

**SECTION****23.0.0 Chimneys****23.1.0 Design and Construction**

Design and construct chimneys to be structurally safe, sound, durable, smoke tight, and capable of withstanding action of flue gases.

**23.2.0 Height of Chimneys**

The top of all residential chimneys shall extend not less than two feet six inches (2' 6") above every roof ridge or wall, and not less than three feet (3' 0") above every flat roof surface. Said height limitations shall apply to any point of the building within 15 feet or any point of an adjacent building within 10 feet from the chimney. **(Ord. #639, 1/16/78)**

**23.3.0 Residential Chimneys****23.3.1 Materials**

Chimneys for other than gas-burning heating units and appliances shall be constructed of reinforced concrete or approved masonry with the units laid in a full bed of mortar with all joints filled solid with mortar. Hollow masonry units shall not be used in the construction of chimneys except as hereinafter provided.

**23.3.2 Chimneys - Not Exceeding Two Stories (25' 0") in Height**

The outer wall of the building, when of hollow masonry units, may serve as the outer chimney wall, which shall be not less than eight inches (8") in thickness. The remaining walls of the chimney shall be a minimum of two layers of four-inch (4") hollow units set with joints staggered both ways or may be built of solid masonry.

**23.3.3 Chimney Walls and Flues**

The walls of chimneys shall be not less than eight inches (8") in thickness except that in residential buildings not exceeding two (2) stories in height, chimneys having walls of solid hard-burned brick, may be a minimum of four inches (4") in thickness, but with a tile liner, provided that the total flue area is not more than one hundred sixty (160) square inches. In a masonry chimney having more than one flue, each separate flue is considered a chimney.

**23.3.4 Flues Over 400 Square Inches in Area**

For chimneys having a single flue with an area greater than 400 square inches, the design of such chimneys shall conform to the provisions of Section 40 through 46 of the National Building Code of the American Fire Insurance Association, copies of which are on file with the Village Clerk

**23.3.5 Flue Connections to Fireplaces, Heating Appliances and to Water Heaters**

There shall be separate flues of proper area for each fireplace and each heating appliance having a smoke pipe or vent outlet, except that a vent not exceeding thirteen (13) square inches, from a gas-fired water heater, may connect with the same flue as a heating appliance smoke pipe, providing the connection is made above the smoke pipe.

**23.3.6 Chimney and Flue Linings**

All chimneys shall be lined throughout with fire-clay flue lining; except that in chimneys having solid brick walls of twelve inches (12") or more in thickness, the flue lining may be omitted for other than flues or gas-fired equipment; which shall have vitrified tile or acceptable metal flue liners. Flue linings shall be at least five-eighths inches (5/8") thick, suitable for the purpose and adapted to withstand high temperature and the resultant gases or conditions from burning fuel. Flue linings shall be set in place integrally with the chimney walls and all spaces between the masonry and the lining shall be filled solid with mortar. Linings in chimneys for gas fired heating units and appliances

may be of stainless steel of the gauge and type recommended by the gas supplier. Linings shall start at least eight inches (8") below the center line of the smoke pipe intake, or, for fireplaces, from the apex of the smoke chamber, and shall be continuous for the entire height of the chimney.

#### **23.4.0 Chimney Construction - Separation from Combustible Construction**

##### **23.4.1 Framing Members**

Framing members of every type shall be separated not less than two inches (2") from any chimney.

##### **23.4.2 Fire-stopping**

Air spaces around chimneys shall be fire-stopped at each floor level with strips of cement asbestos board, mineral insulation board, or other non-combustible material.

##### **23.4.3 Flooring of Roofs**

Sub-flooring, flooring and roof sheathing shall be separated from chimneys by at least one inch (1") of air space.

##### **23.4.4 Furring Strips**

Furring strips, not wider than one and one-half inches (1 1/2") may be installed with zero clearances at corners of masonry chimneys. Other wood furring shall be separated from chimney masonry by not less than 1/2" of gypsum sheetrock.

#### **23.5.0 Clean-Out Doors for Chimneys**

A clean-out door shall be provided at the bottom of chimneys serving solid-fuel burning equipment. In no case shall a clean-out door be installed in a crawl space. All clean-out doors must be accessible from a 6'-0" basement or from the exterior of the building.

#### **23.6.0 Chimney Caps**

Chimney caps shall be provided, of concrete or other permanent, non-combustible material. Chimney cap shall be sloped from flue to outside edge. Minimum thickness of concrete cap at outside edge shall be two inches (2").

#### **23.7.0 Chimney Connectors (Smoke pipes)**

Smoke pipes for appliances using solid or liquid fuel, and vent connectors for gas-fired incinerators, or gas appliances, without draft hood, shall be constructed of corrosion-resistant and heat-resistant material but not less than 24 gauge galvanized steel.

#### **23.8.0 Gas-Fired Chimneys and Flues**

Use of pre-fabricated chimneys, of insulated metal wall construction at least equal to Van Packer Chimneys of 1969 design, will be permitted for inside use only, two-story and one-story residences, providing two inch (2") clear space is maintained around chimneys, and provided all other requirements in this ordinance are complied with. Flue details and flue linings for gas-fired heating equipment shall be in accordance with the requirements of the Northern Illinois Gas Company in effect on December 31, 1969, a certified copy of which is on file with the Village Clerk. All pre-fabricated chimneys shall bear the label of Underwriters' Laboratories, Inc.