Product Information Report Emergency Eye Wash Stations





Overview

OSHA 1910.151 states:

"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."

The ANSI Z358.1 standard further clarifies what the minimum requirements are for "suitable facilities", since the Code of Federal Regulations does not offer further documentation. While ANSI Z358.1 is considered a voluntary standard, OSHA often uses it as a guide when inspecting facilities. As a result, the ANSI Z358.1 standard has gained significant importance within the safety industry. If it finds non-compliance with the ANSI standard, OSHA may elect to impose penalties from warnings and fines, to (rarely) plant shutdowns.

ANSI Z358.1 Requirements

Each of the five sections of the ANSI Z358.1 standard, which includes plumbed and self-contained emergency showers, plumbed and self-contained eye wash equipment, eye/face wash equipment, combination units, and supplemental equipment, has particular requirements.

Annual Inspection

This document summarizes the key points within the standard, but is not a substitute for the standard. Consult the ANSI Z358.1 directly for further details. Emergency products must be inspected yearly to ensure they comply with the ANSI standard. While a fixture may be certified to meet the ANSI standard, it is important to make sure it is installed according to the requirements of the standard.

(1 of 4)

Emergency Eye Wash Stations



Product Offerings



Fig. 1. Example of a plumbed eye wash unit (Item No. SF14252)



Fig. 2. Example of a portable eye wash unit (Item No. SF10706)

Fig. 3. Example of a combination unit (Item No. SF14259)

Lawson Products, Inc. offers options from three popular categories of emergency fixtures and additional supplemental equipment. These include:

1. Plumbed and Self-Contained Eye Wash Equipment

- Plumbed units are typically piped directly into the main water supply of the building and deliver water at a regulated temperature at the required flow of 0.4 gpm (Fig. 1).
- Self-contained gravity feed units are typically portable and do not require hard plumbing
 lines. These units are filled with a mixture of saline, water and other chemicals for use in an
 emergency. They require periodic (ranging one week to two years) service of draining and
 disinfecting to prevent harmful bacteria from entering the eyes in an emergency (Fig. 2).

2. Combination Units

Showers, eye washes, eye/face washes and drench hoses all can be utilized in combination units. The requirements for each of these product categories must be met when used with other categories of emergency equipment. It must be assumed that all drenching systems may be activated simultaneously. In such an event, the system must be capable of delivering an uninterrupted 15-minute, ANSI-compliant, tepid flush (Fig. 3).

3. Supplemental Equipment

Supplemental equipment is intended for immediate use. However, supplemental equipment use must be followed by the use of emergency products that can provide a minimum of 15 minutes of continuous flushing. Personal eye wash units (Fig. 4) and drench hoses (Fig. 5) are considered supplemental equipment. Such equipment is only designed to assist other types of emergency products, but can not be the only product available to address an emergency situation.

For example, a personal eye wash (Fig. 4) could be used in conjunction with a plumbed or gravity-fed eye wash or eye/face wash. It is best that the personal eye wash is in close proximity to a worker's area for immediate treatment. However, the worker should then proceed to the nearest eye wash or eye/face wash fixture for the full 15-minute flush required by the ANSI standard.



Fig. 4. Example of a personal eye wash station (Item No. SF10120)



Fig. 5. Example of a drench hose (Item No. SF14273)

Emergency Eye Wash Stations



Eye Wash Station Inspection

Honeywell Sperian® Fendall Porta Stream® I and II



Porta Stream® I



Porta Stream® II

Regular inspection is required to ensure these safety devices are ready at all times.

These self-contained eye wash units must be checked on a weekly schedule to ensure the unit is in proper operating condition with adequate levels of flushing fluid. Records of these weekly inspections should be kept with the unit.

Weekly

- Lift fill cap and vent cap on top of unit to check that fluid level is within 1" of fill opening.
 Replace vent cap and fill cap after checking.
- Check that rubber pull strap is securely fitted around nozzles and that leakage has not occurred.
- Check that there are no obstructions around unit or between hazard and unit, and that signage is present and visible.
- If ordinary tap water (without preservative) has been used to fill the unit, the unit must be emptied, cleaned and refilled on a weekly basis. Use of a fluid beyond its expiration date may result in serious personal injury. See owner's manual for instructions.

Semi-annually

Eye wash units containing Sperian® Saline Solution or Sperian® Water Additive should be cleaned and refilled per the solution manufacturer's recommendations (every 6 months). Use of a fluid beyond its expiration date may result in serious personal injury.

NOTE: The Sperian® Saline Solution contains a specially-formulated salt compound. There may be a white residue if solution has dried on the Fendall Porta Stream® surfaces. The white residue can be removed by wiping with a damp cloth.

Honeywell Sperian® Fendall Pure Flow 1000®



Pure Flow 1000®

Inspect these eye wash stations monthly to ensure proper operating conditions. Inspection records must be kept with the unit. If the "WARNING – SERVICE IMMEDIATELY" notice is visible or if the activating door is open, replace cartridges immediately.

Monthly

NOTE: Do not lift activating door during inspection, as it will start fluid flow. Once fluid flow has started, it cannot be stopped.

- Check the fluid cartridge expiration date, printed on each black strap and on the front face of each cartridge. Cartridges must be replaced on or before expiration date.
- Remove cover or look through the window and ensure that platens are unlatched and resting on the fluid bags. Replace cover.
- Check that the drain valve at the bottom of the reservoir tank is in closed position with the handle pointing back.
- Ensure that the area around and under unit is clear of obstructions and debris.
- Check that signage is present and visible.

Emergency Eye Wash Stations



Eye Wash Station Inspection (cont.)

Honeywell Sperian® Fendall 2000®



Inspect these eye wash stations monthly to ensure proper operating condition and that eye wash solution has not expired. Inspection records must be kept with the unit.

Honeywell

Monthly

- Check both inspection windows to inspect Cartridge Expiration Date and Product Information labels.
- Push the blue button above pull-down door and hold for 3 seconds until a beep is heard to disarm the alarm. Note: short beep once every 10 seconds indicates a low battery.
- Use screwdriver or pen to push on release button in the center of pull-down door.
- While button is pressed in, gently pull door open (there should be no resistance).
- Inspect nozzle for correct attachment, and hose for possible kinking. Reposition if needed.
- To re-arm, close the door. An audible "click" will be heard to confirm that the nozzle is engaged and the alarm is reactivated. CAUTION: The station is now armed and will activate if the door is opened.
- Place new tamper-evident seal over the door and front face of the unit.
- Check that there are no obstructions around unit or between hazard and unit, and that signage is present and visible.

Further instructions for installation, operation, inspection and maintenance of all Sperian® Fendall stations are available at:

https://www.honeywellsafety.com/Americas/Product_Catalog/Eye___Face_Protection.aspx?tid=867&bid=0&hid=0&iid=0

Plumbed or Pressurized Stations



Plumbed Eye Wash Stations



Pressurized Eye Wash Stations

These eye wash stations must be checked on a weekly schedule to ensure the unit is in proper operating condition. Records of these weekly inspections should be kept with the unit.



Weekly, for all units

- Activate unit. Nozzle/basin covers should be removed by the activation.
- Observe spray pattern, ensuring nozzles are functioning properly.
- Clean as required per manufacturer's instructions.
- Check that there are no obstructions around unit or between hazard and unit, and that signage is present and visible.

For pressurized units

- If ordinary tap water (without preservative) has been used to fill the unit, the tank must be emptied, cleaned and refilled on a weekly basis. Use of a fluid beyond its expiration date may result in serious personal injury. See owner's manual for instructions.
- Eye wash units containing a water preservative should be cleaned and refilled per the preservative manufacturer's recommendations. Use of a fluid beyond its expiration date may result in serious personal injury.

Further instructions on installation, operation, inspection and maintenance of these stations are available at:

https://www.bradleycorp.com/filter?filters=cat_524=1