SCHULTE & ASSOCIATES

Building Code Consultants

3701 Franklin Park Circle Lawrence, KS 66046 fpeschulte@aol.com 847/312-7617

FIRE PROTECTION HISTORY-PART 194: 1920 (DEFINITION OF THE TERM "FIRE WALL")

By Richard Schulte

The discussion of definition of the term "fire wall" at the NFPA Annual Meeting held in May 1920 went on at length. The following is an excerpt of the transcript of the Report of Committee on Nomenclature addressing this term:

The President: The next item is the Report of the Committee on Nomenclature, Mr. I. H. Woolson, of New York, Acting Chairman.

Report of Committee on Nomenclature.

Prof. Woolson: Following the unfortunate death of the Chairman of this committee, the Executive Committee requested the speaker to complete the report of the committee for presentation at this meeting. I had understood that there was only one thing left, one subject left, simply the definition of a fire wall. I have written the definition of a fire wall as I understood the term:

Definition of Fire Wall.— The term "Fire Wall" indicates a wall sub-dividing a building to restrict the spread of fire. It shall have such thickness as to prevent the communication of fire by heat conduction.

It shall have such stability as to remain intact after complete combustion of the contents of the building on either side of the wall; and its structural integrity shall be such as not to be dangerously impaired by any wreckage resulting from the fire or its extinguishment.

In all buildings it shall start at the foundation, be continuous through all stories, and extend at least three (3) feet above the roof.

I prepared that definition as I understood it was the request of the Association to have it written, and submitted it to the remaining members of the Committee. It has been approved in full. There was no necessity for their approving it because thus far it meets with the approval of the Association as I understand it, but three members of the Committee are of the opinion that the last paragraph is not exactly what it should be. I will say to the members not present at the meeting last year, that a very vigorous and long discussion arose when the Committee presented the idea that a fire wall might be offset in going through a fire proof building, but that was definitely voted down; it was decided that the wall should be continuous from the foundation to and through the roof, but in spite of that action, three members of the Committee feel that this is not always necessary in a thoroughly fire-resistive building.

The President: Do I understand that the question of offsetting is involved, or only the question of going through the roof?

Prof. Woolson: The question of offsetting was definitely settled last year.

The President: And this difference of opinion you report is only on the question of whether or not it should go through the roof?

Prof. Woolson: In a fire-resistive building.

Mr. Miller: As I remember the discussion last year, that was one of the essentials laid down for a fire wall, that it shall go through the roof and at least 3 feet above it. While I do not like the form, with all due respect to the Chairman of the Committee, because I think it reads more like a specification than a definition, I think we ought to adopt it just as he presented it.

Mr. W. C. Robinson: I would like to ask how a wall which would perform all that you would expect of it would be classified if it did not extend continuously through a fire-resistive building?

Prof. Woolson: Call it a division wall or a partition.

Mr. Robinson: Well, if it does all that a fire wall is expected to do, should we not be a little careful how we define a fire wall here? We have before us at times a so-called fire wall that is built from story to story; it is anchored into the construction; the failure of that wall, I am quite certain, would involve the failure of the entire structure, which I think would be hardly possible under ordinary conditions, certainly not under many conditions. If a proper classification for such a fire stop is possible, we might let this definition stand, but if it is not, I think perhaps we are tying ourselves down to too narrow a definition.

Prof. Woolson: I received a letter from a Committee member, just as I was leaving New York, which makes this statement: "Openings limited in size and number, when properly protected, are permissible." According to our definition there is no provision for an opening in a fire wall. Now, ordinarily a fire wall is allowed to have openings if they are properly protected, and in some cases probably we could not get fire walls put in unless we did provide for openings. So in order to get a vote on it, I am going to suggest, with your permission, an additional paragraph, following a suggestion in this letter of Mr. D. E. Waid, a member of the Committee. I will read the provision as taken from the National Board Building Code, but first of all, we'd better find out whether the Association desires to permit an opening in a fire wall.

The Secretary: Is this not again a question of specification and not of definition? It seems to me this discussion is describing the same circle it did last year. This is a Committee on Nomenclature. If any one should ask what a fire wall is, we want to give him, not a specification, not what you can do to it or how you can pierce it, but what a fire wall is. We are seeking a definition and all this discussion is over specifications of construction.

Prof. Woolson: In the first report of this Committee on that subject, the definition was as follows: "A fire wall is a wall built for the purpose of restricting the area subject to the spread of fire."

The Secretary: That is enough for a definition. (Applause.)

Prof. Woolson: That was the original definition, and this Association discussed it at length, and decided it wanted something added to it. We added it, and now you don't like it! (Laughter.)

The Secretary: I sympathize with the Chairman; I think he was right in the first place.

The President: The Chair is inclined to sympathize with the point the Secretary has made.

Mr. H.L. Phillipps: (Manager Factory Insurance Association): It was my misfortune not to be present at Ottawa last year and hear the discussion on this subject, but I would like to ask for enlightenment as to how we are to determine a wall is a fire wall or not under these specifications, until it has been through a fire? (Laughter.) How are we to determine whether it has the stability to withstand a given fire until we have had the fire? I confess I do not see that this is a definition; it strikes me that it is a specification for a fire wall.

Prof. Woolson: Well, we immediately get further into a specification the moment we begin to prescribe thicknesses. If it is clay brick, it may be one thickness; if it is reinforced concrete, it may be another; if it is a non-fireproof building, it shall have another thickness; if it is built on the structural frame and concrete style, it may be another thickness. This leads immediately into a multitude of small specifications, and that is what we were trying to avoid originally, but we drifted into this.

Mr. Louis Wiederhold. Jr.: I have listened with considerable amusement to this discussion, but with all due humility, I would like to move that there be stricken out all that portion of the definition that follows: "Restrict the spread of fire."

Mr. Miller: I second the motion.

Prof. Woolson: I think we are getting sane now, gentlemen.

Mr. W. C. Robinson: Would not Mr. Wiederhold be satisfied if that definition is extended to the point where it says, "The wall must extend continuously through the building"? If Prof. Woolson will read that, you will find it a pretty fair definition.

Prof. Woolson: I will read it, as I understand Mr. Robinson would like to have it read: (Reads) "The term fire wall indicates a wall subdividing a building to restrict the spread of fire. It shall start at the foundation, be continuous through all stories-"

Mr. Robinson: Omit "Shall start at the foundation."

Prof. Woolson: Then I shall read down to that and stop; would you like to have that, Mr. Wiederhold?

Mr. Wiederhold: I would like to have read the form that will embody Mr. Robinson's suggestion.

Prof. Woolson: You tell me when to stop. "The term fire wall indicates a wall subdividing a building to restrict the spread of fire. It shall have such thickness as to prevent the communication of the fire by heat conduction; it shall have such stability as to remain intact after complete combustion of the contents of the building on either side of the wall, and its structural integrity shall be such as not to be dangerously impaired by any wreckage resulting from the fire or its extinguishment."

Mr. Wiederhold: It is a Herculean task to attempt intelligently to give a definition which will be acceptable to those who are looking for a specification. My only thought is to eliminate such phraseology as might cloud the mind with specification detail, and I agree fully with the Secretary that the simpler the definition is made the better it will be. I think that point is well worthy of our consideration.

The President: I understand that Mr. Wiederhold does not approve of the amendment to his motion. Does Mr. Robinson wish to present an amendment?

Mr. Robinson: No, I do not; I did not know but what the extension of the sentence covered in the amendment would perhaps be satisfactory.

The President: If Mr. Robinson does not care to present the amendment, I will ask the Chairman to kindly read what Mr. Wiederhold desires.

Prof. Woolson: (Reads) "The term fire wall indicates a wall dividing a building to restrict the spread of fire." I want to say it is my own personal opinion that this is all we need in a definition, and that this is the definition presented three or four years ago, and which was voted down. It seems to me that if we want specifications for a wall they should go into a building code or some place where they will control many more things than you can possibly put into a definition.

The motion was adopted.

Mr. Lacount: I raise the question that "restrict" is not the wording you are thinking of; you are thinking of stopping a fire or preventing it passing; any ordinary partition to some extent "restricts" it.

Prof. Woolson: But in the last analysis, the word "restrict" can be positive, can it not? If it restricts positively, if it permanently restricts the spread of fire, you have it, don't you? It is not a matter of degree, as I see it.

(Several members called for the question.)

The President: It is disposed of.

Prof. Woolson: As I understand it, Mr. Chairman, that is the only matter remaining before this Committee, and I would therefore request that the Committee be discharged.

Mr. A. R. Small (Vice-president Underwriters' Laboratories): I take advantage of the usual opportunity to have it appear in the record that the Chairman should be corrected in the frequent use throughout his remarks, of the word "fireproof." I move that the report of this Committee be accepted and the Committee discharged.

The motion was adopted.

The definition of the term "fire wall" has been debated for close to a century. As can be seen, the debate in 1920 is really not much different than the discussions today.

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