exposure.

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

**6.9 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.

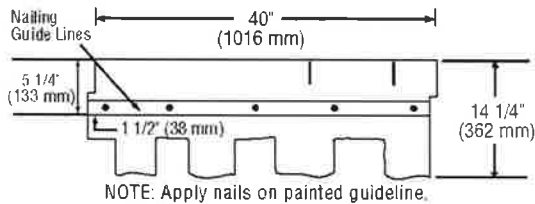


Figure 16-6: Fastening Presidential and Presidential TL Shake shingles on low and standard slopes.

**STEEP SLOPE:**

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

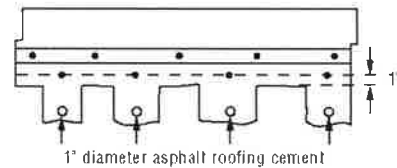


Figure 16-7: Fastening Presidential and Presidential TL Shake shingles on steep slopes.

**6.9.1 Hip & Ridge for Presidential Shake™, Presidential Shake™ IR, Presidential Shake TL™, Presidential Solaris™:**

**6.9.1.1 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.

6.9.1.2 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 HATTERAS™:**

**LOW, STANDARD AND STEEP SLOPE:**

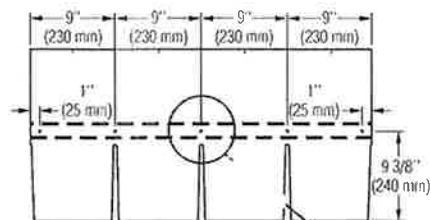


Figure 15-3: Fastening Hatteras Shingles on Low and Standard Slopes

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

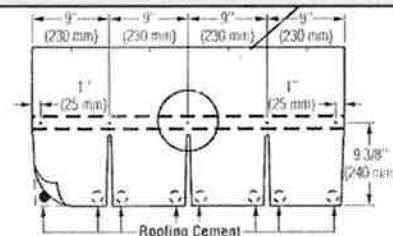


Figure 15-1: Fastening Hatteras Shingles on Steep Slopes

For steep slopes, use five nails and eight spots of asphalt roofing cement for each full Hatteras shingle as shown above. Apply 1" (25mm) diameter spots of roofing cement (ASTM D 4586 Type II suggested) under each tab corner. Press shingle into place; do not expose cement.

CAUTION: Too much roofing cement can cause shingles to blister.



6.10.1 **Hip & Ridge for Hatteras™:**

6.10.1.1 **Option 1:** Accessory for Hatteras

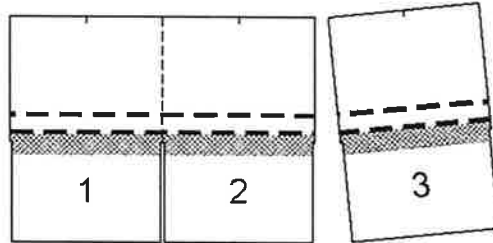
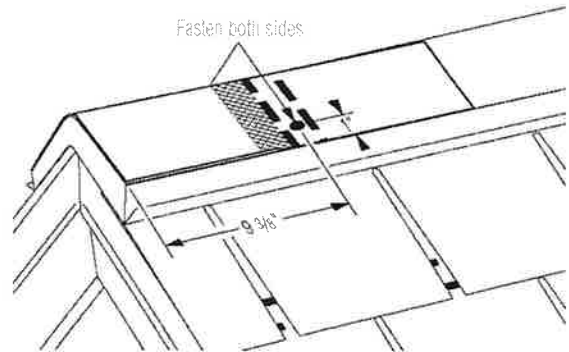


Figure 15-14: 18 three-piece units separate to make 54 Hatteras Accessory shingles.



6.10.1.2 **Option 2:** Cut Hatteras Shingles

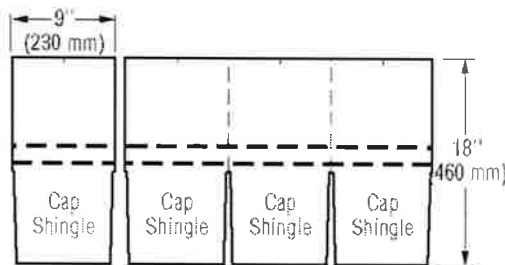


Figure 15-20: Cut Hatteras shingles to make cover cap.

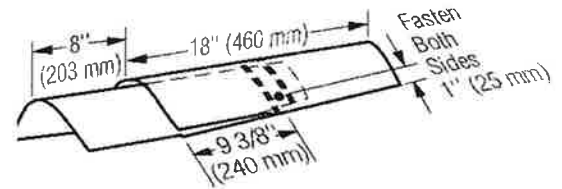


Figure 15-21: Installation of caps along hips and ridges.

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

6.11 **HIGHLAND SLATE™, HIGHLAND SLATE™ IR:**

**LOW AND STANDARD SLOPE:**

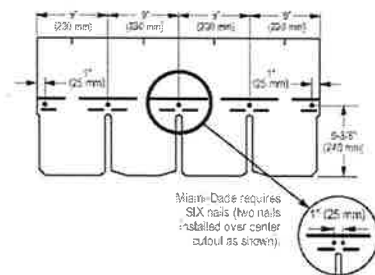


Figure 11-3: Use FIVE nails for every Highland Slate shingle.

**STEEP SLOPE:**

Use FIVE nails and EIGHT spots of asphalt roofing cement\* for each full Highland Slate shingle. For Miami-Dade, SIX nails are required. Apply 1" diameter spots of asphalt roofing cement under each tab corner. Asphalt roofing cement meeting ASTM D4586 Type II is suggested.

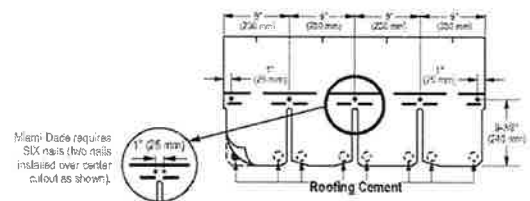


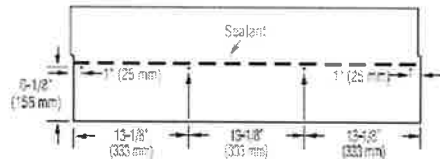
Figure 11-3A: Use FIVE nails and eight spots of asphalt roofing cement under each tab corner.

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

6.11.1 **Hip & Ridge for Highland Slate™, Highland Slate™ IR:** Refer to instructions herein for Cedar Crest™, Cedar Crest™ IR or Shangle Ridge™ hip and ridge shingles.

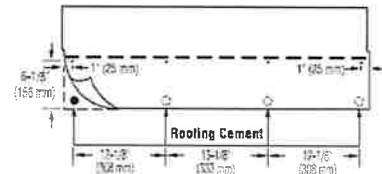
**6.12**
**PATRIOT™:**
**LOW AND STANDARD SLOPE**

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.



6.12.1 **Hip & Ridge for Patriot™:** 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 -

6320 Gibson



BCIS Home Log In User Registration Hot Topics Submit Surcharge Stats & Facts Publications FBC Staff BCIS Site Map Links Search



**Product Approval**  
USER: Public User

[Product Approval Menu](#) > [Product or Application Search](#) > [Application List](#) > **Application Detail**



FL #	FL12328-R7
Application Type	Revision
Code Version	2014
Application Status	Approved



Comments  
Archived

Product Manufacturer	TAMKO Building Products, Inc.
Address/Phone/Email	PO Box 1404 Joplin, MO 64802 (417) 624-6644 Ext 2305 kerri_eden@tamko.com

Authorized Signature	Carter Lea carter_lea@tamko.com
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Technical Representative	Kerri Eden
Address/Phone/Email	PO Box 1404 Joplin, MO 64802 (417) 624-6644 Ext 2305 kerri_eden@tamko.com

Quality Assurance Representative  
Address/Phone/Email

Category	Roofing
Subcategory	Underlayments

Compliance Method	Evaluation Report from a Florida Registered Architect or a Licensed Florida Professional Engineer Evaluation Report - Hardcopy Received
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Florida Engineer or Architect Name who developed the Evaluation Report	Zachary R. Priest
Florida License	PE-74021
Quality Assurance Entity	UL LLC
Quality Assurance Contract Expiration Date	01/07/2019
Validated By	Locke Bowden

Validation Checklist - Hardcopy Received

Certificate of Independence	<a href="#">FL12328_R7_COI_TBP14601.3_2014_FPA_TAMKO_Underlayments-FINAL.pdf</a>
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Referenced Standard and Year (of Standard)	<b>Standard</b>	<b>Year</b>
	ASTM D1970	2009
	ASTM D226	2006
	ASTM D4869	2005
	ASTM D6380	2003

Equivalence of Product Standards  
Certified By

Sections from the Code

Product Approval Method

Method 1 Option D

Date Submitted

08/23/2016

Date Validated

08/23/2016

Date Pending FBC Approval

08/25/2016

Date Approved

10/13/2016

**Summary of Products**

FL #	Model, Number or Name	Description
12328.1	ASTM Slate Surfaced Roll Roofing	Roll roofing surfaced with mineral granules
<b>Limits of Use</b> Approved for use in HVHZ: No Approved for use outside HVHZ: Yes Impact Resistant: N/A Design Pressure: N/A Other: See evaluation report for limits of use.		<b>Installation Instructions</b> <a href="#">FL12328 R7 II TBP14001.3 2014 FPA TAMKO Underlayments-FINAL.pdf</a> Verified By: Zachary R. Priest 74021 Created by Independent Third Party: Yes <b>Evaluation Reports</b> <a href="#">FL12328 R7 AE TBP14001.3 2014 FPA TAMKO Underlayments-FINAL.pdf</a> Created by Independent Third Party: Yes
12328.2	ASTM Tile Underlayment	Coated organic underlayment
<b>Limits of Use</b> Approved for use in HVHZ: No Approved for use outside HVHZ: Yes Impact Resistant: N/A Design Pressure: N/A Other: See evaluation report for limits of use.		<b>Installation Instructions</b> <a href="#">FL12328 R7 II TBP14001.3 2014 FPA TAMKO Underlayments-FINAL.pdf</a> Verified By: Zachary R. Priest 74021 Created by Independent Third Party: Yes <b>Evaluation Reports</b> <a href="#">FL12328 R7 AE TBP14001.3 2014 FPA TAMKO Underlayments-FINAL.pdf</a> Created by Independent Third Party: Yes
12328.3	Master Smooth	Asphalt saturated organic underlayment.
<b>Limits of Use</b> Approved for use in HVHZ: No Approved for use outside HVHZ: Yes Impact Resistant: N/A Design Pressure: N/A Other: See evaluation report for limits of use.		<b>Installation Instructions</b> <a href="#">FL12328 R7 II TBP14001.3 2014 FPA TAMKO Underlayments-FINAL.pdf</a> Verified By: Zachary R. Priest 74021 Created by Independent Third Party: Yes <b>Evaluation Reports</b> <a href="#">FL12328 R7 AE TBP14001.3 2014 FPA TAMKO Underlayments-FINAL.pdf</a> Created by Independent Third Party: Yes
12328.4	Moisture Guard Plus	A self-adhering modified bitumen underlayment.
<b>Limits of Use</b> Approved for use in HVHZ: No Approved for use outside HVHZ: Yes Impact Resistant: N/A Design Pressure: N/A Other: See evaluation report for limits of use.		<b>Installation Instructions</b> <a href="#">FL12328 R7 II TBP14001.3 2014 FPA TAMKO Underlayments-FINAL.pdf</a> Verified By: Zachary R. Priest 74021 Created by Independent Third Party: Yes <b>Evaluation Reports</b> <a href="#">FL12328 R7 AE TBP14001.3 2014 FPA TAMKO Underlayments-FINAL.pdf</a> Created by Independent Third Party: Yes
12328.5	No. 15 ASTM	Asphalt saturated organic felt
<b>Limits of Use</b> Approved for use in HVHZ: No Approved for use outside HVHZ: Yes Impact Resistant: N/A Design Pressure: N/A Other: See evaluation report for limits of use.		<b>Installation Instructions</b> <a href="#">FL12328 R7 II TBP14001.3 2014 FPA TAMKO Underlayments-FINAL.pdf</a> Verified By: Zachary R. Priest 74021 Created by Independent Third Party: Yes <b>Evaluation Reports</b> <a href="#">FL12328 R7 AE TBP14001.3 2014 FPA TAMKO Underlayments-FINAL.pdf</a> Created by Independent Third Party: Yes
12328.6	No. 15 UL	Asphalt saturated organic felt
<b>Limits of Use</b> Approved for use in HVHZ: No Approved for use outside HVHZ: Yes Impact Resistant: N/A		<b>Installation Instructions</b> <a href="#">FL12328 R7 II TBP14001.3 2014 FPA TAMKO Underlayments-FINAL.pdf</a> Verified By: Zachary R. Priest 74021 Created by Independent Third Party: Yes



	<b>Design Pressure:</b> N/A <b>Other:</b> See evaluation report for limits of use.	<b>Evaluation Reports</b> <a href="#">FL12328 R7 AE TBP14001.3 2014 FPA TAMKO Underlayments-FINAL.pdf</a> Created by Independent Third Party: Yes
12328.7	No. 30 ASTM	Asphalt saturated organic felt
	<b>Limits of Use</b> <b>Approved for use in HVHZ:</b> No <b>Approved for use outside HVHZ:</b> Yes <b>Impact Resistant:</b> N/A <b>Design Pressure:</b> N/A <b>Other:</b> See evaluation report for limits of use.	<b>Installation Instructions</b> <a href="#">FL12328 R7 II TBP14001.3 2014 FPA TAMKO Underlayments-FINAL.pdf</a> Verified By: Zachary R. Priest 74021 Created by Independent Third Party: Yes <b>Evaluation Reports</b> <a href="#">FL12328 R7 AE TBP14001.3 2014 FPA TAMKO Underlayments-FINAL.pdf</a> Created by Independent Third Party: Yes
12328.8	No. 30 UL	Asphalt saturated organic felt
	<b>Limits of Use</b> <b>Approved for use in HVHZ:</b> No <b>Approved for use outside HVHZ:</b> Yes <b>Impact Resistant:</b> N/A <b>Design Pressure:</b> N/A <b>Other:</b> See evaluation report for limits of use.	<b>Installation Instructions</b> <a href="#">FL12328 R7 II TBP14001.3 2014 FPA TAMKO Underlayments-FINAL.pdf</a> Verified By: Zachary R. Priest 74021 Created by Independent Third Party: Yes <b>Evaluation Reports</b> <a href="#">FL12328 R7 AE TBP14001.3 2014 FPA TAMKO Underlayments-FINAL.pdf</a> Created by Independent Third Party: Yes
12328.9	TAM-FELT	Alternate to ASTM D 226, Type II underlayment
	<b>Limits of Use</b> <b>Approved for use in HVHZ:</b> No <b>Approved for use outside HVHZ:</b> Yes <b>Impact Resistant:</b> N/A <b>Design Pressure:</b> N/A <b>Other:</b> See evaluation report for limits of use.	<b>Installation Instructions</b> <a href="#">FL12328 R7 II TBP14001.3 2014 FPA TAMKO Underlayments-FINAL.pdf</a> Verified By: Zachary R. Priest PE-74021 Created by Independent Third Party: Yes <b>Evaluation Reports</b> <a href="#">FL12328 R7 AE TBP14001.3 2014 FPA TAMKO Underlayments-FINAL.pdf</a> Created by Independent Third Party: Yes
12328.10	TW Metal and Tile Underlayment	self-adhering modified bitumen underlayment
	<b>Limits of Use</b> <b>Approved for use in HVHZ:</b> No <b>Approved for use outside HVHZ:</b> Yes <b>Impact Resistant:</b> N/A <b>Design Pressure:</b> N/A <b>Other:</b> See evaluation report for limits of use.	<b>Installation Instructions</b> <a href="#">FL12328 R7 II TBP14001.3 2014 FPA TAMKO Underlayments-FINAL.pdf</a> Verified By: Zachary R. Priest 74021 Created by Independent Third Party: Yes <b>Evaluation Reports</b> <a href="#">FL12328 R7 AE TBP14001.3 2014 FPA TAMKO Underlayments-FINAL.pdf</a> Created by Independent Third Party: Yes
12328.11	TW Underlayment	self-adhering modified bitumen underlayment
	<b>Limits of Use</b> <b>Approved for use in HVHZ:</b> No <b>Approved for use outside HVHZ:</b> Yes <b>Impact Resistant:</b> N/A <b>Design Pressure:</b> N/A <b>Other:</b> See evaluation report for limits of use.	<b>Installation Instructions</b> <a href="#">FL12328 R7 II TBP14001.3 2014 FPA TAMKO Underlayments-FINAL.pdf</a> Verified By: Zachary R. Priest 74021 Created by Independent Third Party: Yes <b>Evaluation Reports</b> <a href="#">FL12328 R7 AE TBP14001.3 2014 FPA TAMKO Underlayments-FINAL.pdf</a> Created by Independent Third Party: Yes

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Product Approval Accepts:





**EVALUATION REPORT**

**FLORIDA BUILDING CODE, 5<sup>TH</sup> EDITION (2014)**

**Manufacturer:** TAMKO BUILDING PRODUCTS, INC.  
P.O. Box 1404  
Joplin, MO 64802  
(417) 624-6644  
<http://www.tamko.com>

Issued August 22, 2016

**Quality Assurance:** UL LLC (QUA9625)



**SCOPE**

**Category:** Roofing  
**Subcategory:** Underlayments  
**Code Sections:** 1507.2.3, 1507.2.4, 1507.2.8, 1507.2.9.2, 1507.3.3, 1507.4.5.1, 1507.4.5.2, 1507.4.5.3, 1507.5.3, 1507.5.3.2, 1507.6.3, 1507.6.3.2, 1507.6.5, 1507.7.3, 1507.7.3.2, 1507.8.3, 1507.8.3.2, 1507.8.8, T1507.8, 1507.9.3, 1507.9.3.2, 1507.9.5, 1507.9.9  
**Properties:** Physical properties

**REFERENCES**

Entity	Report No.	Standard	Year
PRI Construction Materials Technologies (TST6049)	TAP-191-02-01REV	ASTM D 1970	2009
PRI Construction Materials Technologies (TST6049)	TAP-192-02-01	ASTM D 1970	2009
PRI Construction Materials Technologies (TST6049)	TAP-193-02-01	ASTM D 1970	2009
PRI Construction Materials Technologies (TST6049)	TAP-214-02-01	ASTM D 4869	2005e01
PRI Construction Materials Technologies (TST6049)	TAP-215-02-01	ASTM D 226	2006
PRI Construction Materials Technologies (TST6049)	TAP-216-02-03	ASTM D 6380	2003(2009)
PRI Construction Materials Technologies (TST6049)	TAP-217-02-01REV	ASTM D 6380	2003(2009)
PRI Construction Materials Technologies (TST6049)	TAP-218-02-01	ASTM D 226	2006
PRI Construction Materials Technologies (TST6049)	TAP-219-02-01	ASTM D 226	2006
PRI Construction Materials Technologies (TST6049)	TAP-220-02-01	ASTM D 6380	2003(2009)
PRI Construction Materials Technologies (TST6049)	TAP-222-02-01	ASTM D 4869	2005e01
PRI Construction Materials Technologies (TST6049)	TAP-319-02-01.1	ACC 188	2012
UL LLC (TST9628)	13CA12269	ASTM D 226	2006

**PRODUCT DESCRIPTION AND APPLICATION**

**TAMKO® ASTM Slate Surfaced Roll Roofing** ASTM D 6380, Class M, Type II underlayment constructed from organic felt saturated with asphalt and coated on both sides with asphalt and surfaced with granules.

**Min. slope:** 2:12

**Application:** The underlayment shall be installed with minimum 2" side laps and minimum 4" staggered end laps and in accordance with FRSA/TRI 07230 for tile applications.

**Allowable roof coverings:** Attachment of asphalt shingle valleys and clay and concrete tile shall be permitted in accordance with the FBC.

**TAMKO® ASTM Tile Underlayment**

ASTM D 6380, Class M, Type II underlayment constructed from an organic felt saturated with asphalt then coated on both sides with asphalt and surfaced with granules.

Application: The underlayment shall be installed with minimum 2" side laps and minimum 4" staggered end laps and in accordance with FRSA/TRI 07230 for tile applications.

Allowable roof coverings: Attachment of clay and concrete tile shall be permitted in accordance with the FBC.

**TAMKO® Master Smooth**

ASTM D 6380, Class S, Type IV underlayment constructed from an organic felt saturated with asphalt then coated on both sides with asphalt and surfaced with a fine mineral.

Application: The underlayment shall be installed along the valley in accordance with FBC requirements.

Allowable roof coverings: Attachment of asphalt shingle valleys shall be permitted in accordance with the FBC.

**TAMKO® Moisture Guard Plus®**

Self-adhered, ASTM D 1970, fiberglass reinforced, modified bitumen sheet membrane with a mineral surfacing and a removable release film on the adhesive side.

Application: The underlayment shall be attached by adhering directly to the roof deck with minimum 3-1/2" side laps and minimum 6" staggered end laps.

Min. application temperature: 40°F.

Allowable roof coverings: Attachment of asphalt shingles and mechanically fastened concrete and clay tile roofing shall be permitted in accordance with the FBC.

**TAMKO® No. 15 ASTM Asphalt Saturated Organic Felt**

ASTM D 226, Type I underlayment constructed from a non-perforated organic felt that is saturated with asphalt.

Application: The underlayment shall be installed with minimum 2" side laps and minimum 4" end laps.

Allowable roof coverings: Attachment of asphalt shingles, metal roofing, wood shingles, wood shakes, and roll roofing shall be permitted in accordance with the FBC.

**TAMKO® No. 15 UL Asphalt Saturated Organic Felt**

ASTM D 226, Type I underlayment constructed from a non-perforated organic felt that is saturated with asphalt.

Application: The underlayment shall be installed with minimum 2" side laps and minimum 4" end laps.

Allowable roof coverings: Attachment of asphalt shingles, metal roofing, wood shingles, wood shakes, and roll roofing shall be permitted in accordance with the FBC.

<b>TAMKO® No. 30 ASTM Asphalt Saturated Organic Felt</b>	<p>ASTM D 226, Type II underlayment constructed from a non-perforated organic felt that is saturated with asphalt.</p> <p>Application: The underlayment shall be installed with minimum 2" side laps and minimum 4" end laps.</p> <p>Allowable roof coverings: Attachment of asphalt shingles, metal roofing, clay and concrete tile, slate shingles, wood shingles, wood shakes, and roll roofing shall be permitted in accordance with the FBC.</p>
<b>TAMKO® No. 30 UL Asphalt Saturated Organic Felt</b>	<p>ASTM D 226, Type II underlayment constructed from a non-perforated organic felt that is saturated with asphalt.</p> <p>Application: The underlayment shall be installed with minimum 2" side laps and minimum 4" end laps.</p> <p>Allowable roof coverings: Attachment of asphalt shingles, metal roofing, clay and concrete tile, slate shingles, wood shingles, wood shakes, and roll roofing shall be permitted in accordance with the FBC.</p>
<b>TAMKO® TW Metal and Tile Underlayment</b>	<p>Self-adhered, flexible, ASTM D 1970, rubberized asphalt sheet membrane with a polymer film on the surface and a removable release film on the adhesive side.</p> <p>Application: The underlayment shall be attached by adhering directly to the roof deck with minimum 4" side laps and minimum 6" staggered end laps.</p> <p>Min. application temperature: 40°F</p> <p>Allowable roof coverings: Attachment of asphalt shingles, metal roofing, and mechanically fastened clay and concrete tiles shall be permitted in accordance with the FBC.</p>
<b>TAMKO® TW Underlayment</b>	<p>Self-adhered, flexible, ASTM D 1970, rubberized asphalt sheet membrane with a polymer film on the surface and a removable release film on the adhesive side.</p> <p>Application: The underlayment shall be attached by adhering directly to the roof deck with minimum 4" side laps and minimum 6" staggered end laps.</p> <p>Min. application temperature: 40°F</p> <p>Allowable roof coverings: Attachment of asphalt shingles and metal roofing shall be permitted in accordance with the FBC.</p>
<b>TAMKO® TAM-FELT</b>	<p>Alternate to ASTM D 226, Type I and Type II underlayment constructed from a non-perforated organic felt that is saturated with asphalt.</p> <p>Application: The underlayment shall be installed with minimum 2" side laps and minimum 4" end laps.</p> <p>Allowable roof coverings: Attachment of asphalt shingles shall be permitted in accordance with the FBC.</p>

**LIMITATIONS**

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- 1) This evaluation report is not for use in the HVHZ.
- 2) Fire Classification is not within the scope of this evaluation.
- 3) Wind uplift resistance is not within scope of this evaluation.
- 4) Installation of the evaluated product shall comply with this report, the FBC, and the manufacturer's published application instructions. Where discrepancies exist between these sources, the more restrictive and FBC compliant installation detail shall prevail.
- 5) Minimum application temperature shall be 50°F unless otherwise noted. Contact the manufacturer when installing at temperatures below the minimum application temperature.
- 6) Deck substrates shall be clean, dry, and free from any irregularities and debris. All fasteners in the deck shall be checked for protrusion and corrected prior to underlayment application.
- 7) The roof deck shall be constructed of closely fitted sheathing for new or existing construction. Roof deck shall be installed in accordance with FBC requirements.
- 8) Unless otherwise stated, the minimum roof slope shall be in accordance with FBC requirements.
- 9) All underlayments shall be installed with the roll length parallel to the eave, starting at the eave, and lapped in successive courses installed up the deck in a manner that effectively sheds water from the deck. End laps shall be staggered between courses in accordance with the manufacturer's application instructions.
- 10) The underlayment may be used as described in other current FBC product approval documents.
- 11) The underlayment shall not be installed over existing roof coverings.
- 12) Contact the manufacturer regarding specific exposure limits for each underlayment.
- 13) All products listed in this report shall be manufactured under a quality assurance program in compliance with Rule 61G20-3.

**COMPLIANCE STATEMENT**

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The products evaluated herein by Zachary R. Priest, P.E. have demonstrated compliance with the Florida Building Code, 5<sup>th</sup> Edition (2014) as evidenced in the referenced documents submitted by the named manufacturer.



  
Digitally signed by Zachary R. Priest

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Zachary R. Priest, P.E.  
Florida Registration No. 74021  
Organization No. ANE9641

**CERTIFICATION OF INDEPENDENCE**

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CREEK Technical Services, LLC does not have, nor will it acquire, a financial interest in any company manufacturing or distributing products under this evaluation.

CREEK Technical Services, LLC is not owned, operated, or controlled by any company manufacturing or distributing products under this evaluation.

Zachary R. Priest, P.E. does not have, nor will acquire, a financial interest in any company manufacturing or distributing products under this evaluation.

Zachary R. Priest, P.E. does not have, nor will acquire, a financial interest in any other entity involved in the approval process of the product.

**END OF REPORT**



**Product Approval**  
USER: Public User

[Product Approval Menu](#) > [Product or Application Search](#) > [Application List](#) > **Application Detail**



**FL #** FL5259-R25  
**Application Type** Revision  
**Code Version** 2014  
**Application Status** Approved



**Comments**  
Archived

**Product Manufacturer** POLYGLASS USA  
**Address/Phone/Email** 150 Lyon Drive  
 Fernley, NV 89408  
 (570) 384-1230 Ext 242  
 jakins@polyglass.com

**Authorized Signature** James Akins  
 jakins@polyglass.com

**Technical Representative** Steve Wadding  
**Address/Phone/Email** 150 Lyon Drive  
 Fernley, NV 98408  
 (602) 363-7139  
 stevew@polyglass.com

**Quality Assurance Representative** James Akins  
**Address/Phone/Email** 555 Oakridge Road  
 Humboldt Industrial Pkwy  
 Hazleton, PA 18201  
 (800) 894-4563  
 jakins@polyglass.com

**Category** Roofing  
**Subcategory** Underlayments

**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** Robert Nieminen  
**Florida License** PE-59166  
**Quality Assurance Entity** UL LLC  
**Quality Assurance Contract Expiration Date** 04/24/2018  
**Validated By** John W. Knezevich, PE  
 Validation Checklist - Hardcopy Received

**Certificate of Independence** [FL5259\\_R25\\_COI\\_2016\\_01\\_COI\\_Nieminen.pdf](#)

Referenced Standard and Year (of Standard)	Standard	Year
	ASTM D1970	2009
	ASTM D226	2006
	ASTM D6164	2005
	ASTM D6222	2008
	ASTM G154	2006
	ASTM G155	2005
	FM 4474	2004



FRSA/TRI April 2012  
TAS 103  
UL 1897

2012  
1995  
2004

Equivalence of Product Standards  
Certified By

Sections from the Code

Product Approval Method	Method 1 Option D
Date Submitted	10/17/2016
Date Validated	10/18/2016
Date Pending FBC Approval	10/19/2016
Date Approved	12/15/2016
Date Revised	03/13/2017

**Summary of Products**

FL #	Model, Number or Name	Description
5259.1	Polyglass Roof Underlayments	Roofing underlayments
<b>Limits of Use</b> <b>Approved for use in HVHZ:</b> No <b>Approved for use outside HVHZ:</b> Yes <b>Impact Resistant:</b> N/A <b>Design Pressure:</b> +N/A/-622.5 <b>Other:</b> 1.) The design pressure in this application relates to one particular underlayment system (over concrete deck) for use under foam-on tile systems (where the underlayment forms part of the load-path). Refer to ER Section 5.6.4 for other systems, other deck types and associated maximum design pressures. 2.) Refer to ER Section 5 for other limits of use.		<b>Installation Instructions</b> <a href="#">FL5259 R25 VI 2016 10 FINAL ER POLYGLASS UNDERLAYMENTS FL5259-R25.pdf</a> Verified By: Robert Nieminen PE-59166 Created by Independent Third Party: Yes <b>Evaluation Reports</b> <a href="#">FL5259 R25 AE 2016 10 FINAL ER POLYGLASS UNDERLAYMENTS FL5259-R25.pdf</a> Created by Independent Third Party: Yes

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Product Approval Accepts:



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**Safe**





**EXTERIOR RESEARCH & DESIGN, LLC.**

*Certificate of Authorization #9503*

353 CHRISTIAN STREET, UNIT #13

OXFORD, CT 06478

PHONE: (203) 262-9245

FAX: (203) 262-9243

**EVALUATION REPORT**

**Polyglass USA, Inc.**  
150 Lyon Drive  
Fernley, NV 98408

**Evaluation Report P12060.02.09-R21  
FL5259-R25  
Date of Issuance: 02/24/2009  
Revision 21: 10/17/2016**

**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 5<sup>th</sup> Edition (2014) Florida Building Code sections noted herein.

**DESCRIPTION: Polyglass 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. if the product changes or the referenced Quality Assurance documentation changes. Trinity|ERD 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 "Trinity|ERD 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.**

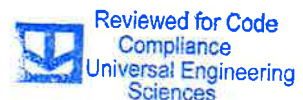
*Florida Registration No. 59166, Florida DCA ANE1983*



The facsimile seal appearing was authorized by Robert Nieminen, P.E. on 10/17/2016. This does not serve as an electronically signed document. Signed, sealed hardcopies have been transmitted to the Product Approval Administrator and to the named client

**CERTIFICATION OF INDEPENDENCE:**

1. Trinity|ERD 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. Trinity|ERD 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 Trinity|ERD 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:** Roof Underlayments, as produced by Polyglass USA, Inc., have demonstrated compliance with the following sections of the 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:**

<u>Section</u>	<u>Property</u>	<u>Standard</u>	<u>Year</u>
1504.3.1	Wind Uplift	FM 4474	2004
1504.3.1	Wind Uplift	UL 1897	2004
1504.6	Accelerated Weathering	ASTM G154	2006
1504.6	Accelerated Weathering	ASTM G155	2005
1507.2.3, 1507.3.3, 1507.5.3, 1507.7.3, 1507.8.3, 1507.9.3	Physical Properties	ASTM D226	2006
1507.2.4, 1507.2.9.2, 1507.5.3, 1507.7.3	Physical Properties	ASTM D1970	2009
1507.11.2	Physical Properties	ASTM D6164	2005
1507.11.2	Physical Properties	ASTM D6222	2008
1507.3.3	Installation Practice	FRSA/TRI April 2012	2012
1523.6.5.2.1	Physical Properties	TAS 103	1995

**3. REFERENCES:**

<u>Entity</u>	<u>Examination</u>	<u>Reference</u>	<u>Date</u>
FM Approvals (TST 1867)	Wind Uplift	3004091	01/12/2000
PRI (TST 5878)	Physical Properties	PRI01111	04/08/2002
PRI (TST 5878)	Physical Properties	PUSA-005-02-01	01/31/2002
PRI (TST 5878)	Physical Properties	PUSA-013-02-01	12/23/2002
PRI (TST 5878)	Physical Properties	PUSA-013-02-02	12/23/2002
PRI (TST 5878)	Physical Properties	PUSA-013-02-03	12/23/2002
PRI (TST 5878)	Physical Properties	PUSA-018-02-01	07/14/2003
PRI (TST 5878)	Physical Properties	PUSA-028-02-01	07/13/2005
PRI (TST 5878)	Physical Properties	PUSA-033-02-01	01/12/2006
PRI (TST 5878)	Physical Properties	PUSA-035-02-01	09/29/2006
PRI (TST 5878)	Physical Properties	PUSA-055-02-02	12/10/2007
PRI (TST 5878)	Physical Properties	PUSA-061-02-02	01/28/2008
PRI (TST 5878)	Physical Properties	PUSA-076-02-01	02/22/2008
PRI (TST 5878)	Physical Properties	PUSA-083-02-01	04/14/2008
PRI (TST 5878)	Physical Properties	PUSA-088-02-01	07/29/2009
MTI (TST 2508)	Physical Properties	JX20H7A	04/01/2008
MTI (TST 2508)	Physical Properties	RX14E8A	01/29/2009
ERD (TST 6049)	Physical Properties	11752.09.99-1	02/08/2000
ERD (TST 6049)	Wind Uplift	11757.08.01-1	08/13/2001
ERD (TST 6049)	Wind Uplift	11776.06.02	01/16/2003
ERD (TST 6049)	Physical Properties	02200.07.03	07/14/2003
ERD (TST 6049)	Wind Uplift	P1740.01.07	01/04/2007
ERD (TST 6049)	Physical Properties	P5110.04.07-1	04/11/2007
ERD (TST 6049)	Wind Uplift	P9260.03.08	03/21/2008
ERD (TST 6049)	Physical Properties	P13450.08.09	08/13/2009
ERD (TST 6049)	Wind Uplift	P30540.11.09-R1	11/30/2009
ERD (TST 6049)	Physical Properties	P11030.11.09-1	11/30/2009
ERD (TST 6049)	Wind Uplift	P11030.11.09-2	11/30/2009
ERD (TST 6049)	Physical Properties	P11030.11.09-3	11/30/2009
ERD (TST 6049)	Physical Properties	P33360.06.10	06/25/2010

<b>Entity</b>	<b>Examination</b>	<b>Reference</b>	<b>Date</b>
ERD (TST 6049)	Physical Properties	P33370.03.11	03/02/2011
ERD (TST 6049)	Physical Properties	P33370.04.11	04/26/2011
ERD (TST 6049)	Physical Properties	P37300.10.11	10/19/2011
ERD (TST 6049)	Physical Properties	P40390.08.12-1	08/06/2012
ERD (TST 6049)	Physical Properties	P40390.08.12-2	08/07/2012
ERD (TST 6049)	Physical Properties	C41420.09.12-3	09/11/2012
ERD (TST 6049)	Wind Uplift	P39680.03.13	03/04/2013
ERD (TST 6049)	Physical Properties	P45370.04.13	04/26/2013
ERD (TST 6049)	Wind Uplift	P1738.02.07-R2	04/29/2013
ERD (TST 6049)	Wind Uplift	11757.04.01-1-R1	04/30/2013
ERD (TST 6049)	Wind Uplift	P41630.08.13	08/06/2013
ERD (TST 6049)	Wind Uplift	P11751.05.03-R1	11/26/2013
ERD (TST 6049)	Wind Uplift	P11781.11.03-R1	11/26/2013
ERD (TST 6049)	Physical Properties	P45270.05.14	05/12/2014
ERD (TST 6049)	Physical Properties	6020.07.14-1	09/08/2014
ERD (TST 6049)	Physical Properties	6020.09.14-2	09/08/2014
ERD (TST 6049)	Physical Properties	6020.09.14-3	09/08/2014
ERD (TST 6049)	Physical Properties	6020.09.14-4	09/08/2014
ERD (TST 6049)	Physical Properties	6020.09.14-5	09/08/2014
ERD (TST 6049)	Physical Properties	6020.09.14-6	09/08/2014
ERD (TST 6049)	Physical Properties	P46520.10.14	10/03/2014
ERD (TST 6049)	Physical Properties	P44360.10.14	10/07/2014
ERD (TST 6049)	Physical Properties	P43290.10.14	10/17/2014
ERD (TST 6049)	Physical Properties	PLYG-SC7550.03.15	03/24/2015
ERD (TST 6049)	Physical Properties	P40390.04.15	04/03/2015
ERD (TST 6049)	Physical Properties	PLYG-SC8080.05.15-1	05/20/2015
ERD (TST 6049)	Wind Uplift	PLYG-SC8905.05.16-1	05/17/2016
ERD (TST 6049)	Physical Properties	PLYG-SC8080.07.16	07/16/2016
ERD (TST 6049)	Wind Uplift	PLYG-SC12025.10.16	10/12/2016
ICC-ES (EVL 2396)	IBC Compliance	ESR-1697	11/01/2014
Miami-Dade (CER 1592)	HVHZ Compliance	NOA 14-0717.08	01/22/2015
Polyglass USA	Manufacturing Affidavit	Products Current	02/18/2009
Polyglass USA	P/L Affidavit	Mule-Hide Cross Ltg	03/01/2008
Polyglass USA	Materials Affidavit	Polystick SA Compound	08/18/2011
UL, LLC. (QUA9625)	Quality Control	Service Confirmation	Exp. 04/24/2018

#### 4. PRODUCT DESCRIPTION:

##### 4.1 **Mechanically Fastened Underlayments:**

- 4.1.1 **Elastobase** is a fiberglass reinforced, SBS modified bitumen base sheet.
- 4.1.2 **Elastobase P** is a polyester-reinforced, SBS modified bitumen base sheet.
- 4.1.3 **Polyglass G2 Base** is a fiberglass-reinforced, asphaltic base sheet.
- 4.1.4 **Polyglass APP Base** is a fiberglass-reinforced, APP modified bitumen base sheet.

##### 4.2 **Self-Adhering Underlayments:**

- 4.2.1 **Polystick MTS** is a nominal 60-mil thick rubberized asphalt waterproofing membrane, glass fiber reinforced, surfaced with polyolefinic film surface; meets ASTM D1970 and TAS 103.
- 4.2.2 **Polystick MTS PLUS** is a nominal 60-mil thick rubberized asphalt waterproofing membrane, glass fiber reinforced, surfaced with poly-film surface; meets TAS 103.
- 4.2.3 **Polystick IR-Xe** is a nominal 60-mil thick rubberized asphalt waterproofing membrane, glass fiber reinforced, with an aggregate surface; meets ASTM D1970.

- 4.2.4 **Polystick TU Plus** is a nominal 80-mil thick rubberized asphalt waterproofing membrane, glass fiber reinforced, with a polyester fabric surface; meets ASTM D1970 and TAS 103.
- 4.2.5 **Polystick TU P** is a nominal 130-mil thick rubberized asphalt waterproofing membrane, glass-fiber/polyester reinforced, with a granular surface; meets ASTM D1970 and TAS 103.
- 4.2.6 **Polystick TU Max** is a nominal 60-mil thick rubberized asphalt waterproofing membrane with a 190 g/m<sup>2</sup> polyester fabric surface; meets ASTM D1970 and TAS 103.
- 4.2.7 **Polyflex SAP, Polyflex SAP FR, Mule-Hide SA-APP Cap Sheet and Mule-Hide SA-APP Cap Sheet (FR)** are polyester reinforced, APP modified bitumen cap sheets; meet ASTM D6222.
- 4.2.8 **Polystick Dual Pro™** is a nominal 60-mil thick dual-layer rubberized asphalt waterproofing membrane, fiberglass reinforced, with a polyester fabric surface; meets ASTM D1970.
- 4.2.9 **Polystick Tile Pro™** is a nominal 60-mil thick dual-layer rubberized asphalt waterproofing membrane, fiberglass reinforced, with a polyester fabric surface; meets ASTM D1970 and TAS 103.
- 4.2.10 **Polystick MU-X** is a nominal 54-mil thick dual-layer rubberized asphalt waterproofing membrane, fiberglass reinforced, with a polypropylene film surface; meets AC188 and physical requirements of ASTM D1970.
- 4.3 **Mechanically Fastened and/or Bonded Underlayments:**
- 4.3.1 **Elastoflex S6 G and Elastoflex S6 G FR** are polyester reinforced, SBS modified bitumen cap sheets; meet ASTM D6164.
- 4.3.2 **Polyflex G and Polyflex G FR** are polyester reinforced, APP modified bitumen cap sheets; meet ASTM D6222.

**5. LIMITATIONS:**

- 5.1 This is a building code evaluation. Neither Trinity|ERD 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 the HVHZ.
- 5.3 Fire Classification is not part of this Evaluation Report; refer to current Approved Roofing Materials Directory for fire ratings of this product.
- 5.4 Polyglass 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 evaluation combined with supporting data for the prepared roof covering.
- 5.5 **Allowable Roof Covers:**

<b>Underlayment</b>	<b>Asphalt Shingles</b>	<b>Nail-On Tile</b>	<b>Foam-On Tile</b>	<b>Metal</b>	<b>Wood Shakes &amp; Shingles</b>	<b>Slate</b>
Elastobase	Yes	Yes (base sheet in 2-ply system)	Yes (base sheet in 2-ply system)	Yes	Yes	Yes
Elastobase P	Yes	Yes (base sheet in 2-ply system)	Yes (base sheet in 2-ply system)	Yes	Yes	Yes
Polyglass G2 Base	No	Yes (base sheet in 2-ply system)	Yes (base sheet in 2-ply system)	No	No	No
Polyglass APP Base	No	Yes (base sheet in 2-ply system)	Yes (base sheet in 2-ply system)	No	No	No
Polystick MTS	Yes	Yes	No	Yes	Yes	Yes
Polystick MTS PLUS	Yes	Yes	No	Yes	Yes	Yes
Polystick IR-Xe	Yes	No	No	No	Yes	Yes
Polystick TU P	Yes	Yes	Yes See 5.5.1	No	Yes	Yes
Polystick TU Plus	Yes	Yes	Yes See 5.5.1	Yes	Yes	Yes

TABLE 1: ROOF COVER OPTIONS						
Underlayment	Asphalt Shingles	Nail-On Tile	Foam-On Tile	Metal	Wood Shakes & Shingles	Slate
Polystick TU Max	No	Yes	Yes See 5.5.1	Yes	No	No
Polystick Dual Pro	Yes	Yes	No	Yes	Yes	Yes
Polystick Tile Pro	Yes	Yes	Yes See 5.5.1	Yes	Yes	Yes
Polystick MU-X	Yes	No	No	Yes	Yes	Yes
Elastoflex S6 G	Yes	Yes	Yes See 5.5.1	No	Yes	Yes
Elastoflex S6 G FR	Yes	Yes	No	No	Yes	Yes
Polyflex G	Yes	Yes	Yes See 5.5.1	No	Yes	Yes
Polyflex G FR	Yes	Yes	No	No	Yes	Yes
Polyflex SAP or SAP FR	Yes	Yes	Yes See 5.5.1	No	Yes	Yes
Mule-Hide SA-APP Cap Sheet or SA-APP Cap Sheet (FR)	Yes	Yes	Yes See 5.5.1	No	Yes	Yes

5.5.1 "Foam-On Tile" is limited to use of the following Approved tile adhesives unless tensile adhesion / long term aging data from an accredited testing laboratory is provided.

- ✓ **3M™ 2-Component Roof Tile Adhesive AH-160 (FL6332):** Polystick TU P, Polystick TU Plus, Polystick TU Max, Elastoflex S6 G, Polyflex G, Polyflex SAP, Polyflex SA Cap FR, Mule-Hide SA-APP Cap Sheet or Mule-Hide SA-APP Cap Sheet (FR) or Tile Pro.
- ✓ **3M™ Foam Roof Tile Adhesive RTA-1 (FL6276):** Polystick TU P, Polystick TU Plus, Polystick TU Max, Elastoflex S6 G, Polyflex G, Polyflex SAP, Polyflex SA Cap FR, Mule-Hide SA-APP Cap Sheet or Mule-Hide SA-APP Cap Sheet (FR) or Tile Pro
- ✓ **Convenience Products' Touch 'n Seal StormBond Roof Tile Adhesive (FL14506):** Polystick TU Plus, Polystick TU Max.
- ✓ **Dow TileBond (FL717):** Polystick TU P, Polystick TU Plus, Polyflex SAP or Tile Pro.
- ✓ **Polyglass PolyLok Roof Tile Adhesive (FL17855):** Polystick TU Plus or Polystick TU Max.

5.6 Allowable Substrates:

5.6.1 Direct-Bond to Deck:

Polystick (all variations), Dual Pro, Tile Pro, Polyflex SAP or SAP FR, Mule-Hide SA-APP Cap Sheet or SA-APP Cap Sheet (FR) self-adhered to:

- New untreated plywood; ASTM D41 primed new untreated plywood; Existing plywood; ASTM D41 primed existing plywood; New or existing, unprimed OSB; ASTM D41 primed OSB; Southern Yellow Pine; ASTM D41 primed Southern Yellow Pine; ASTM D41 primed structural concrete; Huber Engineered Woods "ZIP System" Panels (designed and installed to meet wind loads for project).

*Note: Polyglass does not require priming of new or existing plywood or OSB sheathing. New or existing plywood or OSB sheathing should be cleaned of all dirt and debris prior to application of Polystick membranes.*

Elastoflex S6 G or S6 G FR in hot asphalt to:

- ASTM D41 primed structural concrete.

Polyflex G or G FR torch-applied to:

- ASTM D41 primed structural concrete.



5.6.2 **Bond-to-Insulation:**

Polystick (all variations), Polyflex SAP or SAP FR, Mule-Hide SA-APP Cap Sheet or SA-APP Cap Sheet (FR) self-adhered to:

- ASTM C1289, Type II, Class 1 polyisocyanurate or Type V polyisocyanurate-composite insulation; Dens Deck DuraGuard; Dens Deck Prime; or SECUROCK Gypsum-Fiber Roof Board.

Elastoflex S6 G or S6 G FR in hot asphalt to:

- Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board.

Polyflex G or G FR torch-applied to:

- ASTM D41 primed structural concrete; Dens Deck Prime or SECUROCK Gypsum-Fiber Roof Board.

For installation under mechanically attached prepared roof coverings, insulation shall be attached per minimum requirements of the prepared roof covering manufacturer's Product Approval. For installations under foam-on tile systems, insulation attachment shall be designed by a qualified design professional and installed based on testing of the insulation/underlayment system in accordance with FBC Section 1504.3.1.

5.6.3 **Bond to Mechanically Attached Base Layer:**

Polystick (all variations), Polyflex SAP or SAP FR, Mule-Hide SA-APP Cap Sheet or SA-APP Cap Sheet (FR) Dual Pro or Tile Pro self-adhered to:

- ASTM D226, Type I or II felt; Elastobase; Elastobase P or Mule-Hide Nail Base.

Elastoflex S6 G or S6 G FR in hot asphalt to:

- ASTM D226, Type I or II felt; Elastobase; Elastobase P, Mule-Hide Nail Base or Polyglass G2 Base.

Polyflex G or G FR torch-applied to:

- Elastobase; Elastobase P, Mule-Hide Nail Base, Polyglass G2 Base or Polyglass APP Base.

For installations under mechanically attached prepared roof coverings, base layer shall be attached per minimum codified requirements. For installations under foam-on tile systems, base layer shall be attached per minimum requirements of FRSA/TRI April 2012 (04-12), Appendix A, Table 1, or as listed in Section 5.6.4 herein, or as tested in accordance with FBC Section 1504.3.1.

5.6.4 **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 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 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.

5.6.4.1 **Maximum Design Pressure = -90 psf:**

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

Primer: None

Base Ply: (Optional) Polystick MTS PLUS, self-adhered

Underlayment: Polystick TU P, Polystick TU Plus, Polystick TU Max, Polyflex SAP, Polyflex SAP FR, Mule-Hide SA-APP Cap Sheet and Mule-Hide SA-APP Cap Sheet (FR), self-adhered.

5.6.4.2 **Maximum Design Pressure = -97.5 psf:**

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

Primer: PG100 or ASTM D41

Base Ply: (Optional) Polystick MTS PLUS, self-adhered

Underlayment: Polystick TU P, Polystick TU Plus, Polystick TU Max, Polyflex SAP, Polyflex SAP FR, Mule-Hide SA-APP Cap Sheet and Mule-Hide SA-APP Cap Sheet (FR), self-adhered and back-nailed within the selvedge-edge side laps using 12 ga. x 1¼" ring shank nails through 32 ga., 1-5/8" diameter tin caps spaced 12-inch o.c.

- 5.6.4.3 **Maximum Design Pressure = -105 psf:**  
 Deck: Min. 15/32-inch plywood to meet project requirements to satisfaction of Authority Having Jurisdiction.  
 Primer: WB-3000  
 Base Ply: (Optional) Polystick MTS PLUS, self-adhered  
 Underlayment: Polystick TU P, Polystick TU Plus, Polystick TU Max, Polyflex SAP, Polyflex SAP FR, Mule-Hide SA-APP Cap Sheet and Mule-Hide SA-APP Cap Sheet (FR), self-adhered and back-nailed within the selvedge-edge side laps using 12 ga. x 1¼" ring shank nails through 32 ga., 1-5/8" diameter tin caps spaced 12-inch o.c.
- 5.6.4.4 **Maximum Design Pressure = -135 psf:**  
 Deck: Min. 15/32-inch plywood to meet project requirements to satisfaction of Authority Having Jurisdiction.  
 Primer: (Optional) PG100 or ASTM D41  
 Joints: Min. 4-inch wide strips of Elastoflex SA-V over all plywood joints.  
 Base Ply: (Optional) Polystick MTS PLUS, self-adhered  
 Underlayment: Polystick TU P, Polystick TU Plus, Polystick TU Max, Polyflex SAP, Polyflex SAP FR, Mule-Hide SA-APP Cap Sheet and Mule-Hide SA-APP Cap Sheet (FR), self-adhered.
- 5.6.4.5 **Maximum Design Pressure = -315 psf:**  
 Deck: Structural concrete to meet project requirements to satisfaction of Authority Having Jurisdiction.  
 Primer: PG100 or ASTM D41  
 Base Ply: (Optional) Polystick MTS PLUS, self-adhered  
 Underlayment: Polystick TU P, Polystick TU Plus, Polystick TU Max, Tile Pro, Polyflex SAP, Polyflex SAP FR, Mule-Hide SA-APP Cap Sheet and Mule-Hide SA-APP Cap Sheet (FR), self-adhered.
- 5.6.4.6 **Maximum Design Pressure = -622.5 psf:**  
 Deck: Structural concrete to meet project requirements to satisfaction of Authority Having Jurisdiction.  
 Primer: PG100 or ASTM D41  
 Underlayment: Elastoflex S6 G, applied in full mopping of hot asphalt or Polyflex G, torch-applied.
- 5.6.4.7 **Maximum Design Pressure = -30.0 psf\*:**  
 Deck: Min. 15/32-inch OSB to meet project requirements to satisfaction of Authority Having Jurisdiction.  
 Base Sheet: Elastobase or Mule-Hide Nail Base (poly-film top surface)  
 Fasteners: 11 ga. x 1.25-inch long x 1-inch head diameter round metal cap nails  
 Spacing: 6-inch o.c. at the 3-inch wide side laps and 6-inch o.c. at two (2) equally spaced staggered center rows.  
 Base Ply: (Optional) Polystick MTS PLUS, self-adhered  
 Underlayment: Polystick TU P, Polystick TU Plus, Polystick TU Max, Polyflex SAP, Polyflex SAP FR, Mule-Hide SA-APP Cap Sheet and Mule-Hide SA-APP Cap Sheet (FR), self-adhered.
- 5.6.4.8 **Maximum Design Pressure = -37.5 psf\*:**  
 Deck: Min. 15/32-inch plywood to meet project requirements to satisfaction of Authority Having Jurisdiction.  
 Base Sheet: Elastobase or Mule-Hide Nail Base (poly-film top surface)  
 Fasteners: 11 ga. x 1.25-inch long x 1-inch head diameter round metal cap nails  
 Spacing: 6-inch o.c. at the 3-inch wide side laps and 6-inch o.c. at two (2) equally spaced staggered center rows.  
 Base Ply: (Optional) Polystick MTS PLUS, self-adhered  
 Underlayment: Polystick TU P, Polystick TU Plus, Polystick TU Max, Polyflex SAP, Polyflex SAP FR, Mule-Hide SA-APP Cap Sheet and Mule-Hide SA-APP Cap Sheet (FR), self-adhered.
- 5.6.4.9 **Maximum Design Pressure = -37.5 psf\*:**  
 Deck: Min. 19/32-inch plywood to meet project requirements to satisfaction of Authority Having Jurisdiction.  
 Base Sheet: One (1) or two (2) layers ASTM D226, Type II felt  
 Fasteners: 11 ga. x 1.25-inch long x 1-inch head diameter round metal cap nails  
 Spacing: 6-inch o.c. at the 3-inch wide side laps and 12-inch o.c. at two (2) equally spaced staggered center rows.  
 Underlayment: Elastoflex S6 G, applied in full mopping of hot asphalt.

- 5.6.4.10 **Maximum Design Pressure = -45 psf\*:**  
 Deck: Min. 19/32-inch plywood to meet project requirements to satisfaction of Authority Having Jurisdiction.  
 Base Sheet: One (1) layer ASTM D226, Type II felt  
 Fasteners: 11 ga. x 1.25-inch x 3/8-inch head diameter annular ring shank roofing nails at 1-5/8-inch diameter tin caps  
 Spacing: 4-inch o.c. at the 2-inch wide side laps and 4-inch o.c. at two (2) equally spaced staggered center rows.  
 Base Ply: (Optional; for use with self-adhering underlayment only) Polystick MTS PLUS, self-adhered  
 Underlayment: Polystick TU P, Polystick TU Plus, Polystick TU Max, Polyflex SAP, Polyflex SAP FR, Mule-Hide SA-APP Cap Sheet and Mule-Hide SA-APP Cap Sheet (FR), self-adhered or Elastoflex S6 G, applied in full mopping of hot asphalt.
- 5.6.4.11 **Maximum Design Pressure = -45 psf\*:**  
 Deck: Min. 19/32-inch plywood to meet project requirements to satisfaction of Authority Having Jurisdiction.  
 Base Sheet: Two (2) layers ASTM D226, Type II felt  
 Fasteners: 11 ga. x 1.25-inch long x 3/8-inch head diameter annular ring shank roofing nails at 1-5/8-inch diameter tin caps  
 Spacing: 9-inch o.c. at the 2-inch wide side laps and 9-inch o.c. at two (2) equally spaced staggered center rows.  
 Base Ply: (Optional; for use with self-adhering underlayment only) Polystick MTS PLUS, self-adhered  
 Underlayment: Polystick TU P, Polystick TU Plus, Polystick TU Max, Polyflex SAP, Polyflex SAP FR, Mule-Hide SA-APP Cap Sheet and Mule-Hide SA-APP Cap Sheet (FR), self-adhered or Elastoflex S6 G, applied in full mopping of hot asphalt.
- 5.6.4.12 **Maximum Design Pressure = -45 psf:**  
 Deck: Min. 15/32-inch plywood to meet project requirements to satisfaction of Authority Having Jurisdiction.  
 Base Sheet: Elastobase (sanded top surface for hot-asphalt or torch-applied cap or poly-film surface for torch-applied cap)  
 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: Elastoflex S6 G, applied in full mopping of hot asphalt or Polyflex G, torch-applied.
- 5.6.4.13 **Maximum Design Pressure = -52.5 psf:**  
 Deck: Min. 15/32-inch plywood to meet project requirements to satisfaction of Authority Having Jurisdiction.  
 Base Sheet: Elastobase (sanded top surface for hot-asphalt or torch-applied cap or poly-film surface for torch-applied cap)  
 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: Elastoflex S6 G, applied in full mopping of hot asphalt or Polyflex G, torch-applied.
- 5.6.4.14 **Maximum Design Pressure = -52.5 psf:**  
 Deck: Min. 15/32-inch plywood to meet project requirements to satisfaction of Authority Having Jurisdiction.  
 Base Sheet: Elastobase or Mule-Hide Nail Base (poly-film top surface)  
 Fasteners: Simplex Original Cap Nails  
 Spacing: 6-inch o.c. at the 3-inch wide side laps and 6-inch o.c. at four (4) equally spaced staggered center rows.  
 Base Ply: (Optional) Polystick MTS PLUS, self-adhered  
 Underlayment: Polystick TU P, Polystick TU Plus, Polystick TU Max, Polyflex SAP, Polyflex SAP FR, Mule-Hide SA-APP Cap Sheet and Mule-Hide SA-APP Cap Sheet (FR), self-adhered.
- 5.6.4.15 **Maximum Design Pressure = -52.5 psf:**  
 Deck: Min. 15/32-inch plywood to meet project requirements to satisfaction of Authority Having Jurisdiction.  
 Base Sheet: Elastobase (sanded top surface for hot-asphalt or torch-applied cap or poly-film surface for torch-applied cap)  
 Fasteners: Simplex Original Cap Nails  
 Spacing: 6-inch o.c. at the 3-inch wide side laps and 6-inch o.c. at four (4) equally spaced staggered center rows.  
 Underlayment: Elastoflex S6 G, applied in full mopping of hot asphalt or Polyflex G, torch-applied.
- 5.6.4.16 **Maximum Design Pressure = -60 psf:**  
 Deck: Min. 19/32-inch plywood to meet project requirements to satisfaction of Authority Having Jurisdiction.  
 Base Sheet: Elastobase (sanded top surface for hot-asphalt or torch-applied cap or poly-film surface for torch-applied cap)  
 Fasteners: 11 ga. x 1.25-inch long x 3/8-inch head diameter annular ring shank roofing nails at 1-5/8-inch diameter tin caps  
 Spacing: 8-inch o.c. at the 4-inch wide side laps and 8-inch o.c. at three (3) equally spaced staggered center rows.  
 Underlayment: Elastoflex S6 G, applied in full mopping of hot asphalt or Polyflex G, torch-applied.

5.6.4.17 **Maximum Design Pressure = -60 psf:**

Deck: Min. 19/32-inch plywood to meet project requirements to satisfaction of Authority Having Jurisdiction.  
 Base Sheet: Elastobase (sanded top surface for hot-asphalt or torch-applied cap or poly-film surface for torch-applied cap)  
 Fasteners: OMG #12 Standard Roofgrip with OMG Flat Bottom Metal Plates  
 Spacing: 12-inch o.c. at the 4-inch wide side laps and 12-inch o.c. at two (2) equally spaced staggered center rows.  
 Underlayment: Elastoflex S6 G, applied in full mopping of hot asphalt or Polyflex G, torch-applied.

5.6.4.18 **Maximum Design Pressure = -67.5 psf:**

Deck: Min. 15/32-inch plywood to meet project requirements to satisfaction of Authority Having Jurisdiction.  
 Base Sheet: Polyglass G2 Base or Polyglass APP Base (*requires use of torch-applied underlayment*)  
 Fasteners: 12 ga. x 1.25-inch long x 3/8-inch head diameter annular ring shank roofing nails at 1-5/8-inch diameter tin caps  
 Spacing: 8-inch o.c. at the 4-inch wide side laps and 8-inch o.c. at four (4) equally spaced staggered center rows.  
 Underlayment: Elastoflex S6 G, applied in full mopping of hot asphalt or torch-applied or Polyflex G, torch-applied.

5.6.4.19 **Maximum Design Pressure = -75 psf:**

Deck: Min. 15/32-inch plywood to meet project requirements to satisfaction of Authority Having Jurisdiction.  
 Base Sheet: Polyglass G2 Base or Polyglass APP Base (*requires use of torch-applied underlayment*)  
 Fasteners: Dekfast #14 with Dekfast Hex plates, OMG #14 HD with OMG 3" Galvalume Steel Plates, OMG Roofgrip #14 with OMG Flat Bottom Plates (AccuTrac), Trufast HD with Trufast 3-inch Insulation Plates or Simplex MAXX Cap Fasteners  
 Spacing: 10-inch o.c. at the 4-inch wide side laps and 10-inch o.c. at three (3) equally spaced staggered center rows.  
 Underlayment: Elastoflex S6 G, applied in full mopping of hot asphalt or torch-applied or Polyflex G, torch-applied.

5.6.4.20 **Maximum Design Pressure = -90 psf:**

Deck: Min. 15/32-inch plywood to meet project requirements to satisfaction of Authority Having Jurisdiction.  
 Base Sheet: Elastobase (sanded top surface for hot-asphalt or torch-applied cap or poly-film surface for torch-applied cap)  
 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: Elastoflex S6 G, applied in full mopping of hot asphalt or Polyflex G, torch-applied.

5.6.4.21 **Maximum Design Pressure = -90 psf:**

Deck: Min. 15/32-inch plywood to meet project requirements to satisfaction of Authority Having Jurisdiction.  
 Base Sheet: Elastobase (sanded top surface for hot-asphalt or torch-applied cap or poly-film surface for torch-applied cap)  
 Fasteners: OMG #12 Standard Roofgrip or OMG #14 Heavy Duty with OMG 3" Round Metal Plates or OMG Flat Bottom Metal Plates  
 Spacing: 6-inch o.c. at the 4-inch wide side laps and 6-inch o.c. at three (3) equally spaced staggered center rows.  
 Underlayment: Elastoflex S6 G, applied in full mopping of hot asphalt or Polyflex G, torch-applied.

5.6.4.22 **Maximum Design Pressure = -90 psf:**

Deck: Min. 15/32-inch plywood to meet project requirements to satisfaction of Authority Having Jurisdiction.  
 Base Sheet: Elastobase (sanded top surface)  
 Fasteners: Trufast #12 DP or Trufast #14 HD with Trufast 3" Metal Insulation Plates  
 Spacing: 6-inch o.c. at the 4-inch wide side laps and 6-inch o.c. at three (3) equally spaced staggered center rows.  
 Underlayment: Elastoflex S6 G, applied in full mopping of hot asphalt.

5.6.4.23 **Maximum Design Pressure = -90 psf:**

Deck: Min. 15/32-inch plywood to meet project requirements to satisfaction of Authority Having Jurisdiction.  
 Base Sheet: Polyglass G2 Base or Polyglass APP Base (*requires use of torch-applied underlayment*)  
 Fasteners: Dekfast #14 with Dekfast Hex plates, OMG #14 HD with OMG 3" Galvalume Steel Plates, OMG Roofgrip #14 with OMG Flat Bottom Plates (AccuTrac), Trufast HD with Trufast 3-inch Insulation Plates or Simplex MAXX Cap Fasteners  
 Spacing: 9-inch o.c. at the 4-inch wide side laps and 9-inch o.c. at four (4) equally spaced staggered center rows.  
 Underlayment: Elastoflex S6 G, applied in full mopping of hot asphalt or torch-applied or Polyflex G, torch-applied.

- 5.6.4.24 **Maximum Design Pressure = -97.5 psf:**  
 Deck: Min. 19/32-inch plywood to meet project requirements to satisfaction of Authority Having Jurisdiction.  
 Base Sheet: Elastobase or Mule-Hide Nail Base (poly-film top surface)  
 Fasteners: 11 ga. x 1.25-inch x 3/8-inch head diameter annular ring shank roofing nails at 1-5/8-inch diameter tin caps  
 Spacing: 4-inch o.c. at the 4-inch wide side laps and 4-inch o.c. at four (4) equally spaced staggered center rows.  
 Base Ply: (Optional) Polystick MTS PLUS, self-adhered  
 Underlayment: Polystick TU P, Polystick TU Plus, Polystick TU Max, Polyflex SAP, Polyflex SAP FR, Mule-Hide SA-APP Cap Sheet and Mule-Hide SA-APP Cap Sheet (FR), self-adhered.
- 5.6.4.25 **Maximum Design Pressure = -105 psf:**  
 Deck: Min. 15/32-inch plywood to meet project requirements to satisfaction of Authority Having Jurisdiction.  
 Base Sheet: Elastobase (sanded top surface for hot-asphalt or torch-applied cap or poly-film surface for torch-applied cap)  
 Fasteners: Simplex MAXX Cap Fasteners  
 Spacing: 6-inch o.c. at the 2-inch wide side laps and 6-inch o.c. at three (3) equally spaced staggered center rows.  
 Underlayment: Elastoflex S6 G, applied in full mopping of hot asphalt or Polyflex G, torch-applied.
- 5.6.4.26 **Maximum Design Pressure = -112.5 psf:**  
 Deck: Min. 19/32-inch plywood to meet project requirements to satisfaction of Authority Having Jurisdiction.  
 Base Sheet: Elastobase or Mule-Hide Nail Base (poly-film top surface)  
 Fasteners: 11 ga. x 1.25-inch x 3/8-inch head diameter annular ring shank roofing nails at 1-5/8-inch diameter tin caps  
 Spacing: 6-inch o.c. at the 4-inch wide side laps and 6-inch o.c. at four (4) equally spaced staggered center rows.  
 Primer: PG100 or ASTM D41 primer at all tin-caps  
 Base Ply: Polystick MTS PLUS, self-adhered  
 Underlayment: Polystick TU P, Polystick TU Plus, Polystick TU Max, Polyflex SAP, Polyflex SAP FR, Mule-Hide SA-APP Cap Sheet and Mule-Hide SA-APP Cap Sheet (FR), self-adhered.
- 5.6.4.27 **Maximum Design Pressure = -120 psf:**  
 Deck: Min. 15/32-inch plywood to meet project requirements to satisfaction of Authority Having Jurisdiction.  
 Base Sheet: Elastobase (sanded top surface for hot-asphalt or torch-applied cap or poly-film surface for torch-applied cap)  
 Fasteners: OMG #12 Standard Roofgrip or OMG #14 Heavy Duty with OMG 3" Round Metal Plates or OMG Flat Bottom Metal Plates  
 Spacing: 6-inch o.c. at the 4-inch wide side laps and 6-inch o.c. at five (5) equally spaced staggered center rows.  
 Underlayment: Elastoflex S6 G, applied in full mopping of hot asphalt or Polyflex G, torch-applied.
- 5.6.4.28 **Maximum Design Pressure = -120 psf:**  
 Deck: Min. 15/32-inch plywood to meet project requirements to satisfaction of Authority Having Jurisdiction.  
 Base Sheet: Elastobase (sanded top surface)  
 Fasteners: Trufast #12 DP or Trufast #14 HD with Trufast 3" Metal Insulation Plates  
 Spacing: 6-inch o.c. at the 4-inch wide side laps and 6-inch o.c. at five (5) equally spaced staggered center rows.  
 Underlayment: Elastoflex S6 G, applied in full mopping of hot asphalt.
- 5.6.4.29 All other direct-deck, adhered Polyglass underlayment systems beneath foam-on tile systems carry a Maximum Design Pressure of -45 psf.
- 5.6.4.30 For mechanically attached base sheet, the maximum design pressure for the selected assembly shall meet or exceed the Zone 1 design pressure determined in accordance with FRSA/TRI April 2012 (04-12), Appendix A, Table 1A or FBC 1609. 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 RAS 117, FM LPDS 1-29 and ANSI/SPRI WD1. 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:**  
 Elastobase, Elastobase P, Polyglass G2 Base or Polyglass APP Base shall not be left exposed for longer than 30-days after installation.  
 Polystick IR-Xe or Polystick MU-X shall not be left exposed for longer than 90-days after installation.  
 Polystick MTS, MTS PLUS, TU P, TU Plus, TU Max, Dual Pro or Tile Pro shall not be left exposed for longer than 180-days after installation.

Polyflex SAP or SAP FR, or Mule-Hide SA-APP Cap Sheet or SA-APP Cap Sheet (FR) does not have an exposure limitation, unless the prepared roof covering is to be adhesive-set tile, in which case the maximum exposure is 30 days.

Elastoflex S6 G or S6 G FR or Polyflex G or G FR does not have an exposure limitation, unless the prepared roof covering is to be adhesive-set tile (Elastoflex S6 G or Polyflex G only), in which case the maximum exposure is 180 days.

**6. INSTALLATION:**

6.1 **Polyglass Roof Underlayments** shall be installed in accordance with **Polyglass** published installation requirements subject to the Limitations set forth in Section 5 herein and the specifics noted below.

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 Elastobase, Elastobase P or Mule-Hide Nail Base:**

6.3.1 Shall be installed in compliance with the codified requirements for ASTM D226, Type II underlayment in FBC Sections 1507 for the type of prepared roof covering to be installed.

6.3.2 **Non-Tile Applications:**

Reference is made to the current edition of the NRCA Steep-slope Roofing Manual and ARMA recommendations for installing shingle underlayments and flashings

Elastobase, Elastobase P or Mule-Hide Nail Base may be covered with a layer of Polystick, Polyflex SAP or SAP FR, Mule-Hide SA-APP Cap Sheet or SA-APP Cap Sheet (FR), Dual Pro or Tile Pro, self-adhered, Elastoflex S6 G or S6 G FR in hot asphalt or Polyflex G or G FR, torch applied.

6.3.3 **Tile Applications:**

Reference is made to FRSA/TRI April 2012 (04-12) Installation Manual and Table 1 herein, using the instructions noted above as a guideline.

**6.4 Polystick MTS, MTS PLUS, IR-Xe, TU P, TU Plus, TU Max, Dual Pro, Tile Pro or MU-X or Polyflex SAP, Polyflex SAP FR, Mule-Hide SA-APP Cap Sheet or Mule-Hide SA-APP Cap Sheet (FR):**

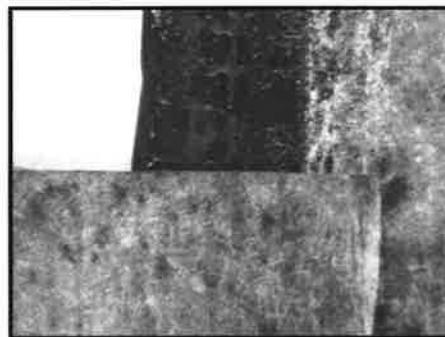
6.4.1 Shall be installed in compliance with the codified requirements for ASTM D1970 underlayment in FBC Sections 1507 for the type of prepared roof covering to be installed.

6.4.2 **Direct-to-Deck with Mechanically Fastened Roof Covers:**

All self-adhering materials, with the exception of Polystick TU Plus, Polyflex SAP or SAP FR and Mule-Hide SA-APP Cap Sheet or SA-APP Cap Sheet (FR) should be back-nailed in selvage edge seam in accordance with Polyglass / Mule-Hide Back Nailing Guide. Nails shall be corrosion resistant, 11 gauge ring-shank type with a minimum 1-inch diameter metal disk or Simplex-type metal cap nail, at a minimum rate of 12" o.c. Polystick TU Plus should be back-nailed using the above noted fasteners and spacing, in area marked "nail area, area para clavar" on the face of membrane. The head lap membrane is to cover the area being back-nailed

All seal-lap seams (selvage laps) must be firmly rolled with a minimum 28 lb. hand roller to ensure full contact and adhesion.

For Dual Pro and Tile Pro, align the edge of the top sheet to the end of the glue pattern (the sheet will overlap the fabric).



View of Overlap Seam of Dual Pro and Tile Pro



All over-fabric and over-granule end-laps shall have a 6-inch wide, uniform layer of Polyplus 50 Premium Modified Wet/Dry Cement or Polyglass PG500 Modified Cement applied in between the application of the lap.

Polystick TU Plus, Dual Pro and Tile Pro may not be used in any exposed application such as crickets, exposed valleys, or exposed roof to wall details

Repair of Polystick membranes is to be accomplished by applying Polyplus 50 Premium Modified Wet/Dry Cement or Polyglass PG500 Modified Cement to the area in need of repair, followed by a minimum 6 x 6 inch patch of the Polystick material of like kind, set and hand rolled in place over the repair area. Patch laps, if needed, shall be installed in a water shedding manner.

All Polystick membranes shall be installed to ensure full contact with approved substrates. Polyglass requires a minimum of 40-lb weighted-roller or, on steep slopes, use of a stiff broom with approximately 40-lbs of load applied for the field membrane. Hand rollers are acceptable for rolling of patches, laps (min. 28 lb roller) or small areas of the roof that are not accessible to a large roller or broom.

**6.4.3 Tile Applications (not allowed for Polystick IR-Xe or Polystick MU-X):**

Reference is made to FRSA/TRI April 2012 (04-12) Installation Manual and Table 1 herein, using the instructions noted above as a guideline.

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 5.6.4 herein.

For nail-on tile systems over Polystick MTS, battens are required for loading / staging of the tile.

For nail-on tile systems over Polystick MTS PLUS:

- Battens are required for loading/staging of lugged tile regardless of slope.
- Battens are required for loading/staging of flat tile at slopes in excess of 5:12.

**6.4.4 Two (2) Ply Underlayment Systems:**

Polystick MTS or MTS PLUS followed by Polystick MTS, MTS PLUS, TU P, TU Plus, TU Max, Tile Pro, MU-X or Polyflex SAP is allowable for use under mechanically attached prepared roof systems. Limits of use are those associated with the top-layer material. This is not a requirement, but is allowable if a 2-ply underlayment system is desired.

Polystick MTS PLUS followed by Polystick TU P, TU Plus, TU Max, Tile Pro or Polyflex SAP is allowable for use under foam-on tile systems. Limits of use are those associated with the top-layer material. This is not a requirement, but is allowable if a 2-ply underlayment system is desired.

**6.5 Elastoflex S6 G or S6 G FR:**

6.5.1 Elastoflex S6 G or S6 G FR shall be installed in compliance with current Polyglass published installation requirements. For use in tile applications, reference is made to FRSA/TRI April 2012 (04-12) Installation Manual and Table 1 herein.

6.5.2 Elastoflex S6 G or S6 G FR shall be fully asphalt-applied to the substrates noted in Section 5.6. Side laps shall be minimum 3-inch and end-laps minimum 6-inch wide, off-set 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 Polyflex G or G FR:**

6.6.1 Polyflex G or G FR shall be installed in compliance with current Polyglass published installation requirements. For use in tile applications, reference is made to FRSA/TRI April 2012 (04-12) Installation Manual and Table 1 herein.

6.6.2 Polyflex G or G FR shall be fully torch-applied to the substrates noted in Section 5.6. Side laps shall be minimum 3-inch and end-laps minimum 6-inch wide, off-set 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.

**6.7 Tile Staging:**

6.7.1 Tile shall be loaded and staged in a manner that prevents tile slippage and/or damage to the underlayment. Refer to Polyglass published requirements for tile staging.

- 6.7.2 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.
- 6.7.3 For nail-on tile systems over Polystick MTS, battens are required for loading / staging of the tile.
- 6.7.4 For nail-on tile systems over Polystick MTS PLUS:
  - Battens are required for loading/staging of lugged tile regardless of slope.
  - Battens are required for loading/staging of flat tile at slopes in excess of 5:12.
- 6.7.5 The minimum cure time after installation of self-adhering membranes and before loading of roofing tiles is forty-eight (48) hours.

**7. BUILDING PERMIT REQUIREMENTS:**

As required by the Building Official or Authority Having Jurisdiction 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. Rule 61G20-3 QA requirements.

**9. QUALITY ASSURANCE ENTITY:**

UL, LLC – QUA9625; (314) 578-3406; k.chancellor@us.ul.com

**- END OF EVALUATION REPORT -**





# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)  
4/10/2017

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.

**IMPORTANT:** If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

<b>PRODUCER</b> Sihle Insurance Group, Inc. 1021 Douglas Avenue Altamonte Springs FL 32714	<b>CONTACT NAME:</b> Certificate Department <b>PHONE (A/C, No, Ext):</b> 407-869-5490 <b>E-MAIL ADDRESS:</b> Certificates@sihle.com	<b>FAX (A/C, No):</b> 407-389-3580
	<b>INSURER(S) AFFORDING COVERAGE</b>	
<b>INSURED</b> GEORPBA-01 George P Barnett, Inc. 2842 Gleason Avenue Orlando FL 32826	<b>INSURER A:</b> Arch Specialty Insurance Co. <span style="float: right;">NAIC # 21199</span>	
	<b>INSURER B:</b>	
	<b>INSURER C:</b>	
	<b>INSURER D:</b>	
	<b>INSURER E:</b>	
	<b>INSURER F:</b>	

**COVERAGES** **CERTIFICATE NUMBER: 404844032** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PROJECT <input type="checkbox"/> LOC <input type="checkbox"/> OTHER:			AGL0029603	7/25/2016	7/25/2017	EACH OCCURRENCE \$1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$100,000 MED EXP (Any one person) \$10,000 PERSONAL & ADV INJURY \$1,000,000 GENERAL AGGREGATE \$1,000,000 PRODUCTS - COMP/OP AGG \$1,000,000 \$
	<b>AUTOMOBILE LIABILITY</b> <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS						COMBINED SINGLE LIMIT (Ea accident) \$ BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
	<input type="checkbox"/> UMBRELLA LIAB <input type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$						EACH OCCURRENCE \$ AGGREGATE \$ \$
	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b> ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? <input type="checkbox"/> Y <input checked="" type="checkbox"/> N (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below			N/A			PER STATUTE <input type="checkbox"/> OTH-ER <input type="checkbox"/> E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

<b>CERTIFICATE HOLDER</b> City of Belle Isle 1600 Nela Avenue Belle Isle FL 32809	<b>CANCELLATION</b> SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE 



JEFF ATWATER  
CHIEF FINANCIAL OFFICER

STATE OF FLORIDA  
DEPARTMENT OF FINANCIAL SERVICES  
DIVISION OF WORKERS' COMPENSATION

**\*\* CERTIFICATE OF ELECTION TO BE EXEMPT FROM FLORIDA WORKERS' COMPENSATION LAW \*\***

**CONSTRUCTION INDUSTRY EXEMPTION**

This certifies that the individual listed below has elected to be exempt from Florida Workers' Compensation law.

**EFFECTIVE DATE:** 7/5/2016      **EXPIRATION DATE:** 7/5/2018  
**PERSON:** BARNETT      GEORGE      P  
**FEIN:** 550856303

**BUSINESS NAME AND ADDRESS:**

GEORGE P BARNETT INC

2842 GLEASON AVE

ORLANDO      FL      32826

**SCOPES OF BUSINESS OR TRADE:**

LICENSED ROOFING  
CONTRACTOR

Pursuant to Chapter 440.05(14), F.S., an officer of a corporation who elects exemption from this chapter by filing a certificate of election under this section may not recover benefits or compensation under this chapter. Pursuant to Chapter 440.05(12), F.S., Certificates of election to be exempt... apply only within the scope of the business or trade listed on the notice of election to be exempt. Pursuant to Chapter 440.05(13), F.S., Notices of election to be exempt and certificates of election to be exempt shall be subject to revocation if, at any time after the filing of the notice or the issuance of the certificate, the person named on the notice or certificate no longer meets the requirements of this section for issuance of a certificate. The department shall revoke a



**STATE OF FLORIDA  
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION**

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

(850) 487-1395

**BARNETT, GEORGE PATRICK  
GEORGE P BARNETT INC  
2842 GLEASON AVE  
ORLANDO FL 32826**

Congratulations! With this license you become one of the nearly one million Floridians licensed by the Department of Business and Professional Regulation. Our professionals and businesses range from architects to yacht brokers, from boxers to barbeque restaurants, and they keep Florida's economy strong.

Every day we work to improve the way we do business in order to serve you better. For information about our services, please log onto [www.myfloridalicense.com](http://www.myfloridalicense.com). There you can find more information about our divisions and the regulations that impact you, subscribe to department newsletters and learn more about the Department's initiatives.

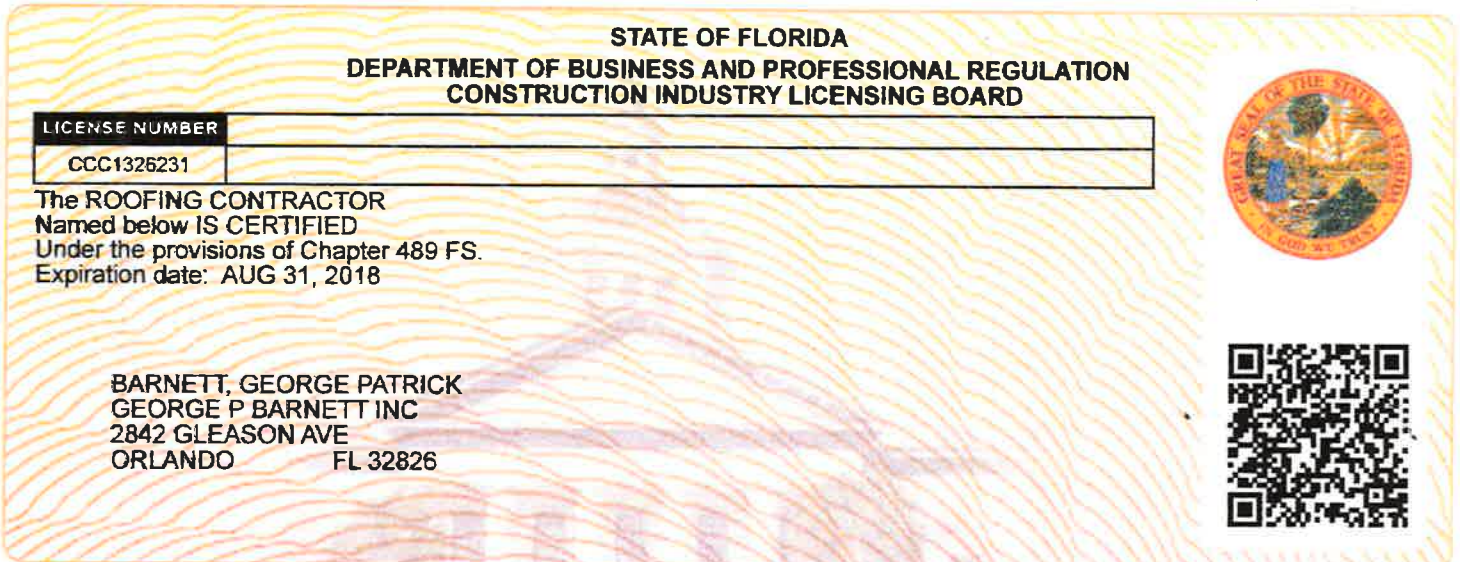
Our mission at the Department is: License Efficiently, Regulate Fairly. We constantly strive to serve you better so that you can serve your customers. Thank you for doing business in Florida, and congratulations on your new license!



DETACH HERE

RICK SCOTT, GOVERNOR

KEN LAWSON, SECRETARY



ISSUED: 05/10/2016

DISPLAY AS REQUIRED BY LAW

SEQ # L1605100001155

# Scott Randolph, Tax Collector

# Local Business Tax Receipt

# Orange County, Florida

This 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 other lawful authorities. This receipt is valid from October 1 through September 30 of receipt year. **Delinquent penalty is added October 1.**

5000 BUSINESS OFFICE      2016      EXPIRES      9/30/2017      5000-0579418  
\$30.00      1      EMPLOYEE

TOTAL TAX      \$30.00  
PREVIOUSLY PAID      \$30.00  
TOTAL DUE      \$0.00

2842 GLEASON AV (MOBILE)  
U - ORLANDO, 32826

PAID: \$30.00      0098-00720665      7/7/2016



• BARNETT GEORGE P PRESIDENT

GEORGE P BARNETT INC  
2842 GLEASON AVE  
ORLANDO FL 32826-3864

This receipt is official when validated by the Tax Collector.



---

**Susan Manchester**

**From:** Susan Manchester  
**Sent:** Friday, April 14, 2017 3:41 PM  
**To:** 'PatBarnett55@gmail.com'  
**Cc:** CobiPermits  
**Subject:** 6320 Gibson Dr - roof permit 2017-04-05 needs underlayement code - George P Barnett Inc

Hello,

Please forward me the FL PA code for the underlayement.

Thank you,



*Susan Manchester*

Permit Administration  
Building Inspection Department  
Universal Engineering Sciences, Inc.

3532 Maggie Blvd.

Orlando, FL 32811

Phone: 407-581-8161

Fax: 407-581-0313

Email: [smanchester@universalengineering.com](mailto:smanchester@universalengineering.com)



**UNIVERSAL  
ENGINEERING SCIENCES**

Consultants In: Geotechnical Engineering • Environmental Sciences  
Geophysical Services • Construction Materials Testing • Thermal Inspection  
Building Inspection • Plan Review • Building Code Administration

✓ 4-18-17  
David