- LUIS LORENZO
05/07/13
10:42 AM
NOTIFIED

7

OK - Historic Dept 5-1-13

Building & Zoning Department
405 Biltmore Way, Third Floor
Coral Gables, Florida 33134
Tel: 305-460-5235
Fax: 305-460-5261
www.coralgables.com

CITY OF CORAL GABLES
BUILDING AND ZONING DEPARTMENT
Permit Application

inclusive
✓ ABB041689

MCOL #

ALL OF THE FOLLOWING MUST BE COMPLETED BY APPLICANT ACCORDING TO FS 713.35

Date: _____

Application #: _____

Permit Change:	☑
Change of Contractor	
Permit Extension	
Permit Renewal	
Permit Revision	
Permit Supplement	

Permit Type:	☑
Building	
Electrical	
Mechanical	
Plumbing	
Roofing	✓
Misc.	

App. _____ Date 4/30/13

Master Permit #: BL-12-09-1201

Control #: BL1304|970 *

Project Information:	☑
Commercial: Re-Roof	
Residential: 1624	✓
Linear Feet:	☑
Square Feet: 7648	☑
Value of Work: $ 60.000	☑

DESCRIPTION OF WORK (PRINT):

Re - Roof and new Roof
FLAT and Tile.
Alhambra Barral Terracotta

ZION TILE/ALHAMBRA HANDMADE CLAY
COLOR: TERRACOTTA

PROPERTY LOCATION:

Address: 641 San Lorenzo Ave.
Coral Gables Fl 33146
Folio #: 03412002221480
Lot: Block:
Subdivision:
APPROVED CRM 26 APR 13
Plat book: Page:

PROPERTY OWNER:

Name: Armando J Olivera
Address: 712 San Esteban AVE.
City/State/Zip: Coral Coral Gables Fl 33146.
Telephone No.:

CONTRACTOR: CUBA ROOFING INC.
Address: 4678 E 10 LN
City/State/Zip: Hialeah Fl 33013
License No.: CCC1326045 Telephone No.: 3/681-1060

ARCHITECT:

Name:
Address:
City/State/Zip: Tel.:

ENGINEER:

Name:
Address:
City/State/Zip: Tel.:

BONDING:

Name:
Address:
Telephone No.:

MORTGAGE LENDER:

Name:
Address:
Telephone No.:

Application is hereby made to obtain a permit to do work and installations as indicated. I certify that no work has commenced prior to the issuance of a permit and that all work will be performed to meet the standards of all laws regulating the construction in the City of Coral Gables. I understand that a separate permit must be secured for ELECTRICAL, PLUMBING, SIGNS, WELLS, POOLS, BOILERS, TANKS, AIR CONDITIONERS, ROOFING, AWNINGS, ETC. **The Historical Resources Department's approval is required prior to the issuance of a demolition permit.**

WARNING TO OWNER: 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.

OWNER'S AFFIDAVIT: I certify that all the foregoing information is accurate and that all work will be done in compliance with all applicable laws regulating construction and zoning.

Signature of Owner ✓ _____ Signature of Qualifier _____

The foregoing instrument was acknowledged before me this 25 day of April 20 13 by Armando J. Olivera

(✓) is personally known to me,

( ) has produced a _____ as identification,

NOTARY PUBLIC (SEAL) CARMEN TORRE
MY COMMISSION # DD 867057
EXPIRES: April 22, 2013
Bonded Thru Budget Notary Services

The foregoing instrument was acknowledged before me this 25 day of APRIL 20 13 by _____.

(✓) is personally known to me,

( ) has produced a _____ as identification,

NOTARY PUBLIC (SEAL)

MARICELA LOPEZ
Notary Public - State of Florida
My Comm. Expires Sep 11, 2016
Commission # EE 200620
Bonded Through National Notary Assn.

Form 101

Florida Building Code Edition 2010

High-Velocity Hurricane Zone Uniform Permit Application Form

Section A (General Information)

Master Permit No. BL-12-09-1201 Process No. _____

Contractor's Name CODA ROOFING INC.

Job Address 641 SAN LORENZO AVE.

ROOF CATEGORY

- ☑ Low Slope
- ☐ Mechanically Fastened Tile
- ☑ Mortar/Adhesive Set Tile
- ☐ Asphaltic Shingles
- ☐ Metal Panel/Shingles
- ☐ Wood Shingles/Shakes
- ☐ Prescriptive BUR-RAS 150

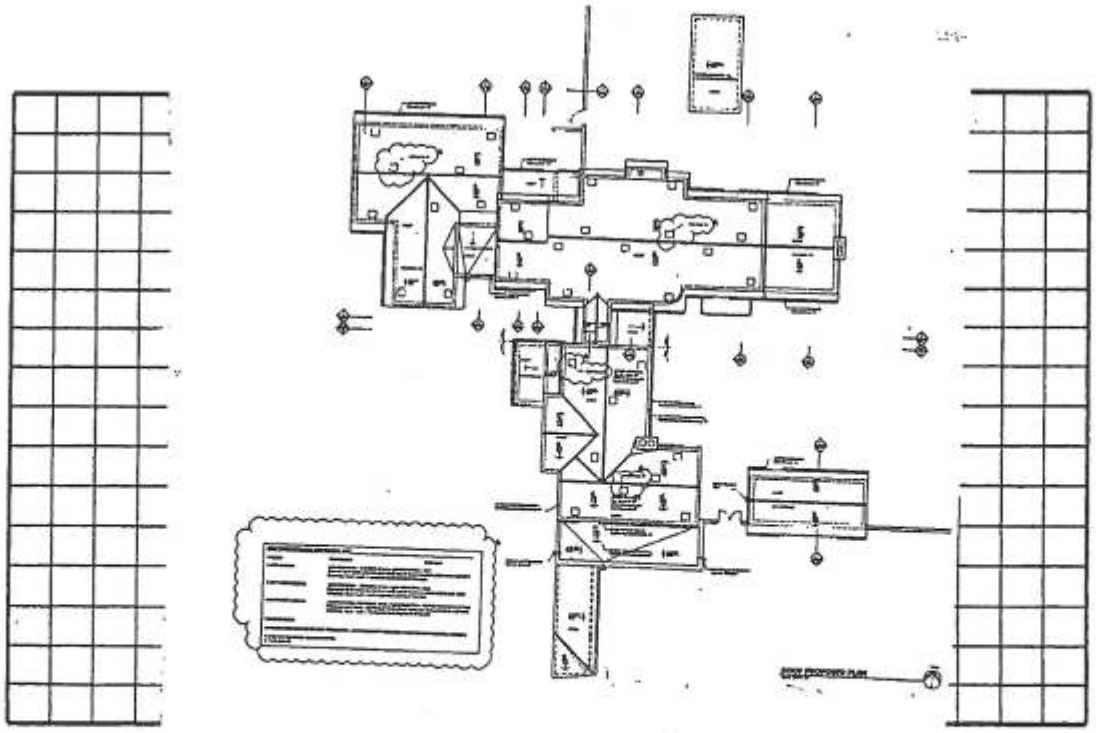
ROOF TYPE

- ☑ New Roof
- ☑ Reroofing
- ☐ Recovering
- ☐ Repair
- ☐ Maintenance

ROOF SYSTEM INFORMATION

Low Slope Roof Area (SF)	Steep Sloped Roof Area (SF)	Total (SF)
700	New Roof 5322 Re-Roof 1626	7.648.

Sketch Roof Plan: Illustrate all levels and sections, roof drains, scuppers, overflow scuppers and overflow drains. Include dimensions of sections and levels, clearly identify dimensions of elevated pressure zones and location of parapets.



Florida Building Code Edition 2010

High-Velocity Hurricane Zone Uniform Permit Application Form

Section C (Low Slope Application)
Fill in specific roof assembly components and identify manufacturer
(If a component is not used, identify as "NA")

System Manufacturer: GAF

Product Approval No.: 09-0224.01

Design Wind Pressures, From RAS 128 or Calculations:

P1: -42.8 P2: -71.7 P3: -108.0

Max. Design Pressure, from the specific Product Approval system: 52.5

Deck:

Type: Wood

Gauge/Thickness: 5/8"

Slope: 1/2"

Anchor/Base Sheet & No. of Ply(s): ① glass base

Anchor/Base Sheet Fastener/Bonding Material: 1¼ RS roof nails.

Insulation Base Layer: n/a

Base Insulation Size and Thickness: n/a

Base Insulation Fastener/Bonding Material: n/a

Top Insulation Layer: n/a

Top Insulation Size and Thickness: n/a

Top Insulation Fastener/Bonding Material: n/a

Base Sheet(s) & No. of Ply(s): n/a

Base Sheet Fastener/Bonding Material: n/a

Ply Sheet(s) & No. of Ply(s): ① ply Rubc. FR20

Ply Sheet Fastener/Bonding Material: MOP.

Top Ply: ① ply Rubc. FR 170

Top Ply Fastener/Bonding Material: MOP.

Surfacing: n/a

Fastener Spacing for Anchor/Base Sheet Attachment:

Field: 9" oc @ Lap, # Rows 2 @ 9" oc

Perimeter: 4" oc @ Lap, # Rows 6 @ 4" oc

Corner: 4" oc @ Lap, # Rows 6 @ 4" oc

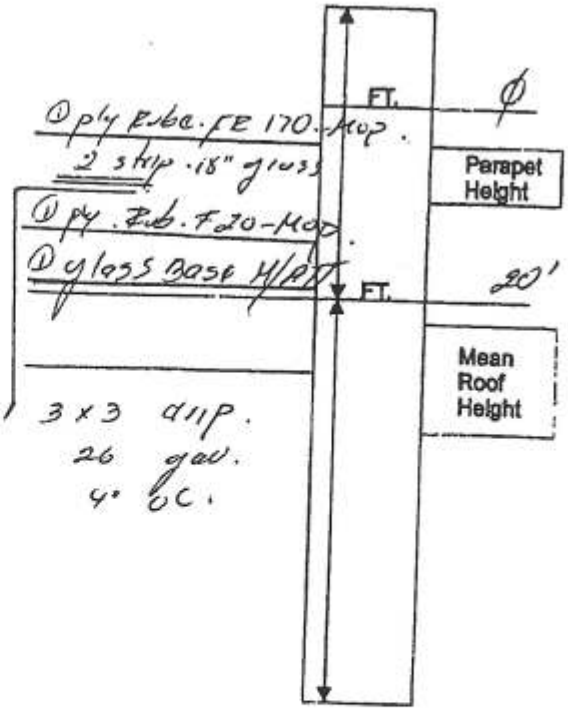
Number of Fasteners Per Insulation Board:

Field ~~Perimeter~~ Corner

Illustrate Components ~~Noted and Details as~~ Applicable:

Woodblocking, Gutter, Edge Termination, Stripping, Flashing, Continuous Cleat, Cant Strip, Base Flashing, Counter- Flashing, Coping, Etc.

Indicate: Mean Roof Height, Parapet Height, Height of Base Flashing, Component Material, Material Thickness, Fastener Type, Fastener Spacing or Submit Manufacturers Details that Comply with RAS 111 and Chapter 16



Florida Building Code Edition 2010

High-Velocity Hurricane Zone Uniform Permit Application Form.

Section D (Steep Sloped Roof System)

Roof System Manufacturer: 3 ion.

Notice of Acceptance Number: ______

Minimum Design Wind Pressures, If Applicable (From RAS 127 or Calculations):
P1: -39.1 P2: -68.1 P3: -100.7

Steep Sloped Roof System Description

Roof Slope: 3.75 : 12

Ridge Ventilation? n/a

Mean Roof Height: 20'

Deck Type: 5/8" plywood

Type Underlayment: #30 pound Base M/ATT

Insulation: n/a

Fire Barrier: n/a

Fastener Type & Spacing: 1 1/4 RS Roof Nails.

Adhesive Type: polyfoam

Type Cap Sheet: #90 Mineral S.

Roof Covering: Alhambra

Type & Size Drip Edge: 3X3 galv. 26 gau. 6" oc.

Florida Building Code Edition 2010

High-Velocity Hurricane Zone Uniform Permit Application Form.

Section E (Tile Calculations)

For Moment based tile systems, choose either Method 1 or 2. Compare the values for M_r with the values from M_f. If the M_f values are greater than or equal to the M_r values, for each area of the roof, then the tile attachment method is acceptable.

Method 1 "Moment Based Tile Calculations Per RAS 127"

(P_1: 39.1 × λ 0.21 = 8.21) - M_g: 5.18 = M_{r1} 3.03 Product Approval M_f 38.80

(P_2: 68.1 × λ 0.21 = 14.34) - M_g: 5.18 = M_{r2} 9.12 Product Approval M_f 38.80

(P_3: 100.7 × λ 0.21 = 21.14) - M_g: 5.18 = M_{r3} 15.96 Product Approval M_f 38.80

Method 2 "Simplified Tile Calculations Per Table Below"

Required Moment of Resistance (M_r) From Table Below _____ Product Approval M_f _____

M_r required Moment Resistance*					
Mean Roof Height → / Roof Slope ↓	15'	20'	25'	30'	40'
2:12	34.4	36.6	38.2	39.7	42.2
3:12	32.2	34.4	36.0	37.4	39.8
4:12	30.4	32.2	33.8	35.1	37.3
5:12	28.4	30.1	31.6	32.8	34.9
6:12	26.4	28.0	29.4	30.5	32.4
7:12	24.4	25.9	27.1	28.2	30.0

*Must be used in conjunction with a list of moment based tile systems endorsed by the Broward County Board of Rules and Appeals.

For Uplift based tile systems use Method 3. Compared the values for F' with the values for F_r. If the F' values are greater than or equal to the F_r values, for each area of the roof, then the tile attachment method is acceptable.

Method 3 "Uplift Based Tile Calculations Per RAS 127"

(P_1: _____ × L _____ = _____ × w: = _____) - W: _____ × cos θ _____ = F_{r1} _____ Product Approval F' _____

(P_2: _____ × L _____ = _____ × w: = _____) - W: _____ × cos θ _____ = F_{r2} _____ Product Approval F' _____

(P_3: _____ × L _____ = _____ × w: = _____) - W: _____ × cos θ _____ = F_{r3} _____ Product Approval F' _____

Where to Obtain Information		
Description	Symbol	Where to find
Design Pressure	P1 or P2 or P3	RAS 127 Table 1 or by an engineering analysis prepared by PE based on ASCE7
Mean Roof Height	H	Job Site
Roof Slope	θ	Job Site
Aerodynamic Multiplier	λ	Product Approval
Restoring Moment due to Gravity	M_g	Product Approval
Attachment Resistance	M_f	Product Approval
Required Moment Resistance	M_r	Calculated
Minimum Attachment Resistance	F'	Product Approval
Required Uplift Resistance	Fr	Calculated
Average Tile Weight	W	Product Approval
Tile Dimensions	L = length W = width	Product Approval
All calculations must be submitted to the building official at the time of permit application.		

Jesus Gonzalez, P.E, LEED AP
7364 Sedgebrook Dr.
Stanley, NC 28164

PRODUCT EVALUATION REPORT

Florida Building Code 2010

Per Rule 9B-72.070 – Method 1-D Evaluation Report from a Professional Engineer
REF: FL # 16057

CATEGORY:	Roofing
SUB-CATEGORY:	Roofing Tiles
PRODUCT NAME:	Alhambra Handmade Clay Roof Tile
MATERIAL:	CLAY
SUPPORT TYPE:	Wood Deck
DATE:	December 14, 2012
MANUFACTURER:	**IMEXINSA** La Paz Centro, Nicaragua and distributed by: **Zion Tile Corp.** 12002 Southwest 128th Court #103 Miami, FL 33186
PREPARED BY:	Florida Professional Engineer Jesus Gonzalez – PE 68553 7364 Sedgebrook Dr. Stanley, NC 28164

General:

Statement of Compliance:
This product as described herein has demonstrated compliance with the Florida Building Code 2010, including the High Velocity Hurricane Zone of the Florida Building Code.

This engineering validation report is being issued per Rule Chapter No. 9B-72 to support the application to a Florida Product Approval using option under section 9B-72.070 (1) (D) of the Department of Community Affairs – Florida Building Commission.

Scope:
This roofing system using the "Alhambra Roof Tile" shall be used for locations where the pressure requirements, as determined by applicable Building Code do not exceed the design pressure values obtained by calculations in compliance with RAS 127 using the values listed

Limitation and Conditions of Use:

1- This system is for wood deck applications. Minimum deck requirements shall be in compliance with applicable Building Code
2- Fire Classification: Fire Classification is outside the scope of Rule 9B-72, and it is not included in this evaluation
3- Tiles shall pass a quarterly test performed by a State of Florida approved Laboratory in accordance with TAS 112, appendix 'A'. Results of the test shall be submitted to Keystone Certification, Inc. for review.
4- A static field test shall be performed in accordance with RAS 106
5- Minimum underlayment shall comply with the applicable Roofing Application Standard RAS 120.

Installation

- This product shall be install to comply with Roofing Application Standard RAS 120

Aerodynamic Multipliers – $\lambda(ft^3)$	
Tile Profile	Direct Deck Installation
Alhambra Tile	0.21

Restoring Moment due to Gravity – Mg (ft-lbf)						
Tile Profile	2":12"	3":12"	4":12"	5":12"	6":12"	7":12"
Alhambra Tile	Direct Deck	Direct Deck	Direct Deck	Direct Deck	Direct Deck	Direct Deck
	5.27	5.18	5.05	4.88	4.65	4.36

Attachment Resistance Expressed as a Moment - M_f (ft-lbf) for Single Patty Adhesive Set System		
Tile Profile	Tile Application	Minimum Attachment Resistance
Alhambra Tile	3M™ 2-Component Foam Roof Tile Adhesive AH-160 (Formerly known as Polyfoam Polipro AH160™)	113.010*
* Paddy placement of 34.5 gram of 2-Component Foam Roof Tile Adhesive AH 160tm for pan Tile, 17.25 grams on each side of cap tiles.		

3M™ 2-Component Foam Roof Tile Adhesive AH-160 (NOA-12-0228.18, Exp 05/10/17) renews and revises NOA 11-0124.04 from Polifoam Polypro AH160™

Attachment Resistance Expressed as a Moment - M_f (ft-lbf) for Mortar Set Systems		
Tile Profile	Tile Application	Minimum Attachment Resistance
Alhambra Tile	Mortar Set	38.80

Labeling
All tiles shall bear an imprint per FBC 2010 Section 1715.8.1.

ZION TILE CORP. **MADE IN NICARAGUA**

End of Evaluation Report.

Quarterly Report

February 8, 2013

Manufacturer: Imexinsa, Nicaragua.

Zion Tile Corporation.
12002 S.W. 128th Court, Suite 103
Miami, FL 33186

Product: FL # 16057
Alhambra Handmade Clay Tile
Made in Nicaragua

Referenced Quarter

- ☐ 1st Quarter (Oct–Dec)
- ☒ 2nd Quarter (Jan-Mar)
- ☐ 3rd Quarter (Apr-Jun)
- ☐ 4th Quarter (Jul-Sep)

Test Date(s): 02/08/13 - 02/08/13

Technician: Angel Alvarez

Specimen #		1	2	3	4	5	Average	Specified
Length (in.)		17.29	17.34	17.30	17.50	17.16	17.32	+/- 5% of 17.5"
Width (in.)	Head End	7.499	7.647	7.572	7.665	7.494	7.58	+/- 5% of 7.5"
	Butt End	8.271	8.31	8.31	8.293	8.314	8.30	+/- 5% of 8.5"
Thickness (in.)		0.92	0.89	0.93	0.91	0.91	0.91	+/- 5% of .9"
Dry Wt. (lb.)		7.60	7.56	8.02	7.52	7.30	7.60	+/- 10% of 7.5 lbs
Transverse Strength (lbs.) Tested Dry - after 24 hr at 160°F		500	493	445	388	377	441	>400-Average of 5
								>350-Individual
Water Absorption (lb/ft)		13.00	13.50	14.15			13.55	<18-Average of 3
Permeability (pass or fail)		Pass	Pass	Pass			Pass	water droplets

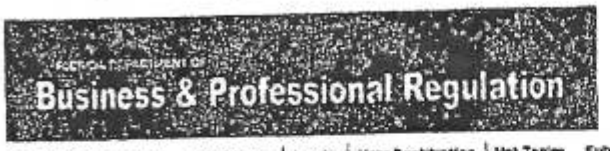
Test Results: The tiles submitted meet the Florida Building Code (TAS-112-95) & A.S.T.M. C 67 physical tests for : dimensional, transverse breaking strength, water absorption and permeability.

To the best of my knowledge, belief and professional opinion, the above data represent the actual conditions as reported herein.

Sincerely,

2-8-13

Alberto Cardona
P.E. Lic. # 17138



Florida Department of Business & Professional Regulation

Product Approval
USER: Public User

OFFICE OF THE SECRETARY

FL #	FL16057
Application Type	New
Code Version	2010
Application Status	Approved
Comments	
Archived	☐
Product Manufacturer	Zion Tiles Corp.
Address/Phone/Email	12002 Southwest 128th Court #103 Miami, FL 33186 (305) 252-9077 jgconsultants@charter.net
Authorized Signature	Mario Garcia jgconsultants@charter.net
Technical Representative Address/Phone/Email	
Quality Assurance Representative Address/Phone/Email	
Category	Roofing
Subcategory	Roofing Tiles
Compliance Method	Evaluation Report from a Florida Registered Architect or a Licensed Florida Professional Engineer ☑ Evaluation Report - Hardcopy Received
Florida Engineer or Architect Name who developed the Evaluation Report	Jesus Gonzalez
Florida License	PE-68553
Quality Assurance Entity	Keystone Certifications, Inc.
Quality Assurance Contract Expiration Date	12/31/2014
Validated By	Pedro Figueiredo ☑ Validation Checklist - Hardcopy Received
Certificate of Independence	FL16057_R0_COI_12132012_Alhambra_COI.pdf

Referenced Standard and Year (of Standard)

Standard	Year
ASTM C1167	2003
TAS 101	1995

Equivalence of Product Standards Certified By

Sections from the Code

Product Approval Method	Method 1 Option A
Date Submitted	10/31/2012
Date Validated	02/15/2013
Date Pending FBC Approval	12/21/2012
Date Approved	02/19/2013

Summary of Products

FL #	Model, Number or Name	Description
16057.1	ALHAMBRA ROOF TILE	ALHAMBRA HANDMADE CLAY TILE
Limits of Use **Approved for use in HVHZ:** Yes **Approved for use outside HVHZ:** Yes **Impact Resistant:** N/A **Design Pressure:** N/A **Other:** See limitations and guidelines for installation listed in the product evaluation report. Tiles shall pass a quarterly test performed by a State of Florida approved Laboratory in accordance with TAS 112, appendix 'A'. Results of the test shall be submitted to Keystone Certification, Inc. for review.		**Installation Instructions** FL16057_R0_II_Alhambra_PER_R1.pdf Verified By: Jesus Gonzalez 68553 Created by Independent Third Party: Yes **Evaluation Reports** FL16057_R0_AE_Alhambra_PER_R1.pdf FL16057_R0_AE_TAS 112_Report.pdf Created by Independent Third Party: Yes

Back | Next