PURPOSE OF THIS GUIDE

Proper fire extinguisher placement is required by OSHA (29 CFR 1910.157) and NFPA 10. This guide provides placement requirements, spacing distances, and best practices to ensure compliance and effective fire response.

FIRE CLASSES & EXTINGUISHER TYPES

Select extinguisher type based on the hazards present in each area. Multi-class extinguishers (ABC) are suitable for most general areas.

A — CLASS A - Ordinary Combustibles
Wood, paper, cloth, rubber, plastics

B — CLASS B - Flammable Liquids
Gasoline, oil, grease, paints, solvents

C — CLASS C - Electrical Equipment
Energized electrical equipment, wiring

D — CLASS D - Combustible Metals
Magnesium, titanium, sodium, potassium

K — CLASS K - Cooking Oils/Fats
Commercial kitchens, deep fryers

COMMON EXTINGUISHER TYPES

ABC Dry Chemical - Most common, multi-purpose
CO2 - Clean agent for electronics/sensitive areas

UNDERSTANDING EXTINGUISHER RATINGS

Fire extinguishers are rated by fire class and extinguishing capacity. Higher numbers = greater capacity.

Rating Example	Meaning	Typical Use
2A	Can extinguish 2.5 gal burning wood crib	Light hazard areas
10B:C	Can extinguish 10 sq ft flammable liquid fire	General office areas
4A:80B:C	Higher capacity multi-class unit	Industrial/warehouse
6L Class K	Kitchen hood suppression supplement	Commercial kitchens

OCCUPANCY HAZARD CLASSIFICATIONS

LIGHT HAZARD

Offices, churches, schools, hotels, hospitals

ORDINARY HAZARD

Manufacturing, warehouses, auto showrooms, parking

EXTRA HAZARD

Woodworking, auto repair, aircraft hangars, flammable liquid storage

MAXIMUM TRAVEL DISTANCE REQUIREMENTS (NFPA 10 / OSHA)

Fire Class	Hazard Level	Max Travel Distance	Min. Rating Required
Class A	Light Hazard	**75 feet (22.9 m)**	2A
Class A	Ordinary Hazard	**75 feet (22.9 m)**	2A
Class A	Extra Hazard	**75 feet (22.9 m)**	4A
Class B	Light Hazard	**50 feet (15.2 m)**	5B or 10B
Class B	Ordinary Hazard	**50 feet (15.2 m)**	10B or 20B
Class B	Extra Hazard	**50 feet (15.2 m)**	40B or 80B
Class C	All Hazards	**Based on A or B hazard**	Based on A or B
Class D	As required	**75 feet (22.9 m)**	Per specific metal
Class K	Commercial Kitchen	**30 feet (9.1 m)**	Class K rated

IMPORTANT: Travel distance is measured along the normal path of travel, not straight-line distance. Account for obstacles, equipment, and aisle layouts when determining placement.

MOUNTING HEIGHT REQUIREMENTS

OSHA & NFPA MOUNTING REQUIREMENTS

Extinguishers ≤ 40 lbs: Top of extinguisher not more than 5 feet (1.53 m) above floor

Extinguishers > 40 lbs: Top of extinguisher not more than 3.5 feet (1.07 m) above floor

All Extinguishers: Bottom of extinguisher not less than 4 inches (10 cm) above floor

VISIBILITY & ACCESSIBILITY REQUIREMENTS

- Extinguishers must be conspicuously located and readily accessible
- Must not be obstructed by storage, equipment, or materials
- Locations must be along normal paths of travel, including exits
- Must be clearly visible - if obstructed, signage is required
- Signage should be placed above extinguisher location (NFPA recommended)
- In outdoor areas, protect from weather and freezing conditions
- Cabinets must not be locked unless break-glass type or other approved access

PLACEMENT GUIDELINES BY AREA TYPE

Office & Administrative Areas

- Place 2A:10B:C extinguishers at max 75 ft travel distance
- Locate near exits, break rooms, and copy/print areas
- Consider wall-mounted cabinets in high-traffic corridors
- One extinguisher per 3,000 sq ft minimum for light hazard

Manufacturing & Industrial Areas

- **Use 4A:40B:C or higher rated extinguishers for extra hazard**
- **Place at each exit and every 50 ft along travel paths**
- **Position near specific hazards (welding stations, flammable storage)**
- **Consider wheeled extinguishers for large open areas**
- **Supplement with Class D units where combustible metals are present**

Commercial Kitchen & Food Service

CLASS K EXTINGUISHERS REQUIRED

• Class K extinguisher required within 30 ft of cooking appliances using oils/fats
• Must be installed in addition to (not instead of) hood suppression system
• Place along egress path from cooking area
• ABC extinguisher also required for general fire protection

Warehouse & Storage Areas

- Maintain clear access aisles to all extinguisher locations
- Place at column locations and rack end caps where visible
- Increase quantity for high-pile storage areas
- Consider Class B extinguishers near flammable liquid storage
- Mark floor areas to prevent obstruction by stored materials

Vehicle Bays & Garage Areas

- 10B:C minimum rating for Class B hazards (fuel, oil)
- Place near each vehicle bay door
- Include at fuel dispensing areas and maintenance pits
- Protect from vehicle impact with barriers or recessed cabinets

Electrical & Server Rooms

CLEAN AGENT RECOMMENDED

• CO2 or clean agent extinguishers preferred to avoid equipment damage
• Place near entrance and within 50 ft travel distance inside room

MONTHLY VISUAL INSPECTION CHECKLIST

OSHA requires monthly inspections. Document each inspection using this checklist or equivalent.

MONTHLY INSPECTION ITEMS

- ☐ Extinguisher is in designated location
- ☐ Extinguisher is visible and unobstructed
- ☐ Operating instructions are legible and facing outward
- ☐ Safety seal and tamper indicator are intact
- ☐ Pressure gauge shows adequate pressure (green zone)
- ☐ Extinguisher shows no visible damage, corrosion, or leakage
- ☐ Nozzle/horn is free of obstruction
- ☐ Mounting bracket is secure
- ☐ Inspection tag is present and current
- ☐ Weight is correct (for cartridge-operated or CO2 types)

ANNUAL PROFESSIONAL MAINTENANCE

REQUIRED ANNUAL MAINTENANCE (Must be performed by certified technician)

- Thorough examination of all mechanical parts
- Verify weight and/or pressure
- Replace damaged or missing components
- Attach new annual service tag with date and technician initials

HYDROSTATIC TESTING SCHEDULE

Extinguisher Type	Test Interval
Stored pressure water, AFFF, FFFP	**5 years**
Dry chemical (stored pressure, cartridge)	**12 years**
Carbon dioxide (CO2)	**5 years**
Wet chemical (Class K)	**5 years**
Dry powder (Class D)	**12 years**

RECORD KEEPING REQUIREMENTS

- Maintain inspection records for at least 1 year (many jurisdictions require longer)
- Annual maintenance records must be retained for the life of the extinguisher
- Records should include: date, location, inspector name, findings, corrective actions
- Hydrostatic test records must be retained until next test or disposal
- Keep service company certifications on file