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MINING ENGINEERING DEPARTMENT
NATURAL STONE TECHNOLOGY LABORATORY
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Sample Owner Company: **Finike Marble Company Inc.**
Commercial Designation of Sample: **Pearle Limestone**

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PHYSICAL and MECHANICAL PROPERTIES						
	METRIC SYSTEM		SI SYSTEM		BRITISH SYSTEM	
Hardness	Mohs	3-3.5	Mohs	3-3.5	Mohs	3-3.5
Bulk Specific Gravity (ASTM C97)						
Dry	gr/cm ³	2.401±0.007	kg/m ³	2401±7	lbs/ft ³	149.89±0.44
Saturated	gr/cm ³	2.428±0.008	kg/m ³	2428±8	lbs/ft ³	151.58±0.50
Density	gr/cm ³	2.746±0.02	kg/m ³	2746±20	lbs/ft ³	171.43±1.25
Water Absorption at Atmospheric Pressure						
by volume	%	7.710±0.170	%	7.710±0.170	%	7.710±0.170
by weight (ASTM C97)	%	3.185±0.073	%	3.185±0.073	%	3.185±0.073
Water Absorption at Boiling Water						
by volume	%	8.456±0.112	%	8.456±0.112	%	8.456±0.112
by weight	%	3.492±0.118	%	3.492±0.118	%	3.492±0.118
Effective Porosity	%	7.710±0.170	%	7.710±0.170	%	7.710±0.170
Real Porosity	%	11.58	%	11.58	%	11.58
Ratio of Fullness	%	88.42	%	88.42	%	88.42
P-Wave Velocity (Vp)	m/s	4179±114	km/s	4.179±0.114	ft/s	13707.12±374
Compressive Strength (TS EN 1926)	kg/cm ²	665.05±41	MPa	65.22±4.01	Psi	9458.98±582
Compressive Strength After Freezing	kg/cm ²	611.31±77	MPa	59.95±7.52	Psi	8694.66±1090.64
Compressive Strength Decreasing After Freezing	%	8.08	%	8.08	%	8.08
Weight Decreasing After Freezing	%	0.01	%	0.01	%	0.01
Flexural Strength under Concentrated Load	kg/cm ²	84.88±5.33	MPa	8.32±0.52	Psi	1207.25±75.81
Flexural Strength under Constant Moment	kg/cm ²	85.97±2.77	MPa	8.43±0.27	Psi	1222.75±39.40
Strength to Blow	kg.cm/cm ³	29±1	kg.cm/cm ³	29±1	kg.cm/cm ³	29±1
Abrasion Strength (Bohme)	cm ³ /50cm ²	26.23±3.74	cm ³ /50cm ²	26.23±3.74	cm ³ /50cm ²	26.23±3.74
Tensile Strength (Brazilian Test)	kg/cm ²	26.10±3.98	MPa	2.56±0.39	Psi	371.28±56.56
Point Load Strength Index (I _{s(50)})	kg/cm ²	26.41±4.89	MPa	2.59±0.48	Psi	375.63±69.62
Schmidt Rebound Hardness		32±1		32±1		32±1

Assist.Prof. Dr. Server DEMIRDAG

