



Water Regulations Approval Scheme Limited (WRAS) hereby recognises:

*NSF Wales Limited
30 Fern Close, Pen-y-Fan Industrial Estate
Oakdale, Newport
NP11 3EH*

As an Affiliated Testing Laboratory.

Reports prepared by the laboratory in accordance with the policies and procedures agreed to by the laboratory in the Laboratory Agreement, for the tests detailed in the attached Scope of Recognition, will be accepted by WRAS as evidence to demonstrate compliance with the requirements of the Water Supply (Water Fittings) Regulations*.

This recognition is valid for four years from the date of issue, unless otherwise suspended or withdrawn.

Date of Recognition: 05/08/2021

Authorised by:

Ian Hughes
WRAS Approvals Manager



Testing to be performed at the above address only unless permitted by the Scope of Recognition. Any alteration or falsification of this certification may constitute grounds for delisting of the Laboratory. Reproduction of this certification, in whole or in part, for advertising purposes without the expressed written permission of WRAS is strictly prohibited.

*Water Supply (Water Fittings) Regulations 1999 (England & Wales), the Water Supply (Water Fittings) (Scotland) Byelaws 2014 and the Water Supply (Water Fittings) Regulations (Northern Ireland) 2009

SCOPE OF WRAS LABORATORY RECOGNITION

Laboratory Reference: NSF2108

Issue no: 1

Contact details: wras-approvals@nsf.org

Issue Date: 01/09/2023

Detail of Recognition:

The Laboratory has satisfactorily demonstrated its compliance to ISO/IEC 17025:2017 as referenced in clause 6.2 of ISO/IEC 17065:2012 and has been verified as capable of performing tests in the following categories:

Materials/products Tested	Standard Reference / specification
<p>Water Fittings in contact with wholesome water for the WRAS Approvals Product Scheme</p> <p>To demonstrate compliance with the requirements of the Water Supply (Water Fittings) Regulations 1999, the Water Supply (water fittings) (Scotland) Byelaws 2014, and the Water Supply (Water Fittings) Regulation (Northern Ireland) 2009</p> <p>*Recognition includes performance of testing at client locations.</p>	<p>Test Code Sheets:</p> <p>1111.1 Closure *</p> <p>1111.2 Closure</p> <p>1111.3 Closure - Opening and reseating pressure test</p> <p>1111.4 Closure - Temperature Conditions *1</p> <p>1111.5 Leaktightness test</p> <p>1111.6 Closure at set outlet pressure</p> <p>1111.7 Closure - Diverter</p> <p>1111.8 Closure under high downstream pressure</p> <p>1111.9 Pressure tightness under a low reverse pressure differential</p> <p>1111.10 Pressure tightness under a high reverse pressure</p> <p>1111.11 Closure under low downstream pressure</p> <p>1112.1 Porosity *</p> <p>1112.2 Porosity</p> <p>1112.6 Porosity</p> <p>1112.7 Porosity</p> <p>1112.8 Porosity</p> <p>1112.9 Body strength</p> <p>1112.14 Porosity</p> <p>1112.15 Body strength</p> <p>1113.1 Joint effectiveness *</p> <p>1113.2 Joint effectiveness</p> <p>1113.5 Joint effectiveness</p> <p>1211.1 Endurance</p> <p>1211.2 Endurance</p> <p>1211.3 Endurance</p> <p>1211.4 Endurance</p> <p>1211.5 Endurance test</p> <p>1211.6 Endurance</p> <p>1211.7 Endurance</p> <p>1211.12 Endurance</p> <p>1211.14 Endurance</p> <p>1211.15 Flushing device physical endurance and leakage</p> <p>1211.16 Endurance</p>

1211.17	Performance test of air bubble unvented hot water storage systems
1211.21	Endurance - remote/non-touch method of actuating the water supply
1212.1	Accelerated ageing
1212.3	Accelerated ageing
1212.4	Accelerated ageing
1212.6	Accelerated ageing *2 & *3
1212.7	Accelerated ageing
1212.10	Accelerated ageing
1311.1	Deflection
1311.2	Deflection
1311.3	Deflection prevention (inspection only)
1311.5	Deflection
1312.1	Deformation
1312.3	Bending strength
1312.6	Deformation
1312.7	Impact
1312.8	Deformation
1312.9	Deformation
1312.10	Impact
1312.11	Bending strength
1312.12	Bending strength
1313.2	Impact
1313.4	Verification of valve not jamming
1313.7	High velocity test
1314.1	Tension - (Resistance to pull-out of assembled joints - single pull)
1314.7	Tension - (Resistance to pull-out of assembled joints - single pull)
1314.8	Tension - (Resistance to pull-out of assembled joints - multiple pull)
1314.9	Tension - (Resistance to pull-out of assembled joints – single pull)
1314.10	Tension - (Resistance to pull-out of assembled joints - single pull)
1314.11	Tension - (Resistance to pull-out of assembled joints - single pull)
1314.12	Tension - (Resistance to pull-out of assembled joints - single pull)
1314.13	Tension - (Resistance to pull-out of assembled joints - single pull)
1314.14	Tension - (Resistance to pull-out of assembled joints - single pull)
1314.15	Tension - (Resistance to pull-out of assembled joints - single pull)
1315.1	Torque - operating mechanism
1315.2	Torque - Connection and Disconnection
1315.4	Torque - backnuts
1315.6	Torque - backnuts
1411.3	Flushing device: chemical endurance
1412.1	Corrosion protection *
1511.2	Flush Rate
1511.6	Flow rate / splashing
1512.1	Consumption
1512.2	Consumption
1512.3	Consumption

1512.5	Consumption
1512.8	Consumption
1512.10	Paper discharge for reduced flush volume
1512.11	Solids discharge and after flush volume for maximum flush
1512.12	Wash of bowl
1611.1	Prevention of contamination - primary to secondary circuits
1611.2	Prevention of waste from frost damage
1611.3	Prevention of waste and contamination - materials and construction
1611.5	Means for connection and disconnection
1611.8	Visual inspection - seal to be readily renewable
1611.9	Visual inspection - fixing of washer plate
1611.10	Visual inspection - means of operation
1611.11	Visual inspection - means of renewing seat and washer, or seal and washer, if so required
1611.14	Visual inspection - manually operated easing gear
1611.15	Visual inspection, method of operation of dual flush cisterns
1611.16	Liquid contaminant, dye retention
1711.2	Operating efficiency
2111.1	Effect upon water quality *4
2111.2	Effect upon water quality
2111.3	Effect upon water quality
2114.2	Opacity
2211.1	Contamination Test
2211.2	Contamination - vacuum when submerged
2211.3	Contamination - mixing of primary and secondary
2211.11	Vacuum test tightness of the upstream check valve
2212.1	Contamination - vacuum test under fault conditions
2212.3	Vacuum / Dimensional
2212.4	Contamination - antisiphonage test
2212.6	Vacuum test *5
2212.11	Vacuum test tightness of the upstream check valve
2212.14	Vacuum test
2212.15	Vacuum test
2212.20	Backflow prevention. Regulator's specification for WC suites
2213.1	Dimensional
2213.3	Contamination - dimension of air vent - gas/water air space
2213.5	Visual Inspection - compatibility of cartridge and housing dimensions, sealing etc
2213.7	Visual inspection
2213.10	Visual inspection - check valve operation
2213.11	Visual inspection - check valve operation
2213.12	Dimensional
2213.13	Pressure differential at valve closure
2213.14	Dimensional
2213.15	Dimensional
2213.16	Dimensional
2213.17	Dimensional
2213.18	Dimensional

	2213.19 Dimensional 3212.1 WC flush volume and water seal depth 5011.1 Measurement of linear dimensions * 5011.5 Measurement of dimension 5011.6 Water Seal depth 5011.7 Warning pipe and overflow provision 5021.3 Measurement of dimension 5031.1 Dimension - capacity 5031.2 Dimension - capacity 6001.1 Marking for identification * BS7686 Opacity BS1212: Part 4 1991 BS1212: Part 4 2016 BS997: 2012 BS997: 2018
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