

STALITE Lightweight Aggregate Properties and Gradations for Geotechnical Applications

Property	Units	Coarse 3/4" x #4	Fine #4 x 0
Density (Unit Weight)			
Typical Damp Loose Density	pcf	48	55
Typical Compacted In-Place Moist Density (ASTM D 698)	pcf	60	77
Estimated Max. Compacted Density (Saturated & Drained)	pcf	68	85
Laboratory Density (Unit Weight)			
Minimum Dry Loose Density (ASTM D 4254)	pcf	48	59
Maximum Dry Compacted Density (ASTM D 4253)	pcf	58	79
Minimum Dry 65% Relative Density (ASTM D 4254)	pcf	54	71

Sieve Size	% Passing	
1" (25 mm)	100	-
3/4" (19 mm)	90-100	-
1/2" (12.5 mm)	-	-
3/8" (9.5 mm)	10-50	100
#4 (4.75 mm)	0-15	85-100
#8 (2.36 mm)	-	-
#16 (1.18 mm)	-	40-80
#30 (600 µm)	-	-
#50 (300 µm)	-	10-35
#100 (150 µm)	-	5-25
#200 (75 µm)	0-10	-
Gradation Characteristics		
Fineness Modulus (ASTM C 136)	6.5 to 7.5	2.7 to 3.7
Coefficient of Uniformity, C_u (ASTM C 136)	2 to 4	18 to 20

Gradations conform to ASTM C 330