



BUILDINGS BULLETIN 2010-020

Technical

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Purpose: This document clarifies the types of fire-resistance-rated construction that are subject to progress inspection, special inspection, or both.

Related Code Section(s): BC 109.3.4 BC 1704.15
BC 1704.11 BC 1704.25

Subject(s): Special inspection, firestop, draftstop and fireblock systems; Special inspection, sprayed fire-resistant materials; Special inspection, mechanical systems; Progress inspection, fire-resistance-rated construction; Sprayed fire-resistant materials; Fire damper; Firestopping; Draftstopping; Fireblocking; Fire-resistance-rated construction; Fire shutters; TR1, special inspection items; TR1, progress inspection items

A. Reference. Building Code section BC 109.3.4, excerpted below, provides a list of work to be inspected as part of the scope of progress inspections of fire-resistance-rated construction:

109.3.4 Fire-resistance-rated construction inspection. *Fire-resistance-rated construction shall be inspected to determine compliance with the approved construction documents, including inspection of the following work:*

1. Fire resistance rated partitions, floors, ceilings, shafts;
2. Fire blocking of concealed spaces;
3. Through-penetration firestopping, draftstopping and fireblocking;
4. Fire dampers;
5. Fire shutters; and
6. Protection of structural members.

Exception: *Work regulated and inspected under Chapter 17.*

In accordance with the above section, items numbered 2, 3, 4 and 6 are types of work regulated as special inspections in accordance with Chapter 17 in addition to the progress inspections required in section BC 109.3.4 (See Section B below). Items numbered 1 and 5 are types of work regulated as progress inspections, and for those items, no additional special inspection is required (See Section C below).

B. Types of work subject to both special inspection and progress inspection.

- i) Section BC 1704.25 requires periodic special inspections of all through-penetration firestopping, draftstopping and fireblocking prior to concealment;
- ii) Section BC 1704.15 requires special inspections of mechanical systems, which includes fire dampers; and
- iii) Section BC 1704.11 requires special inspection of sprayed fire-resistant materials.

The items in Section B (i), (ii) and (iii) above require both special inspections and progress inspections. Where the progress inspector and the special inspector are of the same person, no secondary verification is needed to confirm the required inspections. The progress/special inspector shall fill out sections 3 and 4 of the TR-1 form. Where the progress inspector and the special inspector are of different persons, the progress inspector's only obligation with regards to the aforementioned special inspection items is to track the special inspector's progress through the construction process, typically by reviewing the special inspector's reports, and to confirm that all such required special inspections were performed. The special inspector shall fill out section 3 of the TR-1 form, while the progress inspector shall fill out section 4 of the TR-1 form.

C. Work requiring only progress inspection. Where the scope of work includes fire-resistance-rated construction, but does not involve any through-penetration firestopping, draftstopping, fireblocking, fire dampers, or sprayed fire-resistant materials, only the progress inspection for fire-resistance-rated construction is required. The progress inspector shall fill out section 4 of the TR-1 form.

D. Work involving existing fire-resistance-rated construction. Where the scope of work is limited to firestopping of through penetrations in existing fire-resistance-rated construction and, in the course of work, the cutting away or removal of any part of the existing fire-resistance-rated construction becomes necessary in the general area surrounding the penetration, not to exceed 4 square feet in any given area, only the special inspection is required (TR1 form, section 3). Progress inspection is not required provided that the special inspector also verifies that the removed portion of fire-resistance-rated construction through the course of work has been restored to its original condition. If the cutting away or removal of any part of a fire-resistance-rated construction exceeds 4 square feet in any given area, both the special inspection (TR1 form, section 3) and the progress inspection (TR1 form, section 4) are required.