Previous case 3/18

From: Mike Goolsby

RE: COMPLAINT: NON-COMPLIANT ROOF TILE 641 SAN LORENZO CORAL GABLES, FLA.

Good Afternoon Manny,

Miami-Dade County Product Control Section received three (3) complaints in September 2012 alleging that roofing tiles installed or awaiting installation on three separate projects were of substandard quality and did not meet the specifications on the NOA. The Miami-Dade County Product Control Section investigated each of the complaints and collected roofing tiles at the jobsites for verification testing.

The tested roofing tiles had an average thickness of 0.65", where the NOA requires the average thickness to be +/-5% of 0.90". The sampled roofing tiles are indicative of being 27.8% thinner than required.

The tile's transverse strength was also tested and reported to have an average of 134 lbs., where the average of 5 tiles requires the strength to be >400 lbs.; a 66.5% shortfall.

BORA took action to remove Zion's Miami-Dade County NOA effective October 19, 2012.

Subsequently, Zion applied for and obtained a State of Florida product approval. Zion's current State product approval is not based upon a Miami-Dade County NOA.

Regarding the complaints you have received, your field inspector should be able to verify the thickness of the tile by taking measurements of tiles loaded on the roofs. If the roof tile thickness does not fall within the range of that reflected in the State product approval of 0.90'' + /-5% (0.855'' - 0.945''), the roof tile are not in compliance with the building code.

(I am assuming that none of the projects applied for a permit prior to October 2012 using the Miami-Dade County NOA before it was revoked.)

Please let me know if you have any questions.

Michael L. Goolsby, Board and Code Administration Division Director Miami-Dade County Department of Regulatory and Economic Resources 11805 SW 26 Street Miami, Florida 33175 (786) 315-2508 (786) 315-2555 (Fax)

http://www.miamidade.gov/pera/

"Delivering Excellence Every Day"

please consider the environment before printing this e-mail.

----Original Message-----

From: Lopez, Manuel [mailto:mlopez@coralgables.com]

Sent: Monday, July 01, 2013 1:20 PM

To: 'ARGUELLES67@aol.com'; Goolsby, Michael L. (RER) Cc: mo.madani@dbpr.state.fl.us; Gascon, Jaime (RER)

Subject: RE: COMPLAINT: NON-COMPLIANT ROOF TILE 641 SAN LORENZO CORAL GABLES, FLA.

I am sorry about the delay but I was out for two weeks and I have been trying to catch up. Let me refer this to Mike

1

Previous case 3/18

Goolsby in Dade County for his input.

Mike have you rescinded the NOA for tile mentioned by Mr. Arguelles? I believe this was approved based on a Dade County NOA.

Manuel Z. Lopez, P.E. Building Official City of Coral Gables Building & Zoning Department 305-460-5242

----Original Message-----

From: ARGUELLES67@aol.com [mailto:ARGUELLES67@aol.com]

Sent: Monday, July 01, 2013 12:59 PM

To: Lopez, Manuel

Cc: mo.madani@dbpr.state.fl.us; gascon@miamidade.gov

Subject: COMPLAINT: NON-COMPLIANT ROOF TILE 641 SAN LORENZO CORAL GABLES, FLA.

Mr. Lopez,

I sent you a complaint by e-mail on 5/19/13 and just recently on 6/26/13 about the use of Non-Compliant Roof Tile at 2555 Segovia Circle and 822 Milan Coral Gables, Florida. As of yet I have not received any kind of response from you and this is a great concern.

Last week yet another job was loaded with Non-Compliant Roof Tile at 641 San Lorenzo Coral Gables, Florida. The Florida Approval dictates the tile must have an average thickness of .91" thick. The Roof tile on the jobsite does not have this thickness and as a result will have proportionally less strength. Attached: please view photos of jobsite. Also, please compare the tiles with the ones submitted to the State of Florida from the link below. Please note the tiles submitted for testing barely passed and were artificially thicker just to pass testing.

Florida Approval Testing Link:

http://www.floridabuilding.org/upload/PR Tech Docs/FL16057 R0 AE TAS%20112 Report.pdf

Please acknowledge receipt of this complaint.

Sincerely,

Dan Arguelles

Under Florida Law, e-mail 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 this office by phone or in writing.



Department of Regulatory and Economic Resources Product Control Section

11805 S.W. 26 Street (Coral Way) • Room 208 Miami, Florida 33175-2474 T 786 -315-2590 F 786-315-2599

miamidade.gov

# **MEMO**

TO:

All Building Officials in Miami-Dade County

FROM:

Michael L. Goolsby, Director

**Board and Code Administration Division** 

DATE:

October 19, 2012

SUBJECT: Notice of NOA Removal – Zion Tile Corporation NOA #07-0815.03

This is to inform you of the removal of Zion Tile Corporation's NOA effective October 19, 2012 due to the roofing tile not complying with the required thickness and breaking strength specifications. The tiles bear the marking "Zion Tile Corp. Made in Nicaragua".

If you have any questions or need additional information, please contact Jaime Gascon, P.E., Product Control Section Supervisor at 786-315-2590.

Thank you for your attention on this matter.



C.A. #: 26095

### **Breaking Strength Test Report**

May 8, 2013

Manufacturer: Artezanos, Inc.

9455 SW 78th Street. Miami, FL 33173

Referenced Ouarter N/A

Test Date(s):

05/08/13 - 05/08/13

Technician: AA

Product:

09-0422.05

Two Piece Barrel Clay Tile

Made in Colombia

Transverse Strength Only in accordance with ASTM C-1167

	1 fallsvers	e Streng	m Omy	m accor	uance wi	ui ASII	VI C-116/	
Specimen #		1	2	3	4	5	Average	Specified
Length (in.)		19.00	19.14	19.10	19.14	19.14	19.10	19 to 20.5 19 average of 5
Width (in.)	Head End	8.3	8.4	8.3	8.4	8.4	8.36	8.1 to 8.5
	Butt End	6.5	6.5	6.40	6.3	6.5	6.44	6.2 to 7.2
Height (in)		2.4	2.4	2.30	2.5	2.4	2.40	N/A
Thickness (in.)	BOTTOP CON BOTTOP AND THE HEAD PARTY PARTY BAR AND ENTERT AND SAME TO THE MASSIC SAME	0.54	0.53	0.54	0.54	0.55	0.54	N/A
Dry Wt. (lbf.)	ing diskulg to limit of government and seek and a feet on the ground and a strong services and a strong services and the government and the govern	6.50	6.50	6.30	6.40	6.50	6.44	5.5 to 6.5 ind.
			anne medicine de la companya de la c			contraction of Contract world		6.0 average of 5
Transverse Strength (lbs.) Tested Dry - after 24 hr at 160°F		250	225	220	235	255	237	>350-Individual >400-Average of 5
Water Absorption (%			OTTAKEO COLINIO PROPRIO PROPRI		A THE STREET AND A	mentings from the contract of a special and	N/A	≤13 Individual tîle
24 Hr. submersion						name in a processor de la companya d		≤11 average of 5 tiles
Absorption (%) 5 hr.	. boil							N/A
Caturation Conficien	•	PA-Standistina		- V			N/A	≤.82 Individual tile
Saturation Coefficient		ALL PROPERTY.		- ·	and the same of th		1411	≤.80 average of 5 tiles
Efflorescence					o principal de la companya de la com			N/A
Reactive Particles	Reactive Particles							None
Permeability (pass or	r fail)						N/A	Pass

To the best of my knowledge, belief and professional opinion, the above data represent the actual conditions as reported herein. Florida Tec, Inc. has no part or financial interest in in any part of the material tested herein.

Alberto Cardona P.E. Lic. # 17138

Office (305) 256-4550

Fax (866) 333-6988

1 of 1 www.floridatec.ret 10735 SW 216th St. Unit 416 Miami FL 33170

C.A. #: 26095

# **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				
1 <sup>st</sup> Quarter (Oct–Dec)				
2 <sup>nd</sup> Quarter (Jan-Mar)				
3 <sup>rd</sup> Quarter (Apr-Jun)				
4 <sup>th</sup> 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"
AAIMUI (III.)	Butt End	8.271	8.31	8.31	8.293	8.314	8.30	+/- 5% of 8.5"
Thickness (in.)	4	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	ı (lbs.)	500	493	445	388	377	4.44	>400-Average of 5
Tested Dry - after 24 hr at 160°F		300	433	440	300	211	441	>350-Individual
Water Absorption (lb/ft)		13.00	13.50	14.15			13.55	<18-Average of 3
Permeability (pass o	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

Alberto Cardonal P.E. Lic. # 17138

Office (305) 256-4550

Fax (866) 333-6988

1 of 5 www.floridatec.net 595 West 18 Street Hialeah, FL 33010



## Quarterly Report

May 8, 2013

Manufacturer: Imexinsa, Nicaragua.

Zion Tile Corporation.

12002 S.W. 128th Court, Suite 103

Miami, FL 33186

	Referenced Quarter
and the second	1 <sup>st</sup> Quarter (Oct–Dec)
- unanoppopulation of the last	2 <sup>nd</sup> Quarter (Jan-Mar)
	3 <sup>rd</sup> Quarter (Apr-Jun)
Salara Maria	4 <sup>th</sup> Quarter (Jul-Sep)
	Test Date(s):
V to season Aprillage	04/15/13 - 04/19/13
1	Technician: Ricardo Peralta

Product:

FL#: 16057

Alhambra Handmade Clay Tile

Made in Nicaragua

Specimen #		1	2	3	4	5	Average	Specified
Length (in.)		19.14	19.14	19.14	19.14	19.14	19.14	19 to 20.5 19 average of 5
Width (in.)	Head End	8.3	8.4	8.3	8.4	8.4	8.36	8.1 to 8.5
	Butt End	6.18	6.17	6.20	6.2	6.2	6.19	6.1 to 6.2
Height (in)		2.4	2.4	2.30	2.5	2.4	2.40	N/A
Thickness (in.)		0.54	0.53	0.54	0.54	0.55	0.54	NA
Dry Wt. (lbf.)		5.50	5.60	5.50	5.70	5.60	5.58	5,5 to 6,5 ind,
								6.0 average of 5
Transverse Strengt Tested Dry - after 2	* *	675	655	728	591	728	675	>350-Individual >400-Average of 5
Water Absorption ( 24 Hr. submersion	(%)	9.09	11,11	9.09	10.71	10.53	10.11	≤13 Individual tile ≤11 average of 5 tiles
Absorption (%) 5 h	ır. boil							N/A
Saturation Coeffici	ent	0.75	0.74	0.75	0.77	0.78	0.76	≤.82 Individual tile ≤.80 average of 5 tiles
Efflorescence			**************************************					NA
Reactive Particles					- Continue and		***************************************	None
Permeability (pass	or fall)	Pass	Pass	Pass			Pass	Pass

To the best of my knowledge, belief and professional opinion, the above data represent the actual conditions as reported herein. Florida Tec, Inc. has no part or financial interest in in any part of the material tested herein.

P.E. Lic. #17138

Office (305) 256-4550 Fax (866) 333-6988

1 of 3 www.floridatec.net 595 West 18 Street Hialeah, FL 33010



American Test Lab of South Florida 6801 NW 17 Ave Ft Lauderdale, FL 33309 office 954-972-6208 fax 954-972-6285 www.atlsf.com email:info@atlsf.com

# **TEST REPORT FOR ROOF TILE PHYSICAL PROPERTIES**

Client:

Artezanos, Inc.

9455 S.W. 78<sup>th</sup> Street Miami, Florida 33173

Att. Dan Arguelles

Report Date: 11/11/13

ATLSF Report #: RT1104.01-13

Page: 1 of 2

Test Authorized by:	Dan Arguelles					
rest Authorized by.	Dall Argueries					
Sampled by:	Client					
Date of Delivery:	11/1/13					
ATLSF Item #:	111594					
Test Method(s):	Standard Specification for Clay Roof Tiles, ASTM C1167-03					
Manufacturer:	Zion Tile Corporation					
Model:	Alhambra, Handmade Clay Roof Tile, Tapered Barrel					
Quantity Received:	16 tiles					
Nominal Dimensions, (in.): (l x w x h), per FBC Approval	17.5 x 8.5 x N/P					
Nominal Weight, (lbf): per FBC Approval	7.5					
Nominal Thickness, (in.): per FBC Approval	0.9					
Imprint:	Zion Tile Corp. Made in Nicaragua					
Tile Florida Approval #:	6057					
Classification:	Type I- High Profile					
ATLSF Certification #s:	Miami-Dade: 13-0228.09 FBC: TST3782 A2LA: 2650.01 testing					
Comments:	<ol> <li>The above product specifications were obtained from FBC Approval #16057.</li> <li>The tiles were hand labeled Mendavia</li> </ol>					

Client: Artezanos, Inc.

Modes cashambra, Handmade, Clay Roof Tile 3/18

Tapered Barrel, Nicaragua

Report Date: 11/11/13

ATLSF Report #: RT1104.01-13

Page 2 of 2

Physical Property	Tile #1	Tile #2	Tile #3	Tile #4	Tile #5	Average	Requirements
Length (in.)	18.0	18.0	18.0	18.3	18.2	18.1	16.6 - 18.4 indiv.
							$\geq$ 17.5 average 5
Width (in.)	7.8	7.8	7.9	7.8	7.6	7.8	8.1 - 8.9 indiv.
					3		$\geq$ 8.5 average 5
Thickness (in.)	.82	.87	.87	.82	.76	.83	.86 – .95 indiv.
							≥ .90 average 5
Height (in.)	3.1	3.2	3.2	3.3	3.2	3.2	N/P
Dry Weight (lbf.)	6.4	6.6	6.9	5.9	5.7	6.3	6.8 - 8.3 indiv.
							$\leq$ 8.3 average 5
Absorption (%)	22.4	21.9	23.4	18.6	22.2	21.7	$\leq$ 15 indiv.
24 hr. soak		100	and the second s				≤ 13 average 5
Transverse Breaking	.412	362	318	256	405	351	$\geq$ 350 indiv.
Strength (lbf.) (dry)		(f)					$\geq$ 400 average 5
Permeability	Fail	Fail	Fail	N/A	N/A	Fail	Pass
Efflorescence	N/E	N/E	N/E	N/E	N/E	N/E	Not Effloresced
Reactive Particulates	None	None	None	None	None	None	None

N/A: Test Not Required, N/P: Not Provided, N/E: Not Effloresced

The physical properties test reported in report ATLSF #: RT1·101.04-13, has been performed in full compliance with the requirements of Miami-Dade County and FBC TAS 110-2000/ASTM C1167-03 with no deviations. The tests reported in report ATLSF #: RT1104.01-13, indicate that:

- 1. The individual and average lengths comply with the requirements of the test method.
- 2. The individual and the average widths are less than provided by the test method.
- 3. Three (3) individual and the average thicknesses are less than provided by the test method.
- 4. The published height was not provided in FBC Approval #16057.

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- 5. Four (4) individual and average dry weight is less than provided by the test method.
- 6. The individual and average 24 hour cold water absorption exceeds the requirements for a Grade 1, 2, or 3 tile classification, therefore; the 5 hr. boil test was not performed.
- 7. Two (2) individual and the average transverse breaking strengths were less than provided by the test method.
- There was no efflorescence after seven (7) days.
- While the tiles are rustic by design, the tiles were considered to not evidence reactive particulates.

Prepared by:

Tony Porcello, RRO Chief Executive Officer

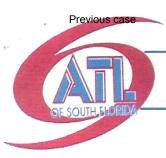
American Test Lab of South Florida

Reviewed by: [13]

Stephen W. Warter, P.E.

Reg. State of Florida # 54395

merican Test Lab of South Florida



American Test Lab of South Florida 6801 NW 17 Ave Ft Lauderdale, FL 33309 office 954-972-6208 fax 954-972-6285 www.atlsf.com email:info@atlsf.com

# TEST REPORT FOR ROOF TILE PHYSICAL PROPERTIES

Client:

Artezanos, Inc.

9455 S.W. 78<sup>th</sup> Street

Miami, Florida 33173

Att. Dan Arguelles

Report Date: 9/30/13

ATLSF Report #: RT0926.01-13

Page: 1 of 2

	<u> </u>					
Test Authorized by:	Dan Arguelles					
~	7					
Sampled by:	Client					
Date of Delivery:	9/26/13					
ATLSF Item #:	111560					
Test Method(s):	Standard Specification for Clay Roof Tiles, ASTM C1167-03					
Manufacturer:	Zion Tile Corporation					
Model:	Alhambra, Handmade Clay Roof Tile, Tapered Barrel					
Test Specimen Description:	13 pieces, terracotta					
Nominal Dimensions, (in.): (l x w x h):	17.5 x 8.5 x N/P					
Nominal Weight, (lbf):	7.5					
Nominal Thickness, (in.):	0.9					
Imprint:	Zion Tile Corp. Made in Nicaragua					
Tile Florida Approval #:	6057					
Classification:	Type I- High Profile					
ATLSF MDC Certification #:	13-0228.09					
ATLSF FBC Organization #:	TST3782					
Comments:	<ol> <li>This report is submitted as an interim report. The final report will be reissued upon completion of the efflorescence test.</li> <li>The above product specifications were obtained from FBC Approval #16057.</li> </ol>					

Client: Artezanos, Inc.

Pwwwdelcaselhambra, Handmade, Clay Roof Tile3/18

Tapered Barrel, Nicaragua

Report Date: 9/30/13

ATLSF Report #: RT0926.01-13

Page 2 of 2

Physical Property	Tile #1	Tile #2	Tile #3	Tile #4	Tile #5	Average	Requirements
Length (in.)	18.0	18.0	18.1	18.2	18.0	18.1	16.6 – 18.4 indiv.
							$\geq$ 17.5 average 5
Width (in.)	7.9	8.0	7.9	7.8	7.8	7.9	8.1 - 8.9 indiv.
							$\geq$ 8.5 average 5
Thickness (in.)	.68	.68	.69	.65	.69	.68	.86 – .95 indiv.
							$\geq$ .90 average 5
Height (in.)	3.2	3.3	3.2	3.5	3.2	3.3	N/P
Dry Weight (lbf.)	6.8	7.2	7.1	6.6	7.1	7.0	6.8 - 8.3 indiv.
			`				$\leq$ 8.3 average 5
Absorption (%)	15.1	15.9	15.8	15.7	15.6	15.6	$\leq$ 15 indiv.
24 hr. soak			pagestricity.				$\leq$ 13 average 5
Transverse Breaking	358	151	342	216	330	279	$\geq$ 350 indiv.
Strength (lbf.) (dry)		1					$\geq$ 400 average 5
Permeability	Fail	Fail	Fail	N/A	N/A	Fail	Pass
Efflorescence	N/C	N/C	N/C	N/C	N/C	N/C	Not Effloresced
Reactive Particulates	None	None	None	None	None	None	None

N/A: Test Not Required, N/P: Not Provided, N/C: Not Completed

The physical properties test reported in report ATLSF #: RT0926.01-13, has been performed in full compliance with the requirements of Miami-Dade County and FBC TAS 110-2000/ASTM C1167-03 with no deviations. The tests reported in report ATLSF #: RT0926.01-13, indicates that:

- 1. The individual and average lengths comply with the requirements of the test method.
- 2. The individual and the average width are less than provided by the test method.
- 3. The individual and the average thicknesses are less than provided by the test method.
- 4. The published height was not provided in FBC Approval #16057.
- 5. One (1) individual and average dry weight is less than provided by the test method.
- 6. The individual and average 24 hour cold water absorption exceeds the requirements for a Grade 1, 2, or 3 tile classification, therefore; the 5 hr. boil test was not performed.
- 7. Four (4) individual and the average transverse breaking strength were less than provided by the test method.
- 8. There is no efflorescence after four (4) days, however; the test will not be complete until the seventh (7) day test.
- 9. While the tiles are rustic by design, the tiles were considered to not evidence reactive particulates.

Tony Porcello, RRO

Chief Executive Officer

American Test Lab of South Florida

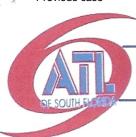
Reviewed by:

9 30 13

Stephen W. Warter, P.E.

Reg. State of Florida # 54395

American Test Lab of South Florida



American Test Lab of South Florida 6801 NW 17 Ave Ft Lauderdale, FL 33309 office 954-972-6208 fax 954-972-6285 www.atlsf.com email:info@atlsf.com

# **TEST REPORT FOR ROOF TILE PHYSICAL PROPERTIES**

Client:

Artezanos, Inc. 9455 S.W. 78<sup>th</sup> Street

Miami, Florida 33173

Att. Dan Arguelles

Report Date: 9/16/13

ATLSF Report #: RT0912.01-13

Page: 1 of 2

Test Authorized by:	Dan Arguelles
	· · · · ·
Sampled by:	Client
Date of Receipt:	Delivered: 9/12/13
ATLSF Item #:	111548
Test Method(s):	Standard Specification for Clay Roof Tiles, ASTM C1167-03 Dimensions, Dry Weight, Absorption, and Transverse Breaking Strength
Manufacturer:	Not Provided.
Series/Model:	Terracotta, Clay, Tapered, Barrel, Roof Tile
Quantity Received:	3 pieces
Imprint:	ALCAZAR Made in Nicaragua
Purpose of Test:	Self-Evaluation
Classification:	Type III- High Profile, Grade 3
MDCBCC Notification #:	None
ATLSF Certification:	13-0228.09
Comments:	None

Client:

Artezanos, Inc.

Report Date: 9/16/13

ATLSF-Report #: RT0912.01-13

Page 2 of 2

Physical Property	Tile #1	Tile #2	Tile #3	Average	Requirements
Length (in.)	17.5	17.6	17.6	17.6	Not provided
Width (in.)	7.6	7.6	8.0	7.7	Not provided
Thickness (in.)	.81	.82	.83	.82	Not provided
Height (in.)	3.6	3.5	3.5	3.5	Not provided
Dry Weight (lbf.)	6.2	6.2	6.2	6.2	Not provided
Absorption (%)	22.7	22.0	24.4	23.0	$\leq$ 15 indiv.
24 hr. soak		, ,			$\leq$ 13 average 5
Transverse Breaking	250	469	393	371	$\geq$ 350 indiv.
Strength (lbf.) (dry)					$\geq$ 400 average 5

N/P: Technical Data Not Provided

The tests reported in report ATLSF #: RT0912.01-13, indicates that:

- 1. An insufficient quantity of tiles was submitted to perform the testing in compliance with ASTM C1167-03.
- 2. Compliance with Section 8 of ASTM C 1167-03, Tolerances on Dimensions and Weight could not be made as the nominal dimensions and weight specified by the supplier were not provided.
- 3. The 24 hr. cold water absorption for the three (3) tiles tested exceeds the maximum individual and average requirements for a Grade 3 tile.
- 4. One (1) individual and the average of the three (3) tile tested do not meet Transverse Breaking Strength requirements of the test method for a high profile tile.

Prepared by:

Tony Porcello, RRO

Chief Executive Officer

American Test Lab of South Florida



American Test Lab of South Florida 6801 NW 17 Ave Ft Lauderdale, FL 33309 office 954-972-6208 fax 954-972-6285 www.atlsf.com email:info@atlsf.com

November 6, 2013

Artezanos, Inc. 9455 S.W. 78<sup>th</sup> Street Miami, Florida 33173 Att. Dan Arguelles

Re: Report Review and Comments

Mr. Arguelles:

Pursuant to your e-mail request dated 11/5/13 we have reviewed the four (4) reports related to the physical properties testing of clay roof tiles and provide the following comments.

#### Reports submitted:

- 1. Lab Report No. 121066, dated February 8, 2013 by Florida Tec titled Quarterly Report.
- 2. Lab Report No. 121066, dated May 8, 2013 by Florida Tec titled Quarterly Report.
- 3. Lab Report No. 121066B, dated May 8, 2013 by Florida Tec titled Breaking Strength Test Report.
- 4. Product Evaluation Report, dated December 14, 2012 by Jesus Gonzalez, P.E., for Florida Building Code Approval #16057.

#### Review and Comments:

Lab Report No. 121066, dated February 8, 2013 by Florida Tec titled Quarterly Report

- 1. As of today, Florida Tec is not accredited by the Florida Building as a product Testing Laboratory for ASTM C 1167. The Miami-Dade Laboratory Certificate No: 12-0130.40 is currently on the FBC website and does not include ASTM C 1167. The website also identifies that the laboratory status was submitted 2/12/13 and approved 4/10/13.
- 2. The report does not accurately provide the requirements of ASTM C 1167-03 in the "Specified" column.
  - a. The dimensional requirements are that the individual dimensions must be within +/-5% of those specified by the supplier and the average of five (5) tiles must be equal to or greater than dimensions provided by the supplier.

Artezanos, Inc. Previous case Re: Report Review and Comments

- b. The weight requirements are that the individual weights must be within +/- 10% of that specified by the supplier and the average of five (5) tiles must be equal to or less than the weight specified +10%.
- c. The transverse breaking strength requirements should be listed as  $\geq$ .
- d. The test method evaluates the percent (%) water absorption, not unit weight as is provided in the report and the test method requirements are not per the standard.
- 3. The test method requires five (5) tiles to be tested for absorption. Only three (3) results are listed.
- 4. Efflorescence and Reactive Particulates are not reported.
- 5. The test report states compliance with TAS 112-95, which is a concrete tile specification. The proper standard per FBC 2010 is ASTM C1167-03.
- 6. The Test Dates on the report are 02/08/13 02/08/13. It is physically impossible to perform the test in the report in one (1) day.
- 7. The report does not state whether or not the requirements of the requirements have been met.
- 8. The report does not state how or when the test samples were obtained.
- 9. The report does not state who requested the testing or who the client was.
- 10. The report does not provide information regarding imprints or product identification.

#### Lab Report No. 121066, dated May 8, 2013 by Florida Tec titled Quarterly Report.

- As of today, Florida Tec is not accredited by the Florida Building as a product Testing Laboratory for ASTM C 1167. The Miami-Dade Laboratory Certificate No: 12-0130.40 is currently on the FBC website and does not include ASTM C 1167. The website also identifies that the laboratory status was submitted 2/12/13 and approved 4/10/13.
- 2. The Lab Report No. is the same as the report dated February 8, 2013. Per ISO/IEC 17025:2005, reports should be uniquely identified. While the Florida Tec website does not provide evidence of or claim compliance with ISO/IEC 17025:2005, it is good laboratory practice.
- 3. The parameters in the "Specified" column have changed significantly from the February 8, 2013 report and are no longer in line with the Product Evaluation Report.
- 4. The report does not accurately provide the requirements of ASTM C 1167-03 in the "Specified" column.
  - a. If the new specified length is 19.0" then the acceptable individual length would be between 18.1"-20.0". In this case the tile lengths in the 2/8/13 report would not meet the requirements.
  - b. I cannot determine what tile widths would provide a +/-5% range as reported.
  - c. The specified thickness is no longer reported, however the average thickness has decreased almost 3/8", (a decrease of 40%), yet the average transverse breaking strength has increase 53%. While thickness and breaking strength are

Artezanos, Inc.
Previous case
Re: Report Review and Comments

not always directly related, with handmade clay tile, generally as thickness decreases strength also decreases.

- 5. There are no results provided for Efflorescence and Reactive Particulates.
- 6. The report does not state whether or not the requirements of the requirements have been met.
- 7. The report does not state how or when the samples were obtained.
- 8. The report does not state who requested the testing or who the client was.
- 9. The report does not provide information regarding imprints or product identification.

Lab Report No. 121066B, dated May 8, 2013 by Florida Tec titled Breaking Strength Test Report.

- 1. The Lab Report No. is the same as the above reports with a letter B following the number. Generally, that would indicate some relationship to the Lab Report No. 121066. Since the tiles were two (2) different manufacturers and they were tested in two (2) separate months, I do not see a relationship. Why the reports were dated the same date is unclear.
- 2. The report indicates that the tiles were tested in one (1) day which is physically impossible, if the test method is followed.
- 3. The report does not provide information regarding imprints or product identification.
- 4. The report does not state how or when the samples were obtained.
- 5. The report does not state who requested the testing or who the client was.
- 6. The "Specified" dimension and weight requirements are almost exactly the same as the May 8, 2013 report for the Alhambra tile. The requirements are not correct for the Artezanos tile, see the Data for Attachment Calculation, Table 1, below excerpted from NOA 09-0422.05.

#### 4. INSTALLATION

#### System A1 - Handmade Barrel Tile (Two-Piece Cap and Pan)

- 4.1. "World Class Two Piece Handmade Tapered Mission Roofing Tile" and its components shall be installed in strict compliance with Roofing Application Standard RAS 120.
- 4.2. Data for Attachment Calculations

Table 1: Average Weight (W) and Dimensions (I x w)								
Tile Profile	Weight-W (lbf)	Length - [ (feet)	Width - w (feet)					
Two Piece	5.8	1.42	0.58					
Handmade Tapered								
Mission Tile								

- 7. The length measurements reported are remarkably similar to those reported for the Alhambra tile in the May 8, 2013 report.
- 8. The head end width measurements reported are identical to those reported for the Alhambra tile in the May 8, 2013 report.

Artezanos, Inc.

Re: Report Review and Comments

- 9. The height measurements reported are identical to those reported for the Alhambra tile in the May 8, 2013 report.
- 10. The thickness measurements reported are identical to those reported for the Alhambra tile in the May 8, 2013 report.
- 11. The report does not state whether or not the requirements of the requirements have been met.

American Test Lab of South Florida is an independent laboratory retained by Artezanos, Inc. to provide a non-biased review of the above listed documents and provide comments. American Test Lab of South Florida, its employees, and witnessing engineers do not own, operate, or are controlled by any manufacturer and have no financial interest in the manufacture, manufacture of any related parts, specification, or installation of these or competing products. Both Artezanos, Inc. and Zion Tile Corporation have been clients of American Test Lab of South Florida and this review is not intended to promote or discredit either party or their products.

Respectfully submitted,

Tony Porcello, RRO Chief Executive Officer

American Test Lab of South Florida

C.A. #: 26093 Roofing Indu**我恨CEIVED**. No. 12-0130.40

## Tile Test Report

12 OCT 17 AM 4:5-

BUILDING CODE
OMP: 'ANCE DEPARTMENT'
PRODUCT CONTROL SECTION

October 17, 2012

Manufacturer: Imexinsa, Nicaragua.

Zion Tile Corporation.

12002 S.W. 128th Court, Suite 103

Miami, FL 33186

**Product:** 

NOA#: 07-0815.03

Alhambra Handmade Clay Tile

Made in Nicaragua

Referenced Quarter							
	1 <sup>st</sup> Quarter (Oct–Dec)						
	2 <sup>nd</sup> Quarter (Jan-Mar)						
3 <sup>rd</sup> Quarter (Apr-Jun)							
	4 <sup>th</sup> Quarter (Jul-Sep)						
	Test Date(s):						
	10/08/12 - 10/10/12						
	Technician: HG/AA						

Specimen #		1	2	3	4	5	Average	Specified
Length (in.)		18.00	18.00	17.80	18.00	17.16	17.79	+/- 5% of 17.5"
Width (in.)	Head End	6.3	6.61	7	6.56	7.13	6.72	+/- 5% of 7.5"
wider (III.)	<b>Butt End</b>	7.8	8	7.63	7.8	7.56	7.76	+/- 5% of 8.5"
Thickness (in.)		0.62	0.65	0.66	0.66	0.66	0.65	≠ +/- 5% of .9"
Dry Wt. (lb.)		7.70	7.13	7.45	8.00	7.69	7.59	+/- 10% of 7.5 lbs
Transverse Strength (lbs.)		115.5	126.8	98.7	210	119	134	>400-Average of 5
Tested Dry - after 24 hr at 160°F								>350-Individual
Water Absorption (Ib	13.57	7.72	14.39			11.89	<18-Average of 3	
Permeability (pass or fail)		OK	OK	OK			Pass	water droplets

Test Results: The tiles submitted DO NOT 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,

Alberto Cardona P.E. Lic. # 17138

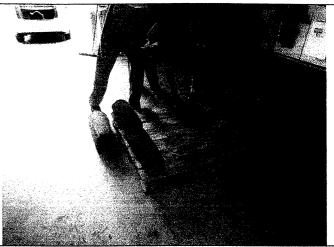
Office (305) 256-4550 Fax (866) 333-6988

1 of 2 www.floridatec.net

595 West 18 Street Hialeah, FL 33010

## **Pictures**



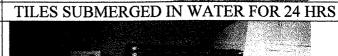


TILE SPECIMENS RECEIVED FROM CODE COMPLIANCE





WATER TANK





TILES OVEN-DRYFOR 24 HRS @ 160 °F



STRENGTH TEST

November 27, 2013

Mr Mo Madani, Manager Building Codes and Standards Office 1940 North Monroe Street Tallahassee, Florida

32399

As you will recall, I notified you by tele-conversation and via e-mail on November 1<sup>st</sup>, 2013 regarding a request for a witness on behalf of the State of Florida for the C-1167 testing of the 16 Alhambra Roof Tiles (FL 16057.1) procured from the most recent complaint dated October 24, 2013 regarding 1461 Mendavia Avenue Coral Gables Florida. You concluded that there would not be anybody from the State of Florida to witness the testing. Therefore, we continued with the testing in an effort to reveal more "job specific" information to be presented to the Florida POC Board on the December 4<sup>th</sup>, 2013 meeting.

Attached: Please view Exhibit "A" C1167 testing for the Alhambra Handmade Barrel Tile procured from 1461 Mendavia Ave. Coral Gables, Florida. Please note: the deficiency in thickness is ALSO accompanied by SERIOUS failures in TRAVERSE BREAK STRENGTH, ABSORBTION AND PERMEABILITY. In layman's terms, this means that the roof tile fails all other requirements apart from the dimension of the tile. Please compare with Exhibit "B" regarding test report RT0926.01-13 dated 9/30/13 regarding previous complaint on 641 San Lorenzo Avenue Coral Gables Florida. Please note: Failures in TRAVERSE BREAK STRENGTH, ABSORBTION AND PERMEABILITY.

On that same day, November 1, 2013, Zion Tile Corp. was to submit a revision to reduce their product's "Thickness" as per John Hill of Keystone Certifications in a letter to the Florida POC dated September 30, 2013 in an attempt to bring into compliance one job enumerated in my previous complaints as follows:

- 1. 3555 Flamingo Ave Miami Beach, Florida
- 2. 2225 Segovia Avenue Coral Gables, Florida
- 3. 822 Milan Avenue Coral Gables, Florida
- 4. 641 San Lorenzo Avenue Coral Gables, Florida
- 5. 1461 Mendavia Avenue Coral Gables, Florida

As you well know, no such evidence of a revision or testing for reduced "thickness" was submitted or took place on November 1, 2013 and we have yet to hear about any type of on site investigation or testing taking place at the other "1-4 affected" jobsites.

Since my initial complaint of May 24, 2013, I have had the opportunity to meet the Owner of Imexinsa of Nicaragua, Ileana Garcia / De Avila, (the manufacturer of Zion Tile Corp. Alhambra Roof Tile Fl (16057.1) in a non-privileged (recorded) meeting supervised by my attorney. Ileana stated that she could produce a compliant handmade roof tile and presented me the Lab Report 121066 from Florida Roof Tec dated May 8, 2013. Please see Exhibit "C". She also mentioned that she would submit some samples to

me for testing at a lab of our choice to prove that they can produce a roof tile that passes the C-1167 testing.

On August 8<sup>th</sup>, 2013, approximately 20 minutes before the Florida POC Meeting, she showed up at my attorneys office with 3 physical handmade roof tile samples for testing stamped "Alcazar", and threatened my attorney with a complaint to Miami Dade County Product Control if I should continue with my complaint against Zion Tile Corp. via the Florida POC. On September 12, 2013, I had the three tiles tested for C-1167 and they failed completely. Please see Exhibit "D". I was very surprised with this failure because this tile was given to me by Ileana of Imexinsa for the specific purpose of proving their quality control through testing. I now believe this manufacturer is not capable of bringing their product within the acceptable limits of compliance for the Florida Product Control Approval based on TRAVERSE BREAK STRENGTH, ABSORBTION AND PERMEABILITY.

On November 4, 2013, Ileana made good on her promise to file a complaint with Miami Dade County Product Control and has alleged similar complaint against my company with a Lab Report 121066B from Florida Tec, see Exhibit "E".

Please note: the very suspicious and striking similarities of both tests furnished by Ileana Garcia / De Avila owner of Imexinsa (Roof Tile manufacturer for Zion Tile Corp. Please also note: that this testing furnished by her also shares a striking resemblance to the testing on the Florida Approved Website for the Zion Tile Corp's Fl (16507). See Exhibit "F". I have taken the liberty to have these three tests analyzed by American Test Labs and have included their findings. Please see Exhibit "G".

My point is, while Zion Tile Corp has enjoyed a very lengthy "Due Process", they continue to sell non-compliant roof tile. The roof located at 1461 Mendavia Avenue is a clear example. On September 12, 2013, in a letter to the Florida POC, John Hill, President of Keystone Certifications contends that:

"Zion Tile management is fully aware that FL 16057 may only be employed to represent roof tile products conforming to ASTM C-1167 Dimensional & Weight tolerances relative to FL 16057.10".

The Fl 16057.10 roof tile at 1461 Mendavia Ave was delivered to the roof top after this date of September 30, 2013 and is hard proof that a quick gain for Zion Tile Corp. is more important than selling a quality Florida Approved Product. If the tiles loaded to 1461 Mendavia Ave were found to be "NON-CONFORMING" as dictated by John Hill in his letter dated November 21, 2013, then Zion Tile Corp is in violation and has been acting in complete disregard of their Fl 16057.10 product approval. This rogue behavior is exactly why Zion Tile Corp lost their Miami Dade County N.O.A. Please see Exhibit "H". We are a substantially affected party and this Non-Compliant behavior adversely affects our own roof tile business.

Dan Arguelles Chaptella

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