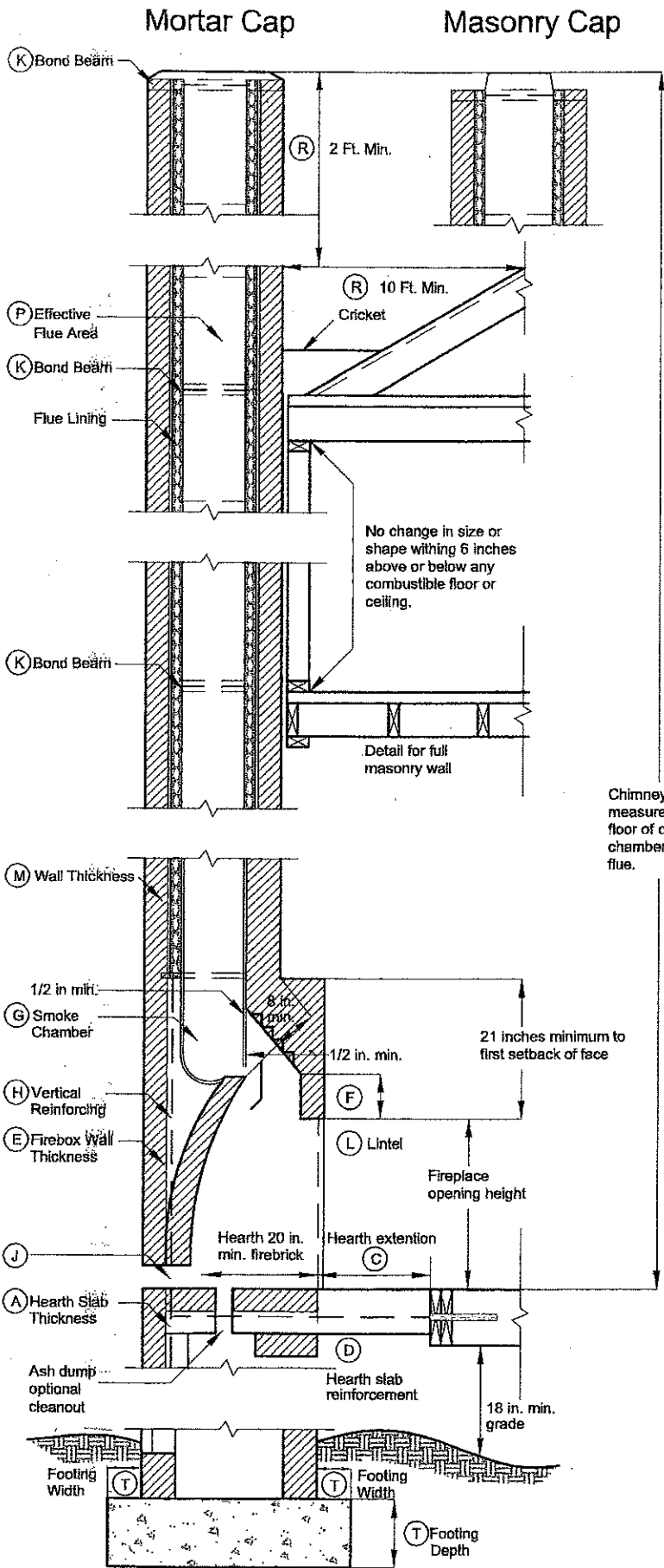


REQUIREMENTS FOR NON LOADBEARING MASONRY FIREPLACES AND CHIMNEYS PER IRC CHAPTER 10 & IBC SECTION 2111

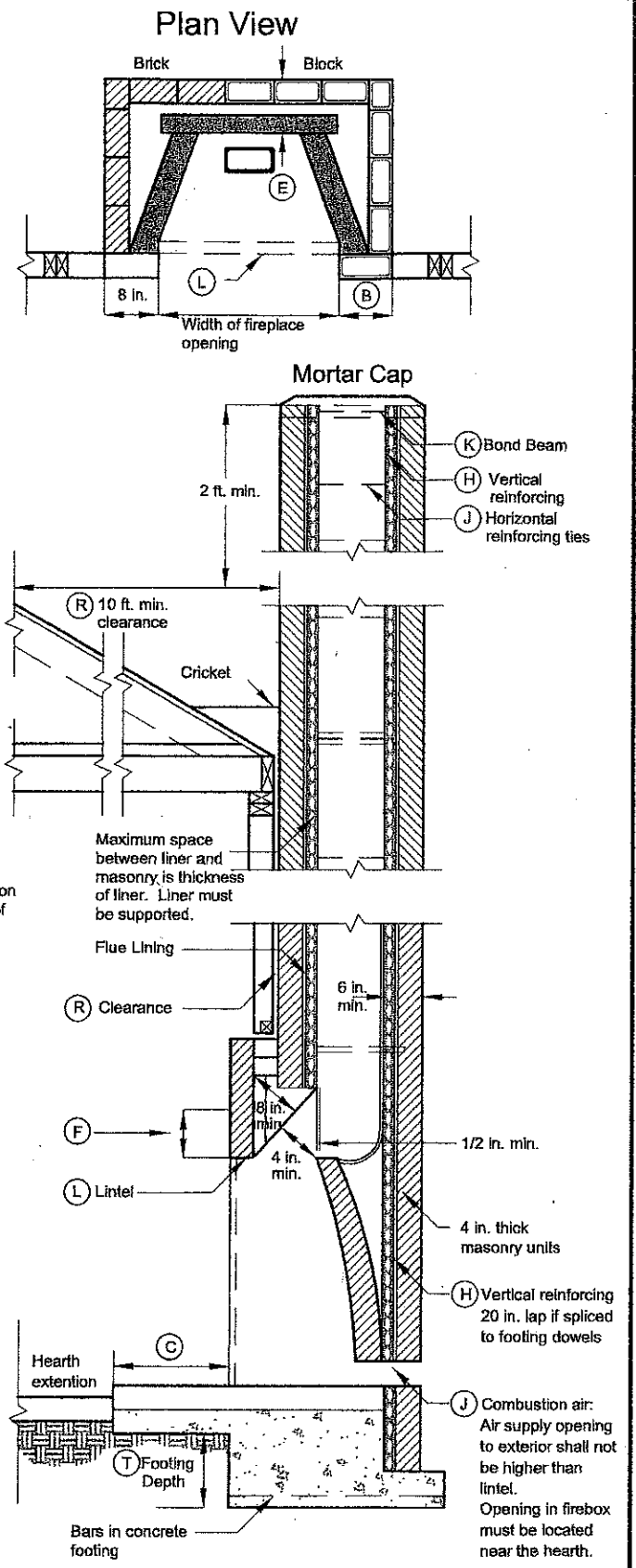
ITEM	LETTER	REQUIREMENTS
Hearth & hearth extension slab thickness	A	4" min for hearth 2" min for heath extension
Hearth extension (each side of opening)	B	8" fireplace opening < 6 sq. ft. 12" fireplace opening ≥ 6 sq. ft.
Hearth extension (front of opening)	C	16" fireplace opening < 6 sq. ft. 20" fireplace opening ≥ 6 sq. ft.
Hearth slab reinforcing	D	Reinforced to carry its own weight and all imposed loads.
Thickness of wall of firebox	E	10" solid brick or 8" where a firebrick lining is used. Joints in firebrick 1/4" max.
Distance from top of opening to throat	F	8" min
Smoke chamber wall thickness	G	6" lined; 8" unlined
Chimney vertical reinforcing	H	#4 at corners and 16" o.c.
Outside Air (a)	J	Minimum 2 -4 inch diameter openings. Source of outside air must not be higher than top of lintel
Bond beams	K	#4 at top of firebox, top of chimney, and 48" o.c.
Firebox lintel	L	Noncombustible material
Chimney walls with flue lining	M	4" thick solid masonry with 5/8" fireclay liner; 1/2" air-space between liner and block.
Distances between adjacent flues	Not shown	4" min
Effective flue area (based on area of fireplace opening)	P	Per Section R 1001.12 (c)
Clearances Combustible material (b) Chimney termination	R	See footnote and/or Section 3' at roofline and 2' at 10'
Tight Fitting Doors	Not shown	Required
Footing Thickness Width	T	12" min. 6" each side of fireplace wall
Spark Arrestor	Not shown	3/8" - 1/2" openings
Decorative Shrouds	Not shown	Prohibited on metal chimneys unless listed for application
Chimney Cricket	Shown	Per Section R1001.17

NOTE: This table provides a summary of major requirements for the construction of masonry chimneys and fireplaces. Attached Figure shows examples of typical construction. This table does not cover all requirements, nor does it cover all aspects of the indicated requirements.

- a. The exterior air intakes shall not be located at an elevation higher than the lintel. The air outlets in the firebox shall be placed near the hearth slab
- b. 4" behind firebox, 2" to chimney and sides of firebox. Contact permitted when walls of firebox or chimney are at least 12" and solid grouted.
- c. Chimney flue sizes must be adjusted for the altitude; typically a 5% increase is needed for every 1000 ft above sea level.



Brick Firebox and Chimney - Sectional Side View on Wood Floor



Brick Firebox and Chimney - Sectional Side View on Concrete Slab

Fireplace and Chimney Details