

BRAUN
INTERTEC**Braun Intertec Corporation**
11001 Hampshire Avenue S
Minneapolis, MN 55438Phone: 952.995.2000
Fax: 952.995.2020
Web: braunintertec.com**Standard Test Method for Resistance of Concrete to Rapid Freezing and Thawing**
ASTM C 666**Date:** April 30, 2008**Project Number:**

BL-08-00585

Client:Doug Edwards
Edwards Cast Stone Company
777 Edwards Road
Dubuque, IA 52003**Project Description:**Arch. Cast Stone Testing
Edwards Cast Stone Company
Dubuque, IA**Concrete Mixture Data**Set Number: 2
Cast Date: 1/11/08
Mix Design: DC23**Sample Data**

Sample Number:	D	E	F
Procedure Used:	Procedure A	Procedure A	Procedure A
Width (in.):	2.88	2.88	2.99
Height (in.):	3.95	4.00	4.01
Length (in.):	16.10	15.90	15.95

Laboratory Data

Date Received:	2/5/2008	2/5/2008	2/5/2008
Date Tested:	2/8/2008	2/8/2008	2/8/2008

Test Results

Cycles	D	E	F
40	0.0%	0.0%	0.0%
80	0.1%	0.1%	0.1%
116	0.1%	0.1%	0.1%
153	0.1%	0.1%	0.1%
190	0.2%	0.2%	0.2%
227	0.2%	0.2%	0.2%
264	0.3%	0.3%	0.3%
300	0.4%	0.4%	0.4%

Final Results

CPWL	0.4%	0.4%	0.4%
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Remarks: The maximum cumulative percent mass loss (CPWL) per ASTM C 1364 is 5.0% at 300 cycles.
The samples meet the freeze-thaw requirement of ASTM C 1364.

Reviewed By:



Jamison T. Langdon
Concrete Materials Specialist

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ASTM C 666**Date:** April 30, 2008**Project Number:**

BL-08-00585

Client:Doug Edwards
Edwards Cast Stone Company
777 Edwards Road
Dubuque, IA 52003**Project Description:**Arch. Cast Stone Testing
Edwards Cast Stone Company
Dubuque, IA**Concrete Mixture Data**Set Number: I
Cast Date: 1/11/08
Mix Design: WC803**Sample Data**

Sample Number:	A	B	C
Procedure Used:	Procedure A	Procedure A	Procedure A
Width (in.):	3.04	3.05	3.07
Height (in.):	3.98	4.00	4.10
Length (in.):	16.10	16.05	16.00

Laboratory Data

Date Received:	2/5/2008	2/5/2008	2/5/2008
Date Tested:	2/8/2008	2/8/2008	2/8/2008

Test Results

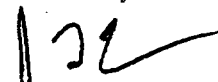
Cycles	A	B	C
40	0.0%	0.0%	0.0%
80	0.1%	0.1%	0.1%
116	0.1%	0.1%	0.1%
153	0.2%	0.1%	0.2%
190	0.2%	0.2%	0.2%
227	0.3%	0.2%	0.3%
264	0.5%	0.3%	0.3%
300	0.6%	0.3%	0.4%

Final Results

CPWL	0.6%	0.3%	0.4%
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Remarks: The maximum cumulative percent mass loss (CPWL) per ASTM C 1364 is 5.0% at 300 cycles.
The samples meet the freeze-thaw requirement of ASTM C 1364.

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BRAUN
INTERTECBraun Intertec Corporation
11001 Hampshire Avenue S
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Fax: 952.995.2020
Web: braunintertec.comSampling and Testing Architectural Cast Stone
Specifications per ASTM C1364

Date: March 12, 2008

Project Number: BL-08-00585

Client:
Doug Edwards
Edwards Cast Stone Company
777 Edwards Road
Dubuque, IA 52003Project Description:
Arch. Cast Stone Testing
Edwards Cast Stone Company
Dubuque, IA

Sample Data

Type of Unit:	Cut Cast Stone Cubes
Supplier:	Edwards Cast Stone Co., Dubuque IA
Mix Design:	DC23
Date Cast:	1/11/08
Date Received:	2/5/08

Standard Test Method for Absorption of Architectural Cast Stone (Test Method A, Cold Water)
ASTM C1195

Sample Number:	2A1	2B1	2C1	Average	Specifications
Date Tested:	4/23/08	4/23/08	4/23/08		
Moisture Content as Received (%):	5.0	5.0	5.1	5.0	
Absorption (%):	4.5	4.5	4.6	4.5	Max 6.0

Standard Test Method for Absorption of Architectural Cast Stone (Test Method B, Boiling Water)
ASTM C1195

Sample Number:	2A1	2B1	2C1	Average	Specifications
Date Tested:	4/23/08	4/23/08	4/23/08		
Moisture Content as Received (%):	4.9	5.1	5.0	5.0	
Absorption (%):	5.2	6.3	5.5	5.7	Max 10.0

Standard Test Method for Compressive Strength of Architectural Cast Stone
ASTM C1194

Sample Number:	2A3	2B3	2C3	Average	Specifications
Date Tested:	2/10/08	2/10/08	2/10/08		
Moisture Content as Received (%):	6.6	7.1	6.9	6.9	
Width (in.):	2.01	2.05	2.06	2.04	
Length (in.):	2.09	2.11	2.09	2.09	
Height (in.):	2.01	2.00	2.02	2.01	
Compressive Strength (psi):	9190	8680	9390	9090	Min 6500

Remarks: The samples meet the requirements for compression and Method B absorption but not Method A absorption.

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Web: braunintertec.com**Sampling and Testing Architectural Cast Stone
Specifications per ASTM C1364**

Date: March 12, 2008

Project Number: BL-08-00585

Client:Doug Edwards
Edwards Cast Stone Company
777 Edwards Road
Dubuque, IA 52003**Project Description:**Arch. Cast Stone Testing
Edwards Cast Stone Company
Dubuque, IA**Sample Data**

Type of Unit:	Cut Cast Stone Cubes
Supplier:	Edwards Cast Stone Co., Dubuque IA
Mix Design:	WC803
Date Cast:	1/11/08
Date Received:	2/5/08

**Standard Test Method for Absorption of Architectural Cast Stone (Test Method A, Cold Water)
ASTM C1195**

Sample Number:	1A1	1B1	1C1	Average	Specifications
Date Tested:	2/11/08	2/11/08	2/11/08		
Moisture Content as Received (%):	5.0	5.0	5.0	5.0	
Absorption (%):	4.6	4.6	4.6	4.6	Max 6.0

**Standard Test Method for Absorption of Architectural Cast Stone (Test Method B, Boiling Water)
ASTM C1195**

Sample Number:	1A2	1B2	1C2	Average	Specifications
Date Tested:	2/11/08	2/11/08	2/11/08		
Moisture Content as Received (%):	4.7	4.6	4.7	4.7	
Absorption (%):	5.6	5.8	7.1	6.2	Max 10.0

**Standard Test Method for Compressive Strength of Architectural Cast Stone
ASTM C1194**

Sample Number:	1A3	1B3	1C3	Average	Specifications
Date Tested:	2/10/08	2/10/08	2/10/08		
Moisture Content as Received (%):	4.9	4.9	5.0	4.9	
Width (in.):	1.97	1.98	1.99	1.98	
Length (in.):	2.06	2.08	2.07	2.07	
Height (in.):	2.01	2.01	2.02	2.01	
Compressive Strength (psi):	11910	11950	12670	12180	Min 6500

Remarks: The samples meet the requirements for compression and absorption.

Reviewed By:


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