

Aggregate Optimization Chart

MIX ID'S: DDS257E7 and DDS257E8

Production Gradation Report

PLANT #: **P-38**

Sample Date: 12/5/16

Concrete Grade: **S2M**

Contractor: _____

Dates Test Represents: 12/5/2016 to 12/11/2016

MDOT No.: _____

Agg. Class	Pit #	Source	Weight (SSD)	ft ³	Specific Gravity	% Contribution
6AA	58-003	Stoneco	1525	9.09	2.69	48.3
26A	58-003	Stoneco	310	1.85	2.69	9.8
2NS	81-93	Burmeister	1320	8.01	2.64	41.8
Total Wt			3155	18.94		100.0

<----- Verify this number is 100%



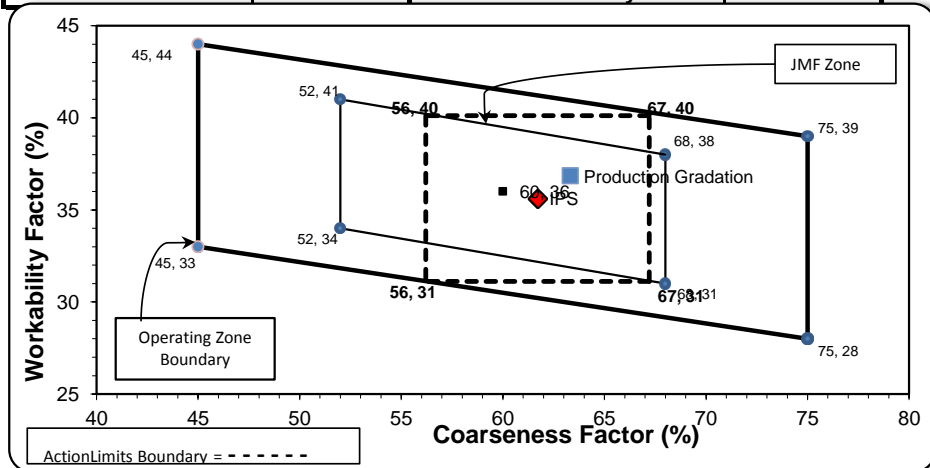
Superior Materials, LLC
 30701 W. 10 Mile Rd.
 Suite 500
 Farmington Hills, MI 48336

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"	86.2	100.0	100.0	93.3	6.7	6.7
1/2"	44.2	99.3	100.0	73.0	20.4	27.0
3/8"	20.6	83.6	100.0	60.0	12.9	40.0
#4	2.9	12.0	98.4	43.7	16.3	56.3
#8	1.5	2.7	85.7	36.8	6.9	63.2
#16	0.8	1.4	70.4	30.0	6.9	70.0
#30	0.8	1.0	51.9	22.2	7.8	77.8
#50	0.7	0.9	22.0	9.6	12.6	90.4
#100	0.6	0.9	4.1	2.1	7.5	97.9
LBW	0.7	0.7	1.5	1.0	1.1	99.0

*Maximum % Retained must be above the 3/8" sieve.
 *Any two adjacent sieves must equal 13% except max., nom. max., #100 and #200 sieves.
 *% Retained must be at least 5% for each sieve except max., nom. max., #100 and #200 sieves.
 *% Retained must be at least 8% for the 1" sieve when a 2" max. size (nom. Max. 1.5") aggregate is used.

Production Gradation Batch Plant Gradations Aggregate Supplier Gradations

Coarseness Factor: **63** **Workability Factor:** **37**



Initial Production Sample (IPS)

Coarseness Factor: **62**
Workability Factor: **36**

Sieve	Cumulative % Passing	% Retained	Cumulative % Retained
2"	100.0	0.0	0.0
1.5"	100.0	0.0	0.0
1"	99.2	0.8	0.8
3/4"	91.1	8.1	8.9
1/2"	72.0	19.1	28.0
3/8"	60.3	11.7	39.7
#4	43.4	16.9	56.6
#8	35.6	7.8	64.4
#16	28.4	7.2	71.6
#30	21.8	6.7	78.2
#50	9.1	12.6	90.9
#100	1.7	7.4	98.3
LBW	1.1	0.6	98.9

PREPARED BY:
 SM, LLC Technical Service

Approved By: