

**CALIFORNIA DEPARTMENT OF TRANSPORTATION
AUTHORIZATION PROCEDURES AND ACCEPTANCE CRITERIA
FOR PRECAST AND CAST-IN-PLACE CONCRETE
CEMENTITIOUS BASED REPAIR MATERIAL**



The Department is compiling a list of authorized concrete repair materials for use in precast and cast-in-place concrete. This program will be administered by the Concrete Materials Testing Branch. This list is the only list recognized by the Department for use on Caltrans precast and cast-in-place concrete products. The following procedures are required to authorize a concrete repair material for inclusion in the Precast and Cast-In-Place Concrete Cementitious Based Repair Material Authorized Material List:

- I. Manufacturer/Supplier shall provide:
 - A. Submittal Package which includes but is not limited to:
 1. Company's name, address, contact information
 2. Name of the repair product
 3. Certificate of Compliance stating proposed material complies with the tests on the material data sheet
 4. Material Safety Data Sheet
 5. Material Data Sheet that at a minimum contains test results for compliance requirements:
 - i. Minimum 7-day compressive strength of 4000 psi (ASTM C39 or ASTM C109)
 - ii. Minimum 28-day bond strength of 1500 psi (ASTM C882 as modified by ASTM C928)
 - iii. Maximum 28-day length change of -0.15% (ASTM C157)
 - iv. Maximum soluble chlorides by weight of 0.05% (AASHTO T260)

OR

Submit a material data sheet stating conformance with ASTM C928.

6. List of projects where product has been used successfully (bridge project, transportation project, etc.). Include reports or pictures of application, if possible.
7. Manufacturer's recommended procedures for use.
8. Limitation on use (e.g. environmental, overhead and vertical application, horizontal application, etc.)

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9. Shelf life of the product
10. Storage requirements
11. Supply two prepackaged bags (approximately 100 lbs) of sample taken from the same batch of material that was supplied for Certificate of Compliance testing. Sample provided must be within the shelf life of the product for Department testing and verification.

B. Send the samples along with the required documents to:

**Caltrans Transportation Laboratory
Attention: Thien Thach, Precast & Cast-In-Place Repair Material
5900 Folsom Boulevard
Sacramento, CA 95819**

II. Caltrans will evaluate the submittal as follows:

- A. Ensure all required documentations and samples are received.
- B. Review the technical information provided.
- C. Perform testing of the concrete repair sample to verify compliance with the requirements listed above.
- D. Inform manufacturer/supplier in writing of the evaluation results.
- E. Allow one retest if the initial specimen fails, if requested by manufacturer/supplier. Retest sample will be selected by a Caltrans representative.
- F. Update the Precast and Cast-In-Place Concrete Cementitious Based Repair Material Authorized Material List, as necessary.

III. Only laboratories that are participants in the CCRL on-site inspection and proficiency sample program with valid accreditation from the AASHTO Accreditation Program are recognized.

IV. The authorization of precast and cast-in-place concrete cementitious based repair material will expire in 5 years.

V. To renew, Manufacturer/Supplier should submit its package with current information approximately 6 months prior to expiration.

VI. Caltrans reserves the rights to sample and to remove a product from the list at any time.