

# Life Safety Code Compliance for Alarmed Exits

## Overview

Life safety codes (NFPA 101, IBC, state/local codes) govern emergency exits to ensure rapid, unobstructed egress. This guide clarifies how alarmed exits like Arm-A-Dor comply with life safety requirements and ADA standards.

## Key Life Safety Principles

**Accessibility:** All exits must be immediately usable without keys, knowledge, or tools

**Capacity:** Exits must accommodate building occupant load

**Visibility:** Exits must be marked and illuminated

**Timeliness:** Occupants must evacuate in under 2-3 minutes depending on occupancy

**Reliability:** Exit systems must function during emergencies and power loss

## NFPA 101 Requirements

**NFPA 101 Section 7.2.1.5.7:** Doors shall be designed to open by manual force not exceeding 15 pounds for swinging doors, 30 pounds for sliding doors. Emergency exits must release immediately without use of key or knowledge.

**Life Safety Code Section 7.2.1.2.1:** Minimum two exits required for occupancies with occupant load over 50. Exits must be remote from each other (remote means separated by 1/3 of the longest diagonal of the space).

## IBC Exit Requirements

Occupancy Type	Min Exits	Min Width	Max Travel Distance	Alarmed Allowed
Assembly < 500	1-2	32" or 36"	250 feet	Yes with conditions
Retail < 2500 sf	1-2	32" or 36"	250 feet	Yes - recommended
Office	1-2	32" or 36"	200 feet	Yes
School/University	2+	36"	150 feet	Yes - monitored
Healthcare	2+	36"	150 feet	Yes - monitored required
Factory/Warehouse	1-2	36"	200 feet	Yes

## Delayed Egress vs Alarmed Exit

**Delayed Egress System:** Door remains locked for 15-30 seconds after push bar is pressed, releasing alarm sounder and visual signal. Restricted to specific occupancy types (retail, education, healthcare).

**Alarmed Exit (Arm-A-Dor):** Door unlocks immediately (panic bar releases normally), but alarm sounds to deter theft. No intentional delay - panic bar works instantly. Available for all occupancy types.

## ADA Compliance

**ADA Standards Section 206.4.3:** Means of egress must be accessible to persons with disabilities. Emergency exits must be usable by individuals with mobility impairments, visual impairments, and hearing impairments.

**Door Force:** Maximum 5 pounds of force to open (ADA Standard 206.4.3.3)

**Lever Height:** 34-48 inches above finished floor

**Alarm Signal:** Visual AND audible required (meets accessible alarm requirements)

**Operating Mechanism:** Panic bar, lever handle, or push plate required (no knobs or special knowledge)

## NFPA 101 Life Safety Code Interpretation

**Opening Force:** Alarmed exits must release with standard panic bar force (5 lbs max)

**Fail-Safe Default:** Door must unlock on power loss

**No Delay Allowed:** NFPA 101 Section 7.2.1.5.7 prohibits delaying mechanisms on most occupancies. Alarmed exits are compliant because they don't delay opening - alarm is supplementary deterrent only.

**Exceptions:** Certain healthcare facilities may use delayed egress if conditions are met (visual/audible signals, max 30 sec delay)

## 15-Second vs 30-Second Delayed Egress

Feature	15-Second Delay	30-Second Delay	Standard Panic (Alarmed Exit)
Allowed Occupancies	Most types	Healthcare only	All occupancies
Visual Signal	Required	Required	Built-in alarm light
Audible Signal	Not required	Required	Built-in 85dB sounder
Latch Delay	15 seconds	30 seconds	Immediate release
Compliance	IBC 1008.1.4.3	IBC 1008.1.4.3	NFPA 101 7.2.1.5.7
Best For	Retail theft prevention	Institutional control	Retail + theft prevention

## Authority Having Jurisdiction (AHJ) Approval

All exit device installations must be approved by local AHJ before installation. Submit design documents including:

- Building layout with all exits marked
- Occupant load calculations
- Equipment specifications (door width, opening force, alarm rating)
- Maintenance and testing procedures

Lock Depot Inc recommends submitting Arm-A-Dor plans to fire marshal 2 weeks before installation.

## Annual Testing & Inspection

**Monthly:** Test alarm sounder operation; verify 85dB minimum volume

**Quarterly:** Inspect door alignment, latch operation, magnet function

**Annually:** Perform full system test; document all results; replace batteries

**After 3 Years:** Professional inspection by certified fire protection contractor

