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DESIGN AND CONSTRUCTION OF BUILDING EXITS: NATIONAL BUREAU OF STANDARDS MISCELLANEOUS PUBLICATION M151-October 10, 1935

By Richard Schulte

In order to understand the present, and to also predict the future, it is useful to study the past. The following are a few excerpts from a document titled "*Design and Construction of Building Exits*" published by the National Bureau of Standards (NBS). The document, referred to a *Miscellaneous Publication M151*, is dated October 10, 1935.

"The deplorable loss of life that occurs annually in building fires can be reduced by providing suitable exits. Building-code requirements vary widely as to how many exits are needed, what sizes should be, and how the details concerning them should be worked out. To aid those interested in the problem, surveys of current practice in providing exits and of the rates at which people can effect their escape through different kinds of exits have been made. The methods employed in the surveys and the results are presented here in detail. To supplement the information thus obtained, opinions have been solicited from numerous architects, building officials, fire-protection experts, and others. Five methods of calculating exit width in current use are discussed. As a useful reference when local requirements are under consideration, suggested requirements are presented, together with notes on the reasoning employed in connection with them."

"In the opinion of many who have studied the matter, 22 inches can be taken as the width of people in motion. Its origins is said to be in experience gained in the Army. A stairway width of 44 inches will permit 2 files of people to move freely down the stairs at the same time. . ."

And now you know why stairs in buildings are required to be a minimum of 44 inches wide. But even in 1935, they were not exactly sure of the basis for this requirement.

As you read through this document, it is rather astounding to find that many of the requirements contained in modern codes date back to the 1930's and even earlier. Many of the recommendations for egress design contained in Miscellaneous Publication M151 found their way into the first editions of the Basic Building Code published by the Building Officials Conference of America (BOCA) in the 1950's.

A copy of “*Design and Construction of Building Exits*” can be found at the following internet address:

<http://fire.nist.gov/bfrlpubs/fire86/PDF/f86004.pdf>

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