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NATURAL STONE TECHNOLOGY LABORATORY  
32260 ISPARTA

**TECHNICAL REPORT**

The physical, mechanical and petrographic properties in accordance with TS EN standards of the marble samples called as "Capuccino" belongs to Adalya Marble Industry Trade Inc.

June – 2015  
ISPARTA / TURKEY





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## PREFACE

Various laboratory tests were applied in accordance with TS EN standards to determine the physical and mechanical properties and petrographic descriptions of marble samples called as “**Capuccino**” belongs to **Adalya Marble Industry Trade Inc.**. The results of tests are presented in Tables. 02 / 06 / 2015





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Company Name : Adalya Marble Industry Trade Inc.

Commercial Designation of Sample : Capuccino

Date: 02 / 06 / 2015

PHYSICAL AND MECHANICAL PROPERTIES					
	Metric System		SI System		Standard
	Mohs		Mohs		
Hardness	Mohs	3.5 - 4	Mohs	3.5 - 4	TS 6809
Bulk Specific Gravity					
Dry	g/cm <sup>3</sup>	2.691 ± 0.003	kg/m <sup>3</sup>	2691 ± 3	TS EN 1936
Saturated	g/cm <sup>3</sup>	2.699 ± 0.002	kg/m <sup>3</sup>	2699 ± 2	
Density	g/cm <sup>3</sup>	2.736 ± 0.008	kg/m <sup>3</sup>	2736 ± 8	TS EN 1936
Water Abs. at Atm. Press.					
by Volume	%	0.781 ± 0.08	%	0.781 ± 0.08	TS EN 13755
by Weight	%	0.290 ± 0.03	%	0.290 ± 0.03	
Effective Porosity	%	0.781	%	0.781	TS EN 1936
Real Porosity	%	1.64	%	1.64	TS EN 1936
Fullness Ratio	%	98.36	%	98.36	TS 699
Water absorption coefficient by capillarity	g/m <sup>2</sup> .s <sup>0.5</sup>	0.52 ± 0.13	g/m <sup>2</sup> .s <sup>0.5</sup>	0.52 ± 0.13	TS EN 1925
Compressive Strength	kg/cm <sup>2</sup>	919 ± 125	MPa	90.1 ± 12.3	TS EN 1926
Compressive Strength after Freeze-Thaw (12 cyc.)	kg/cm <sup>2</sup>	797 ± 106	MPa	78.1 ± 10.4	TS EN 12371
Changing of Compressive Strength after Freeze-Thaw (-)	%	13.3	%	13.3	TS EN 12371
Decreasing of Weight after Freeze-Thaw	%	0.004	%	0.004	TS EN 12371
Flexural Strength Under Concentrated Load	kg/cm <sup>2</sup>	154 ± 15	MPa	15.1 ± 1.4	TS EN 12372
Changing of Flexural Strength after Freeze-Thaw (-) (12 cyc.)	kg/cm <sup>2</sup>	137 ± 14	MPa	13.4 ± 1.3	TS EN 12371
Changing of Flexural Strength after Freeze-Thaw (-)	%	10.74	%	10.74	TS EN 12371
Resist. to ageing by thermal shock					
by weight (-)	%	0.018	%	0.018	TS EN 14066
by modulus of elasticity (-)	%	6.91	%	6.91	
Water vapour resistance factor (dry)	μ-value	276	μ-value	276	TS EN 12524
Thermal conductivity (λ)	W/m.K	2.52	W/m.K	2.52	TS EN 12524 (Thermal resist.)
Abrasion Strength (Method-B/Bohme)	cm <sup>3</sup> /50cm <sup>2</sup>	8.5 ± 0.7	cm <sup>3</sup> /50 cm <sup>2</sup>	8.5 ± 0.7	TS EN 14157
Slip Resistance					
Dry	SRV	48.3 ± 0.6	SRV	48.3 ± 0.6	TS EN 14231
Wet		19.1 ± 0.9		19.1 ± 0.9	
P-Wave Velocity	m/s	6261 ± 178	m/s	6261 ± 178	TS EN 14579



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