



Concrete Cylinder Test Report

PROJECT INFO

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

Client	AECOM	Date Of Placement	07/02/2021
Project Name	PW-7023 Conner Improvements	Specimen Type	Concrete Cylinder
Project Number	2019057D-002	Contractor	Century Cement
Project Location	Detroit, MI	Concrete Supplier	Hercules Material Holdings, LLC
MDOT Job Number		Field Tested By	Diego Riley
MDOT Control Section		Date Issued	07/30/2021
Results Recorded In	English Units		
Supplier Mix Description	City of Detroit P1 MR		

DESIGN PARAMETER

Mix Design Number	0873 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 93.00 +/- yds ³ /ft ³ of concrete at the following location: Sidewalk alongside Conner between Chandler park and Frankfort, Detroit									
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)
9:34 AM	2012	5.75	5.60	0.0	66	75	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	84365	4.00	12.57	8.55	2- (Cone/Vertical)	Unbonded Cap	28	07/30/2021	54987	4370
1	84366	4.01	12.63	8.55	2- (Cone/Vertical)	Unbonded Cap	28	07/30/2021	58173	4610

Average 28 Day Compressive Strength (psi): 4490

*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:	Matthew Johnson



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2:05 PM	2106	5.25	6.80	0.0	75	79	2	0	61

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	84367	4.00	12.57	8.49	2- (Cone/Vertical)	Unbonded Cap	28	07/30/2021	48645	3870
2	84368	4.01	12.63	8.57	3-(Vertical)	Unbonded Cap	28	07/30/2021	45628	3610

Average 28 Day Compressive Strength (psi): 3740

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

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