

TEST REPORT No. 141

MATERIAL NAME: Carrara White Marble “Cattani – Quarry No.133”

CLIENT: *Alba Ventura S.r.l.*


STONELAB BY IMM TECHNOLOGICAL LABORATORY FOR TESTING ON STONES



PERFORMED TESTS:

- | | |
|--|---------|
| 1. Water Absorption & Bulk Specific Gravity (ASTM C97M-15) | Table 1 |
| 2. Modulus of Rupture (ASTM C99M-15) | Table 2 |
| 3. Compressive Strength (ASTM C170M-16) | Table 3 |
| 4. Flexural Strength (ASTM C880M-15) | Table 4 |
| 5. Abrasion Resistance (ASTM C1353M-15a) | Table 5 |

The Test Report No. 141 consists of 13 pages including this one.

| | | |
|---|---|-------------------------------------|
| Technological Laboratory Dr. Geol. Marco Mazzoni |  | DATE: March 23 rd , 2017 |
|---|---|-------------------------------------|

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|--|--|
| <p align="center">STONELAB by IMM</p> <p align="center">Technological Laboratory Viale G.Galilei, 133 - 54033 M. di Carrara - Italy Tel. +39 0585 1812410 - Fax. +39 0585 787602 E-mail: m.mazzoni@immcarrara.it A.S.T.M. MEMBER No. 1741518</p> | <p>TEST REPORT No. 141</p> <p>RESULTS SUMMARY TABLES</p> |
|--|--|

By request of **ALBA VENTURA S.R.L.**, the under listed Tests have been performed on specimens of the material named by **ALBA VENTURA S.R.L.**, “**Carrara White Marble – Cattani - Quarry No.133**”, quarried in Carrara (MS) - Italy.

The relevant results have been reported in the tables enclosed to this document. The specimens under testing have been consigned to this laboratory by **ALBA VENTURA S.R.L.** in date March 17th, 2017. No further information about the geological setting of this rock was given.

NOTE: the standard deviation and the coefficient of variation of mechanical tests have been indicated inside the tables enclosed to this test report.

| Type of Test | Ref. Std. | Units | Conditioning (Load applying dir.) | Average values | Std. Dev. |
|--|-------------------|--------------------|--------------------------------------|----------------|---------------|
| Water Absorption (Table 1) | ASTM C97-15 | % | - | 0.05 | - |
| Bulk Specific Gravity (Table 1) | ASTM C97-15 | Kg/m ³ | - | 2715.85 | - |
| | | lb/ft ³ | - | 169.55 | - |
| Modulus of Rupture (Table 2) | ASTM C99-15 | MPa | DRY | 17.92 | 2.50 |
| | | Psi | | 2598.9 | 362.8 |
| Modulus of Rupture (Table 2) | ASTM C99-15 | MPa | WET | 21.97 | 2.70 |
| | | Psi | | 3186.5 | 391.4 |
| Compressive Strength (Table 3) | ASTM C170-16 | MPa | DRY | 140.94 | 11.73 |
| | | Psi | | 20441.9 | 1701.5 |
| Compressive Strength (Table 3) | ASTM C170-16 | MPa | WET | 133.08 | 32.53 |
| | | Psi | | 19301.3 | 4717.8 |
| Flexural Strength (Table 4) | ASTM C880-15 | MPa | DRY | 14.36 | 0.99 |
| | | Psi | | 2082.1 | 143.3 |
| Flexural Strength (Table 4) | ASTM C880-15 | MPa | WET | 15.90 | 1.67 |
| | | Psi | | 2306.6 | 242.0 |
| Abrasion Resistance (Table 5) | ASTM C1353-15a | Ha | Dry | 25.70 | - |



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|--|--|-------------------------------------|
| Technological Laboratory Dr. Geol. Marco Mazzoni |  | DATE: March 23 rd , 2017 |
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Table 1

|  | | Water Absorption and Bulk Specific Gravity (ASTM C97M-15) | | | Client: Alba Ventura S.r.l. | | | |
|--|--|--|--|------------------------------------|---------------------------------------|---|----------------------|-------------------------|
| ASTM MEMBER NO. 1741518 | | | | | | | | |
| Material: Carrara White Marble “Cattani-Quarry No.133” | | | | Block No.: unknown | | | | |
| Test Report No.: 141 | | | | Test Standard: ASTM C97M-15 | | | | |
| Specim No. | Specimens' weight | | | | | B.S.G. [kg/m ³] [lb/ft ³] | Water Absorption (%) | Specimen Dimension (mm) |
| | After Dry conditioning (>48 hrs. / 60°C) | | After Wet conditioning (>48 hrs. / 20°C) | | | | | |
| | Date | g (m _d) | Date | g (m _s) | g (m _h) | | | |
| 01 | 03/20/17 | 337.75 | 03/22/17 | 337.88 | 213.89 | 2724.01 170.05 | 0.04 | 50.5x49.8x49.6 |
| 02 | 03/20/17 | 336.40 | 03/22/17 | 336.52 | 212.56 | 2713.78 169.42 | 0.04 | 50.5x49.7x49.6 |
| 03 | 03/20/17 | 333.92 | 03/22/17 | 334.05 | 211.03 | 2714.36 169.45 | 0.04 | 50.8x49.2x49.2 |
| 04 | 03/20/17 | 339.23 | 03/22/17 | 339.47 | 214.50 | 2714.49 169.46 | 0.07 | 50.5x49.8x49.9 |
| 05 | 03/20/17 | 329.72 | 03/22/17 | 329.96 | 208.41 | 2712.63 169.34 | 0.07 | 49.8x49.7x49.5 |
| | | | | Min. | Avg. | Max. | | |
| Apparent Density ρ_b [kg/m³] [lb/ft³] | | | | 2712.63 169.34 | 2715.85 169.55 | 2724.01 170.05 | | |
| Water Absorption [%] | | | | 0.04 | 0.05 | 0.07 | | |


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|---|--|--|
| Technological Laboratory Dr.Geol. Marco Mazzoni |  | Date: March 23 rd , 2017 |
|---|--|--|

Table 2


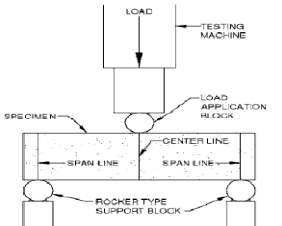

|  <p>Natural Stone Test STONE LAB BY IMM CARRARA ASTM MEMBER No. 1741518</p> | | <p>Modulus of Rupture (ASTM C99M-15) - R -</p> | | | <p>Client: Alba Ventura S.r.l.</p> | | | | |
|--|------------------------------|--|--|-----------|--|---|------------------------|------------------------|-------|
| <p>Material: Carrara White Marble "Cattani-Quarry No.133"</p> | | | | | <p>Block No.: unknown</p> | | | | |
| <p>Test Report No.: 141</p> | | | | | <p>Test Standard: ASTM C99M-15</p> | | | | |
| Specimen No. | Dimensions [mm] a x b x h | Conditioning | Actual Values | | | | | | Notes |
| | | | Dry >48hrs/60°C | Fmax [kN] | R [MPa] | R [Psi] | R _{avd} [MPa] | R _{avd} [Psi] | |
| 01 D | 200x100.0x59.2 | Dry | 19.04 | 14.67 | 2127.1 | | | 0.14 | |
| 02 D | 200x100.0x59.3 | Dry | 23.83 | 18.30 | 2654.0 | | | 0.14 | |
| 03 D | 200x100.8x59.7 | Dry | 26.25 | 19.73 | 2861.5 | 17.92 | 2598.9 | 0.15 | |
| 04 D | 200x100.5x59.8 | Dry | 27.60 | 20.74 | 3007.4 | | | 0.14 | |
| 05 D | 200x100.8x59.8 | Dry | 21.58 | 16.16 | 2344.2 | | | 0.14 | |
| <p>Average M.O.R. (Dry), R_{avd} = 17.92 MPa ⇒ (R_{avd} = 2598.9 Psi)</p> <p>Standard deviation (Dry), s_d = 2.50 MPa ⇒ (s_d = 362.8 Psi)</p> <p>Coefficient of Variation (Dry) = 13.96 %</p> | | | | | | | | | |
| Specimen No. | Dimensions [mm] a x b x h | Conditioning | Actual Values | | | | | | Notes |
| | | | Wet >48hrs/20°C | Fmax [kN] | R [MPa] | R [Psi] | R _{avw} [MPa] | R _{avw} [Psi] | |
| 01 W | 200x100.6x59.9 | Wet | 34.15 | 25.55 | 3705.1 | | | 0.17 | |
| 02 W | 200x100.0x59.8 | Wet | 29.78 | 22.48 | 3260.8 | | | 0.15 | |
| 03 W | 200x100.6x60.0 | Wet | 26.45 | 19.72 | 2860.5 | 21.97 | 3186.5 | 0.17 | |
| 04 W | 200x100.2x59.8 | Wet | 25.07 | 18.89 | 2739.6 | | | 0.18 | |
| 05 W | 200x100.6x59.9 | Wet | 31.03 | 23.21 | 3366.4 | | | 0.16 | |
| <p>Average M.O.R. (Wet), R_{avw} = 21.97 MPa ⇒ (R_{avw} = 3186.5 Psi)</p> <p>Standard deviation (Wet), s_w = 2.70 MPa ⇒ (s_w = 391.4 Psi)</p> <p>Coefficient of Variation (Wet) = 12.28 %</p> | | | | | | | | | |
| <p>Load system schematic</p>  | | | <p>Technological Laboratory Dr. Geol. Marco Mazzoni</p>  | | | <p>Date: March 23rd, 2017</p> | | | |

Table 3


| Natural Stone Test STONE LAB BY IMM CARRARA ASTM MEMBER No. 1741518 | | Compressive Strength (ASTM C170M-16) - C - | | | Client: Alba Ventura S.r.l. | | | | |
|---|------------------------------|--|--|-----------|-------------------------------------|---------|-------------------------------------|------------------------|-------|
| Material: Carrara White Marble "Cattani-Quarry No.133" | | | | | Block No.: unknown | | | | |
| Test Report No.: 141 | | | | | Test Standard: ASTM C170M-16 | | | | |
| Specimen No. | Dimensions [mm] a x b x h | Conditioning | Actual Values | | | | | | Notes |
| | | | Dry >48hrs/60°C | Fmax [kN] | C [MPa] | C [Psi] | C _{avd} [MPa] | C _{avd} [Psi] | |
| 01 D | 50.1x48.9x49.5 | Dry | 365.13 | 149.04 | 21616.8 | | | 0.380 | |
| 02 D | 50.2x48.6x49.4 | Dry | 322.65 | 132.25 | 19181.5 | | | 0.316 | |
| 03 D | 50.3x48.6x49.5 | Dry | 305.33 | 124.90 | 18115.5 | 140.94 | 20441.9 | 0.477 | |
| 04 D | 50.5x49.8x49.5 | Dry | 381.96 | 151.88 | 22028.7 | | | 0.337 | |
| 05 D | 50.2x48.3x49.4 | Dry | 355.53 | 146.63 | 21267.2 | | | 0.396 | |
| <p>Avg. Compressive Strength (Dry), C_{avd} = 140.94 MPa ⇒ (C_{avd} = 20441.9 Psi)</p> <p>Standard deviation (Dry), s_d = 11.73 MPa ⇒ (s_d = 1701.5 Psi)</p> <p>Coefficient of Variation (Dry) = 8.32%</p> | | | | | | | | | |
| Specim. No. | Dimensions [mm] a x b x h | Conditioning | Actual Values | | | | | | Notes |
| | | | Wet >48hrs/60°C | Fmax [kN] | C [MPa] | C [Psi] | C _{avw} [MPa] | C _{avw} [Psi] | |
| 01 W | 50.1x48.9x49.4 | Wet | 369.39 | 150.78 | 21869.1 | | | 0.356 | |
| 02 W | 50.5x49.6x49.6 | Wet | 385.24 | 153.80 | 22307.2 | | | 0.343 | |
| 03 W | 49.7x49.2x49.5 | Wet | 327.03 | 133.74 | 19397.6 | 133.08 | 19301.3 | 0.378 | |
| 04 W | 50.4x49.6x49.6 | Wet | 376.08 | 150.44 | 21819.8 | | | 0.397 | |
| 05 W | 50.4x49.9x49.8 | Wet | 192.70 | 76.62 | 11113.0 | | | 0.418 | |
| <p>Avg. Compressive Strength (Wet), C_{avw} = 133.08 MPa ⇒ (C_{avw} = 19301.3 Psi)</p> <p>Standard deviation (Wet), s_w = 32.53 MPa ⇒ (s_w = 4717.8 Psi)</p> <p>Coefficient of Variation (Wet) = 24.44 %</p> | | | | | | | | | |
| Technological Laboratory Dr.Geol. Marco Mazzoni | | |  | | | | Date: March 23 rd , 2017 | | |

Table 4

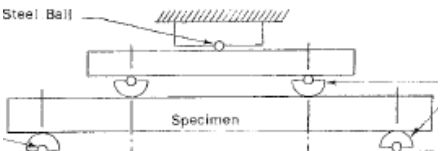


| Natural Stone Test STONE LAB BY IMM CARRARA ASTM MEMBER No. 1741518 | | Flexural Strength (ASTM C880M-15) - σ - | | | Client: Alba Ventura S.r.l. | | | | |
|--|------------------------------|--|---|----------------|-------------------------------------|--|----------------------|------------------------------|-------|
| Material: Carrara White Marble "Cattani-Quarry No.133" | | | | | Block No.: unknown | | | | |
| Test Report No.: 141 | | | | | Test Standard: ASTM C880M-15 | | | | |
| Specimen No. | Dimensions [mm] a x b x h | Conditioning | Actual Values | | | | | | Notes |
| | | Dry >48hrs/60°C | Fmax [kN] | σ [MPa] | σ [Psi] | σ_{avd} [MPa] | σ_{avd} [Psi] | Strain F _{max} [mm] | |
| 01 D | 350x100.8x31.3 | Dry | 6.62 | 15.07 | 2186.3 | | | 0.22 | |
| 02 D | 350x100.0x30.9 | Dry | 5.42 | 12.77 | 1852.1 | | | 0.21 | |
| 03 D | 350x99.9x30.5 | Dry | 6.31 | 15.28 | 2215.5 | 14.36 | 2082.1 | 0.22 | |
| 04 D | 350x100.8x31.9 | Dry | 6.59 | 14.45 | 2095.8 | | | 0.21 | |
| 05 D | 350x99.5x30.3 | Dry | 5.77 | 14.21 | 2060.8 | | | 0.22 | |
| Avg. Flex. Strength (Dry), $\sigma_{avd} = 14.36$ MPa \Rightarrow ($\sigma_{avd} = 2082.1$ Psi) Standard deviation (Dry), $s_d = 0.99$ MPa \Rightarrow ($s_d = 143.3$ Psi) Coefficient of Variation (Dry) = 6.88 % | | | | | | | | | |
| Specimen No. | Dimensions [mm] a x b x h | Conditioning | Actual Values | | | | | | Notes |
| | | Wet >48hrs/20°C | Fmax [kN] | σ [MPa] | σ [Psi] | σ_{avw} [MPa] | σ_{avw} [Psi] | Strain F _{max} [mm] | |
| 01 W | 350x99.2x30.3 | Wet | 5.79 | 14.31 | 2074.9 | | | 0.20 | |
| 02 W | 350x100.7x29.9 | Wet | 7.19 | 17.98 | 2607.5 | | | 0.25 | |
| 03 W | 350x100.2x29.8 | Wet | 6.87 | 17.38 | 2520.8 | 15.90 | 2306.6 | 0.24 | |
| 04 W | 350x100.6x31.2 | Wet | 6.63 | 15.24 | 2210.0 | | | 0.20 | |
| 05 W | 350x99.9x30.4 | Wet | 6.00 | 14.62 | 2119.9 | | | 0.20 | |
| Avg. Flex. Strength (Wet), $\sigma_{avw} = 15.90$ MPa \Rightarrow ($\sigma_{avw} = 2306.6$ Psi) Standard deviation (Wet), $s_w = 1.67$ MPa \Rightarrow ($s_w = 242.0$ Psi) Coefficient of Variation (Wet) = 10.49 % | | | | | | | | | |
| Load system schematic  | | | Technological Laboratory Dr.Geol. Marco Mazzoni  | | | Date: March 23 rd , 2017 | | | |

Table 5

| | | |
|---|---|---------------------------------------|
| Natural Stone Test  BY IMM CARRARA ASTM MEMBER No. 1741518 | Abrasion resistance of Dimension Stone Subjected to Foot Traffic (ASTM C1353M-15a) | Client: Alba Ventura S.r.l. |
|---|---|---------------------------------------|

Material name: Carrara White Marble “Cattani-Quarry No.133”
Specimens’ surface under testing: honed

Test Report No.: 141
Test Standard: ASTM C1353M-15a

| Specimen No. | Specimen Weight | | | | Ha | Specimen dimensions [mm] |
|--------------|-------------------------------|------------------------------|-----------------------------|--------------|-------|--------------------------|
| | Before Testing natural T=20°C | After Testing natural T=20°C | B.S.G (G) g/cm ³ | Wa=(A-B) [g] | | |
| | g (A) | g (B) | | | | |
| 01 | 147.58 | 143.76 | 2.72 | 3.82 | 26.17 | 100.6x99.3x5.6 |
| 02 | 150.92 | 146.80 | 2.72 | 4.12 | 24.26 | 100.3x100.0x5.5 |
| 03 | 151.38 | 147.63 | 2.72 | 3.75 | 26.66 | 100.4x99.3x5.7 |


| | | |
|--------------|-------------------|--------------|
| Min. | Average Ha | Max. |
| 24.26 | 25.70 | 26.66 |

Notes:

B.S.G. = Bulk Specific Gravity

Wa = Loss of Weight during grinding operation

Ha = Abrasive hardness value

| | | |
|---|--|--|
| Technological Laboratory Dr.Geol. Marco Mazzoni |  | Date: March 23 rd , 2017 |
|---|--|--|

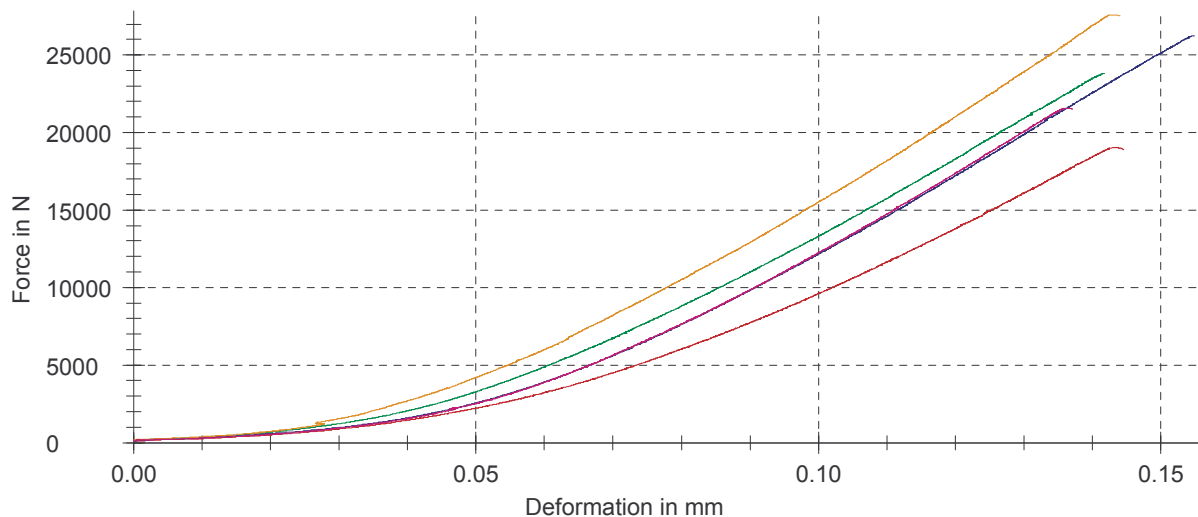
Test Report No.141

Client : Alba Ventura S.r.l.
 Ref. Norm : ASTM C99M-15
 Material name : Carrara White Marble "Cattani - Quarry No.133"- Dry-honed
 Test Device data : Zwick Z250 - testXpert II
 Pre-load : 50 N
 Test speed : 80 N/s

Test results:

| Legenda | No. | Specim.No. | Date | M.O.R. MPa | F.max N | Def. at Fmax mm | Span mm | Spec.Thk mm | Specim.Width mm |
|--------------------------------------|-----|------------|------------|---------------|------------|--------------------|------------|----------------|--------------------|
| ■ | 1 | 01D | 21/03/2017 | 14,67 | 19036,54 | 0,14 | 180 | 59,2 | 100,0 |
| ■ | 2 | 02D | 21/03/2017 | 18,30 | 23832,47 | 0,14 | 180 | 59,3 | 100,0 |
| ■ | 3 | 03D | 21/03/2017 | 19,73 | 26252,13 | 0,15 | 180 | 59,7 | 100,8 |
| ■ | 4 | 04D | 21/03/2017 | 20,74 | 27600,40 | 0,14 | 180 | 59,8 | 100,5 |
| ■ | 5 | 05D | 21/03/2017 | 16,16 | 21577,96 | 0,14 | 180 | 59,8 | 100,8 |

Load/Strain Graphs:



Statistics:

| Alba Ventura S.r.l. | M.O.R. MPa | F.max N | Def. at Fmax mm | Span mm | Spec.Thk mm | Specim.Width mm |
|---------------------|---------------|------------|--------------------|------------|----------------|--------------------|
| n = 5 | 17,92 | 23659,90 | 0,14 | 180 | 59,6 | 100,4 |
| \bar{x} | 17,92 | 23659,90 | 0,14 | 180 | 59,6 | 100,4 |
| s | 2,50 | 3463,63 | 0,01 | 0,00 | 0,29 | 0,40 |
| v | 13,96 | 14,64 | 4,68 | 0,00 | 0,48 | 0,40 |

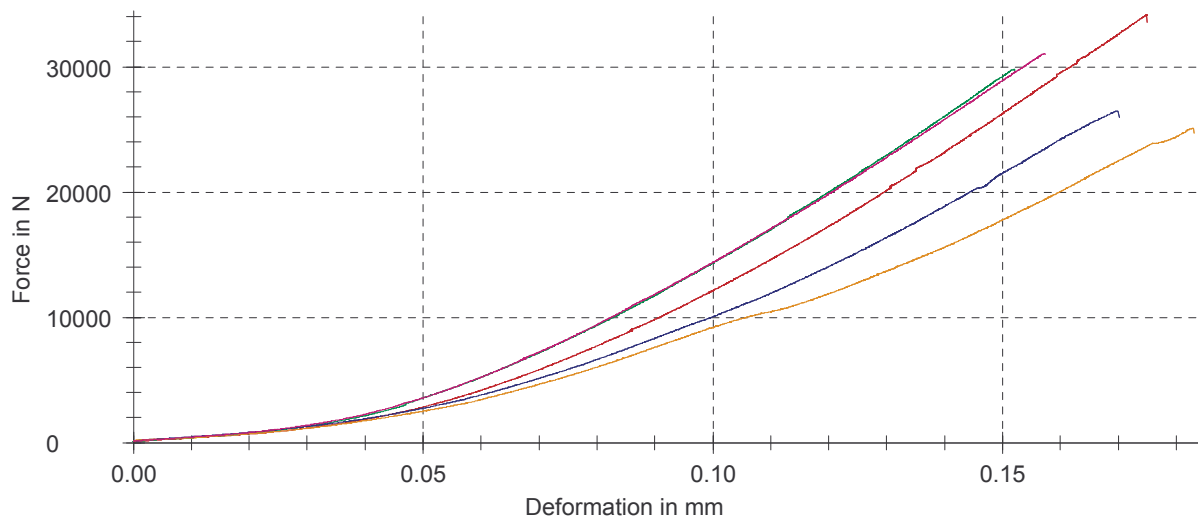
Test Report No.141

Client : Alba Ventura S.r.l.
 Ref. Norm : ASTM C99M-15
 Material name : Carrara White Marble "Cattani - Quarry No.133"- Wet-honed
 Test Device data : Zwick Z250 - testXpert II
 Pre-load : 50 N
 Test speed : 80 N/s

Test results:

| Legenda | No. | Specim.No. | Date | M.O.R. MPa | F.max N | Def. at Fmax mm | Span mm | Spec.Thk mm | Specim.Width mm |
|--------------------------------------|-----|------------|------------|---------------|------------|--------------------|------------|----------------|--------------------|
| ■ | 1 | 01W | 22/03/2017 | 25,55 | 34151,16 | 0,17 | 180 | 59,9 | 100,6 |
| ■ | 2 | 02W | 22/03/2017 | 22,48 | 29777,49 | 0,15 | 180 | 59,8 | 100,0 |
| ■ | 3 | 03W | 22/03/2017 | 19,72 | 26454,02 | 0,17 | 180 | 60,0 | 100,6 |
| ■ | 4 | 04W | 22/03/2017 | 18,89 | 25067,39 | 0,18 | 180 | 59,8 | 100,2 |
| ■ | 5 | 05W | 22/03/2017 | 23,21 | 31029,47 | 0,16 | 180 | 59,9 | 100,6 |

Load/Strain Graphs:



Statistics:

| Alba Ventura S.r.l. n = 5 | M.O.R. MPa | F.max N | Def. at Fmax mm | Span mm | Spec.Thk mm | Specim.Width mm |
|------------------------------|---------------|------------|--------------------|------------|----------------|--------------------|
| \bar{x} | 21,97 | 29295,91 | 0,17 | 180 | 59,9 | 100,4 |
| s | 2,70 | 3632,06 | 0,01 | 0,00 | 0,08 | 0,28 |
| v | 12,28 | 12,40 | 7,58 | 0,00 | 0,14 | 0,28 |

TEST REPORT NO.141

Date: 03/21/17

Ref. Norm.: ASTM C170M-16

Client: Alba Ventura S.r.l

Material:

Carrara White Marble-Cattani Quarry 133

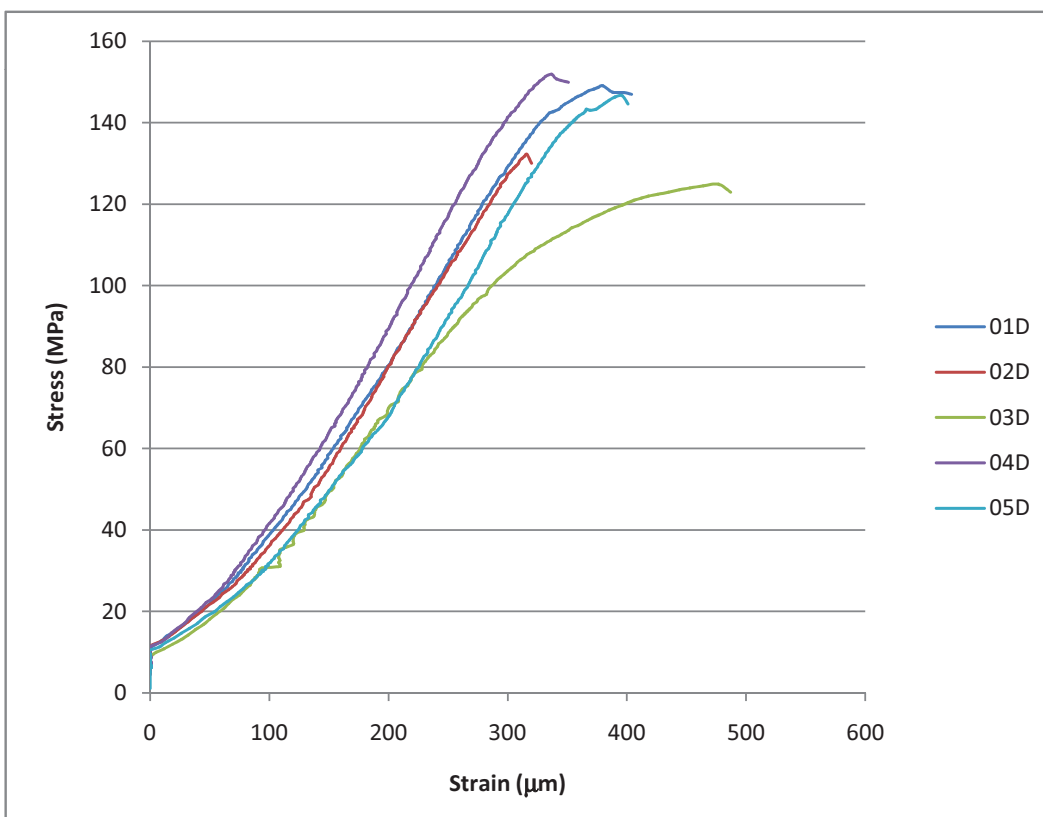
Test Device: Controls Mod.C56Z00

Test Speed: 0,5 MPa/sec

Condition: Dry

| Specim.No | a (mm) | b (mm) | c (mm) | Area (mm ²) | Force (kN) | Compr. Strength (MPa) | Strain at Fmax (μm) |
|-----------|--------|--------|--------|-------------------------|------------|-----------------------|---------------------|
| 01D | 50,1 | 48,9 | 49,5 | 2449,89 | 365,13 | 149,04 | 380 |
| 02D | 50,2 | 48,6 | 49,4 | 2439,72 | 322,65 | 132,25 | 316 |
| 03D | 50,3 | 48,6 | 49,5 | 2444,58 | 305,33 | 124,90 | 477 |
| 04D | 50,5 | 49,8 | 49,5 | 2514,90 | 381,96 | 151,88 | 337 |
| 05D | 50,2 | 48,3 | 49,4 | 2424,66 | 355,53 | 146,63 | 396 |

Average Compr. Strength : 140,94 MPa
 Standard deviation : 11,73 MPa



TEST REPORT NO.141

Date: 03/21/17

Ref. Norm.: ASTM C170M-16

Client: Alba Ventura S.r.l

Material:

Carrara White Marble-Cattani Quarry 133

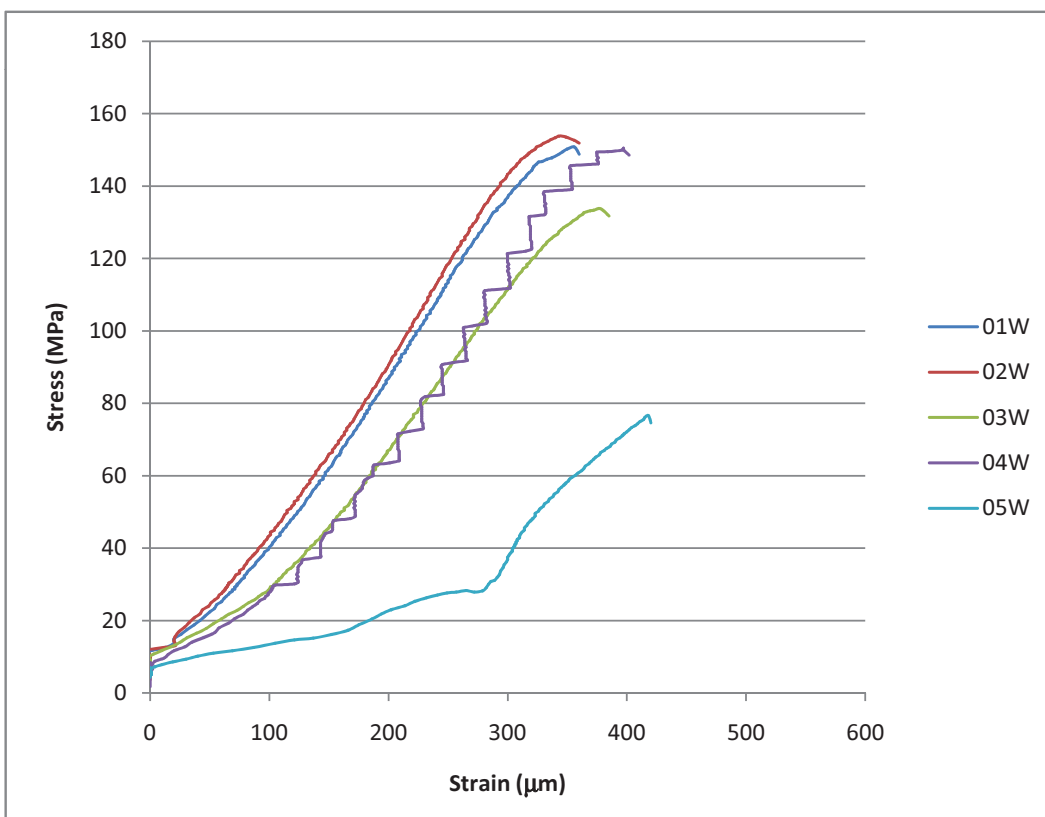
Test Device: Controls Mod.C56Z00

Test Speed: 0,5 MPa/sec

Condition: Wet

| Specim.No | a (mm) | b (mm) | c (mm) | Area (mm ²) | Force (kN) | Compr. Strength (MPa) | Strain at Fmax (μm) |
|-----------|--------|--------|--------|-------------------------|------------|-----------------------|---------------------|
| 01W | 50,1 | 48,9 | 49,4 | 2449,89 | 369,39 | 150,78 | 356 |
| 02W | 50,5 | 49,6 | 49,6 | 2504,80 | 385,24 | 153,80 | 343 |
| 03W | 49,7 | 49,2 | 49,5 | 2445,24 | 327,03 | 133,74 | 378 |
| 04W | 50,4 | 49,6 | 49,6 | 2499,84 | 376,08 | 150,44 | 397 |
| 05W | 50,4 | 49,9 | 49,8 | 2514,96 | 192,70 | 76,62 | 418 |

Average Compr. Strength : 133,08 MPa
 Standard deviation : 32,53 MPa



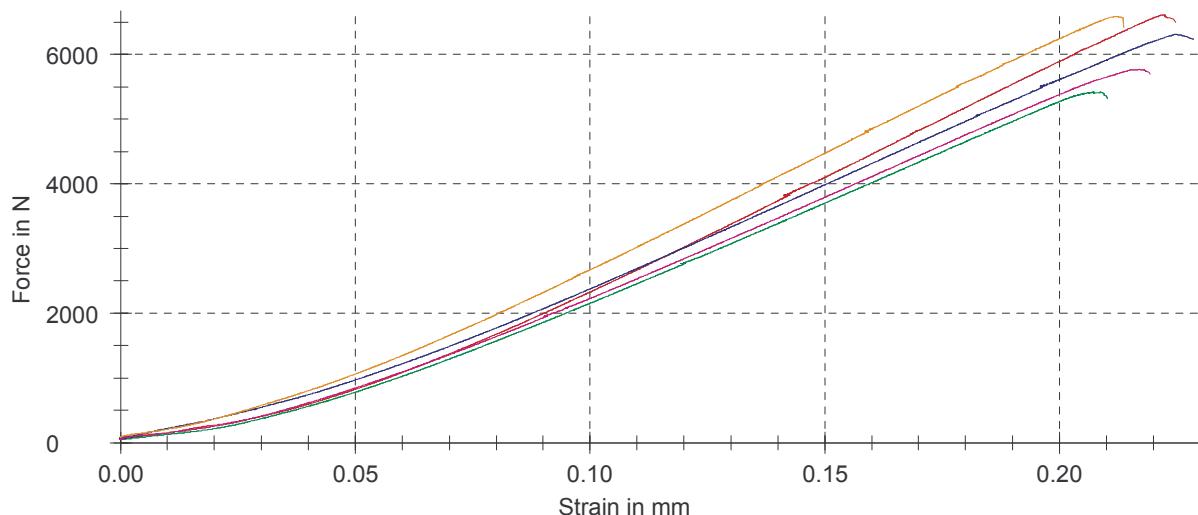
Test Report No.141

Client : Alba Ventura S.r.l.
 Test Standard : ASTM C880-15
 Material name : Carrara White Marble "Cattani - Quarry No.133" - Dry - honed
 Test Device data : Zwick Z250 - testXpert II
 Pre-load : 44 N
 Test Speed : 0,069 MPa/s

Test results:

| Legenda | No. | Specimen No. | Date | F _{max} N | Strain at Fmax mm | Flex. Strength MPa | Span mm | Thickness mm | Width mm |
|--|-----|--------------|------------|-----------------------|----------------------|-----------------------|------------|-----------------|-------------|
| ■ | 1 | 01D | 21/03/2017 | 6620 | 0,22 | 15,07 | 300 | 31,3 | 100,8 |
| ■ | 2 | 02D | 21/03/2017 | 5420 | 0,21 | 12,77 | 300 | 30,9 | 100,0 |
| ■ | 3 | 03D | 21/03/2017 | 6310 | 0,22 | 15,28 | 300 | 30,5 | 99,9 |
| ■ | 4 | 04D | 21/03/2017 | 6590 | 0,21 | 14,45 | 300 | 31,9 | 100,8 |
| ■ | 5 | 05D | 21/03/2017 | 5770 | 0,22 | 14,21 | 300 | 30,3 | 99,5 |

Load/Strain Graphs:



Statistics:

| Alba Ventura S.r.l. | F _{max} N | Strain at Fmax mm | Flex. Strength MPa | Span mm | Thickness mm | Width mm |
|---------------------|-----------------------|----------------------|-----------------------|------------|-----------------|-------------|
| n = 5 | | | | | | |
| \bar{x} | 6140 | 0,22 | 14,36 | 300 | 31,0 | 100,2 |
| s | 528 | 0,01 | 0,99 | 0,00 | 0,64 | 0,58 |
| v | 8,59 | 3,06 | 6,88 | 0,00 | 2,07 | 0,58 |

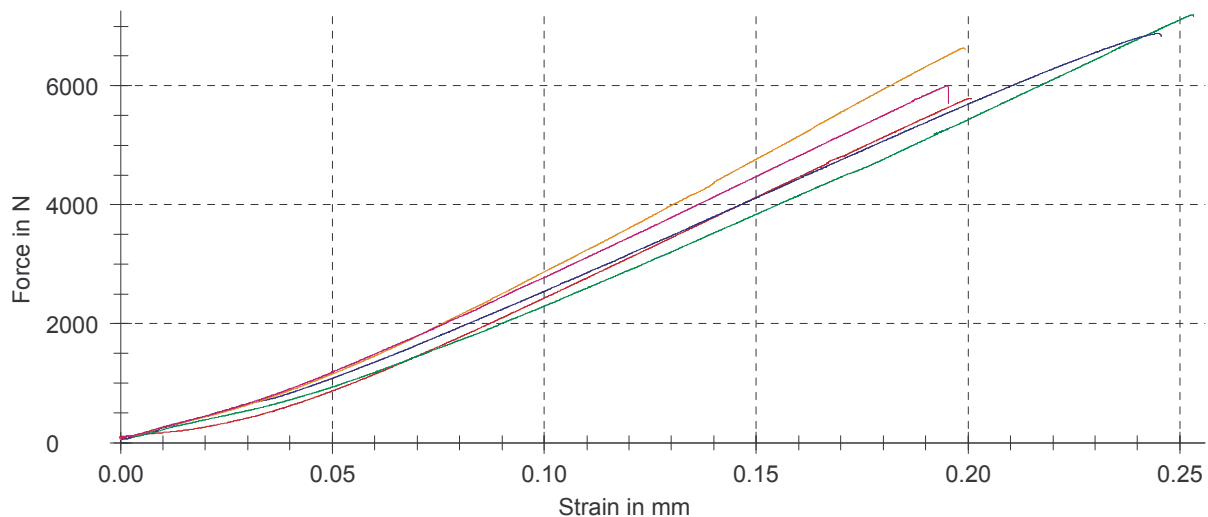
Test Report No.141

Client : Alba Ventura S.r.l.
 Test Standard : ASTM C880-15
 Material name : Carrara White Marble "Cattani - Quarry No.133" - Wet- honed
 Test Device data : Zwick Z250 - testXpert II
 Pre-load : 44 N
 Test Speed : 0,069 MPa/s

Test results:

| Legenda | No. | Specimen No. | Date | F _{max} N | Strain at Fmax mm | Flex. Strength MPa | Span mm | Thickness mm | Width mm |
|--|-----|--------------|------------|-----------------------|----------------------|-----------------------|------------|-----------------|-------------|
| ■ | 1 | 01W | 21/03/2017 | 5790 | 0,20 | 14,31 | 300 | 30,3 | 99,2 |
| ■ | 2 | 02W | 21/03/2017 | 7190 | 0,25 | 17,98 | 300 | 29,9 | 100,7 |
| ■ | 3 | 03W | 21/03/2017 | 6870 | 0,24 | 17,38 | 300 | 29,8 | 100,2 |
| ■ | 4 | 04W | 21/03/2017 | 6630 | 0,20 | 15,24 | 300 | 31,2 | 100,6 |
| ■ | 5 | 05W | 21/03/2017 | 6000 | 0,20 | 14,62 | 300 | 30,4 | 99,9 |

Load/Strain Graphs:



Statistics:

| Alba Ventura S.r.l. | F _{max} N | Strain at Fmax mm | Flex. Strength MPa | Span mm | Thickness mm | Width mm |
|---------------------|-----------------------|----------------------|-----------------------|------------|-----------------|-------------|
| n = 5 | | | | | | |
| \bar{x} | 6500 | 0,22 | 15,90 | 300 | 30,3 | 100,1 |
| s | 590 | 0,03 | 1,67 | 0,00 | 0,55 | 0,61 |
| v | 9,08 | 12,81 | 10,49 | 0,00 | 1,83 | 0,61 |