

**CONCRETE QA CORRELATIO**DATE: 7/24/2020MDOT CONTROL SECTION: 82000MDOT JOB NUMBER: 205935A, 207914ASOMAT JOB NUMBER: 2019086CPROJECT NAME: HMA Resurfacing (fed-aid)CITY: Detroit, MI (Various Routes)CLIENT: Hubbell, Roth, & Clark (HRC)PROJECT ENGINEER: Kevin Surhigh (HRC)INSPECTOR: AndrewCONTRACTOR: MerloQC COMPANY: CTIQC TESTER: Mallory**CONCRETE INFORMATION**

CONCRETE COMPANY:	Superior Materials	TRUCK NUMBER:	3213
MIX DESIGN #:	P155E7CQA032	PLANT LOCATION (CITY):	Detroit
CONCRETE GRADE:	P1	TOTAL QUANTITY (CYDS):	24
PWL/NON-PWL:	Non-PWL	QUANTITY AT SAMPLE (CYDS):	1

POUR LOCATION (STATION, STRUCTURE, ETC...)

Pouring curb at Jos Campau between E.Davison and Carpenter.

TEST RESULTS

	QC (CONTRACTOR)	QA (SOMAT)	TOLERANCE	MEETS TOLERANCE (Y/N)
SAMPLE TIME (Hrs/Min):	7:10 AM			
AIR CONTENT (%):	5.90	6.20	+/- 0.8 PERCENT	YES
CONCRETE TEMP. (°F):	81	80	+/- 2.0 DEGREES	YES
AIR TEMP. (°F):	63	63		

REMARKS:

FIELD REPRESENTATIVE:	Ryan Castillo	DATE:	7/24/2020
PROJECT MANAGER(s):	Steve Drummond	DATE:	

*All results noted in this report relate only to items inspected or tested by Somat Engineering, Inc. and/or Somat Engineering of Ohio, Inc. (Somat). This report shall not be reproduced, except in full, without the prior written approval of Somat.

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Concrete Cylinder Test Report

PROJECT INFO - DRAFT ONLY

ASTM C31, ASTM C39, AASHTO T23, AASHTO T22, ASTM C172, AASHTO R60

Client	HRC	Date Of Placement	07/24/2020
Project Name	HMA Resurfacing 20+ Locations	Specimen Type	Concrete Cylinder
Project Number	2019086C	Contractor	merlo
Project Location	Detroit, MI	Concrete Supplier	Superior Materials, LLC
MDOT Job Number	205935A, 207914A	Field Tested By	Ryan Castillo
MDOT Control Section	82000	Date Issued	07/25/2020
Results Recorded In	English Units		
Supplier Mix Description	Structure Adjustment		

DESIGN PARAMETER

Mix Design Number	0674 P155E7CQA032				
Design Compressive Strength (psi)	3500				
Air (% Max)	8.5	Slump (in Max)	3.00	Unit Weight (lbs/ft ³)	
Air (% Min)	5.5	Slump (in Min)	1.50		

TESTING DATA

Placed 24.00 +/- yds ³ /ft ³ of concrete at the following location: Pouring curb on Jos Campau between E.Davison and Carpenter.									
Time Tested	Truck Num	Slump ASTM C143 (in)	Air ASTM C231 or C173 (%)	Unit Weight ASTM C138 (lbs/ft ³)	Air Temp (°F)	Mix Temp ASTM C1064 (°F)	Concrete Cylinder Set	Water Added (gal)	Cumulative Concrete Placed At Test (yds ³ /ft ³)
7:10 AM	3213	2.00	6.20	0.0	63	80	1	0	1

MATERIAL DATA

Concrete Cylinder Set	Concrete Cylinder Num	Diameter (in)	X-Sec Area (in ²)	Weight (lbs)	Fracture Type	Capping Process	Age Of Concrete Cylinder (Days)	Date Tested	Total Load At Failure (lbs)	Cumulative Strength (psi/mpa)
1	78985						28	08/21/2020		
1	78986						28	08/21/2020		

Average 28 Day Compressive Strength (psi): 0

*Cylinders tested with Unbonded Caps followed ASTM C1231, cylinders tested with Bonded Caps followed ASTM C617.

*All Air Content % tests were performed per C231 unless otherwise noted in the remarks.

*Inspector was notified of non-conformance items, if any.

*Average Compressive Strength results did not meet project specifications.

Remarks:	
Results Reported To:	
Report Approved By:	Ryan Castillo



Concrete Cylinder Test Report

PROJECT INFO - DRAFT ONLY

ASTM C31, ASTM C39, AASHTO T23, AASHTO T22, ASTM C172, AASHTO R60

Client	HRC	Date Of Placement	07/24/2020
Project Name	HMA Resurfacing 20+ Locations	Specimen Type	Concrete Cylinder
Project Number	2019086C	Contractor	merlo
Project Location	Detroit, MI	Concrete Supplier	Superior Materials, LLC
MDOT Job Number	205935A, 207914A	Field Tested By	Ryan Castillo
MDOT Control Section	82000	Date Issued	07/25/2020

Results Recorded In	English Units
Supplier Mix Description	Structure Adjustment

DESIGN PARAMETER

Mix Design Number	0675 P155ERCQA032				
Design Compressive Strength (psi)	3500				
Air (% Max)	8.5	Slump (in Max)	6.00	Unit Weight (lbs/ft ³)	
Air (% Min)	5.5	Slump (in Min)	3.50		

TESTING DATA

Placed	11.00	+/- yds ³ /ft ³ of concrete at the following location: Pouring ADA ramps on E.Vernor between Gratoit and Mt.Elliott
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Time Tested	Truck Num	Slump ASTM C143 (in)	Air ASTM C231 or C173 (%)	Unit Weight ASTM C138 (lbs/ft ³)	Air Temp (°F)	Mix Temp ASTM C1064 (°F)	Concrete Cylinder Set	Water Added (gal)	Cumulative Concrete Placed At Test (yds ³ /ft ³)
10:50 AM	3211	4.25	6.80	0.0	73	85	1	0	1

MATERIAL DATA

Concrete Cylinder Set	Concrete Cylinder Num	Diameter (in)	X-Sec Area (in ²)	Weight (lbs)	Fracture Type	Capping Process	Age Of Concrete Cylinder (Days)	Date Tested	Total Load At Failure (lbs)	Cumulative Strength (psi/mpa)
1	78987						28	08/21/2020		
1	78988						28	08/21/2020		

Average 28 Day Compressive Strength (psi): 0

*Cylinders tested with Unbonded Caps followed ASTM C1231, cylinders tested with Bonded Caps followed ASTM C617.

*All Air Content % tests were performed per C231 unless otherwise noted in the remarks.

*Inspector was notified of non-conformance items, if any.

*Average Compressive Strength results did not meet project specifications.

Remarks:	
Results Reported To:	
Report Approved By:	Ryan Castillo