## **Concrete Repair Materials**

Material Producer List

Materials and Tests Division



## **Concrete Repair Materials**

The following grout and mortar products have been pre-qualified according to 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 the Materials & Tests Division's Rigid Pavements and Concrete Materials Section at (512) 484-6484.

Table 1: Type A - Rapid Materials

Producer	Product	Neat or Extended <sup>1,2</sup>	Coefficient of Thermal Expansion (µ-strain/°F)	Modulus of Elasticity (ksi)
Aquafin Inc.	Pavement DOTLine	Extended <sup>4</sup>	6.9	5,900
/iquaiiii Iiie.	Pavemend SL	Neat	7.0	4,650
	Rapid Set Cement	Extended <sup>3</sup>	6.5	4,750
	Rapid Set Cement All	Neat	7.5	3,800
CTS Cement	Rapid Set Cement All Plus	Neat	8.0	3,650
Manufacturing Corp.	Rapid Set Concrete Mix	Extended <sup>4</sup>	7.1	3,300
	Rapid Set DOT Repair Mix	Extended <sup>3</sup>	7.4	5,500
	Rapid Set Low P Cement	Extended <sup>3</sup>	N/A <sup>5</sup>	4,800
Euclid Chemical	Euco Repair SCC Fast	Extended <sup>4</sup>	7.1	6,300
	Versaspeed RMC	Extended <sup>4</sup>	6.7	5,200
GCC	GCC Rapid Set Cement	Extended <sup>3</sup>	5.4	5,250
H.B. Fuller Construction Adhesives	Premium Patch 300	Neat	8.0	3,650
	Premium Patch 300	Extended	7.7	3,550

Table 1: Type A - Rapid Materials

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Producer	Product	Neat or Extended <sup>1,2</sup>	Coefficient of Thermal Expansion (µ-strain/°F)	Modulus of Elasticity (ksi)
Lyons Manufacturing, Inc.	Lyons PaveQuick HR	Neat	6.7	4,900
	Planitop 18ES	Neat	6.4	3,700
Mapei	Planitop 18ES	Extended <sup>3</sup>	6.4	4,300
Мареі	Planitop FD	Neat	6.6	4,500
	Planitop FD	Extended	6.8	5,350
Performance Cement Systems, LLC	PCS Highway Repair	Extended <sup>4</sup>	6.1	4,250
Phoscrete	Phoscrete F1-HC	Neat	2.4	3,700
Corporation	Phoscrete F3-HC	Neat	5.7	2,950
The Quikrete Companies, LLC	FastSet Concrete Mix	Extended <sup>4</sup>	6.8	3,650
Sakrete	Pro-Mix Accelerated Concrete Mix	Extended <sup>4</sup>	6.3	4,950
	Pro-Mix All-Purpose Cement Mix	Neat	6.7	3,800
	Sikacrete 421 CI Rapid	Extended <sup>4</sup>	6.8	5,950
Sika	SikaQuick 1000	Neat	6.7	4,500
	SikaEmaco 1061EX	Extended <sup>4</sup>	6.9	7150
SpecChem, LLC	RepCon 928	Neat	6.7	4,900
TuffTex Materials	Highway Patch	Extended <sup>4</sup>	7.4	3,350
ruir lex materials	LightningCrete	Extended <sup>4</sup>	7.4	5,250
US Spec	Transpatch	Extended <sup>3</sup>	7.3	3,450
	SC Concrete	Extended <sup>4</sup>	6.0	3,750
	STR Mortar	Extended <sup>3</sup>	6.3	5,150
	STR Mortar	Neat	7.1	4,800
Western Materials	FasTrac 246 SCC Concrete	Extended <sup>4</sup>	5.5	5,100
	FasTrac 300	Extended <sup>3</sup>	5.1	5,350

Table 1: Type A - Rapid Materials

Producer Product Exte	Coefficient of Thermal Expansion (µ-strain/°F)	Modulus of Elasticity (ksi)
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- 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 producer provided 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 <sup>1,2</sup>	Coefficient of Thermal Expansion (µ-strain/°F)	Modulus of Elasticity (ksi)
Adhesives	Crackbond Jet Patch	Neat	6.7	5,100
Technology Corp.	Crackbond Jet Patch	Extended <sup>3</sup>	7.1	4,750
CTS	Rapid Set DOT Concrete Mix	Extended <sup>4</sup>	N/A <sup>5</sup>	3,650
Mapei	Planitop 18TG	Neat	8.5	5,100
	Planitop 18TG	Extended <sup>3</sup>	7.5	6,100
The Quikrete Companies, Inc.	Commercial Grade FastSet  DOT Mix	Neat	6.2	4,300
	FastSet DOT Mix Extended	Extended <sup>4</sup>	7.5	4,000
Sika	SikaEmaco 1060EX	Extended <sup>4</sup>	7.5	7,050
US Spec	Transpatch Concrete	Extended <sup>4</sup>	6.5	4,050
Western Materials	FasTrac 246	Extended <sup>4</sup>	5.4	4,200
Western Materials	FasTrac 400	Extended <sup>4</sup>	4.3	6,000

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- 3. Material extended with producer provided 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 <sup>1,2</sup>	Coefficient of Thermal Expansion (µ-strain/°F)	Modulus of Elasticity (ksi)
CTS Cement Manufacturing Corp.	Rapid Set V/O Repair	Neat	7.9	3,000
	Rapid Set Mortar Mix Plus	Neat	6.8	2,650
	Rapid Set Cement All Plus	Neat	7.9	3,950
Kaufman Products, Inc.	Duracrete II VOFT	Neat	6.9	3,150
	Planitop 23	Neat	7.5	3,350
Mapei	Planitop X	Neat	5.9	3,100
	Planitop XS	Neat	6.5	3,150
Phoscrete Corporation	Phoscrete F3-VO	Neat	5.7	2,450
Sika	SikaQuick VOH	Neat	7.1	N/A <sup>5</sup>
	MonoTop-4500 Geo Hybrid	Neat	8.2	5,600
SpecChem	RepCon V/O	Neat	7.1	4,300
TuffTex Materials	RepPatch VOH-XL	Neat	8.5	2,600
US Spec	Quickset	Neat	7.2	2,600
W.R. Meadows	Meadowcrete GPS DOT	Neat	6.4	2,850

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- 3. Material extended with producer provided 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 <sup>1,2</sup>	Coefficient of Thermal Expansion (µ-strain/°F)	Modulus of Elasticity (ksi)
Euclid Chemical	Euco Repair SCC	Extended <sup>4</sup>	8.3	5,500
Mapei	Planitop 11 SCC	Extended <sup>4</sup>	8.0	3,400
	Planitop 15	Extended <sup>3</sup>	8.4	4,750
Quadex, LLC	GeoKrete Geopolymer Mortar	Neat	5.5	5,950
Sika	SikaCrete 100 CI	Extended <sup>4</sup>	6.0	4,850
	SikaEmaco S 466	Extended <sup>4</sup>	8.3	6,100
	Sikacrete 211 SCC Plus	Extended <sup>4</sup>	6.1	5,950
	Sikacrete 360 SCC	Extended <sup>4</sup>	5.7	5,050

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