

**University of South Alabama Eye Wash and Safety Shower Policy
Standards for Emergency shower and eyewash equipment
ANSI Z358.1 (2004)**

SAFETY SHOWERS

Self contained showers: A shower that contains its own flushing fluid and must be re-filled or replaced after use.

Plumbed shower: An emergency shower permanently connected to a source of potable water.

The following specifications are taken directly from ANSI Z358.1-2004 and are for plumbed showers only:

Description	Performance Requirements
Shower height	Not less than 82" nor more than 96" from standing level
Water Spray Pattern	20" minimum diameter-60" from standing level
Center of Water Spray	16" from any obstruction
Water delivery-Potable	Minimum of 20 GPM/meeting water spray pattern
Control Valve & Actuator	Stay ON type (no use of hands)—OFF to ON in one second-easily located
Location to Hazard	Maximum 10 seconds travel and with 100' of hazard. In a well-lit area and identified with a sign
Identification	Well lighted, sign and area highly visible identified with a sign
Water temperature	Comfort range of 60°-95° F "Tepid water"
Water capacity	Minimum inlet supply pressure of 30 psi
Alarm devices (non-mandatory)	Audible alarms or blinking lights to alert authorities unit is in use
Installation	10 second from hazard-Path of travel shall be free of obstructions that inhibit immediate use of the equipment

EYE/FACE WASH

Plumbed eye wash: An eye wash unit permanently connected to a source of potable water

Gravity-Feed Eye wash: An eye wash device that contains its own flushing fluid and must be refilled or replaced after use

Description	Performance Requirements
Water Delivery-Potable	Minimum of 0.4 GPM-dual stream flushing for 15 minutes
Velocity	Soft spent stream
Location to Hazard	Maximum 10 seconds travel and within 100' of hazards
Nozzles	Cover to protect from air borne contaminants
Nozzle Height	Not less than 33" nor more than 45" from standing level
Control Valve & Actuator	Stay-on-type-OFF to ON in one second-easily located. . In a well-lit area and identified with a sign
Identification	Well lighted, sign, area highly visible
Water temperature	Comfort range of 65° to 95° F "Tepid water"
Water capacity	Minimum inlet supply pressure of 30 psi

Eye/Face Wash

Description	Performance Requirements
Heads	Positioned 33"-45" from floor 6" from wall or nearest obstruction Large head to cover both eyes and face or regular size eye wash heads plus a face spray ring 3 GPM for 15 minutes
Valve	In a well-lit area and identified with a sign. Activates in 1 second or less. Hands free operation
Installation	Same as safety shower

DRENCH HOSE

*NOTE: Hand-held drench hoses support shower and eyewash units but shall not replace them.

<u>Description</u>	<u>Performance Requirements</u>
Water Delivery-Potable	Minimum of 3 GPM-low velocity
Location to Hazard	Maximum of 10 seconds travel and within 100 of hazard
Control valve	Stay-on type—OFF to ON one second-easily located. . In a well-lit area and identified with a sign
Water temperature	Comfort range of 65° to 95° F "Tepid water"

Departmental Responsibilities:

1. Locate and notate the location of all safety shower/eyewash equipment in department area.
2. Eyewash equipment should be activated weekly to flush lines and verify proper operation. A record of these activations should be kept near each piece of safety equipment. Each department will be responsible for requesting that a yearly check on the safety shower/eye wash be done by maintenance and obtaining verification of these checks.
3. Clear area of all obstructions around the safety shower/eye wash.
4. All employees and students, who might be exposed to hazardous chemicals, shall be instructed in the proper use and location of all emergency equipment.
5. The department should maintain all records of staff/student training for a minimum of 3 years.
6. Equipment identification/location signs are departmental responsibility.

Maintenance Responsibilities for Showers and Eyewashes (yearly)

1. Spray pattern
2. Water Delivery
3. Function of control valve and actuator
4. Water temperature
5. Placement of identification/location signs
6. Maintaining yearly check records.

Tools for Inspection

1. Shower volume test equipment-water repellent test chute and five-gallon (minimum) collection device
2. Shower pattern tester-measuring device to determine if pattern meets 20" diameter device
3. Eyewash tester- to determine if dual stream rinse is being accomplished
4. Tape measure- to determine heights of showerheads, eyewash heads and target area clearance.
5. Thermometer-to record water temperatures
6. Checklist-to record finding of compliance, non-compliance, observations and recommendations.

Training and Use Instructions

All employees and students that may be exposed to hazardous chemical in the work place shall receive instruction in the proper use of emergency shower and eyewash equipment.

Points to remember:

- Remove protective equipment (gloves, glasses, goggles, clothing, etc) **AFTER** the shower/eyewash has been activated, to rinse away any chemicals that may remain on the equipment and potentially may contaminate the eyes or skin, if removed prematurely.
- Remove all affected clothing **DURING** the irrigation process to properly rinse the affected tissue.
- For chemical splashes to the eyes, it is important hold both eyelids open and roll the eyeballs so water will flow on all surfaces and in the folds surrounding the eyeballs.
- A **MINIMUM** of fifteen (15) minutes is recommended for initial first aid irrigation and dilution of a chemical splash to the eyes, face and body.