POLICY NUMBER: 20

APPROVAL DATE: April 10, 2014

SUBJECT: Acceptance of Adhesive Concrete Anchors under 2013 CBC

This guideline is developed by the Tri-Chapter Uniform Code Committee and is intended to enhance regional consistency in application and enforcement of the Building Code. Please verify acceptance of this guideline with your local building department prior to its application.

CODE REFERENCE(S):

2013 California Building Code
ACI 318-11, Building Code Requirements for Structural Concrete and Commentary
ACI 355.4-11, Qualification of Post-Installed Adhesive Anchors in Concrete and Commentary
ICC-ES AC308, Acceptance Criteria for Post-Installed Adhesive Anchors in Concrete Elements

ISSUE(S):

Under the 2010 CBC, ACI 318-08 Appendix D did not include design or testing provisions for adhesive anchors. Those provisions were in ICC-ES AC308 “Acceptance Criteria for Post-Installed Adhesive Anchors in Concrete Elements.” Under the 2013 CBC, ACI 318-11 Appendix D contains design provisions for adhesive anchors for the first time and requires testing per the new ACI Standard ACI 355.4-11. In February 2013, Concrete Anchor Manufacturers Association started working with ICC-ES to revise AC308 to meet ACI 355.4-11. At the hearing held in June of 2013, AC308 was fully revised and approved to comply with the new testing requirements detailed in ACI 355.4-11. ACI 355.4-11 contains additional testing and restrictions when compared with prior editions of AC308.

To provide concrete anchor manufacturers adequate time to perform testing, and to allow ICC-ES staff sufficient time to review data submittals to create evaluation reports, ICC-ES established compliance dates at the hearing held in June of 2013. Manufacturers must submit their data packages by July 15, 2014 for ICC-ES to issue evaluation reports by January 15, 2015. Existing reports will need to show their compliance with the new ACI 355.4-11 and AC308 before the compliance date, or be subject to report cancellation or mandatory revisions.

Therefore, adhesive anchor evaluation reports showing compliance with the 2012 IBC/2013 CBC may not be available until January 15, 2015, at the latest.
PROPOSED GUIDELINE:

The new testing criteria in ACI 355.4 and the revised AC308 may affect adhesive anchor capacities in current reports, but until testing is complete, it is not known if or how much they will be affected. Based on the successful use of adhesive anchors under the 2009 IBC/2010 CBC, it is proposed that adhesive anchor products with 2009 IBC compliance be allowed in the interim.

For projects under the 2013 CBC:

Prior to January 15, 2015, if an adhesive anchor system into concrete does not have an evaluation report recognizing the anchor under the 2012 IBC, an adhesive anchor system having an evaluation report with 2009 IBC recognition will be accepted.