

MINIMUM AISLE AND DOORWAY WIDTHS FOR SAFE EGRESS

INTRODUCTION

Aisle widths in Laboratory buildings conform to the requirements of NFPA 101, Life Safety Code, and International Building Code (IBC) to provide safe exiting from a building in case of fire. These requirements are summarized below. In the event of a discrepancy between the summary given below and the requirements of NFPA 101, the requirements of NFPA 101 take precedence. The Occupancy use group is determined by IBC and NFPA 101.

Illinois and Federal regulations govern egress and area refuge may supersede these requirements.

DEFINITIONS

Means of Egress - A continuous and unobstructed way of exit travel from any point in a building or structure to a public way open to the outside air. It comprises the vertical and horizontal travel and includes intervening room spaces, doorways, hallways, corridors, passageways, balconies, ramps, stairs, enclosures, lobbies, escalators, horizontal exits, courts and yards.

Occupancy - the purpose for which a building or portion thereof is used or intended to be used. Occupancy uses are defined in NFPA 101 Life Safety Code, 2009 edition and the IBC, 2009 Edition, as a Use Group Occupancy.

REQUIREMENTS

1. **Means of Egress.** The minimum corridor or aisle width, clear of any obstructions, must be sufficient to accommodate the required occupant load, but cannot be less than the following:

Occupancy	Minimum Width Corridors	Travel Distance	Common Path of Travel	Dead End
Assembly (A), Educational (E), <i>Consult FESS Engineering Department for further requirements</i>	A = Varies E = 72-inches	200-Ft / 250-Ft*	75Ft / 100Ft*	20-Ft
Business Use Groups (B)	44-inches	200-Ft / 300-Ft*	75Ft / 100Ft*	20Ft / 50Ft*
Industrial Moderate Hazard (F-1) & Storage Moderate Hazard (S-1)	36-inches If <50 occupants	200Ft/250Ft* /400Ft*	75Ft /100Ft*	20Ft
Industrial Low (F-2) & Storage Low Hazard (S-2),	36-inches If <50 occupants	300FT / 400FT*	75Ft /100Ft*	20Ft
Special or High Hazard (H-1 through H-5) <i>Consult FESS-Engineering Department for further requirements</i>	44-inches	75Ft	25 Ft	0
I-2, I-3, & I-4	44-Inches I-2 = 96-inches	150Ft / 200 Ft	75Ft / 100Ft	20Ft
<u>Lodging & Rooms</u> Hotels/Dorms	<u>36-inches</u> 44-inches	75Ft / 100Ft*	75Ft / 100Ft*	20Ft

2. **Doorways.** The minimum doorway* widths cannot be less than the following:

Occupancy	Minimum Aisle Width	NFPA 101 Reference(s)
Existing Buildings*	28 inches	7.2.1.2.4
New Buildings (except as modified below)	32 inches	7.2.1.2.4
Doors serving area of < 70 sq ft w/ o required handicap access	24 inches	7.2.1.2.4
Lodging & Rooming Houses	28 inches	26.2.3.1
Lodging & Rooming Houses – Bathroom Doors	24 inches	26.2.3.2
One & Two Family Dwellings	28 inches	24.2.4.1
One & Two Family Dwellings – Bathroom Doors	24 inches	24.2.4.2

* Includes similar openings defined by tables, benches, cabinets, etc.