

State of Louisiana
Department of Transportation and Development

Qualified Products List 40

CONCRETE ANCHOR SYSTEMS*

BOLT SIZE	SMM MATERIAL CODE MECHANICAL SYSTEM	SMM MATERIAL CODE CARTRIDGE SYSTEM	SMM MATERIAL CODE INJECTION SYSTEM	SMM MATERIAL CODE RESIN GROUT SYSTEM	SMM MATERIAL CODE CEMENTITIOUS GROUT SYSTEM
¼	1018M00150	1018M00290	1018M00430	1018M00570	1018M00710
⅜	1018M00160	1018M00300	1018M00440	1018M00580	1018M00720
¾	1018M00170	1018M00310	1018M00450	1018M00590	1018M00730
½	1018M00180	1018M00320	1018M00460	1018M00600	1018M00740
⅝	1018M00190	1018M00330	1018M00470	1018M00610	1018M00750
⅞	1018M00200	1018M00340	1018M00480	1018M00620	1018M00760
1	1018M00210	1018M00350	1018M00490	1018M00630	1018M00770
1 ¼	1018M00220	1018M00360	1018M00500	1018M00640	1018M00780
1 ½	1018M00230	1018M00370	1018M00510	1018M00650	1018M00790
1 ⅝	1018M00240	1018M00380	1018M00520	1018M00660	1018M00800
1 ⅞	1018M00250	1018M00390	1018M00530	1018M00670	1018M00810
1 ⅝	1018M00260	1018M00400	1018M00540	1018M00680	1018M00820
1 ¾	1018M00270	1018M00410	1018M00550	1018M00690	1018M00830
2	1018M00280	1018M00420	1018M00560	1018M00700	1018M00840

PRODUCT SOURCE CODE	PRODUCT	BOLT SIZE mm (in)		MINIMUM EMBEDMENT mm (in)		WORKING LOADS				SOURCE
						PULL-OUT kN (lbs)		SHEAR kN (lbs)		
(A) MECHANICAL ANCHOR BOLT SYSTEM										
4015	Maxi-Bolt	6.35	(¼)	50.8	(2)	7.1	(1600)	3.7	(830)	Drillco Devices, Ltd. 10-05 35 th Avenue Long Island, NY 11106 <i>SMM: APS00005330</i>
		9.53	(⅜)	88.9	(3½)	17.0	(3902)	9.0	(2026)	
		12.7	(½)	152.4	(6)	31.6	(7100)	16.4	(3690)	
		15.87	(⅝)	190.5	(7½)	50.3	(11305)	26.1	(5870)	
		19.05	(¾)	235	(9¼)	74.3	(16710)	38.6	(8680)	
		25.4	(1)	317	(12½)	134.8	(30315)	70.0	(15750)	
		31.75	(1¼)	406	(16)	222.3	(50015)	115.5	(25980)	
4016	Molly Parabolt Stud	12.7	(½)	57.2	(2¼)	5.1	(1150)	8.2	(1840)	Emhart Fasteners Group Threaded Fastener Div. (Molly Plant) 504 Mt. Laurel Avenue Temple, PA 19560 <i>SMM: APS00003530</i>
		15.87	(⅝)	69.8	(2¾)	8.6	(1940)	15.0	(3375)	
		19.05	(¾)	82.6	(3¼)	14.3	(3225)	24.2	(5440)	
		22.2	(⅞)	101.6	(4)	20.8	(4690)	33.3	(7500)	
		25.4	(1)	114.3	(4½)	25.6	(5750)	43.7	(9825)	
		31.75	(1¼)	139.7	(5½)	38.9	(8750)	70.6	(15875)	

PRODUCT SOURCE CODE	PRODUCT	BOLT SIZE		MINIMUM EMBEDMENT		WORKING LOADS				SOURCE	
		mm	(in)	mm	(in)	PULL-OUT		SHEAR			
						kN	(lbs)	kN	(lbs)		
(A) MECHANICAL ANCHOR BOLT SYSTEM (continued)											
4053	Kwik Bolt 3	6.4	(¼)	29	(1⅞)	1.8	(404)	2.2	(499)	Hilti, Inc. 5400 S. 122 nd East Avenue Tulsa, OK 74146 SMM: APS00003300	
		9.5	(⅜)	41	(1⅝)	4.6	(1025)	5.9	(1332)		
		12.7	(½)	57	(2¼)	6.8	(1519)	11.4	(2565)		
		15.9	(⅝)	70	(2¾)	9.2	(2071)	17.0	(3816)		
		19.1	(¾)	83	(3¼)	11.4	(2561)	23.8	(5353)		
		25.4	(1)	114	(4½)	19.5	(4375)	33.9	(7625)		
4080	Red Head Trubolt Wedge	6.35	(¼)	28.6	(1⅞)	2.0	(445)	1.6	(350)	ITW Commercial Construction–North America 2471 Brickvale Avenue Elk Grove Village, IL 60007 SMM: APS00003540	
		9.53	(⅜)	38.1	(1½)	2.5	(560)	2.9	(655)		
		12.7	(½)	57.15	(2¼)	5.7	(1275)	5.3	(1190)		
		15.87	(⅝)	69.85	(2¾)	8.0	(1795)	7.9	(1780)		
		19.05	(¾)	82.55	(3¼)	12.1	(2710)	15.3	(3430)		
		22.2	(⅞)	95.25	(3¾)	16.4	(3685)	18.5	(4145)		
25.4	(1)	114.3	(4½)	22.5	(5045)	25.4	(5705)				
4056	Kingpin Wedge Anchor	6.35	(¼)	44.4	(1¾)	2.7	(602)	1.8	(396)	Porteous Fasteners Co. 1040 Watson Center Road Carson, CA 90745 SMM: APS00005340	
		9.53	(⅜)	76.2	(3)	6.3	(1413)	5.7	(1284)		
		12.7	(½)	101.6	(4)	9.9	(2235)	10.4	(2344)		
		15.9	(⅝)	127	(5)	17.3	(3897)	14.4	(3232)		
		19.05	(¾)	146	(5¾)	20.3	(4562)	18.9	(4262)		
		22.2	(⅞)	152	(6)	20.5	(4602)	22.5	(5058)		
		25.4	(1)	178	(7)	30.9	(6957)	31.29	(6900)		
31.75	(1¼)	190	(7½)	29.7	(6682)	48.40	(10672)				
4064	Power- Stud Wedge Expansion Anchor	9.53	(⅜)	41.3	(1⅞)	4.9	(1100)	5.1	(1140)	Powers Fasteners 2 Powers Lane Brewster, NY 10509 SMM: APS00003570	
		12.7	(½)	57.2	(2¼)	6.8	(1530)	10.2	(2300)		
		15.9	(⅝)	69.8	(2¾)	8.1	(1830)	14.5	(3255)		
		19.05	(¾)	85.7	(3⅜)	12.2	(2755)	19.6	(4410)		
4031	S-7 Spin- Lock Concrete Anchor	12.7	(½)	95.2	(3¾)	7.0	(1565)	9.3	(2100)	Williams Form Engineering Corporation 2600 Vulcan Drive Lithia Springs, GA 30122 SMM: APS00005350	
		19.05	(¾)	133	(5¼)	18.9	(4250)	22.2	(5000)		
		25.4	(1)	184	(7¼)	27.8	(6250)	40.0	(9000)		
		31.7	(1¼)	197	(7¾)	27.8	(6250)	64.5	(14500)		
		41.3	(1⅝)	317.5	(12½)	83.3	(18750)	105.8	(23800)		
		44.4	(1¾)	317.5	(12½)	83.3	(18750)	126.7	(28500)		
50.8	(2)	406	(16)	150.0	(33750)	176.5	(39700)				
(B) CARTRIDGE SYSTEMS**											
4017	Parabound Capsule Anchor System	9.53	(⅜)	30 min.	88.9	(3½)	6.8	(1525)	4.5	(1015)	Emhart Fasteners Group (Molly Plant) SMM: APS00003530
		12.7	(½)	@	108	(4¼)	11.1	(2505)	7.6	(1705)	
		15.9	(⅝)	22°C	127	(5)	18.9	(4255)	13.3	(2995)	
		19.05	(¾)	(72°F)	168	(6⅝)	29.4	(6605)	23.2	(5230)	
		25.4	(1)		210	(8¼)	44.3	(9960)	33.2	(7475)	
		31.7	(1¼)		260	(10¼)	68.9	(15495)	55.6	(12285)	

PRODUCT SOURCE CODE	PRODUCT	BOLT SIZE		MINIMUM EMBEDMENT		WORKING LOADS				SOURCE	
		mm	(in)	mm	(in)	PULL-OUT		SHEAR			
						kN	(lbs)	kN	(lbs)		
(B) CARTRIDGE SYSTEMS** (continued)											
4020	HVA Adhesive Anchor System	9.53	(3/8)	10 min. @ 20°C (68°F)	88.9	(3½)	5.7	(1290)	4.8	(1070)	Hilti, Inc. SMM: APS00003300
		12.7	(½)		108	(4¼)	11.6	(2620)	9.3	(2090)	
		15.87	(5/8)		127	(5)	18.5	(4160)	13.3	(3000)	
		19.05	(¾)		168	(6⅝)	24.2	(5450)	21.3	(4800)	
		22.2	(7/8)		168	(6⅝)	32.0	(7210)	28.2	(6350)	
		25.4	(1)		210	(8¼)	39.8	(8960)	33.9	(7630)	
		31.7	(1¼)		305	(12)	68.9	(15490)	58.1	(13070)	
4021	HEA Adhesive Capsule	9.53	(3/8)	10 min. @ 20°C (68°F)	88.9	(3½)	40.3	(9070)	4.8	(1070)	
		12.7	(½)		108	(4¼)	55.4	(12470)	9.3	(2090)	
		15.87	(5/8)		127	(5)	84.5	(19010)	13.3	(3000)	
		19.05	(¾)		168	(6⅝)	121.0	(27230)	21.3	(4800)	
		22.2	(7/8)		168	(6⅝)	142.5	(32050)	28.2	(6350)	
		25.4	(1)		210	(8¼)	204.8	(46070)	33.9	(7630)	
		31.75	(1¼)		305	(12)	432.3	(97260)	58.1	(13070)	
4037	Chem-Stud	9.53	(3/8)	30 min. @ 10-20°C (50-68°F)	88.9	(3½)	87	(1955)	7.2	(1620)	Powers Fasteners SMM: APS00003570
		12.7	(½)		114	(4½)	14.9	(3359)	12.4	(2780)	
		15.9	(5/8)		127	(5)	22.9	(5146)	19.6	(4413)	
		19.05	(¾)		168	(6⅝)	30.4	(6850)	30.4	(6846)	
		22.2	(7/8)		178	(7)	39.0	(8773)	40.1	(9016)	
		25.4	(1)		210	(8¼)	53.1	(11950)	59.1	(13284)	
		31.75	(1¼)		260	(10¼)	77.9	(17525)	75.6	(17000)	
		34.9	(1⅜)		260	(10¼)	82.2	(18500)	91.1	(20500)	
38.1	(1½)	260	(10¼)	86.7	(19500)	105	(23625)				
4040	Hammer-Capsule	9.53	(3/8)	60 min. @ 20°C & (68°F & over)	88.9	(3½)	10.2	(2295)	7.2	(1620)	
		12.7	(½)		107.9	(4¼)	14.3	(3225)	12.4	(2780)	
		15.9	(5/8)		127	(5)	20.8	(4675)	19.6	(4413)	
		19.05	(¾)		152.4	(6)	29.1	(6543)	30.4	(6846)	
		22.2	(7/8)		177.8	(7)	38.3	(8615)	40.1	(9016)	
25.4	(1)	209.5	(8¼)	49.2	(11060)	59.1	(13284)				

PRODUCT SOURCE CODE	PRODUCT	BOLT SIZE mm (in)	APPROX CURE TIME	MINIMUM EMBED. mm (in)	WORKING LOADS		SOURCE
					PULL-OUT kN (lbs)	SHEAR kN (lbs)	
(C) INJECTION SYSTEMS**							
(Anchor studs are not included with the system)							
4051	Ultra Bond Speed Set 2	9.5 (3/8) 12.7 (1/2) 15.9 (5/8) 19.1 (3/4) 22.2 (7/8) 25.4 (1)	(Refer to product data)	44.4 (1 3/4) 54.0 (2 1/8) 63.5 (2 1/2) 85.7 (3 3/8) 95.3 (3 3/4) 104.8 (4 1/8)	4.8 (1086) 13.4 (3019) 14.8 (3331) 19.4 (4359) 27.8 (6241) 30.6 (6879)	10.0 (2238) 17.6 (3946) 25.2 (5654) 35.6 (8008) 46.1 (10363)	Adhesives Technology Corp. 450 East Copans Road Pompano Beach, FL 33064 SMM: APS00003510
4057	Ultrabond 1300	9.5 (3/8) 12.7 (1/2) 15.9 (5/8) 19.1 (3/4) 22.2 (7/8) 25.4 (1)	(Refer to product data)	88.9 (3 1/2) 114.3 (4 1/2) 142.9 (5 5/8) 171.5 (6 3/4) 200 (7 7/8) 228.6 (9)	11.3 (2531) 16.1 (3628) 23.0 (5172) 29.9 (6716) 38.1 (8582) 46.4 (10448)	7.8 (1759) 11.5 (2595) 20.1 (4514) 28.6 (6433) 34.9 (7852) 41.2 (9271)	
4058	Ultrabond 2300	9.5 (3/8) 12.7 (1/2) 15.9 (5/8) 19.1 (3/4) 22.2 (7/8) 25.4 (1)	(Refer to product data)	88.9 (3 1/2) 114.3 (4 1/2) 142.9 (5 5/8) 171.5 (6 3/4) 200 (7 7/8) 228.6 (9)	10.8 (2342) 16.3 (3678) 25.0 (5615) 33.6 (7552) 44.7 (10057) 55.8 (12563)	7.8 (1759) 11.5 (2595) 20.1 (4514) 28.6 (6433) 34.9 (7852) 41.2 (9271)	
4018	Molly Parafast	(Refer to product data)					Emhart Fasteners Group (Molly Plant) SMM: APS00003530
4070	Hilti HTE 50	9.53 (3/8) 12.7 (1/2) 15.9 (5/8) 19.1 (3/4) 22.2 (7/8) 25.4 (1) 31.75 (1 1/4)	(Refer to product data)	85.7 (3 3/8) 114.3 (4 1/2) 142.9 (5 5/8) 171.5 (6 3/4) 200 (7 7/8) 228.6 (9) 285.8 (11 1/4)	9.8 (2195) 18.0 (4055) 27.8 (6250) 43.5 (9785) 52.1 (11725) 73.6 (16565) 83.9 (18870)	7.8 (1770) 13.6 (3055) 25.8 (5795) 35.4 (7965) 38.9 (8740) 61.1 (13730) 81.6 (18355)	Hilti, Inc. SMM: APS00003300
4049	HIT RE 500	9.5 (3/8) 12.7 (1/2) 15.9 (5/8) 19.1 (3/4) 22.2 (7/8) 25.4 (1) 31.75 (1 1/4)	(Refer to product data)	44 (1 3/4) 57 (2 1/4) 73 (2 7/8) 86 (3 3/8) 101 (4) 114 (4 1/2) 140 (5 1/2)	4.9 (1095) 8.7 (1965) 13.5 (3045) 20.1 (4515) 25.2 (5665) 37.5 (8440) 57.0 (12815)	5.5 (1235) 11.1 (2505) 12.7 (2855) 17.2 (3875) 24.3 (5455) 30.4 (6825) 44.9 (10090)	

PRODUCT SOURCE CODE	PRODUCT	BOLT SIZE mm (in)	APPROX CURE TIME	MINIMUM EMBED. mm (in)	WORKING LOADS		SOURCE
					PULL-OUT kN (lbs)	SHEAR kN (lbs)	
(C) INJECTION SYSTEMS (continued)** (Anchor studs are not included with the system)							
4084	HIT-HY 200	9.5 (3/8) 12.7 (1/2) 15.9 (5/8) 19.1 (3/4) 22.2 (7/8) 25.4 (1) 31.75 (1 1/4)	(Refer to product data)	60 (2 3/8) 70 (2 3/4) 79 (3 1/8) 89 (3 1/2) 89 (3 1/2) 102 (4) 127 (5)	8.5 (1900) 13.1 (2950) 17.2 (3860) 20.4 (4575) 20.4 (4575) 24.9 (5590) 34.8 (7815)	9.1 (2045) 28.3 (6355) 37.0 (8315) 43.8 (9855) 43.8 (9855) 53.6 (12040) 74.9 (16830)	Hilti, Inc. Continued <i>SMM: APS00003300</i>
4081	Red Head Epcon C6	9.5 (3/8) 12.7 (1/2) 15.9 (5/8) 19.1 (3/4) 22.2 (7/8) 25.4 (1) 31.8 (1 1/4)	(Refer to product data)	85.7 (3 3/8) 114.3 (4 1/2) 142.9 (5 5/8) 171.5 (6 3/4) 200 (7 7/8) 228.6 (9) 285.8 (11 1/4)	9.4 (2110) 19.7 (4420) 27.3 (6130) 35.1 (7885) 41.9 (9430) 53.3 (11970) 63.4 (14245)	6.5 (1465) 14.0 (3145) 22.0 (4950) 28.6 (6430) 33.7 (7575) 44.9 (10085) 72.4 (16270)	ITW Commercial Construction-North America <i>SMM: APS00003540</i>
4082	Red Head Epcon A7	9.5 (3/8) 12.7 (1/2) 15.9 (5/8) 19.1 (3/4) 22.2 (7/8) 25.4 (1) 31.75 (1 1/4)	(Refer to product data)	38.1 (1 1/2) 50.8 (2) 63.5 (2 1/2) 76.2 (3) 88.9 (3 1/2) 101.6 (4) 127.0 (5)	4.2 (934) 6.7 (1505) 8.2 (1832) 9.6 (2158) 15.2 (3413) 18.1 (4067) 24.3 (5460)	4.6 (1031) 8.9 (2005) 12.5 (2814) 22.4 (5030) 23.3 (5230) 36.9 (8288) 36.9 (8288)	
4052	AC 100 Plus	9.53 (3/8) 12.7 (1/2) 15.9 (5/8) 19.1 (3/4) 22.2 (7/8) 25.4 (1) 31.75 (1 1/4)	(Refer to product data)	44 (1 3/4) 54 (2 1/8) 64 (2 1/2) 86 (3 3/8) 95 (3 3/4) 105 (4 1/8) 152 (6)	4.7 (1060) 7.5 (1683) 11.4 (2571) 18.9 (4254) 20.7 (4644) 22.2 (4996) 33.5 (7530)	5.2 (1159) 9.1 (2048) 10.1 (2279) 17.5 (3934) 20.8 (4680) 24.2 (5450) 38.9 (8756)	Powers Fasteners <i>SMM: APS00003570</i>
4071	PE1000+	9.5 (3/8) 12.7 (1/2) 15.9 (5/8) 19.1 (3/4) 22.2 (7/8) 25.4 (1) 31.75 (1 1/4)	(Refer to product data)	85.7 (3 3/8) 114.3 (4 1/2) 142.9 (5 5/8) 171.4 (6 3/4) 200 (7 7/8) 228.6 (9) 285.8 (11 1/4)	15.5 (3495) 28.1 (6310) 37.6 (8455) 48.3 (10860) 54.3 (12200) 62.4 (14020) 76.1 (17110)	(Refer to Product Data)	

PRODUCT SOURCE CODE	PRODUCT	BOLT SIZE mm (in)	APPROX CURE TIME	MINIMUM EMBED. mm (in)	WORKING LOADS		SOURCE
					PULL-OUT kN (lbs)	SHEAR kN (lbs)	
(C) INJECTION SYSTEMS (continued)** (Anchor studs are not included with the system)							
4072	AC100+ Gold	9.5 (3/8) 12.7 (1/2) 15.9 (5/8) 19.1 (3/4) 22.2 (7/8) 25.4 (1) 31.75 (1 1/4)	(Refer to product data)	85.7 (3 3/8) 114.3 (4 1/2) 142.9 (5 5/8) 171.4 (6 3/4) 200 (7 7/8) 228.6 (9) 285.8 (11 1/4)	8.9 (2005) 19.4 (4355) 28.6 (6440) 37.4 (8400) 47.8 (10745) 53.3 (11975) 69.2 (15555)	Data Not Available	Powers Fasteners continued SMM: APS00003570
4073	T 308+	9.5 (3/8) 12.7 (1/2) 15.9 (5/8) 19.1 (3/4) 22.2 (7/8)	(Refer to product data)	85.7 (3 3/8) 102 (4) 142.9 (5 5/8) 152.4 (6) 200 (7 7/8)	18.1 (4060) 69.1 (15420) 120.1 (26810) 117.4 (26205) 136 (30460)	Data Not Available	
4078	Pure 50+	9.5 (3/8) 12.7 (1/2) 15.9 (5/8) 19.1 (3/4) 22.2 (7/8) 25.4 (1) 31.75 (1 1/4)	8 hrs. @ 25°C (77°F)	85.7 (3 3/8) 114.3 (4 1/2) 142.9 (5 5/8) 171.4 (6 3/4) 200 (7 7/8) 227 (9) 285.8 (11 1/4)	9.5 (2125) 17.3 (3890) 26.3 (5920) 40.6 (9120) 50.7 (11435) 72.7 (16340) 88.6 (19925)	7.1 (1585) 12.9 (2900) 20.6 (4625) 30.4 (6845) 42.0 (9445) 55.1 (12395) 88.2 (19830)	
4079	Pure 110+	9.5 (3/8) 12.7 (1/2) 15.9 (5/8) 19.1 (3/4) 22.2 (7/8) 25.4 (1) 31.75 (1 1/4)	8 hrs. @ 25°C (77°F)	85.7 (3 3/8) 114.3 (4 1/2) 142.9 (5 5/8) 171.4 (6 3/4) 200 (7 7/8) 227 (9) 285.8 (11 1/4)	11.4 (2560) 22.2 (4985) 31.4 (7050) 45.1 (10130) 59.2 (13300) 86.6 (19925) 113.6 (25545)	9.9 (2225) 18.0 (4055) 27.8 (6260) 40.1 (9010) 54.6 (12265) 71.3 (16020) 111.4 (25035)	
4074	AT Acrylic-Tie Adhesive	9.5 (3/8) 12.7 (1/2) 15.9 (5/8) 19.1 (3/4) 22.2 (7/8) 25.4 (1) 28.6 (1 1/8) 31.75 (1 1/4)	(Refer to product data)	44 (1 3/4) 54 (2 1/8) 64 (2 1/2) 86 (3 3/8) 98 (3 3/8) 114 (4 1/2) 130 (5 1/8) 143 (5 5/8)	3.7 (840) 5.8 (1315) 9.5 (2125) 14.5 (3250) 15.8 (3550) 23.1 (5220) 29.6 (6650) 36 (8090)	5.4 (1215) 9.3 (2080) 16.5 (3700) 22.6 (5090) 30.6 (6870) 36.3 (8170) 46.2 (10385) 56 (12595)	Simpson Strong-Tie Co. 136 Official Road Addison, IL 60101 SMM: APS00003600
4075	EDOT Epoxy-Tie Adhesive	9.5 (3/8) 12.7 (1/2) 15.9 (5/8) 19.1 (3/4) 22.2 (7/8) 25.4 (1) 31.75 (1 1/4)	(Refer to product data)	85.7 (3 3/8) 114.3 (4 1/2) 142.9 (5 5/8) 171.5 (6 3/4) 200 (7 7/8) 228.6 (9) 286 (11 1/4)	18.8 (4240) 29.2 (6575) 32.7 (7560) 40.3 (9065) 50.2 (11295) 66.2 (14885) 86.3 (19420)	6.4 (1450) 12.7 (2860) 21.6 (4850) 31.6 (7055) 42.8 (9625) ----NA---- ----NA----	

PRODUCT SOURCE CODE	PRODUCT	BOLT SIZE mm (in)	APPROX CURE TIME	MINIMUM EMBED. mm (in)	WORKING LOADS				SOURCE
					PULL-OUT kN (lbs)		SHEAR kN (lbs)		
(C) INJECTION SYSTEMS (continued)**									
(Anchor studs are not included with the system)									
4083	ET-HP Epoxy-Tie	9.5 (3/8)	(Refer to product data)	89 (3 1/2)	9.8 (2195)	8.5 (1905)	Simpson Strong-Tie Co. Continued SMM: APS00003600		
		12.7 (1/2)		108 (4 1/4)	17.1 (3840)	12.5 (2820)			
		15.9 (5/8)		127 (5)	25.4 (5720)	21.8 (4890)			
		19.1 (3/4)		171 (6 3/4)	39.4 (8865)	30.8 (6925)			
		22.2 (7/8)		197 (7 3/4)	48.5 (10900)	30.8 (6925)			
		25.4 (1)		229 (9)	52.6 (11835)	60 (13490)			
		38.6 (1 1/8)		257 (10 1/8)	68.8 (15460)	65.9 (14820)			
4077	SET Epoxy-Tie Adhesive	31.75 (1 1/4)	(Refer to product data)	289 (11 1/4)	87.6 (19685)	71.8 (16145)			
		9.5 (3/8)		44 (1 3/4)	2.1 (475)	5.1 (1145)			
		12.7 (1/2)		54 (2 1/8)	8.0 (1805)	7.8 (1750)			
		15.9 (5/8)		64 (2 1/2)	7.5 (1695)	16 (3605)			
		19.1 (3/4)		86 (3 3/8)	17.2 (3865)	23.6 (5295)			
		22.2 (7/8)		98 (3 7/8)	21.3 (4780)	31.5 (7085)			
		25.4 (1)		114 (4 1/2)	22.3 (5020)	33.9 (7640)			
4060	Sikadur Anchor Fix 4	28.6 (1 1/8)	(Refer to product data)	130 (5 1/8)	30.6 (6890)	46 (10330)	Sika Corporation 201 Polito Avenue Lyndhurst, NJ 07071 SMM: APS00001810		
		31.75 (1 1/4)		143 (5 5/8)	39.9 (8965)	58 (13035)			
		9.5 (3/8)		85.7 (3 3/8)	9.9 (2209)	5.0 (1125)			
		12.7 (1/2)		114.3 (4 1/2)	15.8 (3536)	10.8 (2400)			
		15.9 (5/8)		142.9 (5 5/8)	19.7 (4388)	19.2 (4275)			
		19.1 (3/4)		171.4 (6 3/4)	31.5 (7035)	59.5 (4800)			
		22.2 (7/8)		200 (7 7/8)	35.4 (7905)	30.9 (6900)			
4048	Pro-Poxy 300 Fast	25.4 (1)	(Refer to product data)	228.6 (9)	47.7 (10639)	42.0 (9375)	Unitex – A Dayton Superior Company 3101 Gardener Kansas City, MO 64120 SMM: APS00003150		
		9.5 (3/8)		87.7 (3 3/8)	9.2 (2060)	5.0 (1140)			
		12.7 (1/2)		114.3 (4 1/2)	13.0 (2930)	9.0 (2025)			
		15.9 (5/8)		142.9 (5 5/8)	21.0 (4720)	14.1 (3160)			
		19.1 (3/4)		171.5 (6 3/4)	28.7 (6470)	20.3 (4555)			
		22.2 (7/8)		200 (7 7/8)		27.5 (6200)			
(D) RESIN GROUTS**									
(No approved sources)									
(E) CEMENTITIOUS GROUTS**									
(No approved sources)									

*Type I, Grade C, epoxy listed on Qualified Products List 32 is also approved for use with concrete anchor bolt systems.

** Not approved for sustained tensile load such as overhead applications.

REFERENCE:

DOTD Specifications, Subsection 1018.22

NOTE:

All material, regardless of prior approval, shall be sampled in accordance with the Material Sampling Manual and tested for conformance to the original sample and the current specification. Any deviation in performance from the original sample submitted or the current specification may result in removal of the product from the qualified list.

No information contained in this list is to be used for promotional purposes.