

This guide specification was prepared utilizing 3-part format recommended by the Construction Specifications Institute (CSI), and generally incorporates recommendations from their SectionFormat™ /Page Format™, and MasterFormat™, latest Editions, insofar as practicable.

Carefully review and edit the text to meet the Project requirements and coordinate this Section with the remainder of the Specifications and the Drawings.

Where bracketed text is indicated, e.g. [text], make appropriate selection and delete the remainder of text within additional brackets, highlighting, and bold face type, if any.

Consult the manufacturer for assistance in editing this guide specification for specific Project applications where necessary.

This Specification was current at the time of publication but is subject to change. Please confirm the accuracy of these specifications with the manufacturer prior to use.

SECTION 10 44 00(B) FIRE PROTECTION SPECIALTIES- FIRE EXTINGUISHERS

SPECIFIER: This Section includes fire extinguishers

PART 1 - GENERAL

1.01 SUMMARY

- A. Section Includes:

SPECIFIER: Revise subparagraphs below to suit Project requirements.

1. Fire extinguishers

- B. Related Requirements:

1. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

SPECIFIER: Revise section numbers and titles in subparagraphs below per CSI MasterFormat and Project requirements.

2. Section 01 33 00 - Submittal Procedures: For administrative and procedural requirements for processing of submittals during the construction phase.
3. Section 01 77 00 - Closeout Procedures: For administrative and procedural requirements for completion of the Work.

SPECIFIER: Retain subparagraphs below to suit Project requirements; revise section numbers and titles per project requirements.

4. Section 09 91 00 - Painting: For field painting of cabinets.
5. Section 11 19 00 - Detention Equipment: For fire protection specialties for detention facilities.
6. Section 21 12 00 - Fire-Suppression Standpipes: For standpipes and fire hose connections.
7. Section 21 12 26 - Fire Suppression Valve and Hose Cabinets: For valve and hose cabinets.
8. Section 21 13 00 - Fire-Suppression Sprinkler Systems: For sprinkler systems using water for fire extinguishing and suppression.

9. Section 23 38 13 - Commercial Kitchen Hoods: For ventilation hoods and equipment with fire suppression systems for commercial kitchens.

1.02 REFERENCES

SPECIFIER: Use care when indicating the edition date of the referenced standards; these standards are subject to regular review, and updated accordingly.

- A. Reference Standards:
 1. ASTM International (ASTM):
 - a. ASTM E814-11a, Standard Test Method for Fire Tests of Penetration Firestop Systems.

SPECIFIER: Indicate date of current Edition in affect in the Project location if known, to avoid problems with interpretation.

2. International Code Council (ICC):
 - a. International Building Code (IBC) - **[current]** Edition.
3. Intertek Testing Services/Warnock-Hersey International (ITS/WHI)
4. National Fire Protection Association (NFPA):
 - a. NFPA 10-2013, Standard for Portable Fire Extinguishers: For criteria covering installations for Class A, B, C, D, and K hazards as well as the selection, inspection, maintenance, recharging, and testing of portable fire extinguishing equipment.

SPECIFIER: Retain subparagraph below if wired alarms are specified for fire extinguisher cabinets.

- b. NFPA 70-2011, National Electrical Code.
5. Underwriters Laboratories, Inc. (UL)
6. United States Code (USC):
 - a. Americans with Disabilities Act of 1990, as amended by the ADA Amendments Act of 2008: For restrictions relating to cabinet projections in corridors.

1.03 ACTION SUBMITTALS

SPECIFIER: Revise Section number in the paragraph below to match that used in the Project Manual.

- A. Submit in accordance with Section **[01 33 00]** **[other]**:
 1. Product Data:
 - a.. Extinguishers: Materials description for fire extinguishers; include ratings and classifications.
 - c. Installation instructions for each product specified.
 2. Shop Drawings:
 - a. Small-scale plans showing locations of fire extinguisher cabinets and individual fire extinguishers.
 - b. Schedules showing each type of cabinet and extinguisher to ensure proper fit and function.
 - c. Indicate installation procedures and accessories required for a complete installation.
 - 1) Size: 6 inches (150 mm) square.

1.04 INFORMATIONAL SUBMITTALS

- A. Warranty: Sample of special warranty.

1.05 QUALITY ASSURANCE

- A. Comply with standards referenced in Article 1.02 - REFERENCES.
- B. Provide fire extinguishers, produced by a single manufacturer.

SPECIFIER: The authority having jurisdiction or AHJ ultimately determines what fire extinguishers are appropriate for each project; VERIFY with AHJ prior to completion of this Section.

- C. Provide fire extinguishers of type approved by UL, State Fire Marshal's Office, and local regulatory agencies, if any.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle fire protection specialties and related materials using means and methods that will prevent damage, deterioration, or loss.
 - 1. Deliver components in manufacturer's original packaging, properly labeled for identification.

1.07 WARRANTY

All Fire Protection Products (except fire extinguishers) carry a one year warranty after date of shipment against defects in materials or workmanship. Fire extinguishers carry a longer warranty. We will replace or repair any product found defective within this period. No other warranty expressed or implied is valid. Manufacturer's warranty, terms and conditions apply in all cases. Please see complete

PART 2 - PRODUCTS

2.01 FIRE PROTECTION SPECIALTIES MANUFACTURERS

- A. Acceptable Manufacturers:

JL Industries, Inc., a division of Activar Construction Products Group
9702 Newton Av S
Bloomington, MN 55431

- B. Substitutions: Manufacturers seeking approval of their products are required to comply with the Owner's Instructions to Bidders, generally contained in the Project Manual.

SPECIFIER: The authority having jurisdiction or AHJ ultimately determines what fire extinguishers are appropriate for each project; VERIFY with AHJ prior to completion of this Section.

2.02 FIRE EXTINGUISHERS

SPECIFIER: Select extinguisher Type in paragraphs below based on the Class of fires anticipated.

- A. Pressurized Water Type: Extinguisher unit containing water and compressed air; nontoxic.
 - 1. Construction: Butt-welded 304-L stainless steel cylinder with stainless steel discharge lever and fixed carry handle, O-ring seal, replaceable valve stem seal, visual pressure gage, pull pin, and UL-labeled chemical engine hose.
 - 2. Effectiveness (Rating): Class A fires.
 - 3. Model Identification and UL Rating: Grenadier P; 2A.

- B. Multi-Purpose Chemical Type: Extinguisher unit containing a fluidized and siliconized mono ammonium phosphate powder; nonconductive and nontoxic.
1. Construction: Heavy duty steel cylinder with metal valve and siphon tube, O-ring seal, replaceable valve stem seal, visual pressure gage, pull pin and upright squeeze grip.
 2. Finish: Factory powder-coated; Red.
 3. Effectiveness (Rating): Class A, B, and C fires.

SPECIFIER: Select extinguisher model number in subparagraph below based on capacity and UL rating required, and listed in the manufacturer's Model Chart. VERIFY that extinguisher cabinet specified is adequately sized for extinguisher body and overall height; NOTE that Cosmic 20 lb extinguishers are available in 2 different physical sizes with the same UL rating.

4. Model Identification and UL Rating: Cosmic [2-1/2E; 1A-10BC] [5E; 3A-40BC] [6E; 3A-40BC] [10E; 4A-80BC] [20E (FE20C); 10A-120BC] [20E (FE20A); 10A-120BC].

- C. Carbon Dioxide Type: Extinguisher unit containing liquid carbon dioxide under pressure; nonconductive.
1. Construction: Lightweight, high pressure, aluminum cylinder with O-ring seal, metal valve, replaceable molded valve stem seal, and pull pin.
 2. Finish: Factory powder-coated; Red.
 3. Effectiveness (Rating): Class B and C fires.

SPECIFIER: Select extinguisher model number in subparagraph below based on capacity and UL rating required, and listed in the manufacturer's Model Chart. VERIFY that extinguisher cabinet specified is adequately sized for extinguisher body and overall height.

4. Model Identification and UL Rating: Sentinel [5; 5BC] [10; 10BC] [15; 10BC] [20; 10BC].

- D. Regular Dry Chemical Type: Extinguisher unit containing a siliconized dry sodium bicarbonate base; nontoxic.
1. Construction: Heavy duty steel cylinder with metal valve and siphon tube, O-ring seal, replaceable valve stem seal, visual pressure gage, pull pin, and upright squeeze grip.
 2. Finish: Factory powder-coated; Red.
 3. Effectiveness (Rating): Class B and C fires.

SPECIFIER: Select extinguisher model number in subparagraph below based on capacity and UL rating required, and listed in the manufacturer's Model Chart. VERIFY that extinguisher cabinet specified is adequately sized for extinguisher body and overall height. Note that the Galaxy 10 models are available with 2 different UL ratings and 2 different physical sizes.

4. Model Identification and UL Rating: Galaxy [2-1/2; 10BC] [5; 10BC] [5-1/2; 40BC] [6; 40 BC] [10; 40 BC (FG10B)] or [10; 60BC (FG10A)] [20; 120BC].

- E. Halotron® Type: Extinguisher unit containing a clean extinguishing agent Halotron® 1 approved by the EPA, accepted and specified by the government, and approved by the FAA for use in airports; nonconductive.
1. Construction: Drawn steel cylinder with steel siphon tube, O-ring seal, power cone discharge system, replaceable valve stem seal, visual pressure gage, pull pin, and upright squeeze grip.
 2. Finish: Factory powder-coated; Red.
 3. Effectiveness (Rating): Class A, B, and C fires.

SPECIFIER: Select extinguisher model number in subparagraph below based on capacity and UL rating required, and listed in the manufacturer's Model Chart. VERIFY that extinguisher cabinet specified is adequately sized for extinguisher body and overall height; NOTE that the 11 lb. and 15-1/2 lb. extinguishers are available in 2 different physical sizes with the same UL rating.

4. Model Identification and UL Rating: Mercury [2-1/2; 2BC] [5; 5BC] [11 (FM11C); 1A-10BC] [11 (FM11A; 1A-10BC)] [15-1/2 (FM15C); 2A-10BC] [15-1/2 (FM15A); 2A-10BC].

SPECIFIER: The extinguisher specified in subparagraph below is primarily used as a supplemental means of containing liquid cooking media fires, when combined with a pre-engineered suppression system in a restaurant application.

- F. Class K Wet Chemical Type: Extinguisher unit containing a low "pH" potassium acetate solution.
 1. Construction: Stainless steel cylinder with protective nozzle tip orifice seal and nonmetallic nozzle tip finger guard, O-ring seal, replaceable valve stem seal, visual pressure gage, pull pin, and upright squeeze grip.
 2. Effectiveness (Rating): Class A, K fires.

SPECIFIER: Select extinguisher model number in subparagraph below based on capacity and UL rating required, and listed in the manufacturer's Model Chart. VERIFY that extinguisher cabinet specified is adequately sized for extinguisher body and overall height.

3. Model Identification and and UL Rating: Saturn [15; Class K] [25; Class K].

SPECIFIER: The extinguisher specified in subparagraph below is ideal for use in medical facilities featuring telecommunications, and in cleanroom environments.

- G. Water Mist Type: Extinguisher unit containing water; nontoxic.
 1. Construction: Nonmagnetic cylinder and misting nozzle, O-ring seal, replaceable valve stem seal, visual pressure gage, and pull pin.
 2. Finish: Factory powder-coated; White.
 3. Effectiveness (Rating): Class A and C fires.

SPECIFIER: Select extinguisher model number in subparagraph below based on capacity and UL rating required, and listed in the manufacturer's Model Chart. VERIFY that extinguisher cabinet specified is adequately sized for extinguisher body and overall height.

4. Model Identification and UL Rating: 272; 2AC.

- H. Accessories:
 1. Mounting Brackets:

SPECIFIER: Steel brackets are provided with each fire extinguisher from the factory; these brackets may be used to mount extinguishers within cabinets if so provided, or may be selected for mounting in place of cabinets where allowed by code.

- a. Standard Brackets: Provide manufacturer's standard steel bracket, designed to secure fire extinguisher to wall or structure, of sizes required for types and capacities of fire extinguishers indicated.

SPECIFIER: Select standard brackets above, or; select painted brackets and accompanying straps in subparagraph below, for mounting in place of cabinets where allowed by code.

- b. Optional Brackets: Provide manufacturer's steel bracket with powder coat paint finish in manufacturer's standard color, and additional straps designed to secure fire extinguisher to wall or structure and prevent accidental dislodgement, of sizes required for types and capacities of fire extinguishers indicated.

2.03 SOURCE QUALITY CONTROL

- A. Ship extinguishers to the Project site fully charged, EXCEPT those which contain water as an extinguishing agent, if any.
- B. Obtain Fire Extinguishers and Fire Extinguisher Brackets from same manufacturer to ensure compatibility.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Examine walls and partitions for suitable framing depth and blocking where recessed and semi-recessed cabinets will be installed, and blocking where surface mounted cabinets will be installed.
 - 1. Notify the Contractor in writing of conditions detrimental to proper and timely completion of the installation.
 - 2. Proceed with installation only after unsatisfactory conditions have been corrected.

3.02 INSTALLATION

- A. Install cabinets in locations and at mounting heights indicated, or if not indicated, at heights to comply with applicable regulations of governing authorities.
 - 1. Prepare recesses in walls for fire extinguisher cabinets as required by type and size of cabinet and style of trim and to comply with manufacturer's instructions.
 - 2. Securely fasten mounting brackets and fire extinguisher cabinets to structure, square and plumb, to comply with manufacturer's instructions.
 - 3. Maintain fire ratings where cabinets are recessed into fire-rated wall systems.

SPECIFIER: Retain paragraph below for wall signs which identify a fire extinguisher location.

- B. Wall Signs:
 - 1. Location: Where shown or directed.
 - 2. Apply on walls after field painting is completed and has been accepted.

3.03 FIELD QUALITY CONTROL

- A. Ensure that each extinguisher is fully charged, and that inspection of each extinguisher has been performed, as evidenced by the National Association of Fire Equipment Distributors certification tag, just prior to turnover.

END OF SECTION