pH7™
NEUTRALISING HAZARDS

HAZCHEM RESPONSE

EMERGENCY SHOWERS & EYEWASHES

NEW ZEALAND'S LEADER IN HAZCHEM SAFETY SOLUTIONS

SHOWERS AND EYEWASHES

This catalogue is a guide to assist you and your clients in deciding on the type of Emergency Shower and Eye/Face Wash systems to use.

HOW WE SUPPORT YOU AND OUR PRODUCTS

- Technical support, advice and stock on hand in East Tamaki.
- We do not sell directly to end-users.
- Through joint calls/visits on your behalf to undertake site assessments, we can advise your clients on appropriate solutions/improvements where practical. We have found that one of the most effective ways to secure new/additional business with re-seller clients, is to undertake site assessments. Safety Showers fall within the scope of these assessments and have often resulted in new installations as well as replacement of existing installations to render workplaces compliant.
- Training available and quick overview video at - https://youtu.be/CN4TWOMnG1g
- We maintain a market presence through brochures and active internet marketing on Linked In and Facebook.

OTHER HELPFUL INFORMATION

- We offer standard eye/face wash option on all plumbed Safety Stations and Eye/Face wash units as experience has shown that offering multiple eye/face wash options, tends to complicate end user decision making. This system is a more sensible option, cost effective and reduces inventory requirements.
- A wider range of products (on indent) is accessible from Guardian and we are happy to look at different options to support your clients – please refer to http://www.gesafety.com/products/products_home.shtml for more information.
- The standard range offered in NZ has a duplex coating system, i.e. galvanised steel with powder coating in addition to plastic sleeves on the tubing – a corrosion resistance chart is attached.
- We also offer complete PVC systems.
- Each system comes complete with product appropriate signage.
- Packaging ensures that our products arrive safe and undamaged:

Quick Guide - Product Cross Reference

NZSB Code	DIL Code	Description	Catalogue Page	Availability	PBA Nearest Equivalent	NZSB PBA Part Number/s
423530	G1562	Portable Eyewash/Drench Hose Unit, 57L	36	Stock / Indent	SE-590A	N/A
423531	G1562DLY	Portable Eyewash/Drench Hose Unit Dolly	36	Stock / Indent	N/A	N/A
423532	G1750P	Eye/Face Wash, Wall Mounted, Plastic Bowl	24	Stock	SE-400/SE-582/PEM-490/SE-505	827004/820289/827008/827012
423533	GC1760P	Eye/Face Wash, Pedestal Mounted, Plastic Bowl	26	Stock	SE-480/SE-546	827007/820288
423534	G1771	Eye/Face Wash, Wall Mounted, No Bowl	22	Stock	SE-475/SE-575	827006/827010
	G1849	DeckMounted Autoflow Eyewash 90° Swing-down	28	Indent	SE-572	820512
423535	G5022	Eyewash/Drench Hose Unit, Bench Mounted	32	Stock / Indent	SE-927	827024
	G5026	Eyewash/Drench Hose Unit, Wall Mounted	32	Indent	SE-927	827024
423519	GC1643	Shower, Wall Mounted, P/Coat	10	Stock	SE-227	827000
423520	GC1931	Shower with Eye/Face Wash, no Bowl, P/Coat	12	Stock	SE-685/SE-675	827016/802507
423521	GC1950P	Shower & Eye/Face Wash,Plastic Bowl,HO,P/Coat	14	Stock	SE-603/SE-616	827014/827020
423522	GC1950PHFC	Shower & Eye/Face Wash, Plastic Bowl, HFC, P/Coat	16	Stock/Indent	SE-607/PEM-607	860647/420353
	G5011	Drench Hose Unit for Safety Shower - Retrofit	30	Indent		
423523	G1996	Shower & Eye/Face wash, Bowl, S/Steel	18	Stock/Indent	N/A	N/A
423524	G1993	Safety Station with Eye/Face Wash – PVC	20	Stock/Indent	N/A	N/A
	SETESTKIT	Shower & Eye Wash Test Kit	38	Stock	SESHW120	419878
423526	SE950	Test Sock For Showers With Bucket		Stock	SE 950	419879

Reference:

G	Guardian
C	Galvanised & Powder Coated
P	Plastic Bowl
HFC	Hand Foot Control
Stock/Indent	Minimal stock holding
Stock	Generally available ex DIL, Wiri subject to prior sale

FIRST AID DEVICES

Emergency eyewash and shower units are designed to deliver water to rinse contaminants from the 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.

LOCATION OF EMERGENCY EQUIPMENT

The ANSI standard states that emergency equipment be installed within 10 seconds walking time from the location of a hazard. The equipment must be installed on the same level as the hazard (i.e. no going up or down stairs or ramps). The path of travel should be free of obstructions and as straight as possible. 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.

WATER TEMPERATURE

The standard states that the water temperature delivered by emergency equipment should be 'tepid.' Tepid is defined to be between 16°C and 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.

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. 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.

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. In addition to this general provision, the standard specifically requires that valves be resistant to corrosion. 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

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. 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.

DISPOSAL OF WATER

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

Generally, our eyewash, eye/face wash and safety station units are designed with waste connections for connection to drain piping.

WE RECOMMEND THAT THE EMERGENCY EYEWASH 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.

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.

CORROSIVE RESISTANCE

Standard emergency eye wash and shower equipment is constructed from a variety of materials, including stainless steel (shower pull rods and actuating arms), chrome plated brass (valves and eye wash components) and galvanized steel (pipe and fittings). In addition, standard units may include plastic components (shower heads, eye wash bowls, spray heads, etc.) that are molded from ABS, polypropylene and/or nylon.

When installed in industrial environments, emergency eye wash and shower equipment is exposed to all of the conditions present in the environment, including temperature, humidity, sunlight and chemicals that may be present. In particular, the equipment can be exposed to acids, caustics and other chemicals that will cause the materials in the equipment to corrode. Such corrosion is a serious matter, since it can cause the equipment to deteriorate to the point of becoming nonfunctional. In an emergency, the equipment may not be available to an injured person. While Guardian carefully selects the materials used in its products, the possibility of corrosion cannot be eliminated.

GUARDIAN OFFERS SEVERAL ALTERNATIVES FOR IMPROVING THE CORROSION RESISTANCE OF EMERGENCY EQUIPMENT:

- Powder Coated Finish. All of our units can be furnished with a powder coated finish applied over the galvanized steel and brass components. The surfaces to be coated are cleaned and etched with phosphoric acid solution. Epoxy/polyester hybrid powder is electrostatically applied to the metal surfaces and then baked to cure. The result is a smooth, hard surface that provides excellent resistance to corrosion. Guardian powder coating is available in a variety of colours, including high visibility orange, green, yellow and red. These colours provide the equipment with increased visibility in the industrial environment.

- Polyvinyl Chloride (PVC) Construction. Guardian offers a wide array of units that are constructed of PVC and PVC-coated materials. All pipe and fittings are PVC. Valves, actuators and other components are brass with a PVC coating. These units can provide better durability than standard emergency equipment in certain environments.

- Stainless Steel. Guardian also offers a wide selection of units that are constructed entirely of stainless steel. These units are highly resistant to corrosion, and are ideal for use in areas such as laboratories and clean rooms.

In order to assist in selecting the equipment that is best suited for a particular application, Guardian has compiled a “Corrosion Resistance Guide”. This corrosion information is offered as a guideline only, to assist in selecting the equipment that will be best suited for the user’s application. Due to the infinite number of combinations of chemicals found in any environment, as well as the effects of chemical concentration, temperature, humidity, etc., Guardian cannot predict and cannot be held responsible for the effects of any particular environment on any specific installation of emergency eye wash and shower equipment.

A Good
B Fair
C Poor
D Not Recommended

CHEMICAL	CONCENTRATION	TEMPERATURE (F)	GALVANIZED STEEL	BRASS	EPOXY/POLYESTER POWDER COATED (SEE NOTE 2)	STAINLESS STEEL (TYPE 304)	POLYVINYL CHLORIDE (PVC)
Acetic Acid	85%	70		D	A	A	A
Acetic Acid, Glacial	99.50%			D	A	A	B
Acetone		70	A	A	A	A	D
Ammonium Hydroxide	10%	70	A	D	A	A	A
Amyl Acetate	Conc	70	A	B	A	A	D
Amyl Alcohol				A	A		C
Benzene		70	A	A	A	A	D
Butyl Alcohol			A		A	A	A
Calcium Hypochlorite	30%	70	A	D	A	A	A
Carbon Disulfide		70		B	A	A	D
Carbon Tetrachloride	CP (Dry)	70	A	A	A	A	D
Chloroform	Dry	70	A	A	A	A	D
Chromic Acid	50%			D	A		D
Cresol	90%				A		D
Crude Oil		70		D	A	A	A
Dioxane				A	A		D
Distilled Water		70	C	D	A	A	A
Ether		70			A	A	D
Ethyl Acetate					A		D
Ethyl Alcohol	10-100%	70	A		A	A	A
Ethyl Ether					A		D
Formaldehyde	37%	70	A		A	A	A
Formic Acid	90%	70			A	A	A
Gasoline		70		A	A	A	B
Glycerine		70		A	A	A	A
Hydrochloric Acid	38%	70	D	D	A	C	B
Hydrofluoric Acid	48%	70		D	A	D	B
Hydrogen Peroxide	90%	70		D	A	A	A
Isopropyl Alcohol				A	A	A	A
Kerosene		70		A	A	A	A
Lactic Acid	25%	70		D		A	B
Methanol		70		A	A	A	A
Methyl Ethyl Ketone				A	A	A	D
Methylene Chloride				B	A	A	D

Continued on next page.

A Good
B Fair
C Poor
D Not Recommended

CHEMICAL	CONCENTRATION	TEMPERATURE (F)	GALVANIZED STEEL	BRASS	EPOXY/POLYESTER POWDER COATED (SEE NOTE 2)	STAINLESS STEEL (TYPE 304)	POLYVINYL CHLORIDE (PVC)
Mineral Oil				A	A	A	B
Monochlorobenzene					A	B	B
Naphthalene					A	A	D
Nitric Acid	70%	70		D	A	A	B
Perchloric Acid	70%				A		C
Phenol	CP	70	A		A	A	D
Phosphoric Acid	75%	70		D	A	A	B
Sea Water		70	D	D	A	A	B
Silver Nitrate				D	A	B	A
Sodium Carbonate				B	A	A	A
Sodium Chloride	20%	70	D	B	A	A	A
Sodium Hydroxide	50%			D	A	A	A
Sodium Hypochlorite		70		D	A	A	B
Sodium Sulfide				D	A	A	A
Sulfuric Acid	87%	70		D	A	D	A
Toluene				A	A	A	D
Trichlorethylene		70		A	A	A	D
Turpentine		70		A	A	A	A
Urea (Saturated)					A		D
Xylene				A	A	A	D
Zinc Chloride	70%	70			A	B	B

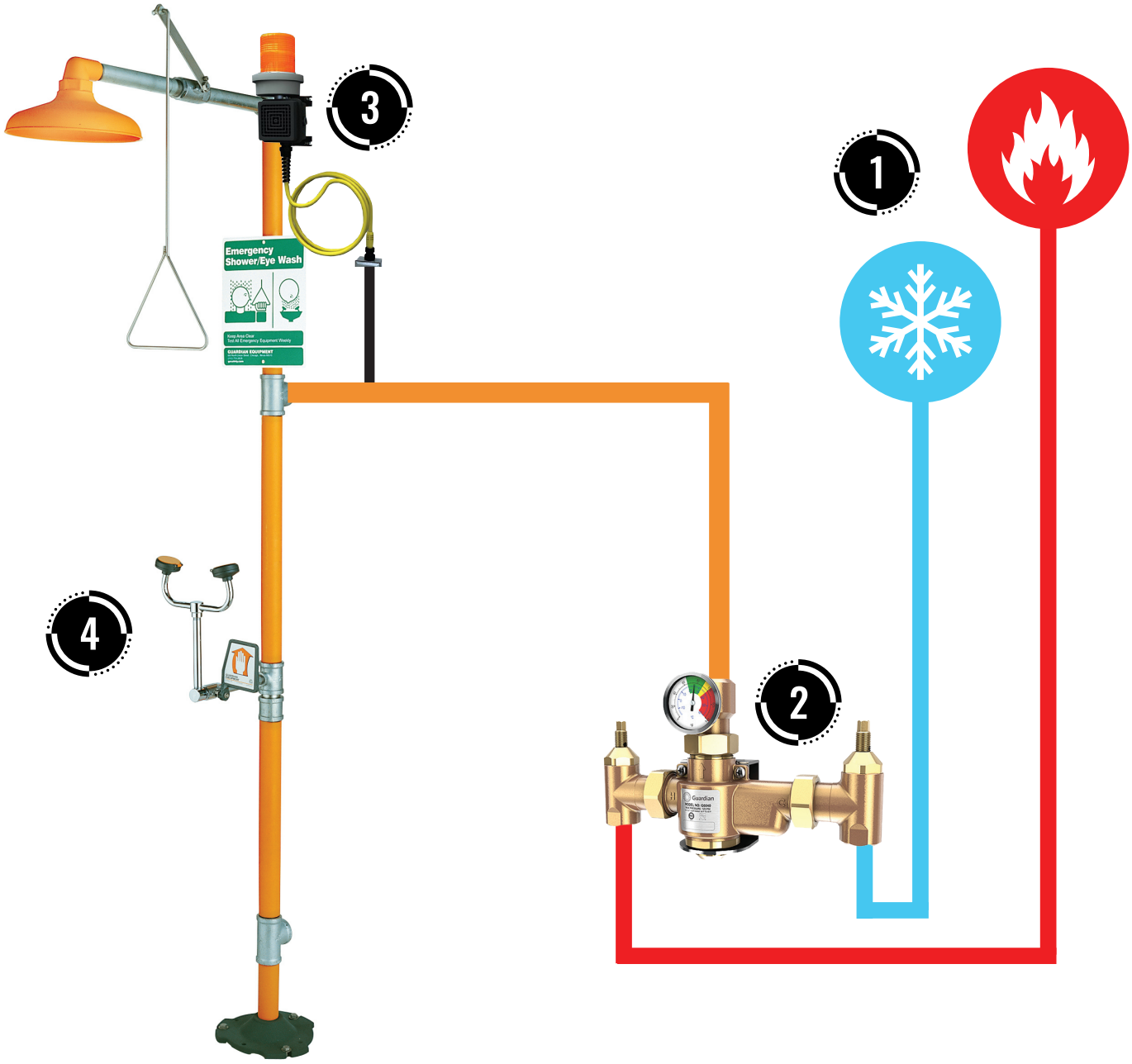
Notes:

1. The above table presents the relative corrosion resistant abilities of certain materials in the specific corrosive environments described. This information should be considered as a general guide only. The table does not provide information on possible combinations of concentrations of corrosive media or temperature levels that may be found in the field. Even small changes in the concentration of the corrosive media or in the temperature at which interaction takes place may generate different results from those described above. Results different from those shown above may also result from impurities in the metals or plastics, the actual condition of the environment in which the materials are used, or other factors.

   NO GUARANTEE OF THE PERFORMANCE OF ANY METAL OR PLASTIC DESCRIBED IN THE TABLE IS EXPRESSED OR SHOULD BE INFERRED. GUARDIAN RECOMMENDS THAT MATERIAL SAMPLES BE SUBJECTED TO ACTUAL OPERATING CONDITIONS BEFORE FINAL SPECIFICATION.

2. The corrosion resistance data for powder coating is based upon laboratory testing consisting of subjecting coated samples to drops of the listed chemicals for ten minutes. Different results may be obtained when coated materials are subjected to chemicals for longer periods of time.

This schematic demonstrates an effective emergency shower system. Hot and cold water supply through a thermostatic mixing valve to deliver tepid water to the system, while activating an alarm to alert employees to the emergency.



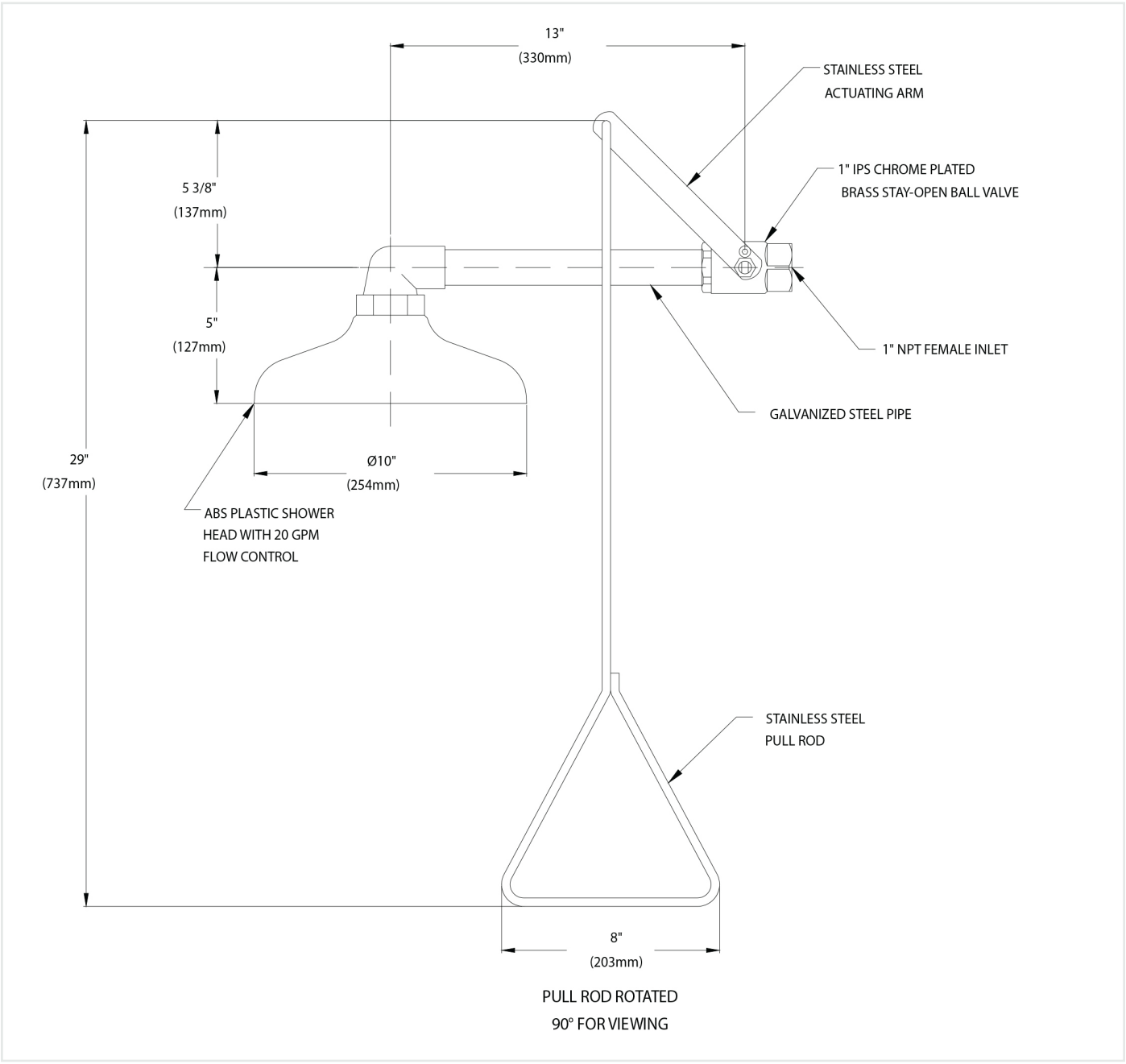
KEY:

1. WATER SUPPLY*
2. G6040 - THERMOSTATIC MIXING VALVE**
3. GAP275-205 - ALARM SYSTEM
4. GC1931 - SAFETY STATION WITH EYE/FACE WASH

*Water supply min kPa 310 through 25mm pipe
** Water supply should be "tepid" (16°C to 38°C)

HORIZONTALLY MOUNTED SHOWER - PLASTIC SHOWER HEAD

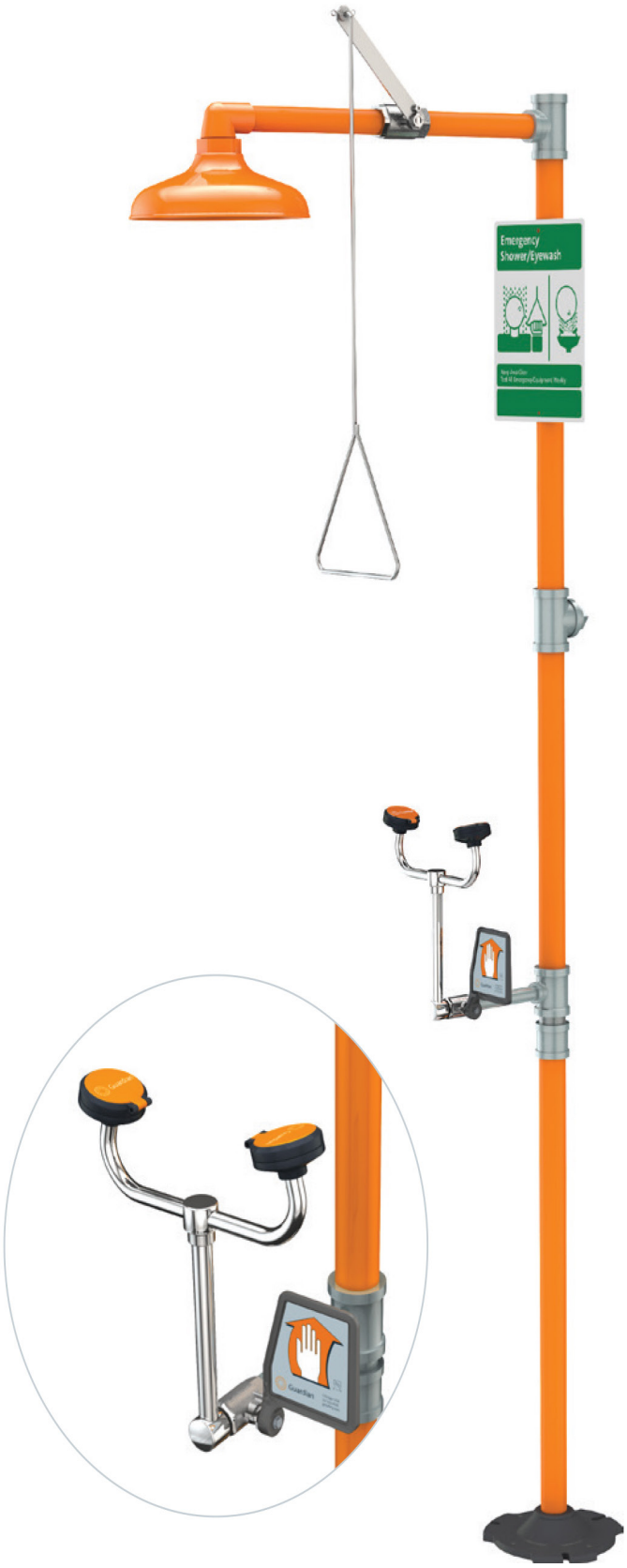
CODE	GC1643 | NZSB#: 423519
APPLICATION	Emergency shower for horizontal mounting.
SHOWER HEAD	254mm diameter with 75L/min flow control. Shower head is orange ABS plastic
VALVE	1" IPS chrome plated brass stay-open ball valve. Valve is US-made with chrome plated brass ball and PTFE seals. Furnished with stainless steel actuating arm and 73.66cm stainless steel pull rod.
PIPE AND FITTINGS	1" IPS galvanized steel nipple with orange ABS plastic elbow. Orange powder coated finish on pipe and fittings.
SUPPLY	1" NPT female inlet.
SIGN	ANSI-compliant identification sign.



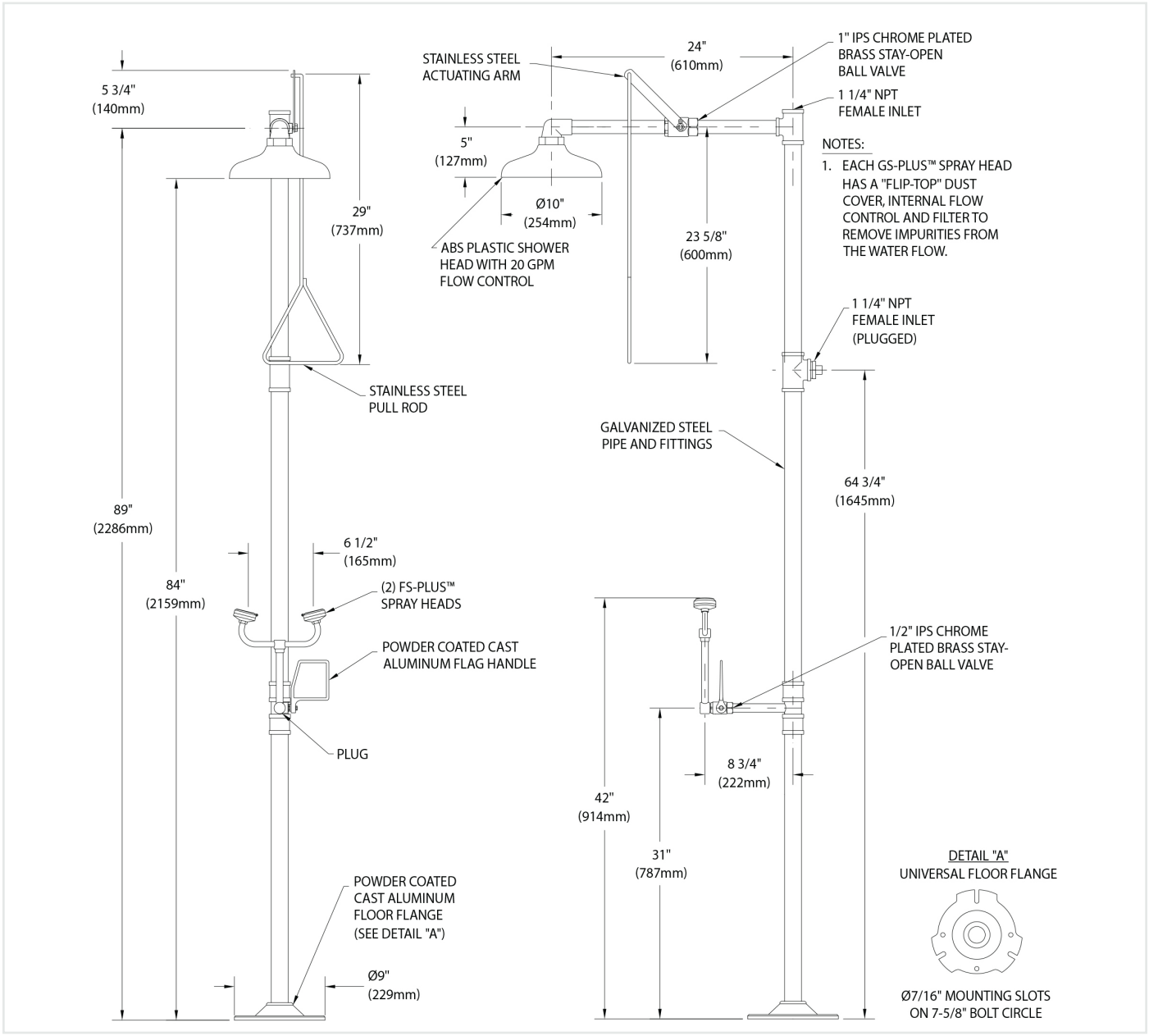
SIGN INCLUDED

Guardian

SAFETY STATION WITH EYE/FACE WASH – NO BOWL



CODE	GC1931 | NZSB#: 423520
APPLICATION	Combination eye/face wash and shower safety station. Eye/face wash features two large FS-Plus™ spray-type outlet heads that deliver a flood of water for rinsing eyes and face. Unit is provided without bowl or drain for waste water. Note: Floor drain should be provided underneath unit to prevent accumulation of water on floor.
SHOWER HEAD	254mm diameter orange ABS plastic with 75L/min flow control.
SHOWER VALVE	1" IPS chrome plated brass stay-open ball valve. Valve is US-made with chrome plated brass ball and PTFE seals. Furnished with stainless steel actuating arm and 73.66cm stainless steel pull rod.
SPRAY HEAD ASSEMBLY	Two FS-Plus™ spray heads. Each head has a "flip top" dust cover, internal flow control and filter to remove impurities from water flow.
EYE/FACE WASH VALVE	1/2" IPS chrome plated brass stay-open ball valve. Valve is US-made with chrome plated brass ball and PTFE seals.
PIPE AND FITTINGS	Schedule 40 galvanized steel. Furnished with orange polyethylene pipe covers for high visibility and corrosion resistance. Orange powder coated finish on pipe and fittings.
SUPPLY	1-1/4" NPT female top or side inlet.
SIGN	ANSI-compliant identification sign.
QUALITY ASSURANCE	Valve and spray head assemblies are factory assembled and water tested prior to shipment.



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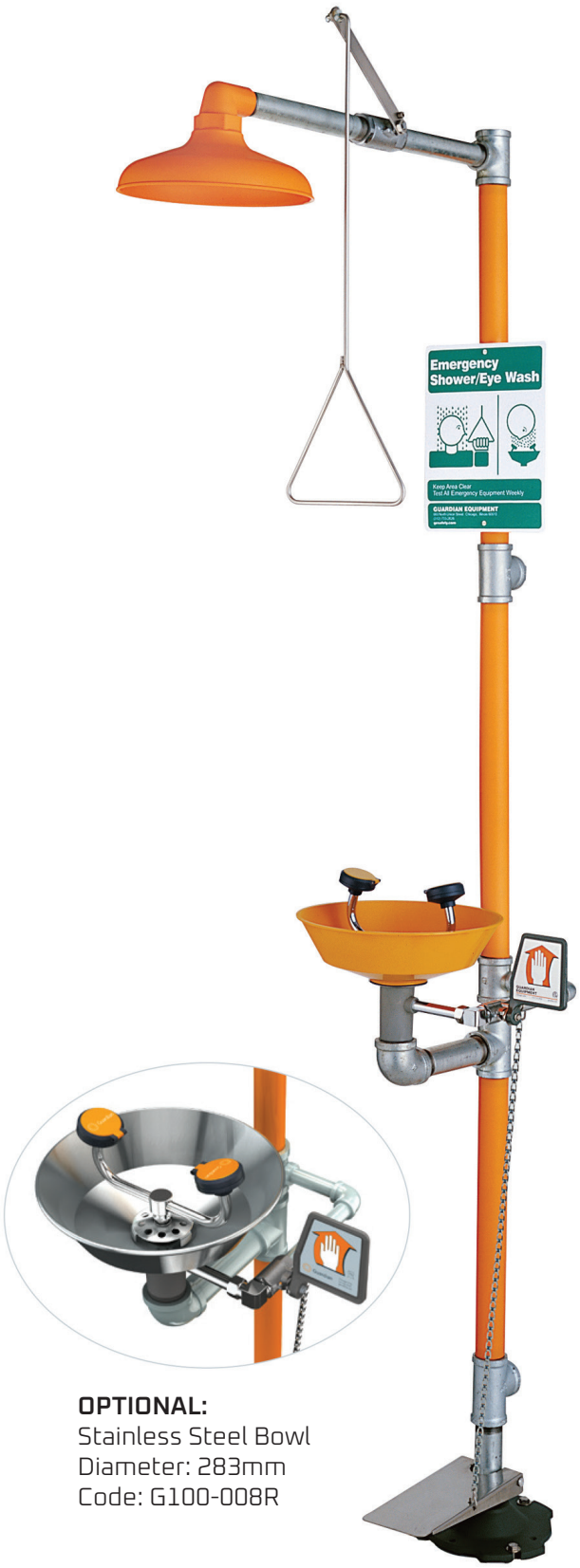
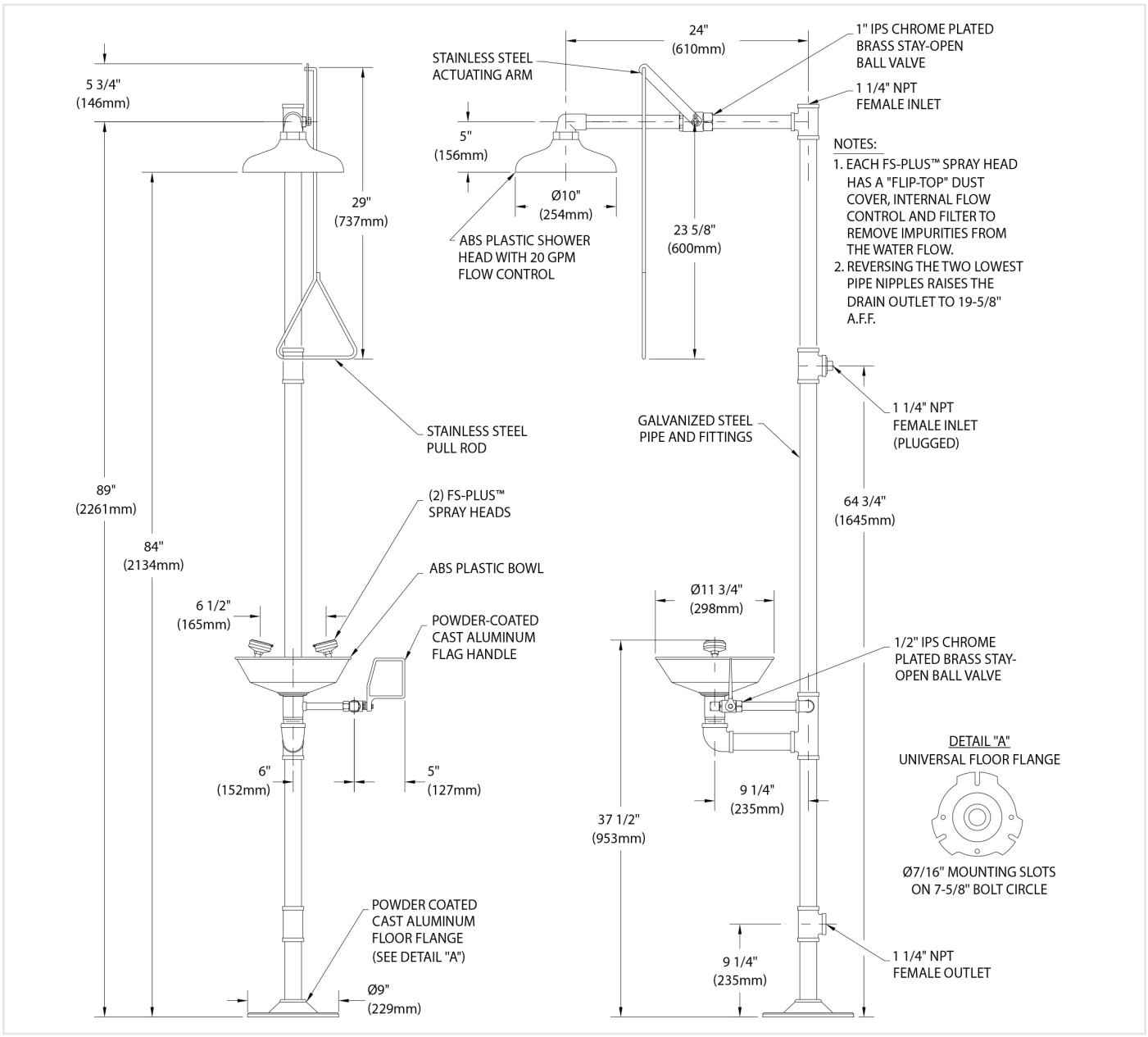
SAFETY STATION WITH EYE/FACE WASH – WITH PLASTIC BOWL



OPTIONAL:
Stainless Steel Bowl
Diameter: 283mm
Code: G100-008R

CODE	GC1950PHFC | NZSB#: 423522
APPLICATION	Combination eye/face wash and shower safety station. Eye/face wash is activated by flag handle or foot treadle and features two large FS-Plus™ spray-type outlet heads that deliver a flood of water for rinsing eyes and face.
SHOWER HEAD	254mm diameter orange ABS plastic with 20 GPM flow control.
SHOWER VALVE	1" IPS chrome plated brass stay-open ball valve. Valve is US-made with chrome plated brass ball and PTFE seals. Furnished with stainless steel actuating arm and 737mm stainless steel pull rod.
SPRAY HEAD ASSEMBLY	Two FS-Plus™ spray heads. Each head has a "flip top" dust cover, internal flow control and filter to remove impurities from water flow.
EYE/FACE WASH BOWL	282mm diameter orange ABS plastic bowl.
EYE/FACE WASH VALVE	1/2" IPS chrome plated brass stay-open ball valve. Valve is US-made with chrome plated brass ball and PTFE seals. Valve is activated by flag handle or foot treadle. Unit remains in operation until handle is returned to closed position.
PIPE AND FITTINGS	Schedule 40 galvanized steel. Furnished with orange polyethylene pipe covers for high visibility and corrosion resistance. Orange powder coated finish on pipe and fittings.
SUPPLY	1-1/4" NPT female top or side inlet.
WASTE	1-1/4" NPT female outlet.
SIGN	ANSI-compliant identification sign.
QUALITY ASSURANCE	Valve and spray head assemblies are factory assembled and water tested prior to shipment.



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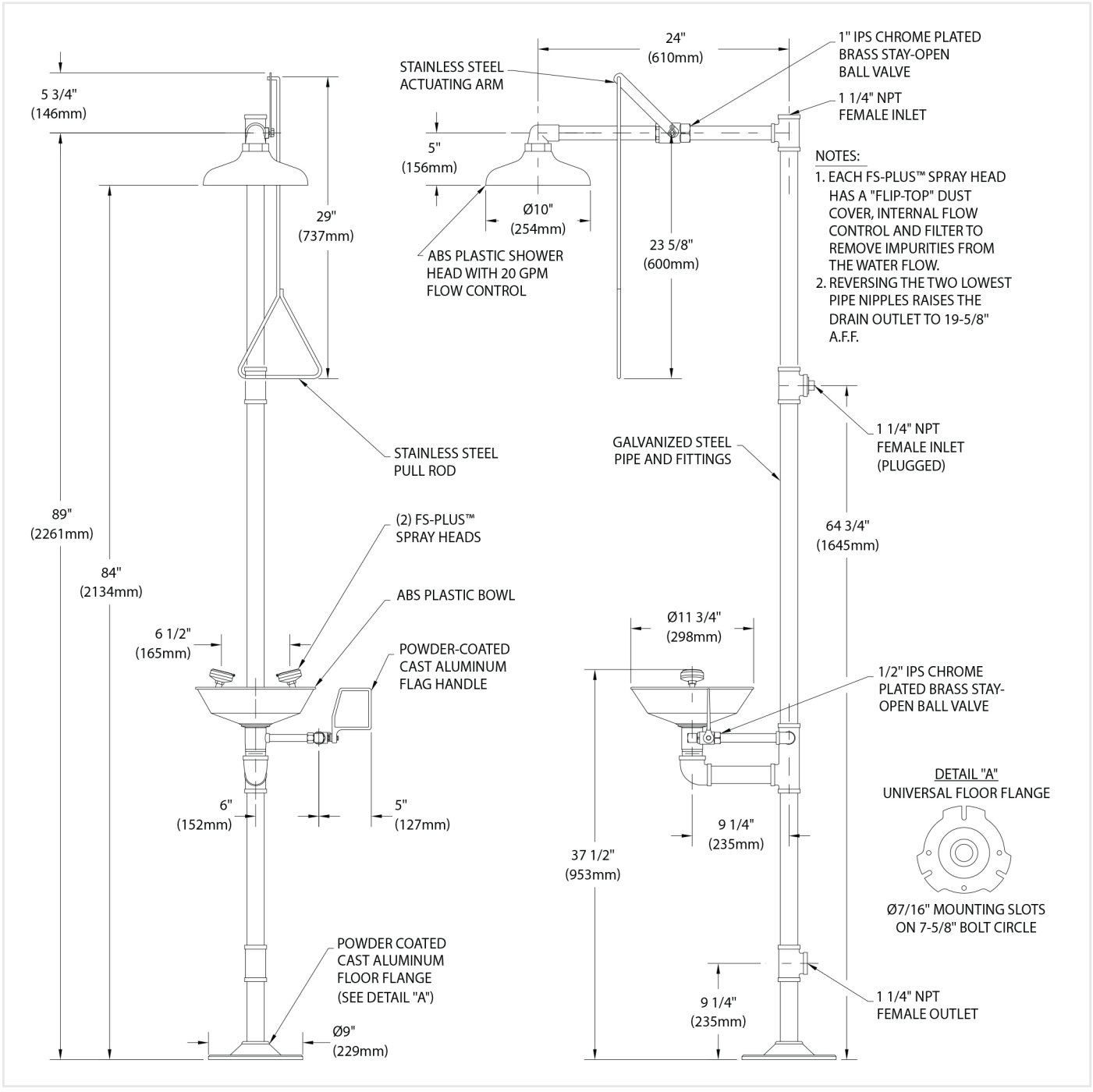
Guardian

SAFETY STATION WITH EYE/FACE WASH – WITH PLASTIC BOWL

CODE	GC1950P | NZSB#: 423521
APPLICATION	Combination eye/face wash and shower safety station. Eye/face wash features a plastic bowl with two large FS-Plus™ spray-type outlet heads that deliver a flood of water for rinsing eyes and face.
SHOWER HEAD	254mm diameter orange ABS plastic with 75L/min flow control.
SHOWER VALVE	1" IPS chrome plated brass stay-open ball valve. Valve is US-made with chrome plated brass ball and PTFE seals. Furnished with stainless steel actuating arm and 737mm stainless steel pull rod.
SPRAY HEAD ASSEMBLY	Two FS-Plus™ spray heads. Each head has a "flip top" dust cover, internal flow control and filter to remove impurities from water flow.
EYE/FACE WASH BOWL	282mm diameter orange ABS plastic bowl.
EYE/FACE WASH VALVE	1/2" IPS chrome plated brass stay-open ball valve. The valve is US-made with chrome-plated brass ball and PTFE seals.
PIPE AND FITTINGS	Schedule 40 galvanized steel. Furnished with orange polyethylene pipe covers for high visibility and corrosion resistance. Orange powder-coated finish on pipe and fittings.
SUPPLY	1-1/4" NPT female top or side inlet.
WASTE	1-1/4" NPT female outlet. The outlet can be positioned at either 235mm or 498mm above finished floor by reversing lower pipe nipples.
SIGN	ANSI-compliant identification sign.
QUALITY ASSURANCE	Valve and spray head assemblies are factory assembled and water tested prior to shipment.

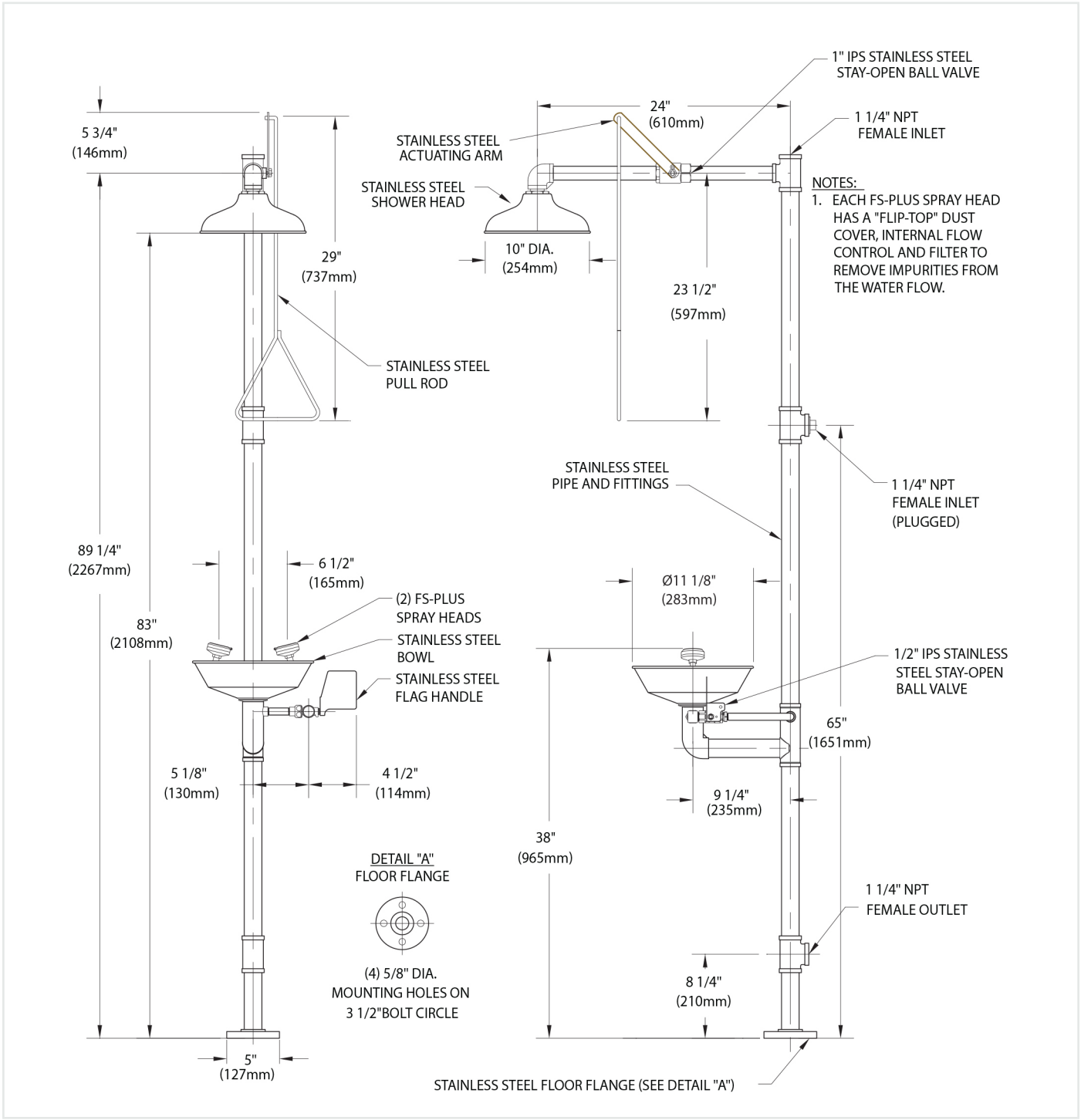


SIGN INCLUDED

Guardian

SAFETY STATION WITH EYE/FACE WASH – WITH PLASTIC BOWL

CODE	G1996 | NZSB#: 423523
APPLICATION	All-stainless steel combination eye/face wash and shower safety station. Stainless steel construction is ideal for highly corrosive environments and clean room applications. Two large FS-Plus™ spray-type outlet heads, deliver a flood of water for rinsing eyes and face.
SHOWER HEAD	254mm diameter stainless steel.
SHOWER VALVE	1" IPS Type 316 stainless steel stay-open ball valve. Valve has stainless steel ball and Teflon® seals. Furnished with stainless steel actuating arm and 73.66cm stainless steel pull rod.
SPRAY HEAD ASSEMBLY	Two FS-Plus™ spray heads. Each head has a "flip top" dust cover, internal flow control and filter to remove impurities from the water flow.
EYE/FACE WASH BOWL	282mm diameter stainless steel bowl.
EYE/FACE WASH VALVE	1/2" IPS Type 316 stainless steel stay open ball valve. Valve has stainless steel ball and Teflon® seals.
PIPE AND FITTINGS	Schedule 40 Type 304 brushed stainless steel. Furnished with orange polyethylene covers for vertical piping for high visibility and corrosion resistance.
SUPPLY	1-1/4" NPT female top or side inlet.
WASTE	1-1/4" NPT female outlet.
SIGN	ANSI-compliant identification sign.
QUALITY ASSURANCE	Valve and spray head assemblies are factory assembled and water tested prior to shipment.

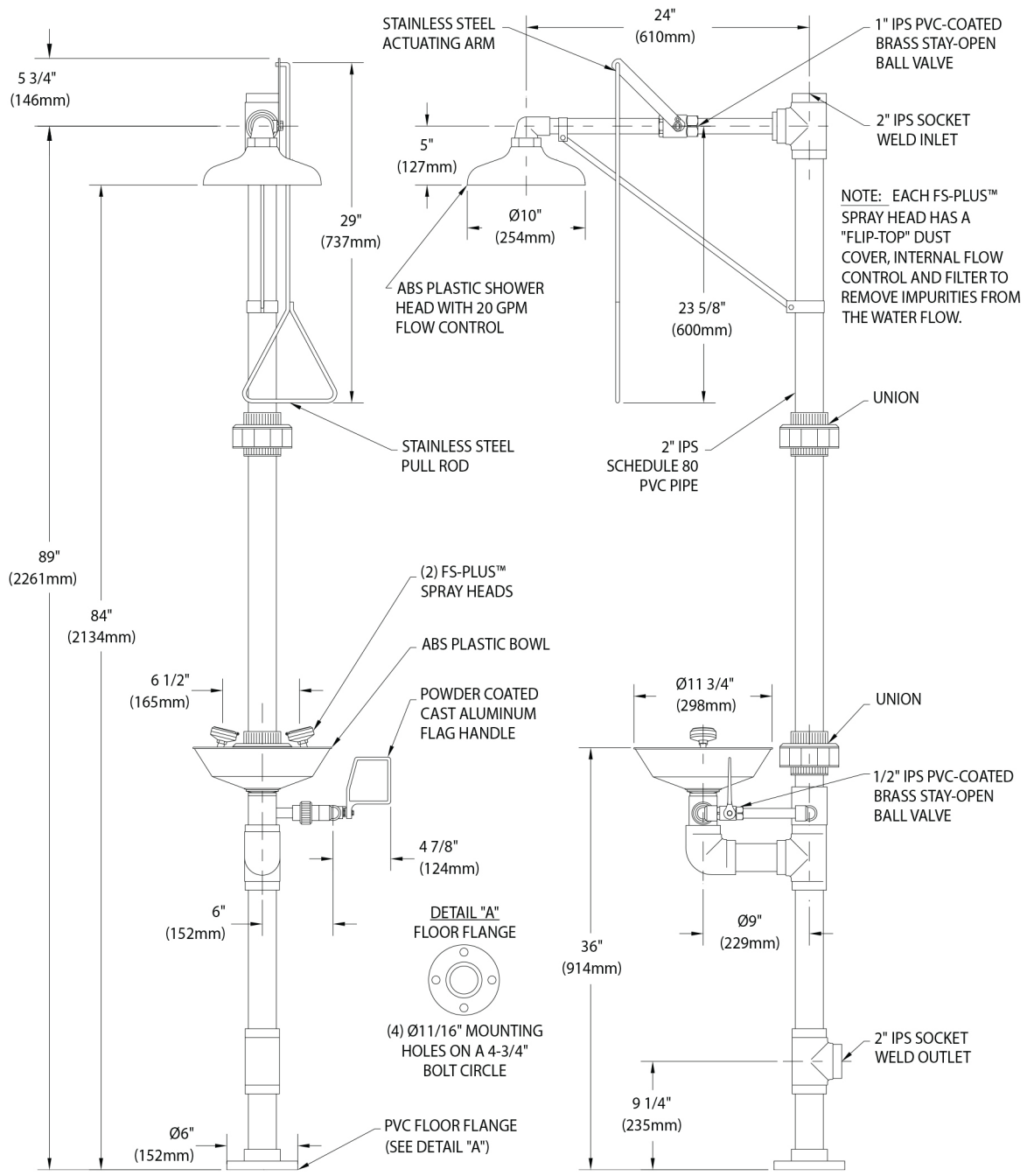


SIGN INCLUDED

Guardian

SAFETY STATION WITH EYE/FACE WASH – WITH PLASTIC BOWL

CODE	G1993 | NZSB#: 423524
APPLICATION	All-PVC combination eye/face wash and shower safety station. Unit is constructed entirely of PVC and PVC coated components for superior corrosion resistance. Ideal for industrial environments where harsh acids or caustics are present. Eye/face wash features two large FS-Plus™ spray-type outlet heads that deliver a flood of water for rinsing eyes and face.
SHOWER HEAD	254mm diameter orange ABS plastic with 20 GPM flow control.
SHOWER VALVE	1" IPS PVC-coated brass stay-open ball valve. The valve is US-made with chrome-plated brass ball and PTFE seals. Furnished with stainless steel actuating arm and 73.66cm stainless steel pull rod.
SPRAY HEAD ASSEMBLY	Two FS-Plus™ spray heads. Each head has a "flip top" dust cover, internal flow control and filter to remove impurities from the water flow.
EYE/FACE WASH BOWL	282mm diameter orange ABS plastic.
EYE/FACE WASH VALVE	1/2" IPS PVC-coated brass stay-open ball valve. The valve is US-made with chrome-plated brass ball and PTFE seals.
PIPE AND FITTINGS	Schedule 80 PVC.
SUPPLY	2" IPS socket weld top female inlet.
WASTE	2" IPS socket weld female outlet.
SIGN	ANSI-compliant identification sign.
QUALITY ASSURANCE	Valve and spray head assemblies are factory assembled and water tested prior to shipment.

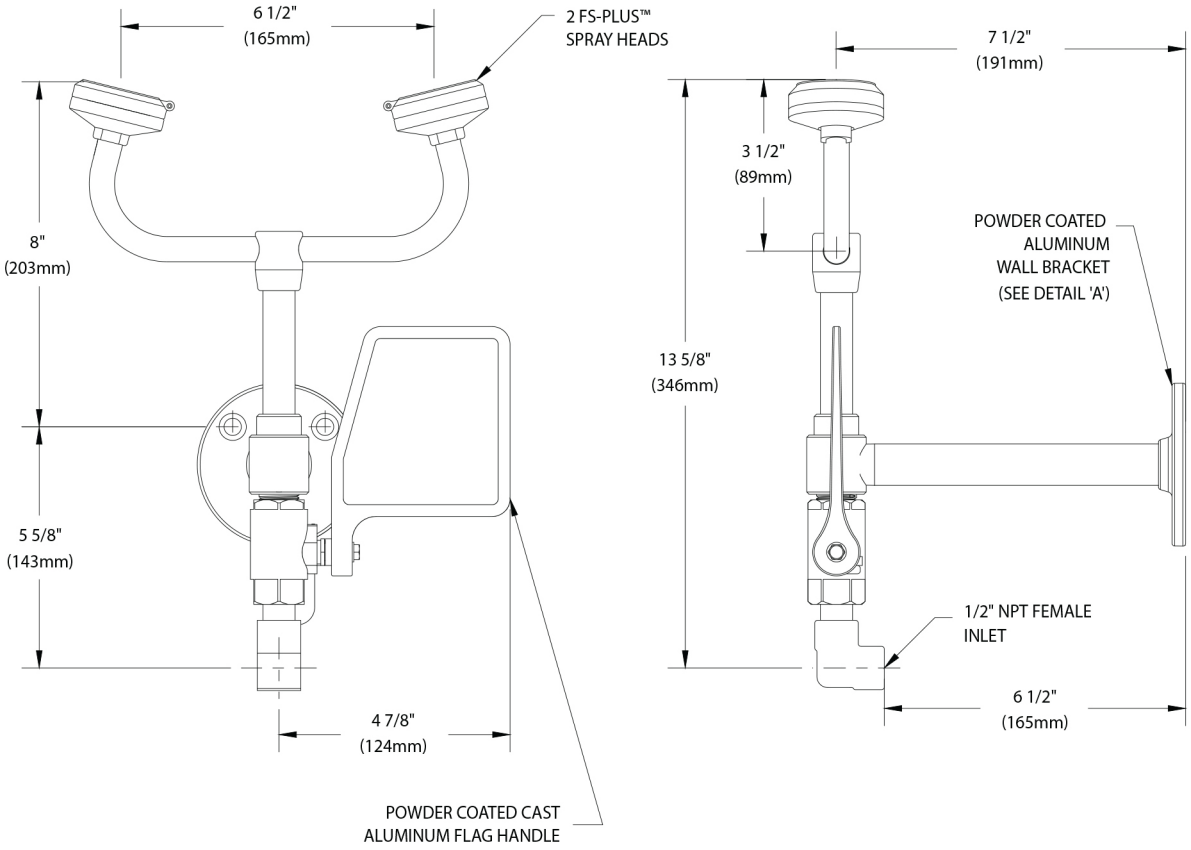


SIGN INCLUDED

Guardian

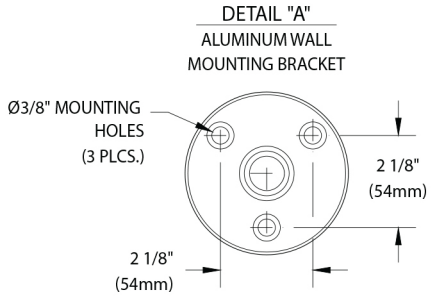
EYE / FACE WASH WALL MOUNTED - NO BOWL

CODE	G1771 | NZSB#: 423534
APPLICATION	Eye/face wash for wall mounting. Two large FS-Plus™ spray-type outlet heads deliver a flood of water for rinsing eyes and face. Unit is provided without a bowl or drains for wastewater. Note: Floor drain should be provided underneath the unit to prevent the accumulation of water on the floor.
SPRAY HEAD ASSEMBLY	Two FS-Plus™ spray heads. Each head has a "flip top" dust cover, internal flow control and filter to remove impurities from the water flow.
VALVE	1/2" IPS chrome plated brass stay-open ball valve. The valve is US-made with chrome-plated brass ball and PTFE seals.
MOUNTING	Heavy-duty cast aluminium wall bracket with corrosion-resistant powder-coated finish.
CONSTRUCTION	Polished chrome-plated brass.
SUPPLY	1/2" NPT female inlet.
SIGN	ANSI-compliant identification sign.
QUALITY ASSURANCE	Unit is completely assembled and water tested prior to shipment.



NOTES:

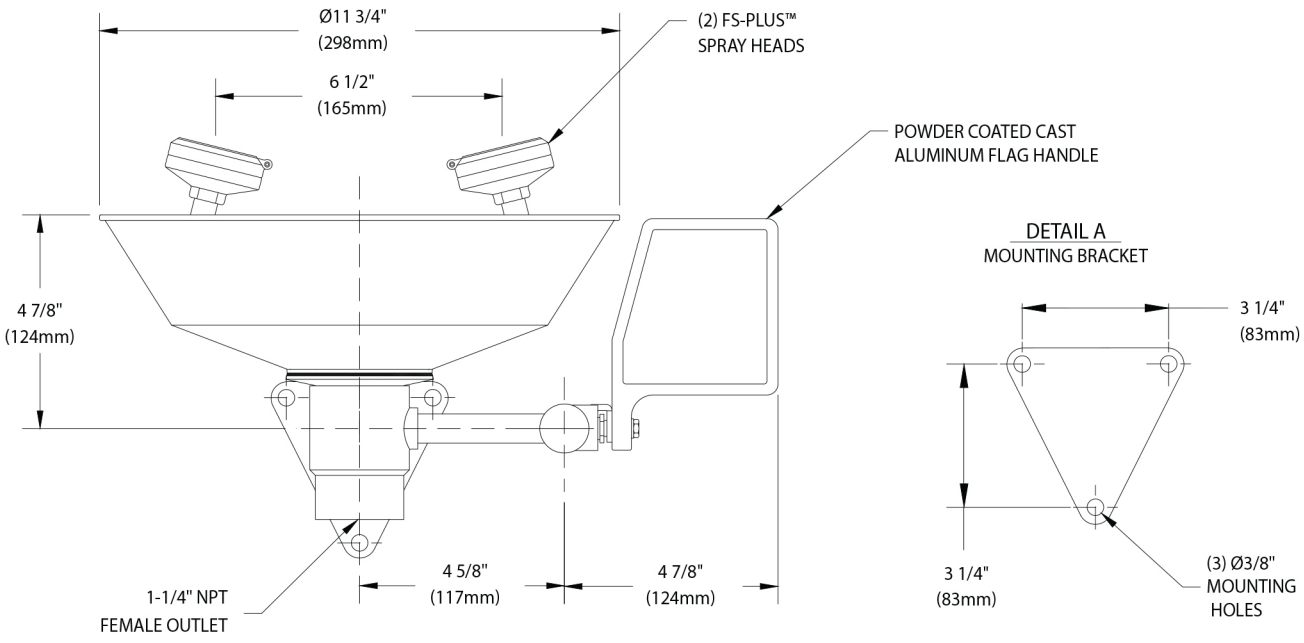
1. EACH FS-PLUS™ SPRAY HEAD HAS A "FLIP-TOP" DUST COVER, INTERNAL FLOW CONTROL AND FILTER TO REMOVE IMPURITIES FROM THE WATER FLOW.
2. UNIT SHOULD BE INSTALLED SUCH THAT WATER FLOW PATTERN IS POSITIONED BETWEEN 33" AND 53" ABOVE FLOOR.

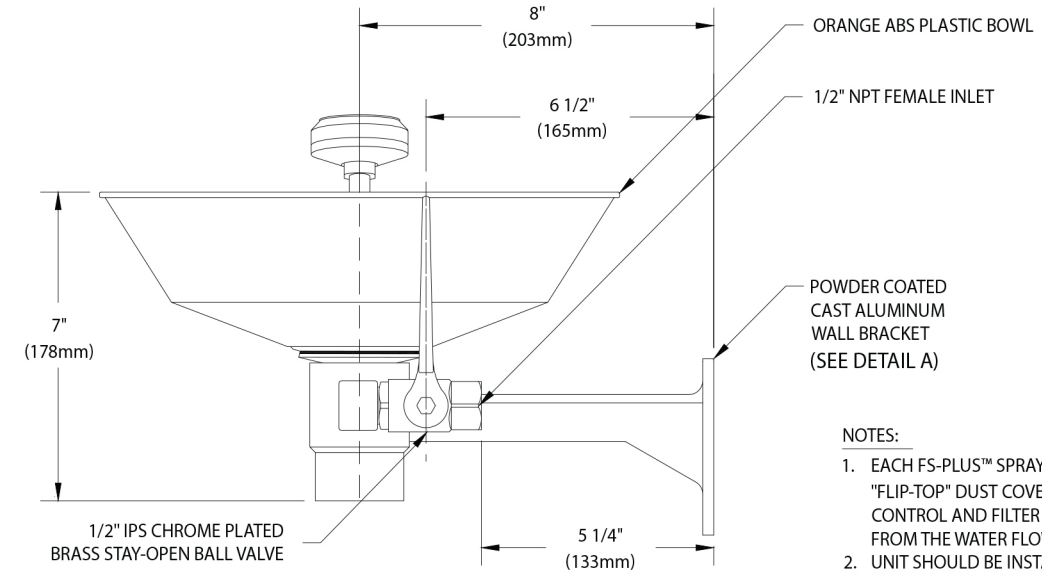


SIGN INCLUDED

EYE/FACE WASH WALL MOUNTED – PLASTIC BOWL

CODE	G1750P | NZSB#: 423532
APPLICATION	Eye/face wash with a plastic bowl for wall mounting. Two large FS-Plus™ spray-type outlet heads deliver a flood of water for rinsing eyes and face.
SPRAY HEAD ASSEMBLY	Two FS-Plus™ spray heads. Each head has a "flip top" dust cover, internal flow control and filter to remove impurities from the water flow.
VALVE	1/2" IIPS chrome plated brass stay-open ball valve. The valve is US-made with chrome-plated brass ball and PTFE seals.
BOWL	282mm diameter orange ABS plastic bowl.
MOUNTING	Heavy-duty cast aluminium wall bracket with corrosion-resistant powder-coated finish.
SUPPLY	1/2" NPT female inlet.
WASTE	1-1/4" NPT female outlet.
SIGN	ANSI-compliant identification sign.
QUALITY ASSURANCE	Unit is completely assembled and water tested prior to shipment.





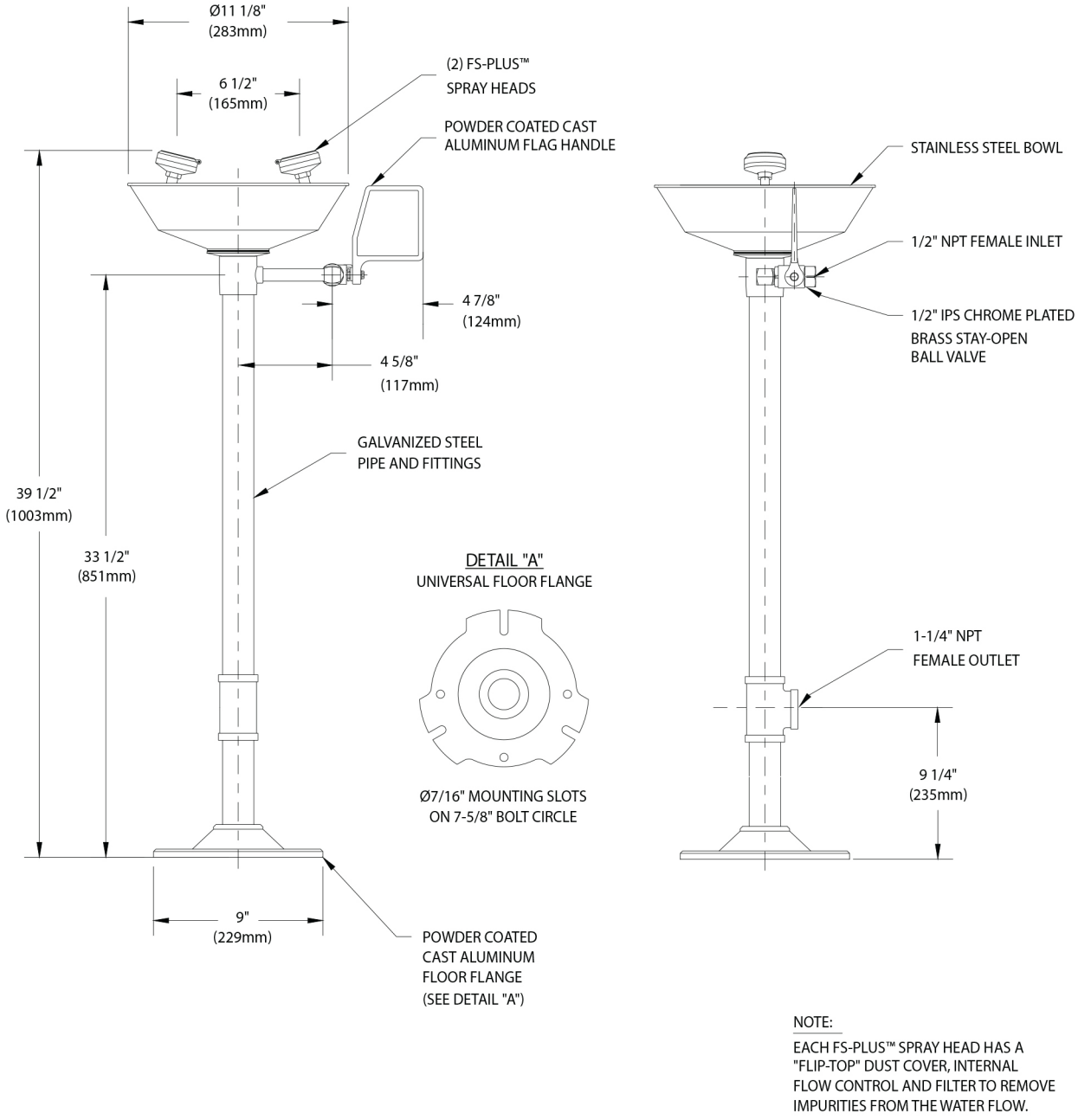
NOTES:

1. EACH FS-PLUS™ SPRAY HEAD HAS A "FLIP-TOP" DUST COVER, INTERNAL FLOW CONTROL AND FILTER TO REMOVE IMPURITIES FROM THE WATER FLOW.
2. UNIT SHOULD BE INSTALLED SUCH THAT WATER FLOW PATTERN IS POSITIONED BETWEEN 33" AND 53" ABOVE FLOOR.

SIGN INCLUDED

EYE/FACE WASH PEDESTAL MOUNTED – PLASTIC BOWL

CODE	GC1760P | NZSB#: 423533
APPLICATION	Freestanding, pedestal mounted eye/face wash. Two large FS-Plus™ spray-type outlet heads deliver a flood of water for rinsing eyes and face.
SPRAY HEAD ASSEMBLY	Two FS-Plus™ spray heads. Each head has a "flip top" dust cover, internal flow control and filter to remove impurities from the water flow.
BOWL	282cm diameter orange ABS plastic.
VALVE	1/2" IPS PVC-coated brass stay-open ball valve. The valve is US-made with chrome-plated brass ball and PTFE seals.
PIPE AND FITTINGS	Schedule 40 galvanized steel. Furnished with orange polyethylene pipe covers for high visibility and corrosion resistance. Orange powder-coated finish on pipe and fittings.
SUPPLY	1/2" NPT female inlet.
WASTE	1-1/4" NPT female outlet.
SIGN	ANSI-compliant identification sign.
QUALITY ASSURANCE	Valve and spray head assemblies are factory assembled and water tested prior to shipment.



NOTE:

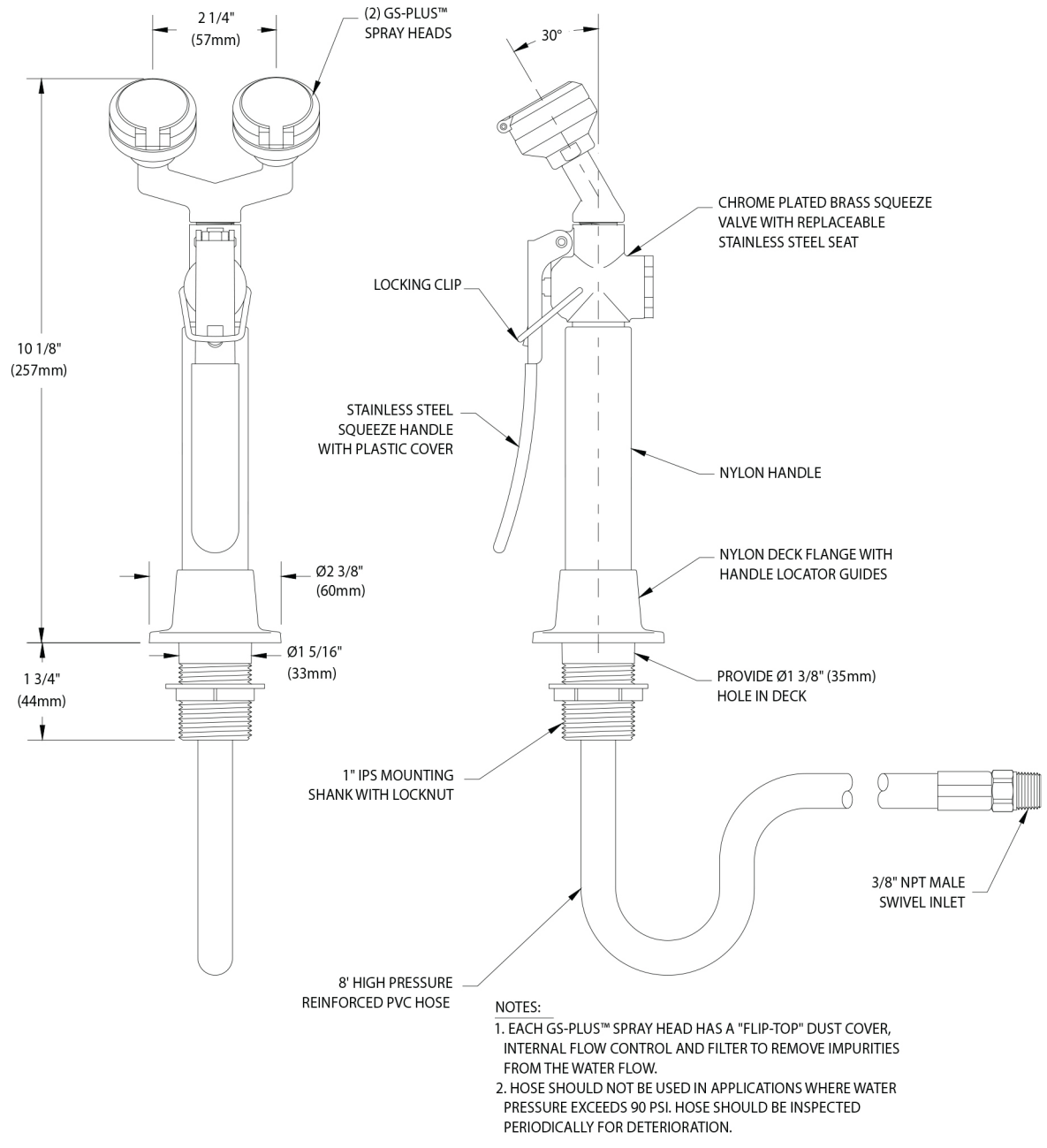
EACH FS-PLUS™ SPRAY HEAD HAS A "FLIP-TOP" DUST COVER, INTERNAL FLOW CONTROL AND FILTER TO REMOVE IMPURITIES FROM THE WATER FLOW.

SIGN INCLUDED

Guardian

EYEWASH/DRENCH HOSE UNIT, DECK MOUNTED

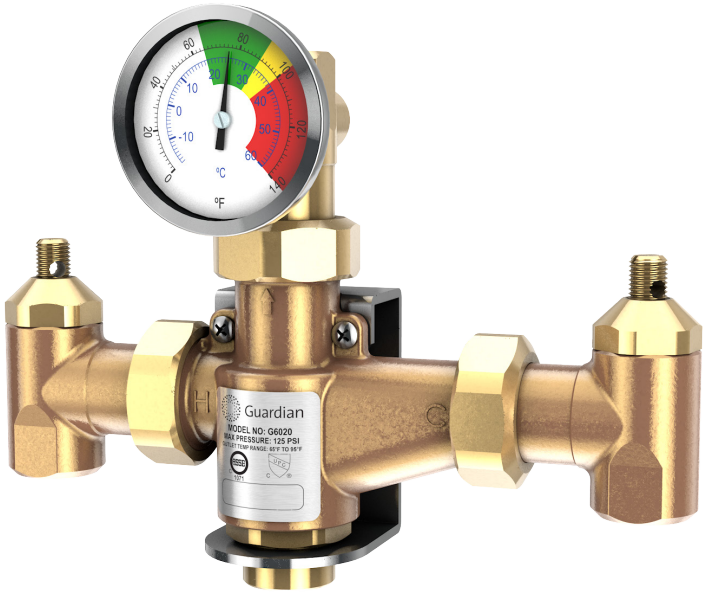
CODE	G5022 | NZSB#: 423535
APPLICATION	Dual purpose eyewash/drench hose for deck mounting. The unit meets the provisions of ANSI Z358.1-2014 as both an eyewash and a drench hose. The unit may be left in the deck flange for use as a fixed eyewash, leaving user's hands-free. Alternatively, the unit may be removed for use as a drench hose to rinse any part of user's eyes, face or body.
SPRAY HEAD ASSEMBLY	Two GS-Plus™ spray heads mounted side-by-side. Each head has a "flip top" dust cover, internal flow control and filter to remove impurities from the water flow.
VALVE	Forged brass squeeze valve activated by a stainless steel lever handle. Valve has replaceable stainless steel seat for exceptional durability. Locking clip engages when the handle is depressed, providing "hands-free" operation. Valve stays open until locking clip is released.
HOSE	8' reinforced PVC hose. 275 PSI maximum working pressure.
MOUNTING	Deck flange for countertop mounting. The flange has handle locator guide to position spray heads and handle facing forward at all times.
SUPPLY	3/8" NPT male swivel-type inlet.
SIGN	ANSI-compliant identification sign.
QUALITY ASSURANCE	Unit is completely assembled and water tested prior to shipment.



SIGN INCLUDED

Guardian

THERMOSTATIC MIXING VALVE FOR EYE/FACE WASHES AND DRENCH HOSES – 49 LITRE CAPACITY



CODE	G6020 | NZSB#: 437008

Application: Thermostatic mixing valve to blend hot and cold water to deliver tepid water. Valve has flow capacity of 13 gallons (49 liters) per minute at 30 PSI (2.1 bar) pressure drop. Valve can be used to supply emergency eyewash, eye/face wash or drench hose unit. Depending on water supply size and pressure, valve can supply multiple units.

Mounting: Valve inlets can be positioned on top, back or bottom of valve. Outlet can be on top or bottom. Valve can be configured in the field for any mounting position. Furnished with heavy duty stainless steel mounting bracket.

Temperature Control: Valve has precision thermal actuator that senses incoming water temperature and automatically blends water to preset temperature. Valve is factory set to deliver 85°F (29°C) water. Temperature of tepid water can be adjusted as required and then locked. Furnished with dial temperature gauge as standard to monitor temperature of tepid water.

Cold Water Bypass: If the supply of hot water is restricted or interrupted, an internal bypass allows the valve to deliver cold water only. In bypass mode, the valve delivers 9 GPM (34 L/min) at 30 PSI (2.1 bar) pressure drop.

Hot Water Shutoff: Valve has internal PTFE valve seat. If the supply of cold water is interrupted, the valve will close completely and *not deliver any water at all*, eliminating any possibility of scalding.

Flow Capacity: Refer to table below for flow capacity of valve at specified pressure drops.

Checkstops/Filters: Each inlet has a lockable shutoff valve for maintenance, internal check valve to prevent backflow and stainless steel basket filter to remove debris from the water flow.

Construction: Valve meets the requirements of the U.S. Safe Drinking Water Act as lead-free.

Inlet/Outlet: 1/2" NPT female inlets and outlet as standard.

Quality Assurance: Valve is ASSE certified under ANSI/ASSE 1071. Valve is fully assembled and factory tested prior to shipment.

Water Pressure/Temperature Requirements

Supply Pressure: Maximum incoming water pressure is 125 PSI (8.6 bar). Pressure of hot and cold water supplies can vary up to 25% and still deliver the flow and temperature required by ANSI/ASSE 1071.

Hot Water Supply Temperature: Incoming hot water temperature range is 120° - 180°F (49° - 82°C). Guardian recommends that the hot water temperature not exceed 140°F (60°C).

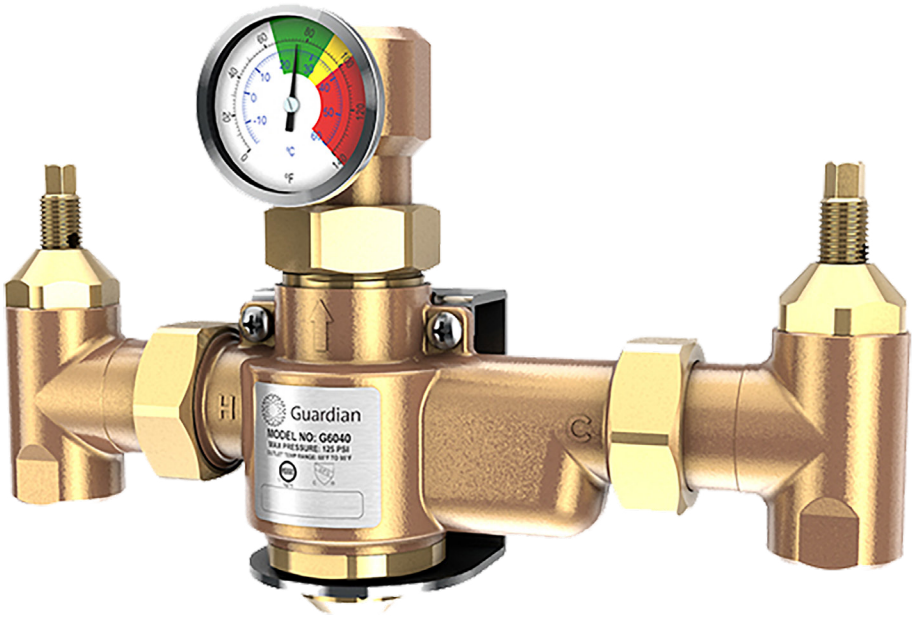
Cold Water Supply Temperature: Incoming cold water temperature range is 40° - 70°F (4° - 21°C). Cold water temperature must be at least 10°F (5.6°C) less than the temperature of the delivered tepid water.

Tepid Water Temperature: Temperature of tepid water is adjustable within a range of 65° - 95°F (18° - 35°C) and then locks in position. High temperature limit stop is set at 90°F (32°C) to prevent misadjustment.

Pressure Drop (PSI)	1	5	10	15	20	25	30	35	40
Flow Rate (GPM)	3	5	7	8	10	11	13	13	14
Bypass Flow Rate (GPM)	3	4	5	6	7	8	9	9	10

Pressure Drop (Bar)	0.1	0.3	0.7	1.0	1.4	1.7	2.1	2.4	2.8
Flow Rate (L/min)	11	19	26	30	38	42	49	49	53
Bypass Flow Rate (L/min)	11	15	19	23	26	30	34	34	38

THERMOSTATIC MIXING VALVE FOR EMERGENCY SHOWERS AND SAFETY STATIONS – 189 LITRE CAPACITY



CODE	G6040 | NZSB#: 437009

Application: Thermostatic mixing valve to blend hot and cold water to deliver tepid water. Valve has flow capacity of 50 gallons (189 liters) per minute at 30 PSI (2.1 bar) pressure drop. Valve can be used to supply emergency shower or combination safety station. Depending on water supply size and pressure, valve can supply multiple units.

Mounting: Valve inlets can be positioned on top, back or bottom of valve. Outlet can be on top or bottom. Valve can be configured in the field for any mounting position. Furnished with heavy duty stainless steel mounting bracket.

Temperature Control: Valve has precision thermal actuator that senses incoming water temperature and automatically blends water to preset temperature. Valve is factory set to deliver 85°F (29°C) water. Temperature of tepid water can be adjusted as required and then locked. Furnished with dial temperature gauge as standard to monitor temperature of tepid water.

Cold Water Bypass: If the supply of hot water is restricted or interrupted, an internal bypass allows the valve to deliver cold water only. In bypass mode, the valve delivers 38 GPM (144 L/min) at 30 PSI (2.1 bar) pressure drop.

Hot Water Shutoff: Valve has internal PTFE valve seat. If the supply of cold water is interrupted, the valve will close completely and *not deliver any water at all,* eliminating any possibility of scalding.

Flow Capacity: Refer to table below for flow capacity of valve at specified pressure drops.

Checkstops/Filters: Each inlet has a lockable shutoff valve for maintenance, internal check valve to prevent backflow and stainless steel basket filter to remove debris from the water flow.

Construction: Valve meets the requirements of the U.S. Safe Drinking Water Act as lead-free.

Inlet/Outlet: 1" NPT female inlets and 1-1/4" NPT female outlet as standard.

Quality Assurance: Valve is ASSE certified under ANSI/ASSE 1071. Valve is fully assembled and factory tested prior to shipment.

Water Pressure/Temperature Requirements

Supply Pressure: Maximum incoming water pressure is 125 PSI (8.6 bar). Pressure of hot and cold water supplies can vary up to 25% and still deliver the flow and temperature required by ANSI/ASSE 1071.

Hot Water Supply Temperature: Incoming hot water temperature range is 120° - 180°F (49° - 82°C). Guardian recommends that the hot water temperature not exceed 140°F (60°C).

Cold Water Supply Temperature: Incoming cold water temperature range is 40° - 70°F (4° - 21°C). Cold water temperature must be at least 10°F (5.6°C) less than the temperature of the delivered tepid water.

Tepid Water Temperature: Temperature of tepid water is adjustable within a range of 65° - 95°F (18° - 35°C) and then locks in position. High temperature limit stop is set at 90°F (32°C) to prevent misadjustment.

Pressure Drop (PSI)	1	5	10	15	20	25	30	35	40
Flow Rate (GPM)	0.5	17	28	34	41	46	50	55	59
Bypass Flow Rate (GPM)	0.5	13	20	25	30	34	38	41	45

Pressure Drop (Bar)	0.1	0.3	0.7	1.0	1.4	1.7	2.1	2.4	2.8
Flow Rate (L/min)	2	64	106	129	155	174	189	208	223
Bypass Flow Rate (L/min)	2	49	76	95	114	129	144	155	170

PORTABLE EYEWASH/DRENCH HOSE UNIT – 56.78 LITRE

SIGN INCLUDED

CODE	G1562 | NZSB#: 423530 | OPTIONAL Stainless Steel Dolly (G1562DLY) | NZSB#: 423531
APPLICATION	Self-contained eyewash and eyewash/drench hose units are ideal for use in low traffic areas, and where a continuous supply of potable water is unavailable for plumbed units. 56.78L pressurized units are ideal for floor placement near any hazard and deliver approximately 37.9 usable litres of water for 15 minutes, thus complying with the provisions of ANSI Z358.1-2014 for eyewashes.
TANK	56.78L stainless steel pressurized tank with 37.9 litres usable capacity. The tank has built-in carrying handles, Schrader air intake valve, pressure gauge and pressure relief valve.
EYEWASH SPRAY HEAD ASSEMBLY	Two GS-Plus™ spray heads. Each head has a "flip top" dust cover, internal flow control and filter.
EYEWASH VALVE	1/2" IPS chrome plated brass stay-open ball valve with flag handle. A pressure regulator controls eyewash flow to 0.65 GPM for 15 minutes.
DRENCH HOSE UNIT	Auxiliary hand-held drench hose for rinsing eyes, face or body. The unit has single GS-Plus™ spray-type outlet head, self-closing valve with squeeze handle, and 1.8m reinforced PVC hose.
OPERATION	To operate the unit, fill with clean potable water and add bacteriostatic additive (supplied with unit). Additive protects against the growth of bacteria, fungus, algae and acanthamoeba. After filling with water, pressurize unit to 80 PSI. If necessary, adjust the pressure regulator to achieve maximum flow for 15 minutes. The unit should be inspected regularly and water should be changed at least once every six months. Filling instructions included.
WEIGHT	16.15kg empty and 53.93kg filled
SIGN	ANSI compliant identification sign permanently affixed to tank.
QUALITY ASSURANCE	Unit is fully assembled, pressurized and water tested at the factory. Unit is depressurized and emptied prior to shipping. Some assembly required in the field.

SHOWER & EYEWASH TEST KIT

CODE	SETESTKIT | NZSB#: 423525

TEST SOCK WITH HANDLE & BUCKET

CODE	SE950 | NZSB#: 423526

FOAM FILTER

CODE	G470-024R | NZSB#: 423528

FOAM FILTER

CODE	GAP470-021 | NZSB#: 423527

EMERGENCY EQUIPMENT INSPECTION LOG TAG

CODE	G250-060R | NZSB#: 423529

An eyewash should be quick, simple and safe to use. The unique shape of Tobin's eyewash bottle ensures that even a temporarily blinded and confused person can identify it as a safe eyewash.

IMPORTANT SAFETY FEATURES

BOTTLE CAP/AIRVENT
The bottle hangs by its cap. To open simply break off the cap. An unopened bottle can be removed/replaced in the stand at will. An open bottle cannot be replaced in the stand.

NO MECHANICAL PARTS
The blow-moulded bottle has no moving or mechanical parts which can malfunction. The bottle is simple to open and easy to use.

DISPOSABLE
The fact that the bottle is disposable is a very important safety feature. Sterile liquid must not be saved in an open bottle. The Tobin bottle cannot be refilled. A safe sterile eyewash container must not be re-useable.

INSTRUCTIONS
Clear, simple instructions for use on each bottle & stand in your own language.

DIRECTIONAL ARROW
An arrow is engraved on the bottle. A blinded person can easily follow the arrow with their thumb and open the bottom airvent.

BOTTOM AIRVENT
When the bottom airvent is activated it lets air into the bottle and ensures the eye is washed by a soft continuous flow. The flow can be stopped, to allow blinking and eye movements, by placing the thumb over the bottom hole.

EYE SUPPORT RING
Facilitates prolonged washing and washing during transportation to a doctor.

THE FLOW
The eye is washed by a soft flow consisting of 6 tiny streams.
A damaged eye must not be washed with a hard/sharp jet.

THE OPEN BOTTLE
The bottle is designed to stop people saving unused liquid or refilling the bottle with other liquid. When empty, the bottle has a hole at both ends making it unsuitable for further use.

EXPIRY DATE
Each bottle shows the recommended expiry date.

ROUNDED BOTTOM
Tobin's eyewash bottle has a round bottom and cannot stand alone. This is a particularly important safety feature which removes the temptation to take bottles from the stand and place them close to bottles with other contents. Mix-ups can never occur. It is important everyone KNOWS where the bottles are when an accident occurs.

The bottle contains 1 litre sterile saline solution 0.9 %.

Tobin's eyewash systems are a well proven, quick and safe way to wash chemicals from the eyes. This specially designed system gives the fastest possible application combined with a volume large enough for most eye accidents.

WITHIN ARMS REACH

Chemicals in the eye causes serious damage within 1-5 seconds. Washing that begins in a few seconds can be decisive in minimising eye damage. A temporarily blinded person trying to reach an eyewash a few metres away requires presence of mind, a good sense of direction and obstacle free passage. An eyewash should be within arms reach. The bottle is also very easy to open.

CONTROLLED FLOW

According to Professor Tengroth at the Eye Clinic at Saint Eriks Hospital in Stockholm, it is important that damaged eyes are washed by a soft flow. Tobin's bottle is constructed to empty under natural pressure giving a soft flow. When the bottom air vent is opened a patient cannot increase the flow by squeezing the bottle. A bottle gives approx. 3 minutes washing time.

SHELF LIFE

As the bottles are disposable, costly refill routines are unnecessary. The contents of the bottle have a 3 year shelf life. Each bottle has an expiry date clearly visible.

VOLUME

Uninterrupted washing over a period is particularly important. The 5 bottle stand gives approximately 15 minutes washing. Further bottles can be taken from other stands if required.

TRANSPORT

Bottles can easily be removed from the stand and taken along during transportation to the doctor. It is very easy to open the bottles by hand. It is possible to control the flow by placing the thumb over the bottom hole.

DUST COVERS

A simple plastic bag accompanies each bottle. It keeps the bottles clean in dusty/dirty environments.

LOW PRICE

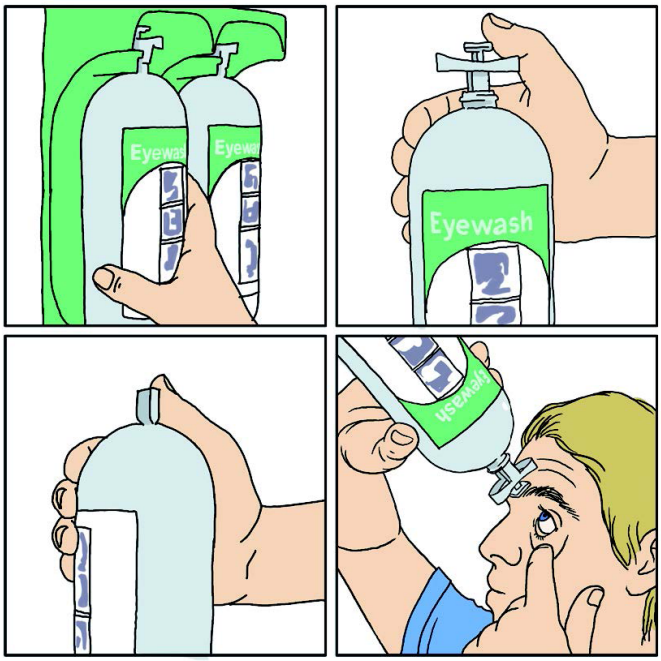
The cost of the wall-stand with 5 bottles is low, making it possible to give each danger spot its own eyewash station.

Sterility

The regulation governing sterile liquids is rigorous. The bottle cannot contain any bacteria during its shelf life. When a bottle is opened the contents must be used within a few hours or thrown away. Bottles cannot be refilled and as such are designed to stop people saving unused liquid or refilling the bottle with other liquid. Open bottles cannot be replaced in a stand.

EASY TO OPEN

The bottles are easy to open as is illustrated on each individual bottle and on most stands.



TOBIN EYEWASH SYSTEM

Tobin's Eyewash Systems are a well proven, quick and safe way to wash chemicals from the eyes. This specially designed system gives the fastest possible application combined with a volume large enough for most eye accidents.

Eye accidents occur without warning. Common to all accidents are acute pain and sense of blindness. An intense burning sensation makes it feel as if the eyes are on fire. We asked Professor Tengroth at the Eye Clinic at Saint Eriks Hospital in Stockholm how quickly washing should begin and how long it should continue. He replied that it is extremely important to begin washing immediately. Seconds are decisive. A flow of liquid is important as the purpose is to dilute and wash the chemicals out of the eyes.

Chemicals can be divided in to three main categories:

- De-greasing Agents
- Acids
- Alkalines

DEGREASING AGENTS	ACIDS	ALKALINES
1 - 3 MINUTES	2 - 4 MINUTES SEE A DOCTOR	10 - 20 MINUTES WASH DURING TRANSPORT TO DOCTOR

- **Wash not less than 2-3 minutes:** Chemicals such as benzene, toulol etc. cause pain and burning in the eye. The eye becomes red and the tears flow.
- **Course of action:** Begin washing at once and continue until the eye is comfortable again. These chemicals seldom cause serious damage.

- **Wash up to 5 minutes.** When acid reaches the eye, damage begins within 5 seconds. The reaction in the eye is severe. The acid eats into the soft eye. The combination of acid and tears causes some dilution but damage can be considerable. In time tissue and proteins coagulate and the acid stops corroding in the eye. At this stage the injury does not get worse even if no treatment is applied. The acid is said to remain on the surface. The damage can be very considerable.
- **Course of action:** Washing must begin within 5 seconds. Speed is more important than anything else. Every second's delay aggravates the situation. Damage increases by the second.
- **Washing period:** The damage seldom increases after 1-2 minutes. Washing for 3 minutes should be sufficient. However, to restore a feeling of comfort a further 2 minutes washing is recommended. These time periods apply only if a predominant part of the liquid makes contact with the eye. The patient should always see a doctor.

- **Wash for 10-20 minutes** Should always see a doctor. Alkaline substances such as lye, caustic soda, lime, cement, ammoniac etc. cause a very aggressive reaction in the eye. The reaction time is even shorter than the one for acids. The importance of speed in beginning washing cannot be sufficiently stressed. All alkaline substances begin eating into the eye immediatley. Alkalines "never" stop corroding in the eye. They must be washed out of the eye. Without treatment the damage will be very extensive and irreversible. Ammonic has been found in the inner eye after only 25 seconds.
- **Course of action:** Lightning fast treatment and prolonged washing are extremely important. Eyewashing equipment should be within arms reach and must be designed so that washing can continue during transportation to a doctor. A 10-20 minutes washing period is recommended. In alkaline cases only a doctor can decide when it is safe to discontinue washing.

STATIONARY STAND

CODE	T124 | NZSB#: 404234
DESCRIPTION	5 x 1 Litre eyewash bottles in a wall-stand for stationary work places. Supplied complete with bottles, wall-stand and wall screws. Provides full 15 minute flush.
DIMENSIONS	39cm (H) x 45cm (W) x 10cm (D)

STATIONARY STAND

CODE	T129 | NZSB#: 403611
DESCRIPTION	2 x 1 Litre eyewash bottles in a wall-stand. Suitable when space is a problem. (Supplied complete with bottles, wall-stand and wall screws.)
DIMENSIONS	39cm (H) x 20cm (W) x 10cm (D)

MOBILE STAND

CODE	T127 | NZSB#: 404236
DESCRIPTION	2 x 1 Litre eyewash bottles in a stand for mobile units such as trucks, boats, trains etc. Supplied complete with bottles, wall-stand and wall screws.
DIMENSIONS	33cm (H) x 20cm (W) x 10cm (D)

DUST PROTECTED CABINET

CODE	T130 | NZSB#: 408012
DESCRIPTION	2 x 1 Litre eyewash bottles in a dust protected cabinet suitable for all work places. Supplied complete with bottles, wall-stand and wall screws.
DIMENSIONS	25cm (H) x 25cm (W) x 10cm (D)

REPLACEMENT BOTTLES

CODE	T128 | NZSB#: 403612
DESCRIPTION	Includes 5 x 1 Litre bottles
DIMENSIONS	39cm (H) x 45cm (W) x 10cm (D)

REPLACEMENT BOTTLES

CODE	T126 | NZSB#: 404235
DESCRIPTION	Includes 2 x 1 Litre bottles
DIMENSIONS	39cm (H) x 20cm (W) x 10cm (D)

PH NEUTRALISING BUFFER SOLUTION

STATIONARY WALL STAND

CODE	T429 | NZSB#: 408013
DESCRIPTION	2 x 1 Litre eyewash bottles in a wall-stand. Suitable when space is a problem. Supplied complete with bottles, wall-stand and wall screws. Contains: Buffered solution with a neutralising effect on both acidic and alkali chemicals.
DIMENSIONS	39cm (H) x 20cm (W) x 10cm (D)

REPLACEMENT BOTTLES

CODE	T426 | NZSB#: 408014
DESCRIPTION	Includes 2 x 1 Litre bottles
DIMENSIONS	39cm (H) x 20cm (W) x 10cm (D)

STATIONARY FLASK AND STAND

CODE	T164 | NZSB#: 442940
DESCRIPTION	1 x 0.5 Litre eyewash Sterile Saline Solution flask in a stationary stand, ideal for when space is a problem and/or eyewashes are required in a number of spots in the same area. Supplied complete with bottles, wall-stand and wall screws.
DIMENSIONS	27.5cm (H) x 10.5cm (W) x 10cm (D)

STATIONARY FLASK AND STAND

CODE	T125 | NZSB#: -
DESCRIPTION	Tobin Freestanding Eyewash Flask (500ml), ideal for when space is a problem and/or eyewashes are required in a number of spots in the same area.
DIMENSIONS	27.5cm (H) x 8cm (W) x 7.5cm (D)

STATIONARY FLASK AND STAND

CODE	T121 | NZSB#: 404233
DESCRIPTION	If it is not practical to have a eyewash station within arms reach, it is possible to carry a personal Pocket Eyewash Flask in the breast pocket. The pocket flask is not sufficient in itself to wash chemicals from the eyes, but can be used on the way to a proper eyewash station. It is very suitable for laboratories, building sites, cleaning staff or anyone with mobile working conditions.
DIMENSIONS	17cm (H) x 8cm (W) x 2cm (D) (Weighs 200 grams)

NOTE: Optional Wire Stand for the pocket flask can be purchased. Suitable for farming and road equipment, trucks etc.

CODE: T405 | NZSB#: - (Sold separately)

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