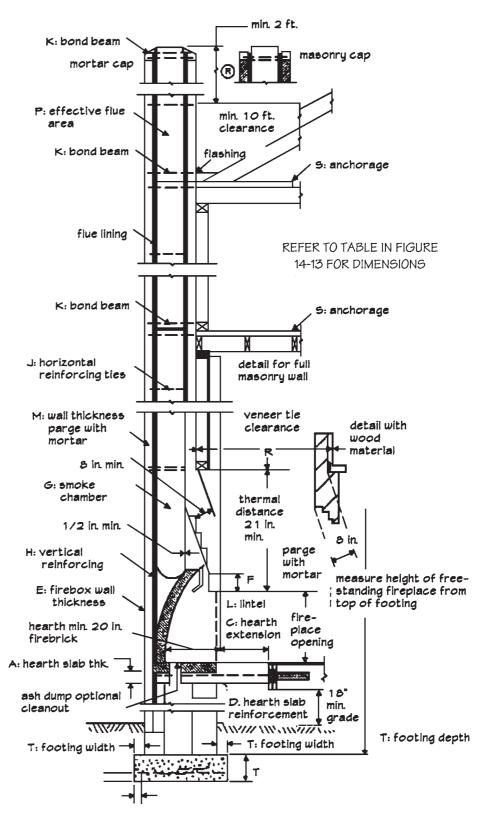
14.2 Fireplaces 459

Masonry Fireplace and Chimney Requirements		
item	Letter Designation§	Requirements
Hearth and hearth extension thickness	А	4 in. minimum thickness for hearth, 2 in. minimum thickness for hearth extension
Hearth extension (each side of opening)	В	8 in. for fireplace opening less than 6 sq.ft; 12 in. for fireplace opening equal to or greater than 6 sq.ft.
Hearth extension (front of opening)	С	16 in. for fireplace opening less than 6 sq.ft; 20 in. for fireplace opening equal to or greater than 6 sq.ft.
Firebox dimensions	D	20 in. minimum firebox depth; 12 in. minimum firebox depth for Rumford fireplaces
Hearth and hearth extension reinforcing	D	Reinforced to carry its own weight and all imposed loads
Thickness of firebox wall	E	10 in. solid masonry or 8 in. where firebrick lining is used
Distance from top of opening to throat	F	8 in. minimum
Smoke chamber wall thickness dimensions	G	6 in. lined; 8 in. unlined; not taller than opening width; walls not inclined more than 45 degrees from vertical for prefabricated smoke chamber lining or 30 degrees from vertical for corbeled masonry
Chimney vertical reinforcing	н	Four No. 4 full-length bars for chimney up to 40 in. wide; add two No. 4 bars for each additional 40 in. or fraction of width, or for each additional flue
Chimney horizontal reinforcing	J	1/4 in. ties at each 18 in. and two ties at each bend in vertical steel
Bond beam	к	As determined by design.
Fireplace lintel	L	Noncombustible material with 4 in. bearing length at each side of opening
Chimney walls with flue lining	M	4 in. thick solid masonry with 5/8 in. fireclay liner or equivalent; 1/2 in. grout or air space between fireclay liner and wall
Effective flue area (based on area of fireplace opening and chimney)	Р	See graph in Figure 14-16
Clearances from chimney from fireplace combustible trim or materials above roof	R	2 in. interior, 1 in. exterior 2 in. back or sides 6 in. from opening 3 ft. above roof penetration, 2 ft. above any part of structure within 10 ft.
Anchorage strap number embedment into chimney fasten to bolts Footing	S T	3/16 in. x 1 in. two 12 in. hooked around outer bar with 6 in. extension four joists two 1/2 in. diameter
thickness width		12 in. minimum 6 in. each side of fireplace wall

<sup>§</sup> See section drawings on following pages.

**Figure 14-13** Masonry fireplace and chimney details and dimension requirements. (*From* International Building Code 2003.)



**Figure 14-14** Section detail, fireplace on wood framing. (*From* International Building Code 2003.)