SECTION 224723 - REMOTE WATER COOLERS

Revise this Section by deleting and inserting text to meet Project-specific requirements.

Verify that Section titles referenced in this Section are correct for this Project's Specifications; Section titles may have changed.

1. GENERAL
	* + 1. RELATED DOCUMENTS

Retain or delete this article in all Sections of Project Manual.

* + - * 1. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
			1. SUMMARY
				1. Section includes remote water coolers and related components.
			2. SUBMITTALS
				1. Submittals for this section are subject to the re-evaluation fee identified in Article 4 of the General Conditions.
				2. Manufacturer's installation instructions shall be provided along with product data.
				3. Submittals shall be provided in the order in which they are specified and tabbed (for combined submittals).
				4. Product Data: For each type of remote water coolers.

Include construction details, material descriptions, dimensions of individual components and profiles, and finishes.

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

* + - * 1. Sustainable Design Submittals:
				2. Shop Drawings: Include diagrams for power, signal, and control wiring.
			1. CLOSEOUT SUBMITTALS
				1. Maintenance Data: For remote water coolers to include in maintenance manuals.
			2. MAINTENANCE MATERIAL SUBMITTALS
				1. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

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

1. PRODUCTS

See Editing Instruction No. 1 in the Evaluations for cautions about named manufacturers and products.

* + - 1. REMOTE WATER COOLERS

Copy "Remote Water Coolers" paragraph below and re-edit for each type of remote water cooler required.

Insert number to complete drawing designation. Use these designations on Drawings to identify each remote water cooler.

* + - * 1. Remote Water Coolers <**Insert drawing designation**>: Remote chiller equipment.

[Manufacturers:](http://www.specagent.com/Lookup?ulid=2836) Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

[Elkay](http://www.specagent.com/Lookup?uid=123457036100).

[Haws Corporation](http://www.specagent.com/Lookup?uid=123457036103).

Oasis International.

Or equal.

Standards:

Comply with NSF 61 Annex G “Drinking Water Systems Components - Health Effects”.

Comply with UL 1951 “Standard for Safety Electric Plumbing Accessories”.

Comply with ASHRAE 34, "Designation and Safety Classification of Refrigerants," for water coolers. Provide HFC 134a (tetrafluoroethane) refrigerant unless otherwise indicated.

Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70 “Standard for Electrical Safety in the Workplace”, by a qualified testing agency, and marked for intended location and application.

Chassis: Galvanized or corrosion-resistant-coated steel.

Chiller: Hermetically sealed compressor, cooling coil, air-cooled condensing unit, corrosion-resistant tubing, and refrigerant.

Storage capacity in "Storage Tank" subparagraph below is usually small. Delete storage capacity unless critical.

Storage Tank: [**0.5 gal.**] [**4 gal.**] <Insert value>, stainless steel.

Controls: Adjustable thermostat.

Capacities and Characteristics:

Cooled Water: [**5 gph**] [**8 gph**] [**14 gph**] <Insert value>.

Ambient-Air Temperature: 90 deg F.

Inlet-Water Temperature: 80 deg F

Cooled-Water Temperature: 50 deg F.

Cooled-Water Storage: <**Insert gal.**>.

Electrical Characteristics:

Motor Horsepower: [**1/5**] [**1/4**] [**1/3**] <**Insert value**>.

Volts: 120-V ac.

Phase: Single.

Hertz: 60.

Full-Load Amperes: <**Insert value**>.

Minimum Circuit Ampacity: <**Insert value**>.

Maximum Overcurrent Protection: <**Insert amperage**>.

Retain "Ventilation Grille" Subparagraph below only if required.

Ventilation Grille: Stainless steel, <**Insert size**>.

Retain "Filter" subparagraph below only if required. Reverse-osmosis systems and UV-disinfection equipment are available; however, the cost is excessive for the flow rates of these chillers. Other filters are specified in Section 223200 "Domestic Water Filtration Equipment."

Filter: One or more water filters complying with NSF 42 and NSF 53 for cyst and lead reduction to below EPA standards; with capacity sized for unit peak flow rate.

1. EXECUTION
	* + 1. EXAMINATION
				1. Examine roughing-in for water-supply and sanitary drainage piping systems to verify actual locations of piping connections before fixture installation.
				2. Examine walls and floors for suitable conditions where remote water coolers will be installed.
				3. Proceed with installation only after unsatisfactory conditions have been corrected.
			2. INSTALLATION
				1. Install remote water coolers level and plumb according to roughing-in drawings.
				2. Install water-supply piping with shutoff valve on supply to each remote water cooler 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."
				3. Set remote water coolers on floor unless otherwise indicated.
				4. 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."
			3. CONNECTIONS

Coordinate piping installations and specialty arrangements with Drawings and with requirements specified in piping systems. If Drawings are explicit enough, these requirements may be reduced or omitted.

* + - * 1. Connect fixtures with water supplies. Use size fittings required to match fixtures.
				2. Comply with water piping requirements specified in Section 221116 "Domestic Water Piping."
				3. 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."
				4. Install ball or gate valves with valved bypass on water connections to [**remote water coolers**] [**and**] [**water filters**]. Comply with valve requirements specified in Section 220523.12 "Ball Valves for Plumbing Piping" and Section 220523.15 "Gate Valves for Plumbing Piping."
			1. ADJUSTING
				1. Adjust water-cooler temperature settings.
			2. CLEANING
				1. After installing remote water cooler, inspect unit. Remove paint splatters and other spots, dirt, and debris. Repair damaged finish to match original finish.

END OF SECTION 224723