

ing a buckled flexible joint between, as indicated in Plate I; or by similar strips of metal nailed to the woodwork with the inner edge close to the chimney. See Plate V.

3. No wooden studding, furring, lathing, or plugging shall be placed against any chimney, or in the joints thereof. Wooden construction shall either be set away from the chimneys, or the plastering shall be directly on the masonry or on metal lathing or on incombustible furring material. Wood furring strips placed around chimneys to support base or other trim shall be insulated from the masonry by asbestos paper, at least $\frac{1}{8}$ in. thick, and metal wall plugs or approved incombustible nail holding devices attached to the wall surface shall be used for nailing. See Plate V.

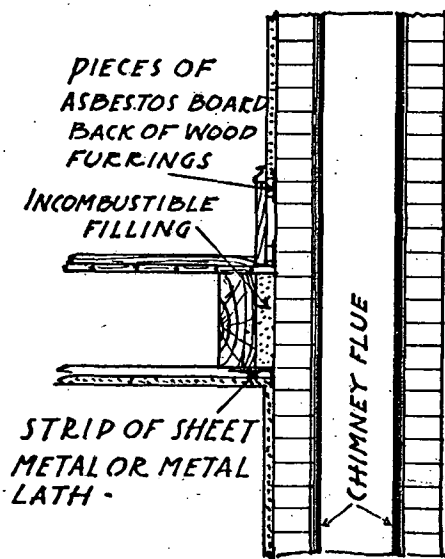


PLATE V.

Detail showing support for fire-stopping around chimney, and protection for woodwork placed next to plaster on chimney brickwork.

4. The walls of fireplaces shall never be less than 8 in. thick, and if built of stone the minimum thickness shall be 12 in.

5. All fireplaces and chimney breasts shall have trimmer arches or other approved fire-resistive construction supporting hearths. The arches and hearths shall be at least 20 in. wide measured from the face of the chimney breast. The arches shall be of brick, stone or hollow tile, not less than 4 in. thick. A flat stone or a reinforced concrete slab may be used to carry the hearth instead of an arch if it be properly supported and a suitable fill be provided between it and the hearth. The length of trimmer arches and hearths shall be not less than 24 in. longer than the fireplace opening. Hearths shall be of brick, stone, tile, or concrete as may be specified. Wood centering under a trimmer arch shall be removed before plastering the ceilings beneath.

6. No coal burning heater shall be placed in a fireplace which does not conform to the foregoing requirements and have an incombustible mantel.

7. No wooden mantel or other woodwork shall be placed within 8 in. of the side or within 12 in. of the top of any open fireplace. No combustible summer piece or fire board shall be used.

8. Any person or persons, whether owner, builder or mechanic, who shall build a chimney or flue in violation of any requirement of this ordinance shall be deemed guilty of a misdemeanor and shall be fined not less than \$10 nor more than \$..... for each offense; and any chimney or flue which is built in violation of any requirement of this ordinance shall be immediately demolished or rebuilt. It shall be the duty of the building inspector or other duly authorized official to enforce this ordinance.

9. All ordinances or parts of ordinances in conflict with this ordinance are hereby repealed.

10. This ordinance shall take effect upon being approved by the

APPENDIX

This appendix contains reasons for certain requirements in the ordinance, and various suggestions for good practice not suitable to be included in the ordinance itself, but which are thought to be useful information to accompany it. The material is, therefore, appended for its educational value, and a municipality in adopting the ordinance can dispose of the appendix as it sees fit.

1. HEAT RESISTANCE OF BRICK

Brick meeting the temperature requirement of Section 1, Par. 4, of the ordinance can be obtained in all sections of the country at a slight cost above that of ordinary brick. In several regions the ordinary brick of the market will meet the requirement, and in such places there would be no additional cost.

It is suggested that each manufacturer of flue linings or heat-resisting brick suitable for chimney lining should have tests made of the softening point of the clays used in the manufacture of such products. Such tests should be made by a laboratory of recognized standing, and the test certificate would constitute the authority for acceptance of the product as fulfilling the requirements, provided suitable identification marks were placed on the material. This would be a simple method of accomplishing the object, and the quality of clay from any particular bank is sufficiently uniform to secure reliable results.

2. THICKNESS OF EXTERIOR CHIMNEY WALLS

For exterior chimneys, or chimneys having any wall exposed to the weather, it is recommended that all such exposed walls be not less than 8 in. thick even though lined. This additional thickness will produce a more uniform temperature in the flue, thereby greatly improving the draft, which will result in fuel economy and a lessening of smoke annoyance.

3. CONCRETE CHIMNEYS

Pure quartz gravel or other highly silicious gravel concretes are not adapted to withstand high temperatures, therefore should not be used where subject to direct attack of heat.

The reinforcement required in concrete chimneys cast as a unit, or when built of large blocks enclosing more than one flue, is to resist stresses due to temperature variations or unequal settlement of foundations.