



## Special Inspection is required for the following types of work:

1. **Concrete.** During the taking of test specimens and placing of reinforced concrete. See item 12 for shotcrete.  
**EXCEPTIONS:** 1. Concrete for foundations conforming to minimum requirements of Table 18-I-D or for Group R, Division 3 or Group U Division 1 Occupancies, provided the building official finds that a special hazard does not exist.  
2. For foundation concrete, other than cast-in-place drilled piles or caissons, where the structural design is based on an  $f_c$  no greater than 2,500 pounds per square inch (psi) (17.2MPa).  
3. Nonstructural slabs on grade, including prestressed slabs when effective prestress in concrete is less than 150 psi (1.03 Mpa).  
4. Site work concrete fully supported on earth and concrete where no special hazard exists.
2. **Bolts installed in concrete.** Prior to and during the placement of concrete around bolts when stress increases permitted by Footnote 5 of Table 19-E or Section 1925 are utilized.
3. **Special moment-resisting concrete frame.** As required by Section 1921.9 of this code.
4. **Reinforcing steel and prestressing steel tendons.**
  - 4.1 During all stressing and grouting of tendons in prestressed concrete.
  - 4.2 During placing of reinforcing steel and prestressing tendons for all concrete required to have special inspection by item 1.  
**EXCEPTION:** The special inspector need not be present continuously during placing of reinforcing steel and prestressing tendons, provided the special inspector has inspected for conformance with the approved plans prior to the closing of forms or the delivery of concrete to the jobsite.
5. **Structural welding.**
  - 5.1 **General.** during the welding of any member or connection which is designed to resist loads and forces required by this code.  
**EXCEPTIONS:** 1. Welding done in an approved fabricator's shop in accordance with Section 1701.7.  
2. The special inspector need not be continuously present during welding of the following items, provided the materials, qualifications of welding procedures and welders are verified prior to the start of work; periodic inspections are made of work in progress; and a visual inspection of all welds is made prior to completion or prior to shipment of shop welding:
    - 2.1 Single-pass fillet welds not exceeding 5/16 inch (7.9 mm) in size.
    - 2.2 Floor and roof deck welding.
    - 2.3 Welded studs when used for structural diaphragm or composite systems.
    - 2.4 Welded sheet steel for cold-formed steel framing members such as studs and joists.
    - 2.5 Welding of stairs and railing system.
  - 5.2 **Special moment-resisting steel frames.** During the welding of special moment-resisting steel frames. In addition to item 5.1 requirements above, nondestructive testing as required by Section 1703 of this code.
  - 5.3 **Welding of reinforcing steel.** During the welding of reinforcing steel.  
**EXCEPTION:** The special inspector need not be continuously present during the welding of ASTM A 706 reinforcing steel not larger than No. 5 bars used for embedments, provided the materials, qualifications of welding procedures and welders are verified prior to the start of work; periodic inspections are made of work in progress; and a visual inspection of all welds is made prior to completion or prior to shipment of shop welding.
6. **High-strength bolting.** As required by Chapter 22, Division IV. Such inspections may be performed on a periodic basis in accordance with the requirements of Section 1701.6.
7. **Structural masonry.**
  - 7.1 For masonry, other than fully grouted open-end hollow-unit masonry, during preparation and taking of any required prisms or test specimens, placing of all masonry units, placement of reinforcement, inspection of grout space, immediately prior to closing of cleanouts, and during all grouting operations.  
**EXCEPTION:** For hollow-unit masonry where the  $f_m$  is no more than 1,500 psi (10.34 Mpa) for concrete units or 2,600 psi (17.93 Mpa) for clay units, special inspection may be performed as required for fully grouted open-end hollow-unit masonry specified in item 7.2 below.
  - 7.2 For fully grouted open-end hollow-unit masonry during preparation and taking of any required prisms or test specimens, at the start of laying units, after the placement of reinforcing steel, grout space prior to each grouting operation, and during all grouting operations.  
**EXCEPTION:** Special inspection as required in items 7.1 and 7.2 above need not be provided when design stresses have been adjusted as specified in Chapter 21 to permit noncontinuous inspection.
8. **Reinforced gypsum concrete.** When cast-in-place Class B gypsum concrete is being mixed and placed.
9. **Insulating concrete fill.** During the application of insulating concrete fill when used as part of a structural system.  
**EXCEPTION:** The special inspections may be limited to an initial inspection to check the deck surface and placement of reinforcing. The special inspector shall supervise the preparation of compression test specimens during this initial inspection.
10. **Spray-applied fireproofing.** As required by U.B.C. Standard 7-6.
11. **Piling, drilled piers and caissons.** During driving and testing of piles and construction of cast-in-place drilled piles or caissons. See items 1 and 4 for concrete and reinforcing steel inspection.
12. **Shotcrete.** During the taking of test specimens and placing of all shotcrete and as required by Section 1922.10 and 1922.11.  
**EXCEPTION:** Shotcrete work fully supported on earth, minor repairs and when, in the opinion of the building official, no special hazard exists.
13. **Special grading, excavation and filling.** During earth-work excavation, grading and filling operations inspection to satisfy requirements of Chapter 18 and Appendix Chapter 33 of this code.
14. **Fire-protection system.**
  - 14.1 Smoke-control system.
    - 14.1.1 During erection of ductwork and prior to concealment for the purposes of leakage testing and recording device location.
    - 14.1.2 Prior to occupancy and after sufficient completion for the purposes of pressure difference testing, flow measurements, and detection and control verification.
  - 14.2 Fire-extinguishing systems.
    - 14.2.1 During installation of sprinkler and standpipe systems.  
**EXCEPTION:** The special inspector need not be present continuously during the installation of the sprinkler and standpipe systems, provided that the special inspector has inspected for conformance with the approved plans prior to concealment.
    - 14.2.2 During acceptance tests as required by U.B.C. Standards 9-1, 9-2, and 9-3.
15. **Special cases.** Work which, in the opinion of the building official, involves unusual hazards or conditions.
16. **Sheathed shear walls and diaphragms.**
  - 16.1 Where sheathing edge nail spacing is less than 4 inches on center or in buildings having an Importance Factor (I) greater than 1.
  - 16.2 The following items in connection with such diaphragms and shear walls shall be inspected:
    - 16.2.1 Anchor bolts.
    - 16.2.2 Tie-downs.
    - 16.2.3 Concrete or masonry to diaphragm ties.
    - 16.2.4 Drag strut connections, including diaphragm nailing thereto.
    - 16.2.5 Nailing (size, spacing, nail heads flush with sheathing surfaces).
17. **Complete load path and uplift ties.** Metal connectors, anchors or fasteners for wood and cold-formed steel construction at the following locations: roof ridges, roof rafters to beam or wall supports, beams to posts, posts or walls to floor framing or foundation below, and all other connections that are part of the load path to resist uplift forces.  
**EXCEPTION:** The special inspector need not be present during the installation of all of the connectors, provided that the special inspector verifies that all of the connectors are installed in conformance with the requirements of this code.
18. **Termite protection.** Termite barrier, treated structural lumber, and pipe penetrations for new wood frame residential buildings.

**WAIVER OF SPECIAL INSPECTION.** The building official may waive the requirement for the employment of a special inspector if the construction is of a minor nature. The employment of a special inspector shall not be required for construction work for any government agency that provides its own inspectors.

**PERIODIC SPECIAL INSPECTION.** Some inspections may be made on a periodic basis and satisfy the requirements of continuous inspection, provided this periodic scheduled inspection is performed as outlined in the project plans and specifications and approved by the building official.

**APPROVED FABRICATORS.** Special inspections required by the Building Code shall not be required where the work is done on the premises or a fabricator approved by the building official to perform such work without special inspection. The approval shall be subject to revocation by the building official if it is found that any work done pursuant to the approval is in violation of this code.