



DOĞALTAŞ ANALİZ LABORATUVARI
(DAL)
NATURAL STONE ANALYSIS LABORATORY



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Test / Analiz Raporu
Test / Analysis Report

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Numune Adı: Denizli Traverten

Sample Name

TEST / ANALİZLER Test / Analysis	BİRİM Unit	SONUÇLAR Results	TEST / ANALİZ METODU Test / Analysis Method
*Yoğun yük altında bükülme dayanımı tayini (Determination of flexural strength under concentrated load) <i>Détermination de la résistance à la flexion sous une charge concentrée</i>	MPa	8,06	TS EN 12372

Bu raporda (*) şeklinde işaretlenmiş muayene sonuçları TÜRKAK tarafından akreditedir.
In this report (*) marked test / analysis results accredited by Turkish Accreditation Agency (TURKAK)

Analiz Sorumlusu
Responsible of Analysis

Ali ÇAKIR

Laboratuvar Şefi
Chief of Laboratory

Gediz EMEK

Çevre Şartları / Environmental Conditions

Sıcaklık / Temperature, °C : 21,6

Rutubet / Moisture, % : 33,0

Sonuçlar, sadece deneyi yapılan numuneye aittir.
The results belong to the tested sample only.

Bu rapor, laboratuvarın yazılı izni olmadan kısmen kopyalanıp çoğaltılamaz. İmzasız ve mühürsüz raporlar geçersizdir.

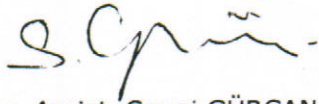
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Aksi istenmedikçe şahit numuneler 6 ay saklanır.

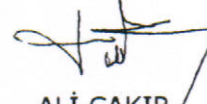
In case of not demanding the opposite, witnessing samples are kept for 6 months.

(Continuation of the test results)

Determination of Resistance to Ageing by Thermal Shock (%) Détermination de la résistance au vieillissement par choc thermique	TS EN 14066	0.01	% 0.03
		0.04	
		0.03	
		0.02	
		0.02	
		0.03	
Determination of Resistance to Ageing by SO ₂ Action in The Presence of Humidity (%) Détermination de la résistance au vieillissement par l'action de SO ₂ en présence d'humidité	TS EN 13919	0.13	% 0.09
		0.12	
		0.08	
		0.05	
		0.07	
		0.11	
Strength of Abrasion (mm) Résistance à l'abrasion	EN 14157	21.22	21.25 mm
		21.14	
		21.22	
Water Absorption (%) L'Absorption d'eau	TS EN 13755	1.39	% 1.35
		1.48	
		1.32	
		1.40	
		1.21	
		1.32	
Determination of Water Absorption Coefficient by Capillarity (gr/m ² .s ^{0,5}) Détermination du coefficient d'absorption d'eau par capillarité.	TS EN 1925	6.55	4.47 gr/m ² .s ^{0,5}
		5.53	
		1.71	
		5.68	
		4.48	
		2.88	
Density (gr/cm ³) Densité	TS EN 1936	Poids de volume unitaire	2.63 gr/cm ³
Unit Volume Weight (gr/cm ³)			2.46 gr/cm ³
Occurance Rate (%) Taux de occurrence			% 6.50
Ultrasonic Velocity (m/s) Vitesse des ultrasons	TS EN 14579	4728	4842.67 m/s
		5035	
		4895	
		5035	
		4697	
		4666	



Res. Assist. Sevgi GÜRCAN
Mining Engineer (M.Sc)



ALİ ÇAKIR
Technician

Table 1. Test results of Denizli Travertine sample.

TESTS	Standard Norme	Measurements mesure	Average Moyenne
Uniaxial Compressive Strength (MPa) (Stratification Direction Perpendicular) Resistance à la compression Uniaxiale (stratification direction perpendiculaire)	TS EN 1926	71.69	85.45 MPa (871.35 kgf/cm²)
		85.84	
		83.22	
		84.30	
		99.97	
		87.66	
Uniaxial Compressive Strength (MPa) (Stratification Direction Parallel) Resistance à la compression Uniaxiale (stratification direction parallele)	TS EN 1926	70.45	78.58 MPa (801.30 kgf/cm²)
		69.63	
		84.70	
		80.30	
		68.17	
		88.20	
Strength Of Pressure After Freezing (MPa) (Stratification Direction Perpendicular) (240 cycle) la force de pression apres congelation	TS EN 12371	88.73	63.36 MPa (646.09 kgf/cm²)
		45.47	
		62.67	
		79.27	
		40.11	
		63.93	
Strength Of Pressure After Freezing (MPa) (Stratification Direction Parallel) (240 cycle) la force de pression apres congelation	TS EN 12371	78.64	72.12 MPa (735.42 kgf/cm²)
		63.78	
		66.35	
		83.54	
		80.20	
		60.18	
Bending Strength (MPa) (Stratification Direction Perpendicular) Resistance à la flexion	TS EN 12372	9.26	7.84 MPa (79.95 kgf/cm²)
		9.31	
		6.85	
		6.64	
		5.07	
		9.89	
Bending Strength (MPa) (Stratification Direction Parallel) Resistance à la flexion	TS EN 12372	7.17	7,23 MPa (73,70 kgf/cm²)
		9.62	
		8.79	
		8.53	
		9.26	
		9.83	
Determination of Resistance to Salt Crystallization (%) Détermination de la resistance au sel cristallisation	TS EN 12370	2.18	% 2,47
		2.34	
		2.64	
		1.95	
		3.01	
		2.68	