



Concrete Cylinder Test Report

PROJECT INFO

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

Client	AECOM	Date Of Placement	07/22/2021
Project Name	Van Dyke Improvements	Specimen Type	Concrete Cylinder
Project Number	2019057D-003	Contractor	Century Cement
Project Location	Detroit, MI	Concrete Supplier	Hercules Material Holdings, LLC
MDOT Job Number		Field Tested By	AndrewLee
MDOT Control Section		Date Issued	08/19/2021

Results Recorded In	English Units
Supplier Mix Description	MDOT P1 + MR - 6" Slump

DESIGN PARAMETER

Mix Design Number	0872 P1-DETM				
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)	3.00		

TESTING DATA

Placed	81.00	+/- yds ³ /ft ³ of concrete at the following location: sidewalk on conners various locations							
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)
7:30 AM	2110	5.25	7.00	0.0	61	79	1	0	11

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	84854	4.00	12.57	8.46	3-(Vertical)	Unbonded Cap	28	08/19/2021	51410	4090
1	84855	4.00	12.57	8.48	3-(Vertical)	Unbonded Cap	28	08/19/2021	53650	4270

Average 28 Day Compressive Strength (psi): 4180

*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 meet project specifications.

Remarks:	
Results Reported To:	AECOM(Alan Ostrowski)
Report Approved By:	Brian Gondek



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1:15 PM	402	5.00	6.60	0.0	75	80	2	0	59

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)
2	84856	4.00	12.57	8.42	3-(Vertical)	Unbonded Cap	28	08/19/2021	57600	4580
2	84857	4.00	12.57	8.44	2-(Cone/Vertical)	Unbonded Cap	28	08/19/2021	56220	4470

Average 28 Day Compressive Strength (psi): 4525

*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 meet project specifications.

Remarks:	
Results Reported To:	AECOM(Peter Bugar)
Report Approved By:	Brian Gondek