

## *Special Inspection Requirements When Using Epoxy*

### **PURPOSE**

This policy provides direction to staff regarding when to require special inspection for permits that propose to use epoxy adhesives as part of the construction project.

### **GENERAL**

The California Building Code (CBC) requires Special Inspections to ensure that a standard of quality is maintained for certain types of work and installation methods. These requirements are contained in Chapter 17 of the CBC. Epoxy adhesives are in the special cases category (Section 1701.5.15). Special Inspections for when epoxy adhesives are used may also be a requirement stated in the specific product's ICBO Evaluation Report.

There are instances where an epoxy adhesive is specified in a construction project and where the use of the epoxy adhesive should not be considered a special case that is subject to Special Inspection requirements.

The following are guidelines for staff to assist in the decision making process to determine if Special Inspections will be required when epoxy adhesives are used for a construction project.

### **AUTHORITY**

The Building Official's authority to require Special Inspections is stated in CBC Chapter 17.

### **FORMS**

Special Inspection, when required, will be identified on the Special Inspection and Testing Requirements form (CNI-012) and attached to the permit plans and file records.

### **PROCEDURE**

A. Special Inspections are mandatory for the following Epoxy Adhesive uses:

1. Whenever Special Inspections for Epoxy Adhesive are required by the design engineer, manufacturer or in the approved Evaluation Report.
2. All other applications of Epoxy Adhesives not listed in B. below.

B. Special Inspections are not mandatory for the following Epoxy Adhesive uses:

1. When the contractor agrees to provide a "pull out test" for the anchor bolts in-lieu of

Special Inspections. A “proof load indicator” may be substituted for the pull out test. The requirements for the test or indicator, and what will happen if they fail, shall be stated on the plans by the designer of record.

2. Retrofitting sill plate anchor bolts into existing concrete as required to comply with conventional construction requirements of the CBC.
  3. Adhering reinforcing steel dowels provided to minimize differential settlement between new and existing foundations.
  4. Adhering holdown anchor bolts used for Braced Wall or Alternate Braced Panel installations provided that there are no more than four (4) holdown anchor bolts per wall line (based on four wall lines (North, South, East and West elevations) per building).
  5. Adhering holdown anchor bolts used for Shear Walls when the engineer provides calculations showing that the bolts are subject to less than 50% of the allowable loads for the anchor bolts.
  6. When approved by the Building Official as an “Alternate materials, alternate design and methods of construction” in accordance with CBC Section 104.2.8.
  7. Incidental uses of Epoxy Adhesives (not part of the load resisting structural system).
- C. This policy does not supersede the project’s designer of the responsibility to require specific testing and inspections when Epoxy Adhesives are specified for the project.

**Approved by:**

/s/ Chris Arnold

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