

# Chemical Admixtures for Concrete

---

## Material Producer List

Materials & Tests Division



## Chemical Admixtures for Concrete

The following materials are prequalified in accordance with DMS-4640, “Chemical Admixtures for Concrete.”

The dosage rates indicated are the manufacturer’s published recommended dosage rates for use under normal conditions. Determine actual dosage rates with trial mixes made with project materials under anticipated construction temperatures and conditions.

1. When using any of the combinations of “Group I, Chemical Admixtures” and “Group II, Air Entraining Admixtures,” ensure they are added to the concrete mix separately.
2. Concrete admixtures may exhibit substantially different performances with different brands or changing chemistry of cement. This is usually most noticeable in the retarding effect at a specified dosage. In those cases where a pre-approved admixture does not seem to provide satisfactory performance, please immediately notify the Materials & Pavements Section of the Construction Division at (512) 506-5858.

The Department reserves the right to conduct random sampling of prequalified materials for testing and to perform random audits of test reports. Department representatives may sample material from the manufacturing plant, terminal, shipping container, and concrete plant. MTD reserves the right to test samples to verify compliance with DMS-4640.

Information on the solids content is included when performing a concrete mix design.

For more information, contact the Materials & Tests Division’s Rigid Pavements and Concrete Materials Section at (512) 506-5858.

## Group 1, Chemical Admixtures

### Type A: Water Reducing Admixtures

- These admixtures reduce the quantity of mixing water required to produce concrete of a given consistency.

Pre-Approved Water Reducing Admixtures (Type A)

Product	Dosage in mL per 100 kg (oz. per 100 lb.) of Cement	Approx. % Solids (for mix design)	Producer	Producer Code
Adva 140M	390 to 1300 (6 to 20)	16	GCP Applied Technologies	99532
Adva 190	130 to 325 (2 to 5)	31		
Adva 405	325 to 650 (5 to 10)	19		
Chryso Enviromix 159	195 to 780 (3 to 12)	33	Chryso	98128
Chryso Enviromix 300	195 to 780 (3 to 12)	33		
Chryso Enviromix 340	195 to 780 (3 to 12)	30		
Chryso Enviromix 350	195 to 685 (3 to 10)	16		
Chryso Enviromix 380	195 to 652 (3 to 10)	18		
Chryso EnviroMix 728	325 to 1170 (5 to 18)	21		
Chryso EnviroMix 740	195 to 782 (3 to 12)	22		
Chryso EnviroMix 740i	195 to 782 (3 to 12)	22		
Chryso EnviroMix i40	195 to 780 (3 to 12)	34		
Chryso EnviroMix i44	325 to 1170 (5 to 18)	21		
Chryso Fluid Optima 203	196 to 522 (3 to 8)	22		
Chryso Fluid Optima 216	522 to 1304 (8 to 20)	22		
Chryso Fluid Optima 256 EMx	130 to 587 (2 to 9)	36		
Chryso Fluid Optima 258 EMx	130 to 457 (2 to 7)	32		
Chryso Pave 259 EMX	195 to 780 (3 to 12)	33		
Chryso Plast 209	195 to 390 (3 to 6)	34		
Chryso Plast CP 40 EMX	195 to 780 (3 to 12)	33		
Chryso Plast P150	196 to 520 (3 to 8)	35		
Chryso Plast P400	196 to 390 (3 to 6)	40		
Chryso Quad 520 EMx	195 to 978 (3 to 15)	24		
Chryso PREMIA 576	130 to 587 (2 to 9)	35		
Chryso Fluid Premia 180	196 to 522 (3 to 8)	25		
Chryso Fluid Premia 198	195 to 391 (3 to 6)	31		
Chryso Omega166	261 to 652 (4 to 10)	18		

**Pre-Approved Water Reducing Admixtures (Type A)**

<b>Product</b>	<b>Dosage in mL per 100 kg (oz. per 100 lb.) of Cement</b>	<b>Approx. % Solids (for mix design)</b>	<b>Producer</b>	<b>Producer Code</b>
Clarena MC2000	130 to 460 (2 to 7)	16	GCP Applied Technologies	99532
CONCERA CP1124	390 to 1040 (6 to 16)	15		
Daracem 55	195 to 585 (3 to 9)	44		
Daracem 65	195 to 780 (3 to 12)	36		
Eucon A+	195 to 522 (3 to 8)	42	Euclid Chemical Corp.	99924
Eucon HC	130 to 390 (2 to 6)	39		
Eucon LR <sup>1</sup>	195 to 260 (3 to 4)	40		
Eucon LW	195 to 390 (3 to 6)	42		
Eucon MR	260 to 910 (4 to 14)	44		
Eucon MRX	195 to 782 (3 to 12)	30		
Eucon NR	195 to 390 (3 to 6)	43		
Eucon NW	195 to 390 (3 to 6)	43		
Eucon SE	130 to 325 (2 to 5)	23		
Eucon SPJ	260 to 455 (4 to 7)	34		
Eucon WR	260 (4)	38		
Eucon WR 75	130 to 195 (2 to 3)	44		
Eucon WR 91	125 to 375 (2 to 6)	42		
Eucon X-15	195 to 975 (3 to 15)	43		
Eucon X-20	195 to 975 (3 to 15)	27		
EvoTek 7015	195 to 1170 (3 to 18)	30	Ritek	98250
EvoTek 2000	65 to 520 (1 to 8)	40	RussTech	99379
ExtendFlo X90	130 to 783 (2 to 12)	28		
FinishEaseNC	196 to 457 (3 to 7)	44	Ritek	98250
FloTek 1225	225 to 325 (3.5 to 5)	35		
FloTek 1240	195 to 325 (3 to 5)	40	Cemex Admix USA	98358
Isoflex 7350	30 to 300 (1 to 10)	19		
Isoflow 9750	60 to 240 (2 to 8)	30	General Resource Tech.	99289
KB-1200	195 to 780 (3 to 12)	46		
LC400P	196 to 327 (3 to 5)	38	RussTech	99379
LC-500	196 to 327 (3 to 5)	39		
MasterGlenium 1466	130 to 260 (2 to 4)	40	BASF Admixtures	99470
MasterGlenium 3030	390 to 1170 (6 to 18)	30		

**Pre-Approved Water Reducing Admixtures (Type A)**

<b>Product</b>	<b>Dosage in mL per 100 kg (oz. per 100 lb.) of Cement</b>	<b>Approx. % Solids (for mix design)</b>	<b>Producer</b>	<b>Producer Code</b>
MasterGlenium 3400	130 to 780 (2 to 12)	44	BASF Admixtures	99470
MasterGlenium 7500	130 to 975 (2 to 15)	26		
MasterPolyHeed 900	195 to 980 (3 to 15)	41		
MasterPolyHeed 997	195 to 780 (3 to 15)	48		
MasterPolyHeed 1020	195 to 780 (3 to 12)	24		
MasterPolyHeed 1025	195 to 780 (3 to 12)	25		
MasterPolyHeed 1720	195 to 780 (3 to 12)	19		
MasterPolyHeed 1725	195 to 780 (3 to 12)	18		
MasterPozzolith 80	260 to 650 (4 to 10)	41		
MasterPozzolith 200	195 to 325 (3 to 5)	32		
MasterPozzolith 322	195 to 455 (3 to 7)	44		
MasterPozzolith 700	195 to 325 (3 to 5)	28		
Melchem	390 to 1625 (6 to 25)	34		
MIRA 59	190 to 590 (3 to 9)	46	GCP Applied Technologies	99532
MIRA 62	130 to 390 (2 to 6)	18		
MIRA 85	195 to 780 (3 to 12)	44		
MIRA 95	130 to 460 (2 to 7)	11		
MIRA 110	195 to 325 (3 to 5)	17		
MIRA PAVE 11	195 to 325 (3 to 5)	17	Riteks	98250
NexCrete 1200	196 to 780 (3 to 12)	45		
NexCrete 1210	65 to 520 (1 to 8)	19		
NexCrete 1410	65 to 391 (1 to 6)	20		
NexCrete 1610	65 to 1304 (1 to 20)	22		
NexCrete 1710	195 to 975 (3 to 15)	23	Sika Corp.	99572
Plastocrete 161	195 to 325 (3 to 8)	28		
Plastocrete 250	130 to 590 (2 to 9)	16	Euclid Chemical Corp.	99924
Plastol 6420	130 to 650 (2 to 10)	16		
Plastol SPC	195 to 390 (3 to 6)	41		
Plastol Ultra 109	130 to 780 (2 to 12)	40		

**Pre-Approved Water Reducing Admixtures (Type A)**

<b>Product</b>	<b>Dosage in mL per 100 kg (oz. per 100 lb.) of Cement</b>	<b>Approx. % Solids (for mix design)</b>	<b>Producer</b>	<b>Producer Code</b>
Polychem 400 NC	195 to 325 (3 to 5)	42	General Resource Tech.	99289
Polychem 775	130 to 195 (2 to 3)	18		
Polychem Paver Plus	130 to 520 (2 to 88)	38		
Polychem SPC	130 to 190 (2 to 3)	37		
Sika ViscoFlow-2020	130 to 520 (2 to 8)	21	Sika Corp.	99572
Sikament 686	195 to 780 (3 to 12)	20		
Sikament AFM	195 to 780 (3 to 12)	15		
Sikament N	390 to 1300 (6 to 20)	41		
Sikament 475	200 to 980 (3 to 15)	20		
SikaPlast 300 GP	130 to 780 (2 to 12)	19		
Sikaplast 500	195 to 780 (3 to 12)	33		
Slump Retain 240	130 to 780 (2 to 12)	25		
Superflow 2000 SCC	196 to 1697 (3 to 26)	30	RussTech	99379
Superflow 2000 RM	65 to 391 (1 to 6)	20		
Superflow 2040 RM	65 to 522 (1 to 8)	39		
ViscoCrete 1000	195 to 780 (3 to 12)	30	Sika Corp.	99572
ViscoCrete 2100	130 to 1040 (2 to 16)	40		
ViscoCrete 4100	195 to 780 (3 to 12)	40		
ViscoCrete 6100	195 to 1040 (3 to 16)	40		
WRDA 35	130 to 520 (2 to 8)	41	GCP Applied Technologies	99532
WRDA 64	195 to 390 (3 to 6)	44		
WRDA 79	200 to 325 (3 to 5)	39		
WRDA PAVE 18	162 to 390 (2.5 to 6)	45		
ZYLA 610	130 to 260 (2 to 4)	21		
ZYLA 630	130 to 455 (2 to 7)	23		
ZYLA 640	130 to 455 (2 to 7)	19		

## Type B: Retarding Admixtures

- These admixtures retard the setting of concrete.

Pre-Approved Retarding Admixtures (Type B)				
Product	Dosage in mL per 100 kg (oz. per 100 lb.) of Cement	Approx. % Solids (for mix design)	Producer	Producer Code
CHRYSO NutraSet TC	65 to 723 (1 to 12)	17	Chryso	98128
Eucon DS	260 to 390 (4 to 6)	26	Euclid Chemical Corp.	99924
Eucon LR	260 to 650 (4 to 10)	40		
Eucon NR	260 to 520 (4 to 8)	43		
Eucon Retarder 75	195 to 325 (3 to 5)	34		
Eucon Retarder 100	130 to 390 (2 to 6)	39		
Eucon Stasis	260 to 1040 (1 to 16)	18		
MasterPozzolith 200	260 to 390 (4 to 6)	34	BASF Admixtures	99470
MasterPozzolith 700	195 to 450 (3 to 7)	28		
MasterSet R 961	195 to 325 (3 to 5)	34		
Plastiment ES	130 to 260 (2 to 4)	34	Sika Corp	99572
Plastiment XR	130 to 325 (2 to 5)	15		
SikaTard 440	130 to 520 (2 to 8)	20		
SYAD 40	195 to 1000 (3 to 16)	35	Riteks	98250
SYAD 75	126 to 195 (1.5 to 3)	25		
V-MAR VSC500	455 to 975 (7 to 15)	16	GCP Applied Technologies	99532
Zyla R	195 to 325 (3 to 5)	12		

**Type C: Accelerating Admixtures (Non-Chloride)**

- These admixtures accelerate the setting and early strength development of concrete.
- Do not use accelerating admixtures on bridge decks or the top slab of direct traffic culverts.

**Pre-Approved Accelerating Admixtures (Non-Chloride) (Type C)**

Product	Dosage in mL per 100 kg (oz. per 100 lb.) of Cement	Approx. % Solids (for mix design)	Producer	Producer Code
Accelguard 80	1040 to 2080 (16 to 32)	60	Euclid Chemical Corp.	99924
Accelguard AcN 200	650 to 3900 (10 to 60)	42		
Accelguard G3	650 to 5870 (10 to 90)	40		
Accelguard NCA	780 to 4875 (12 to 75)	59		
Advanset NC	522 to 5850 (8 to 90)	45	Riteks	98250
Advanset NC14	650 to 2935 (10 to 45)	14		
Chryso CI 100	500 to 3500 (7.5 to 54)	31	Chryso	98128
Chryso TurboCast 650A	397 to 5850 (6 to 90)	47		
Chryso Turbocast 701	650 to 5850 (10 to 90)	34		
Chryso Turbocast NCT	520 to 5850 (8 to 90)	62		
Daraset 200	650 to 3910 (10 to 60)	47	GCP Applied Technologies	99532
Daraset 400	650 to 3910 (10 to 60)	54		
DCI Corrosion Inhibitor	2730 to 8320 (42 to 128)	33		
Eucon CIA	3250 to 9750 (50 to 150) <sup>1</sup>	32	Euclid Chemical Corp.	99924
Isoxel 5400	300 to 3000 (10 to 100)	56	Cemex Admix USA	98358
MasterLife CI 30	2600 to 5850 (40 to 90)	33	BASF Admixtures	99470
MasterSet FP 20	325 to 3910 (5 to 60)	48		
MasterSet AC 534	650 to 2925 (10 to 45)	50		
NCA	1000 to 3000 (16 to 48) <sup>2</sup>	98	Fritz-Pak Corp.	99803
Polarset	520 to 6500 (8 to 100)	42	GCP Applied Technologies	99532
Polychem CI	520 to 5850 (8 to 90)	30	General Resource Tech.	99289
Polychem Superset	520 to 2080 (8 to 32)	59		
Polychem Super Set Plus	520 to 2080 (8 to 32)	34		
Sika CNI	3250 to 9750 (50 to 150) <sup>1</sup>	33	Sika Corp.	99572
Sika Mix NCA	650 to 2925 (10 to 45)	46		
Sika Rapid -1	520 to 3120 (8 to 48)	32		
Sika Set NC-4	580 to 2600 (9 to 40)	58		



**Pre-Approved Accelerating Admixtures (Non-Chloride) (Type C)**

Product	Dosage in mL per 100 kg (oz. per 100 lb.) of Cement	Approx. % Solids (for mix design)	Producer	Producer Code
---------	---	-----------------------------------	----------	---------------

1. Do not exceed 17,366 mL/m<sup>3</sup> or 768 oz./CY.
2. Dosage in g per 100 kg (oz. per 100 lb.)

**Type D: Water-Reducing, Retarding Admixtures**

- These admixtures reduce the quantity of mixing water required to produce concrete of a given consistency and retard the setting of concrete.

**Pre-Approved Water Reducing Retarding Admixtures (Type D)**

Product	Dosage in mL per 100 kg (oz. per 100 lb.) of Cement	Approx. % Solids (for mix design)	Producer	Producer Code
Chryso ControlSet 125	130 to 456 (2 to 7)	17	Chryso	98128
Chryso ControlSet 100R	130 to 260 (2 to 4)	36		
Daratard 17	130 to 260 (2 to 8)	50	GCP Applied Technologies	99532
Daratard 37	130 to 260 (2 to 8)	45		
Eucon HC	130 to 390 (2 to 6)	39	Euclid Chemical Corp.	99924
Eucon LR <sup>1</sup>	260 to 650 (4 to 10)	40		
Eucon NR	260 to 520 (4 to 8)	43		
Eucon NW	195 to 782 (2 to 6)	41		
Eucon Retarder 75	195 to 325 (3 to 5)	34		
Eucon Retarder 100	130 to 390 (2 to 6)	39		
Eucon SE	130 to 325 (2 to 5)	23		
Eucon Stasis	260 to 1040 (1 to 16)	18		
FloTek 1225	225 to 325 (3.5 to 5)	35	Riteks	98250
FloTek 1240	325 to 522 (5 to 8)	35		
FR-1	100 to 120 (1-1/2 to 2) <sup>2</sup>	92	Fritz-Pak Corp.	99803
HPS-R <sup>1</sup>	260 to 520 (4 to 8)	38	Hunt Process-Southern	99473
HydraStop	65 to 485 (1 to 7.5)	16	Riteks	98250
Isoflex 7350	30 to 300 (1 to 10)	19	Cemex Admix USA	98358
Isopause 2500	30 to 300 (1 to 10)	19		

**Pre-Approved Water Reducing Retarding Admixtures (Type D)**

<b>Product</b>	<b>Dosage in mL per 100 kg (oz. per 100 lb.) of Cement</b>	<b>Approx. % Solids (for mix design)</b>	<b>Producer</b>	<b>Producer Code</b>
LC400P	196 to 327 (3 to 5)	38	RussTech	99379
LC400R	200 to 390 (3 to 6)	33		
LC-500	196 to 327 (3 to 5)	39		
MasterPozzolith 80	455 to 650 (7 to 10)	41	BASF Admixtures	99470
MasterPozzolith 200	260 to 390 (4 to 6)	50		
MasterPozzolith 700	195 to 450 (3 to 7)	28		
MasterSet Delvo	195 to 325 (3 to 5)	14		
MasterSet R 100	130 to 260 (2 to 4)	50		
MasterSet R 300	195 to 325 (3 to 5)	50		
MasterSet R 961	195 to 325 (3 to 5)	34		
Plastiment	130 to 390 (2 to 6)	33	Sika Corp.	99572
Plastiment ES	130 to 260 (2 to 4)	34		
Plastiment XR	130 to 325 (2 to 5)	15		
Plastocrete 250	130 to 590 (2 to 9)	16		
Polychem R	130 to 325 (2 to 5)	45	General Resource Tech.	99289
Recover	130 to 780 (2 to 12)	21	GCP Applied Technologies	99532
RENU	65 to 783 (1 to 12)	13	RussTech	99379
Standard Delayed Set	200 to 300 (3 to 5) <sup>2</sup>	93	Fritz-Pak Corp.	99803
SYAD 40	195 to 1000 (3 to 16)	35	Riteks	98250
V-Mar VSC500	455 to 975 (7 to 15)	16	GCP Applied Technologies	99532
WRDA 64	195 to 590 (4 to 9)	44		
WRDA 79	325 to 650 (5 to 10)	39		
Zyla 610	260 to 783 (4 to 7)	20		
Zyla 614R	195 to 300 (3 to 5)	28		
Zyla R	195 to 325 (3 to 5)	12		

1. These admixtures entrain a small amount of air.
2. Dosage in g per 100 kg (oz per 100 lb.)

**Type E: Water-Reducing and Accelerating Admixtures (Non-Chloride)**

- These admixtures accelerate the setting and early strength development of concrete while reducing water content.
- Do not use accelerating admixtures on bridge decks or the top slab of direct traffic culverts.

**Pre-Approved Water-Reducing and Accelerating Admixture (Type E)**

Product	Dosage in mL per 100 kg (oz. per 100 lb.) of Cement	Approx. % Solids (for mix design)	Producer	Producer Code
Accelguard 80	780 to 5870 (12 to 90)	59	Euclid Chemical Corp.	99924
Accelguard AcN 200	650 to 3910 (10 to 60)	46		
Accelguard G3	650 to 5870 (10 to 90)	40		
Accelguard NCA	780 to 4890 (12 to 75)	58		
LCNC-166	522 to 5870 (8 to 90)	54	RussTech	99379
NCA	1000 to 3000 (16 to 48) <sup>1</sup>	98	Fritz-Pak Corp.	99803

1. Dosage in g per 100 kg (oz. per 100 lb.)

**Type F: High Range Water-Reducing Admixtures (HRWR)**

- These are admixtures that reduce the quantity of mixing water required to produce concrete of a given consistency by 12% or greater.
- Do not use this type admixture on bridge deck concrete.

**Pre-Approved High Range Water-Reducing Admixtures (Type F)**

Product	Dosage in mL per 100 kg (oz. per 100 lb.) of Cement	Approx. % Solids (for mix design)	Producer	Producer Code
Adva 140M	390 to 1300 (6 to 20)	16	GCP Applied Technologies	99532
ADVA 150M	522 to 1304 (8 to 20)	11		
ADVA 190	195 to 590 (3 to 9)	30		
ADVA 195	195 to 980 (3 to 15)	32		
ADVA 198	130 to 980 (2 to 15)	26		
ADVA 405	650 to 1175 (10 to 18)	19		
ADVA Cast 555	400 to 1400 (6 to 20)	16		
ADVA Cast 575	130 to 650 (2 to 10)	40		
ADVA Cast 585	130 to 650 (2 to 10)	36		
ADVA Cast 600	130 to 650 (2 to 10)	38		
Adva Flex	260 to 910 (4 to 14)	29		
ADVA ITM750	200 to 650 (3 to 10)	34		
Chryso Enviromix 350	522 to 1174 (8 to 18)	16		
Chryso Enviromix 728	652 to 1170 (10 to 18)	17		
Chryso Enviromix 740	567 to 1304 (9 to 20)	22		
Chryso Enviromix 740i	567 to 1304 (9 to 20)	22		
Chryso Enviromix i40	780 to 1304 (12 to 20)	34		
Chryso Enviromix i44	652 to 1170 (10 to 18)	17		
Chryso Fluid Optima 126	456 to 1304 (7 to 20)	21		
Chryso Fluid Optima 203	196 to 522 (3 to 8)	22		
Chryso Fluid Optima 216	522 to 1304 (8 to 20)	22		
Chryso Fluid Optima 256 EMx	457 to 1045 (7 to 16)	36		
Chryso Fluid Optima 258 EMx	457 to 1045 (7 to 16)	32		
Chryso Fluid Premia 180	196 to 522 (3 to 8)	25		
Chryso Fluid Premia 198	195 to 391 (3 to 6)	31		
Chryso PREMIA 576	130 to 587 (2 to 9)	35		
Chryso Fluid ProPel 3300	520to 1430 (8 to 22)	40		

**Pre-Approved High Range Water-Reducing Admixtures (Type F)**

<b>Product</b>	<b>Dosage in mL per 100 kg (oz. per 100 lb.) of Cement</b>	<b>Approx. % Solids (for mix design)</b>	<b>Producer</b>	<b>Producer Code</b>
Chryso ProPel AG	650 to 1300 (10 to 20)	38.5		
CLARENA MC2000	460 to 980 (7 to 15)	16		
CONCERA SA8080	520 to 1300 (8 to 20)	20	GCP Applied Technologies	99532
Daracem 19	390 to 1300 (6 to 20)	40		
Dynamon NRG 1092	195 to 975 (3 to 15)	40	General Resource Tech.	99289
Dynamon SX	180 to 250 (2.8 to 3.8)	26		
Eucon 37	650 to 1040 (10 to 16)	40		
Eucon 1037	650 to 1625 (10 to 25)	41		
Eucon MRX	195 to 782 (3 to 12)	30		
Eucon SP	390 to 1625 (6 to 25)	40	Euclid Chemical Corp.	99924
Eucon SPJ	260 to 455 (4 to 7)	34		
Eucon SPQ	300 to 1000 (5 to 16)	48		
Eucon X-15	195 to 975 (3 to 15)	43		
Eucon X-20	195 to 980 (3 to 15)	27		
EvoTek 2000	65 to 520 (1 to 8)	40	Riteks	98250
EvoTek 7015	195 to 1170 (3 to 18)	30		
EvoTek 7000	195 to 980 (3 to 15)	40		
EXP 950	130 to 650 (2 to 10)	40	GCP Applied Technologies	99532
Isoflow 9750	30 to 300 (1 to 10)	30	Cemex Admix USA	98358
MasterGlenium 1466	260 to 650 (4 to 10)	40		
MasterGlenium 3030	390 to 1170 (6 to 18)	20		
MasterGlenium 3400	130 to 780 (2 to 12)	45		
MasterGlenium 7101	195 to 780 (3 to 12)	32		
MasterGlenium 7500	130 to 975 (2 to 15)	26		
MasterGlenium 7700	260 to 975 (4 to 15)	34	BASF Admixtures	99470
MasterGlenium 7710	130 to 975 (2 to 15)	25		
MasterGlenium 7920	130 to 780 (2 to 12)	33		
MasterPolyHeed 1020	195 to 780 (3 to 12)	24		
MasterPolyHeed 1025	195 to 780 (3 to 12)	25		
MasterPolyHeed 1720	195 to 780 (3 to 12)	19		
MasterPolyHeed 1725	195 to 780 (3 to 12)	18		

**Pre-Approved High Range Water-Reducing Admixtures (Type F)**

<b>Product</b>	<b>Dosage in mL per 100 kg (oz. per 100 lb.) of Cement</b>	<b>Approx. % Solids (for mix design)</b>	<b>Producer</b>	<b>Producer Code</b>
MasterRheobuild 1000	650 to 1625 (10 to 25)	41		
Melchem	390 to 1625 (6 to 25)	34	General Resource Tech.	99289
MIRA 59	190 to 590 (3 to 9)	46		
MIRA 62	390 to 975 (6 to 15)	18		
MIRA 85	195 to 780 (3 to 12)	44		
MIRA 95	130 to 1000 (2 to 15)	11	GCP Applied Technologies	99532
MIRA 110	350 to 975 (6 to 15)	17		
MIRA PAVE 11	350 to 975 (6 to 15)	17		
NexCrete 1210	65 to 520 (1 to 8)	19		
NexCrete 1410	457 to 1305 (7 to 20)	20	Riteks	98250
NexCrete 1610	65 to 1304 (1 to 20)	22		
NexCrete 1710	195 to 975 (3 to 15)	23		
Plastol 5000	195 to 975 (3 to 15)	32		
Plastol 5500	195 to 520 (3 to 8)	40		
Plastol 6400	200 to 780 (3 to 12)	36		
Plastol 6420	130 to 650 (2 to 10)	17	Euclid Chemical Corp.	99924
Plastol SPC	195 to 800 (3 to 12)	40		
Plastol Ultra 109	130 to 780 (2 to 12)	40		
Plastol Ultra 209	130 to 780 (2 to 12)	36		
Polychem 775	391 to 1304 (6 to 20)	18		
Polychem Paver Plus	190 to 392 (3 to 6)	37	General Resource Tech.	99289
Polychem SPC	130 to 520 (2 to 8)	38		
Sikament AFM	390 to 780 (6 to 12)	15		
Sikament N	390 to 1300 (6 to 20)	41		
Sikament 475	200 to 980 (3 to 15)	20		
Sikament 686	195 to 780 (3 to 12)	20	Sika Corp.	99572
SikaMix HC-300	130 to 650 (2 to 10)	24		
Sikaplast 300GP	130 to 780 (2 to 12)	19		
Sikaplast 500	195 to 780 (3 to 12)	33		
Supercizer 1	300 to 450 (5 to 7) <sup>1</sup>	95	Fritz-Pak Corp.	99803
Supercizer 5	300 to 450 (5 to 7) <sup>1</sup>	91		

**Pre-Approved High Range Water-Reducing Admixtures (Type F)**

<b>Product</b>	<b>Dosage in mL per 100 kg (oz. per 100 lb.) of Cement</b>	<b>Approx. % Solids (for mix design)</b>	<b>Producer</b>	<b>Producer Code</b>
Superflow 2000 SCC	196 to 1697 (3 to 26)	30	RussTech	99379
Superflow 2000 RM	457 to 1305 (7 to 20)	20		
Superflow 2040 RM	65 to 522 (1 to 8)	39		
ViscoCrete 1000	195 to 780 (3 to 12)	30	Sika Corp.	99572
ViscoCrete 2100	130 to 1040 (2 to 16)	40		
ViscoCrete 2110	195 to 780 (3 to 12)	40		
ViscoCrete 4100	195 to 780 (3 to 12)	40		
ViscoCrete 6100	195 to 1040 (3 to 16)	40		

1. Dosage in g per 100 kg (oz. per 100 lb.)

**Type G: Water-Reducing High Range and Retarding Admixtures**

- These are admixtures that reduce the quantity of mixing water required to produce concrete of a given consistency by 12% or greater and retard the setting of concrete.
- Do not use this type admixture on bridge deck concrete.

**Pre-Approved Water-Reducing High Range and Retarding Admixtures (Type G)**

Product	Dosage in mL per 100 kg (oz. per 100 lb.) of Cement	Approx. % Solids (for mix design)	Producer	Producer Code
Chryso Fluid Optima 100	195 to 780 (4 to 30)	30	Chryso	98128
Daracem 100	325 to 1300 (5 to 20)	41	GCP Applied Technologies	99532
Eucon 537	650 to 1300 (10 to 20)	43	Euclid Chemical Corp.	99924
FinishEase-NC	522 to 783 (8 to 12)	44	RussTech	99379
Supercizer 7	250 to 750 (4 to 12) <sup>1</sup>	89	Fritz-Pak Corp.	99803

1. Dosage in g per 100 kg (oz. per 100 lb.)



## Group II, Air Entraining Admixtures

### Air Entraining Admixtures

- These are admixtures added to the batch for entraining air.
- The dosage MUST be adjusted as necessary to produce the required air content in the concrete within the specified tolerances.

Pre-Approved Air Entraining Admixtures

Product	Dosage in mL per 100 kg (oz. per 100 lb.) of Cement	Approx. % Solids (for mix design)	Producer	Producer Code
Air-In -XT	33 to 130 (1/2 to 2)	7	Hunt Process-Southern	99473
Air Plus	16 to 81 (1/4 to 1-1/4) <sup>1</sup>	98	Fritz-Pak Corp.	99803
Airalon 3000	30 to 200 (1/2 to 3)	3	GCP Applied Technologies	99532
A-Train PR	33 to 130 (1/2 to 2)	10	Riteks	98250
A-Train VR	22 to 260 (1/4 to 4)	10		
CCT Stable Air	65.2 (1 to 8.9)	31	Cellular Concrete Technolgoies	98274
Chryso Air TX	33 to 130 (1/2 to 2)	10	Chryso	98128
Chryso Air NVR	33 to 130 (1/2 to 2)	12.5		
Chryso Air 260	13 to 195 (1/5 to 3.0)	7		
Chryso Air 260 Ultra	13 to 196 (1/5 to 3)	5		
Daravair AT30	15 to 200 (1/4 to 3)	10	GCP Applied Technologies	99532
Daravair AT60	15 to 200 (1/4 to 3)	20		
Daravair-1000	33 to 195 (1/2 to 3)	5		
Daravair PAVE 10	33 to 195 (1/2 to 3)	5		
Darex AEA	49 to 195 (3/4 to 3)	6	Euclid Chemical Corp.	99924
Darex II AEA	33 to 195 (1/2 to 5)	10		
Eucon AEA 92	6 to 260 (0.1 to 4)	6		
Eucon AEA 92S	33 to 130 (1/2 to 2)	3		
Eucon Air 30	33 to 260 (1/2 to 4)	3		
Eucon Air 40	16 to 260 (1/4 to 4)	13		
Eucon Air MAC6	6 to 260 (0.1 to 4)	7		
Eucon Air Mix	33 to 65 (1/2 to 1)	15		
Eucon Air Mix 200	33 to 65 (1/2 to 1)	15		
Isosphere 9004	3 to 150 (0.1 to 5)	4		

**Pre-Approved Air Entraining Admixtures**

<b>Product</b>	<b>Dosage in mL per 100 kg (oz. per 100 lb.) of Cement</b>	<b>Approx. % Solids (for mix design)</b>	<b>Producer</b>	<b>Producer Code</b>
MasterAir AE 90	16 to 260 (1/4 to 4)	6	BASF Admixtures	99470
MasterAir AE 200	8 to 260 (1/8 to 4)	12		
MasterAir AE 400	16 to 260 (1/4 to 4)	8		
MasterAir VR 10	16 to 260 (1/4 to 4)	13		
Polychem AE	16 to 130 (1/4 to 2)	6	General Resource Tech.	99289
Polychem SA	8 to 130 (1/8 to 2)	7		
Polychem SA-50	30 to 200 (1/2 to 3)	3		
Polychem VR	8 to 195 (1/8 to 3)	15		
Quantec PL-466	130 to 325 (2 to 5)	13	GCP Applied Technologies	99532
RAE-260	33 to 130 (0.5 to 2)	9	RussTech	99379
RSA-10	33 to 130 (0.5 to 2)	7		
RVR-15	33 to 130 (0.5 to 2)	15		
Sika AEA-14	130 to 195 (1 to 3)	8	Sika Corp.	99572
Sika Air	65 to 195 (1/2 to 3)	6		
Sika Air 260	7 to 400 (0.1 to 6)	10		
Sika Multi Air 25	13 to 195 (0.2 to 3)	6		
Super Air Plus	16 to 81 (1/4 to 1-1/4 ) <sup>1</sup>	97	Fritz-Pak Corp.	99803
Terapave	30 to 200 (1/2 to 3)	10	GCP Applied Technologies	99532

1. Dosage in g per 100 kg (oz. per 100 lb.)