



CALIFORNIA DEPARTMENT OF TRANSPORTATION

INTERIM APPROVAL FOR BRANDS OF CHEMICAL ADHESIVES FOR USE IN CALTRANS CONTRACTS

Chemical adhesives (CA) intended for structural applications, such as for bonding threaded rods and/or rebars into horizontal holes drilled in hardened concrete, are required to comply with ICBO-AC58 (revised January 2001) in addition to Caltrans augmentation requirements. The use of CA in overhead holes is not recommended.

Until further notice, continued use of brands of CA and the corresponding anchors as listed in the table below is permitted, provided that the site and temperature conditions are suitable, and that the general use of this material is deemed appropriate by the Engineer. Installation shall be in accordance with the Caltrans Specifications for "Drill and Bond Dowels (Chemical adhesive)". The presence of a product on this list does not relieve it from meeting the requirements of Section 6, "Control of Materials", in the Caltrans Specifications.

Manufacturer / Brand Name	Product Name	Threaded Rod ASTM A 307	Threaded Rod ASTM A 449 (T1)	Threaded Rod F 593	Reinforcing Bar (Gr. 60)	Min Concrete temp. at time of installation	Max Concrete temp. at time of installation	Installation time at 25°C Set (hrs) ^a	Installation time at 25°C Cure (hrs) ^a
Hilti	HTE 50	Yes	Yes	Yes	Yes	2	43	0.25	24.0
Hilti	HIT - RE100	Yes	Yes	Yes	Yes	-5	43	2.0	12.0
Adhesives Technology Corporation	Ultrabond HS200	Yes	Yes	Yes	Yes	2	43	0.25	24.0
Adhesives Technology Corporation	Ultrabond 365	No	Yes	No	Yes	-18	43	0.1	0.5
Adhesives Technology Corporation	Ultrabond CA-DOT	No	Yes	No	Yes	4	43	4.0	36.0
Unitex	Pro-Poxy 300 Fast ^b	No	Yes	No	No	5	43	2.5	24.0



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Powers Fasteners	T308+ ^b	No	Yes	No	No	5	43	2.5	24.0
US Mix	US SPEC Gelbond NS Fast ^b	No	Yes	No	No	5	43	2.5	24.0
ITW Redhead	Acrylic 7	No	Yes	No	Yes	-18	43	0.1	0.5
Simpson Strong Tie	SET22 & SET56	No	Yes	No	Yes	5	43	1.0	24.0
Covert Operations / USP	CIA Gel 7000	No	Yes	No	Yes	4	43	4.0	36.0
Dewalt	Pure 110+	Yes	Yes	Yes	Yes	5	40	0.37	8

Foot notes:

^a: The installation times are based on information in the Manufacturer’s product literature. Set time is the minimum time needed for the adhesive to harden and support the anchor; cure time is the minimum time required before the anchor may be loaded.

^b: A 30-element mixing nozzle shall be used to place the chemical adhesive.

General Notes:

The conditionally approved adhesives on this interim list shall not be used in the following situations:

1. If there is a likelihood of fire.
2. For coated bars or rods, unless embedment length is increased by 50%, or an equivalent adjustment is made.

If you have questions about this interim approval, please contact Jacquelyn Wong, Concrete Technology Committee Chair, by phone at (916) 227-7205.