

Aggregate Optimization Chart

Production Gradation Report

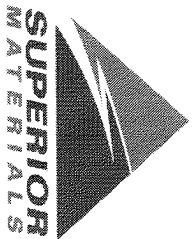
PLANT #: P-102

Sample Date: 7/15/24

Dates Test Represents: 7/16/2024 through 7/22/2024

Concrete Grade: DM, 4500HP

Contractor: _____
MDOT No.: _____



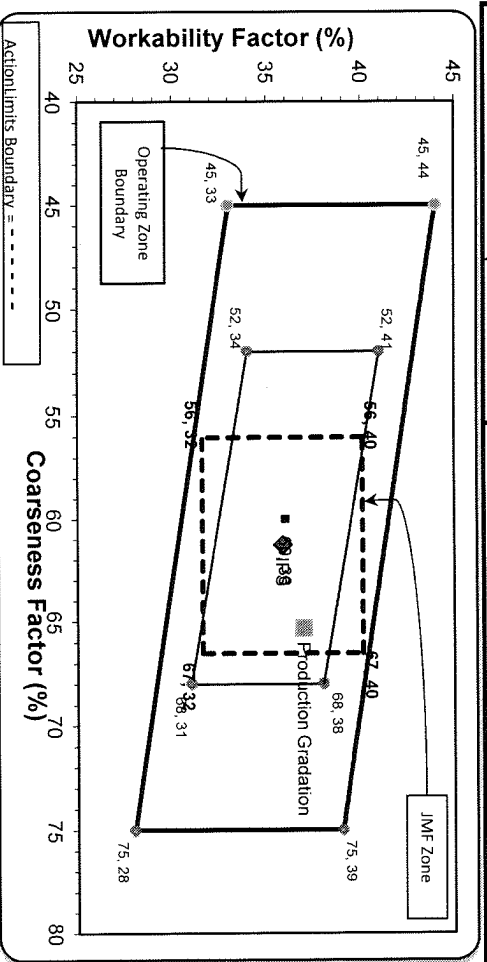
Superior Materials, LLC
 30701 W. 10 Mile Rd.
 Suite 500
 Farmington Hills, MI 48336

Agg. Class	Pit #	Source	Weight (ssu)	ft ³	Specific Gravity	% Contribution
6AA	58-003	Stoneco	1450	8.64	2.69	49.2
26A	58-003	Stoneco	350	2.09	2.69	11.9
2NS	63-114	Highland	1150	6.95	2.65	39.0
Total Wt						17.68
						100.0

Sieve	6AA	26A	2NS	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	100.0	100.0	100.0	0.0	0.0
1.5"	100.0	100.0	100.0	100.0	0.0	0.0
1"	100.0	100.0	100.0	100.0	0.0	0.0
3/4"	86.5	100.0	100.0	93.4	6.6	6.6
1/2"	37.0	99.7	100.0	69.0	24.4	31.0
3/8"	15.1	90.9	100.0	57.2	11.8	42.8
#4	2.6	9.5	98.4	40.8	16.4	59.2
#8	1.5	2.7	85.7	34.5	6.3	65.5
#16	1.3	1.9	70.2	28.2	6.2	71.8
#30	1.2	1.7	50.7	20.6	7.7	79.4
#50	1.2	1.7	19.7	8.5	12.1	91.5
#100	1.1	1.7	3.6	2.1	6.3	97.9
LBW	1.0	1.7	0.7	1.0	1.2	99.0

Production Gradation Batch Plant Gradations Aggregate Supplier Gradations

Coarseness Factor: 65 **Workability Factor:** 34 **Adjusted WF:** 37.0

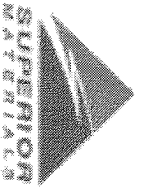


Sieve	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	0.0	0.0
1.5"	100.0	0.0	0.0
1"	99.3	0.7	0.7
3/4"	89.2	10.1	10.8
1/2"	70.7	18.5	29.3
3/8"	60.7	10.0	39.3
#4	44.4	16.3	55.6
#8	35.9	8.5	64.1
#16	27.3	8.6	72.7
#30	19.1	8.2	80.9
#50	7.4	11.7	92.6
#100	1.9	5.6	98.1
LBW	0.7	1.2	99.3

*Maximum % Retained must be above the 3/8" sieve.
 *Any two adjacent sieves must equal 10% except max.
 nom. max. #100 and #200 sieves.
 **Retained must be at least 4% for each sieve except max.
 nom. max. #100 and #200 sieves.
 ***Retained must be at least 4% for the 3/4" sieve when
 a 1.5" max. size (nom. Max. 1.0") aggregate is used.

PREPARED BY:
 SM, LLC Technical Service

Approved By: _____



Daily Summary Report

Date Monday, July 15, 2024

Sample Id	Plant	Product	Specification	Sample Type	Time	2" (50mm)	1 1/2" (37.5mm)	1" (25mm)	3/4" (19mm)	1/2" (12.5mm)	3/8" (9.5mm)	#4 (4.75mm)	#8 (2.36mm)	#16 (1.18mm)	#30 (.6mm)	#50 (.3mm)	#100 (.15mm)	#200 (75um)	Pan	FM	Wash Loss (#200/75um)	Total Moisture
-674954216	S102 Superior Novi	COARSE AGG P1M LS	Coarse Agg P1M LS Target	QA	12:55	100.0	100.0	39.2	6.1	1.9	1.4	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.0	0.0	0.6	2.05
-674908849	S102 Superior Novi	6AA LS 1051	6AA LS	QA	12:56	100.0	100.0	100.0	86.5	37.0	15.1	2.6	1.5	1.3	1.2	1.2	1.1	1.08	0.00	0.00	1.0	3.92
-1989638436	S102 Superior Novi	INTERMED AGG P1M LS	Intermed Agg P1M LS Target	QA	12:57	100.0	100.0	100.0	100.0	95.6	78.1	17.3	7.0	4.3	3.4	3.0	2.9	2.8	0.0	0.0	2.7	5.27
-1590544857	S102 Superior Novi	26A Mod LS	26A Mod LS Spec	QA	12:58	100.0	100.0	100.0	100.0	99.7	90.9	9.5	2.7	1.9	1.7	1.7	1.7	1.7	0.0	0.0	1.7	2.79
-1073647886	S102 Superior Novi	2NS GR	2NS GR Spec	QA	12:59	100.0	100.0	100.0	98.4	85.7	85.7	70.2	50.7	19.7	3.6	0.9	0.0	0.0	0.0	0.0	2.72	4.51