



**City of Belle Isle Job Site Card Roof PERMIT 2018-08-051**

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

Permit Number 2018-08-051

Issue Date 8/21/2018

Site Address: 6633 The Landings Dr 32812

Parcel Number: 20-23-30-4980-00-320

Class: Residential

Subdivision:

Description of Work: **Re-roof 5000 SQFT - Asphalt Shingles**

Issued To: ROOF COMMANDER, INC.

Business Phone: 352 459-599

Name: LOSIK, BRANDON LEONARD

Contractor License: CCC1330061

Payment Date & Method: **8 / 22 / 2018**  Picked up by \_\_\_\_\_

Visa  Master Card  Amex  Discover  Check / Money Order # 4207

Schedule Inspections via Email at: [BI DScheduling@universalengineering.com](mailto:BI DScheduling@universalengineering.com)

**SCHEDULE INSPECTIONS BY 3:00 PM CUT OFF TIME**

**Inspection Results Will Be Sent Out the Following Business Day**

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

**ROOF INSPECTOR DATE COMMENTS**

<b>NEW ROOFS ONLY</b> Code 700 Deck Nailing, Dry-In, Flashing			
<b>Both new &amp; re-roof</b> Code 710 In - Progress			
<b>Both new &amp; re-roof</b> Code 720 Final			

Inspection requests are to be emailed to [BI DScheduling@UniversalEngineering.com](mailto:BI DScheduling@UniversalEngineering.com); a confirmation email will be sent back to you upon scheduling.

**Next-Day Inspection requests must be made by 3:00 p.m.**

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.



# 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)

**PAID**  
AUG 20 2018

## 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: 8/15/18 ROOF PERMIT NUMBER 2018-08-051

PLEASE PRINT. The undersigned hereby applies for a permit to make installations as indicated below:

Project Address 6633 The Landing Dr, Belle Isle, FL 32809 32812  
Property Owner Rick Morgan Phone 407-234-6355  
Property Owner's Mailing Address 322 East Pine St city Orlando  
State FL Zip Code 32801 Parcel Id Number: 20-23-30-4980-00-320

REQUIRED! To obtain this information, please visit <http://www.ocpafl.org/Searches/ParcelSearch.aspx>

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

**PAID**  
8-22-2018  
WUSA 4207  
IS = 15,000

- REQUIRED!** Florida Product Approval Screen Printout from [www.floridabuilding.org](http://www.floridabuilding.org) for the Covering & Underlayment Products

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

Roof Square Footage: 5000 Number of Stories: 2 Job Valuation: \$ 13,939  
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 [Signature] LICENSE # CCC1330061  
LICENSE HOLDER NAME Brandon Lobik COMPANY NAME Roof Commander  
Street Address 41680 Lake Industrial Blvd  
City Tavares State FL Zip Code 32778 Phone Number (352) 459-7599  
Email Address Admin@RoofCommander.com  
Zoning Fee \$ ?

(Date pre-approved on bldg plans)  
Building Official: SM Date 8-21-18  
Verified Contractor's Licenses & Insurance are on file f Date 8-21-2018

Building Fee \$ 95.-  
Review Fee \$ 47.50  
1% BCAIB Fee \$ 2.11M  
1.5% DCA Fee \$ 2.14  
Total Permit Fee \$ 146.64

PENDING VOC N/A

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.  
157 116 25  
SKL4  
Building Permit Number 2018-04-001  
(VOC on file)





**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)



## Product Approval Form

DATE: 8/15/18

PERMIT # 2018-08-051

PROJECT ADDRESS 6633 The Landings Dr., Belle Isle, FL 32809 32812

As required by Florida Statute 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>			
<input checked="" type="checkbox"/> Swingng				Sliding			
<input checked="" type="checkbox"/> Sliding				Soffits			
Sectional/Rollup				Storefront			
Other				Glass Block			
				Other			
<b>WINDOWS</b>				<b>ROOFING PRODUCTS</b>			
<input checked="" type="checkbox"/> Single/Dbf Hung				<input checked="" type="checkbox"/> Asphalt Shingles	Certainted	Landmark	FL 5444-212
Horizontal Slider				Non Struct Metal			
Casement				Roofing Tiles			
Fixed				Single Ply Roof			
Mullion				<input checked="" type="checkbox"/> Underlayment	Interwrap	Rhino 420	FL-1521b-123
Skylights				Other			
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 Tiffany Acuna

Date 8/15/18



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**Product Approval**  
USER: Public User

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 **Application Detail**

OFFICE OF THE SECRETARY

FL #	FL5444-R14	
Application Type	Revision	
Code Version	2017	
Application Status	Approved	
Comments		
Archived	<input type="checkbox"/>	
Product Manufacturer	CertainTeed Corporation-Roofing	
Address/Phone/Email	20 Moores Road Malvern, PA 19355 (610) 893-5400 mark.d.harner@saint-gobain.com	
Authorized Signature	Mark Harner mark.d.harner@saint-gobain.com	
Technical Representative	Mark D. Harner 18 Moores Road Malvern, PA 19355 (610) 651-5847 Mark.D.Harner@saint-gobain.com	
Quality Assurance Representative		
Address/Phone/Email		
Category	Roofing	
Subcategory	Asphalt Shingles	
Compliance Method	Evaluation Report from a Florida Registered Architect or a Licensed Florida Professional Engineer <input type="checkbox"/> 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	03/09/2020	
Validated By	John W. Knezevich, PE <input checked="" type="checkbox"/> Validation Checklist - Hardcopy Received	
Certificate of Independence	<a href="#">FL5444 R14 COI 2018 01 COI NIEMINEN.pdf</a>	
Referenced Standard and Year (of Standard)	<b>Standard</b> ASTM D3161 ASTM D3462 ASTM D7158	<b>Year</b> 2016 2010 2011
Equivalence of Product Standards Certified By		
Sections from the Code		
Product Approval Method	Method 1 Option D	
Date Submitted	05/30/2018	

Date Validated 06/05/2018  
 Date Pending FBC Approval 06/07/2018  
 Date Approved 08/15/2018

**Summary of Products**

FL #	Model, Number or Name	Description
5444.1	CertainTeed Asphalt Roof Shingles	3-tab, 4-tab, strip (no-cut-outs), laminated and architectural asphalt roof shingles
<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: Refer to ER Section 5 for Limits of Use		<b>Installation Instructions</b> <a href="#">FL5444 R14 II 2018 05 FINAL ER CERTAINTEED ASPHALT SHINGLES FL5444-R14.pdf</a> Verified By: Robert Nieminen, PE PE-59166 Created by Independent Third Party: Yes <b>Evaluation Reports</b> <a href="#">FL5444 R14 AE 2018 05 FINAL ER CERTAINTEED ASPHALT SHINGLES FL5444-R14.pdf</a> Created by Independent Third Party: Yes

[Back](#) [Next](#)

Contact Us :: [2601 Blair Stone Road, Tallahassee FL 32399 Phone: 850-487-1824](#)

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Under Florida law, email addresses are public records. If you do not want your e-mail address released in response to a public-records request, do not send electronic mail to this entity. Instead, contact the office by phone or by traditional mail. If you have any questions, please contact 850.487.1395. \*Pursuant to Section 455.275 (1), Florida Statutes, effective October 1, 2012, licensees licensed under Chapter 455, F.S. must provide the Department with an email address if they have one. The emails provided may be used for official communication with the 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](#).



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**NEMO|etc.**

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

ENGINEER

EVALUATE

TEST

CONSULT

CERTIFY

**EVALUATION REPORT**

**CertainTeed Corporation**

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

Evaluation Report 3532.09.05-R15

FL5444-R14

Date of Issuance: 09/22/2005

Revision 15: 05/29/2018

**SCOPE:**

This Evaluation Report is issued under **Rule 61G20-3** and the applicable rules and regulations governing the use of construction materials in the State of Florida. The documentation submitted has been reviewed by Robert Nieminen, P.E. for use of the product under the Florida Building Code and Florida Building Code, Residential Volume. The products described herein have been evaluated for compliance with the **6<sup>th</sup> Edition (2017) Florida Building Code** sections noted herein.

**DESCRIPTION: CertainTeed Asphalt Roof Shingles.**

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

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

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

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

This Evaluation Report consists of pages 1 through 15.

**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 05/29/2018. This does not serve as an electronically signed document.

**CERTIFICATION OF INDEPENDENCE:**

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





ROOFING SYSTEMS EVALUATION:

1. SCOPE:

Product Category: Roofing
Sub-Category: Asphalt Shingles

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

2. STANDARDS:

Table with 4 columns: Section, Property, Standard, Year. Rows include 1507.2.5, R905.2.4; 1507.2.7.1, R905.2.6.1; 1507.2.7.1, R905.2.6.1.

3. REFERENCES:

Table with 4 columns: Entity, Examination, Reference, Date. Lists various UL (TST 1740) and UL LLC (TST 9628) references with corresponding examination standards and dates.



#### 4. PRODUCT DESCRIPTION:

##### 4.1 Asphalt Shingles:

- 4.1.1 **CT20™, XT™ 25, XT™ 30 and XT™ 30 IR** are fiberglass reinforced, 3-tab asphalt roof shingles.
- 4.1.2 **Arcadia™, Belmont®, Belmont® IR, Carriage House Shingle®, Grand Manor Shangle®, Landmark™, Landmark™ IR, Landmark™ Pro, Landmark™ Pro Solaris, Landmark™ Premium, Landmark™ TL, Landmark™ Solaris, Landmark™ Solaris IR and Landmark™ Solaris Gold/Platinum** are fiberglass reinforced, laminated asphalt roof shingles.
- 4.1.3 **NorthGate™** is a fiberglass reinforced, laminated, SBS modified bitumen roof shingle.
- 4.1.4 **Presidential Shake™, Presidential Shake™ IR, Presidential Shake TL™ and Presidential Solaris™** are fiberglass reinforced, architectural asphalt roof shingles.
- 4.1.5 **Hatteras™, Highland Slate™ and Highland Slate™ IR** are fiberglass reinforced, 4-tab asphalt roof shingles.
- 4.1.6 **Patriot™** is a fiberglass reinforced asphalt roof strip-shingle (with no cut-outs) providing a laminated appearance through an intermittent shadow line with contrasting blend drops for color definition.

##### 4.2 Hip & Ridge Shingles:

- 4.2.1 **Presidential Accessory, Accessory for Hatteras, Shangle Ridge™, Shadow Ridge™, Cedar Crest™, Cedar Crest™ IR, NorthGate Ridge and NorthGate Accessory** are fiberglass reinforced accessory shingles for hip and ridge installation.

##### 4.3 Accessory Starter Strips:

- 4.3.1 **High-Performance Starter** is a starter shingle, measuring 10" x 36", comprised of a fiber glass mat base and ceramic-coated mineral granules embedded in asphalt. These starter shingles are designed for use with **Grand Manor Shangle®, Hatteras™ and Highland Slate™**.
- 4.3.2 **Presidential Starter** is a starter shingle, measuring 13-1/4" x 40" (overall), comprised of a fiber glass mat base and ceramic-coated mineral granules embedded in asphalt with a reinforcement on its underside (for impact resistance considerations). These starter shingles, applied using two (2) overlapping layers, are designed for use with **Presidential Shake™ and Presidential Shake TL™**.
- 4.3.3 **Presidential Starter IR** is a starter shingle, measuring 13-1/4" x 40" (overall), comprised of a fiber glass mat base and ceramic-coated mineral granules embedded in asphalt. These starter shingles, applied using two (2) overlapping layers, are designed for use with **Presidential Shake™ IR**.
- 4.3.4 **SwiftStart® Starter Shingle** is a starter strip for asphalt roof shingles. Its overall size of 15-1/4" x 38-3/4" yields two (2) 7-5/8" x 38-3/4" starter pieces per shingle.
- 4.3.5 **Universal Starter** is a starter shingle, measuring 7" x 36" (overall), comprised of a fiber glass mat base and ceramic-coated mineral granules embedded in asphalt. These starter shingles are designed for use with any CertainTeed shingle measuring 12" x 36" having a weather exposure  $\leq 5"$ .
- 4.4 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 NEMO|etc. nor Robert Nieminen, P.E. are, in any way, the Designer of Record for any project on which this Evaluation Report, or previous versions thereof, is/was used for permitting or design guidance unless retained specifically for that purpose.
- 5.2 This Evaluation Report is not for use within FBC HVHZ jurisdictions.
- 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). Refer to Section 6 for installation requirements to meet this wind rating.
- 5.4.3 **High-Performance Starter, Presidential Starter, Presidential Starter IR, SwiftStart® Starter Shingle and Universal Starter** have been evaluated in accordance with **ASTM D3161, Class F**. Refer to Section 6 for installation requirements to meet this wind rating.
- 5.4.3.1 **High-Performance Starter** shingles are limited to use with **Grand Manor Shangle®, Hatteras™** and **Highland Slate™** shingles.
- 5.4.3.2 **Presidential Starter** shingles must be applied using two (2) overlapping layers and are limited to use with **Presidential Shake™** and **Presidential Shake TL™** shingles.
- 5.4.3.3 **Presidential Starter IR** shingles must be applied using two (2) overlapping layers and are limited to use with **Presidential Shake™ IR** shingles.
- 5.4.3.4 **Universal Starter** shingles are limited to use with CertainTeed shingles measuring 12" x 36" having a weather exposure  $\leq 5"$ .
- 5.4.4 Classification by **ASTM D7158** applies to **exposure category B or C** and a **building height of 60 feet or less**. Calculations by a qualified design professional are required for conditions outside these limitations. Contact the shingle manufacturer for data specific to each shingle.
- 5.4.4.1 **Analysis in accordance with ASTM D7158** indicates the measured uplift resistance ( $R_T$ ) for the CertainTeed asphalt Roof shingles listed in Section 4.1.1 through 4.1.6 (*except Presidential Solaris™, Landmark™ Pro Solaris and Landmark™ Solaris Gold/Platinum*) 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 **FAC Rule 61G20-3**.

**6. INSTALLATION:**

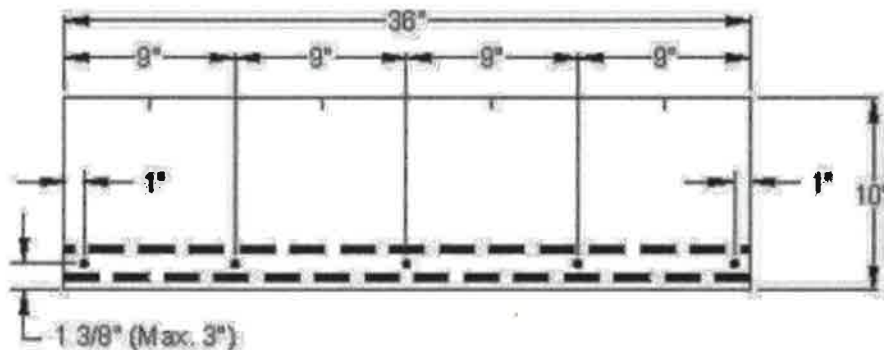
- 6.1 Roof deck, slope, underlayment and fasteners shall comply with **FBC 1507.2 / R905.2** and the shingle manufacturer's minimum requirements.
- 6.1.1 Underlayment shall be acceptable to **CertainTeed Corporation** and shall hold current Florida Statewide Product Approval, or be Locally Approved per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

**6.4 HIGH-PERFORMANCE STARTER:**

6.4.1 Eaves: For the first starter shingle in each roof corner, use five (5) nails as shown below. All other starter shingles require four (4) nails per shingle. Nails must be of sufficient length to penetrate into the deck 3/4" or through the thickness of the decking, whichever is less. Nails are to be 11 or 12 gauge, corrosion-resistant roofing nails with 3/8" heads. Apply the 10" starter shingle with its factory-applied sealant stripes at the shingle's lower-most edge and nail firmly into the roof deck as near as possible \*(maximum 3") to the eaves edge while avoiding the sealant. With the starter shingle well fastened to the deck and the sealant low on the starter shingle, it can firmly adhere to the first course shingles. \*If nailing within 3" is not possible, nail as closely as possible, then lift and adhere the starter shingle to the underlayment and to the supporting structure with CertainTeed FlintBond™ Asphalt Roofing Cement-Caulk Grade, or approved equal.

Rakes: Prior to installation of the field shingles, starter shingles may be applied up the slope along the rake edge with sealant edge placed closest to the rake edge. Fasten as indicated below.

**HIGH-PERFORMANCE STARTER SHINGLES**

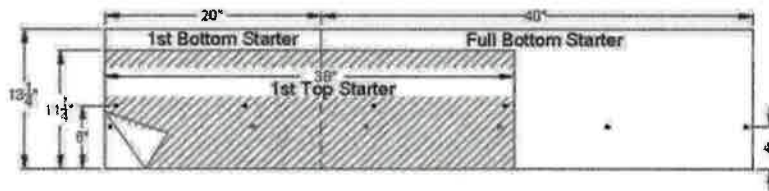


**6.5 PRESIDENTIAL STARTER AND PRESIDENTIAL STARTER IR:**

6.5.1 General: These shingles shall be applied by using two (2) overlapping layers. Begin application of the bottom/lower layer of starter shingles by cutting and applying a 13-3/4" x 20" piece at the lower left rake/eaves corner overhanging rakes and eaves 1/4" to 3/4". Continue along the eaves with full-size 13-1/4" x 40" starter shingles. Each top/upper starter course shingle shall have its 2" top section removed at the perforations, resulting in 11-1/4" x 40" shingles. The colored granule portion of the "top" starter shingles shall be located nearest the lowermost eave edge. Install the first top/upper starter shingle so that it is flush to the left side and bottom edges of the first bottom/lower starter shingle. This first top/upper starter shingle shall be 11-1/4" x 38". Continue along the eaves with 11-1/4" x 40" top/upper starter shingles ensuring that the lower edges are flush with the lower edges of the bottom/lower layer. Reference the product's wrapper for more specific details.

Eaves: Fasten as shown below. Rakes: After applying the starter shingles at the eaves, but prior to installing the field shingles, starter shingles may be applied up the slope at the rake edge. Fasten as shown below.

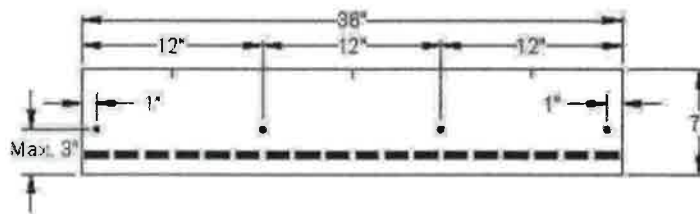
Fastening: Four nails are required per shingle. Nails shall be of sufficient length to penetrate into the deck 3/4" or through the thickness of the decking, whichever is less. Nails are to be 11 or 12 gauge, corrosion-resistant roofing nails with 3/8" heads.

**Presidential Starter and Presidential IR Starter Shingles**

**6.6 UNIVERSAL STARTER:**

6.6.1 General: While Universal Starter Strip shingles are specifically designed to be used with shingles 36" length and having a weather exposure of  $\leq 5"$ , they may be installed beneath shingles of any length if special precautions are taken. **IMPORTANT:** In all cases the end joints of the starter and the first course shingles shall NEVER BE LESS THAN 3-1/2" apart.

Eaves: The sealant on starter courses should face out and lie as close as possible to the eaves edge of the roof. Fasten as described below. Rakes: After applying the starter shingles at the eaves, but prior to installing the field shingles, starter shingles may be applied up the slope at the rake edge with sealant facing out and nearest to the outer roof edge. Fasten as described below.

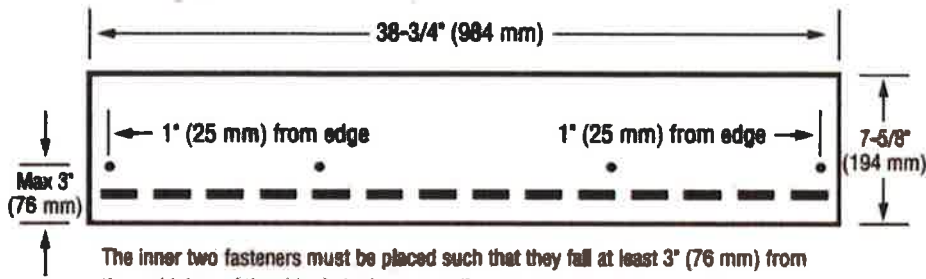
Fastening: Use four nails on these starter shingles as shown below. The sealant on starter courses shall lie as close as possible to the eaves edge of the roof. Nails shall be of sufficient length to penetrate into the deck 3/4" or through the thickness of the decking, whichever is less. Nails are to be 11 or 12 gauge, corrosion-resistant roofing nails with 3/8" heads.

**UNIVERSAL STARTER SHINGLES**




6.7 SWIFTSTART® STARTER SHINGLE:

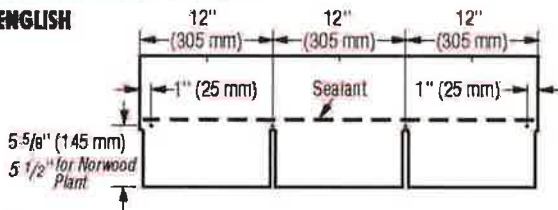
Fastening: Use four nails, located as shown below



6.8 CT20™, XT™ 25, XT™ 30, XT™ 30 IR:

LOW AND STANDARD SLOPE

ENGLISH



METRIC

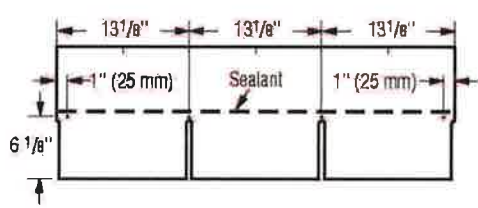
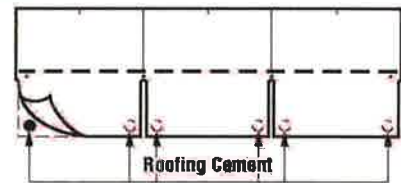


Figure 11-3: Use four nails for every full shingle.

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.

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

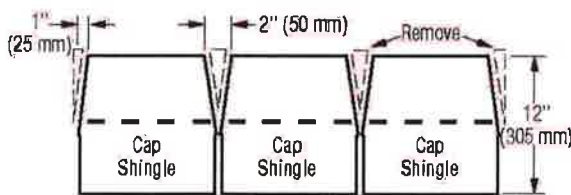


Figure 11-24: Cut tabs, then trim back to make cap shingles (English dimensions shown).

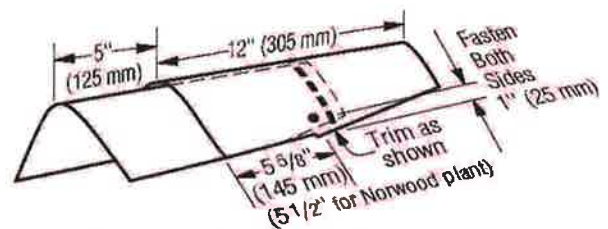


Figure 11-25: Installation of caps along the hips and ridges.

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



**6.9 ARCADIA™:**

**LOW AND STANDARD SLOPE**

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

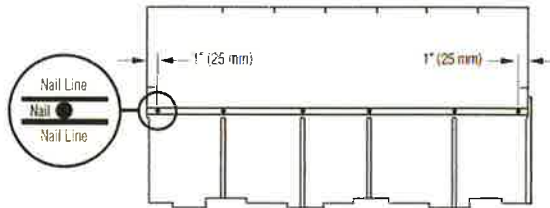


Figure 2: Use six nails for every full shingle.

**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.

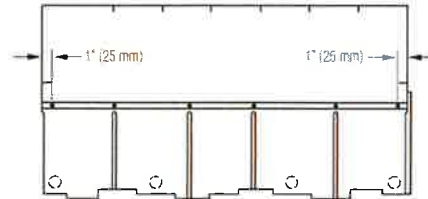
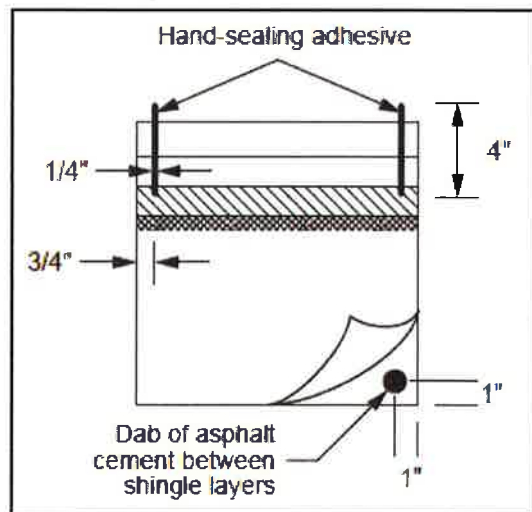
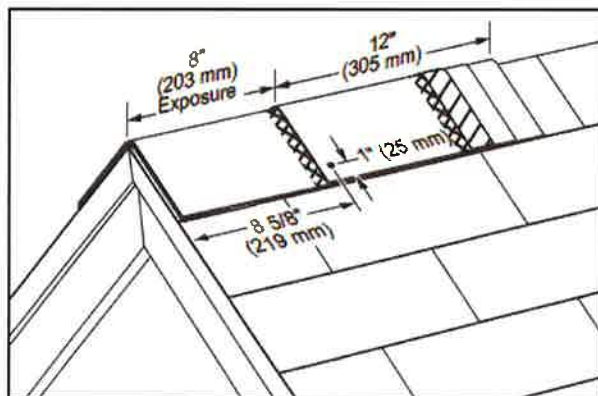


Figure 3: Use six nails and four spots of asphalt roofing cement on steep slopes.

**6.9.1 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.

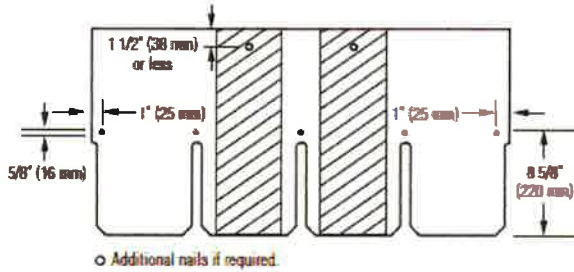




6.10 BELMONT® OR BELMONT® IR:

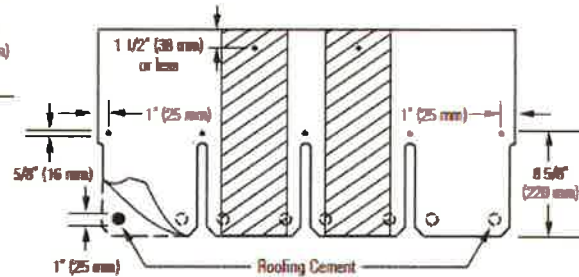
**Low and Standard Slope (2:12 to 21:12):**

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



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

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



6.10.1 **Hip & Ridge for Belmont® or Belmont® IR:**

6.10.1.1 **Option 1:** For Belmont®, refer to instructions herein for Cedar Crest™ or Cedar Crest™ IR hip and ridge shingles. For Belmont® IR, refer to instructions herein for Cedar Crest™ IR hip and ridge shingles.

6.10.1.2 **Option 2:** For Belmont®: Shangle® Ridge

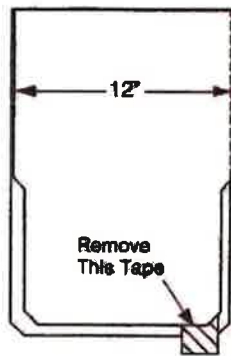


Figure 17-18: Shangle® Ridge.

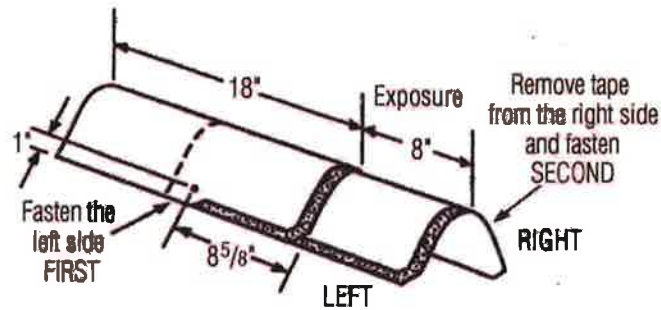


Figure 17-19: Installation of Shangle® Ridge shingles on hips and ridges.

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 CARRIAGE HOUSE SHANGLE® AND GRAND MANOR SHANGLE®:

**LOW AND STANDARD SLOPE**

Use five nails for every full Shingle.

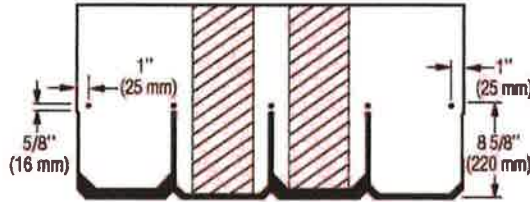


Figure 17-4: Use five nails for every full Grand Manor Shingle, Carriage House Shingle, or Centennial Slate.

**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 D4586 Type II is suggested.

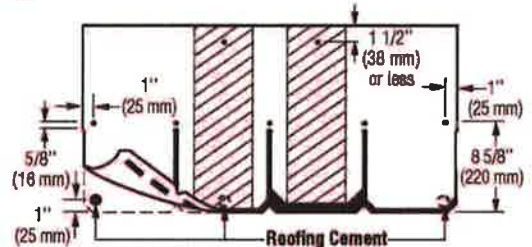
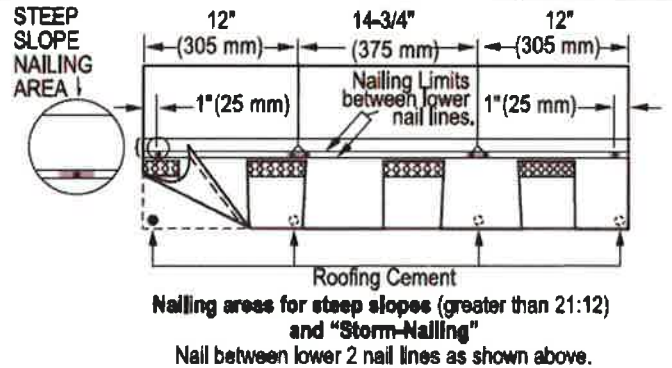
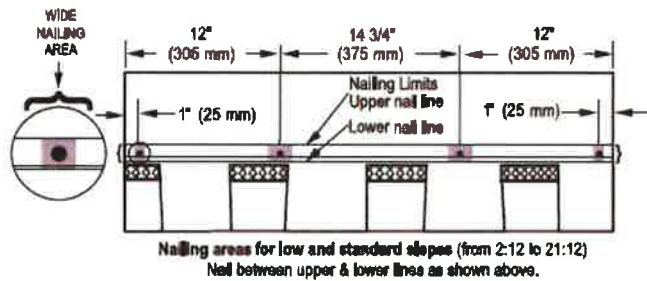


Figure 17-5: When installing Grand Manor Shingles on steep slopes, use seven nails and three spots of asphalt roofing cement.

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

6.12 LANDMARK™, LANDMARK™ IR, LANDMARK™ PRO, LANDMARK™ PRO SOLARIS, LANDMARK™ PREMIUM, LANDMARK™ SOLARIS, LANDMARK™ SOLARIS IR, LANDMARK™ SOLARIS GOLD/PLATINUM OR NORTHGATE:



6.12.1 **Hip & Ridge for Landmark™, Landmark™ IR, Landmark™ Pro, Landmark™ Pro Solaris, Landmark™ Premium, Landmark™ Solaris, Landmark™ Solaris IR, Landmark™ Solaris Gold/Platinum or NorthGate:**

6.12.1.1 **Option 1:** Shadow Ridge™ or NothGate Accessory

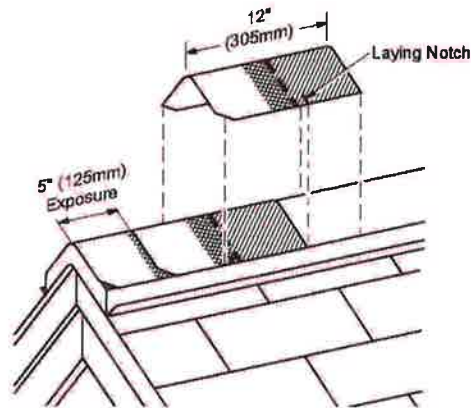
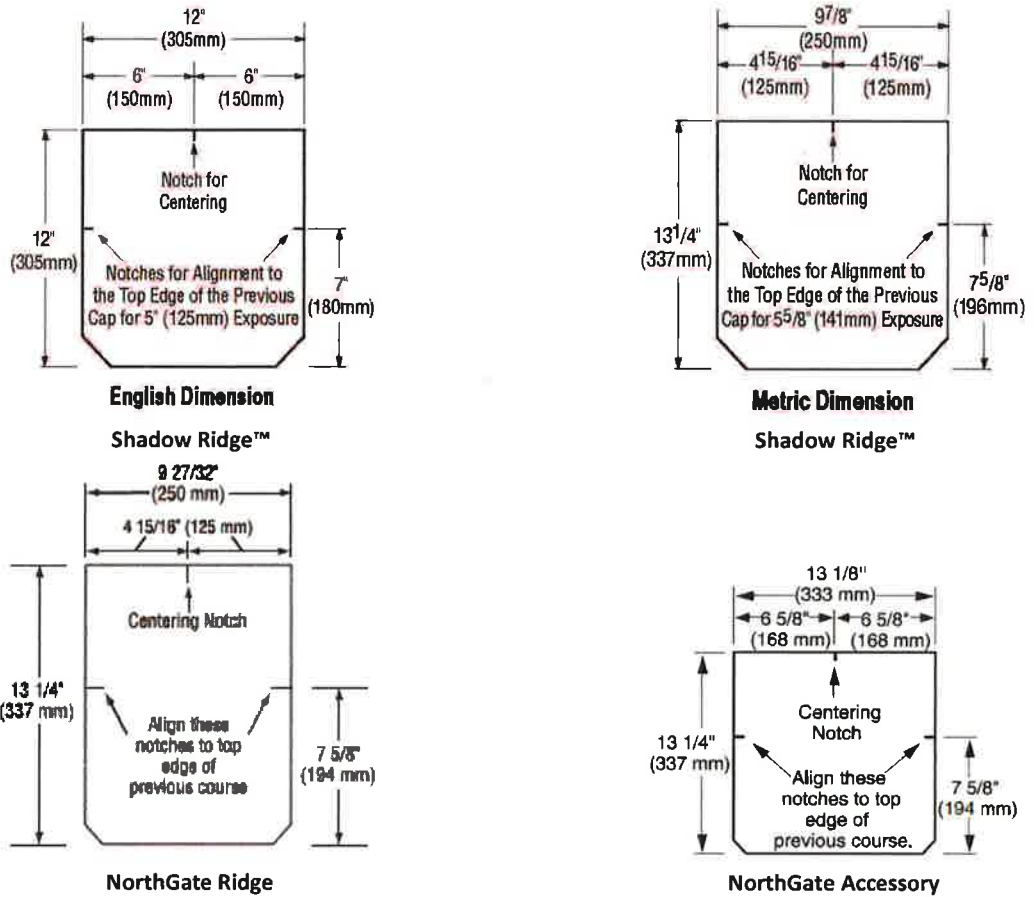


Figure 13-20: Use laying notches to center shingles on hips and ridges, and to locate the correct exposure.

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

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





6.13 LANDMARK™ TL:

LANDMARK TL

LANDMARK TL

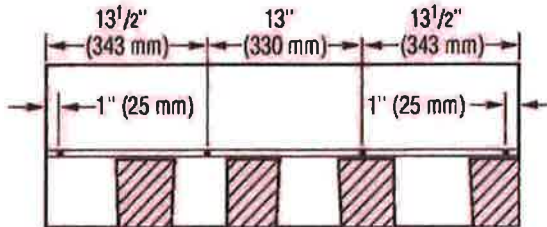


Figure 13-4: Use four nails for every full shingle.

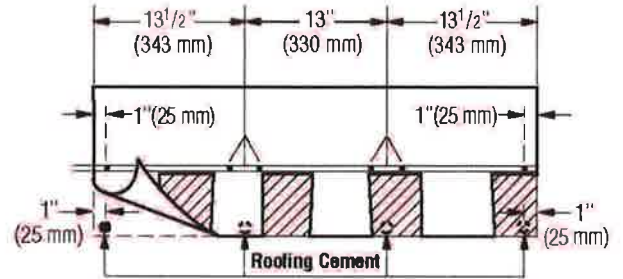


Figure 13-5: Use six nails and four spots of asphalt roofing cement on steep slopes.

6.13.1 Hip & Ridge for Landmark™ TL: Refer to Option 1 or 2 for Landmark™.

6.14 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.

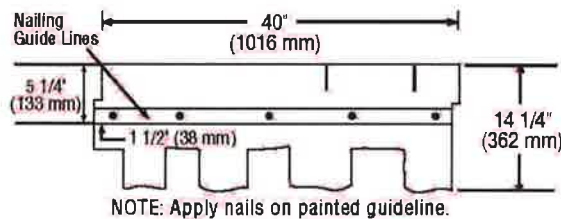


Figure 16-6: Fastening Presidential and Presidential TL Shake shingles on low and standard slopes.

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.

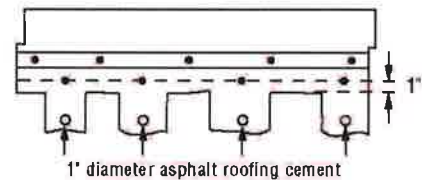


Figure 16-7: Fastening Presidential and Presidential TL Shake shingles on steep slopes.

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

6.14.1.1 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.

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

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



6.15 HATTERAS™:

LOW, STANDARD AND STEEP SLOPE:

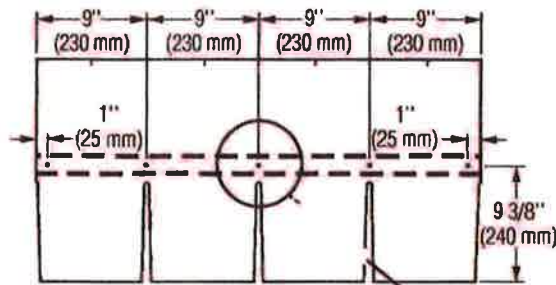


Figure 15-3: Fastening Hatteras Shingles on Low and Standard Slopes

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

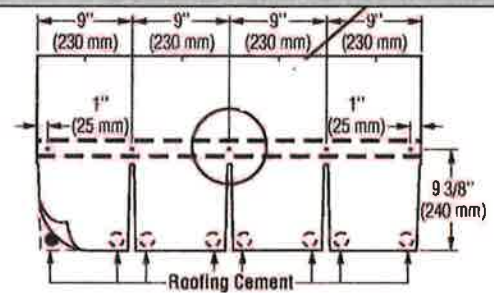


Figure 15-4: Fastening Hatteras Shingles on Steep Slopes

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.

6.15.1 Hip & Ridge for Hatteras™:

6.15.1.1 Option 1: Accessory for Hatteras

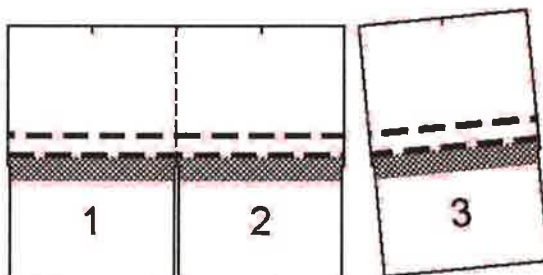
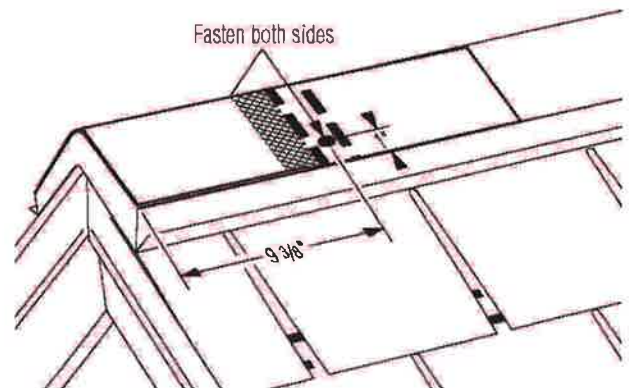


Figure 15-14: 18 three-piece units separate to make 54 Hatteras Accessory shingles.



6.15.1.2 Option 2: Cut Hatteras Shingles

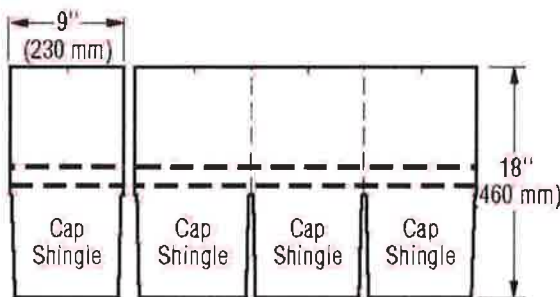


Figure 15-20: Cut Hatteras shingles to make cover cap.

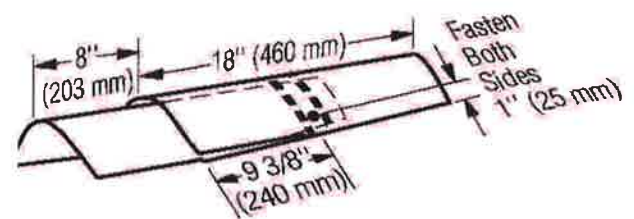


Figure 15-21: Installation of caps along hips and ridges.

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



6.16 HIGHLAND SLATE™, HIGHLAND SLATE™ IR:

LOW AND STANDARD SLOPE:

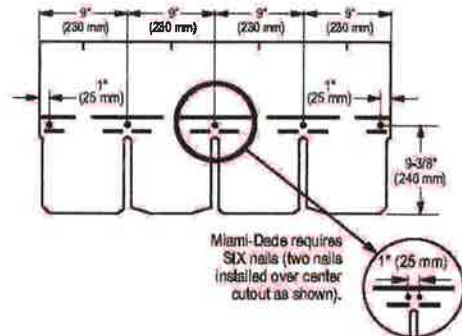


Figure 11-3: Use FIVE nails for every Highland Slate shingle.

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.

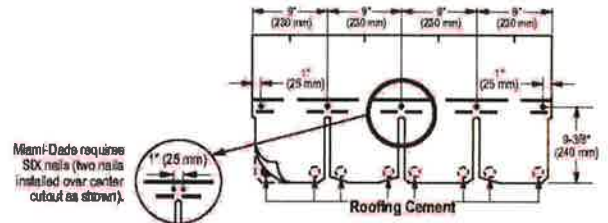


Figure 11-3A: Use FIVE nails and eight spots of asphalt roofing cement under each tab corner.

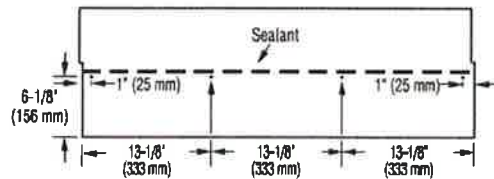
\*CAUTION: Excessive use of roofing cement can cause shingles to blister.

6.16.1 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.

6.17 PATRIOT™:

LOW AND STANDARD SLOPE

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

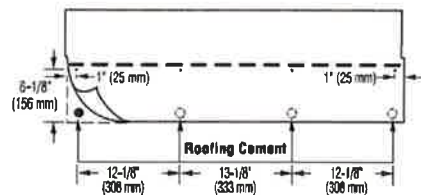


6.17.1 Hip & Ridge for Patriot™: Refer to instructions herein for Cedar Crest™, Cedar Crest™ IR, Shadow Ridge™, NorthGate or Shangle Ridge™ hip and ridge shingles.

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.





**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 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 -**





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**Product Approval**  
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 **Application Detail**

OFFICE OF THE SECRETARY

FL #	FL15216-R4	
Application Type	Revision	
Code Version	2017	
Application Status	Approved	
Comments		
Archived	<input type="checkbox"/>	
Product Manufacturer	Owens Corning Roofing and Asphalt, LLC	
Address/Phone/Email	One Owens Corning Parkway Toledo, OH 43645 (740) 321-6345 Greg.Keeler@owenscorning.com	
Authorized Signature	Keeler Greg Greg.Keeler@owenscorning.com	
Technical Representative	Greg Keeler	
Address/Phone/Email	2790 Columbus Road Granville, OH 43023 (740) 321-6345 greg.keeler@owenscorning.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 <input type="checkbox"/> Evaluation Report - Hardcopy Received	
Florida Engineer or Architect Name who developed the Evaluation Report	Robert Nieminen	
Florida License	PE-59166	
Quality Assurance Entity	Intertek Testing Services NA, Inc. - QA Entity	
Quality Assurance Contract Expiration Date	12/31/2020	
Validated By	John W. Knezevich, PE <input checked="" type="checkbox"/> Validation Checklist - Hardcopy Received	
Certificate of Independence	<a href="#">FL15216 R4 COI 2018 01 COI NIEMINEN.pdf</a>	
Referenced Standard and Year (of Standard)	<b>Standard</b> ASTM D1970 (tear) ASTM D226 (physicals) TAS 117(B)	<b>Year</b> 2015 2009 1995
Equivalence of Product Standards Certified By		
Sections from the Code		
Product Approval Method	Method 1 Option D	
Date Submitted	04/20/2018	

Date Validated 04/20/2018  
 Date Pending FBC Approval 04/22/2018  
 Date Approved 06/12/2018

**Summary of Products**

FL #	Model, Number or Name	Description
15216.1	RhinoRoof Underlayments	Synthetic roof 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 <b>Other:</b> See ER Section 5 for Limits of Use.		<b>Installation Instructions</b> <a href="#">FL15216 R4 II 2018 04 FINAL ER OWENS CORNING RHINOROOF FL15216-R4.pdf</a> Verified By: Robert Nieminen PE-59166 Created by Independent Third Party: Yes <b>Evaluation Reports</b> <a href="#">FL15216 R4 AE 2018 04 FINAL ER OWENS CORNING RHINOROOF FL15216-R4.pdf</a> Created by Independent Third Party: Yes

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**Product Approval Accepts:**



Credit Card  
**Safe**





**NEMO|etc.**

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

ENGINEER

EVALUATE

TEST

CONSULT

CERTIFY

**EVALUATION REPORT**

**Owens Corning Roofing and Asphalt, LLC**  
One Owens Corning Parkway  
Toledo, OH 43659  
**(740) 321-6345**

**Evaluation Report I40510.02.12-R4**  
**FL15216-R4**  
**Date of Issuance: 02/17/2012**  
**Revision 4: 04/19/2018**

**SCOPE:**

This Evaluation Report is issued under **Rule 61G20-3** and the applicable rules and regulations governing the use of construction materials in the State of Florida. The documentation submitted has been reviewed by Robert Nieminen, P.E. for use of the product under the Florida Building Code and Florida Building Code, Residential Volume. The products described herein have been evaluated for compliance with the **6<sup>th</sup> Edition (2017) Florida Building Code** sections noted herein.

**DESCRIPTION: RhinoRoof Underlayments**

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

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

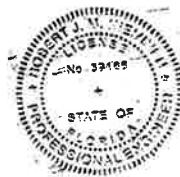
**ADVERTISEMENT:** The Evaluation Report number preceded by the words "NEMO|etc. Evaluated" may be displayed in advertising literature. If any portion of the Evaluation Report is displayed, then it shall be done in its entirety.

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

This Evaluation Report consists of pages 1 through 3.

**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 04/19/2018. This does not serve as an electronically signed document.

**CERTIFICATION OF INDEPENDENCE:**

1. NEMO ETC, LLC does not have, nor does it intend to acquire or will it acquire, a financial interest in any company manufacturing or distributing products it evaluates.
2. NEMO ETC, LLC is not owned, operated or controlled by any company manufacturing or distributing products it evaluates.
3. Robert Nieminen, P.E. does not have nor will acquire, a financial interest in any company manufacturing or distributing products for which the evaluation reports are being issued.
4. Robert Nieminen, P.E. does not have, nor will acquire, a financial interest in any other entity involved in the approval process of the product.
5. This is a building code evaluation. Neither NEMO|etc. 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:** **RhinoRoof Underlayments**, as produced by **Owens Corning Roofing and Asphalt, LLC**, has demonstrated compliance with the following sections of the **6<sup>th</sup> Edition (2017) Florida Building Code** through testing in accordance with applicable sections of the following Standards. Compliance is subject to the Installation Requirements and Limitations / Conditions of Use set forth herein.

**2. STANDARDS:**

Section	Properties	Standard	Year
1507.1.1, R905.1.1 Exception	Unrolling, Breaking Strength, Pliability	ASTM D226	2009
1507.1.1, R905.1.1 Exception	Tear Strength	ASTM D1970	2015
TAS 110	Pull-through resistance	TAS 117(B)	1995

**3. REFERENCES:**

Entity	Examination	Reference	Date
ITS (TST1509)	Physical Properties	100539395COQ-006	10/27/2011
ITS (TST1509)	Physical Properties	100539395COQ-002	10/27/2011
ITS (TST1509)	Physical Properties	100539395COQ-006	03/14/2014
PRI (TST5878)	ASTM D1970; Tear strength	OCF-330-02-02	10/03/2017
PRI (TST5878)	TAS 117(B); Pull-through	OCF-422-02-01	04/03/2018
ITS (QUA1673)	Quality Control	Service Confirmation	09/30/2017

**4. PRODUCT DESCRIPTION:**

- 4.1 **RhinoRoof U20** is a multilayered polymer woven coated synthetic roof underlayment available in 42-inch wide rolls, and can be produced in various other sizes; meets FBC 1507.1.1 & R905.1.1 (Exception).

**5. LIMITATIONS:**

- 5.1 This is a building code evaluation. Neither NEMO ETC, LLC nor Robert Nieminen, P.E. are, in any way, the Designer of Record for any project on which this Evaluation Report, or previous versions thereof, is/was used for permitting or design guidance unless retained specifically for that purpose.
- 5.2 This Evaluation Report is not for use in FBC HVHZ jurisdictions.
- 5.3 Fire Classification is not part of this Evaluation Report; refer to current Approved Roofing Materials Directory or test report from accredited testing agency for fire ratings of this product.
- 5.4 **RhinoRoof 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:**

Underlayment	Asphalt Shingles	Nail-On Tile	Foam-On Tile	Metal	Wood Shakes & Shingles	Slate or Simulated Slate
RhinoRoof U20	Yes	No	No	Yes	Yes	No

**5.6 Exposure Limitations:**

**RhinoRoof U20** shall not be left exposed for longer than **30-days** after installation.



**6. INSTALLATION:**

6.1 **RhinoRoof Underlayments** shall be installed in accordance with **Owens Corning Roofing and Asphalt, LLC** published installation instructions 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.

**6.3 RhinoRoof U20:**

6.3.1 Shall be installed in compliance with the requirements for **ASTM D226, Type I or II** underlayment in **FBC Table 1507.1.1 or R905.1.1** for the type of prepared roof covering to be installed, taking into account the wider sheet-width.

6.3.2 Fasteners:  
 For exposure  $\leq 24$  hours, corrosion resistant fasteners may be 1-inch roofing nails with a 3/8-inch diameter head, minimum 1-inch diameter plastic or metal cap nails or FBC HVHZ nails & 1-5/8" diameter tin caps (with the rough edge facing up). The use of staples is prohibited.

For exposure  $> 24$  hours up to maximum 30 days, corrosion resistant fasteners shall be minimum 1-inch diameter plastic or metal cap nails or FBC HVHZ nails & 1-5/8" diameter tin caps (with the rough edge facing up). The use of staples is prohibited.

6.3.2.1 Code Reference: The Exception statement in FBC 1507.1.1 and FBC R905.1.1 states: "...except metal cap nails shall be required where the ultimate design wind speed,  $V_{ult}$ , equals or exceeds 150 mph."

**Owens Corning Roofing and Asphalt, LLC** has furnished data to permit the use of 1-inch diameter plastic cap nails in lieu of metal cap nails for these applications, when the **RhinoRoof U20** underlayment is installed beneath mechanically fastened prepared roof covers referenced in FBC Table 1507.1.1 or R905.1.1.

6.3.3 Single Layer; Roof Slope  $> 4:12$ :  
 End (vertical) laps shall be minimum 6-inches and side (horizontal) laps shall be minimum 4-inches. Refer to Owens Corning Roofing and Asphalt, LLC recommendations for alternate lap configurations and/or the use of sealant under certain conditions.

For exposure  $\leq 24$  hours, use of every-other fastening location printed on the surface is acceptable. For exposure  $> 24$  hours up to maximum 30-days, use of every fastening location printed on the surface is required.

When batten systems are to be installed atop the underlayment, the underlayment need only be preliminarily attached pending attachment of the battens on the same day. Battens shall not be positioned over cap nails. If this occurs, remove the cap nail and patch the hole in accordance with Owens Corning Roofing and Asphalt, LLC published instructions.

6.3.4 Double Layer;  $2:12 < \text{Roof Slope} < 4:12$ :  
 End (vertical) laps shall be minimum 12-inches and side (horizontal) laps shall be minimum half-sheet-width plus 1-inch.

Double layer application; begin by fastening a half-width plus 1-inch starter strip along the eaves. Place a full-width sheet over the starter, completely overlapping the starter course. Continue as noted in 6.3.3, but maintaining minimum half-width plus 1-inch side (horizontal) laps, resulting in a double-layer application.

**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:**

Qingdao, China

**9. QUALITY ASSURANCE ENTITY:**

Intertek Testing Services NA Inc. – QUA1673; (608) 836-4400

**- END OF EVALUATION REPORT -**

STATE OF FLORIDA  
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION  
CONSTRUCTION INDUSTRY LICENSING BOARD



<b>LICENSE NUMBER</b>	
CCC1330061	

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



LOSIK, BRANDON LEONARD  
ROOF COMMANDER, INC.  
7632 PRETTY LAKE RD  
CLERMONT FL 34714

ISSUED: 07/17/2016

DISPLAY AS REQUIRED BY LAW

SEQ # L1607170001296

**BOB McKEE**  
LAKE COUNTY TAX COLLECTOR

EMPLOYEES 1

TYPE OF BUSINESS CONTRACTING

BUSINESS ROOF COMMANDER INC  
4680 LAKE INDUSTRIAL BLVD

ROOF COMMANDER INC  
4680 LAKE INDUSTRIAL BLVD  
TAVARES, FL 32778

**2017 / 2018**  
**LAKE COUNTY BUSINESS TAX RECEIPT**  
**STATE OF FLORIDA**

ACCT NO. 115450  
RECEIPT NO. 8760031527

**EXPIRES SEPTEMBER 30, 2018**

ORIGINAL TAX	30.00
PENALTY	0.00
TRANSFER FEE	0.00
AMOUNT PAID	30.00
TOTAL DUE	\$0.00

Receipt #2017-0019316  
Paid 07/25/2017 30.00

6633 the handbags



# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)  
12/28/2017

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

<b>PRODUCER</b> Bouchard Insurance for WBS P.O.Box 6090 Clearwater, FL 33758-6090	<b>CONTACT NAME:</b> PHONE (A/C, No, Ext): (866) 293-3600 ext. 623 FAX (A/C, No): E-MAIL ADDRESS:																				
	<table border="1"> <tr> <th colspan="2">INSURER(S) AFFORDING COVERAGE</th> <th>NAIC #</th> </tr> <tr> <td>INSURER A : American Zurich Insurance Company</td> <td></td> <td>40142</td> </tr> <tr> <td>INSURER B :</td> <td></td> <td></td> </tr> <tr> <td>INSURER C :</td> <td></td> <td></td> </tr> <tr> <td>INSURER D :</td> <td></td> <td></td> </tr> <tr> <td>INSURER E :</td> <td></td> <td></td> </tr> <tr> <td>INSURER F :</td> <td></td> <td></td> </tr> </table>	INSURER(S) AFFORDING COVERAGE		NAIC #	INSURER A : American Zurich Insurance Company		40142	INSURER B :			INSURER C :			INSURER D :			INSURER E :			INSURER F :	
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INSURER D :																					
INSURER E :																					
INSURER F :																					
<b>INSURED</b> Workforce Business Services, Inc. Alt. Emp: Roof Commander Inc 1401 Manatee Ave. West Ste 600 Bradenton, FL 34205-6708																					

**COVERAGES**                      **CERTIFICATE NUMBER:** 17FL079845480                      **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
	<b>COMMERCIAL GENERAL LIABILITY</b> <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR  GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:						EACH OCCURRENCE \$ DAMAGE TO RENTED PREMISES (Ea occurrence) \$ MED EXP (Any one person) \$ PERSONAL & ADV INJURY \$ GENERAL AGGREGATE \$ PRODUCTS - COMP/OP AGG \$ \$
	<b>AUTOMOBILE LIABILITY</b> <input type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> NON-OWNED AUTOS ONLY						COMBINED SINGLE LIMIT (Ea accident) \$ BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
	<b>UMBRELLA LIAB</b> <input type="checkbox"/> OCCUR <b>EXCESS LIAB</b> <input type="checkbox"/> CLAIMS-MADE DED    RETENTION \$						EACH OCCURRENCE \$ AGGREGATE \$ \$
<b>A</b>	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b> ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) <input type="checkbox"/> Y / N If yes, describe under DESCRIPTION OF OPERATIONS below	N/A		WC 90-00-818-07	12/31/2017	12/31/2018	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
				<b>Location Coverage Period:</b>	12/31/2017	12/31/2018	<b>Client#</b> 054014

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

Coverage is provided for only those co-employees of, but not subcontractors to:

Roof Commander Inc  
 4680 Lake Industrial Blvd  
 Tavares, FL 32778

<b>CERTIFICATE HOLDER</b>  City of Belle Isle 1600 Nela Ave 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 
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# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

1/18/2018

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

**IMPORTANT:** If the certificate holder is an **ADDITIONAL INSURED**, the policy(ies) must have **ADDITIONAL INSURED** provisions or be endorsed. If **SUBROGATION IS WAIVED**, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on 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> Roof Commander, Inc. 7632 Pretty Lake Road Clermont FL 34714	<b>INSURER A :</b> Westfield Insurance Group	24112
ROOFCOM-01	<b>INSURER B :</b> Gemini Insurance Company	
	<b>INSURER C :</b>	
	<b>INSURER D :</b>	
	<b>INSURER E :</b>	
	<b>INSURER F :</b>	

**COVERAGES**

CERTIFICATE NUMBER: 842128252

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
B	<input checked="" type="checkbox"/> <b>COMMERCIAL GENERAL LIABILITY</b> <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PROJECT <input type="checkbox"/> LOC OTHER:			VNGP001314	1/21/2018	1/21/2019	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 50,000 MED EXP (Any one person) \$ 5,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000 \$
A	<input checked="" type="checkbox"/> <b>AUTOMOBILE LIABILITY</b> <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> NON-OWNED AUTOS ONLY			CWP0683002	9/8/2017	9/8/2018	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ PIP \$ 10,000
	<input type="checkbox"/> <b>UMBRELLA LIAB</b> <input type="checkbox"/> OCCUR <input type="checkbox"/> <b>EXCESS LIAB</b> <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$						EACH OCCURRENCE \$ AGGREGATE \$ \$
	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b> ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below			N/A			<input type="checkbox"/> PER STATUTE <input type="checkbox"/> OTHER E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$
A	Contractors Equipment			CWP0683002	9/8/2017	9/8/2018	Leased & Rented Equip Deductible \$25,000 \$1,000

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

**CERTIFICATE HOLDER****CANCELLATION**

City of Belle Isle  
 1600 Nela Avenue  
 Belle Isle FL 32809

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

*Daniel Delgado*

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