TEST CODE SHEET

---

1. TYPE OF TEST(S)

Endurance.

2. BYELAW REQUIREMENT FOR FITTINGS

Byelaw 52

Every water fitting shall be constructed of materials, the nature, the strength and thickness of which ..... will prevent, so far as is reasonably practicable, damage from - (a) any external load; (b) vibration, stress .....

Byelaw 87

..... every draw-off tap ..... shall - (a) be capable of operating effectively at (I) any water temperature not exceeding 65°C, and (ii) any internal water pressure to which it is likely to be subject; and (b) be made and designed so that it may be easily closed to shut off the flow of water,; and (c) if it incorporates a renewable seal or washer, be made or adapted so that the seal or washer can be readily removed or replaced.....

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

Note Unless stated otherwise, the temperature of the test fluid shall be 20 ± 10°C.

4.1 Tests applicable to the following:-

DRAW-OFF TAPS with metal bodies.
DRAW-OFF TAPS with plastic bodies.

(A) DRAW-OFF TAPS WITH METAL BODIES
DRAW-OFF TAPS WITH PLASTIC BODIES

APPARATUS

Tested on Rig No 25A/25B. The automatic test rig is to provide the following:

a) Rotation of the tap spindle in the opening and closing directions.
b) A constant closing torque of 1.5 ± 0.154Nm throughout the test to the operating member, irrespective of wear on the seating washer or sealing member.
c) Rotation speed of tap spindle 30 ± 5 RPM.
d) Opening the tap 80% - 95% from the closed position.
e) Supply water at a minimum static pressure of 0.2 bar and a temperature less than 30°C and 60 ± 5 -0°C immediately upstream of the tap inlet connection.

(i) TEST METHOD

Fit the tap to be tested onto the automatic test rig in accordance with setting up procedure IGN 1-50-58. The water supply shall be arranged and regulated so that the flow rate through the tap is between 0.25 and 0.5 litres/cycle.

Commence the opening and closing operations as follows:

a) Open the tap 80% and 95% full obturator lift or movement from the closed position.
b) Fully close the tap with an applied closing torque of 1.5 ± 0.15Nm.
c) Allow the tap to remain in the closed position for 4 secs to 6 secs.

This constitutes one cycle. The tap shall be tested for a total of 200,000 cycles whilst being supplied with hot and cold water alternatively for periods of 15 minutes each.

Inspect the tap under test at intervals of 50,000 cycles to check for leaks and/or malfunctioning at these intervals only, compressible gland packing may be adjusted to maintain a watertight seal.

or

Alternative Test on Rig No 2.

(ii) TEST METHOD

Fit the tap to be tested onto the automatic test rig in accordance with Setting-up Procedure IGN 1-50-50.

Subject the tap to 200,000 closures whilst being supplied with cold water at a temperature less than 30°C.

Subject a second similar tap to 200,000 closures whilst being supplied with hot water at a temperature of 60 + 5 -0°C.

5. ACCEPTANCE CRITERIA

Upon completion of testing the taps shall satisfy the watertightness requirements of Test Code Sheet 1111.1.