



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)
ARDEX	TRM	Neat	8.6	5,700
BASF Master Builders Solutions US LLC	MasterEmaco S 6000	Extended ³	13.4	2,650
	MasterEmaco T 545 HT	Extended ³	6.6	5,800
	MasterEmaco T 1060	Extended ³	7.0	4,400
	MasterEmaco T 1060EX	Extended ⁴	7.5	7,050
	MasterEmaco T 1061EX	Extended ⁴	6.9	7,150
CTS Cement Manufacturing Corp.	Rapid Set Concrete Mix	Extended ⁴	7.1	3,300
	Rapid Set DOT Concrete Mix	Extended ⁴	N/A ⁵	3,650
	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
	Rapid Set V/O Repair Mix	Neat	7.9	3,000
Euclid Chemical	Euco Repair SCC Fast	Extended ⁴	7.1	6,300
	Versaspeed 100	Neat	7.3	5,800

Table 1: Type A – Rapid Repair Materials, continued

Producer	Product	Neat or Extended ^{1,2}	Coefficient of Thermal Expansion (μ -strain/ $^{\circ}$ F)	Modulus of Elasticity (ksi)
Lyons Manufacturing, Inc.	Lyons PaveQuick HR	Neat	6.7	4,900
	Lyons PaveQuick HR	Extended ³	6.0	4,750
MAPEI	Planitop 18ES	Neat	6.4	3,700
	Planitop 18ES	Extended ³	6.4	4,300
	Planitop 18TG	Neat	8.5	5,100
	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
Redi-Mix, LLC/ Custom-Crete	QuadraSet	Extended ⁴	5.1	5,850
	QuadraSet	Extended ⁴	N/A ⁵	N/A ⁵
The Quikrete Companies, LLC	FastSet Concrete Mix	Extended ⁴	6.8	3,650
	FastSet DOT Mix Extended	Extended ⁴	5.9	4,000
Sakrete	Pro-Mix Accelerated Concrete Mix	Neat	6.3	4,950
	Pro-Mix All-Purpose Cement Mix	Neat	6.7	3,800
Sika	Sikacrete 321 FS	Extended ⁴	5.2	5,250
	Sikacrete 421 CI Rapid	Extended ⁴	6.8	5,950
	SikaQuick 1000	Neat	6.7	4,500
	SikaQuick 2500	Neat	8.8	4,250
	SikaQuick VOH	Neat	7.1	N/A ⁵
SpecChem, LLC	RepCon 928	Neat	6.7	4,900
	RepCon 928	Extended ³	6.0	4,750
Texas Polymer Systems	Highway Patch	Extended ⁴	7.4	3,350
	LightningCrete	Extended ⁴	7.4	5,250
	Road Patch	Extended ⁴	7.0	5,450
US Spec	Transpatch Concrete	Extended ⁴	6.5	4,050
	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

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)
Western Materials	FasTrac 220FQ	Extended ⁴	5.6	5,000
	FasTac 246	Extended ⁴	5.4	4,200
	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

Producer	Product	Neat or Extended ^{1,2}	Coefficient of Thermal Expansion (μ-strain/°F)
Adhesives Technology Corp.	CRACKBOND JET PATCH	Extended ³	7.1
	CRACKBOND JET PATCH	Neat	6.7
ARDEX	TRM	Neat	8.6
BASF Master Builders Solutions US LLC	MasterEmaco S 6000	Extended ³	13.4
	MasterEmaco T 545 HT	Extended ³	6.6
	MasterEmaco T 1060EX	Extended ⁴	7.5
CTS Cement Manufacturing Corp.	Rapid Set Cement	Extended ³	N/A ⁵
	Rapid Set DOT Concrete Mix	Extended ⁴	N/A ⁵
	Rapid Set DOT Repair Mix	Extended ³	7.4
	Rapid Set Low P Cement	Extended ³	N/A ⁵
	Rapid Set Mortar Mix Plus	Neat	6.8
	Rapid Set V/O Repair Mix	Neat	7.9
Lyons Manufacturing, Inc.	Lyons PaveQuick HR	Neat	6.7
	Lyons PaveQuick HR	Extended ³	6.0
MAPEI	Planitop 18ES	Extended ³	6.4
	Planitop 18TG	Neat	8.5
	Planitop 18TG	Extended ³	7.5
Performance Cement Systems, LLC	PCS Highway Repair	Extended ⁴	6.1
Redi-Mix, LLC/ Custom-Crete	QuadraSet	Extended ⁴	5.1
	QuadraSet	Extended ⁴	N/A ⁵
The Quikrete Companies, Inc.	FastSet DOT Mix Extended	Extended ⁴	7.5
Sika	Sikacrete 321 FS	Extended ⁴	5.2
	Sikacrete 421 CI Rapid	Extended ⁴	6.8
	SikaQuick 2500	Neat	8.8
SpecChem, LLC	Repcon 928	Neat	6.7
	Repcon 928	Extended ³	6.0
Texas Polymer Systems	LightningCrete	Extended ⁴	7.4
US Spec	Transpatch Concrete	Extended ⁴	6.5
	STR Mortar	Extended ³	6.3
	STR Mortar	Neat	7.1
W.R. Meadows	Futura-45 Extended	Extended ⁴	5.4

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

Producer	Product	Neat or Extended^{1,2}	Coefficient of Thermal Expansion (μ-strain/° F)
Western Materials	FasTrac 220FQ	Extended ⁴	5.6
	FasTrac 246	Extended ⁴	5.4
	FasTrac 300	Extended ³	5.1
	FasTrac 303	Extended ³	4.6
	FasTrac 400	Extended ⁴	4.3

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

Producer	Product	Neat or Extended ^{1,2}	Coefficient of Thermal Expansion (μ-strain/° F)	Modulus of Elasticity (ksi)
BASF Master Builders Solutions US LLC	MasterEmaco S 211 SP	Neat	8.4	5,250
	MasterEmaco S 488 CI	Neat	9.9	4,950
CTS Cement Manufacturing Corp.	Rapid Set V/O Repair Mix	Neat	7.9	3,000
	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
Quadex, LLC	GeoKrete Geopolymer Mortar	Neat	5.5	5,950
Sika	Sikacem 103	Neat	9.5	5,200
	Sikacem 103F	Neat	8.5	4,750
	Sikacem 226 CI	Neat	7.5	3,850
	SikaQuick VOH	Neat	7.1	N/A ⁵
Texas Polymer Systems	VertiPatch	Neat	8.1	3,450
W.R. Meadows	Meadowcrete GPS DOT	Neat	6.4	2,850
Western Materials	V/O Mortar	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)
ARDEX	TRM	Neat	8.6	5,700
BASF Master Builders Solutions US LLC	MasterEmaco S 440 MC	Neat	8.1	5,100
	MasterEmaco S 466 CI	Extended ³	8.3	6,100
	MasterEmaco S 6000	Extended ³	13.4	2,650
	MasterEmaco T 545 HT	Extended ³	6.6	5,800
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 CI	Extended ⁴	6.0	4,850
	SikaCrete 211 SCC Plus	Neat	N/A ⁵	4,300
	SikaTop 111	Neat	9.8	3,850
	SikaTop 122	Neat	9.5	3,650

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.