



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>Scope of Work: ReRoof: 5250 sq ft asphalt shingles</p> <p>Comments: None</p> <p>Project Information Address: 1617 Idaho Avenue, Belle Isle, FL 32809 Parcel ID: 25-23-29-5884-19-191 Property Owner: Vincent, Andrew Phone Number: none ***** Company Name: Orlando Roofing Company Contractor Name: Neilson, Frank License Number: CCC1330550 Address: 6682 Hoffner Ave, Orlando, FL 32822 Phone Number: 407 275 9444</p>	<p>Permit Number: 2015-08-014 Date of Application: <u>08/04/2015</u> Date Permit Issued: <u>08/06/2015</u></p> <p>WARNING TO OWNER: "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>IMPACT FEES</p> <p>School \$ Traffic \$</p> <p>ZONING FEES</p> <p>Zoning Fee \$30.00</p> <p>UNIVERSAL ENG - BUILDING FEES</p> <p>Cert of Occ \$ Demo \$ Building \$ Fence \$ Driveway \$ Shed \$ Window(s) \$ Door(s) \$ PrePower \$ Electrical \$ Temp Pole \$ Plumbing \$ Mechanical \$ Gas \$ Roofing \$50.00 Boat Dock \$ Screen Encl \$ Swimming Pool \$ Sign \$</p> <p>SURCHARGE FEES</p> <p>Surcharge Fee \$2.00 Surcharge Fee \$2.00</p> <p>TOTAL FEES \$84.00</p> <p>Date Paid <u>8-13-15</u> CC# or Check # <u>VISA 5270</u> Amount Paid <u>84.00</u></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;">BUILDING INSPECTOR USE ONLY</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>BUILDING 1st _____ (Footing/Foundation) Survey specific foundation plan must be onsite before slab pour. Approved Plan on Site? _____ 2nd _____ (Slab) 3rd _____ (Lintel)(Wall Reinforcing on Masonry Building) 4th _____ (Exterior Framing)(Roof/Wall Sheathing) 5th _____ (Framing) (To be made after Plumbing/ Mechanical/ Electrical Rough-Ins & Windows/Doors Installed) 6th _____ (Insulation to be Made After Roof Installed) 7th _____ (Drywall) 8th _____ (Sidewalk/Driveway) 9th _____ (Other) 10th _____ (Final - After MEP and Other Applicable Finals)</p> <p>ROOFING 1ST ROOFING Deck Nailing/Dry-in/Flashing _____ 2ND ROOFING Covering In-Progress _____ 3RD ROOFING Covering Final _____</p> <p>PLUMBING (Pool-Piping, Solar, Irrigation, Water Treatment Equip, Etc...) 1ST _____ (Underground) 2ND _____ (Sewer) 3RD _____ (Rough-In/Tub Set) 4TH _____ (Final)</p> <p>CHECK APPROPRIATE BOX <input type="checkbox"/> GAS <input checked="" type="checkbox"/> Natural <input type="checkbox"/> LP <input type="checkbox"/> MECHANICAL <input type="checkbox"/> ELECTRICAL <input type="checkbox"/> LOW VOLTAGE</p> <p>1st _____ (Rough-In) 2nd _____ (Final)</p>
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Inspection requests are to be emailed to BidScheduling@UniversalEngineering.com; a confirmation email will be sent back to you upon scheduling. Next-Day Inspection requests must be made by 1pm. 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.universalsciences.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: 7/31/2015 ROOF PERMIT NUMBER 2015-08-014

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

Project Address 1617 Idano Ave Belle Isle, FL 32809 32812

Property Owner Andrew Vincent Phone _____

Property Owner's Mailing Address 3830 Bayview Dr City Orlando

State FL Zip Code 32806 Parcel Id Number: 25-23-29-5884-19-191

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

- **REQUIRED!** Florida Product Approval Screen Printout from www.floridabuilding.org showing the Code Version
- **REQUIRED!** Florida Product Approval Installation Instructions from 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: 1600 Number of Stories: 1 Job Valuation: \$ 5,977.00

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 # CCC1330550

LICENSE HOLDER NAME FRANK NELSON COMPANY NAME Orlando Roofing Company

Street Address 11082 Hoffner Ave

City ORL State FL Zip Code 32822 Phone Number 407-275-9444

Email Address admin@theorlandoroofingco.com

Zoning Fee	\$	<u>30.-</u>
Permit Fee	\$	<u>50⁰⁰</u>
Review Fee	\$	<u>n/a</u>
3% Florida Surcharge	\$	<u>4⁰⁰</u>
Total Permit Fee	\$	<u>84⁰⁰</u>

Building Official: [Signature] Date 8-5-15

Verified Contractor's Licenses & Insurance are on file [Signature] Date 8-5-15

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.

Building Permit Number _____

Permit Number: 2015-08-014
Folio/Parcel ID #: _____
Prepared by: NICOLE NELSON
WDB HOFFERMAN AVE
ORL FL 32822
Return to: _____

DOC # 20150404127 B: 10961 P: 7431
08/04/2015 10:16 AM Page 1 of 1
Rec Fee: \$10.00
Deed Doc Tax: \$0.00
Mortgage Doc Tax: \$0.00
Intangible Tax: \$0.00
Martha O. Haynie, Comptroller
Orange County, FL
Ret To: SIMPLIFILE LC

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)
25-23-24-5884-19-141 1019 Idaho Ave ORL 32809
2. General description of improvement
Remove existing Shingle roof and replace with new shingles
3. Owner information or Lessee information if the Lessee contracted for the improvement
Name Andrew Vincent
Address 1017 Idaho Ave
interest in Property owner
Name and address of fee simple titleholder (if different from Owner listed above)
Name _____
Address _____

4. Contractor
Name Orlando Roofing Company Telephone Number 407-275-9444
Address WDB Hoffer Ave ORL 32822
5. Surety (if applicable, a copy of the payment bond is attached)
Name _____ Telephone Number _____
Address _____ Amount of Bond \$ _____
6. Lender
Name N/A 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)

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.

Signature of Owner of Lessee, or Owner's or Lessee's Authorized Officer/Director/Partner/Manager _____ Signatory's Title/Office _____

The foregoing instrument was acknowledged before me this 31 day of July by Andrew Vincent for _____
as _____ (Type of authority, e.g., officer, trustee, attorney in fact) name of person

Signature of Notary Public - State of Florida _____ Name of party on behalf of whom instrument was executed _____

Print, type, or stamp STACY L. PARRÉ
NOTARY PUBLIC
STATE OF FLORIDA
Comm# FF212383
Expires 3/30/2019



Product Approval
USER: Public User

FL #

Application Type

Code Version

Application Status

FL7006-R9

Revision

2014

Approved

*Approved by DBPR. Approvals by DBPR shall be reviewed and ratified by the POC and/or the Commission if necessary.

Comments

Archived

Product Manufacturer

Address/Phone/Email

IKO Industries, Ltd
40 Hansen Road South
Brampton, NON-US L6W 3H4
(708) 496-2800 Ext 200
rmetz001@tampabay.rr.com

Authorized Signature

Robert Metz
rmetz001@tampabay.rr.com

Technical Representative

Address/Phone/Email

Bob Metz
REMCO of Pinellas
456 Avila Circle NE
Saint Petersburg, FL 33703
(727) 776-5261
rmetz001@tampabay.rr.com

Quality Assurance Representative

Address/Phone/Email

Don Shaw
IKO Industries LTD
120 Hay Rd.
Wilmington, DE 19808
(717) 579-6706
don.shaw@iko.com

Category

Subcategory

Roofing
Asphalt Shingles

Compliance Method

Certification Mark or Listing

FM Approvals - CER
Locke Bowden

Certification Agency

Validated By

Validation Checklist - Hardcopy Received

Referenced Standard and Year (of Standard)

Standard

ASTM D3161 modified to 110 mph
ASTM D3462
ASTM D7158 Class H
ASTM E108

Year

2009
2009
2008
2007

Equivalence of Product Standards

Certified By

Product Approval Method

Method 1 Option A

Date Submitted

06/28/2015

Date Validated

06/30/2015

Date Pending FBC Approval

07/06/2015

Date Approved

Summary of Products

FL #	Model, Number or Name	Description
7006.1	Cambridge, Cambridge HD and CRC Bitmore AR	Laminated architectural fiberglass asphalt shingle manufactured at IKO's Kankakee, IL; Hawkesbury, Ont.; Wilmington, DE; Sylacauga, AL and Toronto, Ont. plants
<p>Limits of Use Approved for use in HVHZ: Yes Approved for use outside HVHZ: Yes Impact Resistant: N/A Design Pressure: N/A Other:</p>		
7006.2	Hip and Ridge 12 Cap fiberglass shingles	<p>Certification Agency Certificate FL7006_R9_C_CAC_FM Letter - ASTM d3161 Letter - 4-15-2015 .pdf FL7006_R9_C_CAC_FM Letter - ASTM d3462 letter - 5.6 15.pdf FL7006_R9_C_CAC_FM Letter - ASTM E 108 letter - 5.3 15 .pdf Quality Assurance Contract Expiration Date 12/31/2020 Installation Instructions FL7006_R9_II_IKO-133-02-01 Letter - Installation Instructions for FBC FL7006.pdf Verified By: Duc T Nguyen 65034 Created by Independent Third Party: No Evaluation Reports Created by Independent Third Party:</p> <p>This is a 12" x 12" fiberglass asphalt shingle used to cover the hip and/or ridge of an asphalt shingle roof system manufactured in Toronto, Ont. and Brampton, Ontario</p>
<p>Limits of Use Approved for use in HVHZ: Yes Approved for use outside HVHZ: Yes Impact Resistant: N/A Design Pressure: N/A Other:</p>		
7006.3	Leading Edge Plus Asphalt Shingle Starter Strip	<p>Certification Agency Certificate EL7006_R9_C_CAC_FM Letter - ASTM d3161 Letter - 4-15-2015 .pdf FL7006_R9_C_CAC_FM Letter - ASTM d3462 letter - 5.6 15.pdf FL7006_R9_C_CAC_FM Letter - ASTM E 108 letter - 5.3 15 .pdf Quality Assurance Contract Expiration Date 12/31/2020 Installation Instructions EL7006_R9_II_IKO-133-02-01 Letter - Installation Instructions.pdf EL7006_R9_II_IKO-133-02-01 Letter - Installation Instructions for FBC FL7006.pdf Verified By: Duc T Nguyen PE 65034 Created by Independent Third Party: No Evaluation Reports Created by Independent Third Party:</p> <p>One piece fiberglass asphalt shingle used as a starter strip at the bottom of a roof system manufactured in Brampton and Hawkesbury, Ontario plants</p>
<p>Limits of Use Approved for use in HVHZ: Yes Approved for use outside HVHZ: Yes Impact Resistant: N/A Design Pressure: N/A Other:</p>		
7006.4	Marathon 25 AR, CRC Superglass	<p>Certification Agency Certificate FL7006_R9_C_CAC_FM Letter - ASTM d3161 Letter - 4-15-2015 .pdf FL7006_R9_C_CAC_FM Letter - ASTM d3462 letter - 5.6 15.pdf FL7006_R9_C_CAC_FM Letter - ASTM E 108 letter - 5.3 15 .pdf Quality Assurance Contract Expiration Date 12/31/2020 Installation Instructions FL7006_R9_II_IKO-133-02-01 Letter - Installation Instructions for FBC FL7006.pdf FL7006_R9_II_Roofing-Products-Leading-Edge-Plus-Application-EN(1).pdf Verified By: Duc T Nguyen PE 65034 Created by Independent Third Party: No Evaluation Reports Created by Independent Third Party:</p> <p>3 tab fiberglass asphalt shingle manufactured at IKO's</p>

M25AR	Brampton, Ontario, Hawkesbury Ont., Toronto, Ont.; Sylacauga, AL and Kanakakee, IL plants
<p>Limits of Use Approved for use in HVHZ: Yes Approved for use outside HVHZ: Yes Impact Resistant: N/A Design Pressure: N/A Other:</p> <p>Certification Agency Certificate FL7006 R9 C CAC FM Letter - ASTM d3161 letter - 4-15-2015 .pdf FL7006 R9 C CAC FM Letter - ASTM d3462 letter - 5 6 15.pdf FL7006 R9 C CAC FM Letter - ASTM E 108 letter - 5 3 15 .pdf Quality Assurance Contract Expiration Date 12/20/2020 Installation Instructions FL7006 R9 II IKO-133-02-01 Letter - Installation Instructions for FBC FL7006.pdf Verified By: Duc T Nguyen 65034 Created by Independent Third Party: No Evaluation Reports Created by Independent Third Party:</p>	

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

[Contract 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, licenses licensed under Chapter 455, F.S. must provide the Department with an email address if they have one. The emailis 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:





CONSTRUCTION MATERIALS

TECHNOLOGIES

March 30, 2015

IKO Industries, Ltd
120 Hay Rd.
Wilmington, DE 19809

Re: FBC FL7006

Sir(s),

PRI Construction Materials Technologies has completed a technical review and attached sealed shingle instructions in compliance the 2014 Florida Building Code.

This review was completed based on the receipt of following evidence from IKO Industries, Ltd:

- 1) IKO Shingle Application Instructions – 3-Tab Shingles
(EN-3Tab_Appins_8AGXEFs-2012-11_reformatted 2013-02-rev07/13-Florida)
- 2) IKO Laminated Shingles Application Instructions
(EN-Laminated_Appins_8TTFEs-2012-04_reformatted 2013-02-rev07/13-Florida)
- 3) IKO Hip and Ridge 12 Application Instructions
(EN-HipandRidge12_3HRTri-2013-08_reformatted 2013-08)
- 4) IKO Leading Edge Plus Shingle Application Instructions
(EN-3LEP-Tri-2012-06_reformatted 2013-03)
- 5) ASTM D3161 Test Report (FM Approvals Project No. 3040947)

The attached instructions should be used in conjunction with the published manufacturer's application instructions and applicable code. In the event the instructions conflict, these instructions shall govern.

Statement of Independence: PRI Construction Materials Technologies and/or Duc T. Nguyen, FL P.E. do not have nor plan to acquire a financial interest in any company manufacturing or distributing products for which the test reports are issued.

Signed:


Brad Grzybowski
Managing Director

Signed:


Duc T. Nguyen
Florida Registered Professional Engineer
P.E. Number: 65034

Date:

April 30, 2015

Date:

April 30, 2015

- Attachments:**
- A) IKO Shingle Application Instructions - 3-Tab
 - B) IKO Laminated Shingles Application Instructions
 - C) IKO Hip and Ridge 12 Application Instructions
 - D) IKO Leading Edge Plus Application Instructions

IKO-133-02-01

IKO Shingle Application Instructions – 3-Tab Shingles (ASTM D3161, Class F – IKO Marathon 25 AR and CRC Superglass M25AR)

NOTE: THESE INSTRUCTIONS SHALL BE USED IN CONJUNCTION WITH IKO'S PUBLISHED APPLICATION INSTRUCTIONS AND THE APPLICABLE CODE. IN THE EVENT THE INSTRUCTION CONFLICT, THESE INSTRUCTIONS WILL GOVERN.

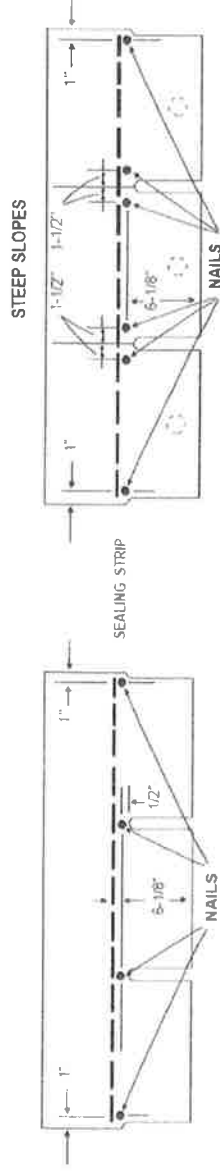
ROOF DECK: Solidly sheathed and fastened deck conforming to 2014 FBC.

UNDERLAYMENT: Applied in accordance with building code requirements. For areas where the roof slope is less than 4" per foot down to 2" per foot, use 2 layers of underlayment conforming to building code requirements, the first sheet overlapping the eave protection by 19", followed by full 36" widths overlapping each preceding course by 19" or other *Approved* underlayments in accordance with the qualified application instructions. For areas where the roof slope is 4" per foot or greater, cover the deck with one ply of underlayment laid parallel to the eaves, with 2" horizontal laps and 4" end laps. Apply metal drip edges on top of any underlay along rake edges and directly to the deck along eaves in accordance with building code requirements.

NAILING: Use galvanized (zinc coated) roofing nails, 11 or 12 gauge, with at least 3/8" diameter heads, long enough to penetrate through plywood or 3/4" into boards. Use 4 nails per shingle placed 6-1/8" above the butt edge, approx. 1" and 13" from each end and 1/2" above each cutout. Drive nails straight so that nail head is flush with, but not cutting into shingle surface.

NAILING ON STEEP SLOPES: For steep slopes of 21" per foot (60°) or more, use 6 nails per shingle placed as shown below. Ensure that no nail is within 2" of a joint/cutout of the underlying shingle. Seal down each shingle at time of application with three 1" diameter (approx. size and thickness of a quarter) spots of asphalt plastic cement placed under the shingle 2" above the bottom edge and equally spaced along the shingle. Apply plastic cement in moderation since excessive amounts may cause blistering. **CAUTION:** Shingles should seal to the underlying course when the factory applied asphalt sealant is sufficiently warmed by the heat of direct sunlight.

EXPOSURE: Installed shingles shall have a maximum average exposure of 5-5/8".



DO NOT NAIL INTO OR ABOVE THE SEALING STRIP

IKO Laminated Shingles Application Instructions (ASTM D3161, Class F – Cambridge, Cambridge HD, and CRC Biltmore AR)

NOTE: THESE INSTRUCTIONS SHALL BE USED IN CONJUNCTION WITH IKO'S PUBLISHED APPLICATION INSTRUCTIONS AND THE APPLICABLE CODE. IN THE EVENT THE INSTRUCTION CONFLICT, THESE INSTRUCTIONS WILL GOVERN.

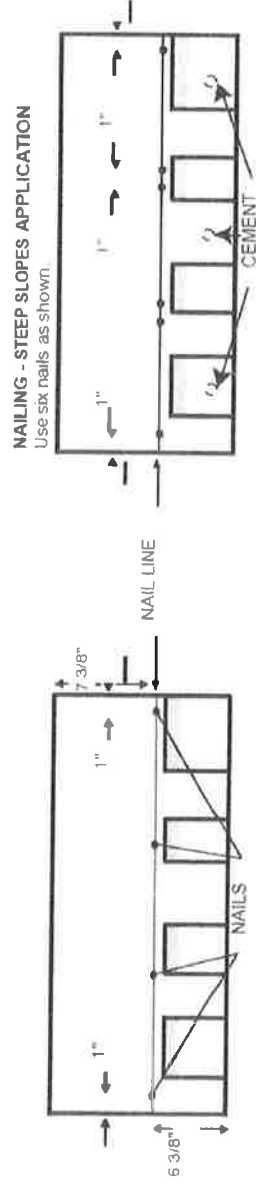
ROOF DECK: Solidly sheathed and fastened deck conforming to 2014 FBC.

UNDERLAYMENT: Applied in accordance with building code requirements. For areas where the roof slope is less than 4" per foot down to 2" per foot, use 2 layers of underlayment conforming to building code requirements, the first sheet overlapping the eave protection by 19", followed by full 36" widths overlapping each preceding course by 19" or other *Approved* underlayments in accordance with the qualified application instructions. For areas where the roof slope is 4" per foot or greater, cover the deck with one ply of underlayment laid parallel to the eaves, with 2" horizontal laps and 4" end laps. Apply metal drip edges on top of any underlay along rake edges and directly to the deck along eaves in accordance with building code requirements.

NAILING: Use galvanized (zinc coated) roofing nails, 11 or 12 gauge, with at least 3/8" diameter heads, long enough to penetrate through plywood or 3/4" into boards. Use 4 nails per shingle placed in the nail line 7-3/8" below the top edge, approx. 1" and 13" in from each end. Drive nails straight so that nail head is flush with, but not cutting into shingle surface.

NAILING ON STEEP SLOPES: For steep slopes of 2 1/4" per foot (60°) or more, use 6 nails per shingle placed as shown below. Ensure that no nail is within 2" of a joint/cutout of the underlying shingle. Seal down each shingle at time of application with three 1" diameter (approx. size and thickness of a quarter) spots of asphalt plastic cement placed under the shingle 2" above the bottom edge and equally spaced along the shingle. Apply plastic cement in moderation since excessive amounts may cause blistering. **CAUTION:** Shingles should seal to the underlying course when the factory applied asphalt sealant is sufficiently warmed by the heat of direct sunlight.

EXPOSURE: Installed shingles shall have a maximum average exposure of 5-7/8" .



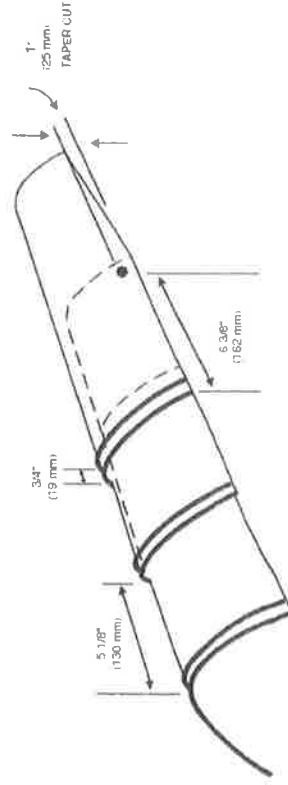
PROPER APPLICATION REQUIRES THAT THE NAILS PENETRATE BOTH THE OVERLAY AND UNDERLAY PORTIONS OF THE SHINGLE

IKO Hip and Ridge 12 Application Instructions (ASTM D3161, Class F – IKO Hip and Ridge 12)

NOTE: THESE INSTRUCTIONS SHALL BE USED IN CONJUNCTION WITH IKO'S PUBLISHED APPLICATION INSTRUCTIONS AND THE APPLICABLE CODE. IN THE EVENT THE INSTRUCTION CONFLICT, THESE INSTRUCTIONS WILL GOVERN.

Cut hip and ridge shingles into thirds, using the perforation marks as a cutting guide. These shingles are designed for a 5 1/8" (130 mm) exposure. (For a neater appearance, the top of each side of each piece has been factory trimmed on a 1" (25 mm) taper (see drawing). Bend each piece over the hip or ridge, and nail 5 5/8" (143 mm) above the butt edge 1" (25 mm) in from each edge, exposing each piece 5 1/8" (130 mm). Apply hip pieces starting at the lower end of the hip, working up toward the ridge. On hip roofs, apply ridge pieces starting at the end, meeting in the middle. On gable roofs, apply ridge pieces starting at the end opposite to the prevailing wind direction and continue to the other end. Note: To obtain a three-dimensional effect, (which is recommended, but not required), apply hip and ridge shingles double thickness by stacking 2 pieces on top of one another, the lower piece extending about 3/4" (19 mm) further than the top piece (see diagram). The final shingle should be set in cement, and the exposed nail heads of the final shingle should be covered with cement. Prior to application in cold weather, storing the shingles in a heated area will allow for easier bending.

NOTE: SHINGLES MUST BE APPLIED PROPERLY. THEY ARE DESIGNED FOR USE AS HIP AND RIDGE SHINGLES ONLY, AND SHOULD NOT BE USED FOR ANY OTHER APPLICATIONS. WE ASSUME NO RESPONSIBILITY FOR LEAKS OR DEFECTS RESULTING FROM POOR APPLICATION OR FAILURE TO PROPERLY PREPARE THE SURFACE TO BE ROOFED OVER, OR FAILURE TO PROVIDE PROPER VENTILATION IN ACCORDANCE WITH MINIMUM PROPERTY STANDARDS REQUIREMENTS. REVIEW ALL APPLICABLE BUILDING CODES, MINIMUM PROPERTY STANDARDS, AND REQUIREMENTS PRIOR TO APPLYING THESE SHINGLES USING THESE APPLICATION INSTRUCTIONS.



IKO Leading Edge Plus Application Instructions (ASTM D3161, Class F – IKO Leading Edge Plus)

NOTE: THESE INSTRUCTIONS SHALL BE USED IN CONJUNCTION WITH IKO'S PUBLISHED APPLICATION INSTRUCTIONS AND THE APPLICABLE CODE. IN THE EVENT THE INSTRUCTION CONFLICT, THESE INSTRUCTIONS WILL GOVERN.

1. Apply any underlayment, eave protection, valley flashings, or drip edges to roof deck as required.
2. Each 39 3/8" x 13 1/4" (1000 mm x 336 mm) IKO Leading Edge Plus strip is perforated lengthwise for separation into two (2) shingles. Take one IKO Leading Edge Plus strip and fold flat at perforation to separate.
3. Take one of the separated shingles 39 3/8" x 6 5/8" (1000 mm x 168 mm) and remove approximately 20" (500 mm). Install this shingle on the lower left corner of the roof deck, granule side up, with the factory installed sealant adjacent to the eaves. The shingle should overhang the rake edge and eaves by a nominal 1/4" (6 mm) minimum. Fasten the shingle to the roof deck with nails located 3" to 4" (75 mm to 100 mm) from the eave edge and 1" (25 mm) in from each end.
4. Take the leftover 20" (500 mm) piece shingle. Rotate the piece and align it vertically up the rake edge with the factory installed sealant adjacent to the outer edge of the roof. The shingle should overhang the rake edge by a nominal 1/4" (6 mm) minimum. Fasten the shingle to the roof deck with fasteners located 3" to 4" (75 mm to 100 mm) from the rake edge and 1" (25 mm) in from each end.
5. Repeat Steps 3 – 4 for the right lower corner of the roof deck.

NAILING: Use galvanized (zinc coated) roofing nails, 11 or 12 gauge, with at least 3/8" (9 mm) diameter heads, long enough to penetrate through plywood or 3/4" (20 mm) into boards. Use 4 nails per shingle placed 3" to 4" (75 mm to 100 mm) from the eave edge and approximately 1" and 13" (25 mm and 330 mm) in from each end.

6. Apply full-length IKO Leading Edge Plus shingles to the remaining eave edges of the roof deck. Install the shingles granule side up with the factory applied sealant adjacent to the eaves. The shingles should overhang the rake edge and eaves by a nominal 1/4" (6 mm) minimum. Fasten the shingles to the roof deck with nails located 3" to 4" (75 mm to 100 mm) from the eave edge, 4 nails per shingle.
7. Apply roof shingles as per the instructions printed on each product's package. Make certain the first course of field shingle lies flush with the edges of the fastened IKO Leading Edge Plus. In this way, the sealant on the IKO Leading Edge Plus shingles will adhere to the first-course field shingles and help keep them from lifting in high winds.