

PORTABLE OR PLUMBED? HOW TO CHOOSE.



EMERGENCY EQUIPMENT INFORMATIONAL PAPER



Portable or Plumbed? How To Choose.

HOW DO I KNOW IF I NEED A PORTABLE OR PLUMBED EMERGENCY SHOWER/EYEWASH PRODUCT?

The most costly injury, of the more than 5 million unintentional work related injuries in the U.S., involves the head, averaging \$82,382 per claim. In any environment, occupational safety should be taken very seriously and appropriate emergency response is a crucial component to the overall safety of your employees and your company.

The Occupational Safety & Health Administration (OSHA), 29 CFR 1910.151, requires that "Where the eyes or body of any person may be exposed to injurious corrosive materials, suitable facilities for quick drenching or flushing of the eyes and body shall be provided within the work area for immediate emergency use." OSHA turns to The American National Standards Institute (ANSI) Z358.1-2014 Standard for specifics on selection, installation, operation and maintenance requirements.

Proper emergency equipment selection is a function of knowing your risks, the characteristics of the materials you work with, and logical consideration of the variety of products and design configurations available.

Proper emergency equipment selection is a function of knowing your risks.

Once you've determined that an emergency station is needed, you need to define whether a portable or plumbed station is most appropriate. But first, you must be aware of the difference. A portable eyewash is a self-contained ANSI-compliant emergency response product that is needed for locations without access to water and can be moved at a moment's notice to meet the rapidly evolving needs of a chemical, manufacturing, or construction environment. There are various types of portable eyewashes including gravity-fed, air-pressurized, and personal squeeze bottles (reference ANSI Z358.1 Supplemental Equipment/Personal Wash Units [Section 8.1]). Portable stations can provide added flexibility, a benefit in today's dynamic work settings. A plumbed unit is just as it sounds; a permanent emergency response solution that is in a fixed location connected to a continuous source of potable water with sufficient flow and pressure for ANSI compliance and victim comfort.

ANSI Z358.1 requires that all emergency stations, portable or plumbed, must provide sufficient flow (flow rate depends on product type i.e. eyewash vs. eye/face wash vs. shower) for a minimum of 15 minutes. They are also required to be located within 10 seconds of the potential hazard. Supplemental eyewashes, such as personal squeeze bottles, are a useful solution while a victim is en route to primary equipment.

In addition to water source, ask yourself these questions when determining if a portable or plumbed unit is needed:

Does the potential hazard stay in the same location within the facility or is it mobile?

If it is a static work station, a plumbed unit is the recommended product choice and must be installed so it is reachable within 10 seconds of the hazard. If the hazard is mobile such as a construction site, a portable product is recommended and is to be accessible within 10 seconds of the hazard.

Does the location need tempered water (60-100°F/16-38°C)?

If the emergency fixture will be located in an area where the internal water temperature could drop below 60°F (16°C) or rise above 100°F (38°C), the water temperature will need to be regulated. Most portable units do not provide an option for tempered water, therefore a plumbed unit along with a tempering solution is the recommendation. Although a few manufacturers do offer a tempered portable station.

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Maintenance of portable and plumbed units differ. As portable units hold stagnant water, they are required to be drained and refilled with potable water on a more frequent basis. Most eyewash manufacturers offer a sterile preservative that keeps the water for an average of 3 months. On a weekly basis, ANSI requires a visual inspection to take place to ensure the unit is full and clean. Regarding plumbed units, there is an ANSI-mandated weekly activation requirement to verify proper operation and to flush buildup that may have formed due to stagnant water in the piping and unit.

It's impossible to predict when an injury will harm a workers' eyes, face or body, but it is possible to take proactive preventative measures by supplying the appropriate emergency response equipment for maximum victim comfort and response.
