



**Marmotest s.r.l.**  
Via Brigade Partigiane n. 47  
fax +390187 968633 cell +393425343505  
[info@marmotest.com](mailto:info@marmotest.com)



number 127310

<b>TEST REPORT</b>	<b>LFD018C97</b>
<b>ASTM C97- ABSORPTION AND BULK SPECIFIC GRAVITY OF DIMENSION STONE</b>	

<b>CLIENT</b>	<b>Namibia Marble and Granite (Pty) Ltd.</b> <b>P.O.Box 69</b> <b>Karibib</b> <b>Namibia</b> <b>Tel +264 64 550201 (W)</b>	
<b>PETROGRAPHIC NAME [ASTM C119]</b>	<b>Marble</b>	
<b>TRADE NAME</b>	<b>White Rhino</b>	
<b>SPECIMEN QUANTITIES</b>	<b>5</b>	
<b>SUMMARY OF TEST</b>	<b>ABSORPTION</b>	<b>0,08%</b>
	<b>BULK SPECIFIC GRAVITY</b>	<b>2871 kg/m3</b> <b>179 lb/ft3</b>
<b>VALUE REQUIRED (ASTM C503 Standard Specification for Marble Dimension Stone)</b>	<b>ABSORPTION MAX</b>	<b>0,20%</b>
	<b>BULK SPECIFIC GRAVITY MIN</b>	<b>2800 kg/m3</b> <b>175 lb/ft3</b>

**Carrara - January 25, 2019**

### Apparatus

Balance Kern PLS 3100-2F, precision 0.01 gr (0.00035 oz), ventilated oven and distilled water.



### Conditioning

Dry: before testing the specimens have been conditioned for 48 h at  $60\text{ }^{\circ}\text{C}\pm 2^{\circ}$ . The temperature in the ventilated oven is controlled by a West 6500 temperature controller with PID logical and a PT100 temperature sensor.

**C97**

**LFD018C97 TEST RESULT**

number of specimens **5**

date of measurement **19/12/2018**

measurement operator **11**

date of test **19/12/2018**

test operator **11**

**Conditioning**

	W 48h g	W 48h oz	W 49h g	W 49h oz	delta %
LFD018C97_01	356,90	12,589	356,90	12,589	0,00%
LFD018C97_02	357,29	12,603	357,29	12,603	0,00%
LFD018C97_03	356,90	12,589	356,90	12,589	0,00%
LFD018C97_04	357,86	12,623	357,85	12,623	0,00%
LFD018C97_05	358,19	12,635	358,18	12,634	0,00%

W 48h= weight after 48 hours at 60° C

W 49h= weight after 49 hours at 60° C = Dry

**Weight after 48 hours in distilled water at 20°C**

	W ssd g	W ssd oz
LFD018C97_01	357,17	12,599
LFD018C97_02	357,56	12,613
LFD018C97_03	357,18	12,599
LFD018C97_04	358,20	12,635
LFD018C97_05	358,41	12,643

W ssd= weight of the specimen after immersion (48 h. in distilled water at 20°C)

### Absorption

	W d g	W d oz	W ssd g	W ssd oz	absorption %
LFD018C97_01	356,90	12,589	357,17	12,599	0,08%
LFD018C97_02	357,29	12,603	357,56	12,613	0,08%
LFD018C97_03	356,90	12,589	357,18	12,599	0,08%
LFD018C97_04	357,85	12,623	358,20	12,635	0,10%
LFD018C97_05	358,18	12,634	358,41	12,643	0,06%
<b>Average:</b>					<b>0,08%</b>
<b>st.dev</b>					<b>0,01%</b>

Wd= weight of the dried specimen

### Bulk Specific Gravity

	W d g	W d oz	W ssd g	W ssd oz	Wimm g	Wimm oz	Gsb
LFD018C97_01	356,90	12,589	357,17	12,599	232,92	8,216	2,872
LFD018C97_02	357,29	12,603	357,56	12,613	233,04	8,220	2,869
LFD018C97_03	356,90	12,589	357,18	12,599	232,63	8,206	2,865
LFD018C97_04	357,85	12,623	358,20	12,635	233,61	8,240	2,872
LFD018C97_05	358,18	12,634	358,41	12,643	233,84	8,248	2,875
<b>Average t/m<sup>3</sup>:</b>							<b>2,871</b>
<b>St.dev t/m<sup>3</sup>:</b>							<b>0,004</b>

Wimm= weight of the specimen immersed

Gsb= Bulk specific gravity

**ASTM C97 ABSORPTION = 0,08%**

According to 'ASTM C503 Standard Specification for Marble Dimension Stone' the maximum value to absorption= 0,20%

**ASTM C97 BULK SPECIFIC GRAVITY = 2871 kg/m<sup>3</sup> [179 lb/ft<sup>3</sup>]**

According to 'ASTM C503 Standard Specification for Marble Dimension Stone' the minimum value to bulk specific gravity = 2800 kg/m<sup>3</sup> [175 lb/ft<sup>3</sup>]

*The laboratory technician*  
*dott. Gabriele Pinelli*

**Marmo Test s.a.s.**  
di DAVIDE ROCCA & C.  
Via Brigade Partigiane, 47  
54033 Carrara (MS)  
P. IVA 01163160458