

February 21, 2025

CHEMICAL ANCHOR SYSTEMS

Specification Reference: 901.05

SM Material Code: 506M00020

This list documents the approval of chemical systems for anchoring deformed steel rebar or grouting load transfer dowels. These chemical anchor systems are approved for pullout loads on deformed rebar which do not exceed the yield requirement for the corresponding rebar size of grade 60 (420) steel. These systems are applicable for rebar sizes not exceeding ENG. #7 (METRIC #22). If the rebar exceeds size ENG. #7 (METRIC #22), the manufacturer shall provide a type B certification for the pullout load of the specified rebar. Testing will be in accordance with ASTM E 488.

Systems shall be installed in accordance with the manufacturer's instructions. Horizontal installations of rebar or dowels require special consideration for proper retention of the material in the hole. The following spacing and edge distance requirements shall be met.

Embedment (E)	Spacing Between Anchors min. (S)	Edge Distance min. (M)
<6.0d	2.00E	1.00E
6.0d to ≤8.0d	1.50E	1.00E
>8.0d	1.00E	0.75E

(d = diameter of rebar)

If the above requirements are not satisfied, contact the Materials and Tests Division.

It should be noted that FHWA Technical Advisory T5140.34 issued on January 16, 2018 strongly discourages the application of anchor systems utilizing adhesives for permanent sustained tension applications or overhead applications. If chemical anchors are to be used in either of these applications, the design and installation must comply with all of the requirements set forth in the technical advisory.

Source Code	Manufacturer Product Name	Approval Number	Comments
9540	ADHESIVES TECHNOLOGY CORP----- ASF - 1000 FAST CURE ACRYLIC ADHESIVE 10.1 & 28 oz Cartridge Systems	W168050	
9540	ADHESIVES TECHNOLOGY CORP----- ULTRABOND ASF-2000 28 oz. Cartridge Systems	W218950	
9540	ADHESIVES TECHNOLOGY CORP----- ULTRABOND EPX-3CC EPOXY ANCHORING SYSTEM A9-EPX3CC, A22-EPX3CC & A53-EPX3CC Cartridge Systems	W208050	
9540	ADHESIVES TECHNOLOGY CORP----- ULTRABOND HS - 1CC EPOXY ANCHORING SYSTEM A9-HS1CC, A22-HS1CC & A53-HS1CC Cartridge Systems	W188050	
9540	ADHESIVES TECHNOLOGY CORP----- ULTRABOND HYB-2CC 10. 14 & 28 oz. Cartridge Systems	W248050	
9540	ADHESIVES TECHNOLOGY CORP----- ULTRABOND 1- ANCHORING EPOXY 21.2oz Cartridge Systems	W228050	

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9540	ADHESIVES TECHNOLOGY CORP----- ULTRABOND 1300 - Dowling Epoxy	W218952	
9540	ADHESIVES TECHNOLOGY CORP----- CRACKBOND 2100 MV (Formulation update November 2023)	W078050	
9540	ADHESIVES TECHNOLOGY CORP----- CRACKBOND 2300 GEL (formerly ULTRABOND 2300)	W028985	
9608	CHEMCO SYSTEMS, INC----- PROGUARD BONDER PASTE LP - Structural epoxy paste 2-, 10- and 90-gallon kits	W238050	
9573	CORNERSTONE CONSTRUCTION MATERIAL, LLC----- FASTRAC CE110 - LOW VISCOSITY INJECTION AND ANCHORING RESIN 15.2 oz. Cartridge System	W168060	
9573	CORNERSTONE CONSTRUCTION MATERIAL, LLC----- FASTRAC CE220 - MEDIUM VISCOSITY ANCHORING EPOXY RESIN 20.28 oz. Cartridge System	W168061	
9573	CORNERSTONE CONSTRUCTION MATERIAL, LLC----- FASTRAC CE308 - ANCHORING GEL 8.45, 20.28 & 50.7 oz. Cartridge Systems	W168065	
9602	DAYTON SUPERIOR CORP----- ALL WEATHER J51AW - ANCHORING GEL 8.5 & 28 oz. Cartridge Systems	W178060	
9602	DAYTON SUPERIOR CORP----- PROANCHOR ELITE - EPOXY ANCHORING GEL 9, 22 & 53 oz. Cartridge Systems	W208036	
9602	DAYTON SUPERIOR CORP----- SURE ANCHOR J50	W028062	
9602	DAYTON SUPERIOR CORP----- SURE ANCHOR I J51	W168063	
9602	DAYTON SUPERIOR CORP----- SURE BOND J58	W208060	
9576	DEWALT----- PURE50+ EPOXY ANCHORING ADHESIVE	W168110	
9576	DEWALT----- PURE110+ EPOXY ANCHORING SYSTEM	W128052	
9576	DEWALT----- PURE220+ EPOXY INJECTION ANCHORING SYSTEM 9.5 & 20.5 OZ. Cartridge Systems	W238101	

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8268	EUCLID CHEMICAL CO.----- DURAL FAST SET EPOXY GEL	W028148	
8268	EUCLID CHEMICAL CO.----- DURAL HS GEL - HIGH STRENGTH ANCHORING EPOXY RESIN 21.2 & 53 oz. Cartridge Systems	W188060	
9533	ITW COMMERCIAL CONSTRUCTION NA----- RED HEAD EPCON C6+ EPOXY RESIN SYSTEM	W188051	
9605	KAUFMAN PRODUCTS, INC----- SUREPOXY DBA EPOXY RESIN SYSTEM 22 oz. - Cartridge System	W148070	
9605	KAUFMAN PRODUCTS, INC----- SUREPOXY HM	W028077	
9605	KAUFMAN PRODUCTS, INC----- SUREPOXY 110	W028075	
9605	KAUFMAN PRODUCTS, INC----- SUREPOXY 117	W028076	
9537	KELKEN-GOLD, INC----- KELIGROUT	W028078	
CAS			
09581	MAPEI CORP.----- PLANIBOND AE-NONSAG, EPOXY ANCHORING GEL 20.3 oz-dual-cartridge unit	W258000	
CAS			
09581	MAPEI CORP.----- PLANIBOND HI-MOD GEL-NONSAG, STRUCTURAL EPOXY ADHESIVE 0.5-gal. Part A and 0.5-gal. Part B 1.5-gal. Part A and 1.5-gal. Part B	W258001	
9311	MKT FASTENING LLC----- EP 800-RESIN ANCHORING MORTAR BASED ON PURE EPOXY 9.5, 13.5 & 20.5 oz. Cartridge Systems	W238051	
9528	POLYGEM, INC----- POLY-BAC 1257	W028086	
9528	POLYGEM, INC----- POLY-BAC 1605	W028087	
9532	PRIME RESINS, INC----- SPEED BOND #1	W028098	
9514	SIKA CORPORATION----- SIKADUR 31 HI MOD GEL	W028975	

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9514	SIKA CORPORATION----- SIKADUR 32 HI MOD EPOXY	W028977	
9514	SIKA CORP----- SIKADUR 33 RAPID SET GEL	W048977	
9543	SIMPSON STRONG-TIE CO., INC----- "AT-XP" HIGH-STRENGTH ACRYLIC ANCHORING ADHESIVE AT-XP10, AT-XP13 & AT-XP30 - Cartridge Systems	W208052	
9543	SIMPSON STRONG-TIE CO., INC----- "ET-HP" EPOXY-TIE ANCHORING ADHESIVE ET-HP22 and ET-HP56 - Cartridge Systems	W028978	
9543	SIMPSON STRONG-TIE CO., INC----- "ET-3G" EPOXY ANCHORING ADHESIVE ET3G10, ET3G22-N and ET3G56 - Cartridge Systems	W238950	
9553	SPECICHEM, LLC----- SPECPOXY 3000 FS	W058050	
9553	SPECICHEM, LLC----- SPECPOXY 3000	W058051	
9553	SPECICHEM, LLC----- SPECPOXY 2000	W058052	
9553	SPECICHEM, LLC----- SPECPOXY 1000	W058054	
9535	UNITEX BY DAYTON SUPERIOR----- PRO-POXY 200	W208061	
9535	UNITEX BY DAYTON SUPERIOR----- PRO-POXY 204	W028989	
9535	UNITEX BY DAYTON SUPERIOR----- PRO-POXY 300	W028140	
9535	UNITEX BY DAYTON SUPERIOR----- PRO-POXY 300 FAST	W168141	
9535	UNITEX BY DAYTON SUPERIOR----- PRO-POXY 400	W248102	
9547	WEJ-IT FASTENING SYSTEMS----- INJECT-TITE	W028054	
9603	W. R. MEADOWS----- REZI-WELD GEL PASTE STATE EPOXY	W028144	