



## BuildCert Certification Scheme

### TMV2 Scheme Auditing Procedures

Issue:

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#### **Introduction**

##### **Quality systems**

BuildCert is required by its UKAS accreditation BS EN 45011 to annually verify that companies having BuildCert approval maintain their quality systems. This may be a quality system certified by an organisation affiliated to UKAS as meeting the requirements of ISO 9001 or a quality system audited by a BuildCert auditor. In addition to this verification BuildCert is asking license holders to complete a quality questionnaire which asks a number of simple questions about their quality system and their approved product.

BuildCert will annually contact all license holders and ask them to provide details of their quality systems and to answer the 4 questions detailed in the quality declaration questionnaire. This request for information will be sent at the beginning of July and BuildCert will require a response within 3 months, the annual membership fee invoice will also be included with the request for information.

##### **Performance Audits**

BuildCert requires all TMV2 and TMV3 thermostatic valves to be performance audit tested within the valves 5 year approval period, TMV2 approved valves are audited once in 5 years. Audit testing ensures that approved valves continue to meet the Schemes performance requirements throughout their 5 year approval period.

To ensure that BuildCert fulfils its obligations to its members BuildCert will notify the license holder when their approved valve(s) are required to undergo performance audit testing, and that BuildCert will then require the results of the audit testing to be presented within the next 12 months. This audit notification will be undertaken at the same time as request of verification of the licence holders quality system.

To ensure that the correct valves are to be audit tested BuildCert will require an audit application form to be completed and returned. BuildCert will then detail the exact valves to be tested, the sample selection process and the tests to be undertaken. The licence holder/applicant can then forward this information to the test house. The test house will then undertake the performance audit testing by liaison between the licence holder and BuildCert. The completed audit test report and valve will then be presented to the Technical Assessment Panel (TAP) for verification that the approved valve continues to comply with the requirements of the TMV2 or TMV3 Scheme.

##### **Steps for audit testing**

1. Licence holder to complete and return the audit application form along with the quality questionnaire and ISO 9001 certificate (if appropriate).

2. BuildCert to issue a BuildCert sample number
3. BuildCert to detail valves to be tested
4. BuildCert to detail audit tests to be undertaken
5. Licence holder to forward test information onto test house along with sample valves
6. Verification of sample selection to be forwarded to BuildCert
7. Testing undertaken
8. Test report and test valve to be sent to BuildCert within the 12 month time period

## **1. Scope of audit tests**

All Primary and factored products shall be audited once or as appropriate within the 'Licence' period (see notes below).

- a) 'Master' valve receives the primary certificate.
- b) Primary certificate is issued for 5 years.
- c) All other valves based upon the 'Master' valve are limited to the same licence period as the 'Master'.
- d) All valves master or otherwise undergo ancillary audits – once. in 5 years (dependant on remaining master valve license life).
- e) Installation & Maintenance manual assessed for compliance.
- f) Factored valves are to be audited to ensure: -
  - i. Conformity with master valve.
  - ii. Complies with the requirements of BS EN 1111 and or 1287 criteria.

BuildCert will notify the license holder when their approved valve(s) are required to undergo performance audit testing and test results must be presented to BuildCert within 12 months of this notification. Audit notification will be undertaken at the same time as the request of verification of the licence holders quality system.

To ensure that the correct valves are to be audit tested BuildCert will require an audit application form to be completed and returned. BuildCert will then detail the exact valves to be tested, the sample selection process and the tests to be undertaken. The licence holder/applicant can then forward this information to the test house. The test house will then undertake the performance audit testing by liaison between the licence holder and BuildCert. The completed audit test report and valve will then be presented to the Technical Assessment Panel (TAP) for verification that the approved valve continues to comply with the requirements of the TMV2 Scheme.

## **Steps for audit testing**

1. Licence holder to complete and return the audit application form.
2. BuildCert to issue a sample number
3. BuildCert to detail valves to be tested
4. BuildCert to detail audit tests to be undertaken
5. Licence holder to forward test information onto test house along with sample valves

6. Verification of sample selection to be forwarded to BuildCert
7. Testing undertaken
8. Test report and test valve to be sent to BuildCert within the 12 month time period

## **2. Selection of TMV's for auditing**

### **Valves undergoing audit testing within their first licence period: -**

Three valves shall be selected from a minimum sample batch size of 30 samples from the manufacturer's or the factors in-house off the shelf stock.

### **Valves undergoing audit testing in subsequent licence periods: -**

One valve shall be selected from a minimum batch of 10 samples; further sample selection if required must be undertaken in the same way.

A representative of the test laboratory, 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 and forwarded to the test house. 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.

If an audit failures occurs then the audit process detailed in clause 4 will require 2 further valves to be selected prior to undertaking the failure audit process, such instances are marked \*.

## **3. Audit tests**

The following tests will constitute the audit of an approved TMV: -

- a) No unauthorised design changes
- b) Performance tests from section 10 of BS EN 1111 1287 will be undertaken on one valve only (Stage 1), chosen at random from the three selected valves: -
  - Clause 10.7 Test for safety with cold water isolation
  - Clause 10.8 Test for temperature stability with changing inlet pressure
  - Clause 10.9 Test for temperature stability with changing inlet temperature
- c) Marking

The cost for the audit testing must be negotiated with the approved test laboratories

The results of all audit tests along with the audited valve will be submitted to the TAP Committee for verification.

The Scheme shall retain all audited valves. Where the audit on the first valve is successful, the remaining two valves (if appropriate) will be released by the Test House for collection by the Licensee.

## **4. Failure of an audit test**

If a valve fails any audit performance test.

- a) The test house will inform the licensee immediately, who will have the option to request one retest at the license holder's expense, within 5 working days of receiving the failure notification.

Or

The manufacture can authorise the test house to undertake limited endurance testing (48 hours) on the failed valve only, to awaken the thermostatic properties of the thermostatic valve, as specified in D 08 clause 6.3.

- b) If the same valve subsequently passes the retest, then the valve will be deemed to comply with the TMV2 requirements and the results will be submitted to the TAP Committee for approval:

If the same valve subsequently fails the retest then the test house will inform simultaneously the Licensee and the TAP Committee of the non- conformity using the standard audit report form;

- c) A period of 4 weeks will then be allowed for a response from the Licensee of his assessment of the valve failure and an expression of intention. If the Licensee does not respond within this time then the TAP will require the two remaining valves held by the test house \* to undertake the full audit test.
- d) The Licensee may decide, after consideration, that the failure was an isolated incident in which case he can instruct the test house to undertake the full Audit using the two remaining valves held by the Test House \* at the license holder's expense (Stage 2). These valves can at the licensee's request be woken up by applying procedure 4.a) prior to testing.
- e) Alternatively, the Licensee will provide a written assessment to TAP, which includes a description of the fault, their remedy to overcome it, the timescale to solve the problem and its effect on, and their intentions concerning the existing population of affected products.

If the TAP Committee disagrees with the proposals the manufacturer will be notified and given the opportunity to provide an alternative proposal.

- f) If the TAP Committee further rejects the proposal from the manufacturer, then the manufacturer will be informed and the Audit will continue using the two valves already held by the test house \*
- g) If the TAP Committee accepts the proposal (original or final) from the manufacturer, then the manufacturer will be informed and be required to provide a further random sample from new stock. The standard audit tests will then be undertaken.
- h) If the test results from the two additional valves \* or the re-submitted valve, (where accepted by TAP) satisfy all of the audit requirements then the product will be deemed to comply with TMV2 requirements. All interested parties shall be informed of the successful audit of the valve previously advised as non-conforming.
- i) Should either of the two additional valves \* (or the re-submitted valve, where accepted by TAP) fail the audit tests, then the product shall be required to be retested against the complete standard BS EN 1111 and or BS EN 1287 at the license holder's expense.
- j) The manufacturer may chose to withdraw the product, in which case the TAP Committee will be informed immediately.

BuildCert will invoice companies involved with failed audits for time required to deal with the audit failure at the Schemes professional rate.

## **5. Notification of Result**

- b) Pass: The Licensee will be notified formally that his valve has passed the audit.
- c) Fail: The Licensee will be notified formally in writing with a 'Warning Notice', that his valve has failed the audit and the License suspended.

The Licensee will be requested to acknowledge, in writing his intention:

- i. To submit his valve for full testing, or
- ii. Not to resubmit, in which case, the 'License' will be withdrawn immediately.

## **6. Retesting**

The valve will be tested fully to BS EN 1111 and or BS EN 1287 as appropriate at the license holders expense; within 4 months of the date of the 'Warning Notice'.

## **Notes**

A 'Primary' TMV approved by the Technical Assessment Panel (TAP) on behalf of the BuildCert Advisory Committee will be granted a 'Licence' for a period of 5 years. Additional variants and factored brands are licensed for the remaining period of the original licence.