WRc Evaluation & Testing Centre Ltd

WBS TEST & ACCEPTANCE CRITERIA PD.

Test Code13145Sheet13145Number

Issue No: 4 Date of issue: October 1998

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TEST CODE SHEET

1. <u>TYPE OF TEST(S)</u>

Compression - front thrust test.

2. <u>BYELAW REQUIREMENT FOR FITTINGS</u>

Byelaw 52

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

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. <u>TEST PROCEDURE</u>

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

4.1 Tests applicable to the following fittings:-

CISTERNS, WC FLUSHING

- rubber compound and plastics materials, manual, high and low level (including close coupled)

- (A) WC FLUSHING CISTERNS, 7.51 max.flush capacity. (Derived from BS 7357:1990, Section 2, Clause 5, Appendix C)
- (B) <u>WC FLUSHING CISTERNS</u>, nominally 91 flush, or dual flush 4.51 or 91. (Derived from BS 1125:1987, Section 2, Clause 5, Appendix B)

TEST METHOD

Front thrust test.

Fasten the cistern, complete with its fitments and cover, by its normal fixing devices to a solid background. Fill the cistern with water at ambient temperature to the marked water line. Apply horizontally a front thrust of $110N (\pm 10N)$ through a 150mm ($\pm 2mm$) diameter disk as high up as possible to the front of the cistern on its centre line (See Figure 2). Face the disk with a soft material, such that the face will conform to the contour of the cistern shell. Ensure that the cistern cover is in position during the test. Hold the force for a time of 5 mins ± 10 secs.

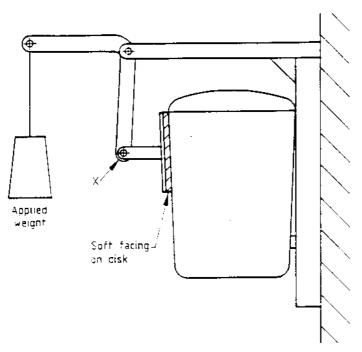
5. <u>ACCEPTANCE CRITERIA</u>

The complete cistern shall not distort to such an extent that any part becomes detached or inoperable.

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NOTE. Applied weight to be adjusted to give a horizontal thrust of 110 N. This can be determined initially by a spring balance at 'X'.

Figure 2. Front thrust test apparatus