

Estates and Facilities Alert

NHSE/I-2020/005 Issued: 08 December 2020

RWC TMV3 audit failure

Summary

NSF has informed NHSE and I that the RWC 15mm Easifit tee type valve has failed some of the audit performance tests from HTM 04-01-part A:

The failures identified during audit testing (changing water supply pressure and stability at reduced flowrate) in that there are two instances where the mixed water temperature is recorded as being 3.4°C above the maximum permitted value for shower outlets with the test value recorded as being 45.4°C.

Actions

Ask local estate management if they ever use a tee type valve as a temperature control for shower use or would they limit tee type valves to the supply of washbasins only If this was the case, then the risk to users would be reduced to only washbasin use.

If these devices are in use by the trust a multi-disciplinary team (the Water Safety Group WSG) will need to conduct a risk assessment of the local application of the valve and if the temperature fluctuation can be tolerated or the valve needing to be remediated/replaced.

Action by

- Chief Executive Officers,
- Medical Directors and Directors of Nursing
- Critical Care Directors and Matrons
- Respiratory and acute medicine directors and matrons
- Estates and Facilities Directors
- EPRR Leads
- Health and Safety Manager,
- Estates
- Head of Patient Safety

Deadlines for action

Actions underway: Immediately
Actions complete: 08 March 2021

Device details

Reliance Worldwide Corporation (UK) Ltd.

Certificate number: NSF2011/1018

2019-03-07 v23 Page 1 of 5

Easifit T-type thermostatic mixing valve with brushed chromium plated DZR brass body. Temperature is controlled via an adjustment screw located under a detachable cap. Both hot and cold-water inlets incorporate single check valve cartridges and stainless-steel strainers. The 4in1 version in addition incorporates angled inlets with integral spherical valves. Maximum working pressure 10 bar.

Application Codes: HP-S, HP-W, LP-SE & LP-WE

Size: 15mm Compression

Product Designations: Easifit 15mm 2in1 HEAT112010

Easifit 15mm 4in1 HEAT112050

Markings: Red and blue dots on inlets, valve bbody laser etched 4311801, REAS123, detachable

blue cap printed Easifit, Reliance TMV2/3.

Manufacture: Reliance Worldwide Corporation (UK) Ltd



Problem / background

Audit testing performed to the requirements of Health Technical Memorandum 04-01: Supplement – Performance Specification DO8: thermostatic mixing valves (Healthcare premises) issued 2017.

RWC 15mm Easifit tee type valve has failed the following audit performance tests:

- 7.10 Temperature stability with changing water supply pressure
- 7.12 Temperature stability at reduced flow rate

The failures identified during audit testing are limited, but in the two extreme supply conditions there are two instances (clause 7.10) were the mixed water temperature was recorded as being 3.4°C above the maximum permitted value for shower outlets with the maximum value recorded being 45.4°C.

In accordance with the auditing procedures the valve underwent a 48-hour thermal endurance to awaken the thermostatic properties of the valve as specified in D08 clause 6.3.

After the 48 hours the valve was re-tested and failed the same clauses (7.10 & 7.12) in the same manner.

The number of installed valves in Healthcare facilities is unknown as these valves are sold through a diverse number of outlets and therefore any remedial actions for installed valves must therefore be considered by NHSE and I for the health service.

RWC believe that the majority of the valves sold are for domestic applications and indeed the products installed in the Healthcare sector may well be relatively low.

2019-03-07 v23 Page 2 of 5

Manufacturer contacts

Mr. Eric Winter - RWC Director of Product Development eric.winter@rwc.com

Distribution

NHS acute and specialist hospitals hospital trusts, independent hospitals

References

- 1. HTM 04-01 and DO8
- 2. Table 2 of HTM 04-01-part A notes, states:

Where installed, it is preferable that thermostatic mixing devices are fitted directly to the mixed temperature outlet or be integral with it, and be the method of temperature and flow control, i.e. the mixing device should not be separate nor supply water via a second tap or manual mixer since there will be many cases where draw-off of cold water will not occur. If a separate thermostatic device is used, it should be fitted as close to the outlet as possible, which should be a flow-only control. Where "T" type mixing valves are installed, they should be readily accessible for maintenance.

2019-03-07 v23 Page 3 of 5

Issued:

Enquiries

Enquires should be addressed to: nhsi.estatesandfacilities@nhs.net

Reporting adverse incidents in England

Defects or failures should be reported on this system: https://efm.digital.nhs.uk/

The web-based D&F reporting system is managed by the NHS Digital on behalf of NHS Improvement. For further information on this system, including obtaining login details, please contact the efm-information Helpdesk. Tel 07850 913 690.

© Crown Copyright 2020 Addressees may take copies for distribution within their own organisations

2019-03-07 v23 Page 4 of 5

Issued:

Annex 1 - Good Oxygen Housekeeping For use on ALL WARDS AND DEPARTMENTS

Ward and Department checklist

Complete before shift handover and during pharmacy rounds	
	Advise all staff working of the location the oxygen outlet alarm panel Check stock of oxygen cylinders is readily available in case of emergency Replace empty or near empty oxygen cylinders Turn off oxygen flowmeters which are not in use Remove medical air flowmeters when not in active use
Patient checklist	
	Titrate patients' oxygen to targeted SpO ₂ . Guidance on suggested oxygen titration is found on page 11 of this guidance:
	https://static1.squarespace.com/static/5e6613a1dc75b87df82b78e1/t/5f999cd5b3df86542e85d0ab/1603902680560/AdultCriticalCare-COVID-19-October2020.pdf
	Turn off oxygen flowmeter if not in use Ensure no more than 15L/Min are given by a standard ward oxygen flowmeter
High flow nasal oxygen (HFNO ₂) and CPAP/NIV devices patient checklist	
	Turn off devices when not in use Limit large mask leaks with CPAP / NIV devices: call for help to review / refit mask if required Where possible avoid the use of oxygen cylinders to support CPAP / NIV devices (both risk of oxygen failure and potential fire risk)

If an oxygen alarm sounds, this must be taken seriously and not ignored Please contact [Insert local point of contact] as a matter of urgency.

2019-03-07 v23 Page 5 of 5