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## SECTION 224716 - PRESSURE WATER COOLERS

### **TIPS:**

To view non-printing **Editor's Notes** that provide guidance for editing, click on MasterWorks/Single-File Formatting/Toggle/Editor's Notes.

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## PART 1 - GENERAL

### 1.1 SUMMARY

- A. Section includes pressure water coolers and related components.

### 1.2 ACTION SUBMITTALS

- A. Product Data: For each type of pressure water cooler.
  - 1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes.

2. Include rated capacities, operating characteristics, electrical characteristics, and furnished specialties and accessories.

B. Sustainable Design Submittals:

1. Product Data: For water consumption.

C. Shop Drawings: Include diagrams for power, signal, and control wiring.

### 1.3 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For pressure water coolers to include in maintenance manuals.

### 1.4 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

1. Filter Cartridges: Equal to **<Insert number>** percent of quantity installed for each type and size indicated, but no fewer than **<Insert number>** of each.

## PART 2 - PRODUCTS

### 2.1 PRESSURE WATER COOLERS

- A. Pressure Water Coolers **<Insert drawing designation>**: [**Freestanding**] [**Flush to wall**].

1. Basis-of-Design Product: Subject to compliance with requirements, provide Murdock Manufacturing; Morris Group International; [**A511.5**] [**A611.8**] or comparable product by one of the following:

- a. Elkay Manufacturing Co.
- b. Oasis International.
- c. **<Insert manufacturer's name>**.

2. Standards:

- a. Comply with:

- 1) ASHRAE 15, or where applicable, ASHRAE 34.
- 2) ASME A112.18.1/CSA B125.
- 3) IAPMO IGC 226.
- 4) NSF 61 and NSF 372.
- 5) UL 399 and CSA C22.2, No. 120.
- 6) Uniform Plumbing Code, National Plumbing Code of Canada (UPC/CUPC).

3. Cabinet:

- a. Finish: **[All stainless steel]** **[Powder coated, with manufacturer's color selected from manufacturer's standard offerings]**, and stainless steel top.
  - b. Orientation: **[Positioned against wall]** **[Freestanding with enclosed back panel]**.
4. Bubbler: One **[flexible bubbler with gray finish]** **[stainless steel bubbler]**, with adjustable stream regulator, located on each cabinet deck.
  5. Control: **[Push button]** **[Foot pedal]**.
  6. Drain: Grid with **1-1/4 O.D. (32 mm)** tailpiece.
  7. Supply: **NPS 3/8 (DN 10)** with shutoff valve.
  8. Waste Fitting: ASME A112.18.2/CSA B125.2, **NPS 1-1/4 (DN 32)** brass P-trap.
  9. Filtration: Provide lead, chlorine, and cyst reduction filter rated for **1500 gal (6800 L)** effective lifespan.
  10. Cooling System: Electric, with hermetically sealed compressor, cooling coil, air-cooled condensing unit, corrosion-resistant tubing, refrigerant, corrosion-resistant-metal storage tank, and adjustable thermostat.
    - a. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
    - b. Provide HFC 134a (tetrafluoroethane) refrigerant unless otherwise indicated.
  11. Capacities and Characteristics:
    - a. Capacity: **[5 gph (22.7 L/h)]** **[8 gph (36.44 L/h)]** **<Insert value>**.
    - b. Ambient-Air Temperature: **90 deg F (32 deg C)**.
    - c. Inlet-Water Temperature: **80 deg F (27 deg C)**.
    - d. Cooled-Water Temperature: **50 deg F (10 deg C)**.
    - e. Electrical Characteristics:
      - 1) Motor Horsepower: **1/5 HP (3.7 kW)**.
      - 2) Volts: 120 V ac.
      - 3) Phase: Single.
      - 4) Hertz: 60.
      - 5) Full-Load Amperes: **[3.6 A]** **[4.4 A]**. **<Insert value>**.
    - f. Refrigerant: R-134a.
    - g. Insulate cooled water lines.
  12. Accessories:
    - a. Glass Filler: Deck mounted.
    - b. Hot Water Cup Filler: Deck mounted.
- B. Pressure Water Coolers **<Insert drawing designation>**: Wall mounted, stainless steel **[, bi-level]** **[, bottle filler]** **[, vandal resistant]** **[, wheelchair accessible]**.
1. Basis-of-Design Product: Subject to compliance with requirements, provide Murdock Manufacturing; Morris Group International; **[A171.8-UG]** **[A171.8-UG-BF]** **[A171.8-UG-SO]** **[A171.8-UG-SO-BF]** **[A171.8-UG-SOC]** **[A171.8-UG-SOC-BF]** **[A171.8-UG-VR]** **[A171.8-UG-VR-BF]** **[A171.8-UG-VR-D1-BFS]** **[A172.8-UG]** **[A172.8-UG-**

**BF] [A172.8-UG-SO] [A172.8-UG-SO-BF] [A172.8-UG-SOC] [A172.8-UG-SOC-BF] [A172.8-UG-VR] [A172.8-UG-VR-BF] [A172.8-UG-VR-D1-BFS] [A191.8] [A191.8-BF] [A192.8] [A192.8-BF] [A311.8] [A171408S-FG-VR] [A171408S-FG-VR-BFS] [A172408S-FG-VR-BFS]** or comparable product by one of the following:

- a. Elkay Manufacturing Co.
  - b. Oasis International.
  - c. **<Insert manufacturer's name>**.
2. Standards:
- a. Comply with:
    - 1) ASHRAE 15, or where applicable, ASHRAE 34.
    - 2) ASME A112.18.1/CSA B125.
    - 3) IAPMO IGC 226.
    - 4) ICC A117.1.
    - 5) NSF 61 and NSF 372.
    - 6) UL 399 and CSA C22.2, No. 120.
    - 7) Uniform Plumbing Code, National Plumbing Code of Canada (UPC/CUPC).
  3. Receptor: Type 304 stainless steel, No. 4, satin finish.
  4. Bubbler: **[One] [Two]**, **[flexible with gray finish] [lead-free stainless steel]**, with anti-rotation, non-squirt design.
  5. Maximum Water Flow: **0.5 gpm (1.9 L/m)**.
  6. Cabinet: **[Single] [Bi-level cabinets] [Bi-level cabinets with bi-level skirt kit]**.
  7. Control, Push Button: Push-button operated cartridge-style valve, having front access adjustable stream regulator.
  8. Control, Vandal Resistant: Round vandal-resistant push button, having front access adjustable stream regulator.
  9. Control, Sensor Operated: Infrared sensor-operated valve, preset for maximum 20-second run time.
    - a. Sensor Location: **[Front apron] [Undermount concealed]**.
    - b. Flow Restrictor: **0.5 gpm (1.9 L/m)**.
  10. Valve: 9 V dc electronic solenoid valve.
  11. Bottle Filler, Accessible: Accessible contour design for coordinated installation with single station drinking fountain and bi-level accessible station. Drinking fountain basin will serve as drain.
    - a. Housing: Minimum 20-gauge, Type 304 stainless steel with exposed surfaces polished to No. 4 satin finish, with contour that aligns with drinking fountain basin. Fabricate bottle filler area from antimicrobial, impact-resistant ABS plastic. Provide LED lamp to illuminate bottle filler area during activation.
    - b. Activation:
      - 1) 9-volt infrared sensor, preset with 20-second automatic shut-off timer. Provide **[115-volt, plug-in transformer] [battery power pack]**.

- 2) Pneumatic hemispherical push button requiring less than **5 pounds (22.2 N)** force to operate air-actuated valve.
  - c. Spout: Laminar flow spout. Fill rate **1.0 gpm (0.6314 L/s)**.
  - d. Bottle Counter Display: Provide LED screen that activates during use to display number of uses that equate to 16-ounce bottles, and water filter status.
    - 1) Provide bottle-filled count that does not reset with change of filter or power interruption.
12. Bottle Filler, Vandal Resistant: Accessible vandal-resistant design with coordinated installation for single-station drinking fountain and bi-level accessible station. Drinking fountain basin will serve as drain.
- a. Housing: 18-gauge Type 304 stainless steel with exposed surfaces polished to a No. 4 satin finish.
  - b. Activation:
    - 1) 9-volt infrared sensor, preset with 20-second automatic shut-off timer with **[115-volt plug-in transformer] [battery power pack]**.
    - 2) Pneumatic hemispherical push button requiring less than **5 pounds (22.2 N)** force to operate air-actuated valve.
  - c. Spout: Laminar Flow Spout. Fill rate **1.0 gpm (0.6314 L/s)**.
  - d. Bottle Counter Display: Provide LED screen that activates during use to display number of uses that equate to 16-ounce bottles, and water filter status.
    - 1) Provide bottle-filled count that does not reset with change of filter or power interruption.
13. Drain: Grid with **1-1/4-inch (32 mm)** OD tailpiece.
14. Supply: **NPS 3/8 (DN 10)** with shutoff valve.
15. Waste Fitting: ASME A112.18.2/CSA B125.2, **1-1/4-inch (32 mm)** OD, brass P-trap.
16. Filtration:
- a. Lead, chlorine, and cyst reduction filter rated for **[1500 gal (6800 L)] [3000 gal (13600 L)]** effective lifespan.
  - b. Provide **[EZ Door]** filter assembly with lockable cover, allowing access beneath skirt for replacement with lead, chlorine, and cyst reduction filter rated for **1500 gal (6800 L)** effective lifespan. Furnish key for each unit having lockable cover furnished for Project.
17. Cooling System: Electric, with hermetically sealed compressor, cooling coil, air-cooled condensing unit, corrosion-resistant tubing, refrigerant, corrosion-resistant-metal storage tank, and adjustable thermostat.
- a. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
  - b. Provide HFC 134a (tetrafluoroethane) refrigerant unless otherwise indicated.

## 18. Capacities and Characteristics:

- a. Cooled Water: **[8 gph (30 L/h)]** <Insert value>.
- b. Ambient-Air Temperature: **90 deg F (32 deg C)**.
- c. Inlet-Water Temperature: **80 deg F (27 deg C)**.
- d. Cooled-Water Temperature: **50 deg F (10 deg C)**.
- e. Electrical Characteristics:
  - 1) Motor Horsepower: **[1/5]** <Insert value>.
  - 2) Volts: 120-V ac.
  - 3) Phase: Single.
  - 4) Hertz: 60.
  - 5) Full-Load Amperes: **[5]** <Insert value>.
- f. Provide insulation on cooled water lines.

## 19. Ventilation Grille: Stainless steel.

## 20. Accessories:

- a. Back panel splash plate.
- b. Cane skirt kit for upper unit on bi-level fountains.
- c. Concealed support carrier.
- d. Drop-down filter access door.

## 21. Support: Standard wall-mounting bracket for attaching to substrate.

22. Water Cooler Mounting Height: **[Standard]** **[Child]** **[Handicapped/elderly, in accordance with ICC A117.1]**.

## C. Drinking Fountains: Stainless steel pressure water coolers, wall mounted, with trim panel &lt;Insert drawing designation&gt;.

1. Basis-of-Design Product: Subject to compliance with requirements, provide Murdock Manufacturing; Morris Group International; **[A131.8-VR]** **[A131.8-VR-BF]** **[A132.8-VR]** **[A132.8-VR-BF]** **[A151.8-FG]** **[A151.8-FG-BF]** **[A151.8-VR]** **[A151.8-VR-BF]** **[A152.8-FG]** **[A152.8-FG-BF]** **[A152.8-VR]** **[A152.8-VR-BF]** or comparable product by one of the following:

- a. Elkay Manufacturing Co.
- b. Oasis International.
- c. <Insert manufacturer's name>.

## 2. Standards:

- a. Comply with:
  - 1) ASHRAE 15, or where applicable, ASHRAE 34.
  - 2) ASME A112.18.1/CSA B125.
  - 3) IAPMO IGC 226.
  - 4) ICC A117.1.
  - 5) NSF 61 and NSF 372.

- 6) UL 399 and CSA C22.2, No. 120.
  - 7) Uniform Plumbing Code, National Plumbing Code of Canada (UPC/CUPC).
3. Receptor: Type 304 stainless steel, No. 4, satin finish.
  4. Back Panel: Stainless steel wall plate behind drinking fountain with No. 4 satin finish
  5. Bubbler: **[One]** **[Two]** **[flexible with gray finish]** **[lead-free stainless steel]**, with anti-rotation, non-squirt design.
  6. Maximum Water Flow: **0.5 gpm (1.9 L/m)**.
  7. Cabinet: **[Single]** **[Bi-level cabinets]** **[Bi-level cabinets with bi-level skirt kit]**.
  8. Accessible Drinking Fountain Orientation: On **[left]** **[right]** side, when facing unit.
  9. Control, Push Button: Round, vandal-resistant push-button operated cartridge-style valve, having front access adjustable stream regulator.
  10. Control, Sensor Operated: Infrared sensor-operated valve, preset for maximum 20 second run time.
    - a. Sensor Location: **[Front apron]** **[Undermount concealed]**.
    - b. Flow Restrictor: **0.5 gpm (1.9 L/m)**.
    - c. Valve: 9 V dc electronic solenoid valve.
  11. Drain: Grid with **1-1/4-inch (32 mm)** OD tailpiece.
  12. Supply: **NPS 1/2 (DN 15)** with shutoff valve.
  13. Waste Fitting: ASME A112.18.2/CSA B125.2, **1-1/4-inch (32 mm)** OD, brass P-trap.
  14. Bottle Filler, Accessible, Vandal Resistant: Accessible, vandal-resistant design integrated into trim panel for single-station drinking fountain and bi-level accessible station.
    - a. Activation:
      - 1) 9-volt infrared sensor, preset with 20-second automatic shut-off timer. Provide 115-volt, plug-in transformer.
      - 2) Pneumatic hemispherical push button requiring less than **5 pounds (22.2N)** force to operate air-actuated valve.
    - b. Spout: Laminar flow spout. Fill rate **1.0 gpm (3.8 L/m)**.
    - c. Filtration: Lead, chlorine, and cyst reduction filter rated for **[1500 gal (6800 L)]** **[3000 gal (13600 L)]** effective lifespan.
    - d. Bottle Counter Display: Provide LED screen that activates during use to display number of uses that equate to 16-ounce bottles, and water filter status.
      - 1) Provide bottle-filled count that does not reset with change of filter or power interruption.
  15. Accessories:
    - a. Filter access panel for bi-level units.
    - b. Back panel splash plate.
    - c. Cane skirt kit for upper unit for bi-level fountains.
    - d. High polish stainless steel.

16. Cooling System: Electric, with hermetically sealed compressor, cooling coil, air-cooled condensing unit, corrosion-resistant tubing, refrigerant, corrosion-resistant-metal storage tank, and adjustable thermostat.
    - a. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
    - b. Provide HFC 134a (tetrafluoroethane) refrigerant unless otherwise indicated.
  17. Capacities and Characteristics:
    - a. Cooled Water: **8 gph (30 L/h)** <Insert value>.
    - b. Ambient-Air Temperature: **90 deg F (32 deg C)**.
    - c. Inlet-Water Temperature: **80 deg F (27 deg C)**.
    - d. Cooled-Water Temperature: **50 deg F (10 deg C)**.
    - e. Electrical Characteristics:
      - 1) Motor Horsepower: **[1/5]** <Insert value>.
      - 2) Compressor: **[115 V, 60 Hz, 4.6 A] [220 V, 50 Hz, 2.5 A]**.
      - 3) Phase: Single.
    - f. Provide insulation on cooled water lines.
  18. Ventilation Grille: Stainless steel.
  19. Support: In-wall mounting frame to receive fixture trim plate.
  20. Support: Standard wall-mounting bracket for attaching to substrate.
  21. Water Cooler Mounting Height: **[Standard] [Child] [Handicapped/elderly, in accordance with ICC A117.1]**.
- D. Bottle Filling Station with Pressure Water Cooler<Insert drawing designation>: wall mounted[, **standard**][, **wheelchair accessible**][, **vandal resistant**].
1. Basis-of-Design Product: Subject to compliance with requirements, provide Murdock Manufacturing; Morris Group International; **[BF38] [BF48] [BF158] [BF168] [BFEZ168] [BFEZ268] [A1711080-BF2S]** <Insert product name or designation> or comparable product by one of the following:
    - a. Elkay Manufacturing Co.
    - b. Oasis International.
    - c. <Insert manufacturer's name>.
  2. Standards:
    - a. Comply with:
      - 1) ASHRAE 15, or where applicable, ASHRAE 34.
      - 2) ASME A112.18.1/CSA B125.
      - 3) IAPMO IGC 226.
      - 4) ICC A117.1, CSA B651.
      - 5) NSF 61 and NSF 372.

- 6) UL 399 and CSA C22.2, No. 120.
  - 7) Uniform Plumbing Code, National Plumbing Code of Canada (UPC/CUPC).
3. Cabinet: [**Stainless steel**] [**Powder coated steel with stainless steel top**] <Insert material>.
  4. Bottle Filler: Accessible contour design for coordinated installation with single-station drinking fountain and bi-level accessible station.
    - a. Housing: Minimum 20-gauge, Type 304 stainless steel with exposed surfaces polished to No. 4 satin finish with contour to align with drinking fountain basin.
      - 1) Fabricate bottle filler area of antimicrobial, impact-resistant, ABS plastic.
      - 2) Provide LED light that illuminates during bottle fill activation.
    - b. Activation:
      - 1) 9-volt infrared sensor, preset with 20-second automatic shut-off timer. Provide [**115-volt, plug-in transformer**] [**battery power pack**].
      - 2) Pneumatic hemispherical push button requiring less than **5 pounds (22.2 N)** force to operate air-actuated valve.
    - c. Spout: Laminar flow spout. Fill rate **1.0 gpm (3.8 L/m)**.
    - d. Filtration: Lead, chlorine, and cyst reduction filter rated for [**1500 gal (6800 L)**] [**3000 gal (13600 L)**] effective lifespan.
    - e. Bottle Counter Display: Provide LED screen that activates during use to display number of uses that equate to 16-ounce bottles, and water filter status.
      - 1) Provide bottle-filled count that does not reset with change of filter or power interruption.
  5. Bottle Filler, Vandal Resistant: Drinking fountain receptor serves as bottle filler drain.
    - a. Housing: Minimum 18-gauge, Type 304 stainless steel with exposed surfaces polished to No. 4 satin finish with contour to align with drinking fountain basin.
    - b. Activation:
      - 1) 9-volt infrared sensor, preset with 20-second automatic shut-off timer. Provide [**115-volt, plug-in transformer**] [**battery power pack**].
      - 2) Pneumatic hemispherical push button requiring less than **5 pounds (22.2 N)** force to operate air-actuated valve.
    - c. Spout: Laminar flow spout. Fill rate **1.0 gpm (3.8 L/m)**.
    - d. Filtration: Lead, chlorine, and cyst reduction filter rated for [**1500 gal (6800 L)**] [**3000 gal (13600 L)**] effective lifespan.
  6. Bottle Filler: Accessible, vandal-resistant, semi-recessed design.
    - a. Activation:
      - 1) 9-volt infrared sensor, preset with 20-second automatic shut-off timer. Provide [**115-volt, plug-in transformer**] [**battery power pack**].

- 2) Pneumatic hemispherical push button requiring less than **5 pounds (22.2 N)** force to operate air-actuated valve.
- b. Spout: Laminar flow spout. Fill rate **1.0 gpm (3.8 L/m)**.
- c. Drain: Type304 stainless steel screen.
- d. Filtration: Lead, chlorine, and cyst reduction filter rated for [**1500 gal (6800 L)**] [**3000 gal (13600 L)**] effective lifespan.
- e. Bottle Counter Display: Provide LED screen that activates during use to display number of uses that equate to 16-ounce bottles, and water filter status.
- 1) Provide bottle-filled count that does not reset with change of filter or power interruption.
7. Drain: Grid with **1-1/4-inch (32 mm)** OD tailpiece.
8. Supply: **NPS 3/8 (DN 10)** with shutoff valve.
9. Waste Fitting: ASME A112.18.2/CSA B125.2, **1-1/4-inch (32 mm)** OD, brass P-trap.
10. Cooling System: Electric, with hermetically sealed compressor, cooling coil, air-cooled condensing unit, corrosion-resistant tubing, refrigerant, corrosion-resistant-metal storage tank, and adjustable thermostat.
  - a. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
  - b. Provide HFC 134a (tetrafluoroethane) refrigerant unless otherwise indicated.
11. Capacities and Characteristics:
  - a. Cooled Water: [**8 gph (30 L/h)**] **<Insert value>**.
  - b. Ambient-Air Temperature: **90 deg F (32 deg C)**.
  - c. Inlet-Water Temperature: **80 deg F (27 deg C)**.
  - d. Cooled-Water Temperature: **50 deg F (10 deg C)**.
  - e. Electrical Characteristics:
    - 1) Motor Horsepower: [**1/5**] **<Insert value>**.
    - 2) Compressor: [**115 V, 60 Hz, 4.6 A**] [**220 V, 50 Hz, 2.5 A**].
    - 3) Phase: Single.
    - 4) Full Load Amps: [**4.6 A**] [**2.5 A**].
  - f. Provide insulation on cooled water lines.
12. Ventilation Grille: Stainless steel.
13. Support:
  - a. Fixture mounting plate with brackets for attaching to wood blocking or substrate
  - b. In-wall mounting frame to receive fixture trim plate.
  - c. Concealed in-wall support carrier.
14. Bottle Filling Station Mounting Height: [**Standard**] [**Child**] [**Handicapped/elderly in accordance with ICC A117.1**].

- E. Drinking Fountains: Stainless steel, recessed, pressure water coolers, <Insert drawing designation>: [cuspidor] [, wheelchair accessible] [, bottle filler].
1. Basis-of-Design Product: Subject to compliance with requirements, provide Murdock Manufacturing; Morris Group International; [AI81.8] [A481.8] [A481.8CUSP] [AL81.8-BF] [AR81.8-BF] or comparable product by one of the following:
    - a. Elkay Manufacturing Co.
    - b. Oasis International.
    - c. <Insert manufacturer's name>.
  2. Standards:
    - a. Comply with:
      - 1) ASHRAE 15, or where applicable, ASHRAE 34.
      - 2) ASME A112.19.2/CSA B145.1.
      - 3) NSF 61 and NSF 372.
      - 4) ICC A117.1.
  3. Receptor Shape: Concave with flush wall flange.
  4. Drinking Fountain Bubbler: One [flexible bubbler with gray finish,] [stainless steel bubbler,] located on deck, anti-rotation, non-squirt design.
  5. Drinking Fountain Control: Push-button operated cartridge-style valve, having front access adjustable stream regulator.
  6. Bottle Filler: Provide ligature resistant bottle and cup filler, located in back wall.
  7. Maximum Water Flow: 0.5 gpm (1.9 L/m).
  8. Cuspidor: Provide additional receptor with stainless steel wash down outlet in lieu of drinking bubbler.
  9. Supply Piping: NPS 1/2 (DN 15). Provide with shutoff valve and 100-mesh strainer.
  10. Drain: Grid with 1-1/4 inch (32 mm) OD, minimum, horizontal waste and trap, complying with ASME A112.18.2/CSA B125.2.
  11. Filtration: Lead, chlorine, and cyst reduction filter rated for [1500 gal (6800 L)] [3000 gal (13600 L)] effective lifespan.
  12. Cooling System: Electric, with hermetically sealed compressor, cooling coil, air-cooled condensing unit, corrosion-resistant tubing, refrigerant, corrosion-resistant-metal storage tank, and adjustable thermostat.
    - a. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
    - b. Provide HFC 134a (tetrafluoroethane) refrigerant unless otherwise indicated.
  13. Capacities and Characteristics:
    - a. Cooled Water: [8 gph (30 L/h)] <Insert value>.
    - b. Ambient-Air Temperature: 90 deg F (32 deg C).
    - c. Inlet-Water Temperature: 80 deg F (27 deg C).
    - d. Cooled-Water Temperature: 50 deg F (10 deg C).
    - e. Electrical Characteristics:

- 1) Motor Horsepower: [1/5] <Insert value>.
  - 2) Compressor: [115 V, 60 Hz, 4.6 A] [220 V, 50 Hz, 2.5 A].
  - 3) Phase: Single.
  - 4) Full Load Amps: [4.6 A] [2.5 A].
- f. Provide insulation on cooled water lines.
14. Ventilation Grille: Stainless steel [**with ligature resistant design**]. Locate grille and chiller [**below unit**] [**above unit**].
15. Accessories:
- a. Glass filler.
  - b. High polish stainless steel.
  - c. Less drinking bubbler and push button.
16. Support: Mounting frame or brackets for attaching to wood blocking or substrate.

## 2.2 SUPPORTS

### A. Type I Water Cooler Carrier:

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
  - a. Jay R. Smith Mfg Co; a division of Morris Group International.
  - b. Josam Company.
  - c. <Insert manufacturer's name>.
2. Standard: ASME A112.6.1M.

### B. Type II Water Cooler Carrier:

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
  - a. Jay R. Smith Mfg Co; a division of Morris Group International.
  - b. Josam Company.
  - c. <Insert manufacturer's name>.
2. Standard: ASME A112.6.1M.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine roughing-in for water-supply and sanitary drainage and vent piping systems to verify actual locations of piping connections before fixture installation.

- B. Examine walls and floors for suitable conditions where fixtures will be installed.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 INSTALLATION

- A. Install fixtures level and plumb in accordance with roughing-in drawings. For fixtures indicated for children, install at height required by authorities having jurisdiction.
- B. Set freestanding pressure water coolers on floor.
- C. Install off-the-floor carrier supports, affixed to building substrate, for wall-mounted fixtures.
- D. Install mounting frames, affixed to building construction, and attach recessed, pressure water coolers, and in-wall bottle filling stations to mounting frames.
- E. Install water-supply piping with shutoff valve on supply to each fixture to be connected to domestic-water distribution piping. Use ball or gate valve. Install valves in locations where they can be easily reached for operation. Valves are specified in Section 220523.12 "Ball Valves for Plumbing Piping" and Section 220523.15 "Gate Valves for Plumbing Piping."
- F. Install trap and waste piping on drain outlet of each fixture to be connected to sanitary drainage system.
- G. Install wall flanges or escutcheons at piping wall penetrations in exposed, finished locations. Use deep-pattern escutcheons where required to conceal protruding fittings. Comply with escutcheon requirements specified in Section 220518 "Escutcheons for Plumbing Piping."
- H. Seal joints between fixtures and walls using sanitary-type, one-part, mildew-resistant, silicone sealant. Match sealant color to fixture color. Comply with sealant requirements specified in Section 079200 "Joint Sealants."

### 3.3 CONNECTIONS

- A. Connect fixtures with water supplies, stops, and risers, and with traps, soil, waste, and vent piping. Use size fittings required to match fixtures.
- B. Comply with water piping requirements specified in Section 221116 "Domestic Water Piping."
- C. Install ball or gate shutoff valve on water supply to each fixture. [ **Install valve upstream from filter for water cooler.** ] Comply with valve requirements specified in Section 220523.12 "Ball Valves for Plumbing Piping" and Section 220523.15 "Gate Valves for Plumbing Piping."
- D. Comply with soil and waste piping requirements specified in Section 221316 "Sanitary Waste and Vent Piping."

3.4 ADJUSTING

- A. Adjust fixture flow regulators for proper flow and stream height.
- B. Adjust pressure water-cooler temperature settings.

3.5 CLEANING

- A. After installing fixture, inspect unit. Remove paint splatters and other spots, dirt, and debris. Repair damaged finish to match original finish.
- B. Clean fixtures, on completion of installation, in accordance with manufacturer's written instructions.
- C. Provide protective covering for installed fixtures.
- D. Do not allow use of fixtures for temporary facilities unless approved in writing by Owner.

END OF SECTION 224716