

Residential Brickwork

OCEOA

August 15, 2019

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The Belden Brick Company



















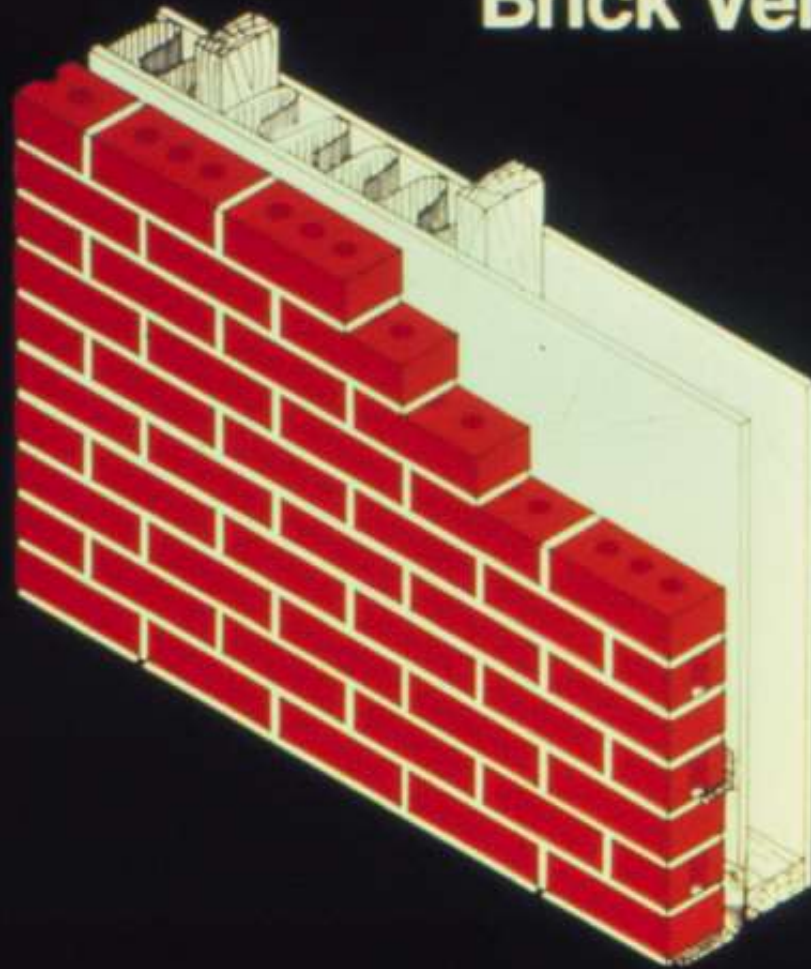


Ohio Residential Code (ORC)





Brick Veneer Wall



Masonry Veneer

Height of masonry limited to 30 feet
above foundation and 38 feet at
gables

SDC A B & C



Anchorage

Corrugated Ties - 1" air space

Wire Ties - 4 1/2" air space



Anchorage

Spacing @ 32in OC Horizontal

24in OC Vertical

1 tie per 2 2/3 sq ft wall area

Additional at 3' centers

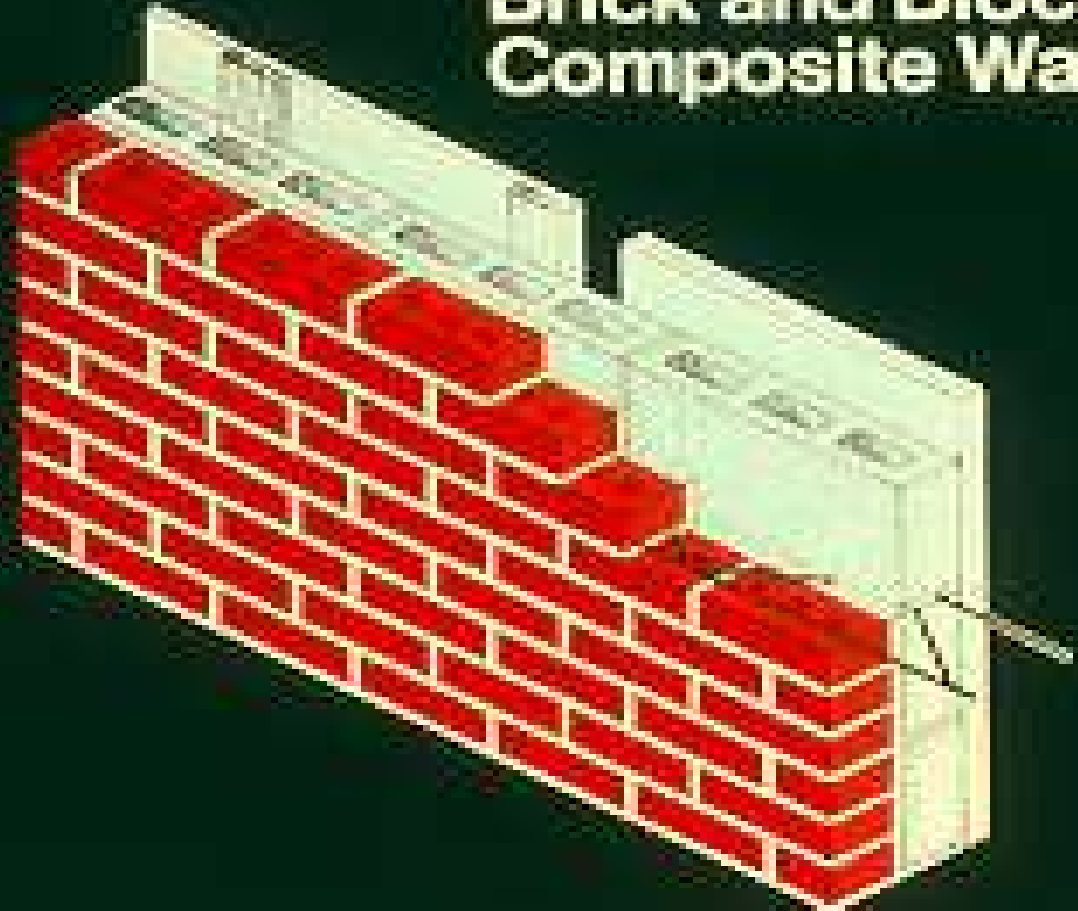
Within 12" of Opening

Flashing

Base of Wall



Brick and Block Composite Wall













Flashing

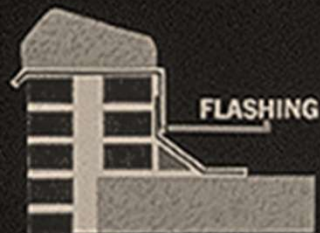
Atop window/door openings

Chimney/wall intersections

Copings and Sills

Wall/roof intersections

FLASHING—CRITICAL POINTS



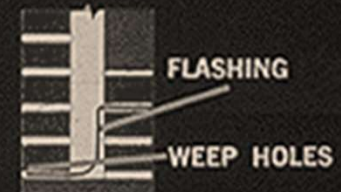
TOP OF
CAVITY



OVER
OPENINGS



WINDOW
SILLS



BOTTOM OF
CAVITY

ELEVATION AT WEEP HOLES

















Weepholes

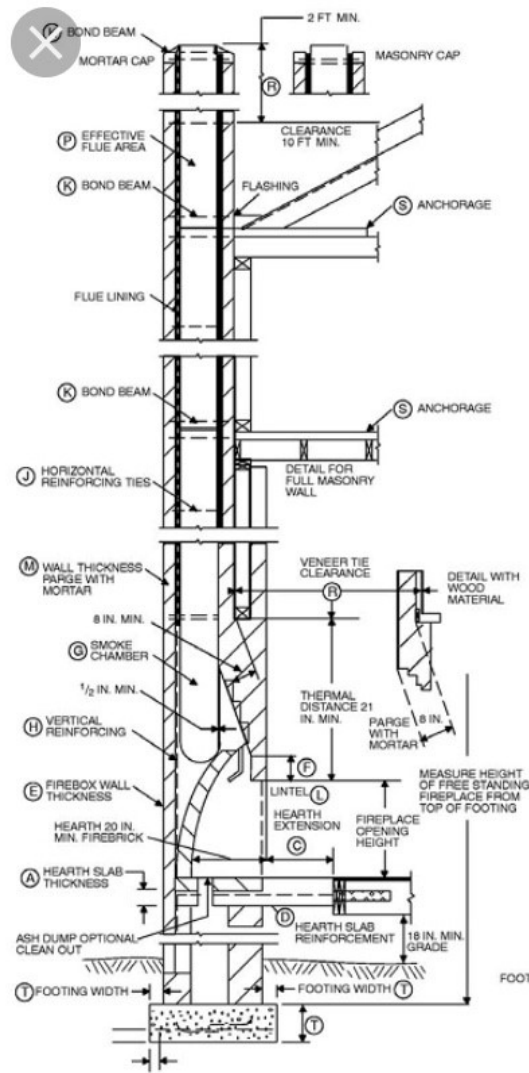
Required at 33 inches OC



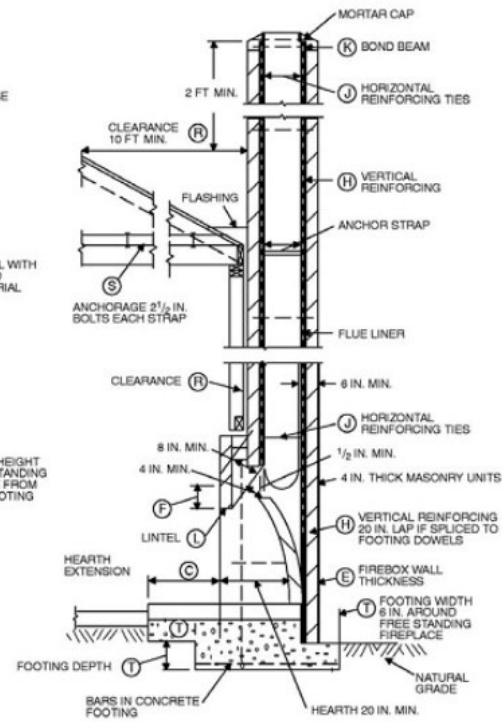
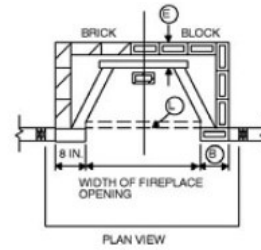




Fireplaces and Chimneys



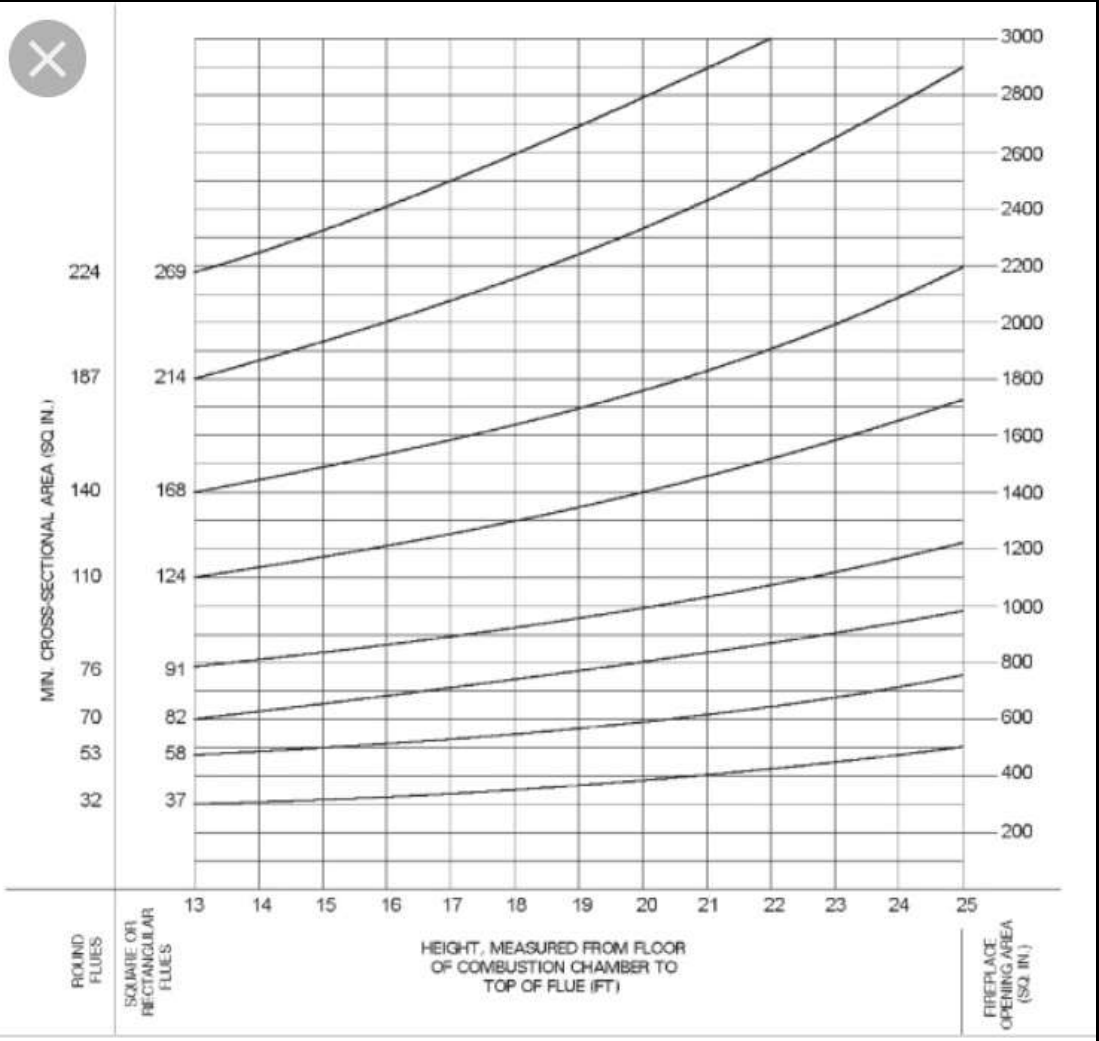
BRICK FIREBOX AND CHIMNEY—
SECTIONAL SIDE VIEW ON WOOD FLOOR



BRICK FIREBOX AND BLOCK CHIMNEY—
SECTIONAL SIDE VIEW ON CONCRETE SLAB

TABLE 1001.1
SUMMARY OF REQUIREMENTS FOR
MASONRY FIREPLACES AND CHIMNEYS

ITEM	LETTER ^a	REQUIREMENTS
Hearth slab thickness	A	4"
Hearth extension (each side of opening)	B	8" fireplace opening < 6 square feet. 12" fireplace opening ≥ 6 square feet.
Hearth extension (front of opening)	C	16" fireplace opening < 6 square feet. 20" fireplace opening ≥ 6 square feet.
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" maximum.
Distance from top of opening to throat	F	8"
Smoke chamber wall thickness	G	6"
Unlined walls		8"
Chimney Vertical reinforcing ^b	H	Four No. 4 full-length bars for chimney up to 40' wide. Add two No. 4 bars for each additional 4' or fraction of width or each additional flue.
Horizontal reinforcing	J	1/4" ties at 18" and two ties at each bend in vertical steel.
Bond beams	K	No specified requirements.
Fireplace lintel	L	Noncombustible material.
Chimney walls with flue lining	M	Solid masonry units or hollow masonry units grouted solid with not less than 4-inch nominal thickness.
Distances between adjacent flues	—	See Section 1003.13.
Effective flue area (based on area of fireplace opening)	P	See Section 1003.15.



ROUND FLUES

SQUARE OR RECTANGULAR FLUES

HEIGHT, MEASURED FROM FLOOR OF COMBUSTION CHAMBER TO TOP OF FLUE (FT)

FIREPLACE OPENING AREA (SQ. IN.)







