 Building Division	<h1>FIRE BLOCKING AND DRAFT STOPPING</h1> <p>City of Palo Alto Building Inspection Division 285 Hamilton Ave. Inspection Request: 650 329-2496</p>	Revision Date: 4/27/11
		General Requirements/Checklist for: Residential/ Multi-family/Comm.
		Codes Enforced: 2010 California Building Code Palo Alto Municipal Code (PAMC)
The information provided in this document is general and intended as a guide only. Each project is unique and additional requirements may be enforced as deemed appropriate.		

Application

- Fire blocking and draft stopping shall be installed in combustible concealed construction. *CBC 717.1*

Fire Blocking: (* New code requirements)

- See attached fire blocking illustrations
- ☐ Fire blocking materials: 2x or two thicknesses of 1x lumber w/broken lap joints. Nonrigid batts or blankets of mineral wool or glass fiber may be used with the 10' horizontal fireblocking in walls constructed using parallel rows of studs or staggered studs. *CBC 717.2.1*
- ☐ Fire blocking at exterior furred out columns, 10' vertical and horizontal.
- ☐ Fire blocking at intersections of furred soffits, trayed, dropped or coved ceilings. *CBC 717.2.3*
- ☐ Fire blocking in concealed spaces between stair stringers at top and bottom of run. *CBC 717.2.4*
- ☐ Fire blocking for furred construction at fire rated walls such as dwelling and garage separation: dropped ceilings and set-out/furred walls shall be fire blocked a maximum of 8' in any direction. *CBC 803.4.1, 803.4.2*
- ☐ *Fire blocking is required in concealed and furred wall spaces vertically at the ceiling and floor levels and horizontally at intervals not exceeding 10'. (10' vertical no longer req.) *CMC 717.2.2*
- ☐ ***Chimney:** Min. 1" thick noncombustible fire blocking securely fastened between wood framing and masonry chimney and shall be supported on metal lath and no closer than 2" clearance from chimney to framing. See [\[Figure A-7\]](#) *CBC 2111.12, 2113.20*

Draft stopping: (*New code requirements)

- See attached Draft stopping illustrations.
- ☐ Required when open web floor and roof trusses are installed in group R-2 buildings with three or more dwelling units and shall be located above and inline with the dwelling unit and sleeping unit separations.
- ☐ Draft stopping Materials: min. ½" drywall, 1x wood, cement fiber board, mineral wool or glass fiber adequately supported. *CBC 717.3.2, 717.3.1*
- ☐ *Draft stopping Exception: Automatic sprinklers throughout building and in combustible concealed spaces. *CBC 717.3.2 exception 1,2.*

Fire blocking at ceiling and floor penetrations, and top and bottom of walls:

- ☐ Penetration Materials: Approved foam and caulking shall be certified materials that resist the free passage of flame and the products of combustion (Such as Touch 'n Seal Gun Foam II or listed fire blocking caulk). *CBC 717.2.5, 712.4.2.2*
- ☐ Fire blocking shall be installed at openings around vents, pipes, tub & shower traps, ducts, chimneys and fireplaces at ceiling and floor levels with approved materials. *CBC 717.2.5, 712.4.2.2*

COMMERCIAL

Frequently missed

- ☐ Verify fire blocking and caulking at all exit corridors.

☒ MULTI FAMILY:**Partition wall outlet boxes:**

- ☐ **Horizontal separation** between outlet boxes on opposite sides of the wall may not be less than 24" and not allowed in the same bay vertically. See [\[FIGURE A-1\]](#)

Exception:

- May be less than 24" (not back to back/shadowing) when using listed putty pads.
- ☐ **Back to back outlet** boxes are not allowed. See [\[FIGURE A-3\]](#)

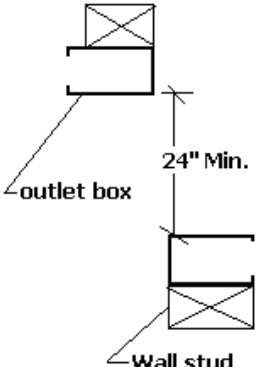
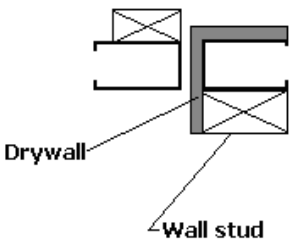
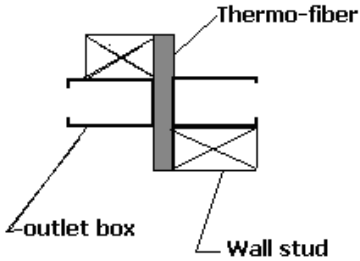
Exceptions:

- Horizontal separation may be less than 24" provided one of the outlet boxes is boxed out with drywall. See [\[FIGURE A-2\]](#)
- Stuff one block of thermo-fiber between back to back receptacles.

Putty pad installation recommendation:

- Clean electrical box, Spray-Glue the box and attach putty pad.

TOP VIEW
MULTI FAMILY PARTITION WALLS
(OUTLET BOX SEPARATION)

FIGURE A-1	FIGURE A-2	FIGURE A-3
<p>Partition wall outlet box min. 24" horizontal separation.</p> 	<p>Back to back outlet boxes are allowed provided one of the outlet boxes is boxed out with drywall.</p> 	<p>Back to back outlet boxes are allowed provided one block of thermo-fiber is placed between outlet boxes.</p> 

See Venders and Services in back of book for local fire blocking materials

Figure A-7

FIREPLACE FIREBLOCKING

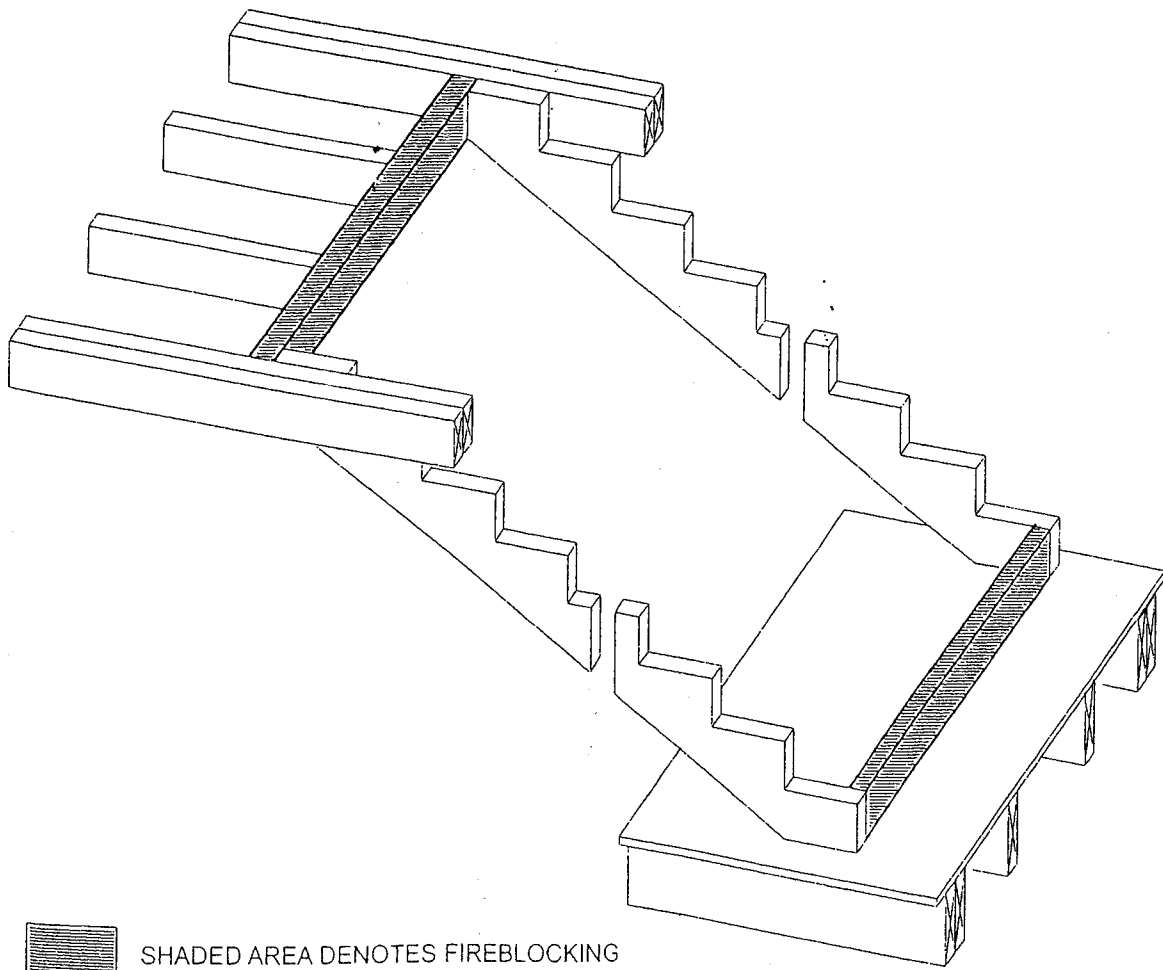
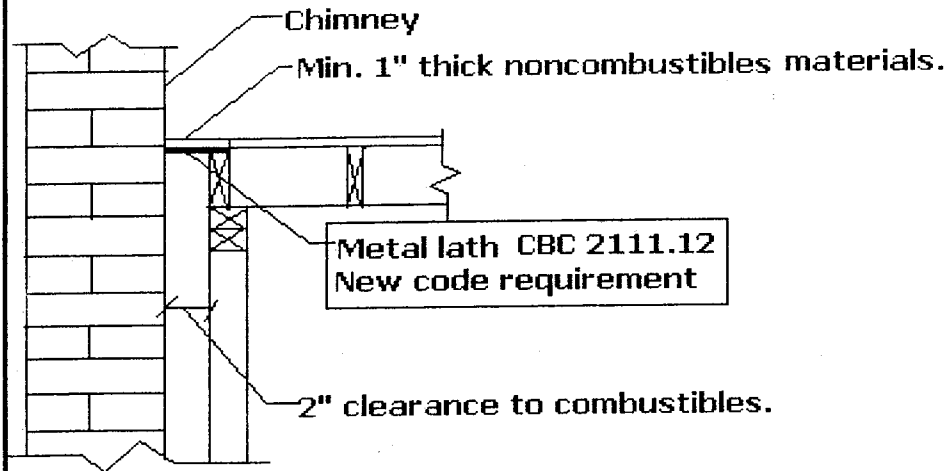


Figure 717.2.4
FIREBLOCKING—STAIRS

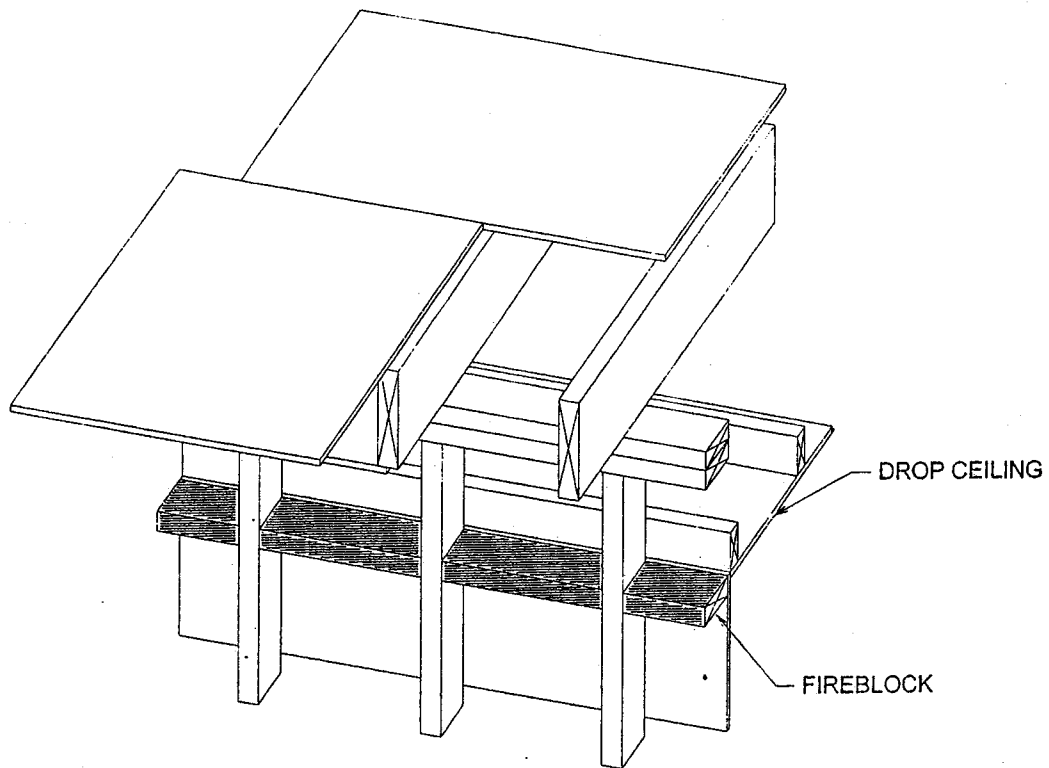


Figure 717.2.3(2)
FIREBLOCKING—DROP CEILINGS

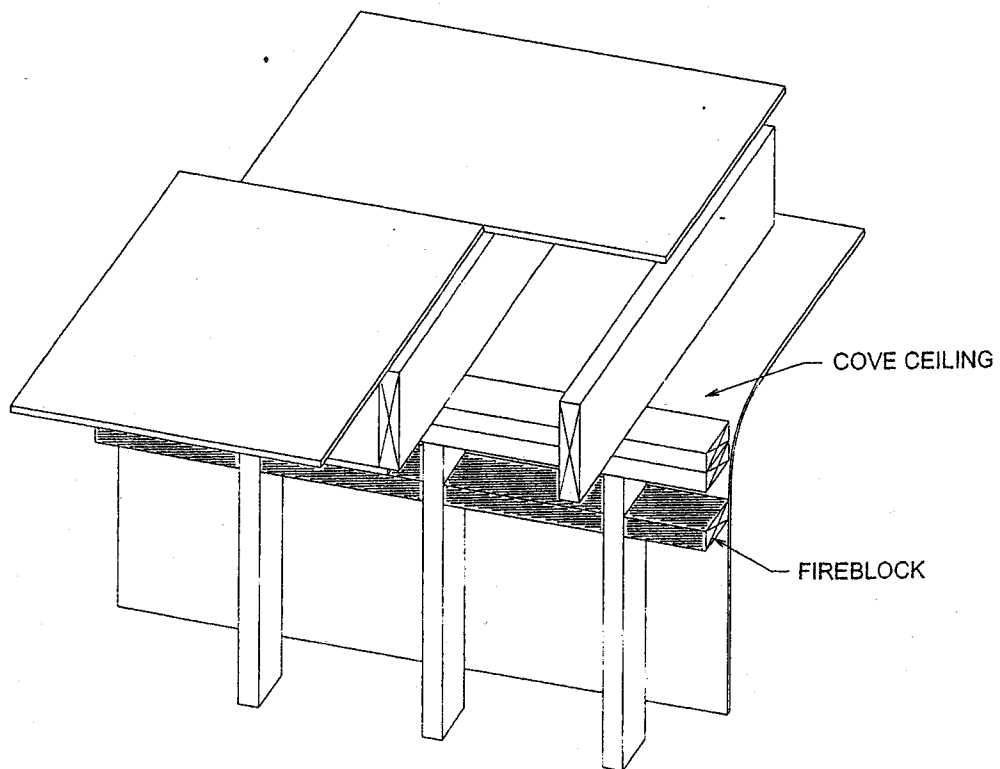
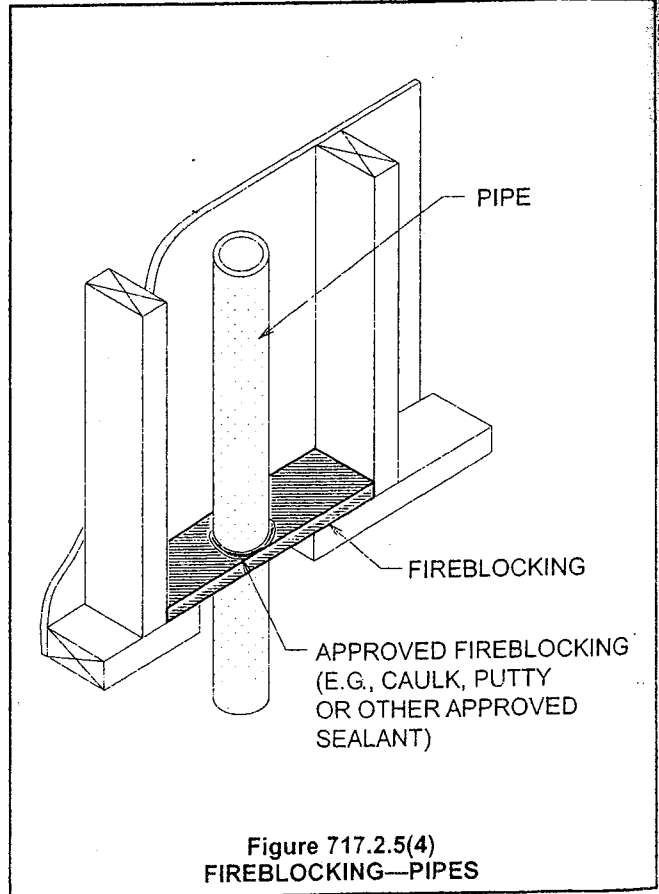
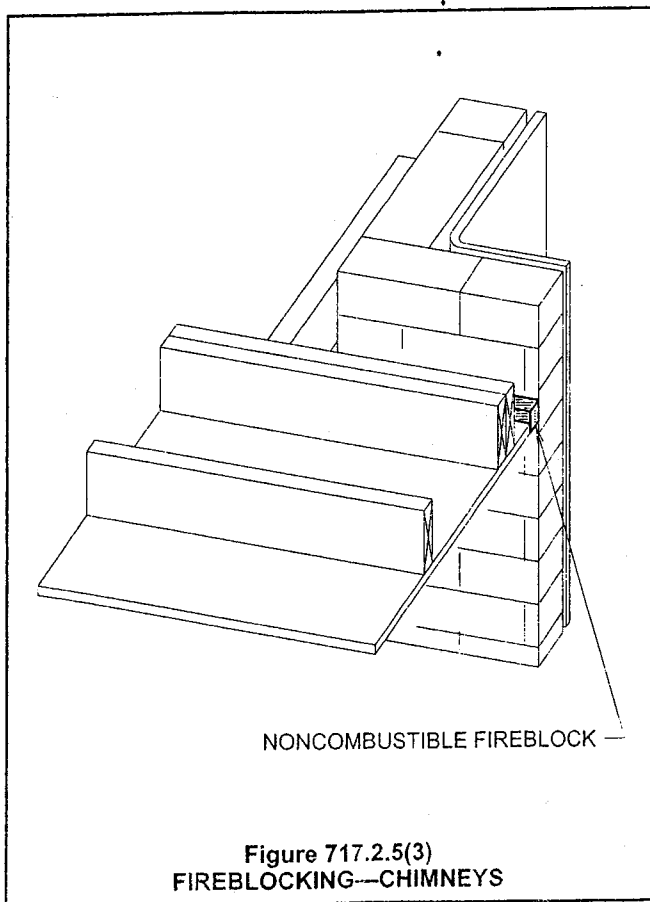
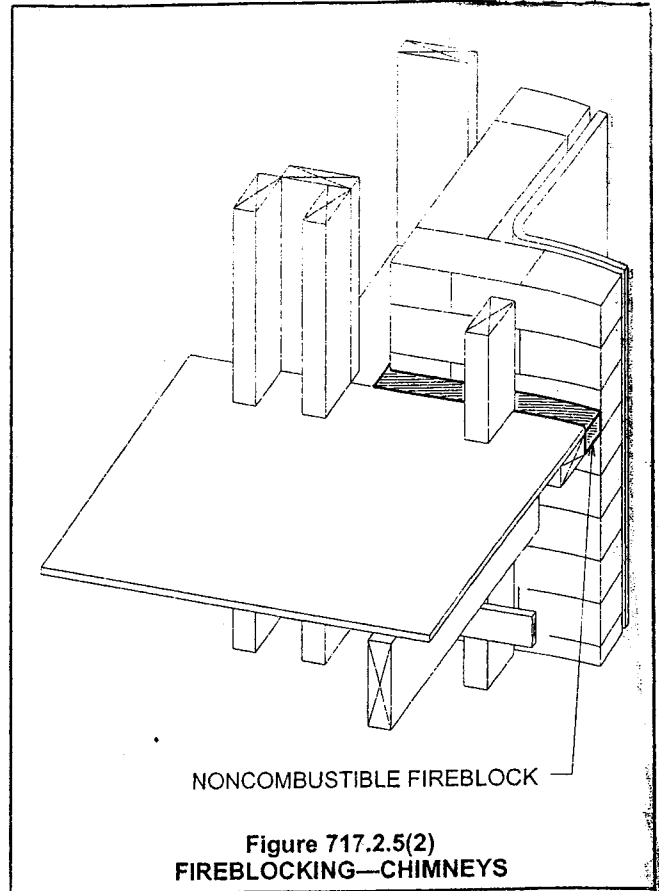
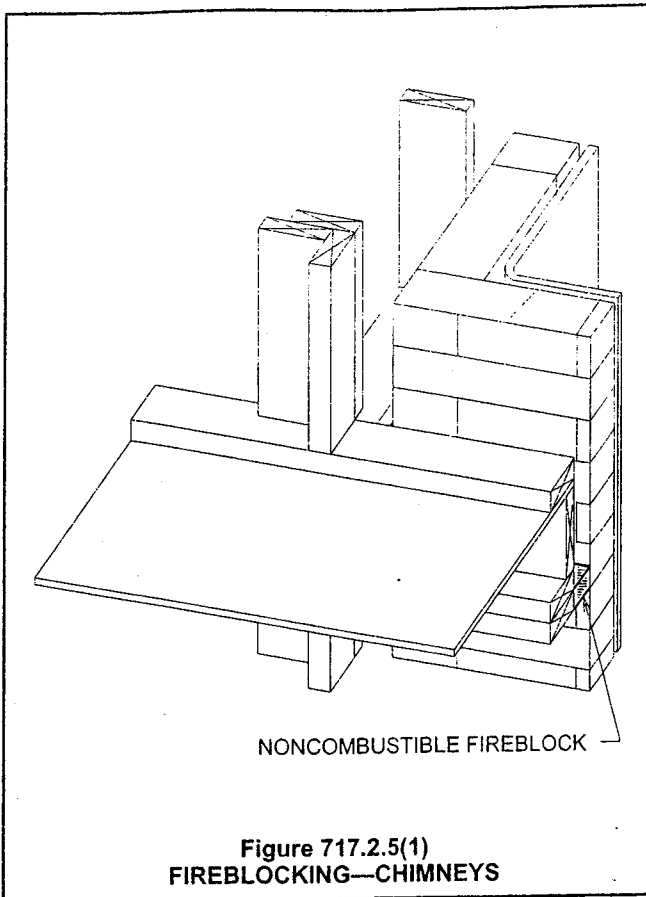
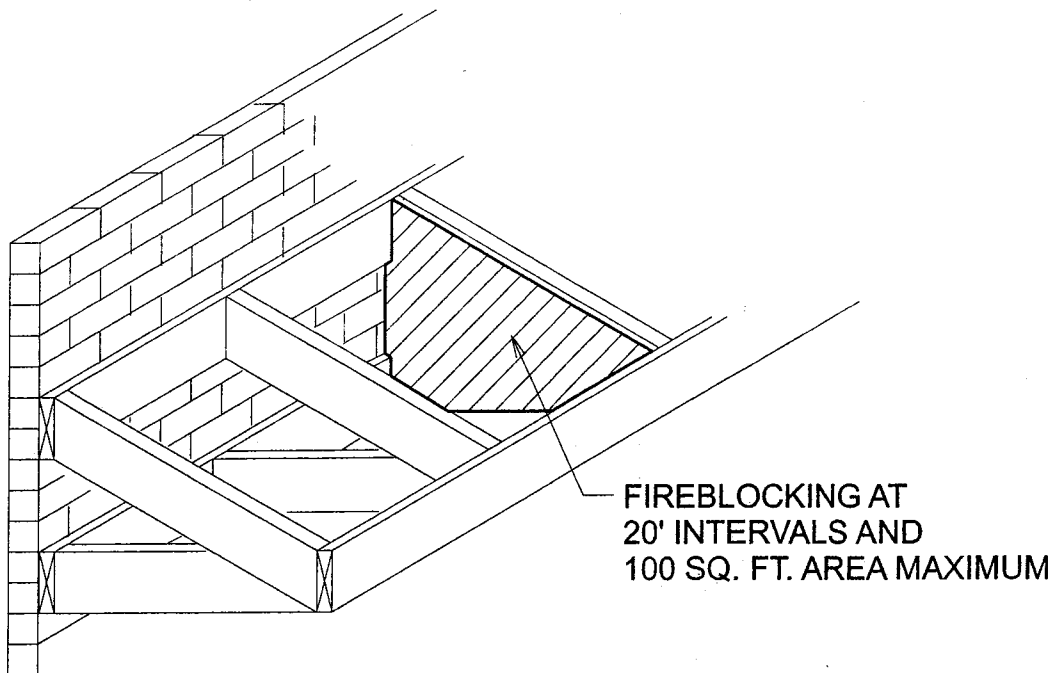


Figure 717.2.3(3)
FIREBLOCKING—COVE CEILING



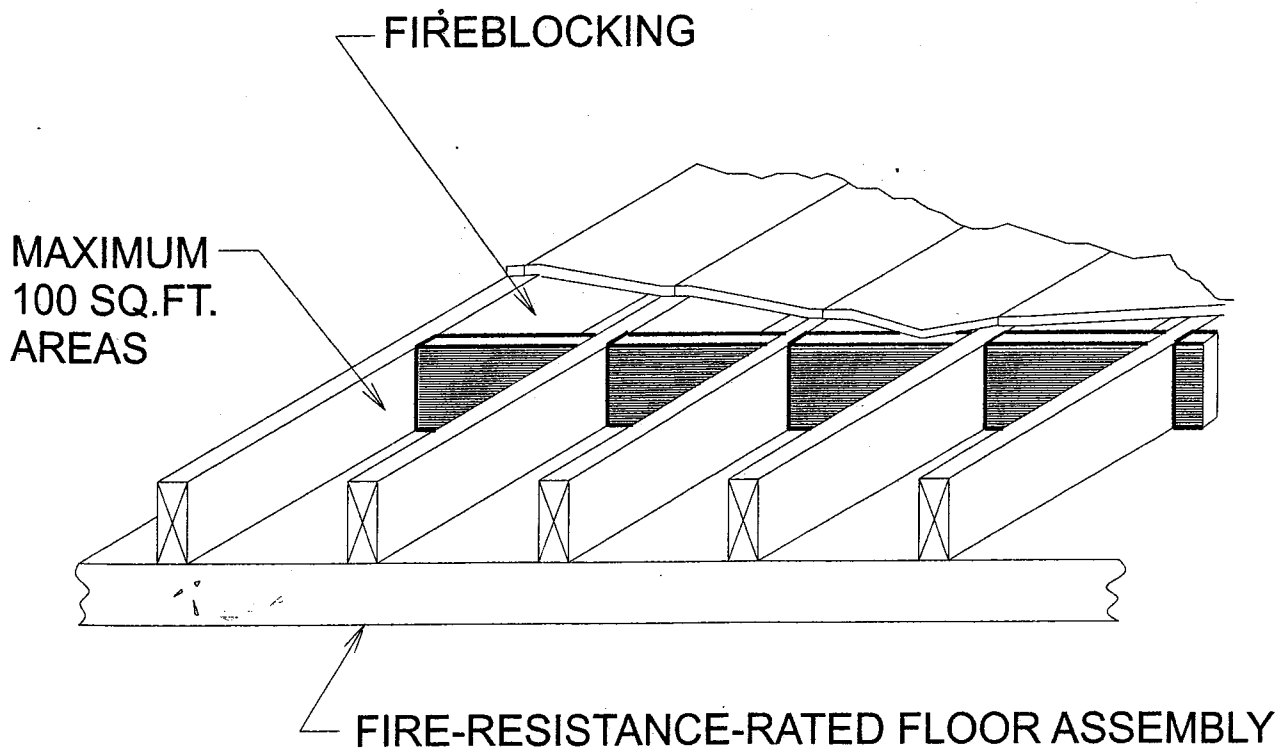


FIREBLOCKING AT
20' INTERVALS AND
100 SQ. FT. AREA MAXIMUM

FIREBLOCKING USED EVERY 20' IN AN EXTERIOR CORNICE

For SI: 1 foot = 304.8 mm, 1 square foot = 0.0929 m².

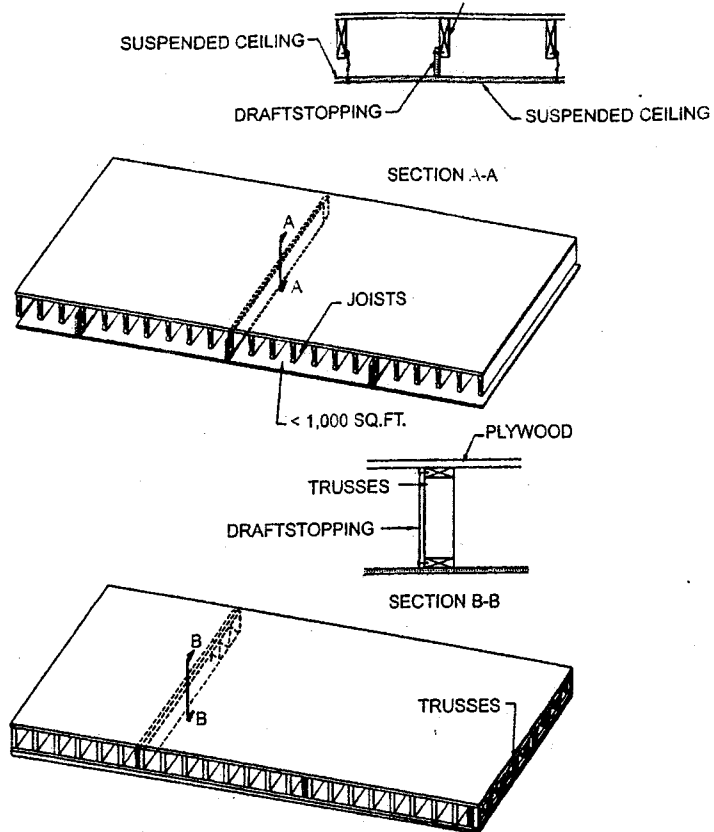
Figure 717.2.6
FIREBLOCKING—ARCHITECTURAL TRIM



FIRE-RESISTANCE-RATED FLOOR ASSEMBLY

For SI: 1 square foot = 0.0929 m².

Figure 717.2.7
FIREBLOCKING—CONCEALED FLOOR SPACES



For SI: 1 square foot = 0.0929 m².

Figure 717.3.3
DRAFTSTOPPING—CONCEALED FLOOR SPACES, OTHER GROUPS

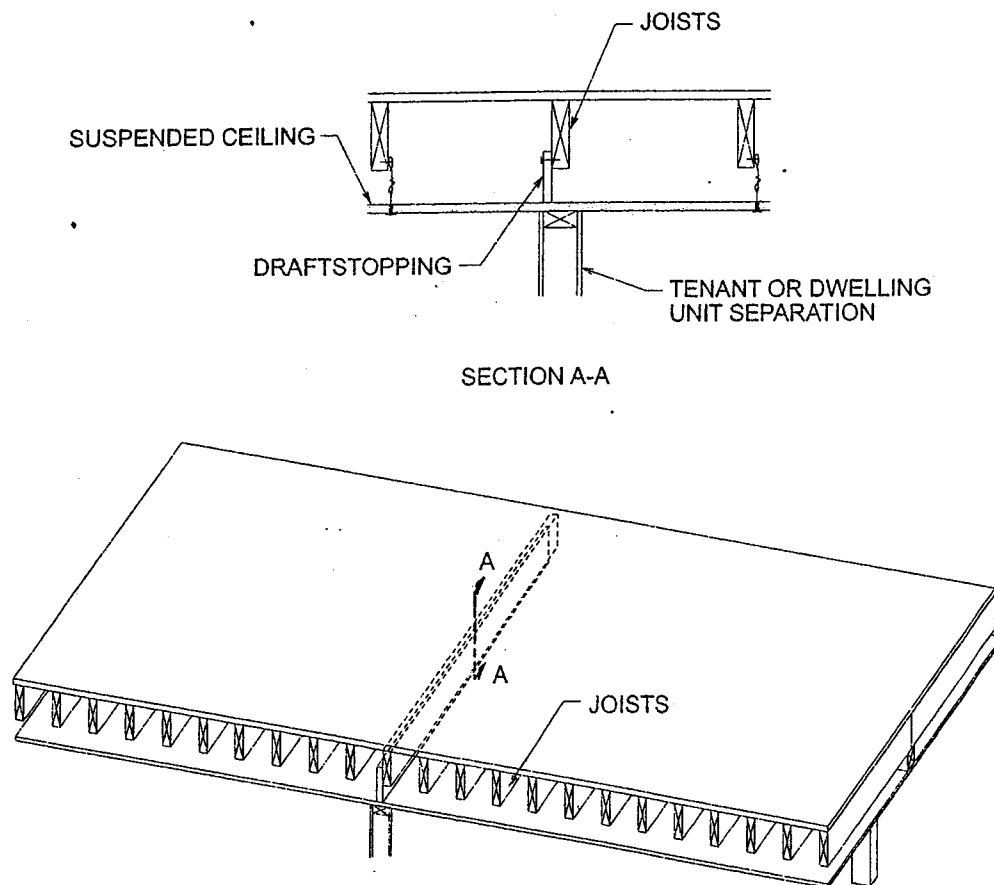


Figure 717.3.2
DRAFTSTOPPING—GROUPS R-1, R-2, R-3 AND R-4 AT TENANT AND DWELLING UNIT SEPARATIONS