

Concrete Repair Materials

Material Producer List

Materials and Tests Division

Concrete Repair Materials

Overview

The following materials are pre-qualified in accordance with DMS-4655, "Concrete Repair Materials."

The Department reserves the right to conduct random sampling of pre-qualified materials for testing and to perform random audits of test reports. Department representatives may sample material from the manufacturing plant, the project site, and the warehouse. The Department's Materials and Tests Division (MTD) reserves the right to test samples to verify compliance with DMS-4655.

Approval and use of the materials listed are limited to the condition under which they were evaluated (neat or extended) by the MTD Concrete Laboratory. Use the listed values for the coefficient of thermal expansion and modulus of elasticity as an aid in choosing the repair material that most closely resembles the original material of the structure being repaired. See product-specific documentation for proportioning, mixing, placement, and curing instructions.

For more information, contact MTD's Rigid Pavements and Concrete Materials Section at (512) 506-5858.

Table 1: Type A - Rapid Materials

Producer	Product	Neat or Extended ^{1,2}	Coefficient of Thermal Expansion (μ-strain/°F)	Modulus of Elasticity (ksi)
Aquafia Inc	Pavemend DOTline	Extended ⁴	6.9	5,883
Aquafin Inc.	Pavemend SL	Neat	7.0	4,667
ARDEX	TRM	Neat	8.6	5,700
Master Builders	MasterEmaco T 1060EX	Extended ⁴	7.5	7,050
Solutions US LLC	MasterEmaco T 1061EX	Extended ⁴	6.9	7,150
	Rapid Set Concrete Mix	Extended ⁴	7.1	3,300
	Rapid Set DOT Concrete Mix	Extended ⁴	N/A ⁵	3,650
0.70	Rapid Set DOT Repair Mix	Extended ³	7.4	5,500
CTS Cement Manufacturing Corp.	Rapid Set Cement	Extended ³	6.5	4,750
	Rapid Set Cement All	Neat	7.5	3,817
	Rapid Set Low P Cement	Extended ³	N/A ⁵	4,800
	Rapid Set Mortar Mix Plus	Neat	6.8	2,650

Table 1: Type A – Rapid Repair Materials, continued

Producer	Product	Neat or Extended ^{1,2}	Coefficient of Thermal Expansion (µ-strain/°F)	Modulus of Elasticity (ksi)
CTS Cement Manufacturing Corp.	Rapid Set V/O Repair Mix	Neat	7.9	3,000
Euclid Chemical	Euco Repair SCC Fast	Extended ⁴	7.1	6,300
Edelia Offernical	Versaspeed RMC	Extended ⁴	6.7	5,200
H.B. Fuller Construction	Premium Patch 300	Neat	8	3650
Adhesives	Premium Patch 300	Extended ³	7.7	3550
Lyons	Lyons PaveQuick HR	Neat	6.7	4,900
Manufacturing, Inc.	Lyons PaveQuick HR	Extended ³	6.0	4,750
	Planitop 18ES	Neat	6.4	3,700
	Planitop 18ES	Extended ³	6.4	4,300
	Planitop 18TG	Neat	8.5	5,100
MAPEI	Planitop 18TG	Extended ³	7.5	6,100
	Planitop FD	Neat	6.6	4,500
	Planitop FD	Extended ³	6.8	5,350
	Planitop X	Neat	5.9	3,100
Performance Cement Systems, LLC	PCS Highway Repair	Extended ⁴	6.1	4,250
Phoscrete Phoscrete	Phoscrete F1-HC	<mark>Neat</mark>	<mark>2.4</mark>	<mark>3,700</mark>
Corporation	Phoscrete F3-HC	<mark>Neat</mark>	5.7	<mark>2,950</mark>
Redi-Mix, LLC/ Custom-Crete	QuadraSet	Extended ⁴	5.1	5,850
	FastSet Concrete Mix	Extended ⁴	6.8	3,650
The Quikrete	FastSet DOT Mix Extended	Extended ⁴	5.9	4,000
Companies, LLC	Rapid Road Repair® - CA	Extended ⁴	6.4	4,900
Sakrete	Pro-Mix Accelerated Concrete Mix	Extended ⁴	6.3	4,950
	Pro-Mix All-Purpose Cement Mix	Neat	6.7	3,800
Sika	Sikacrete 421 Cl Rapid	Extended ⁴	6.8	5,950
	SikaQuick 1000	Neat	6.7	4,500
	SikaQuick VOH	Neat	7.1	N/A ⁵
	RepCon 928	Neat	6.7	4,900
SpecChem, LLC	RepCon 928	Extended ³	6.0	4,750

Table 1: Type A - Rapid Repair Materials, continued

Producer	Product	Neat or Extended ^{1,2}	Coefficient of Thermal Expansion (μ-strain/°F)	Modulus of Elasticity (ksi)
Texas Polymer	Highway Patch	Extended ⁴	7.4	3,350
Systems	LightningCrete	Extended ⁴	7.4	5,250
	Transpatch	Extended ³	7.3	3,470
	Transpatch Concrete	Extended ⁴	6.5	4,050
US Spec	SC Concrete	Extended ⁴	6.0	3,750
	STR Mortar	Extended ³	6.3	5,150
	STR Mortar	Neat	7.1	4,800
W.R. Meadows	Futura-45 Extended	Extended ⁴	5.4	4,200
Western Materials	FasTrac 220FQ	Extended ⁴	5.6	5,000
	FasTrac 246	Extended ⁴	5.4	4,200
	FasTrac 246 SCC Concrete	Extended ⁴	5.5	5,075
	FasTrac 300	Extended ³	5.1	5,350
	FasTrac 400	Extended ³	4.3	6,000

- 1. See DMS-4655 for the definitions of neat and extended.
- 2. Approval and use of the materials listed are limited to the condition under which they were evaluated (neat or extended) by the MTD Concrete Laboratory.
- 3. Material extended with CRSQC approved aggregates during mixing
- 4. Material pre-packaged with coarse aggregates
- 5. Data is currently unavailable.

Table 2: Type B – Ultra-Rapid Repair Materials

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Producer	Product	Neat or Extended ^{1,2}	Coefficient of Thermal Expansion	Modulus of Elasticity
			(μ-strain/°F)	(ksi)
Adhesives Technology	CRACKBOND JET PATCH	Extended ³	7.1	4,970
Corp.	CRACKBOND JET PATCH	Neat	6.7	5,080
Aquafia Inc	Pavemend DOTline	Extended ⁴	6.9	5,883
Aquafin Inc.	Pavemend SL	Neat	7.0	4,667
Master Builders Solutions US LLC	MasterEmaco T 1060EX	Extended ⁴	7.5	7,050
	Rapid Set Cement	Extended ³	6.5	4,750
	Rapid Set Cement All	Neat	7.5	3,817
CTS Cement	Rapid Set DOT Concrete Mix	Extended ⁴	N/A ⁵	3,650
Manufacturing Corp.	Rapid Set DOT Repair Mix	Extended ³	7.4	5,500
	Rapid Set Low P Cement	Extended ³	N/A ⁵	4,800
	Rapid Set Mortar Mix Plus	Neat	6.8	2,650
Lyons Manufacturing, Inc.	Lyons PaveQuick HR	Neat	6.7	4,900
	Planitop 18ES	Extended ³	6.4	4,300
MAPEI	Planitop 18TG	Neat	8.5	5,100
	Planitop 18TG	Extended ³	7.5	6,100
The Quikrete	Commercial Grade FastSet® DOT Mix	Neat	6.2	4,300
Companies, Inc.	FastSet DOT Mix Extended	Extended ⁴	7.5	4,000
	Rapid Road Repair® - CA	Neat	7.1	4,700
Sika	Sikacrete 421 Cl Rapid	Extended ⁴	6.8	5,950
SpecChem, LLC	Repcon 928	Neat	6.7	4,900
US Spec	Transpatch	Extended ³	7.3	3,470
	Transpatch Concrete	Extended ⁴	6.5	4,050
US Spec	STR Mortar	Extended ³	6.3	5,150
	STR Mortar	Neat	7.1	4,800

Table 2: Type B - Ultra-Rapid Repair Materials, continued

Producer	Product	Neat or Extended ^{1,2}	Coefficient of Thermal Expansion (μ-strain/°F)	Modulus of Elasticity (ksi)
W.R. Meadows	Futura-45 Extended	Extended ⁴	5.4	4,200
Western Materials	FasTrac 246	Extended ⁴	5.4	4,200
	FasTrac 400	Extended ⁴	4.3	6,000

- 1. See DMS-4655 for the definitions of neat and extended.
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- 3. Material extended with CRSQC approved aggregates during mixing
- 4. Material pre-packaged with coarse aggregates
- 5. Data is currently unavailable.

Table 3: Type C - Vertical and Overhead Repair Materials

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Producer	Product	Neat or Extended ^{1,2}	Coefficient of Thermal Expansion (μ-strain/°F)	Modulus of Elasticity (ksi)
Master Builders Solutions US LLC	MasterEmaco S 488 CI	Neat	9.9	4,950
Cornerstone Construction Materials, LLC	FasTrac VO	Neat	7.3	3,400
CTS Cement	Rapid Set V/O Repair Mix	Neat	7.9	3,000
Manufacturing Corp.	Rapid Set Mortar Mix Plus	Neat	6.8	2,650
MAPEI	Planitop 23	Neat	7.5	3,350
	Planitop X	Neat	5.9	3,100
Performance Cement Systems, LLC	PCS VOH	Neat	8.4	3,300
Phoscrete Corporation	Phoscrete F3-V0	Neat	<mark>5.7</mark>	<mark>2,450</mark>
Quadex, LLC	GeoKrete Geopolymer Mortar	Neat	5.5	5,950
Sika	Sikacem 103F	Neat	8.5	4,750
	SikaQuick VOH	Neat	7.1	N/A ⁵
TuffTex Materials	RepPatch VOH-XL	Neat	8.5	2,600
W.R. Meadows	Meadowcrete GPS DOT	Neat	6.4	2,850

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- 3. Material extended with CRSQC approved aggregates during mixing
- 4. Material pre-packaged with coarse aggregates
- 5. Data is currently unavailable.

Table 4: Type D – Standard Repair Materials

Producer	Product	Neat or Extended ^{1,2}	Coefficient of Thermal Expansion (μ-strain/°F)	Modulus of Elasticity (ksi)
Master Builders	MasterEmaco S 440 MC	Neat	8.1	5,100
Solutions US LLC	MasterEmaco S 466 CI	Extended ⁴	8.3	6,100
Euclid Chemical	Euco Repair SCC	Extended ⁴	8.3	5,500
MAPEI	Planitop 11 SCC	Extended ⁴	8.0	3,400
	Planitop 12 SR	Neat	8.3	4,500
	Planitop 15	Neat	9.3	4,600
	Planitop 15	Extended ³	8.4	4,750
Quadex, LLC	GeoKrete Geopolymer Mortar	Neat	5.5	5,950
The Quikrete Companies, LLC	Form & Pour Concrete Mix MS	Extended ⁴	7.3	4,500
Sika	Sikacrete 100 Cl	Extended ⁴	6.0	4,850

- 1. See DMS-4655 for the definitions of neat and extended.
- 2. Approval and use of the materials listed are limited to the condition under which they were evaluated (neat or extended) by the MTD Concrete Laboratory.
- 3. Material extended with CRSQC approved aggregates during mixing
- 4. Material pre-packaged with coarse aggregates
- 5. Data is currently unavailable.