



DSA Structural Amendments under review are highlighted in GRAY

Template 21-24

2001 CBC - Chapter 21A
MASONRY

Section - 2106A - GENERAL DESIGN REQUIREMENTS

Subsection(s) - 2106A.1.12.4 - Column Reinforcement

1 2106A.1.12.4 Special provisions for Seismic Zones 3 and 4.

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4 1. **Column reinforcement.** *The spacing of column ties shall be*
5 *as follows: not greater than 8 bar diameters, 24 tie diameters, or*
6 *one half the least dimension of the column for the full column*
7 *height. Top tie shall be within 2 inches (51 mm) of the top of the*
8 *column or of the bottom of the horizontal bar in the supported*
9 *beam.*

10
11 Column ties shall terminate with a minimum 135-degree hook
12 with extensions not less than six bar diameters or 4 inches (102
13 mm). Such extensions shall engage the longitudinal column rein-
14 forcement and project into the interior of the column. Hooks shall
15 comply with Section 2107A.2.2.5, Item 3.

16
17 **EXCEPTION:** Where ties are placed in horizontal bed joints,
18 hooks shall consist of a 90-degree bend having an inside radius of not
19 less than four tie diameters plus an extension of 32 tie diameters.

20
21 2. **Shear Walls.**

22
23 2.1 **Reinforcement.** The portion of the reinforcement
24 required to resist shear shall be uniformly distributed
25 and shall be joint reinforcement, deformed bars or a
26 combination thereof. The spacing of reinforcement in
27 each direction shall not exceed 24 inches (610 mm)
28 *each way.*

29
30 Joint reinforcement used in exterior walls and consid-
31 ered in the determination of the shear strength of the

32 member shall be hot-dipped galvanized in accordance
33 with UBC Standard 21-10.

34
35 Reinforcement required to resist in-plane shear shall be
36 terminated with a standard hook as defined in Section
37 2107A.2.2.5 *which encircles the vertical reinforcing* or
38 with an extension of proper embedment length beyond
39 the reinforcement at the end of the wall section. The
40 hook or extension may be turned up, down or horizon-
41 tally. Provisions shall be made not to obstruct grout
42 placement. Wall reinforcement terminating in columns
43 or beams shall be fully anchored into these elements.