

SECTION 10 14 00 SIGNAGE

PART 1 GENERAL

1.01 REFERENCES

- A. The following is a list of standards that may be referenced in this section:
1. American Society of Mechanical Engineers (ASME): A13.1, Scheme for the Identification of Piping Systems.
 2. Architectural Barriers Act (ABA).
 3. ASTM International (ASTM):
 - a. A53/A53M, Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated Welded and Seamless.
 - b. D709, Standard Specification for Laminated Thermosetting Materials.
 4. International Code Council (ICC): International Fire Code (IFC): Chapter 50, Hazardous Materials-General Provisions.
 5. National Fire Protection Association (NFPA):
 - a. 704, Standard System for the Identification of the Hazards of Materials for Emergency Response.
 - b. HAZ-01, Fire Protection Guide to Hazardous Materials.
 6. Occupational Safety and Health Act (OSHA).
 7. U.S. Department of Transportation, Federal Highway Administration: Manual on Uniform Traffic Control Devices for Streets and Highways.

1.02 SUBMITTALS

- A. Action Submittals:
1. Product Data: Manufacturer's literature for items specified.
 2. Shop Drawings:
 - a. Signage: Drawings showing layouts, actual letter sizes and styles, and Project-specific mounting details.
 - b. Sign Layout Plan: Submit layout plan for each facility showing locations where scheduled signs are to be placed.
 - c. Pipe Label Layout Plan: Submit layout plan for each facility showing types, sizes, and locations where pipe labels are intended to be placed based on specified requirements.
 - d. Pipe Label Color Chart: Submit color selections for approval prior to final acceptance of piping submittals.
- B. Informational Submittals: Manufacturer's installation instructions.

PART 2 PRODUCTS

2.01 DOOR NAMEPLATES

A. Manufacturers and Products:

1. Best Sign Systems, Montrose, CO; Graphic Blast.
2. Or equal.

B. Physical Characteristics:

1. Material: Plastic with square corners.
2. Thickness: 1/8 inch.
3. Height: 2 inches.
4. Finish: Nondirectional matte.
5. Background: Black.
6. Letters: Raised.
 - a. Size: 1 inch high.
 - b. Color: White.
 - c. Style: Helvetica Regular upper case.
 - d. Message Text: As shown on Door and Hardware Schedule on the Drawings.
 - e. Braille Text: Domed or rounded as required by ABA regulations, with 3/8-inch minimum clearance on all sides.

C. Functional Characteristics: None.

D. Performance Characteristics: Exterior-rated with non-glare UV inhibiting paint.

2.02 PICTORIAL SYMBOLS

A. Manufacturers and Products:

1. Best Sign Systems, Montrose, CO; Graphic Blast.
2. Or equal.

B. Physical Characteristics:

1. Material: Plastic with square corners, match door nameplates.
2. Conform to ABA, Section F216. Provide Braille text as required by regulation.

C. Functional Characteristics: None.

D. Performance Characteristics: None.

2.03 SIGN TYPES

A. Physical Characteristics:

1. Metal Sign (Type B):
 - a. Manufacturers:
 - 1) Seton Identification Products.
 - 2) Or equal.
 - b. Material: Baked enamel finished 20-gauge (minimum) steel or 18-gauge (minimum) aluminum signs.
2. Fiberglass Sign (Type C):
 - a. Manufacturers:
 - 1) Best Sign Systems.
 - 2) Or equal.
 - b. Material: Three-ply laminated fiberglass, minimum 1/8 inch thick, with contrasting color core message layer between two clear weather-resistant surface layers.
3. Traffic Sign (Type D):
 - a. Painted aluminum reflectorized signs, standard design meeting requirements of U.S. Department of Transportation, Federal Highway Administration, Manual on Uniform Traffic Control Devices for Streets and Highways.
 - b. Materials and Fabrication: Arizona Department of Transportation Standard Specifications for Road and Bridge Construction.
4. Painted Sign (Type F):
 - a. Stenciled.
 - b. Paint System and Surface Preparation: As specified in Section 09 90 00, Painting and Coating, as appropriate for material and sign location.
5. Hazardous Material Sign (Type H):
 - a. Manufacturers:
 - 1) Brady Signmark.
 - 2) Or equal.
 - b. Conform to NFPA 704 and NFPA HAZ-01.
 - c. Material: Fiberglass 1/8 inch thick.
 - d. Background, Letters, and Numbers: Die-cut vinyl with pressure sensitive adhesive.

B. Functional Characteristics: None.

C. Performance Characteristics: None.

2.04 IDENTIFICATION LABELS

A. Pipe Labels (Type 1):

1. Manufacturers and Products:
 - a. Seton Identification Products; Ultra-mark Pipe Markers
 - b. Or equal.
2. Physical Characteristics:
 - a. Snap-on, reversible type with lettering and directional arrows, sized for outside diameter of pipe and insulation.
 - b. Provided with ties or straps for pipes typically nominal size 6 inches in diameter and larger.
 - c. Designed to firmly grip pipe so labels remain fixed in vertical pipe runs.
 - d. Material: Heavy-duty vinyl or polyester, suitable for exterior use, long lasting, and resistance to moisture, grease, and oils.
 - e. Letters and Arrows: Black on OSHA safety yellow background.
 - f. Color Field Length, and Letter Height: Meet ASME A13.1.
 - g. Color Selection: By approved submittal prior to final acceptance of piping submittals.
 - h. Message: See Piping Schedule on the Drawings and Section 40 27 00, Process Piping—General.
3. Functional Characteristics: None.
4. Performance Characteristics: None.

B. Pipe Labels (Type 2):

1. Manufacturers and Products:
 - a. Seton Identification Products; Opti-Code Markers and Directional Arrows.
 - b. Or equal.
2. Physical Characteristics:
 - a. Labels: Self-adhesive, with separate directional flow arrows.
 - b. Material: Pressure sensitive vinyl.
 - c. Letters and Arrows: Black on OSHA safety yellow background.
 - d. Color Field Length, and Letter Height: ASME A13.1.
 - e. Color Selection: By approved submittal prior to final acceptance of piping submittals.
 - f. Message: See Piping Schedule on the Drawings and Section 40 27 00, Process Piping—General.
3. Functional Characteristics: Typically used on all pipe sizes and exposed installations, except at locations where Type 1 would work better.
4. Performance Characteristics: None.

C. Equipment Labels:

1. Manufacturers and Products:
 - a. Seton Identification Products; Etched Equipment Nameplates.
 - b. Or equal.
2. Physical Characteristics:
 - a. Material: Stainless steel, 25 gauge.
 - b. Letters: Etched, uppercase.
 - c. Background: Natural metal.
 - d. Furnish with square corners and four mounting holes; provide adhesive mounting application requires.
 - e. Size: 6 inches wide by 3 inches high.
3. Functional Characteristics:
 - a. Applies to equipment with assigned tag numbers, where specified.
 - b. Message: Equipment names and tag numbers as used in sections where equipment is specified.
4. Performance Characteristics: Message: Equipment names and tag numbers as used in sections where equipment is specified.

2.05 ANCILLARY MATERIALS

A. Physical Characteristics:

1. Fasteners: Stainless steel screws or bolts of appropriate sizes.
2. Wood Posts: Preservative treated 4 by 4 wood as specified in Section 06 10 00, Rough Carpentry.
3. Pipe Posts: 2-1/2-inch galvanized steel pipe meeting ASTM A53/A53M, Type S, Grade B.
4. Chain: Type 304 stainless steel, No. 16 single jack chain or No. 2 double loop coil chain.

B. Functional Characteristics: None.

C. Performance Characteristics: None.

PART 3 EXECUTION

3.01 INSTALLATION—GENERAL

- A. In accordance with manufacturer's recommendations.
- B. Mount securely, plumb, and level.

3.02 DOOR NAMEPLATES AND PICTORIAL SYMBOLS

- A. Attach to doors or walls adjacent to doors with self-sticking removable adhesive. See Door and Hardware Schedule for locations and messages.

- B. Mount with bottom of nameplates in the Administration Building (10) at a height between 4 feet and 5 feet above floor for ABA mounting and 5 feet 6 inches above floor for non-ABA mounting.

3.03 SIGNS

A. General:

1. Fasten to walls or posts, or hang as scheduled.
2. Anchor in place for easy removal and reinstallation with ordinary hand tools.

- B. Traffic Signs: Mount each sign on scheduled support using two 1/4-inch stainless steel bolts through sign and post.

C. Hazardous Material Sign:

1. Install where required by NFPA No. 704 and IFC, Chapter 50.
2. Install at entrances to spaces where hazardous materials are stored, dispensed, used, or handled, and on sides of stationary tanks.
3. Specific Materials:

Sign Schedule—Hazardous Material Signs								
Mark	Material	Health Hazard (Blue)	Flammability Hazard (Red)	Instability Hazard (Yellow)	Special Hazard (White)	Location	Mounting Method	Height to Top
H-1	Magnesium Hydroxide (53% solution)	0	0	0		Wall	Bolts	5'-6"
H-2	Sodium Hypochlorite (12-15% solution)	3	0	0	COR	Wall	Bolts	5'-6"

3.04 IDENTIFICATION LABELS

A. Pipe Labels:

1. Use Type 1 (Snap-on) labels for pipes 3 inches in diameter and smaller.
2. Use Type 2 (Adhesive) labels for pipes larger than 3 inches in diameter.
3. Locate at connections to equipment, valves, or branching fittings at wall boundaries.
4. At intervals along piping not greater than 18 feet on center with at least one label applied to each exposed horizontal and vertical run of pipe.
5. At exposed piping not normally in view, such as above suspended ceilings and in closets and cabinets.
6. Apply to pipe after painting in vicinity is complete, or as approved by Contracting Officer.
7. Install in accordance with manufacturer's instructions.

B. Equipment Labels:

1. Locate and install on equipment or concrete equipment base.
2. Anchor to equipment or base for easy removal and replacement with ordinary hand tools.

3.05 SUPPLEMENTS

A. The supplement listed below, following “End of Section,” is a part of this specification:

1. Sign Schedule: Tabulation of characteristics and mounting information for signs on Project. Provide items as scheduled. Meet requirements of Occupational Safety and Health Act (OSHA).

END OF SECTION

Sign Schedule														
Sign														Other Requirements
Number ¹	Sign Type ²	Detail Reference ³	Size		Color	Mounting								
			Width	Height		Location	Method	Height to Top	Height	Style	Color	Message	Faces	
S-1	C	1014-002	20"	14"	Yellow	Hanging	Chain	5'-6"	1" min.	Helvetica	Black	CAUTION Equipment Starts Automatically	1	At Pumps
S-3	C	1014-001	20"	14"	White	Door	Screws or Bolts	5'-6"	1" min.	Helvetica	Black	DANGER High Voltage	1	At each Electrical Rom Door
S-6	C	1014-001	20"	14"	White	Wall	Bolts	5'-6"	1" min.	Helvetica	Black	DANGER No Smoking	1	At Digesters, near name door 32104A
S-8	C	1014-001	20"	14"	White	Wall	Bolts	3'-6"	1" min.	Helvetica	Black	DANGER Nonpotable Water Not for Drinking	1	Provide at interior W2 hose valves
S-9	B	1014-001	20"	14"	White	Pipe Post	Bolts	3'-6"	1" min.	Helvetica	Black	DANGER Nonpotable Water Not for Drinking	1	Provide at exteriorW2 hose valves
S-10	F	N/A	As required		White	Tank Side	Painted	5'-0"	3" min.	Block	Red	*DANGER COMBUSTIBLE LIQUIDS	1	*Put message on one line
S-11 ⁴	C	1014-001	10"	7"	White	Door	Screws	5'-6"	1" min.	Helvetica	Black	DANGER CONFINED SPACE AUTHORIZED EMPLOYEES ONLY	1	At Digesters
S-16	B	1014-009	10"	7"	White	Door	Adhesive	5'-6"	1" min.	Helvetica	Red	FIRE DOOR DO NOT OBSTRUCT	1	As noted on Door and Hardware Schedule
S-20	G	1014-011	10"	14"	White	Door	Adhesive	6'-0"	6"	Block	Red	Not An Exit	1	Door 80S01D

Sign Schedule														
Sign									Lettering					Other Requirements
Number ¹	Sign Type ²	Detail Reference ³	Size		Color	Mounting								
			Width	Height		Location	Method	Height to Top	Height	Style	Color	Message	Faces	
S-19	D	STD	30"	30"	Red	Post	Bolts	7'-6" min.	7" min.	Block	White	STOP	1	Where shown on Civil Drawings
S-22	D	1014-004	12"	18"	Blue	Pipe Post	Bolts	5'-6"	1" min.	Block	White	*HANDICAPPED PARKING STATE PERMIT REQUIRED	1	*With symbol above
S-23	H	1014-006	10" min	10" min	*	Wall	Screws	5'-6"	4"	Block	Black	*	1	*See format detail and article Signs; provide at all locations hazardous materials are stored and used

¹Numbers refer to a particular sign type with a particular message.

²Letters refer to Sign Types specified in this section.

³Numbers refer to Design Details that show sign layout.

⁴Verify requirements for this sign with Regulations in state where Project is located.