

| | | | | | |
|------------------|---|---|---|---|---|
| Test Code | | | | | |
| Sheet | 1 | 1 | 1 | 1 | 3 |
| Number | | | | | |

TEST & ACCEPTANCE CRITERIA

Issue No: 4
Date of Issue: 2 September 1993

Sheet 1 of 2

TEST CODE SHEET

1. TYPE OF TEST(S)

Closure - Opening and reseating pressure test.

2. BYELAW REQUIREMENT FOR FITTINGS

Byelaw 94

Every pressure relief valve, expansion valve, temperature relief valve, or combined temperature and pressure relief valve connected to any hot water cylinder or storage tank or pipe shall:-

- a) Close automatically after discharging water.
- b) Be watertight when closed.
- c) Be resistant to corrosion.
- d) Be inconstructed and installed so that the discharge of water from the valve (or from any pipe connected to it) is readily visible.
- e) Except in the case of a temperature relief valve or the temperature function of a combined temperature and pressure relief valve, discharge water only when it is subject to water pressure 0.5 bar above the water pressure to which the boiler or other apparatus is, or is likely to be subject.

3. BRITISH STANDARDS OR WATER SPECIFICATION, DEEMED TO SATISFY BYELAW REQUIREMENTS

(See Water Supply Byelaw Guide)

3.1 Fittings with 'kitemarks' which are deemed to satisfy the requirements of byelaws are listed in the Directory.

4. TEST PROCEDURE

4.1 Note: Unless otherwise stated the temperature of the test fluid shall be $20 \pm 10^{\circ}\text{C}$.

Tests applicable to the following fittings:-

PRESSURE RELIEF VALVES, EXPANSION RELIEF VALVES AND COMBINED TEMPERATURE AND PRESSURE RELIEF VALVES

(A) PRESSURE RELIEF VALVES, EXPANSION RELIEF VALVES AND COMBINED TEMPERATURE AND PRESSURE RELIEF VALVES

TEST METHOD

Connect the valve to a water supply that can be controlled in temperature, pressure and flowrate and measure the water temperature and pressure as close as possible to the inlet of valve.

Maintain for at least 5 minutes a flow of water past the valve at a flow rate of not less than 0.02 L/S at a temperature of $20 \pm 10^{\circ}\text{C}$ and at a pressure not exceeding 80% of the set pressure.

Increase the pressure steadily at a rate not exceeding 0.35 bar/min with a flow maintained at not less than 0.02 L/S and the temperature maintained at $20 \pm 10^{\circ}\text{C}$. Record the pressure at the instant the test valve closes drop tight as the reseating pressure.

Repeat the test with the same valve to give a total of three determinations of opening and reseating pressure.

| | | | | | |
|------------------|--|--|--|--|--|
| Test Code | | | | | |
|------------------|--|--|--|--|--|

| | | | | | |
|-------------------------|----------|----------|----------|----------|----------|
| Sheet Number | 1 | 1 | 1 | 1 | 3 |
|-------------------------|----------|----------|----------|----------|----------|

Issue No: 4

Date of Issue : 2 September 1993

Sheet 2 of 2

5. CRITERIA

In each of the three determinations of the opening and reseating, the pressures shall be as follows.

a) Opening pressures:-

- 1) Not more than the set pressure plus 5% or the set pressure plus 0.14 bar, whichever is the greater;
- 2) Not less than the set pressure minus 5% or the set pressure plus 0.14 bar whichever is the lesser pressure.

b) Reseating pressure:-

Not less than the set pressure minus 15% or the set pressure minus 0.14 bar, whichever is the lesser pressure.

