

## A Guide to Specifying Water Coolers and Drinking Fountains

*What Every Specifying Engineer Should Know*

When it comes to specifying the right commercial plumbing fixtures, it is important to choose high-quality equipment that is well-suited for its intended use. For water coolers and drinking fountains specifically, it is imperative for a specifying engineer to:

- Consider the environment for the drinking water device
- Decide on whether to install a water cooler or drinking fountain
- Select accessories that best cater to the end-user in this environment
- Specify ADA-compliant products (both child and adult)
- Know the cooling capacity of the water cooler
- Ensure the waterways are code compliant
- Recommend a high quality filter and filter monitor to improve the end user experience
- Work with a quality manufacturer that offers a sound warranty and reliable customer and local technical service

Vandal-Resistant Water Cooler Series (VRC8S)



### The Environment

When specifying a water cooler or drinking fountain, many engineers find themselves working in one of the following commercial environments: outdoor, indoor, corrosive, explosive or an environment that is susceptible to extreme use (e.g. vandalism). Ranging from schools, hospitals and parks to stadiums, recreation centers, factories and manufacturing plants, a drinking water device should perform to meet the demands of its surroundings. For example, a professional should spec products made of stainless steel to endure corrosive environments such as refineries or coastal regions. To help combat sanitary concerns, hospitals and schools may be the ideal choice for a water cooler that has hands-free functionality.

Golf courses, stadiums and school gymnasiums are examples of recreational environments. One option to consider for these high-traffic settings is the Vandal-Resistant Series of water coolers by Elkay® Commercial. Engineered to withstand frequent use, rough handling and even vandalism, this series is virtually unbreakable. Designed for both indoor and outdoor environments, the Vandal-Resistant Series features a 16-gauge galvanized frame and a 20-gauge stainless steel cabinet. It also includes a chrome-plated one-piece bubbler, a self-closing single-action mechanical pushbutton and pinned torx screws. The stream height regulator can be easily adjusted through a hole in the pushbutton. In addition, the cooler's satin finish resists stains and

corrosion. Best of all, it still complies with child and adult ADA requirements.

### Cooler or Fountain

Drinking fountains dispense ambient temperature water while water coolers chill water to approximately 50 degrees and dispense it to the end-user. To chill the water, an electrical infrastructure is needed and should be a key deciding factor when deciding between a water cooler or drinking fountain. Environments, such as parks, may not have electricity available to power a water cooler so in these instances, a drinking fountain is the best solution.

While electricity is important when specifying a drinking fountain or water cooler, weather conditions can also play a part. For example, in California, a drinking fountain may be a more rational specification due to the temperate climate, resulting in a pleasant sip of water. However, in regions that experience extreme heat or dryness, such as Arizona, Texas or Florida, a water cooler is preferred since it can chill the water, providing a cool, refreshing drink to the end-users in that environment.

### Functional Accessories Enhance Water Cooler

When it comes to water coolers, specifying engineers have many accessory choices to complement a cooler installation. Manufacturers such as Elkay offer an array of accessories that are geared towards the environment in which the water cooler is being installed. For example, a frost-resistant kit is ideal for outdoor applications that may experience occasional cold temperature drops, as in the case of golf courses.

As safety at work, school and other public environments remain a concern, a flexible bubbler such as Elkay's anti-microbial Flexi-Guard® safety bubbler, is a perfect add-on. Made of tough, yet pliable polyester elastomer, the bubbler flexes on impact before returning to its original position, helping to protect against accidental injuries incurred by hard contact with the bubbler. The anti-microbial agent that is blended into the plastic inhibits bacteria from multiplying on the surface of the bubbler.

Flexi-Guard Safet  
Bubbler (56073C)



Glass Filler  
(LK1110)

One of the most popular accessories for a water cooler is a glass filler. Available on most Elkay models, this optional feature allows users to easily fill up glasses and water bottles. Adding a glass filler to a water cooler can help to reduce waste from plastic water bottles

and saves end-users money from buying bottled water.

When specifying a remodel application, some water cooler models are no longer available and a new model may not match up exactly with how the older model was mounted. One accessory that is available is a wall bezel, which is designed to cover-up wall surface imperfections left from the installation of the previous cooler. An access panel is another handy accessory; it allows the maintenance to gain easy access inside the wall where the trap is sometimes located.

**ADA Compliancy**

Engineers should also take into consideration ADA requirements when specifying water coolers. Most manufacturers offer ADA-compliant products that not only make life easier for people with disabilities, but also allow facilities to meet the requirements of federal law. Specifiers should also be aware of local and state codes, in relation to both child and adult ADA requirements.

Refer to this image as a guide to finding ADA-compliant products in vendor catalogs or on Web sites.



Reference [www.ada.gov](http://www.ada.gov) for more information or [www.access-board.gov](http://www.access-board.gov).

**Cooling Capacity**

After pinpointing the needs and demands of the environment, a professional should consider the cooling capacity needed for the installation and the most eco-friendly solution for keeping the water cold. Refer to the following charts as a guide to ensure the most accurate cooling capacity for each installation.

**TECHNICAL INFORMATION**

**Suggested Bubblers Service Information**

To determine the number of people that can be served, multiply the G.P.H. of your cooler by the standard bubbler service ratings below that best state your needs.

Installation	Standard Bubbler Service Rating*	Installation	Standard Bubbler Service Rating*
Offices	25	Light Mfg.	15
Hospitals	25	Heavy Mfg.	12
Schools	25	Hot Heavy Mfg.	10

\*Based on Standard Rating Conditions of ARI Standard 1010.

\*Example: Sizing a Light Mfg. - 8 GPH x 12 People/GPH = 96 People

As a way to be more environmentally responsible, consider installing Elkay products, the first water cooler manufacturer to use non-ozone-depleting refrigerants. Select Elkay water coolers and fountains also incorporate a large percentage of recycled materials and components and exceed energy-efficiency standards by more than 50 percent (standard CSA C815). Elkay continually strives for excellence and continues to lead the industry in the development of more efficient and environmentally friendly products.

**Certification and Codes**

End-users and specifiers should both be aware of contaminants found in drinking water. The NSF/ANSI 61 Standard regulates the levels of contaminants (including lead) that can leach from drinking water devices to potable water. Elkay was the first company to comply with the **entire** NSF/ANSI 61 Standard on water coolers, drinking fountains and remote chillers by redesigning its products and manufacturing processes. Elkay water coolers and drinking fountains are third-party certified to NSF/ANSI 61.

Expected to truly change the landscape of the plumbing and manufacturing industry, California House Bill AB 1953 (CA AB 1953) is scheduled to go into effect in 2010. This bill limits the amount of lead used in metal pipes, fixtures and fittings in potable water systems, starting in the state of California.

**Table for estimating delivered G.P.H. of 50° F drinking water at various temperatures and water inlet temperatures.**

Factor	1.58	1.15	0.84	1.53	1.08	0.80	1.40	1.00	0.75	1.25	0.92	0.65
Room Temperature ° F	70	70	70	80	80	80	90	90	90	100	100	100
Water Inlet Temperature ° F	70	80	90	70	80	90	70	80	90	70	80	90

Example: Water Cooler size - 8.9 G.P.H. (at Standard rating 90° F- 80° F). Desired condition - Ambient 80° F, water inlet 70° F. Estimated capacity = factor x G.P.H. (rated).  
 = 1.53 x 8.9  
 = 13.6 GPH

Tapping into its history of innovative engineering, Elkay water cooler and fountain products are already CA AB 1953 compliant and years ahead of the curve.

When it comes to matters of water quality and health, Elkay leads the way by offering the broadest line of water coolers and drinking fountains with standard features like No Lead Design and the Filtrex System®. Manufactured with a waterway system utilizing copper components and completely lead-free materials, the Elkay No Lead products incorporate an additional cleaning feature called the Filtrex System. This NSF/ANSI 61 compliant strainer is located behind the front panel of all No Lead coolers, preventing larger impurities from entering the cooler. The super-fine mesh traps waterborne particles the size of 140 microns in diameter or larger from the water supply. Engineered with easy access in mind, the Filtrex System installs with inlet tube connections.

### **Filtered Water Coolers**

In many educational facilities, students and teachers have embraced water coolers as a source for a cool, clean and healthy drink of water throughout the day. This is especially prevalent as mounting cost and waste concerns continue to plague the bottled water industry. Engineers have an opportunity to specify a clean, green alternative to bottled water -- the hands-free Elkay WaterSentry® Cooler with Visual Filter Monitor.

As a leader in the industry, Elkay WaterSentry filtration system meets NSF/ANSI 42 Standard, resulting in the reduction of more than 97 percent of free available chlorine. This improves the aesthetics of the water by alleviating unpleasant tastes, odors and sediment frequently detected in unfiltered water. The filtration system also meets NSF/ANSI 53 Standard, which improves the health benefits of the water by decreasing the amount of harmful impurities, such as lead and cysts from reaching the end-user.

Ideal for education and healthcare facilities, this new Elkay water cooler line is outfitted with a unique LED display on the user interface, visually communicating the presence of a built-in WaterSentry filtration system. The lights alert the end-user that the filter is functioning and also notifies maintenance when the filter needs to be replaced.



Visual Filter Monitor  
(LZO8L)

The Visual Filter Monitor also benefits the maintenance or facility managers charged with maintaining the water coolers. Due to the filter's auto shutoff feature, the personnel do not have to turn off the water during a filter change, making it an efficient and speedy change-out. Since the filter is completely encapsulated, maintenance never has to touch the filtration media, ensuring that no contaminants are ever allowed to enter the drinking water stream.

### **Warranty and Customer Service**

It is also important to check that the manufacturer offers a long-term warranty and first-rate customer service for each device specified. For example, Elkay offers a five-year warranty on the complete refrigeration system and includes a one-year warranty on all components. In addition, if a contractor on a job site has a question while installing an Elkay product, trained technicians are available for assistance and are just a phone call away, answering 92 percent of all calls live within 20 seconds. Elkay has hundreds of manufacturer representatives in the USA to support its specifiers, contractors and wholesalers.



Standard Space-ette®  
Free Standing  
Cooler (FD7003)

### **The Professional's Choice**

As manufacturers, Elkay wants to make the specifier's job easy, which is why they continually strive to create the highest quality products available. Elkay's Quality Management System is also certified to ISO 9001-2000.

Whether it is an indoor or outdoor application, a corrosive factory or manufacturing plant, or a high-traffic school or hospital, a professional can spec the ideal drinking water solution using the Elkay water cooler and drinking fountain line.

To provide specifying engineers with additional options for any application, Elkay also continues to manufacture and support legacy products, which are mature products that are still viable and important for a professional's business needs. When working on replacement or refurbishment projects, Elkay's legacy products provide a simple solution and include easy-to-use instructions.

For more information about Elkay commercial water coolers and drinking fountains, visit [www.elkayusa.com](http://www.elkayusa.com) or call Elkay customer service at 630-572-3192.