



2018

Product Data Sheet  
Plant: Lawyers Road

I. GEOLOGICAL FORMATION: ARCH MARBLE

II. CHEMICAL ANALYSIS ( February 2018 ) :

Silica	as SiO2	3.6%	Calcium	as CaO	51.4%	CaCO3
Iron	as Fe2O3	0.7%	Magnesium	as MgO	1.2%	MgCO3
Aluminum	as Al2O3	1.1%	Calcium Carbonate Equiv.	CCE	85.0%	
Sulfur	as S	0.1%				

III. QUALITY DATA:

TEST	TEST DATE	Product										
		3	357	57	W 57	68	78	8/8P	9	Concrete Sand	Asphalt Sand	10
<b>* SPECIFIC GRAVITY *</b>												
BULK (ASPHALT)	01/18	2.713	2.719	2.711	2.729	2.702	2.716	2.696	2.658	2.692	2.692	2.653
BULK - SSD (CONCRETE)	01/18	2.719	2.730	2.723	2.739	2.716	2.728	2.709	2.700	2.714	2.714	2.700
APPARENT	01/18	2.730	2.748	2.743	2.757	2.741	2.750	2.731	2.775	2.752	2.752	2.783
% ABSORPTION	01/18	0.2%	0.4%	0.4%	0.4%	0.5%	0.5%	0.5%	1.6%	0.8%	0.8%	1.8%
<b>DRY RODDED (LBS/CUBIC FT)</b>												
	01/18	97.3	97.8	99.8	100.4	103.2	97.3	96.9	94.1	103.8	103.8	114.1
<b>DRY RODDED (LBS/CUBIC YARD)</b>												
	01/18	2627	2641	2695	2711	2786	2627	2616	2541	2803	2803	3081
<b>DRY RODDED ( % VOIDS )</b>												
	01/18	42.5%	42.3%	41.0%	41.1%	38.8%	42.6%	42.4%	43.3%	38.2%	38.2%	31.1%
<b>DRY RODDED (Kg/Cubic Meter)</b>												
	01/18	1559	1567	1599	1608	1653	1559	1552	1507	1663	1663	1828
<b>VTM-5 % VOIDS IN STONE SAND</b>												
	01/18									54.7%	54.7%	55.1%
<b>ASTM C1252 % VOIDS (METH B)</b>												
	01/18									53.5%	53.5%	53.8%
<b>ASTM C1252 % VOIDS (METH C)</b>												
	01/18									43.9%	43.9%	41.3%
<b>ASTM D4791 % F &amp; E (3:1)</b>												
	01/18		52.8%	28.4%	9.4%	22.6%	28.5%	17.1%				
<b>GRADING A % LOSS</b>												
	01/18	25.6%										
<b>GRADING B % LOSS</b>												
	01/18	25.8%										
<b>GRADING C % LOSS</b>												
	01/18	27.9%										
<b>SOUNDNESS % LOSS (Magnesium Sulfate)</b>												
	01/18	0.6%	0.5%	0.5%	0.4%	0.4%	0.4%	0.4%	3.6%	6.7%	6.7%	4.5%
<b>SOUNDNESS % LOSS (Sodium Sulfate)</b>												
<b>Stone (lb/sq yd)</b>												
<b>Emulsion (gal/sq yd)</b>												
<b>* SUPERPAVE *</b>												
<b>ASTM C1252 % VOIDS (METH A)</b>												
	01/18									48.5%	48.5%	49.2%
<b>AASHTO T 176 SAND EQUIVALENT</b>												
	01/18									97	97	69
<b>ASTM D4791 % F &amp; E (5:1)</b>												
	01/18		11.3%	4.1%	0.4%	0.7%	4.9%	0.3%				

## QUARRY -4 WEIGHTS

MAXIMUM DRY DENSITY 132.1  
 OPTIMUM MOISTURE 7.6  
 BULK SPECIFIC GRAVITY 2.72  
 ABS. 0.40

MAXIMUM DRY DENSITY \_\_\_\_\_  
 OPTIMUM MOISTURE \_\_\_\_\_  
 BULK SPECIFIC GRAVITY 2.72  
 ABS. 0.40

PLAIN				WITH CEMENT			
% +4 Material	lbs/cu.ft. DENSITY	% MOISTURE	KG/cu.M. DENSITY	% +4 Material	lbs/cu.ft. DENSITY	% MOISTURE	KG/cu.M. DENSITY
70%	156.4	3.3	2505	70%	#DIV/0!	1.0	#DIV/0!
69%	156.0	3.3	2498	69%	#DIV/0!	1.0	#DIV/0!
68%	155.5	3.4	2492	68%	#DIV/0!	1.0	#DIV/0!
67%	155.1	3.4	2485	67%	#DIV/0!	0.9	#DIV/0!
66%	154.7	3.5	2479	66%	#DIV/0!	0.9	#DIV/0!
65%	154.3	3.6	2472	65%	#DIV/0!	0.9	#DIV/0!
64%	153.9	3.6	2466	64%	#DIV/0!	0.9	#DIV/0!
63%	153.5	3.7	2460	63%	#DIV/0!	0.9	#DIV/0!
62%	153.2	3.8	2453	62%	#DIV/0!	0.9	#DIV/0!
61%	152.8	3.8	2447	61%	#DIV/0!	0.9	#DIV/0!
60%	152.4	3.9	2441	60%	#DIV/0!	0.8	#DIV/0!
59%	152.0	3.9	2435	59%	#DIV/0!	0.8	#DIV/0!
58%	151.6	4.0	2428	58%	#DIV/0!	0.8	#DIV/0!
57%	151.2	4.1	2422	57%	#DIV/0!	0.8	#DIV/0!
56%	150.8	4.1	2416	56%	#DIV/0!	0.8	#DIV/0!
55%	150.4	4.2	2410	55%	#DIV/0!	0.8	#DIV/0!
54%	150.1	4.3	2404	54%	#DIV/0!	0.8	#DIV/0!
53%	149.7	4.3	2398	53%	#DIV/0!	0.7	#DIV/0!
52%	149.3	4.4	2392	52%	#DIV/0!	0.7	#DIV/0!
51%	148.9	4.4	2386	51%	#DIV/0!	0.7	#DIV/0!
50%	148.6	4.5	2380	50%	#DIV/0!	0.7	#DIV/0!
49%	148.2	4.6	2374	49%	#DIV/0!	0.7	#DIV/0!
48%	147.8	4.6	2368	48%	#DIV/0!	0.7	#DIV/0!
47%	147.5	4.7	2362	47%	#DIV/0!	0.7	#DIV/0!
46%	147.1	4.7	2356	46%	#DIV/0!	0.6	#DIV/0!
45%	146.7	4.8	2351	45%	#DIV/0!	0.6	#DIV/0!
44%	146.4	4.9	2345	44%	#DIV/0!	0.6	#DIV/0!
43%	146.0	4.9	2339	43%	#DIV/0!	0.6	#DIV/0!
42%	145.7	5.0	2333	42%	#DIV/0!	0.6	#DIV/0!
41%	145.3	5.1	2328	41%	#DIV/0!	0.6	#DIV/0!
40%	145.0	5.1	2322	40%	#DIV/0!	0.6	#DIV/0!
% +4 Material	lbs/cu.ft. DENSITY	% MOISTURE	KG/cu.M. DENSITY	% +4 Material	lbs/cu.ft. DENSITY	% MOISTURE	KG/cu.M. DENSITY
PLAIN				WITH CEMENT			