

## City and County of Denver Approved Concrete Designs

For questions email [CCDMaterialsReview@denvergov.org](mailto:CCDMaterialsReview@denvergov.org)

Aggregate Industries						
Mix Design Dated	Mix Code	CDOT Class	Fly Ash Amount	Fly Ash Type	Design w/c	Notes
03/26/20	94088087	Class BZ Air Entrained	30%	Class F	0.44	
03/26/20	94099097	Class BZ	30%	Class F	0.45	
04/02/20	MM7782E	Shotcrete	32%	Class F	0.43	
03/24/20	9456623	Class B, D, P Hand	20%	Class F	0.42	
09/25/20	9456623P	Class B, D, P Hand	20%	Class F	0.42	
04/20/21	9458224	Class B, D, P Machine	25%	Class F	0.4	
04/22/21	7456120	Class B	20%	Class F	0.39	4.5K DENVER MIX - FA

Brannan - Ready Mixed						
Mix Design Dated	Mix Code	CDOT Class	Fly Ash Amount	Fly Ash Type	Design w/c	Notes
10/23/19	145813G	B, D	23%	Class F	0.40	
03/21/20	112814GE	Class P, 3000 PSI in 12 HRS	20%	Class F	0.31	
03/25/20	124814GE	Class P, 3000 PSI in 24 HRS	20%	Class F	0.35	
03/18/20	145812G	Class D, Low Slump	20%	Class F	0.34	
07/27/20	145813G	Class B/D	23%	Class F	0.40	
06/29/20	145915G	Class G	30%	Class F	0.39	
03/21/20	245812G	Class P, Low Slump	23%	Class F	0.39	
03/21/20	245814G	Class P, Hand	23%	Class F	0.39	
04/27/20	845813R	Class B Median Cover	23%	Class F	0.40	

BURNCO Colorado						
Mix Design Dated	Mix Code	CDOT Class	Fly Ash Amount	Fly Ash Type	Design w/c	Notes
01/15/21	451D1C4C	Class B/D/P, High Slump	25%	Natural Pozz.	0.43	
08/05/20	451C1C2C	Class B/D/P, Low Slump	20%	Natural Pozz.	0.41	
08/04/20	451C1C4C	Class B/D/P, High Slump	20%	Natural Pozz.	0.41	
01/15/21	451D1C2C	Class B/D/P, Low Slump	25%	Natural Pozz.	0.43	
03/03/21	45C1C1C4C	Class B/D/P, High Slump	20%	Natural Pozz.	0.43	
03/03/21	45C1C1C2C	Class B/D/P, Low Slump	20%	Natural Pozz.	0.43	

On Demand Concrete						
Mix Design Dated	Mix Code	CDOT Class	Fly Ash Amount	Fly Ash Type	Design w/c	Notes
04/13/20	CDP4512HR	Class P, 12 Hour	25%	Class F	0.38	Type IP cement, fly ash won't show up on ticket
04/13/21	CDP4524HR	Class P, 24 Hour	25%	Class F	0.38	Type IP cement, fly ash won't show up on ticket
05/11/20	CDP4504C	Class P, 4 Hour	None	None	0.44	Type 1157 HS cement, fly ash not required
01/27/20	CDP4500R	Class P	25%	Class F	0.44	Type IP cement, fly ash won't show up on ticket

Martin Marietta Materials						
Mix Design Dated	Mix Code	CDOT Class	Fly Ash Amount	Fly Ash Type	Design w/c	Notes
10/10/19	CD4575	B, D, P	20%	Class F	0.45	
10/10/19	ZA4514	B, D, P	20%	Class F	0.43	Machine place
10/10/19	ZA4315	B, D, P	20%	Class F	0.42	24 Hour
11/05/19	XCD4575	B, D, P	20%	Natural Pozz.	0.45	
07/01/20	XCD4514	B, D, P	20%	Natural Pozz.	0.43	Machine place
06/30/20	XCD4315	B, D, P	20%	Natural Pozz.	0.4	24 Hour

Velocity Ready Mix						
Mix Design Dated	Mix Code	CDOT Class	Fly Ash Amount	Fly Ash Type	Design w/c	Notes
08/26/20	CDE4524	D, P	20%	Class F	0.38	Reaches 3,000 psi @29hrs
08/20/20	CDP4520	D, P	20%	Class F	0.4	High Slump
09/02/21	CDP4522	D, P	20%	Class F	0.42	High Slump
07/24/20	CDPM4520	D, P	20%	Class F	0.41	Low Slump, Slip Form

All concrete requires 1.5 pounds micro fibers (Fibermesh or equal) PER CUBIC YARD of Concrete. Fibers must be ordered when concrete is ordered.  
 Concrete for all ROW features on Collectors and Arterials requires 20% Class F Flyash for Winter Deicer Resistance and Class 2 default for soil sulfates. Highly recommended for local streets and City & County of Denver specs are MGPEC Item 30 specs, EXCEPT No use of class C Flyash in a mix is allowed without special submittals. See CDOT Standard Specifications for Road & Bridge at