

PLEASE ADDRESS ANY CORRESPONDENCE TO WATER SUPPLY (NETWORK) DEPARTMENT

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: 14 May 2019

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To water fitting suppliers, water tank suppliers, test Laboratories, Singapore Sanitary Ware Importers & Exporters' Association (SSWIEA), Singapore Plumbing Society (SPS), Licensed Plumbers and relevant Government Agencies, Statutory Board, Professional Engineers, M&E Consultants, Associations and Organisations.

Dear Sir/Madam

- A) UPDATED STIPULATION OF STANDARDS & REQUIREMENTS FOR THERMOSTATIC MIXERS UNDER MWELS AND THERMOSTATIC MIXING VALVES**
- B) PUBLIC UTILITIES (WATER SUPPLY) (AMENDMENT NO. 3) REGULATIONS 2019 ON MANDATORY WATER EFFICIENCY LABELLING SCHEME:**
- UPDATED TEST STANDARDS FOR THERMOSTATIC MIXERS ON FLOW RATE TEST**

Currently, the following water fittings:

- a) thermostatic mixers (for dynamic pressures up to 1 bar) under MWELS shall be tested to comply with BS EN 1287:1999;
- b) thermostatic mixers (for dynamic pressure up to 5 bars) under MWELS shall be tested to comply with BS EN 1111:1999; and
- c) thermostatic mixing valve (up to 50mm) shall be tested to comply with BS EN 1111:1999;

before they are allowed to be offered, displayed or advertised for sale and supply in Singapore.

Thermostatic Mixers (for dynamic pressures up to 1 bar & 5 bars) under MWELS

2 With effect from 1 Apr 2020 (date of test report), only thermostatic mixers (for basin, sink, bib or shower) which have been tested for compliance with BS EN 1111:2017 shall be allowed for supply and installation in potable water supply systems in Singapore. The flow rate test shall be tested to Section 13.2 of BS EN 1111:2017. All existing thermostatic mixers which are registered under MWELS before 1 April 2020 can still continue to be supplied and installed in Singapore without having to re-submit the test reports. The stipulation for *thermostatic mixers (for dynamic pressures up to 1 bar)* will be removed from 1 Apr 2020.

3 The flow rate test method Section 13.2 of BS EN 1111:2017 has been incorporated in the Public Utilities (Water Supply) (Amendment No. 3) Regulations 2019 which was gazetted

on 29 Mar 2018 and has come into operation on 1 Apr 2019. Please refer to **Annex** for the amendments to this regulation. The full version of the updated regulations can be found in Singapore Statutes Online website at <https://sso.agc.gov.sg>. Anyone found not complying with the Public Utilities (Water Supply) Regulations shall be guilty of an offence and be liable for prosecution.

Thermostatic Mixing Valves (up to 50mm)

4 With effect from 1 Apr 2020 (date of test report), only thermostatic mixing valves which have been tested for compliance with BS EN 1111:2017 shall be allowed for supply and installation in potable water supply systems in Singapore. All existing thermostatic mixing valves which have been tested to BS EN 1111:1999 or BS EN 1287:1999 before 1 Apr 2020 can still continue to be supplied and installed in Singapore without having to re-test.

5 A summary of the updated stipulated standards is shown in Table below. Please refer to PUB's website at www.pub.gov.sg and www.pub.gov.sg/wels for the updated copies of "PUB's Stipulation of Standards & Requirements of Water Fittings for Use in Potable Water Service Installation dated 14 May 2019 and WELS Guidebook dated 14 May 2019 respectively.

	Type of water fitting	Between 1 Apr 2019 to 31 Mar 2020	From 1 Apr 2020
a	Thermostatic Mixers (for dynamic pressures up to 1 bar) under MWELS	BS EN 1111:2017 or BS EN 1287:1999	Will be removed.
b	Thermostatic mixers (for dynamic pressure up to 5 bars) under MWELS	BS EN 1111:2017 or BS EN 1111:1999	BS EN 1111:2017
c	Thermostatic mixing valve (up to 50mm)	BS EN 1111:2017 or BS EN 1111:1999	BS EN 1111:2017

6 We would like to remind that a water fitting is deemed to comply with PUB's stipulated standards if it is tested as complying with such standards by a testing laboratory accredited by the Singapore Accreditation Council (SAC) or its Mutual Recognition Arrangement (MRA) partners. For more information, please visit SAC's website at www.sac-accreditation.gov.sg. Test reports issued by a testing laboratory accredited by the SAC or its MRA partners must bear the SAC-SINGLAS mark and ILAC mark, or MRA partners' International Laboratory Accreditation Cooperation (ILAC-MRA) mark respectively. This includes test reports which are subcontracted to accredited test laboratory. Please note that **PUB will not accept any test report** issued by a testing laboratory (notwithstanding that the testing laboratory is accredited by the SAC or its MRA partners) if the test report does not bear the above-mentioned marks.

7 All water fittings must be supported with valid, complete and full test reports. Suppliers, retailers and installers shall ensure that the test reports of all water fittings which they offer-for-sale, advertise, display, sell or supply are properly kept and must be produced for verification upon request by PUB. PUB conducts surveillance checks and will not hesitate to take action against any non-compliance.

Overseas suppliers / distributors of water fittings

8 All overseas suppliers / distributors who supply water fittings including water storage tanks in Singapore for potable water use shall have a local office or representative registered by the Accounting and Corporate Regulatory Authority (ACRA) to follow up on queries/complaints, and to monitor the products supplied by them.

9 Please disseminate the information in this circular with your relevant staff, members, distributors, retailers and other industry partners for their information and compliance. A copy of this circular is downloadable from PUB's website at www.pub.gov.sg. If you have any queries concerning this circular or need further clarification or assistance, please do not hesitate to contact any of the officers listed below.

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Yours faithfully



ROLAND CHAN
PRINCIPAL ENGINEER (INSPECTORATE)
for DIRECTOR
WATER SUPPLY (NETWORK) DEPARTMENT

Enclosed

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No. S 192

**PUBLIC UTILITIES ACT
(CHAPTER 261)**

**PUBLIC UTILITIES (WATER SUPPLY)
(AMENDMENT NO. 3) REGULATIONS 2019**

In exercise of the powers conferred by section 72 of the Public Utilities Act, the Public Utilities Board, with the approval of the Minister for the Environment and Water Resources, makes the following Regulations:

Citation and commencement

1.—(1) These Regulations are the Public Utilities (Water Supply) (Amendment No. 3) Regulations 2019 and, except for regulation 6(*b*), come into operation on 1 April 2019.

(2) Regulation 6(*b*) comes into operation on 1 April 2020.

Amendment of regulation 8

2. Regulation 8(1) of the Public Utilities (Water Supply) Regulations (Rg 5) (called in these Regulations the principal Regulations) is amended by deleting “(5)” in sub-paragraph (i)(B) and substituting “(3)”.

Amendment of regulation 29

3. Regulation 29(1) of the principal Regulations is amended by deleting “(5)” in sub-paragraph (c)(ii) and substituting “(3)”.

Amendment of regulation 40AB

4. Regulation 40AB of the principal Regulations is amended —
(a) by deleting sub-paragraph (a) of paragraph (2) and substituting the following sub-paragraph:

“(a) where the advertisement has any visual element, must ensure the following:

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- (i) for an advertisement other than a print advertisement —
 - (A) a Water Efficiency Label is, as far as practicable, displayed in the advertisement next to the image or description of the specified water fitting; or
 - (B) where it is not practicable to comply with sub-paragraph (A), all the information contained in the Water Efficiency Label is stated in the advertisement;
 - (ii) for an advertisement that is a print advertisement —
 - (A) the advertisement complies with sub-paragraph (i); or
 - (B) the information mentioned in paragraph (2A) is stated in the advertisement; and”;
- (b) by inserting, immediately after paragraph (2), the following paragraph:
- “(2A) The information required in paragraph (2)(a)(ii)(B) is as follows:
- (a) the tick rating of the specified water fitting;
 - (b) the brand of the specified water fitting;
 - (c) the model number of the specified water fitting;
 - (d) the number issued by the Board for the specified water fitting’s registration under regulation 40AE.”.

Amendment of First Schedule

5. Paragraph 18 of the First Schedule to the principal Regulations is deleted and the following paragraph substituted therefor:

“18.—(1) Every flushing cistern serving a water-closet pan must be of such a design, and be arranged, so as to give a dual flush of 2 different volumes such that —

- (a) the volume of the full flush does not exceed 4 litres; and
- (b) the volume of the reduced flush does not exceed 3 litres.

(2) Every flush valve serving a water-closet pan must be of such a design, and be arranged, so as to give a single flush of not more than 4.5 litres.

(3) Every flush valve serving a urinal must be of such a design, and be arranged, so as to give a single flush of not more than one litre.”.

Amendment of Part 1 of Second Schedule

6. Paragraph 1 of Part 1 of the Second Schedule to the principal Regulations is amended —

- (a) by inserting, immediately after the words “Section 10 of BS EN 1287 (1999)” in the third column of item (1)(n), the words “or section 13.2 of BS EN 1111(2017)”; and
- (b) by deleting the words “Section 10 of BS EN 1287 (1999) or section” in the third column of item (1)(n) and substituting the word “Section”.

Amendment of Part 2 of Second Schedule

7. Paragraph 2 of Part 2 of the Second Schedule to the principal Regulations is amended by deleting sub-paragraphs (a) to (e) and substituting the following sub-paragraphs:

“(a) basin tap and mixer —

<i>Number of ticks</i>	<i>Flow rate (litres per minute)</i>
2	$2 < \text{flow rate} \leq 4$
3	$\text{flow rate} \leq 2$

(b) sink tap and mixer or bib tap and mixer —

<i>Number of ticks</i>	<i>Flow rate (litres per minute)</i>
2	$4 < \text{flow rate} \leq 6$
3	$\text{flow rate} \leq 4$

(c) shower tap and mixer —

<i>Number of ticks</i>	<i>Flow rate (litres per minute)</i>
2	$5 < \text{flow rate} \leq 7$
3	$\text{flow rate} \leq 5$

(d) flushing cisterns —

<i>Number of ticks</i>	<i>Flush volume (litres per flush)</i>
2	(a) $3.5 < \text{flush volume for full flush} \leq 4$; and (b) $2.5 < \text{flush volume for reduced flush} \leq 3$
3	(a) $\text{flush volume for full flush} \leq 3.5$; and (b) $\text{flush volume for reduced flush} \leq 2.5$

(e) urinal flush valves and waterless urinals —

<i>Number of ticks</i>	<i>Flush volume (litres per flush)</i>
2	$0.5 < \text{flush volume} \leq 1$
3	flush volume ≤ 0.5 ".

Amendment of Part 3 of Second Schedule

8. Part 3 of the Second Schedule to the principal Regulations is amended —

(a) by deleting sub-paragraph (c) of paragraph 1 and substituting the following sub-paragraph:

“(c) the lowest flow rate of the tap and mixer —

- (i) for a sink tap and mixer with a flow rate falling within the range of flow rates specified for 3 ticks — must not be lower than 2.5 litres per minute;
- (ii) for a sink tap and mixer with a flow rate falling within the range of flow rates specified for 2 ticks — must not be lower than 3.5 litres per minute;
- (iii) for a basin tap and mixer, with a flow rate falling within the range of flow rates specified for 2 ticks and 3 ticks — must not be lower than 1.5 litres per minute;
- (iv) for a bib tap and mixer with a flow rate falling within the range of flow rates specified for 2 ticks and 3 ticks — must not be lower than 3.5 litres per minute; and
- (v) for a shower tap and mixer with a flow rate falling within the range of flow rates specified for 2 ticks and 3 ticks — must not be lower than 4.5 litres per minute;”;

(b) by deleting the words “6 litres” in paragraph 1(d)(i) and substituting the words “4 litres”;

(c) by deleting the words “8 litres” in paragraph 1(d)(ii) and substituting the words “6 litres”;

(d) by deleting the words “9 litres” in paragraph 1(d)(iii) and substituting the words “7 litres”;

(e) by inserting, immediately after the words “flush valve” in paragraph 2, the words “serving a urinal”; and

(f) by deleting the words “, (2) or (5)” in paragraph 2 and substituting the words “or (3)”.

Made on 19 March 2019.

CHIANG CHIE FOO
Chairman,
Public Utilities Board,
Singapore.

[MEWR S030/01/124 Vol. 16; AG/LEGIS/SL/261/2015/3 Vol. 6]

(To be presented to Parliament under section 72(4) of the Public Utilities Act).