


[Travel](#)

[Work with Caltrans](#)

[Programs](#)

[Caltrans Near Me](#)

[Search](#)

Chemical Adhesives (Drill and Bond Dowel)

Last edit date: 2/6/2024

Drill and Bond Dowel (Chemical Adhesive), DBCA, intended for structural applications, such as for bonding threaded rods and/or rebar into holes drilled in hardened concrete, must comply with ACI 355.4 and be installed in accordance with ACI 318 design standards. Chemical adhesive specifications are in Sections 41-10 and 51-1 of the 2018 Standard Specifications. Do not use DBCA in overhead applications where the anchor is subjected to sustained tension. Unless otherwise stated, the testing in the table below was evaluated with holes drilled with a hammer drill and carbide bit.

Evaluation Criteria: [Authorization Requirements and Acceptance Criteria for Chemical Adhesives](#)

Special Note for Section 51-1 use only: Materials on this list may be used if the project was designed in accordance with AASHTO LRFD Bridge Design Specifications, 8th edition and associated Bridge Design Aid 5-71. Contact the Resident Engineer or Project Designer for guidance.

Manufacturer	Brand Name	Evaluation Report Number	Authorized Threaded Rod Diameters (inches)	Authorized Reinforcing Bar Sizes (Grade 60)	Concrete temperature at time of installation		Reauthorization Date	BABA Act Information*
					Minimum	Maximum		
Adhesives Technology Corporation	ULTRABOND HS-1CC	ESR-4094	5/8, 3/4, 7/8, 1	#5, #6, #7, #8	43°F	110°F	01/2025	Unconfirmed
	ULTRABOND HYB-2CC	ESR-4535	5/8, 3/4, 7/8, 1	#5, #6, #7, #8	23°F	103°F	03/2024	Unconfirmed