

HEMCO[®]

Laboratory Planning Solutions

Emergency Shower



BETATEK INC.
Instrumentation Superbly Supported
L'instrumentation à son meilleur

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Laboratory Emergency/Shower Decontamination Booth

Full body emergency shower & eye / face wash, both with immediate response activation handle.

Durable one piece seamless fiberglass construction with glass smooth white surfaces and coved corners for ease of clean-up.

Emergency showers available with translucent frosted strip curtains, which provides for easy access into booth, while containing contaminated water splash.

Stainless steel Grab bars located on right & left sides to support victim and rescue personnel during decontamination, included.

Plumbing is provided, for installation by local certified plumber. Plumbed to single point 1-1/4" IPT. connection. Tempered warm water supply connection 20 GPM water supply is required.

Raised fiberglass deck with self draining containment basin, and 2" diameter drain outlet located on either the bottom or rear of unit.

Laboratory Applications
Emergency Drench Shower Booth
same specs as above except with finished exterior side panels.
Cat No. 16604

Industrial Applications
Emergency Drench Shower Booth
unit is equipped with pull rod activated overhead drench shower and rear wall mounted eye/face wash.
Cat No. 16601



Cat. No. 16601
For Industrial Applications
shown above



Overhead Drench Shower

Shower unit features 10" diameter plastic head and 1" IPS brass "stay open" valve with rigid pull rod and handle. **Cat. No. 16088**

Alarm Horn & Light
Audible warning sound when system is activated by flow switch. Top mounted visual warning light when system is activated.
Cat. No. 16680



Eye/Face Wash

Wall mounting unit features two large plastic heads, push plate operated "stay open" ball valve. 1/2" IPS inlet, and 1 1/4" IPS drain. **Cat. No. 16006**

Eye and Face Wash Options

Hand Held Body Wash
squeeze valve nozzle on 8' coiled hose and bracket. Can be used to rinse all body parts while victim is sitting or lying down. Wall or hood mounted, 3/8 NPT, barrier free.
Cat No. 16005



Swing-Out Eye Wash
Deck mounted next to sink. Activates when pivoted. 1/2" NPT. Barrier free.
Cat. No. 16009



Hand Held Eye/Face & Body Wash
Mounted on the front side-wall of the fume hood. Includes 8' hose and surface escutcheon. 3/8" NPT. barrier free.
Cat. No. 93966

Emergency Shower Decontamination Booth

Emergency showers & eye/facewash stations are necessary as a backup to decrease the effects of exposure to hazardous chemicals.

Other names for emergency showers include deluge or drench showers. An emergency shower is not designed to flush the eyes, instead it is intended to flush the whole body, the rate of water flow from an emergency shower could possibly damage eyes.

Eye wash stations are intended to flush the eyes and face only, and provide a lower rate of flow.

HEMCO's Emergency shower decontamination booths are combination drench showers and eye/face washes. Emergency shower decontamination showers are appropriate in situations where detailed information about a specific work place hazard is unavailable or in situations where complex hazardous processes incorporate chemicals with different properties.

Even though portable models are a possibility, it is generally better to select a plumbed in model if possible.

The requirements of the emergency shower decontamination booth depends upon the properties of the chemicals that are in use, and the tasks that the chemicals are used for. An analysis of the workplace can provide an assessment of the potential hazards involved in the work area. Emergency Showers need to deliver a pattern of water with at least a 20 inch diameter at 60 inches, to ensure water comes in contact with the entire body. It is recommended that the shower head height be between 82" & 96" inches off the floor. Minimum volume of spray required is 20 gallons per minute for 15 minutes.

The design of the shower should allow it to be activated in less than 1 second and remain operational without the users hand on the valve. When enclosures are used be sure that there is an unobstructed area of 34" inches in diameter. The valve height should not exceed 69" inches. It is recommend that Eyewash stations deliver fluid to both eyes at a minimum volume of 0.4 gallons per minute for a duration of 15 minutes, but not a velocity that could injure the eyes. Eye Face washes should be located between 33 and 45 inches from the floor, with a minimum of 6 inches distance from the wall or closest obstruction.

ANSI Z358.1-2009 states that the affected body part be flushed thoroughly and immediately for a period of at least 15 minutes, using a large supply of clean fluid under low pressure. Contaminates are not neutralized by water, water can only wash them away, and this requires large amounts of water.

Recommendations for the amount of flushing time are as follows:

- Mildly irritating chemicals require a minimum of 5 minutes flushing time.
- Severe irritants require at least 20 minutes of flushing time.
- Non-penetrating corrosives-chemicals that react with human tissue to form a protective layer, which limits the amount of damage done, require a minimum of 20 minutes flushing time.
- Penetrating Corrosives- includes phenol, hydrofluoric acid, and most alkalies enter into the eyes and or skin deeply, and require at least 60 minutes of flushing time.
- If irritation continues then repeat the flushing for the required time.

ANSI recommends that the user be able to reach the equipment in 10 seconds or less. Take into consideration that the injured party may not have use of their vision. According to ANSI's ten second rule, an average person can walk 55 feet in 10 seconds time, not accounting for the emotional and physical condition of the person. The 10 second rule may have to be modified depending on the potential effect of the chemicals in use. Where highly corrosive chemicals are used an emergency shower decontamination booth may need to be located within 10" to 20" feet from possible exposure to hazards.

Emergency Showers should be clearly identified by highly visible signage, in the form of a symbol that does not require language skills to understand. The Emergency Shower should be in a well lit area.