



DSA Structural Amendments under review are highlighted in GRAY

Template 19-35

2001 CBC - Chapter 19A
CONCRETE

Section - **1916A - PRECAST CONCRETE**

Subsection(s) - **1916A.11**

1 **1916A.11 Reinforcement.** *Perimeters of precast walls shall be*
2 *reinforced continuously with a minimum of one No. 5 bar extend-*
3 *ing the full height and width of the wall panel. Bars shall be con-*
4 *tinuous around corners. Where wall panels do not abut columns or*
5 *other wall panels, perimeter bars shall be retained by hooked wall*
6 *bars. Edges of openings in precast walls shall be reinforced with a*
7 *minimum of one No. 5 bar continuous past corners sufficient to de-*
8 *velop the bar.*

9
10 *A continuous tie or bond beam shall be provided at the roof line*
11 *either as a part of the roof structure or part of the wall panels as*
12 *described in the next paragraph below. This tie may be designed*
13 *as the edge member of the roof diaphragm but, in any case, shall*
14 *not be less than equivalent to two No. 6 bars continuous. A contin-*
15 *uous tie equivalent to two No. 5 bars minimum shall also be pro-*
16 *vided either in the footing or with an enlarged section of the floor*
17 *slab.*

18
19 *Wall panels of shear wall buildings shall be connected to col-*
20 *umns or to each other in such a manner as to develop at least 75*
21 *percent of the horizontal wall steel. Half of this continuous hori-*
22 *zontal reinforcing may be concentrated in bond or tie beams at the*
23 *top and bottom of the walls and at points of intermediate lateral*
24 *support. If possible, cast in-place joints with reinforcing bars ex-*
25 *tending from the panels into the joint a sufficient distance to meet*
26 *the splice requirements of Section 1912A.15 for Class A shall be*
27 *used. The reinforcing bars or welded tie details shall not be spaced*
28 *over eight times the wall thickness vertically nor fewer than four*
29 *used in the wall panel height. Where wall panels are designed for*
30 *their respective overturning forces, the panel connections need*
31 *not comply with the requirements of this paragraph.*
32

33 Where splicing of reinforcement must be made at points of maxi-
34 mum stress or at closer spacing than permitted by Section
35 1907A.6, welding may be used when the entire procedure is suit-
36 able for the particular quality of steel used and the ambient condi-
37 tions. Unless the welds develop 125 percent of the specified yield
38 strength of the steel used, reinforcement in the form of continuous
39 bars or fully anchored dowels shall be added to provide 25 percent
40 excess steel area and the welds shall develop not less than the spe-
41 cified yield strength of the steel.

42
43 Where reinforcing bars are used to transfer shear across a joint
44 the shear value for bolts set forth in Table 19A-D may be used.

45
46 Wall panels shall be positively connected to all floors and roofs
47 as specified in Sections 1605A, 1611A and 1633A.2.4.2. They
48 shall be connected to the foundations when not anchored to the
49 floor slab or otherwise properly anchored.

50
51 See Sections 1910A.10, 1910A.11, 1910A.12 and 1910A.13 for
52 design of compression forces in the precast walls.