

**WAC 296-155-708 Beams and columns. (1) General.**

(a) During the final placing of solid web structural members, you must not release the load from the hoisting line until the members are secured with at least two bolts per connection. These bolts must be of the same size and strength as shown in the erection drawings, drawn up wrench-tight or the equivalent as specified by the project structural engineer of record.

Exception: See subsection (2) of this section.

(b) A competent person must determine if more than two bolts are necessary to ensure the stability of cantilevered members; if additional bolts are needed, you must install them.

(2) **Diagonal bracing.** You must secure solid web structural members used as diagonal bracing by at least one bolt per connection drawn up wrench-tight or the equivalent as specified by the project structural engineer of record.

(3) (a) **Double connections at columns and/or at beam webs over a column.** When two structural members on opposite sides of a column web, or a beam web over a column, are connected sharing common connection holes, at least one bolt with its wrench-tight nut must remain connected to the first member unless a shop-attached or field-attached seat or equivalent connection device is supplied with the member to secure the first member and prevent the column from being displaced (see Appendix E to this part for examples of equivalent connection devices).

(b) If a seat or equivalent device is used, the seat (or device) must be designed to support the load during the double connection process. It must be adequately bolted or welded to both a supporting member and the first member before the nuts on the shared bolts are removed to make the double connection.

(4) **Column splices.** Each column splice must be designed to resist a minimum eccentric gravity load of 300 pounds (136.2 kg) located 18 inches (.46 m) from the extreme outer face of the column in each direction at the top of the column shaft.

(5) **Perimeter columns.** You must not erect perimeter columns unless:

(a) The perimeter columns extend a minimum of 48 inches (1.2 m) above the finished floor to permit installation of perimeter safety cables prior to erection of the next tier, except where constructibility does not allow (see Appendix D to this part);

(b) The perimeter columns have holes or other devices in or attached to perimeter columns at 42 to 45 inches (107-114 cm) above the finished floor and the midpoint between the finished floor and the top cable to permit installation of perimeter safety cables required by WAC 296-155-716 (1)(b), except where constructibility does not allow. (See Appendix D to this part.)

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060. WSR 16-09-085, § 296-155-708, filed 4/19/16, effective 5/20/16. Statutory Authority: RCW 49.17.010, [49.17].040, and [49.17].050. WSR 02-13-115, § 296-155-708, filed 6/19/02, effective 9/1/02.]