

BUILDING CODE MANUAL COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS BUILDING AND SAFETY DIVISION Based on the 2011 LACBC

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DESIGN AND REMOVAL OF FORMS

Section 1906 of the Building Code refers to the design, fabrication and erection of form-work and indicates general criteria and purposes of forms. The Code does not specify permit and inspection requirements for temporary forms or shores as such items are more like tools than construction unless they remain as part of the completed structure. However, if faulty, questionable or unsafe conditions are observed, they should be brought to the attention of the contractor.

Section 1906.2 applies to the removal of forms. Forms should be left in place until concrete has attained sufficient strength to support the loading involved.

Warm weather, high concrete temperature, rapid-setting cement and low-water cement ratios may reduce, while the opposite conditions may lengthen, the time that forms should remain in place. Light loads will permit earlier stripping while heavy loads require longer time. The design engineer/ architect should specify the minimum strength of the concrete to be attained before removal of forms or shores. Cylinder test reports and design engineer approval are usually required to establish a safe and proper schedule. However, when the engineer/architect does not specify a time for concrete stripping, the following removal times extracted from ACI Manual of Concrete Practice may serve as general guides:

- 1. Vertical forms such as for sides of walls, columns, beams and girders 12 hours
- 2. Soffit forms or shores for beams:
 - a) Over 20 ft. clear span 21 days
 - b) Less than 20 ft. clear span 14 days
- 3. Soffit forms or shores for one way slabs:
 - a) Over 20 ft. clear span 10 days
 - b) Less than 20 ft. clear span 7 days
- 4. Post-tensioned slabs As soon as full post-tensioning has been applied

Special care shall be taken where machinery loads or temporary construction equipment are to be placed.

Supersedes BCM 1906 Article 1, dated 05-12-09

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