2012 International Building Code
Errata

(Portions of text and tables not shown are unaffected by the errata)

SECOND PRINTING (Updated May 23, 2012)

CHAPTER 19
CONCRETE

(Note: The following modification is based on the 2008 edition of ACI 318)

1905.1.9 ACI 318-08, Section D.3.3. ~~Delete~~ Modify ACI 318-08 Sections D3.3.4 through D.3.3.6 and add Section ~~through~~ D3.3.7 ~~and replace with the following~~ to read as follows:

~~*D.3.3.4 – The anchor design strength associated with concrete failure modes shall be taken as $0.75\phi N_n$ and $0.75\phi V_n$, where ϕ is given in D4.3 or D4.4, and N_n and V_n are determined in accordance with D5.2, D5.3, D5.4, D6.2 and D6.3, assuming the concrete is cracked unless it can be demonstrated that the concrete remains uncracked.*~~

~~*D.3.3.5*~~ D3.3.4– Anchors shall be designed to be governed by the steel strength of a ductile steel element as determined in accordance with D.5.1 and D.6.1, unless either ~~D.3.3.6~~ D3.3.5 or ~~D.3.3.7~~ D.3.3.6 is satisfied.

Exceptions:

1. Anchors designed to resist wall out-of-plane forces with design strengths equal to or greater than the force determined in accordance with ASCE 7 Equation 12.11-1 or 12.14-10 need not satisfy Section ~~D.3.3.5~~ D.3.3.4.

2. ~~D.3.3.5~~ D.3.3.4 need not apply and the design shear strength in accordance with D.6.2.1(c) need not be computed for anchor bolts attaching wood sill plates of bearing or non-bearing walls of light-frame wood structures to foundations or foundation stem walls provided all of the following are satisfied:

2.1. The allowable in-plane shear strength of the anchor is determined in accordance with AF&PA NDS Table 11E for lateral design values parallel to grain.

2.2 The maximum anchor nominal diameter is 5/8 inches (16 mm).

2.3. Anchor bolts are embedded into concrete a minimum of 7 inches (178 mm).

2.4. Anchor bolts are located a minimum of 1-3/4 inches (45 mm) from the edge of the concrete parallel to the length of the wood sill plate.

2.5. Anchor bolts are located a minimum of 15 anchor diameters from the edge of the concrete perpendicular to the length of the wood sill plate.

2.6. The sill plate is 2-inch or 3-inch nominal thickness.

3. Section ~~D.3.3.5~~ D.3.3.4 need not apply and the design shear strength in accordance with Section D.6.2.1(c) need not be computed for anchor bolts attaching cold-formed steel track of bearing or non-bearing walls of light-frame construction to foundations or foundation stem walls provided all of the following are satisfied:

3.1. The maximum anchor nominal diameter is 5/8 inches (16 mm).

3.2. Anchors are embedded into concrete a minimum of 7 inches (178 mm).

3.3. Anchors are located a minimum of 1-3/4 inches (45 mm) from the edge of the concrete parallel to the length of the track.

3.4. Anchors are located a minimum of 15 anchor diameters from the edge of the concrete perpendicular to the length of the track.

3.5. The track is 33 to 68 mil designation thickness.

Allowable in-plane shear strength of exempt anchors, parallel to the edge of concrete shall be permitted to be determined in accordance with AISI S100 Section E3.3.1.

4. In light-frame construction, design of anchors in concrete shall be permitted to satisfy D.~~3.3.8~~ 3.3.7.

~~*D.3.3.6*~~ D3.3.5– Instead of ~~D.3.3.5~~ D3.3.4, the attachment that the anchor is connecting to the structure shall be designed so that the attachment will undergo ductile yielding at a force level corresponding to anchor forces no greater than the design strength of anchors specified in ~~D.3.3.4~~ D.3.3.3.

Exceptions:
1. Anchors in concrete designed to support nonstructural components in accordance with ASCE 7 Section 13.4.2 need not satisfy Section ~~D.3.3.6~~ D.3.3.5.
2. Anchors designed to resist wall out-of-plane forces with design strengths equal to or greater than the force determined in accordance with ASCE 7 Equation 12.11-1 or 12.14-10 need not satisfy Section ~~D.3.3.6~~ D.3.3.5.

~~*D.3.3.7*~~ *D.3.3.6 - As an alternative to ~~D.3.3.5~~ D.3.3.4 and ~~D.3.3.6~~ D.3.3.5, it shall be permitted to take the design strength of the anchors as 0.4 times the design strength determined in accordance with ~~D.3.3.4~~ D.3.3.3.*

~~*D.3.3.8*~~ *D.3.3.7 – In light-frame construction, bearing or non-bearing walls, shear strength of concrete anchors less than or equal to 1 inch [25 mm] in diameter of sill plate or track to foundation or foundation stem wall need not satisfy ~~D.3.3.7~~ D.3.3.6 when the design strength of the anchors is determined in accordance with D.6.2.1(c).*