

A Guide to the  
**European Standard EN15154 - Parts 2 and 5**

Emergency safety showers

*Part 2: Plumbed-in eye wash units*

*Part 5: Water overhead body showers for sites other than laboratories*

# The European Standard EN15154-2 & 5 - An Introduction

Hughes Safety Showers leads the market in its compliance structure, anticipating future needs as well as conforming to current standards and demands, including the European standard for emergency safety showers.

The European Standard EN15154-2 & 5 recommends performance requirements for plumbed-in eye wash units and emergency safety showers installed on industrial and logistics sites.

This summary should act as an overview to assist specifiers in understanding the guidelines. Please consult the complete European standard before purchasing or installing emergency safety equipment.

**If you need help or advice on meeting current standards, please contact us:**

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# General Overview

## Water Temperature

- Water delivered by the emergency safety equipment should be tepid, between 15-37C (ideally between 20-25C).
- Special attention should be given to avoid overheating or freezing due to ambient conditions.
- The safety shower or eye wash should deliver a continuous flow of water for at least 15 minutes.
- The velocity of water shall be low enough to prevent further injury to the user.

## Location

- Emergency safety equipment should be installed within 20 metres, or 10 seconds reach, of the hazard without stairs, ramps or obstacles in the path.
- Equipment must be located in a clearly visible, easily identifiable position and free from any obstructions such as doors, partitions etc.
- A safety sign, conforming to BS EN ISO 7010, should be displayed near the shower and/or eye wash.

## Water Flow

- Safety showers must comply with the following flow rates:  
Class I: 30-60 litres per minute  
Class II: >60-100 litres per minute  
Class III: >100 litres per minute

## Operation

- Safety shower and eye wash nozzles/heads must be secure. They should require the use of a tool to adjust or remove them.
- The control valve must be simple to operate and fully open within 1 second. It should remain open until intentionally closed.
- The safety shower should be at full flow within 3 seconds.

## Testing

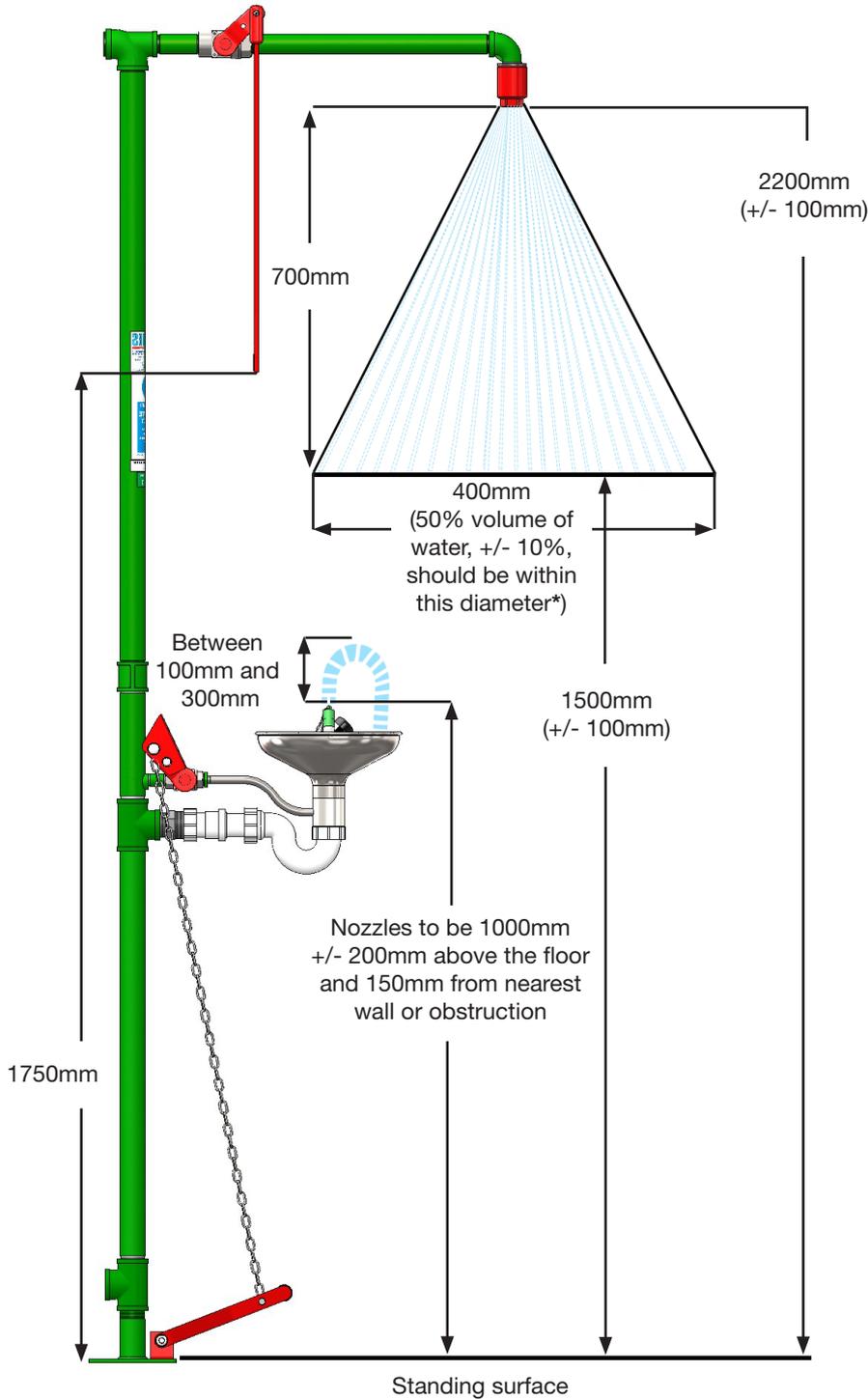
- Safety showers and eye wash units should be tested at least every month and documented. The test should include visual inspection of the spray pattern and water quality, and measurement of the flow rate.  
*(Hughes recommend that these units should be visually inspected and activated weekly along with an annual service to ensure reliable and effective operation).*



SAFETY  
EYE WASH  
SHOWER

Stop

# Emergency Safety Showers



\*The area reached by a minimum of 95% of the water should not exceed 800mm in diameter.

- The entrance to, and the space inside the shower should be at least 800mm wide.
- Water temperature should be between 15C and 37C (ideally within 20-25C).
- The shower head should be self-draining between the valve and outlet and provide a minimum flow rate of 60 litres per minute for at least 15 minutes.
- A minimum clearance of a 400mm radius should be provided between the centre of the shower head and the nearest obstacle.
- Simple valve activation is required. The valve should fully open within 1 second and should remain open until intentionally closed.

*Additional points for combination showers:*

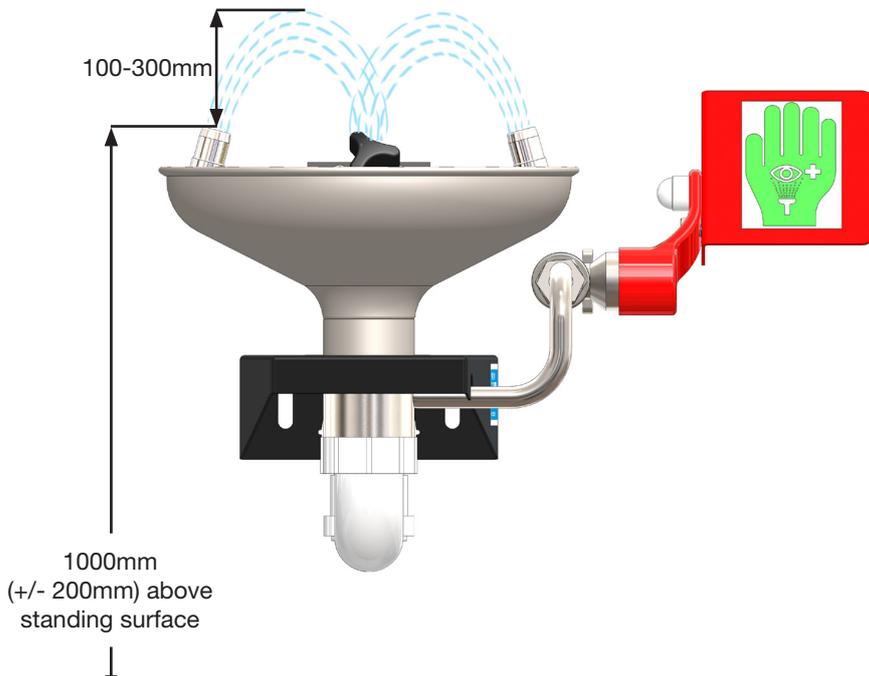
- Water from an eye wash should spray at a height between 100mm and 300mm from the centre of the nozzle before arching back down into the eye bath.
- Eye wash nozzles must be protected from airborne contaminants. The removal of the nozzle protection should not require an additional step when activating.
- Enough room should be provided around the eye wash to allow both eyelids to be held open.

## Note:

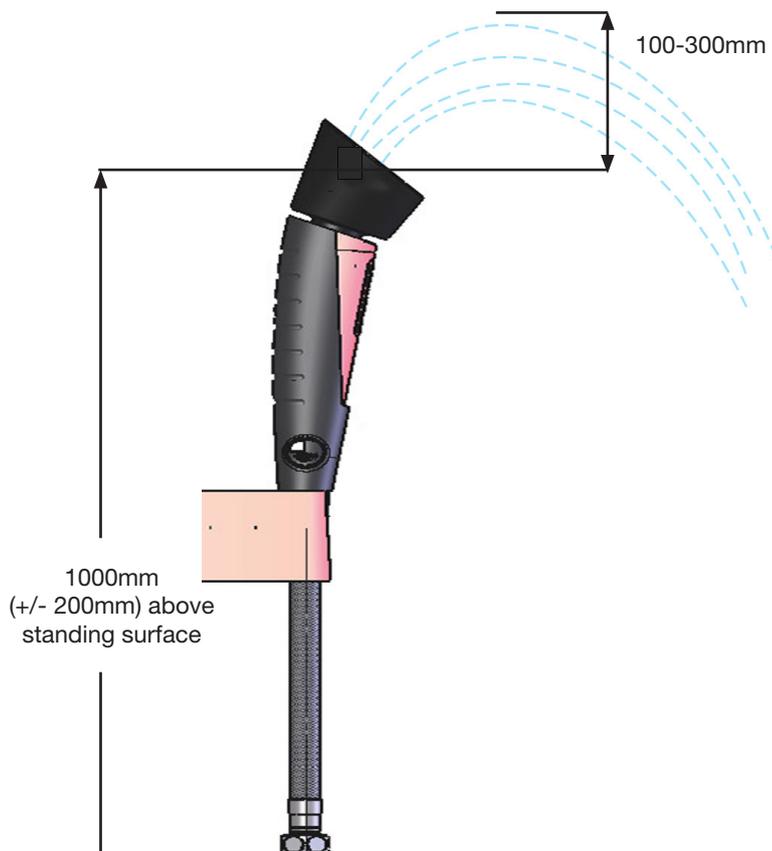
*Hughes safety showers meet Class II as a minimum, providing a flow rate of >60-100 litres per minute. The summary references Class II guidelines only.*



## Plumbed-in Emergency Eye Wash Equipment



- Eye washes should deliver a constant flow of at least 6 litres per minute of flushing fluid for a minimum of 15 minutes.
- Water temperature should be between 15C and 37C.
- Water velocity should be low enough to be non-injurious to the user.
- The nozzles must be protected from airborne contaminants. The removal of the nozzle protection should not require an additional step when activating.
- Water from the eye wash should spray at a height between 100mm and 300mm from the centre of the nozzle before arching back down into the eye bath.
- Enough room should be provided around the eye wash to allow both eyelids to be held open.
- Simple valve activation is required. The valve should fully open within 1 second and remain open until intentionally closed.



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