

# Ramon Cream



## Exterior Usage:

Suitable for paving and cladding applications in freezing and non-freezing conditions.

## Durability:

Suitable for most commercial and/or high traffic areas.

## Usage in wet conditions:

Suitable for wet surroundings.

## Color Range



## Other Names:

Jerusalem Cream

## Stone Type:

Limestone

## Quarry Location:

Mitzpe Ramon,  
Grebelsky Quarry

## Special Notes:

- Might contain dry seams, pits, fossils and glass veins- all of which are inherent characteristics of the stone and are filled at the factory during production. Since these voids may sometimes lose their fillings, they should be refilled as a part of standard maintenance.
- This stone contains deposits of minerals that may react to moisture. Caution should be taken in installations where this material is exposed to standing or running water which may result in spalling on the face of the stone.
- Application of a sealer is recommended. (Note: It is advised to apply a sealer prior to grouting.)



## PRODUCT TESTING SERVICE

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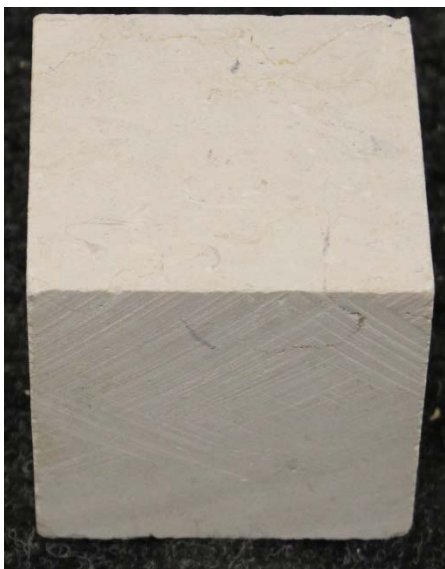
September 2, 2016

A. Grebelsky & Son  
Attn: Arik Grebelsky  
4 Hamelach St.  
Jerusalem, 95065  
Israel

Dear Mr. Grebelsky,

The samples you identified as “Ramon Cream, Jerusalem Cream” were tested per ASTM C170 Compressive Strength per your request (TCNA Test Report: TCNA-536-16). The analysis was performed by the Bishop Materials Laboratory part of Clemson University. All comments, findings, and interpretations within this report were made by the Bishop Materials Laboratory.

The following is an image of the product which was submitted for testing.



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Katelyn Simpson  
Laboratory Manager

9/2/2016



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**Results of Tests on Brick conducted in accordance with ASTM C170 - 15b Standard Method for Compressive Strength of Dimensional Stone**

9/6/2016

Name:	Tile Council of North America 100 Clemson Research Blvd. Anderson, SC 29625	Plant:	North America Office
Phone:		Report Number:	7151_15184
Fax:		Date Sampled:	8/29/2016
Test Equipment:	BML - 032 (Satec), BML - 005 (Dryer), BML-015 "12 inch Caliper"	Date Completed:	9/2/2016
Sample Description:	TCNA-536-16 Ramon Cream, Jerusalem Cream	Technician	Mark Young

**Dry**

ID #	Average Length (in.)	Average Width (in.)	Area (in. <sup>2</sup> )	Test Peak (lbf)	Compressive Strength (psi)	Test Date
1	3.11	3.09	9.61	121700	12700	9/2/2016
2	3.07	3.03	9.31	71580	7690	
3	3.09	3.09	9.53	134100	14100	
4	3.04	3.06	9.32	80890	8680	
5	3.04	3.08	9.35	106000	11300	
Average	3.07	3.07	9.42	102854	10894	
				St Dev	2687	

**Wet**

ID #	Average Length (in.)	Average Width (in.)	Area (in. <sup>2</sup> )	Test Peak (lbf)	Compressive Strength (psi)	Test Date
1	3.07	3.06	9.38	119300	12700	9/2/2016
2	3.05	3.07	9.37	92700	9890	
3	3.05	3.08	9.39	60160	6410	
4	3.02	3.05	9.22	101200	11000	
5	3.05	3.08	9.37	107400	11500	
Average	3.05	3.07	9.35	96152	10300	
				St Dev	2397	

Michael Walker  
Quality Manager



## PRODUCT TESTING SERVICE

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August 11, 2016

A. Grebelsky & Son  
Attn: Arik Grebelsky  
4 Hamelach St.  
Har Tuv Jerusalem, 95065  
Israel

Dear Mr. Grebelsky,

Tile Council of North America has tested the samples you submitted. Test report TCNA-536-16 is enclosed. If you have any questions or concerns, please contact us.

Best Regards,

TILE COUNCIL OF NORTH AMERICA, INC.

Katelyn Simpson  
Laboratory Manager  
Enclosures



# PRODUCT TESTING SERVICE

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TCNA TEST REPORT NUMBER:

TCNA-536-16

PAGE: 1 OF 3

TEST REQUESTED BY:

A. Grebelsky & Son

TEST METHOD: ASTM C97: "Absorption and Bulk Specific Gravity of Dimension Stone"

Informal Test Method Description: These test methods cover the tests for determining the absorption and bulk specific gravity of all types of dimension stone, except slate. These test methods are useful in indicating the differences in absorption between the various dimension stones. See ASTM C97 for all method details and information.

TEST SUBJECT MATERIAL:

Identified by client as: "**Ramon Cream, Jerusalem Cream**"  
Approximate Size as Received: 3"x3"x3"

TEST DATE:

8/1/2016 – 8/3/2016

TEST PROCEDURE NOTES:

- Sample prep: None
- The specimens were dried in an oven for 48 hours before a dry weight was recorded for each specimen.
- The specimens were then submerged in water for an additional 48 hours before measuring the saturated and suspended weights.
- The weight percent absorption and the density were then calculated based on the weight measurements made.

TEST RESULTS:

	% Water Absorption	Density (lb/ft <sup>3</sup> )
Specimen 1	1.95%	156.8
Specimen 2	1.87%	156.2
Specimen 3	2.61%	152.8
Specimen 4	2.24%	154.2
Specimen 5	1.13%	161.4
Average:	1.96%	156.3

COMMENTS: None





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TCNA TEST REPORT NUMBER:

TCNA-536-16

PAGE: 2 OF 3

TEST REQUESTED BY:

A. Grebelsky & Son

TEST SUBJECT MATERIAL:

Identified by client as: “Ramon Cream, Jerusalem Cream”

TEST METHOD: ASTM C97: “Absorption and Bulk Specific Gravity of Dimension Stone”

## ASTM SPECIFICATIONS\*:

ASTM standard	Stone Type	Specification
ASTM C503	Marble – Calcite	Maximum 0.20% Absorption; Minimum 162 lb/ft <sup>3</sup> Density
ASTM C503	Marble – Dolomite	Maximum 0.20% Absorption; Minimum 175 lb/ft <sup>3</sup> Density
ASTM C1527	Travertine (Interior or Exterior)	Maximum 2.5% Absorption; Minimum 144 lb/ft <sup>3</sup> Density
ASTM C568	Limestone (Low Density)	Maximum 12.0% Absorption; Minimum 110 lb/ft <sup>3</sup> Density
ASTM C568	Limestone (Medium Density)	Maximum 7.5% Absorption; Minimum 135 lb/ft <sup>3</sup> Density
ASTM C568	Limestone (High Density)	Maximum 3.0% Absorption; Minimum 160 lb/ft <sup>3</sup> Density
ASTM C615	Granite	Maximum 0.40% Absorption; Minimum 160 lb/ft <sup>3</sup> Density
ASTM C616	Quartz (Sandstone)	Maximum 8% Absorption; Minimum 125 lb/ft <sup>3</sup> Density
ASTM C616	Quartz (Quartzitic Sandstone)	Maximum 3% Absorption; Minimum 150 lb/ft <sup>3</sup> Density
ASTM C616	Quartz (Quartzite)	Maximum 1% Absorption; Minimum 160 lb/ft <sup>3</sup> Density

*\*For more detailed information, refer to ASTM C503 Specification for Marble Dimension Stone, ASTM C1527 Specification for Travertine Dimension Stone, ASTM C568 Specification for Limestone Dimension Stone, ASTM C616 Specification for Quartz-Based Dimension Stone and ASTM C615 Specification for Granite Dimension Stone*

## IMAGE OF PRODUCT TESTED:



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TCNA-536-16

PAGE: 3 OF 3

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Katelyn Simpson  
Laboratory Manager

8/11/2016

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TCNA TEST REPORT NUMBER:

TCNA-536-16

PAGE: 1 OF 3

TEST REQUESTED BY:

A. Grebelsky & Son

TEST METHOD:

ASTM C880: "Flexural Strength of Dimension Stone"

Informal Test Method Description: This test method covers the procedure for determining the flexural strength of stone by use of a simple beam using quarter-point loading. This test method is useful in indicating the differences in flexural strength between the various dimension stones. See ASTM C880 for all method details and information.

TEST SUBJECT MATERIAL:

Identified by client as: "**Ramon Cream, Jerusalem Cream**"

Approximate Size as Received: 4"x12"x1.25"

TEST DATE:

8/1/2016–8/3/2016

TEST PROCEDURE NOTES:

- Sample prep: None
- Five of ten specimens were dried in an oven for 48 hours. The remaining five were submerged in water for 48 hours.
- All ten specimens were broken by a four point load on an Instron universal tester with a load rate of 600 psi/min and a span of 10.0 inches\*.

TEST RESULTS:

Dry Condition	Flexural Strength (psi)	Wet Condition	Flexural Strength (psi)
Specimen 1	800	Specimen 1	883
Specimen 2	1288	Specimen 2	805
Specimen 3	600	Specimen 3	1009
Specimen 4	853	Specimen 4	599
Specimen 5	953	Specimen 5	432
Average	899	Average	746
St. Deviation	253	St. Deviation	230

\***COMMENTS:** The test method states that the specimens shall be 15" long. The client submitted 12" long specimens therefore the span was set to 10". The test was modified per the client's request.



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TCNA TEST REPORT NUMBER:

TCNA-536-16

PAGE: 2 OF 3

TEST REQUESTED BY:

A. Grebelsky & Son

TEST SUBJECT MATERIAL:

Identified by client as: “Ramon Cream, Jerusalem Cream”

TEST METHOD:

ASTM C880: “Flexural Strength of Dimension Stone”

## ASTM SPECIFICATIONS\*:

ASTM standard	Stone Type	Specification
ASTM C503	Marble (Calcite or Dolomite)	Minimum 1000 psi
ASTM C1527	Travertine (Interior or Exterior)	Minimum 500 psi
ASTM C568	Limestone (Low Density)	No Requirement
ASTM C568	Limestone (Medium Density)	No Requirement
ASTM C568	Limestone (High Density)	No Requirement
ASTM C615	Granite	Minimum 1200 psi
ASTM C616	Quartz (Sandstone)	No Requirement
ASTM C616	Quartz (Quartzitic Sandstone)	No Requirement
ASTM C616	Quartz (Quartzite)	No Requirement

*\*For more detailed information, refer to ASTM C503 Specification for Marble Dimension Stone, ASTM C1527 Specification for Travertine Dimension Stone, ASTM C568 Specification for Limestone Dimension Stone, ASTM C616 Specification for Quartz-Based Dimension Stone and ASTM C615 Specification for Granite Dimension Stone*

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PAGE: 3 OF 3

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Katelyn Simpson  
Laboratory Manager

8/11/2016



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TCNA TEST REPORT NUMBER:

TCNA-536-16

PAGE: 1 OF 3

TEST REQUESTED BY:

A. Grebelsky & Son

TEST METHOD:

ASTM C1353-15: "Abrasion Resistance of Dimension Stone Subjected to Foot Traffic Using a Rotary Platform Abraser"

Informal Test Method Description: This test method covers the establishment of an index of abrasion resistance by determination of loss of volume resulting from abrasion of dimension stone. A specimen is abraded using rotary rubbing action under controlled conditions of pressure and abrasive action. See ASTM C1353 for all method details and information.

TEST SUBJECT MATERIAL:

Identified by client as: "**Ramon Cream, Jerusalem Cream**"  
Approximate Size as Received: 4"x4"

TEST DATE:

8/1/2016 – 8/5/2016

TEST PROCEDURE:

- Sample prep: None
- Three specimens were tested.
- The bulk density of the specimens was determined by following the procedure in ASTM C97.
- After, drying the specimens the average index of abrasion ( $I_w$ ) resistance was determined by following the procedure in ASTM C1353 using a Taber Abraser for 1,000 revolutions
- The relative humidity of the test area was 50%

TEST RESULTS:

	Index of Abrasion ( $I_w$ )
Specimen 1	24
Specimen 2	19
Specimen 3	16
Average:	20

COMMENTS: None



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TCNA TEST REPORT NUMBER:

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PAGE: 2 OF 3

TEST REQUESTED BY:

A. Grebelsky & Son

TEST SUBJECT MATERIAL:

Identified by client as: “Ramon Cream, Jerusalem Cream”

TEST METHOD:

ASTM C1353-15: “Abrasion Resistance of Dimension Stone Subjected to Foot Traffic Using a Rotary Platform Abraser”

## ASTM SPECIFICATIONS\*:

ASTM standard	Stone Type	Specification
ASTM C503	Marble (Calcite or Dolomite)	Minimum $H_A$ 10 (ASTM C241)
ASTM C1527	Travertine (Interior or Exterior)	Minimum $H_A$ 10 (ASTM C241)
ASTM C568	Limestone (Low Density)	Minimum $H_A$ 10 (ASTM C241)
ASTM C568	Limestone (Medium Density)	Minimum $H_A$ 10 (ASTM C241)
ASTM C568	Limestone (High Density)	Minimum $H_A$ 10 (ASTM C241)
ASTM C615	Granite	Minimum $H_A$ 25 (ASTM C241)
ASTM C616	Quartz (Sandstone)	Minimum $H_A$ 2 (ASTM C241)
ASTM C616	Quartz (Quartzitic Sandstone)	Minimum $H_A$ 8 (ASTM C241)
ASTM C616	Quartz (Quartzite)	Minimum $H_A$ 8 (ASTM C241)

\*For more detailed information, refer to ASTM C503 Specification for Marble Dimension Stone, ASTM C1527 Specification for Travertine Dimension Stone, ASTM C568 Specification for Limestone Dimension Stone, ASTM C616 Specification for Quartz-Based Dimension Stone and ASTM C615 Specification for Granite Dimension Stone

Note:  $I_W$  and  $H_A$  are similar values for softer stones like marble and limestone, but not for harder stones like granite. The specifications state the following regarding the abrasion methods: “The supplier of the No. 60 Alundum abrasive, Norton, has indicated that the formula for Norton treatment 138S has been changed. The new abrasive is currently more aggressive, resulting in lower abrasive hardness values ( $H_A$ ) than when the standard (ASTM C241) was initially established. As such, care should be taken when interpreting  $H_A$  values from tests using the new abrasive, particularly with regard to current ASTM stone standard specification requirements for abrasion resistance, which were developed when the original abrasive was still in use. Committee C18 is actively studying alternatives to address this issue.” “Abrasion resistance test method C1353 will eventually replace test method C241 and it is not necessary to perform both tests”

## IMAGE OF PRODUCT TESTED:



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Katelyn Simpson  
Laboratory Manager

8/11/2016





## PRODUCT TESTING SERVICE

100 Clemson Research Blvd. ■ Anderson, SC 29625 ■ Tel (864) 646-TILE ■ Fax (864) 646-2821

October 6, 2016

A. Grebelsky & Son  
Attn: Arik Grebelsky  
4 Hamelach St.  
Har Tuv Jerusalem, 95065  
Israel

Dear Mr. Grebelsky,

The sample you identified as “Ramon Cream, Jerusalem Cream” was tested per ASTM C666 High cycle freeze/thaw resistance per your request (TCNA Test Report: TCNA-539-16). The testing was performed by Nelson Testing Laboratories in Elmhurst, IL. All comments, findings, and interpretations within this report were made by Nelson Testing Laboratories.

The following is an image of the product which was submitted for testing.



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Katelyn Simpson  
Laboratory Manager

10/6/2016



EXPERIENCED | INNOVATIVE | AUTHENTIC

**ASTM C 666 – Freeze-Thaw Evaluation**

**for**

**Tile Council of North America**

**TCNA Project – 539-16 – Ramon Cream, Jerusalem Cream**

**Tile Council of North America  
100 Clemson Research Blvd  
Anderson, SC 29625**

**October 5, 2016**

October 5, 2016

Tile Council of North America  
Attn: Testing  
100 Clemson Research Blvd  
Anderson, SC 29625

#### REPORT OF TESTS

SUBJECT: **Physical Analysis of Tile Specimens**

PROJECT: **TCNA - 539-16 – Ramon Cream, Jerusalem Cream**

TEST METHOD: ASTM C666, "Standard Test Method for Resistance of Concrete to Rapid Freezing and Thawing"

MATERIALS: Sent by Tile Council of North America to NTL on August 2, 2016

NTL PROJECT #: 16-1236(B)

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#### TEST DESCRIPTION

Five specimens (approximately 3 x 3 x 3-in) were subjected to freeze-thaw durability testing for 300 cycles in an ASTM C666, Procedure A, test apparatus. The testing began in August 2016 and ended in October 2016. The specimens were weighed before testing and after every 35 cycles until completion to measure deterioration.

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Tile Council of North America – 539-16  
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### TEST RESULTS

	<u>Weight Before Testing</u>	<u>% Change</u>
A) Ramon Cream, Jerusalem Cream	1228.5 g.	n/a
B) Ramon Cream, Jerusalem Cream	1230.5 g.	n/a
C) Ramon Cream, Jerusalem Cream	1161.5 g.	n/a
D) Ramon Cream, Jerusalem Cream	1195.5 g.	n/a
E) Ramon Cream, Jerusalem Cream	1229.0 g.	n/a

	<u>Weight @ 35 Cycles</u>	<u>% Change</u>
A) Ramon Cream, Jerusalem Cream	1228.5 g.	0.0%
B) Ramon Cream, Jerusalem Cream	1230.5 g.	0.0%
C) Ramon Cream, Jerusalem Cream	1161.5 g.	0.0%
D) Ramon Cream, Jerusalem Cream	1195.5 g.	0.0%
E) Ramon Cream, Jerusalem Cream	1229.0 g.	0.0%

	<u>Weight @ 70 Cycles</u>	<u>% Change</u>
A) Ramon Cream, Jerusalem Cream	1228.5 g.	0.0%
B) Ramon Cream, Jerusalem Cream	1230.5 g.	0.0%
C) Ramon Cream, Jerusalem Cream	1161.5 g.	0.0%
D) Ramon Cream, Jerusalem Cream	1195.5 g.	0.0%
E) Ramon Cream, Jerusalem Cream	1229.0 g.	0.0%

	<u>Weight @ 105 Cycles</u>	<u>% Change</u>
A) Ramon Cream, Jerusalem Cream	1228.5 g.	0.0%
B) Ramon Cream, Jerusalem Cream	1230.5 g.	0.0%
C) Ramon Cream, Jerusalem Cream	1161.5 g.	0.0%
D) Ramon Cream, Jerusalem Cream	1195.5 g.	0.0%
E) Ramon Cream, Jerusalem Cream	1229.0 g.	0.0%

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### TEST RESULTS

	<u>Weight @ 140 Cycles</u>	<u>% Change</u>
A) Ramon Cream, Jerusalem Cream	1228.5 g.	0.0%
B) Ramon Cream, Jerusalem Cream	1230.5 g.	0.0%
C) Ramon Cream, Jerusalem Cream	1161.5 g.	0.0%
D) Ramon Cream, Jerusalem Cream	1195.5 g.	0.0%
E) Ramon Cream, Jerusalem Cream	1224.7 g.	-0.4%

	<u>Weight @ 175 Cycles</u>	<u>% Change</u>
A) Ramon Cream, Jerusalem Cream	1228.5 g.	0.0%
B) Ramon Cream, Jerusalem Cream	1230.5 g.	0.0%
C) Ramon Cream, Jerusalem Cream	1161.5 g.	0.0%
D) Ramon Cream, Jerusalem Cream	1195.5 g.	0.0%
E) Ramon Cream, Jerusalem Cream	1224.7 g.	-0.4%

	<u>Weight @ 210 Cycles</u>	<u>% Change</u>
A) Ramon Cream, Jerusalem Cream	1228.5 g.	0.0%
B) Ramon Cream, Jerusalem Cream	1230.5 g.	0.0%
C) Ramon Cream, Jerusalem Cream	1161.5 g.	0.0%
D) Ramon Cream, Jerusalem Cream	1195.5 g.	0.0%
E) Ramon Cream, Jerusalem Cream	1224.7 g.	-0.4%

	<u>Weight @ 245 Cycles</u>	<u>% Change</u>
A) Ramon Cream, Jerusalem Cream	1228.5 g.	0.0%
B) Ramon Cream, Jerusalem Cream	1230.5 g.	0.0%
C) Ramon Cream, Jerusalem Cream	1160.0 g.	-0.1%
D) Ramon Cream, Jerusalem Cream	1195.5 g.	0.0%
E) Ramon Cream, Jerusalem Cream	1224.7 g.	-0.4%



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### TEST RESULTS

	<u>Weight @ 280 Cycles</u>	<u>% Change</u>
A) Ramon Cream, Jerusalem Cream	1228.5 g.	0.0%
B) Ramon Cream, Jerusalem Cream	1230.5 g.	0.0%
C) Ramon Cream, Jerusalem Cream	1160.0 g.	-0.1%
D) Ramon Cream, Jerusalem Cream	1195.5 g.	0.0%
E) Ramon Cream, Jerusalem Cream	1224.7 g.	-0.4%

	<u>Weight @ 300 Cycles</u>	<u>% Change</u>
A) Ramon Cream, Jerusalem Cream	1228.5 g.	0.0%
B) Ramon Cream, Jerusalem Cream	1230.5 g.	0.0%
C) Ramon Cream, Jerusalem Cream	1160.0 g.	-0.1%
D) Ramon Cream, Jerusalem Cream	1195.5 g.	0.0%
E) Ramon Cream, Jerusalem Cream	1224.7 g.	-0.4%

### SUMMARY

Three specimens showed no visible signs of deterioration upon completion of the 300 freeze-thaw cycles, while two specimens exhibited small chips during the course of the testing.

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## PICTURES

### Before Testing



### After 300 Freeze-Thaw Cycles



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Respectfully submitted,

NELSON TESTING LABORATORIES



Mark R. Nelson  
President