| Test Code |   |   |   |   |   |
|-----------|---|---|---|---|---|
| Sheet     | 1 | 1 | 1 | 1 | 9 |
| Number    |   |   |   |   |   |

WRAS TEST & ACCEPTANCE CRITERIA

Issue No: 5

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Sheet 1 of 2

#### TEST CODE SHEET

\_\_\_\_\_

#### 1. $\underline{TYPE}$ OF $\underline{TEST}(S)$

Pressure tightness under a low reverse pressure differential.

#### 2. WATER REGULATIONS REQUIREMENTS FOR FITTINGS

Schedule 2

15-(1) .... every water system shall contain an adequate device or devices for preventing backflow of fluid from any appliance, fitting or process from occurring.

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

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

#### 4. <u>TEST PROCEDURE</u>

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

4.1 Tests applicable to the following:-

#### CHECK VALVES

DN6 to DN250.

Devices for the prevention of contamination by backflow.

## (A) <u>CHECK VALVES</u> (Derived from prEN 164167 W1 108. Clause 7.6)

DN6 to DN250.

#### **TEST METHOD**

**APPARATUS** The following apparatus is required.

A supply of water to achieve the test flow rates.

Flow meter.

Sight glass.

The example of the test equipment shown in Figure 03 is for guidance only.

Laboratory equipment must be designed to ensure that the valve can be tested to verify the requirement.

<u>NOTE</u>: For double check valves, each single check valve shall be tested separately. The check valve not being tested shall be either removed or the obturator held in the open position.

#### **PROCEDURE** The procedure shall be as follows:-

- (1) Mount the device in the test system in its normal working position. (Reference Figure 03).
- (2) Close all the valves.
- (3) Open valves '3', '4', '6', '7' and '8'.
- Open valve '1' and fill pipe '12' and the branch circuits '10' and '13'. Purge the air by means of valve '7' and pipes '14' and '11'. Close valve '7' when the air has been removed from the circuit.

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- (5) Slowly close valve '1' so as to keep a meniscus at the top of the pipe '11'.
- (6) Close valve '4'.
- (7) In pipe '14', mark the height of the water (a), which should be at the same level as in the pipe '11'.
- Open valve '2' slightly and lower the water level in the pipe '14' to level (b),  $30 \pm 2$  mm below the level (a). During this operation, close valve '2' very slowly.
- (9) Allow check valve to settle, then refill meniscus by means of valve '15'.
- (10) Observe the meniscus for 5 minutes.

### 5. <u>ACCEPTANCE CRITERIA</u>

No leak shall be observed during the 5 minutes. This is verified by the maintenance of a stable convex meniscus.

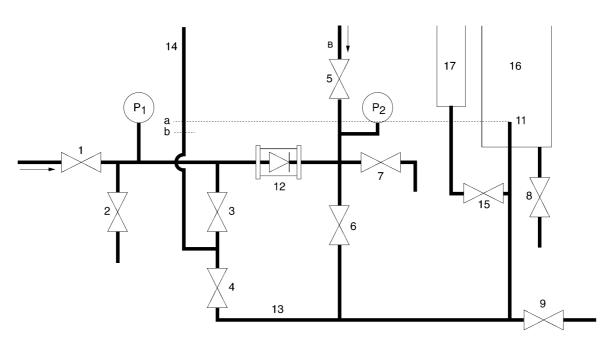


FIG 03