3 Indag™ Aggregate

Product Data Sheet

Product Description

Basic Use: Indag aggregate is ideally suited for use as a non-skid aggregate. It is also suited for use as a concrete floor surface shake-on hardener which helps extend floor life.

Composition and Materials: The aggregate is an extremely hard, fine grained, dark gray colored, igneous rock. Its lath-like crystals interlock, providing high abrasion resistance. The crushed and graded aggregate is free of moisture. Indag is sold in 50 lb. Bags or in bulk form. The typical chemical analysis shows the following composition:

Belle Mead Diabase

Silicon Dioxide	52.53%	Sodium Oxide	1.95%
Aluminum Oxide	13.85%	Potassium Oxide	0.56%
Iron Oxide	9.58%	Titanium Dioxide	0.89%
Calcium Oxide	11.15%	Manganese Oxide	0.18%
Magnesium Oxide	8.10%	Loss on Ignition	0.24%

Indag aggregate is screened to the following sizes:

No. 8

U.S. Sieve Size	% Retained
No. 4	None
No. 6	0-3
No. 12	70-97
No. 20	3-20
<No. 20	0-3

No. 9

U.S. Sieve Size	% Retained
No. 8	0-1
No. 12	4-10
No. 16	30-45
No. 20	25-37
No. 30	14-24
No. 40	2-9
<No. 40	0-2

Physical Properties (Belle Mead)

Property	Results
Color	Dark Gray
Compression Strength	>34,000 psi (approx.)
Specific Gravity	3.00
Hardness	6 - 6 ½ (MOHS)
Abrasion Loss: L.A.R. A-Grading ASTM C131	15.5
Soundness: 5 cycle $MgSO_4$, ASTM C88	0.31
Burbank Abrasion Index	1.4119
(AMS Abraded) Power to Crush (ft. lbs./cu. in.)	10.00+
Bulk Density (in place) (lbs./cu. ft.)	192
Loose bulk density (lbs./cu. ft.)	100
Friability Index Number (Burbank Test Mill)	78.0

Performance Properties (Belle Mead) When Applied in Concrete Mix

		Results	
Property	Measuring Standards and Conditions	Indag #8	Indag #9
Concrete Mix			
Cement lbs.	ASTM C150	564 lbs. Northwestern, Type I Portlant	
Fine Aggregate lbs.	ASTM C33	1045 lbs. Sand	
Coarse Aggregate lbs.	ASTM C33	1916 lbs. ¾" limestone	
Admixture oz.	ASTM C260	5.5 oz. Protex AES	
Water lbs.		271 lbs.	
Water/Cement Ratio		0.48	
Slump	ASTM C143	4 inches	
Air content	ASTM C231	6.1%	
28 day Compressive Strength		5920	
Skid Resistance on wet surfaces	ASTM E303-83	85	82
Chloride - Ion Penetrations (Coulombs)	AASHTO T277-83	2710 Moderate	2480 Moderate
Freeze/Thaw	ASTM C666		
Linear expansion		0.028%	034%
Relative dynamic modulus of elasticity (RDME)		82.9%	78.6%
Weight loss		.16%	.20%

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