

STONE TEST CERTIFICATE

Date Received	07 September 2010
Date Reported	10 October 2010

Lab Ref.	MC2 12282/1
Client Ref.	--

Client	International Marble Co.LLC		
Project	Not given	Sampled by	Client*
Description	One Sample of Natural Marble Stone(Trade Name : Desert Rose)	Test Location	Exova,Azaiba Lab

1. Introduction

One sample of marble(natural),contents sawn cut specimens of dimensions as natural stone,was submitted to Exova laboratory on 07th September 2010 with a request to carry at following test

- 1.1 Density and Water Absorbtion(ASTM C 97) on 60x60x60mm cubical specimens
- 1.2 Compressive Strength(ASTM C 170) on 60x60x60mm cubical specimens
- 1.3 Modules of Rupture(ASTM C 99) on 200x100x57mm specimens
- 1.4 Crystallisation Test (BRE Report No:141) on 60x60x60mm cubical specimens
- 1.5 Porosity & Saturation Coefficient (BRE Report No:141) on 60x60x60mm cubical specimens
- 1.6 Wetting & Drying (BRE Report No:141) on 60x60x60mm cubical specimens
- 1.7 Abrasion Resistance(ASTM C 241/C 1353) on 60x60x60mm cubical specimens
- 1.8 Flexural Strength (ASTM C 880) on 380x100x32mm specimens
- 1.9 Visual Inspection(GSO 447/1994) on 300x300x50mm specimens

These tests were carried out in accordance with above mentioned test methods and the results obtained are as tabulated below.

2. Test Results

2.1 Density and Water Absorption (ASTM C 97)

Specimen Ref.	Weight of Dried Specimen(g)	SSD Weight(g)	Weight in Water(g)	Density (kg/m ³)	Absorption (%)
P 10-3136/1	168.8	169.5	106.0	2.658	0.4
P 10-3136/2	169.6	170.3	106.6	2.662	0.4
P 10-3136/3	166.5	167.3	104.3	2.643	0.5
Average				2.654	0.4

2.2 Compressive Strength (ASTM C 170)

Specimen Ref.	Test Condition	Compressive Strength (MPa)**
P 10-3137/1-5	Dry	143.7
P 10-3137/6-10	Wet	137.0

** Average of 5 specimens

2.3 Modulus of Rupture (ASTM C 99)

Specimen Ref.	Test Condition	Modulus of Rupture (MPa)***
P 10-3138/1-5	Dry	13.8
P 10-3138/6-10	Wet	9.7

*** Average of 5 specimens

2.4 Crystallisation Test (BRE Report No.141)

Specimen Ref:	P 10-3139/1	P 10-3139/2	P 10-3139/3	P 10-3139/4	P 10-3139/5****
No. of cycles	15	15	15	15	15
Weight Loss/Gain (%)*****	+0.06	+0.17	+0.23	+0.12	+0.17
Mean weight Loss/Gain(%)	+0.15				

**** Average of 5 specimens

*****Note : (-ve)Sign indicates weight loss and (+ve) sign indicates weight gain.

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2.5 Porosity & Saturation Coefficient (BRE Report No:141)

Specimen Ref.	Porosity (%)*****	Saturation coefficient*****
P 10-3140/1-4	0.8	0.9

*****Average of 4 specimens

2.6 Wetting & Drying (BRE Report No:141)

Specimen Ref:	P- 10- 3141/1-3*****
No: of cycles	15
Observations	Pass, No Signs of delamination, splitting or flaking after the test

***** Average of 3 specimens

2.7 Abrasion Resistance (ASTM C 241-90/C1353)

Exova Sample Reference	Trade Name	Abrasion Value	Abrasion Value	Abrasion Value	Mean Abrasion Resistance H _a Value *****
		(Test A)	(Test B)	(Test C)	
P 10 - 3143	Natural Stone	11.83	13.12	13.16	12.70

***** This test was carried out in our approved subcontract lab in UK and abrasive used was 'Abralox' Grade 60 (Abralox is the equivalent to European 'Alundum' as specified in ASTM C241-90)

2.8 Flexural Strength (ASTM C 880)

Specimen Ref.	Test Condition	Flexural Strength (MPa)*****
P 10-3144/1-5	Dry	9.3
P 10-3144/6-10	Wet	8.4

***** Average of 5 specimens

2.9 Result of Visual Inspection (GSO 447/1994)

Specimen	Findings of Visual Inspection
P 10-3142/1-3	Set of 3 tiles were visually examined in the laboratory (Megascopically) for the presence of any defects and the tiles are found to be free from the defects such as cracking, crazing, creeping, efflorescence, fissures and pitting

*Sampling certificate was not given



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For and on behalf of Exova Ltd. & Co. LLC

TEST REPORT

Date Received	07 September 2010
Date Reported	10 October 2010

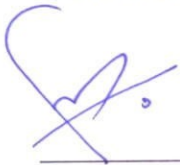
Lab Ref.	MC2: 12282/2
Clients Ref.	--

Client	International Marble Co. LLC		
Project	Not given		
Description	Three sample of Natural Marble Stone Tiles(Trade Name :Desert Rose)		
Source	Quarry at Ibri		
Date Tested	10.10.2010	Exova Sample Ref.	P 10-3145
Test Location	Exova, Azaiba Lab	Sampled by	Client

Test Results – Measurement of Dimensions

Exova Specimen Ref.	Client Ref.	Dimensions																
		Length (mm)				Width (mm)				Thickness (mm)								
		1	2	3	Average	1	2	3	Average	1	2	3	4	5	6	7	8	Average
P 10-3145/A1	Type-1	200.7	200.8	200.6	200.7	200.8	200.7	200.9	200.8	22.2	22.2	22.3	22.5	22.5	22.5	22.4	22.3	22.4
P 10-3145/A2		200.8	200.9	200.9	200.9	200.7	200.6	200.6	200.6	22.5	22.5	22.5	22.4	22.2	22.2	22.1	22.3	22.3
P 10-3145/A3		200.5	200.7	200.6	200.6	200.9	200.9	200.8	200.9	21.9	22.0	22.3	22.3	22.4	22.2	22.0	21.9	22.1
P 10-3145/B1	Type-2	200.4	200.4	200.4	200.4	200.6	200.7	200.7	200.7	31.5	31.6	31.7	31.4	31.4	31.6	31.7	31.4	31.5
P 10-3145/B2		200.8	200.9	200.8	200.8	200.5	200.5	200.5	200.5	31.1	31.2	31.2	31.4	31.4	31.4	31.3	31.2	31.3
P 10-3145/B3		200.9	200.9	200.8	200.9	200.4	200.4	200.5	200.4	31.0	31.0	30.8	31.2	31.3	31.3	31.3	31.2	31.1
P 10-3145/C1	Type-3	300.6	300.8	300.9	300.8	301.0	301.0	301.0	301.0	50.5	50.4	50.6	50.4	50.6	50.6	50.7	50.5	50.5
P 10-3145/C2		300.6	300.5	300.6	300.6	300.9	300.9	300.9	300.9	50.4	50.4	50.4	50.5	50.3	50.4	50.2	50.5	50.4
P 10-3145/C3		301.1	301.1	301.2	301.1	300.5	300.1	300.7	300.4	50.5	50.5	50.3	50.2	50.4	50.5	50.4	50.5	50.4

Test Method: GSO 775/1997



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