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FIRE PROTECTION HISTORY-PART 276: 1918 (EXTERIOR WALL OPENING PROTECTION)

By Richard Schulte

The twenty-second Annual Meeting of the National Fire Protection Association was held in Chicago in May 1916. The Committee on Fire-Resistive Construction presented a report at this meeting.

Included in the Committee's Report were provisions which addressed the construction of exterior walls and the protection of exterior door and window openings in fire resistive buildings. The following is the portion of the Committee's Report addressing this subject:

"Allowable Openings in Walls.-The maximum percentage of openings allowed in any exterior wall shall not exceed 40 per cent of its superficial area per story. If a brick bearing wall is punctured 40 per cent of its superficial area per story, the wall shall be not less than the following thicknesses: top story, 12 inches; next three stories below 16 inches; following two stories, 20 inches.

There shall be not less than 5 feet of wall between openings in a vertical line, and the minimum distance between adjacent wall openings shall be 20 inches.

Exterior window openings shall not exceed 45 square feet in area, and no single dimension shall exceed 9 feet. No window opening shall be less than one foot from the ceiling surface, but the wall construction between the window opening and the ceiling may, if desired, be replaced by a fire window in fixed sash and frame.

Openings in fire walls shall not exceed 80 square feet in area. No fire wall shall have more than three openings in any story, and the distance between adjacent openings shall be not less than 9 feet.

[TEXT OMITTED]

Protection of Exterior Wall Openings.

All exterior window openings shall be protected by approved fire windows, or such other protection as may be approved for the purpose.

All window openings exposed to buildings within 25 feet shall be protected by approved fire shutters or outside open sprinklers in addition to the fire windows.

All exterior door openings shall be protected by approved fire doors."

The provision for a minimum vertical separation between windows on adjacent stories was intended to address fire spread between stories outside the building, while the provision for the protection of exterior wall openings by fire windows was intended to prevent the spread of fire between stories outside the building, as well as fire spread between buildings in a conflagration.

The concern with conflagrations was still fresh in everyone's mind.

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Source: "Proceedings of the Twenty-Second Annual [NFPA] Meeting", Chicago, Illinois, 1918.

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