# **INSTALLATION :: USAGE**



## GENERAL RULES

Emergency equipment manufactured by Haws Corporation<sup>®</sup> is warranted to function if installed per provided installation and maintenance instructions. The units also must be used for the purpose for which they were intended. This product is intended to supplement first-aid treatment. Due to widely varying conditions, *Haws Corporation* cannot guarantee that the use of this emergency equipment will prevent serious injury or the aggravation of existing or prior injuries.

OSHA - Haws emergency equipment enables you to meet the requirements in the OSHA Rules and Regulations covering this type of equipment.

ANSI - Haws emergency equipment is manufactured to meet ANSI Z358.1-2014 for Emergency Eyewash and Shower Equipment.

#### **EMPLOYEE INSTRUCTION**

To insure adequate operation of the units, all persons should be instructed in the proper use of both the shower and eye/ face wash. Affected areas should be rinsed at the scene of the accident for at least 15 minutes, and a doctor or industrial nurse should be contacted immediately.

**WARNING:** Eye and eye/face wash units should not be used if it is known that eye contamination is metal or some other rigid solid fragment. In such an event, both the victim's eyes should be gently immobilized in accordance with the current "Red Cross Standard First Aid Manual" and medical attention immediately sought.

#### **IDENTIFICATION and SIGNAGE**

Units should be installed in close proximity to hazardous areas, free from obstructions that may inhibit immediate use, and clearly identified as eye/face wash stations or emergency showers or both.

#### INSTALLATION AND WATER SUPPLY

Showers and eye/face washes should be connected to the main potable water supply, and a loose-key lock-shield type stop or shut-off valve is recommended to allow proper maintenance of the unit. Valve must be labeled to prevent unauthorized shut-off.

One of the most important considerations when installing water bearing emergency equipment is assuring an adequate supply of water is available to unit. Piping should be installed no smaller than the inlet size of the unit, and at least 30 psi dynamic pressure should be available to the equipment. The ideal pressure for shower or eyewash is between 30 and 90 psi.

Only products that meet the American National Standards Institute (ANSI) for Emergency Eyewash and Shower Equipment (Z358.1) should be installed. Emergency eye/face wash, shower, drench hose, and combination units are not a substitute for proper primary protective devices. As a defense against flying solid particles and splashing injurious liquids, workers should wear eye and face protectors and protective clothing.

### **PROPER DRAINAGE**

Appropriate drainage should be considered for emergency showers and other equipment to prevent excess accumulation of water on floors.

### FREEZE-RESISTANCE

When installations are outside and temperatures drop below  $32^{\circ}$  F (0 ° C), freeze-proof units are recommended. Precautions should also be taken to protect the user under frigid conditions. It shall be the responsibility of each specifying authority to determine the delivered water temperature that will be required in an area, not only to provide the flow of water as required, but also maintain it at a temperature that will be safe for the user. Delivered water temperature should not be at extremes that might be expected to discourage the unit's effective use under emergency conditions. The ANSI required range is  $60^{\circ}$  F - 100° F ( $15^{\circ}$  C -  $38^{\circ}$  C). In circumstances where chemical reaction is accelerated by water temperature, a medical advisor should be consulted for the optimum temperature for each application.

#### WARNING ALARM SYSTEMS

In remote areas or in hazardous locations where there are very few people, a Haws Model 9001 alarm should be installed. This alarm activates when a shower or an eye/face wash unit is used in order to summon help to the injured.

#### **PROTECTION FROM DEBRIS**

Wherever possible, a *Haws* Model 9070 filter should be provided upstream of the eye/face wash to remove particles from the water and prevent additional eye damage. Model SP502 strainer tee is also available.

Line size Y-strainer installed in supply line to unit should be considered to reduce chance of debris reaching eye/face wash and/or shower.

When protection of a Haws eye/face wash from dust or airborne contaminants is necessary, Haws offers Model 9102 Dust Cover which encloses the bowl and is available for selected eye/face wash models.

# MAINTENANCE



## SPECIFIC REQUIREMENTS

These units should be located as close to the hazard as possible without physically causing a hazard itself, such as protruding fittings. Emergency showers and eye/face washes shall be in accessible locations that require no more than 10 seconds to reach. Per ANSI Z358.1-2014, tepid water should also be used to protect the user under frigid conditions, including provisions for the proper disposal of the water. Installation procedures should be in accordance with proper plumbing practices, with supply piping sized adequately to meet flow requirements.

Supply lines should be properly flushed prior to installation of emergency units.

#### **EYE and EYE/FACE WASHES**

All eye and eye/face washes should be connected with piping no smaller than 1/2" IPS, and should be attached to a drain by a code approved method to facilitate ease of testing.

Dynamic water pressure at the eye/face wash should be no less than 30 psi or more than 90 psi during operation.

In areas where multiple eye injuries could occur simultaneously, more than one eye/face wash is recommended.

#### **EMERGENCY SHOWERS**

Minimum pipe size to shower should be no smaller than 1" IPS. Dynamic water pressure should be no less than 30 psi or more than 90 psi. On showers located more than 50 feet from the main water supply, piping should be sized to provide friction losses no greater than 50 feet of 1-1/4" pipe.

A drain should be provided for the shower.

In case of chemical burn, the victim should shower immediately and a doctor or nurse should be notified.

#### **COMBINATION SHOWERS and EYE/FACE WASHES**

A drain should be provided for the shower, and the eye/face wash should be connected to the drainage system.

Minimum pipe size to the combination unit should be no smaller than 1-1/4" IPS. Dynamic water pressure should be no less than 30 psi during operation of both units. On units more than 50 feet from the main water supply, piping should be sized to provide friction losses no greater than 50 feet of 1-1/2" pipe.

The injured person should immediately turn on the shower and remove all clothing as quickly as possible.

#### **REGULAR TESTING**

All emergency showers and eye/face washes should be tested weekly. A testing tag is attached to each unit and is used to record the date of the test and the initials of the tester. If there is no floor drain available for proper testing of the shower, a Haws Shower Test Kit, Model 9010, and container, Model 9009 should be used.

