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FIRE PROTECTION HISTORY-PART 277: 1918 (BUILDING CONTENTS)

By Richard Schulte

The twenty-second Annual Meeting of the National Fire Protection Association was held in Chicago in May 1918. The Committee on Fire-Resistive Construction presented a report at this meeting. Among the topics covered in the Fire-Resistive Construction Committee's Report was the topic of the contribution of the contents in a fire. The following is the portion of the Committee's Report addressing the contribution of contents in a fire:

> "* ***Furniture and Fixtures.***
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> *In discussing the general problems involved in fire-resistive construction and fire protection, the question of furniture and fixtures, which are an essential part of all buildings, has been considered, and the Committee submits herewith its comments and recommendations upon these subjects.*
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> *Some thirty-five years ago when fire-resistive buildings of the steel beam type were first erected, fear was expressed by some officials of the insurance companies of those days, that if this new type of fireproof building were to become popular, insurance against fire would soon be unnecessary. This feeling of security though inversely expressed is still more or less indulged in by many well-meaning people who take it for granted that their lives and goods are safe, if within what was then called a fireproof building, and what we now have more properly designated a fire-resistive building.*
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> *In spite of some lamentable disasters, the popular imagination still is that the contents of a fire-resistive building will not burn, so that when flames are seen issuing from the windows of a building known as "fireproof" there are some people who will refer with derision to the "fire-proof" building, and even some journals will print "fire-proof but it burns."*
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> * *From Report of 1914.*

This feeling that all depends upon the building has been reflected by those who are intrusted with the making of building laws, for though they endeavor to make building construction more and more fire-resistive, they devote little or no attention to the contents.

Many lives and much property have been lost due to the inflammable nature of the building's contents, and there are many instances where such loss has occurred with little or no damage to the building itself, though of the most ordinary non-fire-resistive type.

Much time and thought have been given to the planning and construction of buildings to render them fire-resistive with good results, but the Committee feels that with comparatively little expense greater results may be obtained by providing fire-resistive furnishings and equipments to protect the lives of the occupants and the contents of the building. Although it is not expected that the standard here recommended will be universally adopted, the Committee have reason to believe there is a demand for such a standard, and that many will avail themselves of some, if not all, of the suggestions herein contained, and the Committee is strong in this belief because already there are many buildings equipped in accordance with the standard herewith proposed.

The following items are recommended to those desiring to reduce the fire hazard within a building:

1. All solid partitions to be of metal lath and cement plaster, terra cotta, brick, gypsum, or other incombustible material, and all doors with trim should be of metal or metal covered or other non-inflammable material, and no wood should be used except metal covered.

2. All glazing of sash partitions including doors, should be of 1/4-inch wired glass in metal frames, with the balance of the construction of metal or metal and plaster, or other incombustible material, and no wood unless covered with metal should be used.

3. Wooden slat partitions or slat guards back of fire doors or elsewhere should not be used; wire screens set in metal frames or other metal guards are suggested.

4. All shelving should be of metal or other suitable, incombustible material. Where the contents of the shelving is of an inflammable nature, the fronts of all shelving should be provided with doors of same material as shelves, and if required to be glazed, the same should be done with wired glass fastened with metal independent of putty.

5. All the clothes lockers or closets should be of incombustible material, and when the number exceeds ten, they should be kept in a special room enclosed with fire-resistive partitions and doors.

6. All furniture such as tables, benches and chairs should be of metal or other fire-resistive material. No wood should be allowed except in table tops and the under side should be protected with metal.

7. All stock rooms or storage rooms containing inflammable goods should be enclosed to the ceiling with fire-resistive material; no wooden slat partitions should be used.

In order to reduce the fire hazard due to inflammable goods, it is recommended that where large quantities are stored more than one room should be provided, and that no area of such room exceed 500 square feet unless the goods are packed or stored in separate enclosed fire-resistive shelving or closets. The area of stock or storage room should not exceed 5,000 square feet unless equipped with automatic sprinklers, in which case it should not exceed 10,000 square feet.

8. Inflammable material in process of, or being used in manufacture, shall not be unnecessarily exposed, and when not in use shall be stored in fire-resistive rooms or enclosures.

9. Tight, fire-resistive, covered receptacles, should be used for all waste, rubbish, or refuse, which should be collected and placed therein twice a day and removed or destroyed once every day. Oily waste or rubbish should be kept in approved waste cans.

Small quantities of excelsior or other inflammable material used for packing, should be kept in fire-resistive receptacles, and large quantities should be stored in separate fire-resistive rooms or vaults.

10. The use of electricity is recommended for illuminating purposes. Where gas is used for such purpose it should be properly safeguarded. Steel or wrought iron pipes should be used throughout with properly located valves, and except for movable parts, rubber hose should not be used. Any material of an infammable nature should be protected from the flame or heat of the gas apparatus by metal, asbestos or other fire-resistive non-conductor.

11. Where there is inflammable material of any nature, either in process of manufacture or in storage, there should be no smoking, and the occupants should carry no matches except of the safety type.

12. The premises should be provided with standard equipment of automatic sprinklers.

13. There should be no screens, curtains, or hangings of an inflammable nature.

14. All paints, oils, grease, etc., should be kept in closed cans and when not in use should be stored in a separate room or closet enclosed with fire-resistive partitions and fire doors.

Clearly, it was recognized that the contents of a building was an important factor influencing the outcome of a fire in a building even in 1914.

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