

Delta Sand and Gravel, Inc.

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Summary of Typical Aggregate Gradations & Test Results - July, 2018

Bank Run		Sized Double-Washed Crushed Gravel Stone						Processed Base Materials					Fine Aggregate/Sands															
% Pass	Bank * Run Gravel							% Pass	2" Minus Screened Gravel	1-1/2" Minus CRUSHED Gravel	3/4" Minus CRUSHED Gravel	1/2" Minus CRUSHED Gravel	Hardpak	% Pass	Winter Sand	Sand (Blacktop)	Concrete Sand	Gravel Stone Dust	Beach Sand	Mason Sand	% Pass							
	1-1/2"	1"	3/4"	3/4" Blend	3/8"	1/4"	2"		1-1/2"	1"	3/4"	1/2"			3/8"	2"	1-1/2"	1"	3/4"	1/2"		3/8"	#4	#8	#16	#30	#50	#100
2"	88							2"	100	100				2"								2"						
1-1/2"	84	100						1-1/2"	97	94				1-1/2"								1-1/2"						
1"	78	67	100	100	100			1"	90	80	100		100	1"								1"						
3/4"	73	14	58	95	99			3/4"	84	73	92		91	3/4"								3/4"						
1/2"	68	1	1	43	67	100		1/2"	76	66	80	100	74	1/2"								1/2"						
3/8"	65	1	1	10	41	88	100	3/8"	70	62	74	88	63	3/8"	100	100						3/8"						
#4	56			1	5	15	22	#4	59	54	64	68	45	#4	87	92	100	100				#4						
#8	49				1	1	1	#8	49	48	56	54	34	#8	70	82	91	83			100	#8						
#16	39						1	#16	36	40	47	39	25	#16	46	62	72	58			100	#16						
#30	24							#30	20	26	32	29	16	#30	19	30	40	43	98		64	#30						
#50	9							#50	10	12	15	20	8	#50	6	9	13	30	78		28	#50						
#100	4							#100	5	4	6	12	4	#100	3	3	5	18	23		6	#100						
#200	2							#200	3	2	2	6	2	#200	2	1	2	9	4		1	#200						

Dry Rodded Wt (pcf)	94.2	100.5	105.2	100.0	99.1	93.3
Max Dry Unit W (Proctor) (pcf)						
Optimum Moisture (%)						
Maximum Wear (Abrasion) (%)				30.0		
Bulk Density (OD)				2.61		
Relative Density (SSD)				2.65		
Apparent Density				2.71		
Absorption (%)				1.40		
Soundness (%) (Na)				4.00		

143.2	138.8	131.9
9.2	6.9	8.9

FM	3.22	2.79	2.68	3.01	3.13
		116.1	132.0	102.2	
		7.6	9.1	18.0	
		2.64			
		2.67			
		2.72			
		1.10			
		6.00			

**only the portion smaller than 3" is tested*

Title 5 Sand			Crushed Trap Rock			Processed Trap (Quarry) Rock						
% Pass	Title 5 Sand	Title 5 % Passing #4 Sieve	% Pass	1-1/2"	3/4"	3/8"	% Pass	Dense Graded	TRG (3/4" Trap Rock Gravel)	1/2" TRG (Trap Rock Gravel)	Quarry Stone Dust	% Pass
	2"	100		100	2"	100				2"	100	
1-1/2"	99	100	1-1/2"	96			1-1/2"	100				1-1/2"
1"	97	100	1"	40	100		1"	86				1"
3/4"	95	100	3/4"	12	98		3/4"	77	100			3/4"
1/2"	92	100	1/2"	2	29	100	1/2"	72	92			1/2"
3/8"	89	100	3/8"	1	4	99	3/8"	67	79	100	100	3/8"
#4	84	100	#4		1	20	#4	52	50	75	98	#4
#8	79	94	#8			4	#8	35	33	49	66	#8
#16	72	86	#16			1	#16	21	20	29	40	#16
#30	55	65	#30				#30	13	13	17	25	#30
#50	25	30	#50				#50	8	8	10	16	#50
#100	8	9	#100				#100	5	6	5	10	#100
#200	2	2	#200				#200	3	4	3	6	#200

Dry Rodded Wt (pcf)	99.1	102.9	98.2	
Max Dry Unit W (Proctor) (pcf)				
Optimum Moisture (%)				
Maximum Wear (Abrasion) (%)	10.0	10.0	10.0	
Bulk Density (OD)	2.86	2.86	2.86	
Relative Density (SSD)	2.87	2.87	2.87	
Apparent Density	2.88	2.88	2.89	
Absorption (%)	0.50	0.45	0.41	

137.2	133.1
8.0	7.8

118.7
2.81
2.84
2.89
1.50

Customer is responsible for product selection & independent testing for job requirements.

Local Independent Test Labs:

S.W. Cole Engineering
13 Delta Drive, Unit 8
Londonderry, NH 03053
Phone: (603) 716.2111
Fax: (603) 716-2112

Allied Testing Laboratories
115 St. George Road
Springfield, MA 01104
Phone: (413) 736-1846
Fax: (413) 736-1838

Advance Testing Company, Inc.
3348 Route 208
Campbell Hall, NY 10916
Phone: (845) 496.1600
Fax: (845) 496.1398

Delta offers many more materials than are shown on this summary sheet. Refer to the current price sheet.