

**PRATT SHOWER & EYE WASH TEST KIT**

The following test procedures are based on the performance and testing requirements of AS4775-2007.

**INSTRUCTION MANUAL:****1. Shower Flow Rate & Flush Testing:**

- a. Using the shower test sock and test bin, assemble the sock handle to the sock ring and hold the shower sock over the shower head, placing the bottom of the sock in the test bin positioned beneath the shower head.
- b. Alternatively, the shower test sock can be mounted onto the shower test frame by assembling one of the cross bar sections and join all three lengths of tube together. The shower test sock is then placed in position to cover the shower head, with the stand beneath the shower head. The end of the sock is placed inside the test bin positioned next to the frame.
- c. For testing of the flow rate – time the flow test, ensuring the bin is not overfilled. Activate the shower and record the duration of the test. By using the liquid level indicator on the side of the bin, calculate the amount of water within the bin by the recorded time and equate this to a minute duration. Eg. If 30 litres is recorded in 15 seconds then multiply this by four, which equals 120 L/min flow rate. The minimum flow rate as specified under AS4775 is 75.6 L/min. A higher flow rate is acceptable, and may be more affective, provided the velocity is not excessive or injurious to the operator.
- d. For weekly flushing, conduct the same test but without the need to monitor the time. Weekly flushing is to ensure the fluid is clean and the shower is operating properly.
- e. Empty the stored fluid contained in the test bin as required. The waste drainage valve can be connected to a ¾" hose with a snap on connector if required.
- f. The 20L plastic bucket can be used as an alternative to the test bin for weekly flushing when used with the test sock.  
**Note:** The bucket is limited in capacity and the shower can only be operated for a few seconds at a time.

**2. Shower Water Pattern Testing:**

- a. Assemble the shower test frame comprising of the two cross bar sections and the two marked lengths of tube. The cross bars are the same size so either can be top or bottom.
- b. Place the test frame centrally beneath the shower head on the ground. Activate the shower and observe the flushing fluid pattern. If the pattern is equal to or exceeds the ends of the top cross bars the pattern is acceptable. If the flushing fluid pattern is less than the ends of the cross bars it is not compliant. Also the flushing fluid must be evenly dispersed within the pattern.
- c. If the pattern is not compliant further servicing or review of the water supply may be required.
- d. **Note:** This test can only be conducted externally or where fluid on the ground is not a concern. An optional test funnel is available for use with the test bin, for internal testing.

**3. Eye wash Flow Rate & Flushing Testing:**

- a. Where possible connect the 38mm flexible hose to the eye wash waste outlet and position the other end of the hose in the flat 10L plastic tray.
- b. For testing of the flow rate, time the test, ensuring the tray is not overfilled. Activate the eye wash and record the amount of water contained within the monitored time. Calculate this to the equivalent of one minute, as per the shower flow test above. This determines the overall flow rate in litres per minute. The minimum flow rate for an eye wash is 1.5LPM and for an eye/face wash 11.4LPM.
- c. For weekly flushing, conduct the same test but without the need to monitor the time, in order to ensure the fluid is clean and the eye wash nozzles are functioning properly.
- d. Empty the stored water into the test bin as required.

**4. Eye Wash Water Pattern Testing:**

- a. Activate the eye wash station. Place the clear plastic eye wash test gauge on top of the fluid stream with the parallel lines facing from front to back of the eye wash.
- b. The flushing fluid must meet within the two sets of parallel lines.
- c. If the flushing fluid does not meet within the lines, the test gauge can be lowered into the fluid stream by no more than 38mm (1 ½ inches).
- d. Adjust the flow control valves or screws as necessary to ensure correct flushing fluid pattern.
- e. If the flushing fluid does not reach the two sets of parallel lines, further servicing of the eye wash station and or fluid supply may be necessary.

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### 5. Cleaning or Replacing of Eye Wash Aerators:

- a. If the aerators are damaged or blocked this will affect the water flow. The aerator set can be removed and either cleaned or replaced with a new aerator set.
- b. Using the aerator removal key unscrew the retaining cap. Remove the aerators from the cap and either clean or replace with a new set. Ensure the aerators are fitted in the correct sequence otherwise the flow stream will be affected. Refit and tighten with the key taking care not to over tighten.

### 6. Using The Shower and Eye Wash Check List:

- a. Using the laminated check list take photo copies of the list with one list for each station. Record the model number and installation date if known, the details of the location, the date and the name of the tester.
- b. The front page is a check list for weekly testing and the reverse side provides additional tests and checks required for annual testing. Mark each of the items on the check list as required.
- c. Also record the test date and tester's name on the shower test tag which should be tied to the unit. Use as water proof marking pen to record this information.

### 7. PVC Document Holder:

Use the document holder to store the check lists, instructions, eye wash test gauge and other relevant documents.

### 8. Shower Test Bin:

- a. The Shower Test Bin has been fitted with a clear tube liquid level sight gauge and calibrated in 5 litre increments so as to accurately measure the flow rate of the safety shower. Do not exceed the recommended maximum fill level as it will be difficult to manoeuvre the bin.
- b. The test bin is also fitted with a ball valve and snap on fitting in order to drain the bin as required. Ensure the valve is closed when conducting shower flushing tests.
- c. All of the components of the shower test kit can be dismantled and stored in the bin ready for the next testing programme.

