

**PURCHASING DIVISION
CITY OF WORCESTER
MASSACHUSETTS 01608-1895
ROOM 201 - CITY HALL, 455 MAIN ST.
PHONE (508) 799-1220**

**BID INVITATION
(Supplies, Material, Equipment, Services)**

BID NO. CR-8754-J7
DATE: July 6, 2026
CITY OF WORCESTER Christopher J. Gagliastro, MCPPO Purchasing Agent
BUYER: Jerry Kucera

AN EQUAL OPPORTUNITY AFFIRMATIVE ACTION EMPLOYER

**NOTICE TO BIDDERS
TERMS AND CONDITIONS**

All bids are subject to the terms and conditions and specificity herein set forth except where specifically deleted by the City of Worcester in Section No. 6 below.

COMPLETE ORIGINAL COPY (including ALL required pages) OF THIS BID MUST BE SUBMITTED IN A SEALED ENVELOPE:

DATE: July 21, 2026

TIME: 4:00 P.M. LOCAL TIME

PLACE: Purchasing Division, Room 201, City Hall, Worcester, Massachusetts

MARK ENVELOPE "Bid No. CR-8754-J7, Emergency Eyewash and Shower Annual Inspections / WPS"

The name and address of the bidder must appear in the upper left hand corner of the envelope. The City of Worcester is not responsible for bids not properly marked.

GENERAL

1. This Bid Invitation covers: Provide Emergency Eyewash and Shower Annual Inspection services from date of contract through June 30, 2027 as per the requirements and specifications of the City of Worcester Public Schools. This contract may be renewed for a second and third year period at the sole discretion of the City, the option of which to be determined at the end of the current contract period (See Page 10).
2. A certified check or bid bond made payable to the "City Treasurer, City of Worcester" in the Amount of \$ ___ must accompany this bid.
3. **NO BID WILL BE ACCEPTED AFTER TIME AND DATE SPECIFIED**
4. A performance bond in the amount of \$ N/A of the total dollar award is required.
5. A payment bond in the amount of \$ N/A of the total dollar award is required.
6. All terms and conditions are applicable to this proposal except the following section numbers which are hereby deleted from this invitation: all apply
7. Questions pertaining to this bid must be directed to: Jerry Kucera in writing via e-mail at: KuceraJS@worcesterma.gov

Email copies of this bid are acceptable. Please email bids to KuceraJS@worcesterma.gov

8. The following meanings are attached to the defined words when used in this bid form.
 - (a) The word “City” means The City of Worcester, Massachusetts.
 - (b) The word “Bidder” means the person, firm or corporation submitting a bid on these specifications or any part thereof.
 - (c) The word “Contractor” means the person, firm or corporation with whom the contract is made by carrying out the provisions of these specifications and the contract.
 - (d) The words “Firm Price” shall mean a guarantee against price increases during the life of the contract.
9. Any prospective bidder requesting a change in or interpretation of existing specifications of terms and conditions must do so within five (5) days (Saturdays, Sundays and Holidays excluded) BEFORE scheduled bid opening date. All requests are to be in writing to the Purchasing Division (or e-mailed at KuceraJS@worcesterma.gov). No changes will be considered or any interpretation issued unless request is in our hands within five (5) days (Saturdays, Sundays and Holidays excluded) BEFORE scheduled bid opening date.
10. The contractor will be required to indemnify and save harmless the City of Worcester, for all damages to life and property that may occur due to his or her negligence or that of his or her employees, subcontractors, etc., during this contract.
11. The Contract Agreement will be in the form customarily employed by the City of Worcester for this purpose and is on file in the Purchasing Division at City Hall.
12. Bids which are incomplete, not properly endorsed, or signed, or otherwise contrary to these instructions will be rejected as informal by the Purchasing Agent. Conditional Bids Will Not Be Accepted.
13. The Bidder must certify that no official or employee of the City of Worcester, Massachusetts is pecuniarily interested in this proposal or in the contract which the bidder offers to execute or in expected profits to arise therefrom, unless there has been compliance with provisions of G.L.C.43 Sec. 27, and that this bid is made in good faith without fraud or collusion or connection with any other person submitting a proposal.
14. As the City of Worcester is exempt from the payment of Federal Excise Taxes, and Massachusetts Sales Tax, prices quoted herein are not to include these taxes.
15. **All prices are to be firm F.O.B. Destination, City of Worcester, Massachusetts, unless otherwise indicated by the City. Time reserved for award is ninety days.**
16. In case of error in the extension prices quoted herein, the unit price will govern.
17. It is understood and agreed that should any price reductions occur between the opening of this bid and delivery of any order, the benefit of all such reductions will be extended to the City.
18. The City of Worcester reserves the right to reject any and all bids, wholly or in part, and to make awards in a manner deemed in the best interest of the City.
19. Awards will be made to the bidder quoting the lowest net price in accordance with specifications.
20. The supplier will be bound by all applicable statutory provisions of law of the Federal Government, the Commonwealth of Massachusetts, the City of Worcester, and The Department of Public Safety of the Commonwealth of Massachusetts.
21. Any bid withdrawn after time and date specified, the bidder shall forfeit deposit on bid as liquidated damages.
22. The contractor will not be permitted to either or underlet the contractor, not assign either legally or equitably any monies hereunder, or its claim thereto without the previous written consent of the City Treasurer and of the Purchasing Agent of the City.

23. If this bid shall be accepted by the City, and the bidder shall fail to contract as aforesaid and to give a bond in the amount as specified in Section 4, within ten (10) days, (not including Sunday or a Legal Holiday) from the date of the mailing of a notice from the City to him, according to the address given herewith, that the contract is ready for signature, the City may by option determine that the bidder has abandoned the contract and thereupon the proposal and acceptance shall be null and void and the bid security accompanying this proposal shall become the property of the City as liquidated damages.
24. When quoting, the bidder shall submit a signed copy of this bid form, and if bid is accepted by the City shall constitute part of the contract of purchase. Do not detach any part of this form when submitting a bid. Bidder must sign and return complete forms.
25. If in the judgment of the Purchasing Agent any property is needlessly damaged by an act or omission of the contractor or his/her employees, servants, or agent, the amount of such damages shall be determined by the Purchasing Agent of the City of Worcester and such amount shall be deducted from any money due the contractor or may be recovered from said contractor in actions at law.
26. It is agreed that deliveries and/or completion are subject to strikes, lockouts, accidents and Acts of God.

INSURANCE AND WORKER'S COMPENSATION

27. COMMERCIAL GENERAL LIABILITY INSURANCE – Contractor to supply the City of Worcester with certificates of insurance evidencing general liability coverage of not less than \$ 1,000,000.00 per occurrence / \$ 2,000,000.00 aggregate.
28. AUTOMOBILE LIABILITY INSURANCE – Contractor to supply the City of Worcester with certificates of insurance evidencing automobile liability coverage, bodily injury and property damage combined single limits, of \$ 1,000,000.00 (all owned, hired and non-owned autos).
29. COMPENSATION INSURANCE – Contractor shall furnish the City of Worcester with certificates showing that all of his or her employees who shall be connected with this work are protected under Massachusetts' statutory worker's compensation insurance policies.
30. The Contractor shall carry public liability insurance with an insurance company satisfactory to the City so as to save the City harmless from any and all claims for damages arising out of bodily injury to or death of any person or persons, and for all claims for damages arising out of injury to or destruction of property caused by accident resulting from the use of implements, equipment or labor used in the performance of the contractor or from any neglect, default or omission, or want of proper care, or misconduct on the part of the Contractor or for any one of his employ during the execution of the contract.
31. Prior to starting on this contract, the Contractor shall deposit with the contracting officer certificates from the insurer to the effect that the insurance policies required in the above paragraph have been issued to the Contractor. The certificates must be on a form satisfactory to the Purchasing Agent.
32. Except as may be otherwise stated herein, the Contractor shall also carry bodily injury and property damage insurance in amount not less than those set forth above covering the operation of all motor powered vehicles owned or operated by the Contractor and engage in this contract.

DISCOUNT

33. Prompt pay discounts will be considered when determining the low bid except when discounts are for a period of less than 30 days. In this event discounts will not be taken into consideration when determining low bid.
34. Time, in connection with discount offered, will be computed from date of completion and/or delivery and acceptance at destination, or from date correct bill or voucher properly certified by the contractor is received if the latter date is later than the date of completion and acceptance and/or delivery and acceptance.

GUARANTEE

35. The bidder to who a contract is awarded guarantees to the City of Worcester all equipment, materials and/or workmanship for a period of one (1) year after final inspection and acceptance and shall replace promptly any defective equipment, materials and/or workmanship required without additional cost to the City.

DELIVERIES AND COMPLETION

36. It is understood and agreed that in the event of failure on the part of the bidder to indicate date of delivery and/or completion, delivery and/or completion will be made within twelve (12) days from date of notification. Should the successful bidder fail to make delivery or complete contract within time specified, the City reserves the right to make the purchase on such orders at the open market and charge any excess over contract price to the account of the successful bidder, who shall pay the same.
37. The contractor shall familiarize himself with the location and facilities for storage.
38. The City, through its Purchasing Division, reserves the right to divert delivery from one location to another, and to allow for any change in operating conditions or for any other cause not now foreseen and to proportion deliveries according to available storage facilities.

SAMPLING AND ANALYSIS

39. Each bidder must state the commercial name of the product quoted, name, and address of operator or agent from whom the product will be purchased and in addition shall furnish an analysis of the product, date of analysis, by whom made and their address.
40. Samples of the product to be delivered may be taken by a representative of the City, either prior to delivery or while it is being delivered in the storage facilities at destination, or will be taken from the storage facilities to which the product has been delivered as determined from time to time by the Purchasing Agent. Bidder agrees to furnish the necessary manual labor, without additional cost required to assemble the physical samples, which is to be performed under the direction of the City representative.
41. The representative of the City taking the samples, shall be given the opportunity, while sampling, to affix his signature to the delivery slip each item represented in his sample.
42. Any product after the sampling and analysis, not found meeting the requirements of the contract shall be sufficient cause for the cancellation of the contract at the option of the Purchasing Agent.
43. If any product is found that does not meet the analysis submitted by the bidder in his proposal, the Purchasing Agent may at his option exercise his right to reject the product and require that all or any part thereof shall be removed promptly by and at the expense of the contractor and replace it forthwith with a product satisfactory to the Purchasing Agent, or to retain the product and compensate the contractor in an amount as determined by the Purchasing Agent and the City Manager.
44. It is understood and agreed that it shall be a material breach of any contract resulting from this bid for the Contractor to engage in any practice which shall violate any provisions of Massachusetts General Laws, Chapter 151B, relative to discrimination in hiring, discharge, compensation, or terms, conditions or privileges of employment because of race, color, religious creed, national origin, sex, age or ancestry.
45. The undersigned as bidder, declares that the only parties interested in this proposal as principals are named herein; that this proposal is made without collusion with any other person, firm or corporation; that no officer or agent of the City is directly or indirectly interested in this bid; and he proposes and agrees that if this proposal is accepted he will contract with the City in accordance with the specifications, also the terms and conditions as spelled out in this bid form.
46. No Person, including but not limited to corporations, partnerships, limited partnerships or limited liability corporations, shall be eligible to receive a contract under this invitation to bid and/or request for proposal if that person has been convicted of any felony offense involving the distribution of controlled substances as that term is defined under Chapter 94C of the General Laws and, for contracts to be performed for on-site services to the Worcester Public Schools, if that person or any person to be employed by that person in the performance of such on-site services has been convicted of a "sex offense" or a "sex offense involving a child" or a "sexually violent offense" or would meet the definition of "sexually

violent predator" as those terms are defined in Chapter 6, Section 178C of the General Laws and who must register with the sex offender registry board.

47. The Contractor shall at all times enforce strict discipline and good order among his employees and shall not employ for work or services relating to this contract any unfit person or anyone not skilled in the task assigned to him. In light of the fact that the performance of this contract requires the Contractor and its employees to have significant interaction with the public, the Contractor shall require all employees who may perform services under this contract to conduct themselves in a courteous, professional manner. If the Contractor is notified by the Contract Officer that any person engaged upon the work is incompetent, unfaithful, disorderly, discourteous, or otherwise unsatisfactory, then such person shall be discharged from providing services or work pursuant to this contract. Without limiting the generality of the foregoing, intimidation, threats and/or violent conduct of any kind or nature directed to members of the public are absolutely prohibited. Failure to comply with this requirement shall be grounds for termination of the contract.
48. The Contractor's performance may be evaluated on an ongoing basis including but not limited to consideration of complaints received from members of the public. In order to facilitate this evaluation, the Contractor shall provide the City with documents and records upon request. The Contractor shall further obtain from its employees authorization that appropriate City personnel may obtain all available criminal offender information ("CORI") from the Criminal History Systems Board. A high number of unresolved complaints, any number of complaints that are particularly severe, or employment of individuals who have been convicted of assault or other violent crimes shall be grounds for the early termination or non-renewal of the contract by the City.
49. The procurement officer shall award the contract to the lowest responsible and responsive bidder. The term "responsible bidder" means "a person who has the capability to perform fully the contract requirements, and the integrity and reliability which assures good faith performance." Consistent with its duty to maintain public order and promote public safety, the City has determined that this contract is of a type and nature so as to be particularly sensitive due, at least in part, to the contractor's inherent access and dealings with the members of the general public. Therefore, the City has concluded that additional scrutiny is justified as it determines whether a particular bidder is responsible, having the integrity and reliability to properly perform the requested services. This may entail consideration of the contractor's system of oversight, training and supervision of its employees, including but not limited to its requirement of a high standard of customer service and courtesy in its dealings with the public. The bidder's care and diligence in hiring and assigning its employees will also be considered. In making its determination, the City reserves the right to examine any and all information at its disposal, including but not limited to prior City contracts, the experiences and information obtained from current and former customers (whether identified by the bidder as references or not), as well as other sources available to the City, including but not limited to court documents, newspapers, financial reports (such as DUNS), and certain police data and reports.
50. The Contractor, acting through its owner(s) or any of its employees, or its agents or sub-contractors and any of their employees, shall not engage in any behavior, whether during the course of its duties under this contract or at any other time, that is illegal, criminal or otherwise shocking or offensive to the general public. The determination whether any particular behavior is illegal, criminal or shocking to the general public shall rest in the sound judgment of the Contracting Officer or the City Manager. In making such determination, the Contracting Officer or the City Manager shall apply the general standards of the community. No criminal conviction or formal charges shall be required to make such determination. Such behavior need be something more than trivial and something which would cause the general public to have concerns either about the safety of individuals coming in contact with the Contractor or about the character and integrity of the individuals with which the City does business. Violation of this provision shall be grounds for immediate and unilateral termination of this contract by the City upon five days' notice as otherwise provided herein

GIVE FULL NAMES AND RESIDENCES OF ALL PERSONS INTERESTED IN THE FOREGOING PROPOSAL.

(NOTICE: Give first and last name in full; in case of corporations, give corporate name and names of President, Treasurer, and Manager; and in case of firms give names of the individual members)

Name	Address	Zip Code
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

KINDLY FURNISH THE FOLLOWING INFORMATION REGARDING BIDDER:

(1) If a Proprietorship

Name of Owner _____

Business Address _____

Zip Code _____ Telephone No. _____

Home Address _____

Zip Code _____ Telephone No. _____

(2) If a Partnership
Full names and addresses of all partners

<u>Name</u>	<u>Address</u>	<u>Zip Code</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

Business Address _____ Zip Code _____

Tel. No. _____

(3) If a Corporation

Full Legal Name _____

State of Incorporation _____ Qualified in Massachusetts ? Yes _____ No _____

Principal Place of Business _____

Street _____ P.O. Box _____

City/Town _____ State _____ Zip _____

Telephone No. _____

Place of Business in Massachusetts _____

Street _____ P.O. Box _____

City/Town _____ State _____ Zip _____

Telephone No. _____

GIVE THE FOLLOWING INFORMATION REGARDING SURETY COMPANY

Full Legal Name of Surety Company _____

State of Incorporation _____ Admitted in Massachusetts ? Yes _____ No _____

Principal Place of Business _____

Street _____ P.O. Box _____

City/Town _____ State _____ Zip _____

Place of Business in Massachusetts _____

Street _____ P.O. Box _____

City/Town _____ State _____ Zip _____

Telephone No. _____

NOTE

The Office of the Attorney General, Washington, D.C. requires the following information on all bid proposals amounting to \$1,000.00 or more.

F.I.D. Number of bidder _____

This number is regularly used by companies when filing their "EMPLOYER'S FEDERAL TAX RETURN, U.S." Treasury Department Form 941.

AUTHORIZED SIGNATURE OF BIDDER _____ TITLE _____
PLEASE SIGN

DATE _____ BID SECURITY \$ N/A

The name of Customer Service Representative and the Contract Administrator responsible for servicing this account in the event of contract award are:

NAME (PLEASE PRINT) *Customer Service Rep.* _____ TEL. NO. _____

NAME (PLEASE PRINT) *Contract Administrator* _____ TEL. NO. _____

FAX NUMBER _____ **FAX #** _____

E-MAIL (Customer Service Rep.): _____

E-MAIL (Contract Administrator): _____

UNDER MASSACHUSETTS GENERAL LAWS, CHAPTER 30B: SECTION 10, THE FOLLOWING CERTIFICATION MUST BE PROVIDED:

Section 10. A person submitting a bid or a proposal for the procurement or disposal of supplies, or services to any governmental body shall certify in writing, on the bid or proposal, as follows:

" The undersigned certifies under penalties of perjury that this bid or proposal has been made and submitted in good faith and without collusion or fraud with any other person. As used in this certification, the word "person" shall mean any natural person, business, partnership, corporation, union, committee, club, or other organization, entity, or group of individuals."

(Please Print) _____
Name of Person Signing Bid

Signature of Person Signing Bid

Company

No award will be made without vendor certification of the above.

PROPOSAL PAGE

Bidders must state and identify the product offered, such as manufacturer's name, trade name, brand name and quality next to each item. WE MUST KNOW WHAT HAS BEEN OFFERED.

The quantities shown herein are estimated only and the Contractor will be required to furnish all quantities ordered by the City during the period of the contract.

YES NO

Delivery to be made to: as required by the Worcester Public Schools

This Bid includes addenda numbered _____

NO PRICE ADJUSTMENTS ALLOWED. PRICES QUOTED ARE FINAL. CHECK BEFORE SIGNING

BIDDER TO COMPLETE ITEMS BELOW

Item No.	Estimated Contract Quantity	Description				Total Amount
		<p style="text-align: center;">Provide Emergency Eyewash and Shower Annual Inspection services from date of contract through June 30, 2027 as per the requirements and specifications of the City of Worcester Public Schools.</p> <p style="text-align: center;">Questions pertaining to this bid must be directed to: Jerry Kucera in writing via e-mail at: KuceraJS@worcesterma.gov</p>				See Specification /Pricing Page(s)

TERMS, PROMPT PAY DISCOUNT _____% 30 DAYS, NET 45 DAYS.

DELIVERY AND/OR COMPLETION TO BE MADE WITHIN (as required) DAYS FROM TIME OF NOTIFICATION BY THE CITY.

NAME OF BIDDER _____

DISCLOSURE OF CONTRACT RENEWAL

This contract may be renewed for a second and third contract period at the sole discretion of the City of Worcester, the option of which will be determined at the end of the current contract term.

In no event will increase exceed _____ % for the second contract period (7/1/27 – 6/30/28).

In no event will increase exceed _____ % for the third contract period (7/1/28 – 6/30/29).

(TO BE COMPLETED BY BIDDER)

_____ Name

_____ Date

_____ Title

IF VENDOR DOES NOT WISH TO BE CONSIDERED FOR A SECOND/THIRD CONTRACT PERIOD OPTION, PLEASE INDICATE BY CHECKING THIS BOX:

IMPORTANT

It is understood and agreed, that failure by the bidder to complete the above increase statement, it is the bidders intent to accept a second contract period option at zero (0) percent increase.

All other Terms and Conditions to remain the same.

Specifications / Requirements

Emergency Eyewash and Shower Annual Inspections / WPS

Bid #: CR-8754-J7

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- II. Required Bidder Qualifications and Experience

Appendices

Appendix 1: Emergency Eyewash and Shower Overviews

Appendix 2: ANSI / ISEA Z358.1-2014 Compliance Checklist

I. Description of Services

The Worcester Public Schools (WPS) is requesting bids to evaluate and test the emergency showers and eyewash stations in 12 schools, totalling 152 fixtures (see Appendix 1 for fixtures). After testing and evaluation, the Awardee is to write a report for each fixture (shower and eyewash) detailing which deficiencies need to be addressed.

The schools with emergency eyewashes and showers are listed below:

- Greendale Head Start
- Challenge and Reach Academy
- Norrback Ave. School
- Claremont and Woodland Academy
- Nelson Place School
- North High School
- Roosevelt School
- University Park Campus School
- Burncoat High School
- Worcester Technical High School
- South High School
- Doherty Memorial High School

Fixtures are either eyewash stations or combination units with showers and eyewash stations. There are sinks and slop sinks around the floors of the schools to be used for emptying barrels and buckets. Floor drains are not to be used to empty any water collected from the annual inspection. All schools besides University Park Campus School have an elevator, however, at University Park Campus School there are only two combination units on the second floor. The Awardee is to follow the ANSI / ISEA Z358.1-2014 Compliance Checklist, shown in Appendix 2.

The Awardee must have the capability to travel between school buildings with all supplies necessary for annual testing (large barrel, shower curtain, etc.). The Awardee is to send all reports to the Environmental Health and Safety Coordinator, Brittany Helgerson, at helgersonb@worcesterschools.net.

II. Required Bidder Qualifications and Experience

1. The Bidder shall have been regularly engaged in the business of providing evaluations and testing of emergency showers and eyewashes for a minimum of three years.
2. The Bidder must have the capacity to provide evaluation and testing to all schools listed above and have the means to travel throughout the district.
3. The Bidder must be able to submit reports within 30 days of the date of inspection.

Appendix 1: Emergency Eyewash and Shower Overview

School	Type	ID	Location
Greendale	Eyewash	001E	Lower-Level Boiler room across water heater
Challenge and Reach Academy	Eyewash	001E	Custodial office (Boiler room) left side of the custodial Desk
Norrback	Eyewash and Shower	001E, 001S	Room 227 left side by entrance door
Claremont	Eyewash and Shower	001E, 001S	Room 284 right side of the room across teacher desk
Claremont	Eyewash and Shower	002E,002S	Room 382 right side of the room next to window
Woodland	Eyewash and Shower	001E, 001S	Room 315 end of the room next to the sink
Nelson Place	Eyewash	001E	Mechanical room on the wall next to the sink
Nelson Place	Eyewash	002E	Classroom (Lab) next to the sink
Nelson Place	Eyewash	003E	Nurse office sink across exam room B134.3
North High	Eyewash and Shower	001E,001S	Sprinkle control valves room B013 (Corner of the room)
North High	Eyewash and Shower	002E,002S	Corner of room 204
North High	Eyewash and Shower	003E,003S	Room 204A Prep
North High	Eyewash and Shower	004E,004S	Room 210
North High	Eyewash and Shower	005E,005S	Room 228
North High	Eyewash and Shower	006E,006S	Room 228A Prep
North High	Eyewash	007E	Health science room 302
North High	Eyewash and Shower	008E,008S	Room 304
North High	Eyewash and Shower	009E,009S	Room 304A prep
North High	Eyewash and Shower	010E,010S	Room 310
North High	Eyewash and Shower	011E,011S	Room 320
North High	Eyewash and Shower	012E,011S	Room 328A Prep
North High	Eyewash and Shower	013E,013S	Room 328
North High	Eyewash and Shower	014E,014S	Room 315A Chemical Storage
North High	Eyewash and Shower	015E,015S	Room 404
North High	Eyewash and Shower	016E,016S	Room 404A Prep
North High	Eyewash and Shower	017E,017S	Room 410
North High	Eyewash and Shower	018E,018S	Room 428
North High	Eyewash and Shower	019E,019S	Room 428A Prep
Roosevelt	Eyewash and Shower	001E,001S	Room 308 (at the end of the room) computer room
UPCS	Eyewash and Shower	001E,001S	Room 2. left side of the room

UPCS	Eyewash (hose on sink)	002E	Room 1. close to the sink near exit door
Burncoat High	Eyewash and shower	001E,001S	left wall next to sink (close to over head door) F-10
Burncoat High	Eyewash	002E	left wall by entrance door D-24
Burncoat High	Eyewash (Drench)	003E	left wall by entrance door D-20
Burncoat High	Eyewash	004E	left wall by entrance door D-18
Burncoat High	Eyewash	005E	left wall by entrance door B-14
Burncoat High	Eyewash	006E	left wall by entrance door B-10
Burncoat High	Eyewash (Drench)	007E	left wall by entrance door C-5
Burncoat High	Eyewash	008E	inside of Prep Room next to sink C-3 PREP
Burncoat High	Eyewash and shower	009E,009S	left side of the room C-3
Worcester Tech	Eyewash and shower	001E,001S	Boiler room wall across water heater B023
Worcester Tech	Eyewash and shower	002E,002S	left side of the room near sink B016
Worcester Tech	Eyewash and shower	003E,003S	Right side of the room B021
Worcester Tech	Eyewash and shower	004E,004S	Behind teacher desk C109
Worcester Tech	Eyewash and shower	005E,005S	on the wall going to the restroom C120
Worcester Tech	Eyewash and shower	006E,006S	left side of the wall going to the shop restroom C128
Worcester Tech	Eyewash and shower	007E,007S	At the end of the room D108
Worcester Tech	Eyewash	008E	Dish room left side of the room A026 inside of A020
Worcester Tech	Eyewash	009E	next to sink in the middle of the room B239 #1
Worcester Tech	Eyewash	010E	left side entrance door next to sink B239 #2
Worcester Tech	Eyewash and shower	011E,011S	Inside of Prep room B211
Worcester Tech	Eyewash and shower	012E,012S	Right side of the Room B210

Worcester Tech	Eyewash and shower	013E,013S	left side of the room next to fume hood B212
Worcester Tech	Eyewash and shower	014E,014S	D120
Worcester Tech	Eyewash	015E	next to the sink Health Suite B114
Worcester Tech	Eyewash and shower	016E,016S	Next to teacher desk D325
Worcester Tech	Eyewash and shower	017E,017S	Right side of the room next to hand washing sink C312
Worcester Tech	Eyewash and shower	018E,018S	right side of the room next to bubbler C325
Worcester Tech	Eyewash and shower	019E,019S	End of the room next to sink across overhead door C311
Worcester Tech	Eyewash and shower	020E,020S	right side of the room C304
Worcester Tech	Eyewash and shower	021E,021S	Right side of the room next to the fume hood B310
Worcester Tech	Eyewash and shower	022E,022S	right side of the room next to the fume hood B312
Worcester Tech	Eyewash and shower	023E,023S	Inside of Prep room B311
Worcester Tech	Eyewash	024E	Next to the sink C406
Worcester Tech	Eyewash and shower	025E,025S	Right side of the room D423
Worcester Tech	Eyewash and shower	026E,026S	Right side of the room by entrance door D420
Worcester Tech	Eyewash and shower	027E, 027S	Right side of the room by entrance door C409
Worcester Tech	Eyewash and shower	028E,028S	Right side of the room by entrance door C407
Worcester Tech	Eyewash	029E	next to sink C416
South High	Eyewash and shower	001E,001S	Basement Right side closer to entrance door Diesel Shop
South High	Eyewash and shower	002E,002S	Basement Right side closer to overhead door Diesel Shop
South High	Eyewash and shower	003E,003S	Basement left side closer to over head door Diesel Shop
South High	Eyewash and shower	004E,004S	Basement left side closer to entrance door Diesel Shop
South High	Eyewash	005E	Basement ASAL learning center B059

South High	Eyewash and shower	006E,006S	1st floor Acid Neutralization end of the room A114
South High	Eyewash and shower	007E,007S	1st floor science Lab A107
South High	Eyewash and shower	008E,008S	1st floor science prep Lab A108
South High	Eyewash	009E	1st floor kids cooking area near window B191
South High	Eyewash	010E	1st floor kids cooking area near teacher office B191
South High	Eyewash	011E	1st floor classroom closer to entrance door B191
South High	Eyewash	012E	1st floor nurse office across B115.1
South High	Eyewash and shower	013E,013S	2nd floor science lab left side of A207
South High	Eyewash and shower	014E, 014S	2nd floor prep room A207
South High	Eyewash and shower	015E,015S	2nd floor Science lab left side room A266
South High	Eyewash and shower	016E,016S	2nd floor science prep room A266
South High	Eyewash and shower	017E,017S	2nd floor science lab left side A270
South High	Eyewash and shower	018E,018S	2nd floor science lab A271
South High	Eyewash and shower	019E,019S	2nd floor prep room A272
South High	Eyewash and shower	020E,020S	2nd floor science lab A275
South High	Eyewash	021E	3rd floor Robotic near sink A309
South High	Eyewash and shower	022E,022S	3rd floor Biology left side of Room A307
South High	Eyewash and shower	023E,023S	3rd floor biology prep room A308
South High	Eyewash and shower	024E,024S	3rd floor science lab left side of room A366
South High	Eyewash and shower	025E,025S	3rd floor science prep room A369
South High	Eyewash and shower	026E,026S	3rd floor science room A370
South High	Eyewash and shower	027E,027S	3rd floor science room A371
South High	Eyewash and shower	028E,028S	3rd floor science prep room A372
South High	Eyewash and shower	029E,029S	3rd floor science lab A375
Doherty	Eyewash and shower	001E,001S	Basement Room right side of the room near SDS sheet binder B005
Doherty	Eyewash and shower	002E,002S	basement near emergency exit door B005
Doherty	Eyewash and shower	003E,003S	Basement near over head door B005
Doherty	Eyewash and shower	004E,004S	Basement near entrance door Robotic B061
Doherty	Eyewash	005E	End of the Room left back wall E062
Doherty	Eyewash and shower	006E,006S	Right side of the room E062
Doherty	Eyewash and shower	007E,007S	Basement left side of the room E603
Doherty	Eyewash and shower	008E,008S	Basement Acid neutralization across door A017
Doherty	Eyewash and shower	009E,009S	Basement left side of the room A002
Doherty	Eyewash and shower	010E,010S	Basement Prep Room A002.1
Doherty	Eyewash and shower	011E,011S	Basement left side of room A004
Doherty	Eyewash and shower	012E,012S	Basement Prep room A004..1
Doherty	Eyewash and shower	013E,013S	By the entrance right side of the room A119

Doherty	Eyewash and shower	014E,014S	Prep room A109.9
Doherty	Eyewash	015E	Left side of the room before sink B102
Doherty	Eyewash and shower	016E,016S	Second floor Ride of the room A209
Doherty	Eyewash and shower	017E,017S	Second floor prep room A209.1
Doherty	Eyewash	018E	Second floor left wall Maker Space E285
Doherty	Eyewash	019E	Second floor left wall next to washing machine C217
Doherty	Eyewash and shower	020E,020S	3rd floor across sink D304.2
Doherty	Eyewash and shower	021E,021S	3rd floor left side of the room next to fume hood D304
Doherty	Eyewash and shower	022E,022S	3rd floor left side of the room D304.1
Doherty	Eyewash and shower	023E,023S	3rd floor left side of the room next to the fume hood D306
Doherty	Eyewash and shower	024E,024S	3rd floor left side of the room D306.1 (1)
Doherty	Eyewash and shower	025E,025S	3rd floor at the end of the of the room D306.1 (2)
Doherty	Eyewash and shower	026E,026S	3rd floor Right side of the room next to fume hood D308
Doherty	Eyewash and shower	027E,027S	3rd floor next to the fume hood D309
Doherty	Eyewash and shower	028E,028S	3rd floor left side of the room D309.1
Doherty	Eyewash and shower	029E,029S	4th floor right side of the room next to the fume hood D402
Doherty	Eyewash and shower	030E,030S	4th floor left side of the room D404.1 (1)
Doherty	Eyewash and shower	031E,031S	4th floor left side at the of the room D404.1 (2)
Doherty	Eyewash and shower	032E,032S	4th floor left side of the room D404
Doherty	Eyewash and shower	033E,033S	4th floor left side of the room next to fume hood D406
Doherty	Eyewash and shower	034E,034S	4th floor left side of wall from entrance door D406.1 (1)
Doherty	Eyewash and shower	035E,035S	4th floor at the end of the room left wall D406.1 (2)
Doherty	Eyewash and shower	036E,036S	4th floor next to the fume hood D408
Doherty	Eyewash and shower	037E,037S	5th floor next to fume hood D502
Doherty	Eyewash and shower	038E,038S	5th floor left side of the wall D502.1 (1)
Doherty	Eyewash and shower	039E,039S	5th floor end of the room D502.1 (2)
Doherty	Eyewash and shower	040E,040S	5th floor left side of the room D504
Doherty	Eyewash and shower	041E,041S	5th floor left side of the room next to fume hood D506
Doherty	Eyewash and shower	042E,042S	5th floor left side of the wall D506.1 (1)
Doherty	Eyewash and shower	043E,043S	5th floor at the end of the room D506.1 (2)
Doherty	Eyewash and shower	044E,044S	5th floor left side of the room next to fume hood D508

Appendix 2. ANSI / ISEA Z358.1-2014 Compliance Checklist

Key Annual Testing Requirements:

- The unit must be on the same level as the hazard and accessible within 10 seconds, with a clear path free of obstruction.
- The unit must be installed according to the manufacturer's instructions.
- Check for damage, corrosion, and leaks.
- Ensure the unit is properly identified with a sign and is in a well-lit area.
- The unit must provide a minimum of 15 minutes of flushing fluid, which must be tepid (60–100°F) for the full duration.
- For showers and eyewashes, a minimum flow rate of 20 gallons per minute (showers) and 0.4 gallons per minute (eyewashes) is required.
- The water spray from an eyewash must be capable of reaching the eyes simultaneously.
- A shower must provide a full-body drenching pattern.
- The spray pattern for an eyewash is at least 20 inches in diameter at 60 inches high and has a minimum diameter of 16 inches.
- The valve must activate in one second or less and remain open until manually closed ("hands-free").
- Eyewash covers must come off when activated.
- The inspection must be documented, including the date, initials of the inspector, and any findings or resolutions.
- Keep inspection records on file.

Pricing Page

Emergency Eyewash and Shower Annual Inspections / WPS

Bid #: CR-8754-J7

All vendors must provide pricing for the following required services. Pricing must include a report for each fixture for which deficiencies need to be addressed.

- **Award based on the aggregate total (Total Annual Cost)***

<u>Item No.</u>	<u>Material</u>	<u>QTY</u>	<u>Unit Price</u>	<u>Total Price</u>
1	Annual Emergency Eyewash & Shower Inspection (includes full report for each fixture)	152 Fixtures	\$ _____ (per fixture)	\$ _____

Total Annual Cost*	\$ _____*
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BIDDER NAME: _____

ANSI/ISEA Z358.1-2014 SAFETY EQUIPMENT CHECKLIST

WEEKLY MINIMUM PERFORMANCE REQUIREMENTS

- 1 Emergency equipment shall be activated weekly.
- 2 Activation shall ensure flow of water to the head(s) of the device.
- 3 Duration of the activation shall be sufficient to ensure all stagnant water is flushed from the unit itself and all sections of piping that do not form part of a constant circulation system. (also known as "dead leg" portions)
- 4 Self-Contained/Portable Equipment shall be visually checked to determine if flushing fluid needs to be changed.

ANNUAL MINIMUM PERFORMANCE REQUIREMENTS

- All shower units shall be inspected **annually** to assure conformance with ANSI Z358.1. Recommended Testing Flow Pressure is 30 psi (+ .5 psi – .0 psi).

LOCATION

- Safety station shall be accessible within 10 seconds of hazard, approximately 55 ft./16.8 m. (Sec. 4.5.2, 5.4.2, 6.4.2, 7.4.2)
- Safety station shall be located on the same level as the hazard and the path of travel shall be free of obstructions. (Sec. 4.5.2, 5.4.2, 6.4.2, 7.4.2)
- Emergency equipment location shall be well lit and identified with a highly visible sign. (Sec. 4.5.3, 5.4.3, 6.4.3, 7.4.3)
- All employees subject to exposure to hazardous material should be instructed in the location and proper use of emergency equipment. (Sec. 4.6.4, 5.5.4, 6.5.4, 7.5.4)
- Where the possibility of freezing conditions exists, the unit shall be protected from freezing or freeze-protected equipment shall be installed. (Sec. 4.5.5, 5.4.5, 6.4.5, 7.4.4)

COMBINATION UNIT

- Combination unit components shall be capable of operating simultaneously and shall be positioned so that components may be used simultaneously by the same user. (Sec. 7.3, 7.4.4)

DRENCH HOSE

- Drench hose must deliver a controlled flow of flushing fluid at a velocity low enough to be non-injurious. (Sec. 8.2.1)
- A drench hose can only be considered an eyewash – eye/face wash if it meets performance requirements in Sec. 5 and/or 6. (See Eyewash / Eye/Face Wash section)

TEMPERATURE

- Deliver tepid flushing fluid. Temperature range – above 60° F (16° C) and below 100° F (38° C). (Sec. 4.5.6, 5.4.6, 6.4.6, 7.4.5)

SHOWER

- Showerhead must be 82 to 96 inches (208.3 cm - 243.8 cm) above the surface floor of user. (Sec. 4.1.3, 7.1)
- Shower must deliver minimum of 20 gallons (75.7L) for 15 minutes and provide a column of water 20 inches (50.8 cm) wide at 60 inches (152.4 cm) above the surface floor of user and be 16" from any obstruction. (Sec. 4.1.2, 4.1.4, 7.1)
- Shall be designed so that the flushing flow remains on without the use of the operator's hands. The valve shall be simple to operate and go from "off" to "on" in one second or less and actuator can not be more than 69 inches (173.3 cm) from the surface floor of user. (Sec. 4.2, 7.2)

EYEWASH / EYE/FACE WASH

- Must provide a means of controlled flow to both eyes simultaneously at a velocity low enough to be non-injurious. (Sec. 5.1.1, 6.1.1, 7.1)
- Eye/face wash equipment must deliver minimum of 3 gallons (11.4 L) per minute of water for 15 minutes. (Sec. 6.1.6, 7.1) Eyewash only must deliver minimum of .4 gallon (1.5 L) per minute of water for 15 minutes. (Sec. 5.1.6, 7.1)
- Outlets shall be protected from airborne contaminants. (Sec. 5.1.3, 6.1.3, 7.1)
- The flushing fluid of an eyewash – eye/face wash shall cover the areas between the interior and exterior lines of a gauge at some point less than 8 inches (20.3 cm) above the eyewash nozzle. (Sec. 5.1.8, 6.1.8, 7.1)
- Flushing fluid flow pattern should be 33 to 53 inches (83.8 cm – 134.6 cm) from the surface floor of user and minimum of 6 inches (15.3 cm) from any obstruction. (Sec. 5.4.4, 6.4.4, 7.1)
- Shall be designed so that the flushing flow remains on without the use of the operator's hands. The valve shall be simple to operate and go from "off" to "on" in one second or less. (Sec. 5.2, 6.2, 7.2)



Model 8300-8309



Please note that Haws Corporation® manufactures and sells emergency equipment and is not licensed or accredited as a health and/or safety specialist. Accordingly, you may wish to enlist the services of an accredited expert concerning compliance to the ANSI Z358.1-2014 emergency equipment standards. Surveys conducted by a representative of the Haws Corporation are not intended as accredited safety review and are not to be relied upon for that purpose.

For a **FREE** ANSI Compliance Survey at your site,
call 888.640.4297 • www.hawsc.com/services

ANSI SITE SURVEY PROGRAM

Want to Reach ANSI Compliance? Haws ANSI Site Survey Program Can Help.

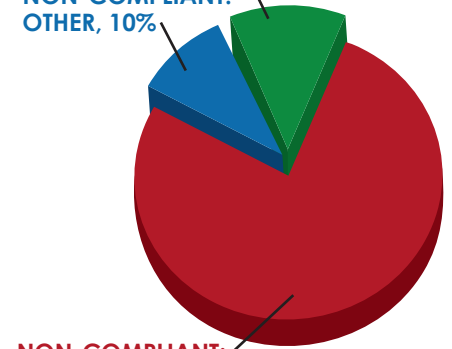
Protect your investment by taking advantage of our one-day free shower survey. Know your current state and take necessary action to ensure ANSI compliance and proper functionality in any emergency.

For more information and to schedule a site survey, visit <https://www.hawsc.com/support/survey/>
(Some Restrictions Apply)

88% of Units Are Not ANSI Z358.1 Compliant

COMPLIANT: 12%

NON-COMPLIANT: OTHER, 10%



NON-COMPLIANT: PERFORMANCE RELATED, 78%

1000+ Units Surveyed



ANSI ESEW Testing Kit model 9011

The ANSI Emergency Shower and Eyewash (ESEW) testing kit includes a 5-gallon bucket with lid and marked 2-gallon testing line, shower sock with 3-piece pole, eyewash gauge, tape measure, testing tag, thermometer, and ANSI checklist with testing instructions.

AXION Advantage® Kits

The AXION Advantage systems offer safety professionals the medically superior AXION® MSR design and technology for upgrading existing emergency equipment, providing the optimal victim comfort solution while maintaining ANSI compliance*.



model AX13

Eye/face wash upgrade system with green ABS plastic eye/face wash head



model AX13S

Eye/face wash upgrade system with stainless steel eye/face wash head



model AX14

Shower and eye/face wash upgrade system with green ABS plastic eye/face wash head and showerhead



model AX14S

Shower and eye/face wash upgrade system with stainless steel eye/face wash head and showerhead

*when installed properly

ANSI Z358.1-2014 SAFETY EQUIPMENT MINIMUM PERFORMANCE CHECKLIST



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Guardian

EMERGENCY EYEWASH & SHOWER TECHNOLOGY

**ANSI / ISEA Z358.1-2014
Compliance Checklist**



INTRODUCTION

The selection of emergency eyewash and shower equipment is often a complicated process. In addition to addressing design and engineering issues, specifiers must be aware of regulatory requirements and compliance standards. A common reference point when selecting emergency equipment is ANSI/ISEA Z358.1, "Emergency Eyewash and Shower Equipment." This standard is a widely accepted guideline for the proper selection, installation, operation and maintenance of emergency equipment.

To assist specifiers in understanding the provisions of this standard, Guardian Equipment has prepared this ANSI Compliance Checklist. In this Checklist, we have summarized and graphically presented the provisions of the standard. This Checklist can serve as a starting point for designing emergency eyewash and shower systems.

LEGAL REQUIREMENTS

The Occupational Safety and Health Act of 1970 was enacted to assure that workers are provided with "safe and healthful working conditions." Under this law, the Occupational Safety and Health Administration (OSHA) was created and authorized to adopt safety standards and regulations to fulfill the mandate of improving worker safety.

OSHA has adopted several regulations that refer to the use of emergency eyewash and shower equipment. The primary regulation is contained in 29 CFR 1910.151, which 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."

ANSI Z358.1

The OSHA regulation regarding emergency equipment is quite vague, in that it does not define what constitutes "suitable facilities" for drenching the eyes or body. In order to provide additional guidance to employers, the American National Standards Institute (ANSI) has established a standard covering emergency eyewash and shower equipment. This standard—ANSI Z358.1—is intended to serve as a guideline for the proper design, certification, performance, installation, use and maintenance of emergency equipment. As the most comprehensive guide to emergency showers and eyewashes, it has been adopted by many governmental health and safety organizations within and outside the US, as well as the Uniform Plumbing Code (UPC) and International Plumbing Code (IPC). The ANSI standard is part of the building code in locations that have adopted the International Plumbing Code. (IPC-Sec. 411)

ANSI Z358.1 was originally adopted in 1981. It was revised in 1990, 1998, 2004, 2009 and again in 2014. This Compliance Checklist summarizes and graphically presents the provisions of the 2014 version of the standard.





GENERAL CONSIDERATIONS

ANSI Z358.1- 2014 contains provisions regarding the design, certification, performance, installation, use and maintenance of various types of emergency equipment (showers, eyewashes, drench hoses, etc.). In addition to the provisions in the standard, there are additional considerations that are not part of the standard. We believe that these considerations should also be addressed when considering emergency equipment. These include the following:

1. FIRST AID DEVICES

Emergency eyewash and shower units are designed to deliver water to rinse contaminants from a user's eyes, face or body. As such, they are a form of first aid equipment to be used in the event of an accident. However, they are not a substitute for primary protective devices (including eye and face protection and protective clothing) or for safe procedures for handling hazardous materials.

2. LOCATION OF EMERGENCY EQUIPMENT

In general, the ANSI standard provides that emergency equipment be installed within 10 seconds walking time from the location of a hazard (approximately 55 feet) (Appendix B5). The equipment must be installed on the same level as the hazard (i.e. accessing the equipment should not require going up or down stairs or ramps). The path of travel from the hazard to the equipment should be free of obstructions and as straight as possible.

However, there are certain circumstances where these guidelines may not be adequate. Previous versions of the standard expressly provided that, where workers are handling particularly strong acids, caustics or other materials where the consequences of a spill would be very serious, emergency equipment should be installed immediately adjacent to the hazard. Although Appendix B5 of the 2014 standard briefly reviews the proper location of emergency equipment under such scenarios, we still believe the previous versions of the standard to be correct.

Laboratory environments may also require special consideration. It has been common in many laboratory buildings to install emergency equipment in a corridor or hallway outside of the lab room. Since a door is considered an obstruction, this violates the provisions of the standard. For laboratory environments, we recommend installing (i) recessed laboratory eyewash/shower cabinets inside the lab room and (ii) dual purpose eyewash/drench hose units at lab sinks (see page 8). The recessed cabinet units are a space saving design that satisfy the standard's requirements for both a shower and an eye/face wash, and are wheelchair accessible, while the eyewash/drench hoses provide immediate protection for the eyes, face or body when a spill involves a relatively small amount of hazardous material.

3. WATER TEMPERATURE

The 2014 version of the standard states that the water temperature delivered by emergency equipment should be 'tepid'. Tepid is defined to be between 60°F (16°C) and 100°F (38°C). However, in circumstances where a chemical reaction is accelerated by flushing fluid temperature, a facilities safety/health advisor should be consulted to determine the optimum water temperature for each application.

The delivery of tepid water to emergency equipment may raise complicated engineering issues. At a minimum, it generally involves providing both hot and cold water to the unit, and then installing a mixing valve to blend the water to the desired temperature. Guardian offers a variety of mixing valves and turnkey, recirculating tempering systems to provide tempered water. Please contact our office for further information.

4. SHUT OFF VALVES

Plumbed emergency equipment must be connected to a potable water supply line. It may be advisable to install a shut off valve on the water line, upstream of the unit, to facilitate maintenance of the equipment. If a shut off valve is installed, provision must be made to prevent unauthorized closure of the shut off valve. (Sections 4.1.2, 4.5.5, 5.1.6, 5.4.5, 6.1.6, 6.4.5, 8.2.3.3) Such provision can include removing the handle of the shut off valve or locking the valve in the open position. Only maintenance personnel should be authorized to place a handle on or unlock the valve.

5. CORROSION RESISTANCE

Once connected to a water supply line, water will enter the emergency equipment and stand in the unit up to the valve(s). When activated, water will flow through the entire unit. Therefore, the unit must be constructed of materials that will not corrode when exposed to water for extended periods of time. (Sections 4.1.6, 5.1.5, 6.1.5) In addition to this general provision, the standard specifically requires that valves be resistant to corrosion. (Sections 4.2, 5.2, 6.2, 8.2.2) Emergency equipment should therefore be constructed of materials that will resist rusting and corrosion. Materials that are considered

acceptable for this purpose include brass, galvanized steel and many types of plastics (ABS, nylon, etc.). However, these materials may not provide durable service when exposed to harsh industrial conditions, may deteriorate in direct sunlight or be subject to other limitations. Therefore, for maximum durability, the following materials should also be considered:

- Epoxy coated galvanized steel
- Epoxy coated brass
- Stainless steel
- PVC

6. FREEZING

There are many applications where emergency equipment must be installed in areas that are subject to freezing conditions. Such areas may include any type of outdoor area (bulk material handling facility, tank farm, etc.), as well as some interior areas (loading docks, low temperature facilities, etc.). In these cases, the emergency equipment must be protected against freezing (Sections 4.5.5, 5.4.5, 6.4.5, 7.4.4, 8.2.3.3). Equipment that is designed and manufactured to be freeze-resistant should be installed. There are a number of different types of freeze-resistant equipment, including:

- Units that have a temperature actuated bleed valve that permits water to flow through the unit when the temperature drops below freezing. These units are generally used only where the possibility of freezing is very infrequent.
- Units on which the valve is mounted behind a wall or buried below the frost line and is remote-activated.
- Combination units that are electrically heated (heat-traced) and insulated.
- Units that have a heated enclosure to fully contain and protect both the equipment and the user.

7. DISPOSAL OF WATER

The standard does not include any specific provisions regarding the disposal of waste water (Appendix A3). However, designers must give consideration to where waste water will go. In particular, care must be taken that waste water not create a hazard (i.e. by creating a pool in which someone might slip) or freeze.

Generally, Guardian eyewash, eye/face wash and safety station units are designed with waste connections for connection to drain piping. **WE RECOMMEND THAT EMERGENCY EYEWASH AND SHOWER UNITS BE CONNECTED TO DRAIN PIPING. FOR EMERGENCY SHOWERS AND FOR OTHER UNITS WITHOUT WASTE CONNECTIONS, FLOOR DRAINS SHOULD BE PROVIDED.**

After an emergency eyewash or shower unit has been used, the waste water may contain hazardous materials that cannot or should not be introduced into a sanitary sewer. It may be necessary to connect the drain piping from the emergency equipment or floor drain to the building's acid waste disposal system or to a neutralizing tank.

8. EMERGENCY RESPONSE

Simply installing emergency equipment is not sufficient to assure worker safety. Employees must be trained in the location of emergency equipment and in its proper use. Emergency equipment must be regularly maintained (including weekly activation of the equipment) to assure that it is in working order and inspected at least annually for compliance with the standard. Most importantly, employers should develop a response plan to be used in the event that an accident does occur. The focus of the response plan should be to provide assistance to the injured worker as quickly as possible.

Guardian offers a variety of alarm systems that may be installed in conjunction with our emergency equipment. They serve to alert personnel and summon assistance if an eyewash or shower is activated. **WE RECOMMEND INSTALLING AN ALARM UNIT WITH ANY EMERGENCY EYEWASH OR SHOWER UNIT.**

9. O&M INFORMATION

Under the standard, the manufacturer of the emergency equipment must provide detailed instructions on the proper operation, inspection and maintenance of the emergency equipment. (Sections 4.6.1, 5.5.1, 6.5.1, 7.5.1, 8.2.4.1) This information should be accessible to maintenance personnel. Guardian offers detailed installation, operation and maintenance guides for its equipment. These guides are available on the Guardian website (gesafety.com) and from our sales representatives.

Note: This ANSI Compliance Checklist is intended to assist design personnel, facility owners and others in selecting, specifying, installing and maintaining emergency equipment. We have tried to assure that it is comprehensive and accurate. However, please refer to the complete ANSI/ISEA Z358.1-2014 standard before purchasing or installing emergency equipment. Guardian Equipment cannot be responsible for any errors or omissions from this Checklist, and cannot assure that any particular product will perform satisfactorily in any particular application.

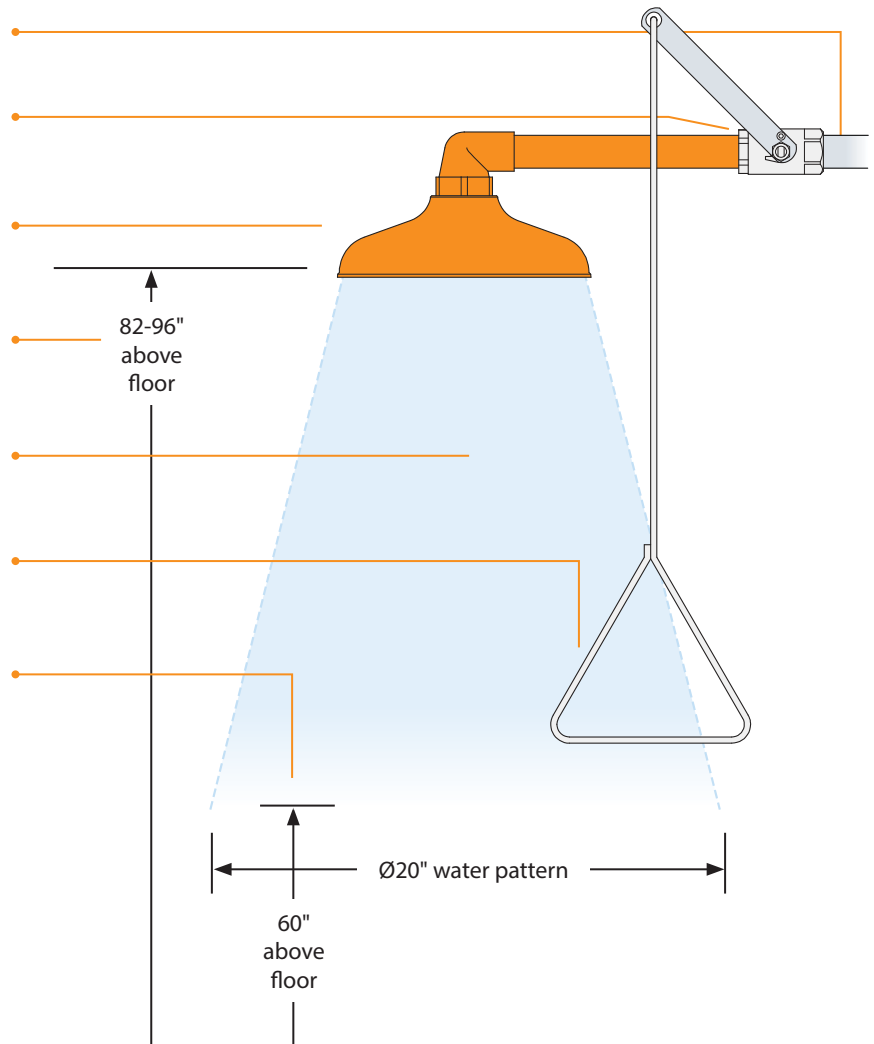


Emergency Showers

This checklist is a summary of the provisions of ANSI Z358.1-2014 relating to emergency showers. Please refer to the standard for a complete listing of these provisions.

All Guardian emergency showers are third-party certified to meet or exceed the provisions of ANSI Z358.1-2014.

- Water supply is sufficient to provide at least 20 GPM for 15 minutes. (Section 4.1.2, 4.5.5)
- Hands-free valve activates in one second or less and remains open until manually closed. (Section 4.2, 4.1.5)
- Shower delivers 20 gallons (75.7 liters) of water per minute for 15 minutes in the required pattern. (Section 4.1.2, 4.5.5)
- Height of water column is between 82" (208.3 cm) and 96" (243.8 cm) above the floor. (Section 4.1.3, 4.5.4)
- Center of the water pattern is at least 16" (40.6 cm) from any obstruction. (Section 4.1.4, 4.5.4)
- Easily located, accessible actuator is no more than 69" (173.3 cm) above floor. (Section 4.2)
- At 60" (152.4 cm) above the floor, the water pattern is at least 20" (50.8 cm) in diameter. (Section 4.1.4)
- If provided, shower enclosure has a minimum diameter of 34" (86.4 cm). (Section 4.3)



- Location:** Install shower within 10 seconds (approximately 55 feet) of hazard, on the same level as hazard and with unobstructed travel path. Where strong acids or caustics are being handled, emergency showers should be located adjacent to the hazard, and an appropriate professional should be consulted for advice on the proper distance. (Section 4.5.2; B5)
- Identification:** Identify shower location with highly visible sign. Area around shower shall be well-lit. (Section 4.5.3)
- Water Temperature:** Water delivered by shower shall be tepid (60-100°F). (Section 4.5.6; B6)
- Training:** Instruct all employees in the location and proper use of emergency showers. (Section 4.6.4)
- Maintenance/Inspection:** Activate plumbed shower at least weekly. (Section 4.6.2) Inspect all emergency showers annually for compliance with standard. (Section 4.6.5)



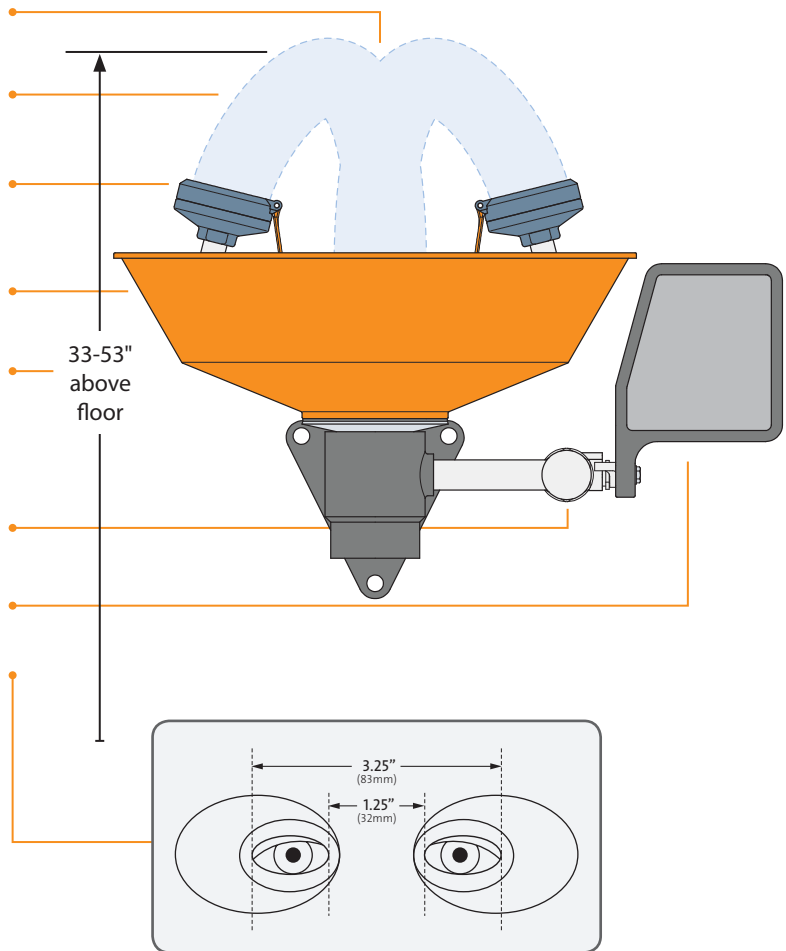


Eye/Face Washes

This checklist is a summary of the provisions of ANSI Z358.1-2014 relating to emergency eye/face washes. Please refer to the standard for a complete listing of these provisions.

All Guardian eye/face wash units are third-party certified to meet or exceed the provisions of ANSI Z358.1-2014.

- Controlled, low velocity flow completely rinses eyes and face and is not injurious to user. (Section 6.1.1)
- Water flow is sufficiently high to allow user to hold eyes open while rinsing. (Section 6.1.7)
- Spray heads are protected from airborne contaminants. Covers are removed by water flow. (Section 6.1.3)
- Unit delivers at least 3.0 gallons (11.4 liters) of water per minute for 15 minutes. (Section 6.1.6, 6.4.5)
- Water flow pattern is positioned between 33" (83.8 cm) and 53" (134.6 cm) from the floor and at least 6" (15.3 cm) from the wall or nearest obstruction. (Section 6.4.4)
- Hands-free stay-open valve activates in one second or less. (Section 6.1.4, 6.2)
- Valve actuator is easy to locate and readily accessible to user. (Section 6.2)
- Unit washes both eyes simultaneously. Water flow covers area indicated on Guardian test gauge at no more than 8" above spray heads. (Section 6.1.8)



- Location:** Install eye/face wash unit within 10 seconds (approximately 55 feet) of hazard, on the same level as hazard and with unobstructed travel path. Where strong acids or caustics are being handled, emergency eye/face wash units should be located adjacent to the hazard, and an appropriate professional should be consulted for advice on the proper distance. (Section 6.4.2; B5)
- Identification:** Identify eye/face wash location with highly visible sign. Area around eye/face wash unit shall be well-lit. (Section 6.4.3)
- Water Temperature:** Water delivered by eye/face wash shall be tepid (60-100°F). (Section 6.4.6; B6)
- Training:** Instruct all employees in the location and proper use of eye/face wash units. (Section 6.5.4)
- Maintenance/Inspection:** Activate plumbed eye/face wash units at least weekly. (Section 6.5.2) Inspect all eye/face wash units annually for compliance with standard. (Section 6.5.5)



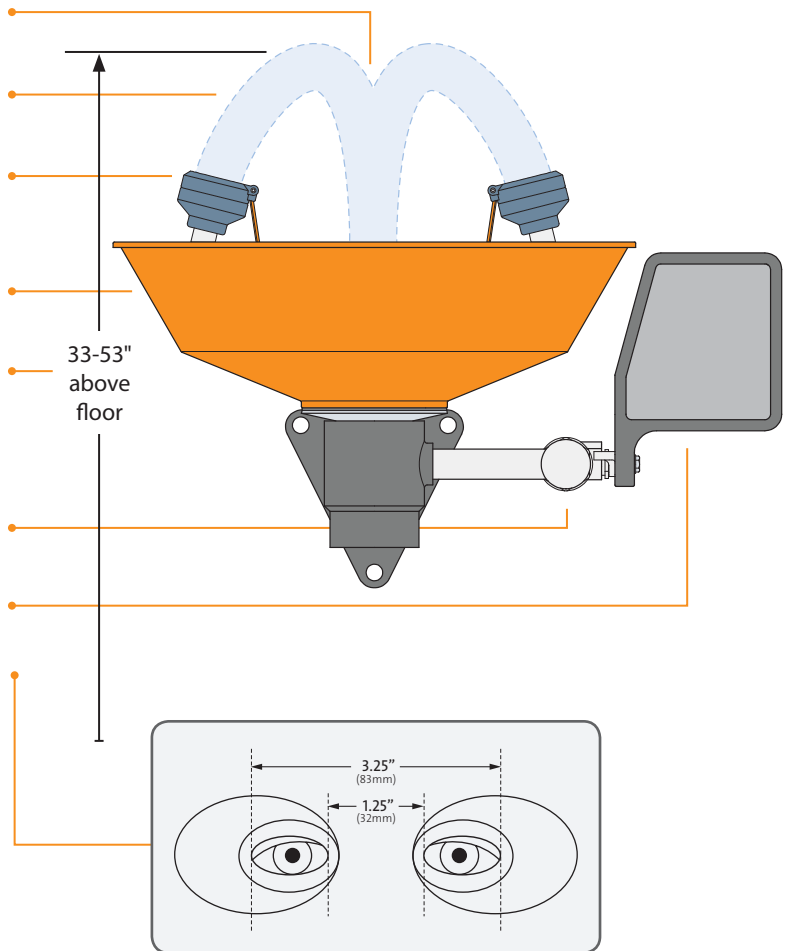


Eyewashes

This checklist is a summary of the provisions of ANSI Z358.1-2014 relating to emergency eyewashes. Please refer to the standard for a complete listing of these provisions.

All Guardian eyewash units are third-party certified to meet or exceed the provisions of ANSI Z358.1-2014.

- Controlled, low velocity flow rinses both eyes and is not injurious to user.** (Section 5.1.1)
- Water flow is sufficiently high to allow user to hold eyes open while rinsing.** (Section 5.1.7)
- Spray heads are protected from airborne contaminants. Covers are removed by water flow.** (Section 5.1.3)
- Unit delivers at least 0.4 gallons (1.5 liters) of water per minute for 15 minutes.** (Section 5.1.6, 5.4.5)
- Water flow pattern is positioned between 33" (83.8 cm) and 53" (134.6 cm) from the floor and at least 6" (15.3 cm) from the wall or nearest obstruction.** (Section 5.4.4)
- Hands-free stay-open valve activates in one second or less.** (Section 5.1.4, 5.2)
- Valve actuator is easy to locate and readily accessible to user.** (Section 5.2)
- Unit washes both eyes simultaneously. Water flow covers area indicated on Guardian test gauge at no more than 8" above spray heads.** (Section 5.1.8)



- Location:** Install eyewash unit within 10 seconds (approximately 55 feet) of hazard, on the same level as hazard and with unobstructed travel path. Where strong acids or caustics are being handled, emergency eyewash unit should be located adjacent to the hazard, and an appropriate professional should be consulted for advice on the proper distance. (Section 5.4.2; B5)
- Identification:** Identify eyewash location with highly visible sign. Area around eyewash unit shall be well-lit. (Section 5.4.3)
- Water Temperature:** Water delivered by eyewash shall be tepid (60-100°F). (Section 5.4.6; B6)
- Training:** Instruct all employees in the location and proper use of eyewash units. (Section 5.5.4)
- Maintenance/Inspection:** Activate plumbed eyewash units at least weekly. (Section 5.5.2) Inspect all eyewash units annually for compliance with standard. (Section 5.5.5)



Eyewash/Drench Hose Units

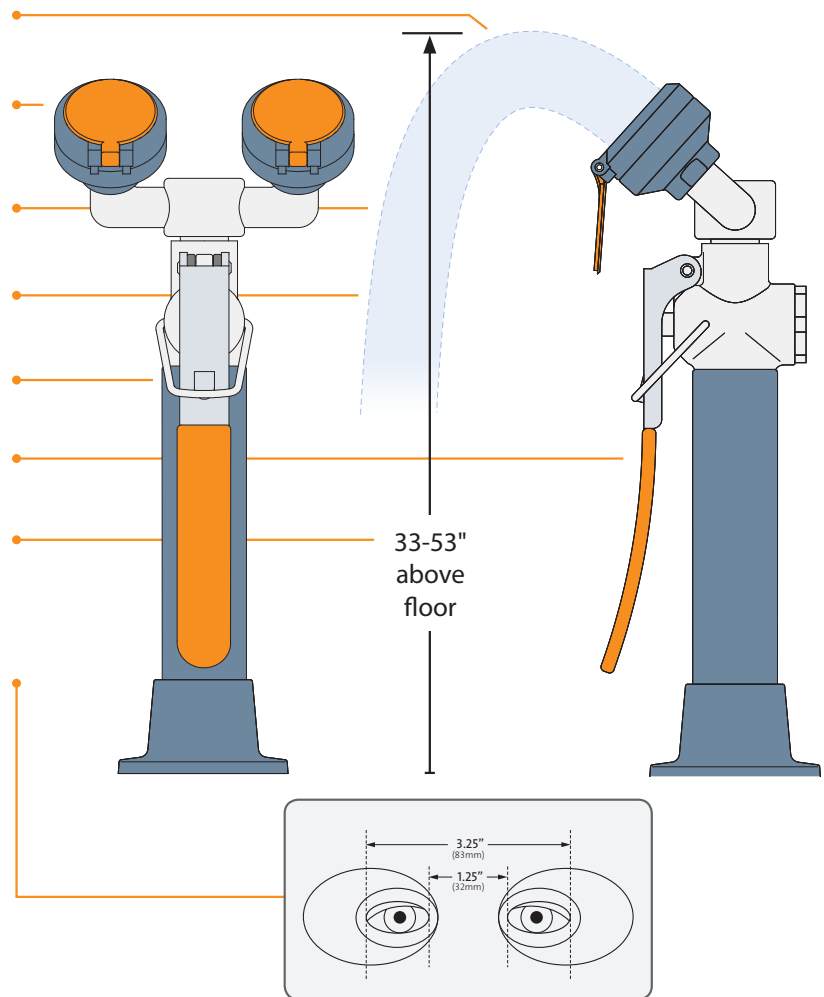
ANSI Standard Z358.1-2014 states that drench hose units may supplement, but may not be used in place of dedicated eyewash units. Guardian offers a series of units that meet the provisions of the ANSI standard as both an eyewash and a drench hose.

These dual purpose units can be used to combine an eyewash and a drench hose into a single versatile, economic unit.

This checklist summarizes the provisions of ANSI Z358.1-2014 for both eyewashes and drench hoses. Please refer to the standard for a complete listing of these provisions.

All Guardian eyewash/drench hose units are third-party certified to meet or exceed the provisions of ANSI Z358.1-2014.

- Water flow is sufficiently high to allow user to hold eyes open while rinsing. (Section 5.1.7)
- Spray heads are protected from airborne contaminants. Covers are removed by water flow. (Section 5.1.3)
- Controlled, low velocity flow rinses both eyes and is not injurious to user. (Section 5.1.1, 8.2.1)
- Unit delivers at least 0.4 gallons (1.5 liters) of water per minute for 15 minutes. (Section 5.1.6)
- Hands-free stay-open valve activates in one second or less. (Section 5.2, 8.2.2)
- Valve actuator is easy to locate and readily accessible to user. (Section 5.2, 8.2.2)
- Water flow pattern is positioned between 33" (83.8 cm) and 53" (134.6 cm) from the floor and at least 6" (15.3 cm) from the wall or nearest obstruction. (Section 5.4.4)
- Unit washes both eyes simultaneously. Water flow covers area indicated on Guardian test gauge at no more than 8" above spray heads. (Section 5.1.8)



- Location:** Install eyewash/drench hose unit within 10 seconds (approximately 55 feet) of hazard, on the same level as hazard and with unobstructed travel path. Where strong acids or caustics are being handled, emergency eyewash/drench hose unit should be located adjacent to the hazard, and an appropriate professional should be consulted for advice on the proper distance. (Section 5.4.2; B5)
- Identification:** Identify eyewash/drench hose location with highly visible sign. Area around eyewash/drench hose unit shall be well-lit. (Section 5.4.3, 8.2.3.2)
- Water Temperature:** Water delivered by eyewash/drench hose unit shall be tepid (60-100°F). (Section 5.4.6, 8.2.3.4; B6)
- Training:** Instruct all employees in the location and proper use of eyewash/drench hose units. (Section 5.5.4, 8.2.4.4)
- Maintenance/Inspection:** Activate eyewash/drench hose units at least weekly. (Section 5.5.2, 8.2.4.2) Inspect all eyewash/drench hose units annually for compliance with standard. (Section 5.5.5, 8.2.4.5)



Drench Hose Units

Under ANSI Z358.1-2014, drench hose units support plumbed and self-contained emergency eyewash and shower units, but cannot replace them. In other words, drench hoses are intended solely as supplemental equipment providing additional protection to personnel.

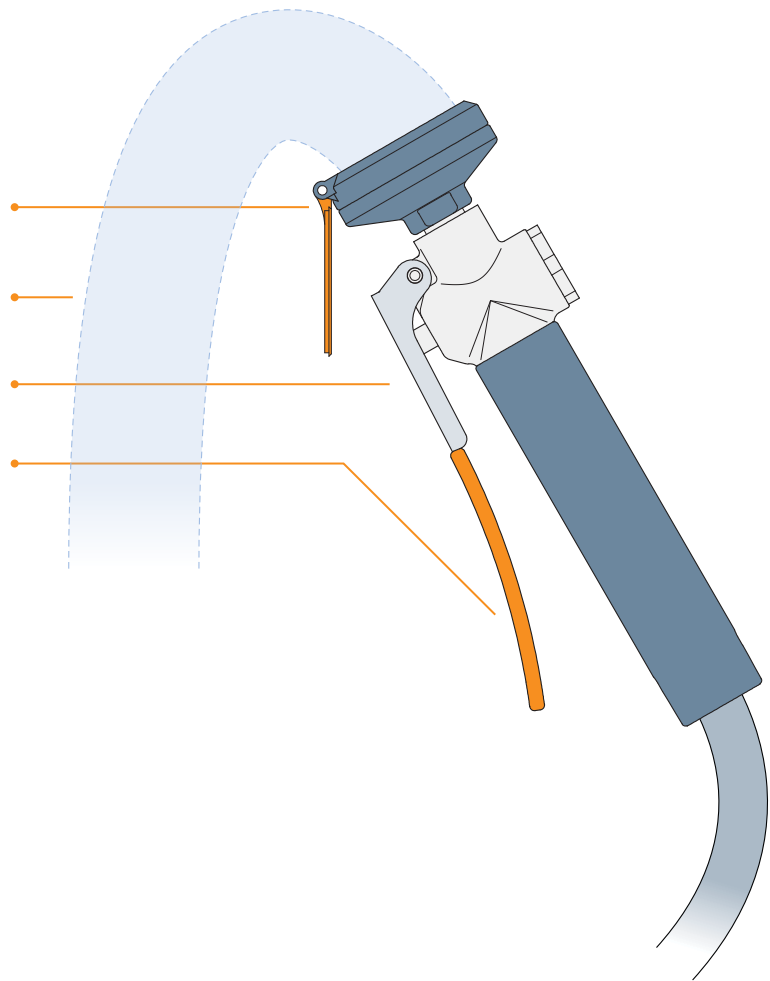
Drench hoses are useful in cases where the user is in a prone position or where it is necessary to reach areas of the face and body inaccessible to the fixed stream of a shower or eyewash unit. They

are also advantageous in areas (such as laboratories) where they can be installed close to where accidents might occur.

This checklist summarizes the provisions of ANSI Z358.1-2014 relating to drench hoses. Please refer to the standard for a complete listing of these provisions.

All Guardian drench hose units are third-party certified to meet or exceed the provisions of ANSI Z358.1-2014.

- Drench hose unit supplements shower and eyewash units installed in vicinity. (Section 8)
- Controlled, low velocity flow is not injurious to user. (Section 8.2.1)
- Valve goes from 'off' to 'on' in one second or less. (Section 8.2.2)
- Valve actuator is easy to locate and readily accessible to the user. (Section 8.2.2)



- Location:** Install drench hose unit in area free of debris or obstructions. (Section 8.2.3.2)
- Identification:** Identify drench hose unit with highly visible sign. Area around drench hose unit shall be well-lit. (Section 8.2.3.2)
- Water Temperature:** Water delivered by drench hose unit shall be tepid (60-100°F). (Section 8.2.3.4)
- Training:** Instruct all employees in the location and proper use of drench hose units. (Section 8.2.4.4)
- Maintenance/Inspection:** Activate drench hose units at least weekly. (Section 8.2.4.2) Inspect all drench hose units annually for compliance with standard. (Section 8.2.4.5)

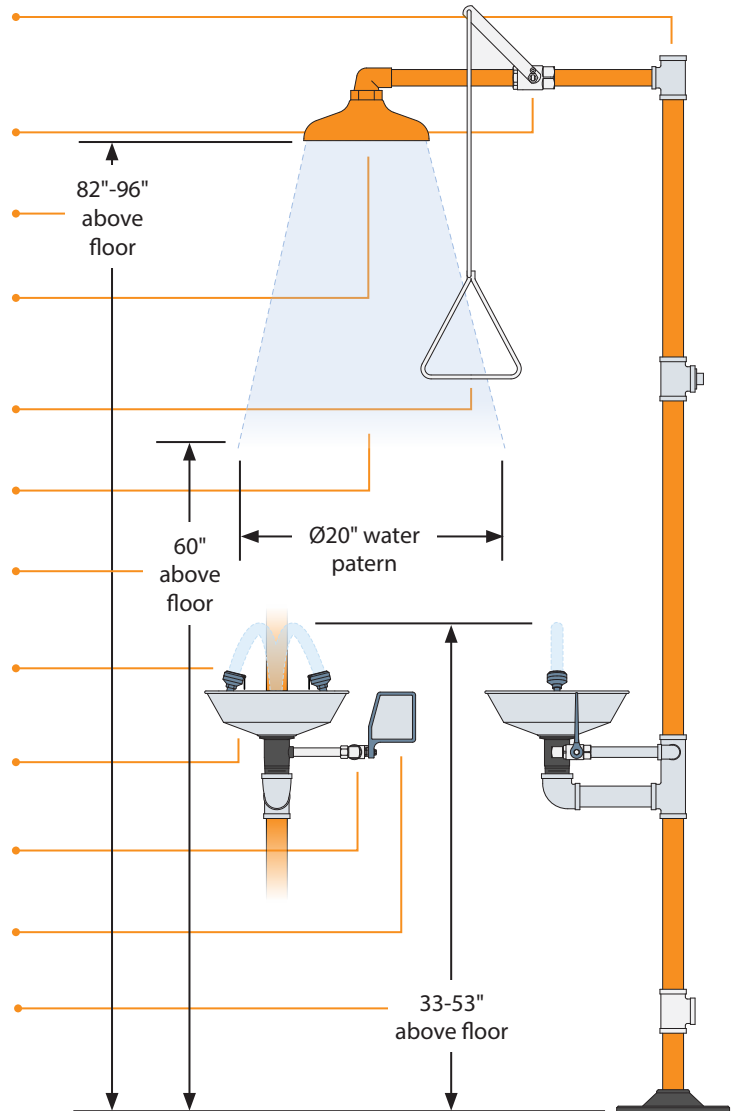


Safety Stations

This checklist is a summary of the provisions of ANSI Z358.1-2014 relating to eye or eye/face wash and shower combination stations. Please refer to the standard for a complete listing of these provisions.

All Guardian safety stations are third-party certified to meet or exceed the provisions of ANSI Z358.1-2014.

- Water supply delivers required flow when shower and eye or eye/face wash are operated simultaneously. (Section 4.5.5, 7.4.4)
- Hands-free stay-open valve activates in one second or less. (Section 4.2)
- Height of water column is between 82" (208.3 cm) and 96" (243.8 cm) above the floor. (Section 4.1.3, 4.5.4)
- Shower delivers 20 gallons (75.7 liters) of water per minute for 15 minutes in the required pattern. (Section 4.1.2, 4.5.5)
- Easily located, accessible actuator is no more than 69" (173.3 cm) above floor. (Section 4.2)
- Center of the water pattern is at least 16" (40.6 cm) from any obstruction. (Section 4.1.4, 4.5.4)
- At 60" (152.4 cm) above the floor, the water pattern is at least 20" (50.8 cm) in diameter. (Section 4.1.4)
- Spray heads are protected from airborne contaminants. Covers are removed by water flow. (Section 5.1.3, 6.1.3)
- Unit delivers at least 3.0 GPM (11.4 liters) (for eye/face wash) or 0.4 GPM (1.5 liters) (for eyewash) for 15 minutes. (Section 5.1.6, 6.1.6, 6.4.5)
- Hands-free stay-open valve activates in one second or less. (Section 5.2, 6.1.4, 6.2)
- Valve actuator is easy to locate and readily accessible to user. (Section 5.2, 6.2)
- Water flow pattern is positioned between 33" (83.8 cm) and 53" (134.6 cm) from the floor and at least 6" (15.3 cm) from the wall or nearest obstruction. (Section 5.4.4, 6.4.4)



- Location:** Install safety station within 10 seconds (approximately 55 feet) of hazard, on the same level as hazard and with unobstructed travel path. Where strong acids or caustics are being handled, safety station should be located adjacent to the hazard, and an appropriate professional should be consulted for advice on the proper distance. (Section 7.4.2; B5)
- Identification:** Identify safety station location with highly visible sign. Area around safety station shall be well-lit. (Section 7.4.3)
- Water Temperature:** Water delivered by safety station shall be tepid (60-100°F). (Section 7.4.5; B6)
- Training:** Instruct all employees in the location and proper use of safety station. (Section 7.5.4)
- Maintenance/Inspection:** Activate safety station at least weekly. (Section 7.5.2) Inspect all safety stations annually for compliance with standard. (Section 7.5.5)



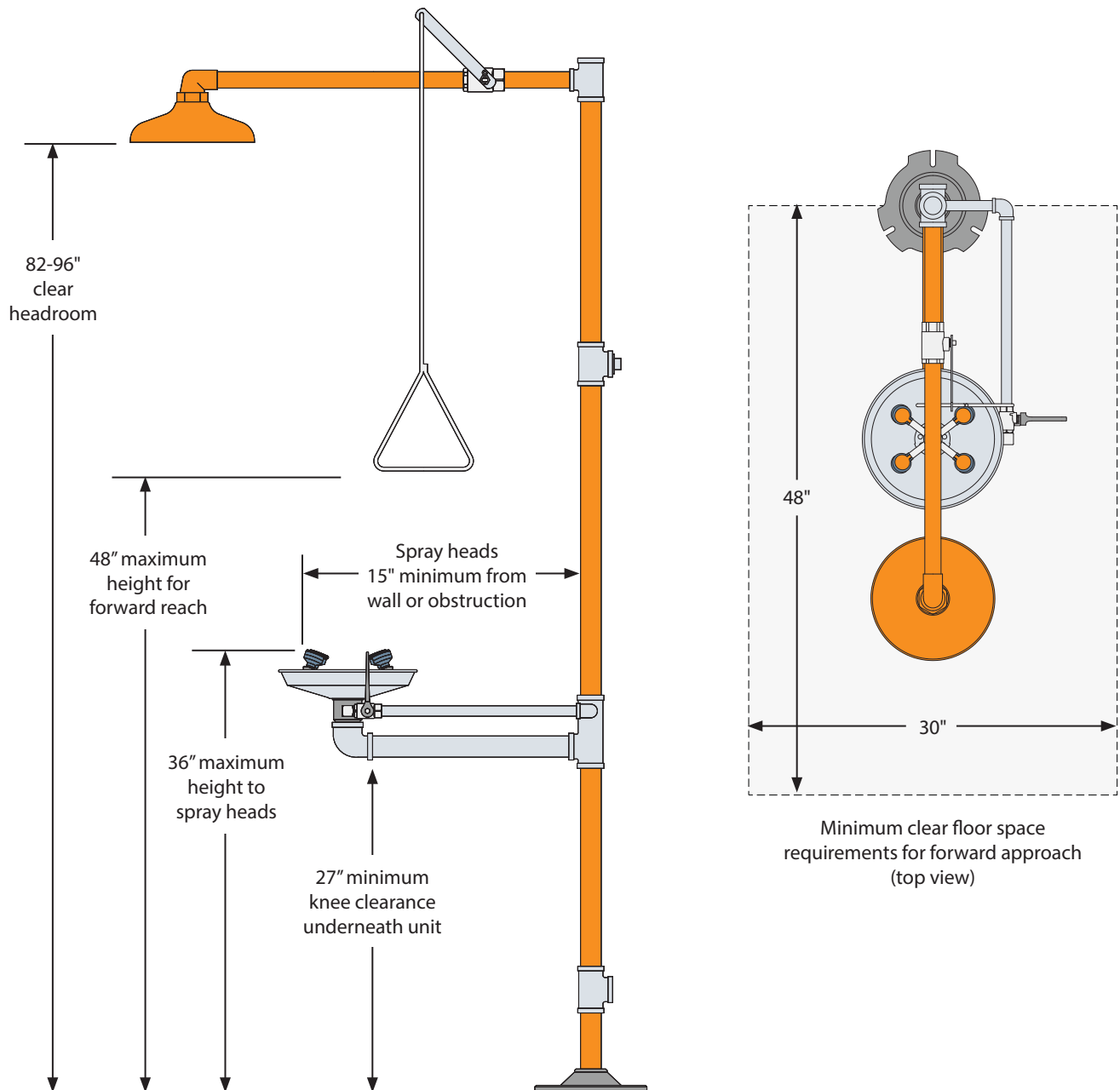


Barrier-Free Equipment

The Americans with Disabilities Act (ADA) requires that employers provide accessible workplaces for all employees. These workplaces may therefore require emergency eyewash and shower equipment that is specially constructed for wheelchair accessibility.

Barrier-free emergency equipment must comply with the provisions of ANSI A117.1-2009 ("Accessible and Usable Buildings and Facilities"). These provisions include dimensions for minimum knee clearance, maximum height and reach, and minimum distance from obstructions.

Guardian offers an array of eyewash and shower units designed for barrier-free applications. These units meet the provisions of ANSI Z358.1-2014 for emergency equipment and the accessibility provisions of ANSI A117.1-2009. The provisions of ANSI Z358.1-2014 are summarized on pages 2-10. The additional accessibility provisions of ANSI A117.1-2009 are shown here. Please refer to the standards for a complete description of these provisions.



Guardian Emergency Eyewash and Shower Technology: Engineered for today's industrial environments.

Safe workplaces demand advanced emergency eyewash and shower equipment. Guardian is proud to offer the most complete selection of emergency equipment designed for today's industrial applications.

Characterized by enhanced performance and superior durability, all Guardian products feature the latest innovations in spray head technology. The unique GS-Plus™ and FS-Plus™ spray heads deliver water in a soft, wide spray rather than a solid, narrow stream. The user receives more water over a wider area than with any other type of outlet head. In an emergency, contaminants are flushed away quickly, gently, and completely.

These heads incorporate a variety of unique and important features:

CONSISTENT, BALANCED FLOW

An engineered flow control located inside each spray head is calibrated to deliver 1.8 (GS-Plus™) or 3.2 (FS-Plus™) gallons per minute, at pressures from 20 to 100 PSI. The flow is consistent, and evenly balanced between the spray heads regardless of line pressure.

"FLIP TOP" DUST COVER

Each spray head is protected against dust and dirt by a "flip top" cover which nests into the top of the outlet head when equipment is not in use. Upon unit activation, water flow swings the cover off the head. The cover is permanently attached to the spray head by a stainless steel pin to prevent removal or loss. Optional stainless steel covers are also available.

FILTERED WATER

Each spray head contains an internal filter to remove particles and debris from the water flow. During flushing, the user's eyes and face are protected against any potential foreign matter which may exist in the water or plumbing lines.

DURABILITY

The spray head bodies are molded from tough, impact-resistant and corrosion-resistant polypropylene, while the "flip top" dust covers are molded nylon. Both the GS-Plus™ and FS-Plus™ spray heads stand up to the harshest laboratory environments.

EASY MAINTENANCE

Water often contains dissolved minerals and foreign matter which, over time can build up and clog any spray head. The GS-Plus™ and FS-Plus™ spray heads are designed such that all working components are contained within the head itself, making cleaning and maintenance easy. Guardian's emergency equipment should never need disassembly in the event of a clogged spray head.

