

Thassos Limenas White

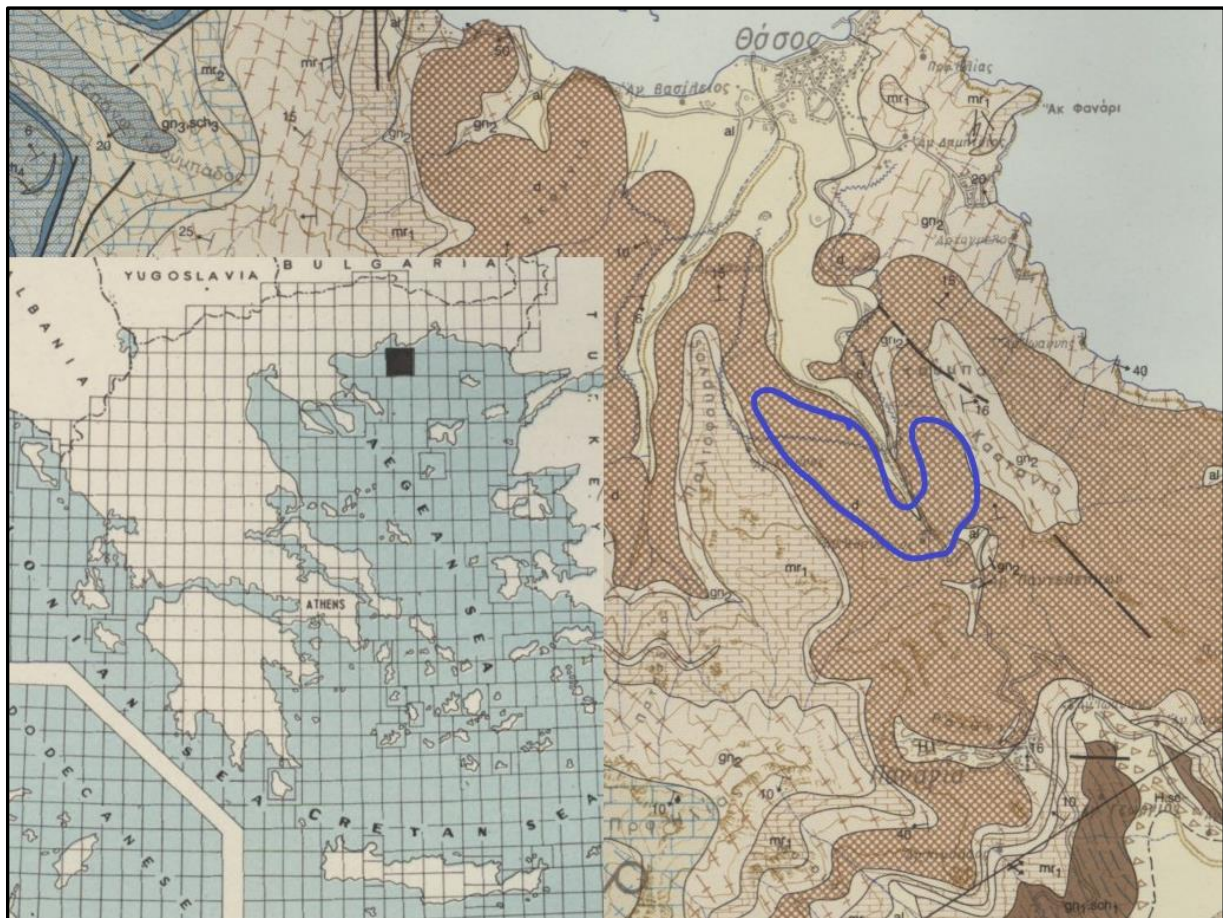


Scale 1:1

Short description: Medium grained crystalline dolomitic marble with semi white crystal veins on its sparkling white background.

Commodity (vocabulary)	Lithology (vocabulary)	Typical colour (code list)	Place of origin			
			Country	County / District / Province	Municipality / Community	Place/town / Village
Marble	Dolomitic- calcitic marble	White	Greece	East Macedonia and Thrace	Thasos	Limenas

Geological setting



Geology: Thassos Limenas White (blue curve) is a metamorphic rock belonging to the carbonate marbles of Rhodope Mass area, which is part of the region of East Macedonia and Thrace.

(Source: Geological Map of Greece 1:50000, Thassos Sheet).

Production: The most important quarry area is near the town Limenas Thasou on the island of Thassos in northern Greece.

Geological age: -

Geological unit: Metamorphic system - Potamia Series

Application, use and heritage

Description: Thassos Limenas White marble is known for many centuries all over the world for its pure sparkling whiteness, used in various construction projects. It provides a high reflection of sunlight and holds its cool temperature, making it perfect suitable for claddings in warmer regions. It is a marble with high strength properties, suitable for interior and exterior use, wall cladding, flooring, stairs, and other design projects.



County Court-Athens: Cladding with Thassos Limenas White.

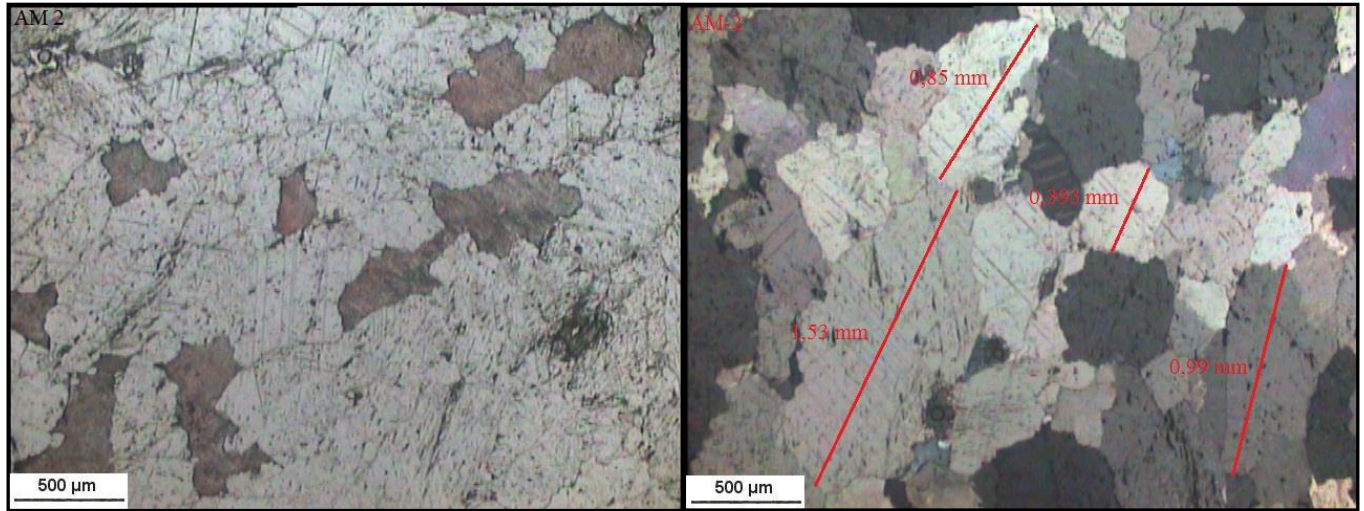


Building of the German Embassy in Athens: Wall cladding with Thassos Limenas marble.



Hilton Hotel Athens: Wall cladding with Thassos Limenas marble.

Petrography



Description: Photomicrograph of thin section, showing scattered calcite crystals.

Source of information: Hellenic Survey of Geology and Mineral Exploration

Mineral composition

If no accurate number, use MM=main minerals, SM = Subordinate minerals, AM=accessory minerals

Dolomite (%)	Calcite (%)	Muscovite (%)	Apatite (%)			
88	12	AM	AM			

Source of information: Hellenic Survey of Geology and Mineral Exploration

Physical properties

Apparent density (EN 1936) kg/m ³	Open porosity (EN 1936) % vol	Water absorption at atmospheric pressure (EN 13755) % wt	Uniaxial Compressive strength (EN 1926) MPa	Flexural strength under concentrated load (EN 12372) MPa
2840	0,5	0,1	148	15,9

Real density (EN 1936) kg/m ³	Total porosity (EN 1936) % vol	Water absorption coefficient by capillary (EN 1925) (g/m ² x s ^{0,5})	Flexural strength under constant moment (EN 13161) MPa
-	-		

Frost resistance (EN 12371)				
Technological Test (Test A)				Identification Test (Test B): Number of cycles completed prior to stone failure
Flexural strength (EN 12372) after freeze-thaw cycling, MPa	Number of cycles	Uniaxial compressive strength (EN 1926) after freeze-thaw cycling, MPa	Number of cycles	
13,2	48			

Resistance to ageing by thermal shock (EN 14066)			
Change in dynamic modulus of elasticity (increase: +; decrease: -) %	Change in open porosity (increase: +; decrease: -) %	Change in ultrasound pulse velocity (increase: +; decrease: -) %	Change in flexural strength under conc. load (increase: +; decrease: -) %
-		-	

Abrasion resistance (EN 14157)			Resistance to salt crystallisation (EN 12370)	Breaking load at dowel hole (EN 13364)	
Method A - Wide Wheel Abrasion Test, mm	Method B - Böhme Abrasion Test, cm ³ / 50cm ²	Method C - Amsler Abrasion Test, mm	Change in mass (increase: +; decrease: -), %	Breaking load, N	Thickness of the test specimens, mm
-	21	-	-	1900	3

Slip resistance by means of the pendulum tester (EN 14231 / CEN/TS 16165)			Rupture energy (EN 14158), Joule	Thermal Conductivity (EN 1745), W/m·K
Tested surface finish	Slip Resistance Value — SRV			
	Dry test condition	Wet test condition		
			3	-

Source of information: Hellenic Survey of Geology and Mineral Exploration

Chemical properties

Main elements

SiO ₂ (%)	Al ₂ O ₃ (%)	Fe ₂ O ₃ (%)	TiO ₂ (%)	MgO (%)	CaO (%)	Na ₂ O (%)	K ₂ O (%)	MnO (%)	P ₂ O ₅ (%)	SO ₃ (%)	LOI (%)
<0,10	<0,10	<0,10	<0,10	18,05	32,90	0,97	0,18	<0,05	-	-	46,00

Trace elements

V (ppm)	Cr (ppm)	Mn (ppm)	Co (ppm)	Ni (ppm)	Cu (ppm)	Zn (ppm)	As (ppm)
2,0	25	40	3,0	9,0	3,0	17	1,3
Sr (ppm)	Cd (ppm)	Ba (ppm)	Pb (ppm)	Be (ppm)	Rb (ppm)	Bi (ppm)	U (ppm)
70	1,0	10	4,0	1,3	0,3	<0,1	0,1
Sc (ppm)	Y (ppm)	Th (ppm)	Sb (ppm)	Ta (ppm)	Nb (ppm)	Zr (ppm)	Sn (ppm)
6,5	2,7	0,2	0,1	1,2	0,6		
Ag (ppm)	B (ppm)	Mo (ppm)	W (ppm)	Ga (ppm)	Ge (ppm)	Se (ppm)	Cs (ppm)
Tl (ppm)							

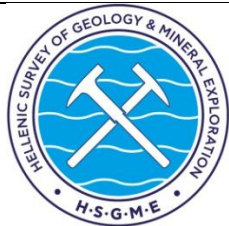
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La (ppm)	Ce (ppm)	Pr (ppm)	Nd (ppm)	Sm (ppm)	Eu (ppm)	Gd (ppm)	Tb (ppm)
Dy (ppm)	Ho (ppm)	Er (ppm)	Tm (ppm)	Yb (ppm)	Lu (ppm)		

Methods applied and source of information: Hellenic Survey of Geology and Mineral Exploration

Sources of more information

Type of information	Name of provider	URL
This data sheet	Hellenic Survey of Geology and Mineral Exploration	https://www.eagme.gr/
Non-commercial directory		
Commercial directory		
Scientific publication		
Other publication		

Compiled by:	Hellenic Survey of Geology and Mineral Exploration (H.S.G.M.E.) https://www.eagme.gr/	
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