

Code & Compliance Reference

User Guide

Quickly look up fire, electrical, and accessibility codes relevant to access control and low-voltage installations.

Quick Reference

Command: /code

Scope: NFPA, NEC Article 725, ADA, IBC basics

Access: Available to all active subscribers

Tip: Always verify local amendments with the AHJ

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1. Getting Started

The `/code` command gives you instant access to the most common codes and standards that affect access control, CCTV, and intrusion alarm installations. Rather than carrying code books to the job site, use this reference as a quick look-up for the rules you encounter daily.

Send `/code` in the chat to open the compliance menu. Select a category to view relevant code summaries. Each entry includes the code section number so you can pull the full text when needed.

Note: This guide provides summaries, not legal advice. Always confirm requirements with the Authority Having Jurisdiction (AHJ) for your project location.

2. NFPA Fire Code

NFPA 72 (fire alarm) and NFPA 101 (life safety) are the two standards you will encounter most often. Key points for access control technicians:

- Free egress: Electrically locked doors on egress paths must release on fire alarm activation (NFPA 101 §7.2.1).
- Fire-rated doors: Hardware on fire-rated openings must be listed and labeled. Mag-locks on fire doors require auxiliary release per NFPA 101.
- Delayed egress: NFPA 101 §7.2.1.6.1 allows 15-second (or 30-second) delayed egress with specific signage and alarm requirements.
- Stairwell re-entry: High-rise buildings require stairwell re-entry per NFPA 101 §7.2.1.5.8. Locks must release upon fire alarm.

Tip: When connecting access control to fire alarm panels, always use a supervised dry-contact relay for the fire alarm release circuit.

3. NEC Low Voltage (Article 725)

NEC Article 725 covers remote-control, signaling, and power-limited circuits — the backbone of access control and CCTV wiring. Key rules:

- Class 1 vs. Class 2: Most access control runs are Class 2 (under 100 VA / 30 V). Class 2 wiring has easier installation rules but must be separated from Class 1 and power-limited fire alarm (PLFA) circuits.
- Cable types: Use CL2, CL2R (riser), or CL2P (plenum) rated cable. Never run non-rated cable in plenums or risers.
- Separation: Maintain separation from power conductors per NEC 725.136. Class 2 cables cannot share conduit or raceways with power wiring.
- Pathway protection: Class 2 cables in accessible areas below 7 ft must be protected from physical damage (NEC 725.135).

Note: If your Class 2 circuit exceeds 100 VA, it reclassifies as Class 1 and must follow Class 1 wiring methods including conduit requirements.

4. ADA Requirements

The Americans with Disabilities Act sets hardware mounting heights, operating force limits, and accessibility standards that affect every access point:

- Mounting height: Card readers and keypads: 48 inches max to the highest operable part for a forward reach (ADA §308.2).
- Operating force: Interior doors must not exceed 5 lbs of force to open. Automatic operators with push-button activation are the standard solution.
- Clear width: Accessible doorways require a minimum 32-inch clear opening.
- Closing speed: Door closers must allow at least 5 seconds from 90° to 12° from the latch.

Tip: Always carry a tape measure and a force gauge on ADA-compliant jobs. Document measurements with photos for your records.

5. Building Code Basics

The International Building Code (IBC) contains requirements that overlap with access control installations. The most common topics you will encounter:

- Means of egress: IBC Chapter 10 requires that all exit doors unlock in the direction of egress without special knowledge or effort.
- Occupancy types: Assembly, educational, and healthcare occupancies have stricter egress requirements than office or storage occupancies.
- Fire-rated assemblies: Penetrations through fire-rated walls for conduit or cable must be firestopped per IBC §714.
- Signage: Exit signs and directional signage requirements may affect where you place card readers near exit paths.

Note: Many jurisdictions amend the IBC with local requirements. Always ask the general contractor or building official about local amendments.

6. Quick Reference

NFPA 72	Fire alarm signaling and notification
NFPA 101	Life safety — egress, delayed egress, stairwell re-entry
NEC Art. 725	Low-voltage wiring classification and installation
ADA §308	Reach ranges for operable hardware
IBC Ch. 10	Means of egress requirements
UL 294	Access control system unit listing standard

Tip: Bookmark `/code` for quick on-site lookups. Pair it with `/safety` for life-safety considerations on the same project.