**3-Part CSI MasterFormat Specification**

**SECTION 104413**

**fire protection specialties – fire cabinets + extinguishers**

1. GENERAL
	* + 1. SUMMARY
				1. Section includes:

[**Fire Rated**] [**Non-Fire Rated**] Fire Extinguisher Cabinets for the following:

Portable fire extinguishers.

Fire hose valves.

Fire hoses and racks.

* + - * 1. Related Requirements:

Section 104416 “Fire Extinguishers.”

Section 211200 “Fire-Suppression Standpipes” for fire-hose connections.

* + - 1. COORDINATION
				1. Coordinate size of fire-protection cabinets to ensure that type and capacity of **[fire extinguishers] [fire hoses, hose valves, and hose racks]** indicated are accommodated.
				2. Size Variations: Obtain Architect’s acceptance and approval of manufacturer’s standard size units that may vary slightly from sizes indicated on Drawings.
				3. Coordinate sizes and locations of fire-protection cabinets with wall depths.
			2. Action SUBMITTALS
				1. Comply with Division 01 requirements.
				2. Shop Drawings:

General: Show connections of units and hardware to other Work. Include schedules showing location of each type and size of door and panel units.

* + - * 1. Product Data: Manufacturer’s technical data for each type of access door and panel assembly, including setting drawings, templates, fire-resistive characteristics, finish requirements, and details of anchorage devices.

Include complete schedule, types, locations, construction details, finishes, latching or locking provisions, and other pertinent data.

* + - * 1. Manufacturer’s Installation Instructions: Indicate installation requirements and rough-in dimensions.
			1. Quality Assurance
				1. NFPA 10 requirements for portable fire extinguishers.
				2. 2010 ADA Standards for maximum cabinet projection of 4 inches and mounting heights.
				3. ASTM E814 for fire resistive cabinets in rated wall assemblies.
			2. Delivery, Storage and Handling
				1. Comply with Division 01 requirements.
				2. Packing and Shipping: Deliver products in original unopened packaging with legible manufacturer’s identification.
				3. Store per manufacturer’s instructions.

Store in dry area out of direct sunlight.

* + - 1. WARRANTY
				1. Provide manufacturer’s written warranty.
				2. Warrant materials and workmanship against defects after completion and final acceptance of Work.

Repair defects, or replace with new materials, faulty materials or fabrication developed during the warranty period at no expense to Owner.

Fire Extinguisher Cabinet: 5 years from date of Substantial Completion of Project.

1. PRODUCTS
	* + 1. MANUFACTURER

Nystrom, Inc.

9300 73rd Avenue N

Brooklyn Park, MN 55428

Phone: (888) 412-3726

Fax: (888) 312-3726

www.nystrom.com

* + - 1. Performance Requirements

#### Requirement in “Fire-Rated Fire Protection Cabinets” Paragraph below applies only to recessed and semi-recessed cabinets.

* + - * 1. Fire-Rated Fire Protection Cabinets: Listed and labeled to comply with requirements in ASTM E 814 for fire-resistance rating of walls where they are installed.
			1. Fire Protection Cabinet
				1. Basis-of-Design Product: Subject to compliance with requirements, provide Nystrom; Fire Extinguisher Cabinet.

Description: Steel unit construction, continuous piano hinge with 180 degree opening. Weld joints and grind smooth.

Cabinet Mounting: [**Recessed,** **1/2 inch** **(12.7 mm)**][**Semi-Recessed,** **2 inches** **(50mm)**][**Semi-Recessed,** **3 inches** **(76mm)**][**Surface**][**Trimless**]

Components:

#### Retain one of the following three "Door and Frame" subparagraphs. Cold Rolled Steel is the standard material for the door and frame. White is the standard color finish for cold rolled steel.

Door and Frame:

0.036 inch (0.9mm) cold rolled steel.

Color and Finish: [**White**][**Red**][**Select from manufacturer’s catalog**] factory applied powder coat paint finish.

6063-T5 anodized aluminum.

Color and Finish: Satin finish, clear polyester coated.

0.0652 inch (1.66mm) stainless steel.

Color and Finish: Type 304 Stainless Steel with #4 finish.

Tub: 0.036 inch (0.9mm) cold rolled steel

Color Finish: White factory applied powder coat paint finish.

Door Type: [**Full glass with tempered safety glass**][**Full break glass with lock and breakrite handle**][**Duo Vertical with tempered safety glass**][**Duo Vertical with lock and breakrite handle**][**Center break glass with lock**][**Solid flush**][**Solid flush panel with lock**][**Full glass with pull handle**].

Options:

Door Glazing Type: [**Tinted or obscured tempered safety glass**][**Tinted or obscured acrylic**][**See manufacturer’s catalog for colors**].

Lettering: [**None**][**Vertical die cut, white**][**Vertical die cut, black**][**Vertical die cut, red][Vertical ascending die cut, white**][**Vertical ascending die cut, black**][**Vertical ascending die cut, red**][**Vertical decal, white**][**Vertical decal, black**][**Vertical decal, red**].

#### 90 degree turn handle is the standard latching mechanism.

Latching: [**90 degree turn handle**][**Pull handle roller catch**][**Fire pull handle roller catch**][**Flush pull handle**].

Cabinet Dimensions: Size to match extinguisher type.

Fire Rating: [Non-fire rated][Fire rated for 1 hour or 2 hour combustible and non-combustible wall systems].

* + - * 1. Basis-of-Design Product: Subject to compliance with requirements, provide; Nystrom Fire Extinguisher Cabinet.

Description: Steel unit construction, plexiglass door, gravity pin hinge with set screws to open 135 degrees. Weld joints and grind smooth.

Cabinet Mounting: [**Recessed,** 1/2 inch (12.7mm)][**Semi-Recessed,** 2 inches (50mm)][**Semi-Recessed**, 3 inches (76mm)][**Surface**][**Trimless**]

Components:

#### Retain one of the following three "Door and Frame" subparagraphs. Cold Rolled Steel is the standard material for the door and frame. White is the standard color finish for cold rolled steel.

Door and Frame:

0.036 inch (0.9mm) cold rolled steel.

Color and Finish: [**White**][**Red**][**Select from manufacturer’s catalog**] factory applied powder coat paint finish.

6063-T5 anodized aluminum.

Color and Finish: Satin finish, clear polyester coated.

0.0652 inch (1.66mm) stainless steel.

Color and Finish: Type 304 Stainless Steel with #4 finish

Tub: 0.036 inch (0.9mm) cold rolled steel.

Color and Finish: White factory applied powder coat paint finish.

Door Type: 0.236 inch (6mm) plexiglass.

Options:

Door Glazing Type: [**Clear**][**Bronze**][**White**][**Smoke**][**Red**] acrylic door.

Lettering: [**None**][**Vertical die cut, white**][**Vertical die cut, black**][**Vertical die cut, red**][**Vertical ascending die cut, white**][**Vertical ascending die cut, black**][**Vertical ascending die cut, red**][**Vertical decal, white**][**Vertical decal, black**][**Vertical decal, red**].

#### Pull handle roller catch is the standard latching mechanism.

Latching: [**Magnetic Catch**][**Scored Insert and Cylinder Lock**]

Cabinet Dimensions: Size to match extinguisher type.

Fire Rating: [Non-fire rated][Fire rated for 1 hour or 2 hour combustible and non-combustible wall systems]

* + - * 1. Basis-of-Design Product: Subject to compliance with requirements, provide Nystrom Fire Extinguisher Cabinet.

Description: Steel unit construction, concealed frame, handle and hinges.

Cabinet Mounting: [**Protrusion,** 5/8 inch (15.875mm)]

Components:

Door and Frame:

0.036 inch (0.9mm) cold rolled steel.

Color and Finish: [**White**][**Red**][**Select from manufacturer’s catalog**] factory applied powder coat paint finish.

6063-T5 anodized aluminum.

Color and Finish: Satin finish, clear polyester coated.

0.0652 inch (1.66mm) stainless steel.

Color and Finish: Type 304 Stainless Steel with #4 finish

Tub: 0.036 inch (0.9mm) cold rolled steel.

Color and Finish: White factory applied powder coat paint finish.

Door Type: [**Duo Vertical Panel**][**Duo Vertical Panel with Lock**][**Solid Flush Panel**][**Solid Flush Panel with Lock**].

Options:

Door Glazing Type: [**Tinted or obscured tempered safety glass**][**Tinted or obscured acrylic**][**See manufacturer’s catalog for colors**].

Lettering: [**None**][**Vertical die cut, white**][**Vertical die cut, black**][**Vertical die cut, red**][**Vertical ascending die cut, white**][**Vertical ascending die cut, black**][**Vertical ascending die cut, red**][**Vertical decal, white**][**Vertical decal, black**][**Vertical decal, red**].

#### Pull handle roller catch is the standard latching mechanism.

Latching: [**90 degree turn handle**][**Pull handle roller catch**][**Fire pull handle roller catch**][**Flush pull handle**].

Cabinet Dimensions: Size to match extinguisher type.

Fire Rating: [**Non-fire rated**][**Fire rated for 1 hour or 2 hour combustible and non-combustible wall systems**]

* + - * 1. Basis-of-Design Product: Subject to compliance with requirements, provide Nystrom Fire Extinguisher Cabinet.

Description: Steel unit construction, continuous piano hinge with 180 degree opening, architectural convex, clear “bubble” window.

Cabinet Mounting: [**Recessed,** 1/2 inch (12.7mm)][**Semi-Recessed,** 2 inches (50mm)][**Semi-Recessed**, 3 inches (76mm)][**Surface**][**Trimless**]

Components:

#### Retain one of the following three "Door and Frame" subparagraphs. Cold Rolled Steel is the standard material for the door and frame. White is the standard color finish for cold rolled steel.

Door and Frame:

0.036 inch (0.9mm) cold rolled steel.

Color and Finish: [**White**][**Red**][**Select from manufacturer’s catalog**] factory applied powder coat paint finish.

6063-T5 anodized aluminum.

Color and Finish: Satin finish, clear polyester coated.

0.0652 inch (1.66mm) stainless steel.

Color and Finish: Type 304 Stainless Steel with #4 finish

Tub: 0.036 inch (0.9mm) cold rolled steel.

Color and Finish: White factory applied powder coat paint finish.

Door Type: [**Convex Clear Full bubble with catch**][**Convex Clear Full bubble with scored acrylic insert and trip lever cylinder lock**].

Optional bubble color: [**Bronze tinted**][**Smoke tinted**]

Options:

Lettering: [**None**][**Vertical die cut, white**][**Vertical die cut, black**][**Vertical die cut, red**][**Vertical ascending die cut, white**][**Vertical ascending die cut, black**][**Vertical ascending die cut, red**][**Vertical decal, white**][**Vertical decal, black**][**Vertical decal, red**].

#### Pull handle roller catch is the standard latching mechanism.

Latching: [**Pull handle roller catch**][**Fire pull handle roller catch**][**Flush pull handle**]

Cabinet Dimensions: Size to match extinguisher type.

Fire Rating: [**Non-fire rated**][**Fire rated for 1 hour or 2 hour combustible and non-combustible wall systems**]

* + - 1. Portable Hand-carried Fire Extinguishers

#### Edit Note: Select type and indicate size of fire extinguisher required.

* + - * 1. Types

ABC Dry Chemical Portable Fire Extinguisher Model BEX-30

Multi-purpose Dry Chemical Type in Steel Container <Insert drawing designation>: UL Rated [**1A:10B:C, 2.5 lb (1.1kg)**][**2A:10B:C, 5 lb. (2.3kg)**][**3A:40B:C, 5 lb. (2.3kg)**][**3A:40B:C, 6 lb. (2.7kg)**][**4A:60B:C, 10 lb. (4.5kg)**][**10A:120B:C, 20 lb. (9.1kg)**] nominal capacity, with momoammonium phosphate based dry chemical in enameled steel container.

Kitchen Class K Portable Fire Extinguisher Model BEX-32

Wet Chemical Type <Insert drawing designation>: UL Rated 2-A:K**,**  [**1.6 gal. (6L)**][**2.5 gal. (9.5L)**] nominal capacity, with potassium acetate based chemical in stainless steel container; with pressure indicating gage.

BC Dry Chemical Portable Fire Extinguisher Model BEX-33

Regular Dry Chemical Type in Steel Container <Insert drawing designation>: UL Rated[**10B:C, 2.5 lb. (1.1kg)**][**10B:C, 5 lb. (2.3kg)**][**40B:C, 5.5 lb. (2.5kg)**][**40B:C, 6 lb. (2.7kg)**][**60B:C, 10 lb. (2.5kg)**][**120B:C, 20 lb. (9.1kg)**] nominal capacity, with sodium bicarbonate based dry chemical in enameled steel container.

Carbon Dioxide Portable Fire Extinguisher Model BEX-34

Carbon Dioxide Type <Insert drawing designation>: UL Rated [**5B:C, 5 lb. (2.3kg)**][**10B:C, 10 lb. (4.5kg)**][**10B:C, 15 lb. (6.8kg)**][**10B:C, 20 lb. (9.1kg)**] nominal capacity, with carbon dioxide in [**manufacturer’s standard enameled metal**][**enameled steel**][**enameled aluminum**] container.

Halotron I Portable Fire Extinguisher Model BEX-31

Clean Agent Type in Steel Container <Insert drawing designation>: UL Rated [**1B:C, 1.4-lb (0.64-kg)**] [**5B:C, 4.75 lb. (2.2kg)**][**1A:10B:C, 10 lb. (4.5kg)**][**2A:10B:C, 15 lb. (6.8kg)**] nominal capacity, with HFC blend agent and inert material in enameled-steel container; with pressure indicating gage.

* + - * 1. Options: Mounting Brackets
				2. Anti-freeze Charge
			1. Accessories
				1. Wall Mounting Bracket with Extinguisher: Sized for each extinguisher. Manufacturer’s standard mounting bracket with strap to secure fire extinguisher to bracket.
				2. Lettering and warning labels.
1. Execution
	* + 1. EXAMINATION
				1. Verify that rough openings for cabinet are correctly sized and located.
				2. Verify blocking is in place for brackets.
			2. Preparation
				1. Coordinate work relating to fire extinguisher cabinet installation including rough opening dimensions and locations of supports.
			3. Installation
				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.

#### EDIT NOTE: delete the following paragraph if no fire-rated units on project.

* + - * 1. Fire-rated units: Include UL label, UL classified listing No. 7N43 ANSI/UL 1479.

END OF SECTION

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