BUILDCERT DISTRIBUTION TEMPERING CONTROL SCHEME (DTC Scheme)

1. Thank you for your recent enquiry, the information below explains the Scheme's procedures and requirements. The application form DTC2 must be completed and returned to the Schemes administrator to progress the approval sarah.johnson@buildcert.com

2. The BuildCert Distribution Tempering Control Scheme provides 3rd party certification of tempering valves against: -

   BS EN 15092: Building Valves – Inline hot water supply tempering valves – tests and requirements, excluding acoustic requirements. The DTC Scheme additionally verifies that tempering valves can operate at a higher mixed water outlet temperature of between 55 and 60 °C so as to comply with the requirements of the UK Water Supply (Water Fitting) Regulations 1999 G18.2 and with Part G of the Building Regulations clause 3.63. Factory set valves must be set at between ≥ 55 and 60 °C.

   The Schemes requirements are as follows:

   - Initially and after every 5 years the tempering valve shall meet the performance requirements detailed above.
   - Initially and annually thereafter the manufacturer/factor has an ISO 9001 quality system in place. Where this is not available BuildCert shall conduct its own quality audit.
   - The tempering valve satisfies the BuildCert performance audit requirements (audit testing once within the 5 years approval period)

3. GENERAL INFORMATION

3.1 An applicant can be either a manufacturer or a factoring agent. Whichever party pays the test fee of a successful application shall own the Licence for the valve. Where the same product is sold by a number of factoring agents each individual agent shall possess a Licence carrying his own unique product reference.

3.2 The manufacturer and / or factor, must have in place an ISO 9001 BuildCert recognised quality system. Where this is not available BuildCert shall conduct its own quality audit.

3.3 An Installation and Maintenance (I&M) documentation must be supplied with the valve(s) and shall include specific information upon the operating characteristics of the valve and operational procedures. For full details upon the information that must be included within the I&M document see the BuildCert website www.buildcert.com or contact the Scheme Manager.

3.4 Valves identification must be permanent and legible and include:

- The manufacturers name, trade mark or identification mark
- Name or model number of the valve
- The set outlet temperature range
- Inlets marked to identify the hot and cold inlets and the mixed water outlet

3.5 The Technical Assessment Panel (TAP) comprises independent experts who if necessary confirm the test requirements and review the test reports and any additional requirements of the Scheme in accordance with BuildCert policies.

3.6 The laboratory undertaking the testing must be registered with BuildCert. Laboratories shall comply with the BuildCert guidance document BDG01 and be ISO 17025 accredited by UKAs (or equivalent) with a scope of accreditation that includes EN 15092. BuildCert reserve the right to require inter-laboratory trials and to carry out site inspections. The list of approved test laboratories can be found in Annex A.

3.7 Conditions of use

	Limits of use	Recommended limits for operation
Dynamic pressure	0.2 bar min	1 bar ≤ P ≤ 5 bar
Static pressure	10 bar max	
Hot water inlet temp	T≤ 90ºC	60 ºC ≤ T 80≤ ºC
Cold water inlet temp	T≤ 25 ºC	T≤ 25 ºC
Distribution (outlet) temp	45 ºC ≤ T≤ 65 ºC	UK 55 ºC ≤ T≤ 60 ºC

NOTES: Valves will not be approved for any conditions of use for which testing has not been undertaken; therefore licensed valves operating outside these conditions cannot be guaranteed by the Scheme to operate as meeting the requirements of EN 15092.

Tempering valves are intended to be used adjacent to hot water storage heaters to provide tempered water up to the terminal fittings and are not intended to control the water temperature at the point of use. **A tempering valve is not a safety device**. Safety devices are thermostatic mixing valves being TMV2 or TMV3 approved.

Type 1 valves are non-adjustable valves having a pre-set temperature of 55 to 60ºC.
Type 2 valves are adjustable with a pre-set temperature set by the manufacturer.

4. SUBMISSION OF APPLICATION

4.1 An applicant wishing to submit a Distribution tempering valve for BuildCert approval must complete the application Form DTC2 and return this to the Scheme Administrator at:
BuildCert Ltd, 30 Fern Close, Pen-y-Fan Industrial Estate, Oakdale, Gwent, NP11 3EH, UK,
Alternatively email sarah.johnson@buildcert.com or ptaylor@nsf.org

4.2 A copy of the applicant's ISO 9001 quality assurance certificate, with accompanying scope of certification must be supplied. Where this is not available then BuildCert shall conduct its own quality audit.

4.3 Only production valves will be considered for certification by the scheme.

5. TEST REQUIREMENTS

5.1 Valves will be tested in accordance with the documents BS EN 15092: Building Valves – Inline hot water supply tempering valves – tests and requirements. Excluding the acoustic requirements unless otherwise requested by the client. Additional testing will be undertaken on type 2 valves to ensure that the valve can satisfy the UK regulatory requirements when tested at between 55 and 60 °C, the following tests will be applied: -

- Clause 7.3 Verification of the set mixed water outlet temperature
- Clause 7.8 Test for temperature stability with changing inlet pressure

5.2 For sample selection, valves undergoing testing of a size up to and including DN25: Three valves must be selected from a minimum sample batch size of 30 valves. Valves undergoing testing of a size greater than DN25: valve selection will be agreed between BuildCert and the applicant.
A representative of the test laboratory (as agreed by BuildCert), a BuildCert auditor, a TAP committee member, or an independent third party approved by the TAP shall select the valves for test. Test samples selected shall be kept under the possession and control of the person making the selection and packaged and sealed in their presence. A letter documenting the person(s) making the selection and verifying the chain of custody of the samples must be forwarded to BuildCert for inclusion within the test file.

Note: It is not permissible to transport valves by air without adequate protection against damage e.g. by freezing or depressurisation, as the performance of the valve may be affected. One of the test samples will be retained by the Scheme for comparison purposes.

5.3 Valves will be required to undergo/comply with the following:

a) Mechanical testing. Tests will not commence until the test laboratory has received the testing requirements designated by BuildCert and the tests for the effects on water quality have been verified as being acceptable unless instructed otherwise by the client). Applicants are notified that it may be necessary to destroy or mutilate a fitting for the purpose of examination or test.

b) Have a current WRAS approval or the non-metallic materials in contact with water are verified by BuildCert as complying with BS 6920 and the Guidance on the Requirements for Approval of Non-Metallic Materials in Fittings, Appendix A.

Applicants are warned that it may be necessary to destroy or mutilate a fitting for the purpose of examination or test.

5.4 Communication with the designated test laboratory and the payment of the laboratory's testing fee are the responsibility of the applicant, who shall arrange for the Scheme to be provided with a copy of the test report.

5.5 Applicants agree by submitting an Application Form (DTC 2) to abide by the terms and conditions of the Scheme and the Schemes auditing procedures a copy of the procedure is available on the BuildCert website (www.buildcert.com).

5.6 Any applicant who submits a valve to the Scheme, which is advertised as having DTC Scheme approval without possessing a current certificate, must understand that a new unique product identity will be required before certification will be granted; similarly DTC Scheme approval cannot be claimed until the certificate has been issued.

6. SCHEMES PROCEDURES

6.1 **DTC approval**, each application for a product type must be made on a separate DTC2 form.

6.2 When a completed Application Form has been received the Scheme Administrator/Manager will review the information supplied and agree with the TAP (if appropriate) the testing schedule, verify the applicants Quality System (ISO 9001) and arrange a BuildCert audit if required. The applicant will then be issued with a letter detailing the BuildCert sample number, testing to be undertaken and an administration invoice.7

6.3 Applications will be cancelled which have been on the Scheme's files for more than twelve months.

6.4 It is a pre-requisite of the BuildCert/DTC Scheme that the valve(s) must be either WRAS approved or the non-metallic materials in contact with water must be verified by BuildCert as being compliant with BS 6920 and Water Industry Guidance before DTC approval can be granted. Factored valves may rely upon the primary products WRAS approval if sufficient information is provided to BuildCert.

6.5 When the performance tests have been completed the test laboratory will forward the test results to BuildCert along with one test sample (B), which is to be retained by the Scheme. The TAP will then decide as to whether the product satisfies the requirements of the product standard (BS EN 15092) and the additional requirements of the Scheme. The Scheme manager will notify the applicant of the Scheme's decision. If successful, an approval letter and certificate will be issued along with the Scheme's invoice for approval; an additional invoice for professional fees will be attached for additional work above that normally expected for an application, or as and when necessary.

6.6 If the fitting satisfies all the Scheme's requirements then a Licence for DTC approval will be granted and a description of the product will be entered on the BuildCert/DTC Schemes web site.

6.7 Approval will relate solely to the valve(s) referred to in the BuildCert approval letter. Statements by applicants in sales literature must refer only to the specifically approved product (s) as designated by the manufacturer's unique model reference.

6.8 Annually BuildCert will verify that the licence holder continues to have a recognised quality system in place, or BuildCert will conduct a quality audit.

6.9 Approved products require audit testing once within the 5-year approval period. The license holder will be notified when audit testing is required, an Audit Application Form, must be completed and returned to BuildCert who will specify the valves and tests needed for auditing. The license holder must then liaise with the test laboratory to undertake the audit testing.

6.10 Approval may be withdrawn for the following reasons: -
- a) Expiration of licence.
- b) Failure of audit.
- c) Failure to maintain ISO 9001 or an approved quality system accreditation.
- d) Reported product failure in service
- e) License holder's request
- f) Accumulation of penalty points for misuse issue

6.11 In the event that certification is suspended or withdrawn, the licence holder shall discontinue reference to the valve(s) being certified in promotional and advertising literature.

7. MODIFICATION TO APPROVED PRODUCTS

7.1 A modification to a listed valve(s) must be made using Application form DTC2. The exact details of the modification should be stated and highlighted in a general assembly drawing.

7.2 The TAP will then determine the test requirements for the modified valve(s).

7.3 Test Reports from the BuildCert approved test laboratory will then be required as well as a sample valve, which is to be retained by the Scheme. The TAP will then agree if the modification can be accepted as having no detrimental effect upon the valves performance.

8. FEES

8.1 The following fees apply:-
- An administration fee invoiced upon receipt of an application
- A certification fee invoiced upon final approval
- A initial listing fee
- Fees for additional work above that expected for a TMV application
- An annual BuildCert TMV membership fee
- An annual listing fee per product
- Amendments to approvals and / or certification issues chargeable at the Scheme's agreed professional rate.

9. APPEALS

9.1 Complaints and appeals regarding BuildCert should be addressed to the BuildCert Director. These are reviewed with the TAP committee as necessary.

9.2 In the event of there being irreconcilable differences between and applicant and the TAP regarding appeals, these will be forwarded to the Chairman of the BuildCert Advisory Committee for review.

Annex A
Approved test laboratories

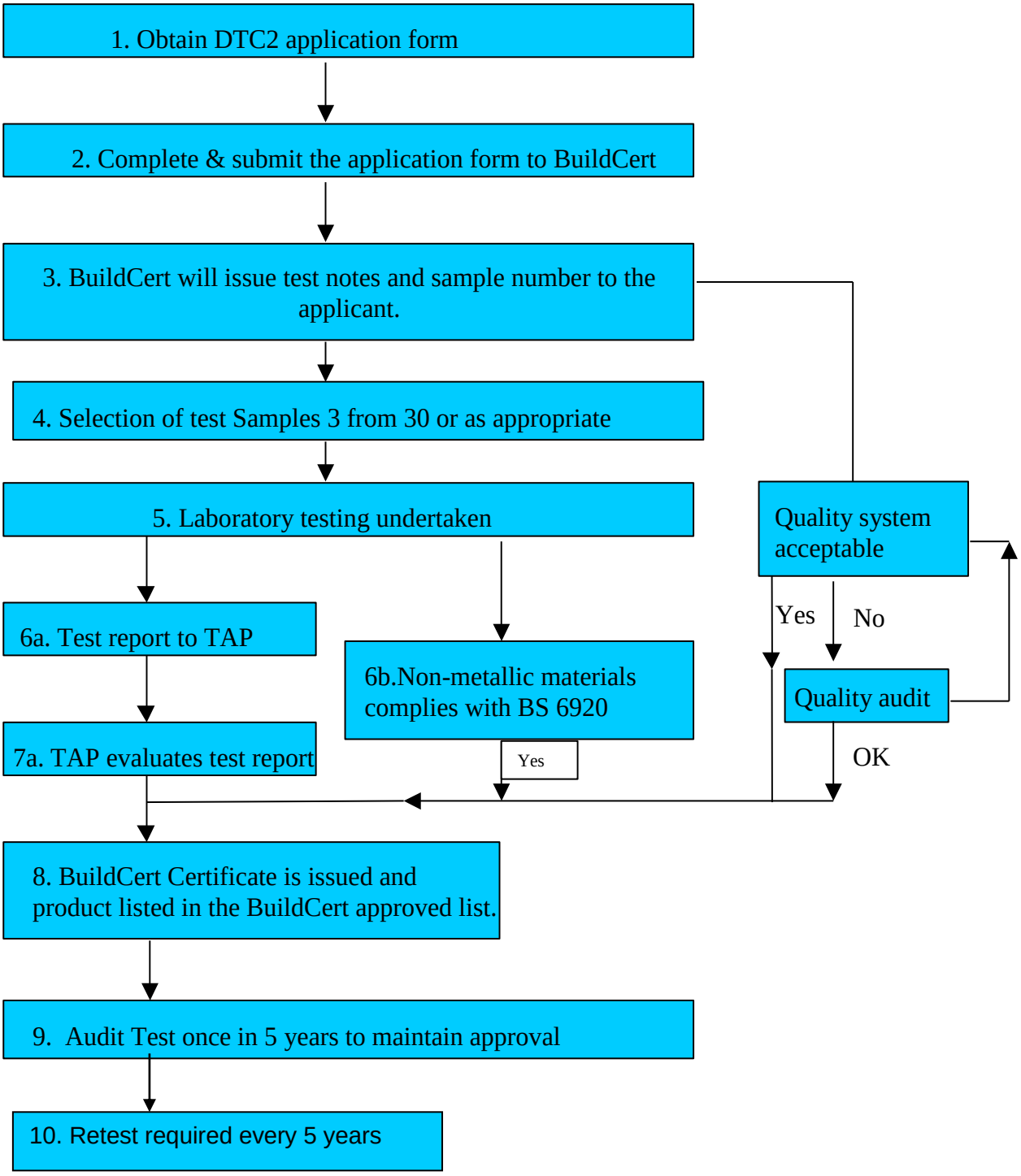
BS 6920 test laboratories

NSF Wales Ltd Unit 30, Fern Close Pen-y-Fan Industrial Estate Oakdale, Gwent, NP11 3EH Tel: 01495 236260 Fax: 01495 249234 Email: mark.norris@wrcnsf.com	LGC (Teddington) Ltd Queens Road Teddington, Middlesex, TW11 0LY Tel: 020 8943 7000 Fax: 020 8943 2767 Email: steve.kippin@lgc.co.uk
The Water Quality Centre Spencer House Manor Farm Road, Reading RG2 0JN Tel: 0118 9236214 or 6219 Fax: 0118 9236373 Email: WQC.materials.testing@materialstesting.co.uk	Intertek Testing & Certification Ltd Intertek House Cleeve road, Leatherhead, Surrey KT22 75B Tel 01372 370900 Fax 01372 370999 Email gill.middleton@intertek.com

Mechanical test laboratories

NSF Wales Ltd Unit 30, Fern Close Pen-y-Fan Industrial Estate Oakdale, Gwent, NP11 3EH Tel: 01495 236260 Fax: 01495 249234 Email: rwilliams@nsf.org	

DTC Scheme Approval



The DTC Scheme is an independent third party certification scheme administered by BuildCert Ltd, under the remit of the BuildCert Certification Scheme.