

Denver Approved CLSM (Controlled Low Strength Material) for Narrow Trench & Pit backfill. Mix Approval List for 2023

City & County Denver - DOTI - ROWS - Construction Engineering and Inspections, Materials Group

Specifications in MGPEC Item 19 (mgpec.org) and summarized in Denver Transportation Standards & Details, 2017 version.

Last update was:

All placements of sand/aggregate flowfill shall be placed at slumps (ASTM C43) of 7 to 10 inches, to allow material to flow and fill voids
 All placements of flyash based flashfill shall be placed with (ASTM D6103) spreads of 8 inch minimum, or one lift slumps (modified C143) of 7 to 10 inch.
 Designs are good for two years

Supplier	Mix Number	CLSM Type (Flowfill or Flashfill)	PE S/S Submittal Date	early day psi	7 day psi	28 day psi	RE (Removability Modulus or Indx), need <=1.50 for Flyash based	Notes
On Demand Concrete	QSFF100S	FlowFill	4/4/2023		73	118	1.47	
On Demand Concrete	QSFF2500S	Flowfill Temp Trench Cap	1/8/2023		2805	4,150		place thin, later remove for permanent
On Demand Concrete	QSFF080S	FlowFill	3/11/2021		33	80	1.21	
On Demand Concrete	CDF100C	FlowFill	2/14/2023		59	111	1.5	
On Demand Concrete	QSCAP1500S	FlowFill	3/1/2021		1060	2,580		place thin, later remove for permanent
Metro Mix (Aggregate Industries)								
Martin Marietta	FF0325	FlowFill	6/23/2021			80	1.28	
Martin Marietta	FF1700	FlowFill	6/23/2021			90	1.4	
Flashfill Services	D-100-02	Temp Trench Cap	5/4/2020	880at 4 hr, 2000 at 1 day	2160	2460		place thin, later remove for permanent Supplier expects traffic ready at 1 hour, as temp travel surface.
Flashfill Services	CXV-40-80L	FlashFill	4/5/2021	50 psi @ 1 day	90	150		
Flashfill Services	W-55-40T	FlashFill	4/24/2021	60 @ 4 hr, 100 @ 1 day	120	210		
Burnco								
Brannan Ready Mix	500907R	Flow Fill	3/21/2021		37	73	1.38	
Ready Mixed (Brannan)								
Alpha-Omega	alphafillplus	FlowFill	7/14/2020	n/a	70	79	1.4	fast setting
Aggregate Industries	9008000	FlowFill	8/12/2020		n/a	70	n/a	