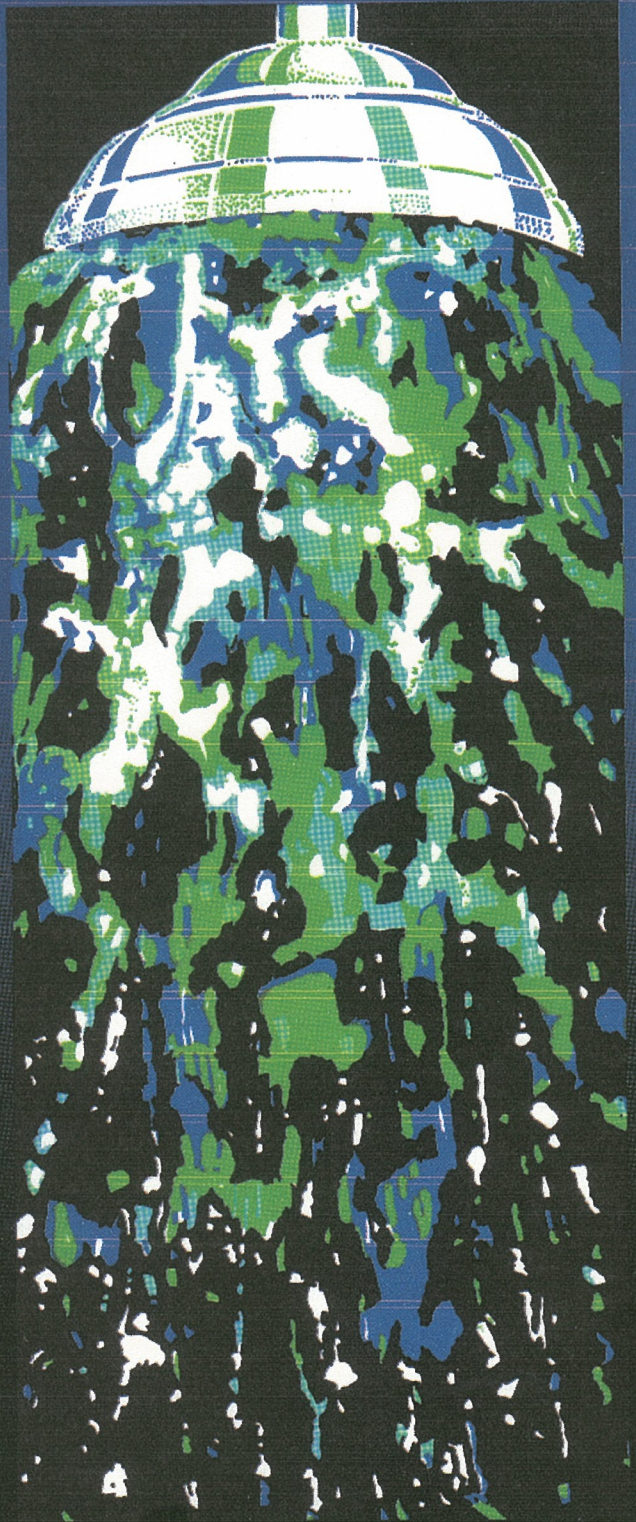




EMERGENCY DELUGE SHOWERS



COMFORTCOOL™

Australia's only Design Award Safety Showers

**Australian
Design Award**



**UNIQUE !
SUPERIOR !
PRACTICAL !
EFFECTUAL !**

THE QUINTESSENTIAL OUTDOOR EMERGENCY SHOWER

The Safetyman COMFORTCOOL™ Emergency Deluge Showers are designed for hot, exposed locations where, by insolation (heating from solar radiation), the water in ordinary showers can be heated well beyond the limits of safety. The maximum safe temperature for shower water is considered to be 35° C and, yet, temperatures as high as 88° C have been recorded in older type showers. Even in many indoor situations, unsafe temperatures can be developed. Not only is scalding a problem but hot water can open the pores of the skin to permit a greater degree of contaminant penetration. In these circumstances, heating shower water can accelerate corrosive injury as well as scalding the affected person. It is here that you need COMFORTCOOL™.

The principle is simple. It works like the old canvas water bag. The supply line is jacketed with a percolating hose which allows water to evaporate from the outer surface. The jacket and the water it contains, insulates the supply water and, at the same time, latent heat is removed, by evaporation, from the whole assembly. It is by these means that the supply water is kept cool and comfortable.

Safetyman, the originators of emergency showers in Australia, have remained leaders in water technology. The COMFORTCOOL™ development is believed to be unique in the world and patents have been granted in Australia, United States and other countries. It demonstrates the Safetyman commitment to research and development, to innovation and to the advancement of safety in the workplace. We, at Safetyman, are pleased and proud that our efforts have been recognized with the conferment of the Australian Design Award.

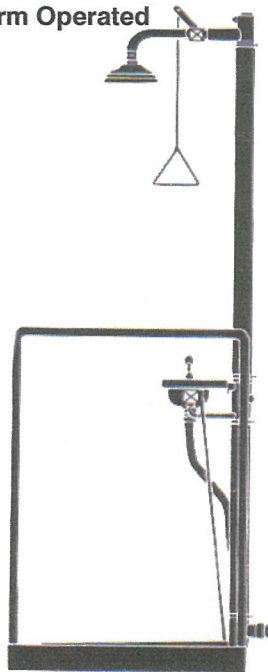
* Australian Patent No. PK2752



COMFORTCOOL™ RANGE

The Safetyman COMFORTCOOL™ range of emergency deluge showers consists of metalware fabricated entirely from stainless steel using stainless steel, stay open, Teflon seated, free flow ball valves, 200mm stainless deluge heads and specially fabricated stainless basins. All pipework and valves in the COMFORTCOOL™ range are 316 stainless. The permeable outer casing is also suitable for the harsh environmental conditions likely to be encountered. Copyright graphic symbols are incorporated into the pull rods and flag handles to make their operation simple and self-evident. All units are provided with 150 x 150 x 6mm stainless mounting flanges.

Handrail Platform Operated



DP 420C

Safetyman all stainless steel platform operated aerated eye wash with overhead deluge operated by pull rod handle. Stainless steel hand rails.

Face Wash



DF 245C

Safetyman free-standing aerated face wash unit operated by push flag handle.

DF 260C

Safetyman free-standing aerated face wash unit operated by both push flag handle and foot lever.



THE COMFORTCOOL™ PRINCIPLE

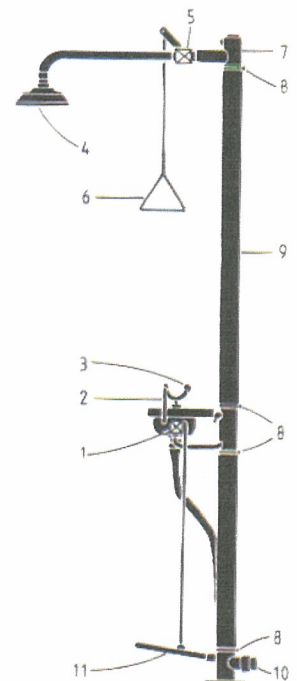
The central pipe or water supply pipe containing the static water is jacketed with a percolating type hose and this jacket is filled with water. A percolating hose is one which is not impervious to water. It allows water to slowly ooze through.

Essentially, the water in the jacket acts as an insulator and limits the heating of the static water held in the water supply pipe. In addition, the jacket allows water to percolate out so that it can be evaporated from the outer surface. This removes latent heat from the assembly thereby providing positive cooling of the water supply. As water evaporates from the outside surface of the jacket, the jacket is constantly refilled, through an adjustable needle valve, from the supply in the water supply pipe.

This is explained in more detail by means of the attached diagrams. (A)

Indicated components are:

1. Ball valve supplying water to face wash.
2. Flag handle to operate ball valve (1).
3. Face or eye wash projectors.
4. Overhead deluge shower head.
5. Ball valve supplying water to overhead deluge.
6. Pull rod to operate ball valve (5).
7. Detailed cross section arrangement (Diagram B).
8. Clip securing jacket in position.
9. Percolating hose jacket.
10. Water inlet.
11. Footpedal.
12. Water supply pipe.
13. Needle valve.
14. Internal jacket support.



Water from the reticulated supply enters through (10). It is held static in the upright portion of the shower. The overhead deluge shower is operated by means of the pull rod (6) and valve (5). Water then flows to the deluge shower head (4). Similarly, the face wash is operated by pushing the flag handle (2) or by stepping on the foot pedal (11). This opens the valve (1) and allows water to flow to the projectors (3). The upright section is jacketed with percolating hose (9) and held in position by circumferential stainless steel clips (8). A portion of the shower which is detailed in diagram B is indicated as (7).

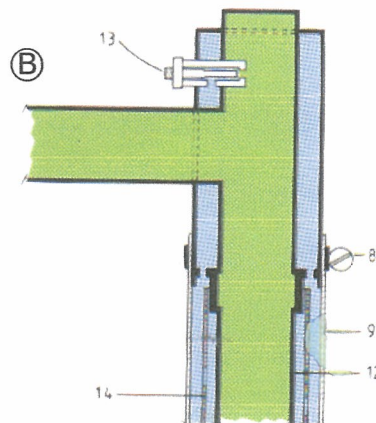
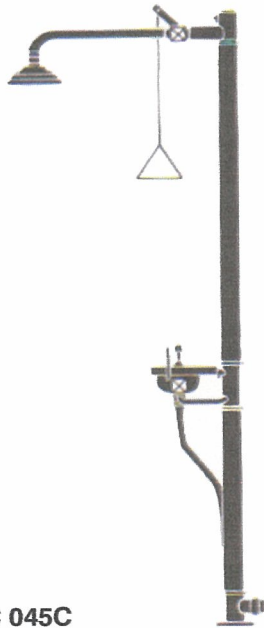


DIAGRAM B: DETAILED CROSS SECTIONAL ARRANGEMENTS

The supply water is held static in the water supply pipe (12) and this is shown in green. A needle valve (3) allows water from the water supply pipe to enter the jacket (9) from which it percolates to the outside surface and evaporates to atmosphere. Also shown is an internal jacket support (14) which merely keeps the jacket in shape when it is subject to water pressure. It is a perforated rigid support which contributes cosmetic value only.

COMFORTCOOL™ RANGE

Eye Wash



DC 045C

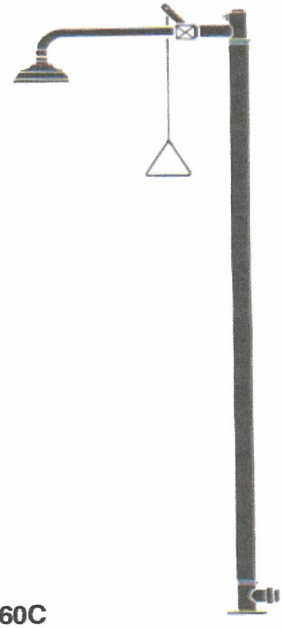
Safetyman free-standing Combination Emergency Deluge System consisting of an overhead deluge, operated by pull rod, and an eye wash unit giving an aerated cleansing flow and operated by a push flag handle.



DC 020C

Safetyman free-standing Combination Emergency Deluge System consisting of an overhead deluge, operated by pull rod, and an eye wash unit giving an aerated cleansing flow and operated both by push flag handle and/or a foot lever.

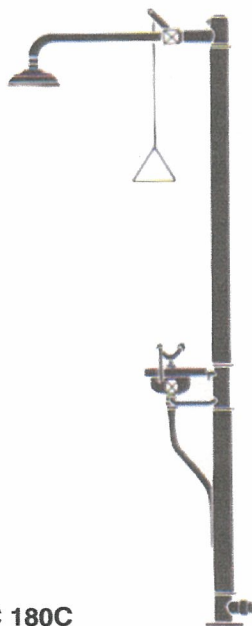
Basic



DC 060C

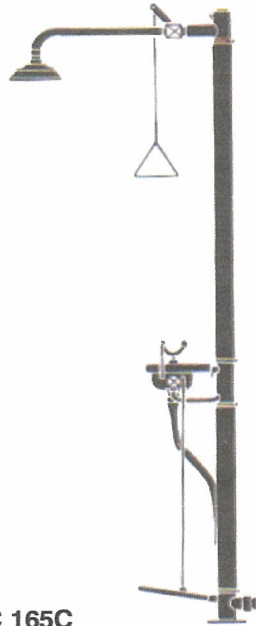
Safetyman free-standing overhead deluge operated by pull rod.

Face Wash



DC 180C

Safetyman free-standing Combination Emergency Deluge System consisting of an overhead deluge, operated by pull rod, and a face wash unit giving an aerated cleansing flow and operated by a push flag handle.



DC 165C

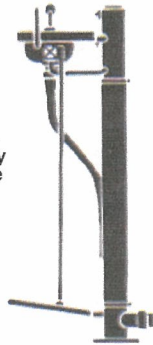
Safetyman free-standing Combination Emergency Deluge System consisting of an overhead deluge, operated by pull rod, and a face wash unit giving an aerated cleansing flow and operated both by push flag handle and/or a foot lever.

Eye Wash



DE 125C

Safetyman free-standing aerated eye wash unit operated by push flag handle.



DE 140C

Safetyman free-standing aerated eye wash unit operated by both push flag handle and/or a foot lever.

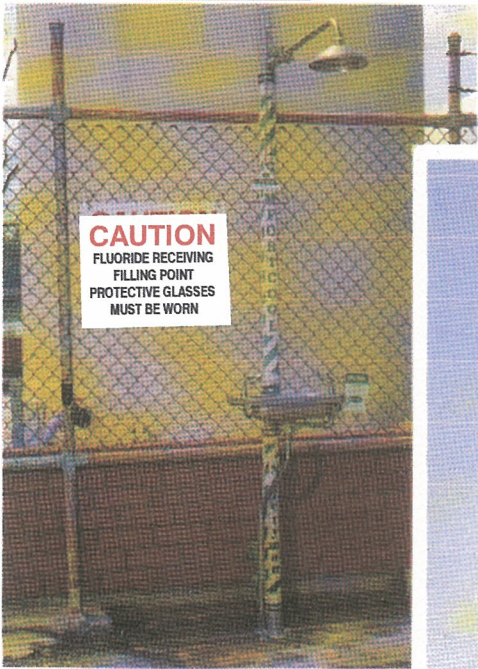
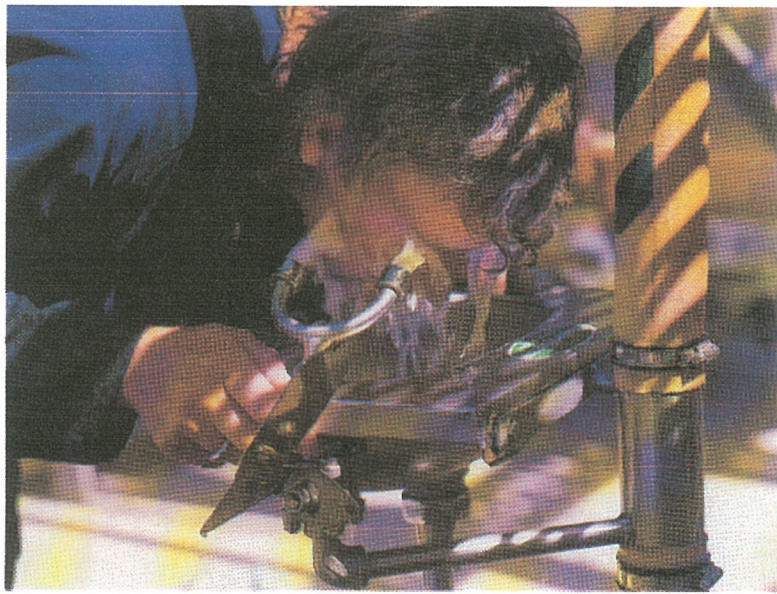
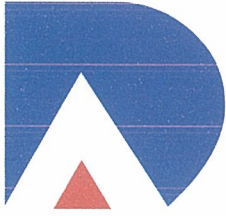
DIMENSIONS

COMBINATION UNITS: Overall height: 2.35m Centreline of rose to centreline of upright: 750mm

PLATFORM UNIT: Overall height: 2.45m Base dimension: 900 x 900mm

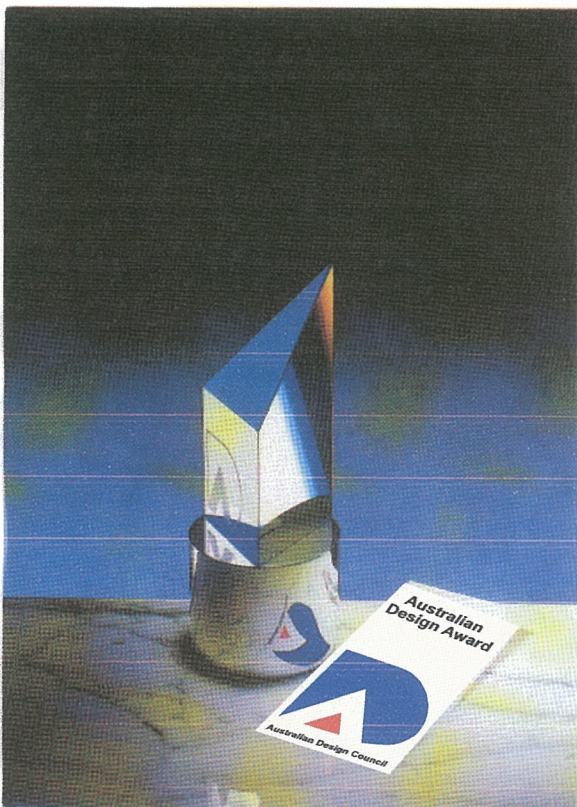
EYE/FACE WASH UNITS: Overall height: 1000mm Overall depth: 320mm

**Australian
Design Award**



COMFORTCOOL™
at the Fluoridation
Plant of the Sydney
Water Board

COMFORTCOOL™
in use at the
Goldquest N.L.
Maxwell Mine,
Inglewood, Vic.



COMFORTCOOL™ at
Cottee's Foods, Liverpool,
NSW.

DESIGN AWARD
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COMFORTCOOL™ INSTALLATION DATA

Your Safetyman deluge shower or eye/face wash unit should be located as near as possible to the point of hazard. In any case, the location must be accessible without having to climb or descend stairs and reachable within ten seconds. A maximum travel distance, in light hazard locations, would be 30m. Exposure to highly corrosive chemicals might demand that the shower or eye/face wash be located no more than 3m distant.

EYE/FACE WASH FOUNTAINS

If eye protection fails or is neglected, and an accident occurs, continuous washing with plain water should be maintained for at least fifteen minutes. Otherwise, serious damage to the eyes may occur. If it is known that the eye contamination is metal or some other non-corrosive solid fragment, the eye wash should not be used. Instead, the victim's eyes should be gently immobilized. Always, medical attention should be immediately sought.

PIPING AND WATER SUPPLY

Eye/face wash fountains should be connected to a potable water supply with piping of no less than 20mm NB. The water inlet provided is 1/2" male BSP. As the units must be regularly tested and, if water spillage is a problem, the basin waste should be connected to the drain. Running pressure, at the fountain, should be no less than 140 kPa nor more than 600 kPa. Water delivery to a face wash fountain should be 20 l/minute at 140 kPa and for an eye wash unit, 15 l/minute at 140 kPa.

So that maintenance work can be undertaken on this safety equipment, thought should be given to the installation of a lockable valve upstream from the equipment. This valve should be padlocked into the open position so that unauthorized tampering can not occur.

DELUGE SHOWERS

Single head emergency deluge showers should be used in all chemical handling areas and areas where clothing fires or impingement burns could occur. Consideration should be given to the possible need for multiple shower installations based upon access time and the possibility of more than one person being affected at the one time.

Single head deluge showers can be provided with a companion eye/face wash unit mounted nearby or, alternatively, a combination unit, with a single water supply connexion, may be employed.

PIPING AND WATER SUPPLY

Single head deluge shower units and combination shower/eye/face wash units are provided with a 1 1/4" male BSP water inlet. Preferably, the supply line from a potable main should be 38mm. However, as a minimum, over short distances, 25mm or 32mm lines may be considered, providing water delivery of 150 l/minute at 140 kPa is allowed. Running pressure should be no less than 140 kPa and no more than 600 kPa.

80 YEARS OF SERVICE

The renowned Safetyman commitment to excellence has been carried into the Comfortcool™ range. Safetyman emergency decontamination systems are designed and constructed, with care and dedication, to perform their lifesaving function, safely and effectively.

Safetyman, in more than 80 years of service to industry, has developed exacting standards which are your assurance of satisfaction, now and in the future. Ours is the performance and the quality, in personnel protection, on which generations of Australian industry have relied.



INCORPORATED IN 1927

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