



水務署
Water Supplies Department

總部 Headquarters

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48/F, Immigration Tower, 7 Gloucester Road, Wan Chai, Hong Kong

本署檔號 : (4) in WSD 3318/50 Pt.10
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10 June 2025

Distribution: To all Licensed Plumbers and Authorized Persons

Dear Sirs,

WSD Circular Letter No. 9/2025

**Amendments to
“Technical Requirements for Plumbing Works in Buildings” and Waterworks Form
WWO542**

This Circular Letter promulgates amendments to "Technical Requirements for Plumbing Works in Buildings" (TR).

Amendments

2. Water Supplies Department has amended Section 4.2.1.5, Table 4.2.3.7.2 and Table 4.2.5.2.1 of TR and Waterworks Form WWO542 for clarity as per **Appendix I**.

Effective Date

3. The above new requirements shall take immediate effect.

Enquiry

4. Should you have any enquiry, please contact our Engineer/Technical Support(5) at telephone no. 2829 4574.

Yours faithfully,

(Original Signed)

(CHAN Chi Yuen, Stanley)
for Water Authority

Encl.
(with Chinese translation)

c.c.

Housing Department (Attn: SM/QM)
Buildings Department
Architectural Services Department
Fire Services Department
The Hong Kong Housing Society
The Hong Kong Institute of Architects
The Hong Kong Institution of Engineers
The Hong Kong Institute of Surveyors
The Chartered Institute of Plumbing and Heating Engineering – Hong Kong Branch
Hong Kong Plumbing and Sanitary Ware Trade Association Ltd.
Hong Kong Licensed Plumbing Professionals Association Ltd.
Hong Kong Water Works Professionals Association Ltd.
The Hong Kong Institution of Plumbing and Drainage Ltd.
Plumbing Technology Student Association
The Association of Registered Fire Service Installation Contractors of Hong Kong Limited
Real Estate Developers Association of Hong Kong
The Hong Kong Construction Association, Ltd.
Hong Kong Registered Contractors Association Company Ltd.
The Hong Kong Federation of Electrical & Mechanical Contractors Ltd.
Contractor's Authorised Signatory Association Ltd
Registered Minor Works Contractor Signatory Association Ltd.
Hong Kong General Building Contractors Association Ltd.
Hong Kong Institute of Vocational Education
Hong Kong Institute of Construction, Construction Industry Council
Hong Kong Licensed Plumbers Union Limited
Hong Kong Metropolitan University Li Ka Shing School of Professional and Continuing Education
The Association of Electrical and Mechanical Engineering (Hong Kong) Ltd.
Pipeman Engineering (International) Limited
Hong Kong Institute of Water and Sanitation Safety
Hong Kong Plumbing General Union

WSD 3318/15/81

January 2025 version

4.2.1.4 Not Used.

#4.2.1.5 Design of fresh water supply system shall comply with relevant requirements stipulated in the prevailing “Code of Practice for Prevention of Legionnaires’ Disease” published by Prevention of Legionnaires’ Disease Committee.

Table 4.2.3.7.2 Requirement on backflow prevention device for typical installations

Installations	Requirement on backflow prevention device
Irrigation systems without insecticide or fertilizer application: (i) Domestic or commercial irrigation system with fixed sprinkler heads or outlets not less than 150mm above ground level (Note 1); (ii) Mini-irrigation systems such as pop-up sprinklers or permeable hoses or with sprinkler heads less than 150mm above ground level (Note 2)	Backflow preventer or Reduced Pressure Zone (RPZ) Device
Commercial agricultural systems: (i) Commercial irrigation outlets below or at ground level and/or permeable pipes, with or without chemical additives; (ii) Insecticide or fertilizer applications; or (iii) Commercial hydroponic systems.	Break Tank
Garden served by point supply, nurseries, large landscaped areas or sports fields	Break Tank (Note 8)
Kitchen equipment for non-domestic use	Details please refer to FIG. 34 under TR
Fixtures for general ablution (e.g. basin, showers) with submerged inlets or with points of discharge below the overflow level	Details please refer to Note 4
Commercial laundries	Details please refer to FIG. 34 under TR
Industrial processes	Break Tank or Backflow preventer or Reduced Pressure Zone (RPZ) Device
Cooling towers	Break Tank
<u>Water misting system</u>	<u>Anti-vacuum valve and non-return valve (Note 9)</u>
Fire service	Details please refer to Note 5
Fire service (improvised hose reel system)	Details please refer to FIG. 44 under TR
Fire service (improvised sprinkler system)	Details please refer to FIG. 17 under TR
Drinking Fountains (not located at street side)	Details please refer to FIG. 37 to 39 under TR
Drinking Fountains (located at street side)	Details please refer to FIG. 40 under TR
Smart water closets	Break Tank or equivalent

Note 1: Examples include systems with manual irrigation points.

Note 2: Examples include systems with drip-feed pipes.

Note 3: Schematic layout of the hydro-vent re-circulation system can be referred to FIG 6C and 6D.

Note 4: The water supply to the fixtures should be provided by either a cistern supplying water to such fixture only or a hot water distribution system supplying such fixture only.

Note 5: A fire services water tank is always required for conventional fire service supply system and a physical break is therefore provided.

Note 6: Schematic layout can be referred to FIG. 37 to 39. Double check valve should be used in direct supply system.

Note 7: Schematic layout can be referred to FIG. 40.

Note 8: For concessionary supplies, when the installation takes the form of supply standpipe and that hosepipe will only be connected to the draw-off point when water is drawn, an anti-vacuum valve and a non-return valve may be installed at the draw-off point in lieu of a break tank for preventing back syphonage because the potential hazard of water contamination is relatively low.

Note 9: For water misting system operated with pumps, a break tank should be installed instead of an anti-vacuum valve and a non-return valve.

4.2.4 General Pipework Arrangement

- #4.2.4.1 All plumbing works between the lot boundary and any master meter or check meter positions shall be exposed or laid in a proper service trench/duct to facilitate inspection and repairs. Adequate drainage shall be provided to remove water inside the trench/duct.

Table 4.2.5.2.1 Minimum requirements on mode of supply for concessionary usage of mains water

Concessionary Usage	Off-Tank Supply	Mains Supply ^{1,2}	Notes
bins and handcarts			
5. Washing vehicles	✓		- For vehicles such as mechanical street-cleaners owned by the Government
6. Air pollution control	✓		- Concerning smoke or gas emitted from plants or equipment - Water loss due to evaporation only - Example includes hydro-vent system for kitchen
7. Dust suppression	✓		- Essential to industrial process or air pollution control - Re-circulation of water is required unless it is proved to be impracticable
D. Others			
1. Water damping facilities for high rise buildings	✓		- Initial filling - Subsequent refilling - Make-up supply
2. <u>Water misting system</u>	✓	✓ ⁶	- <u>For outdoor cooling</u> - <u>Can be branched off from an existing concessionary supply</u>

¹ An anti-vacuum valve and a non-return valve shall be installed at each draw-off point.

² The draw-off point takes the form of supply standpipe. A hose will only be connected to the draw-off point when water is drawn.

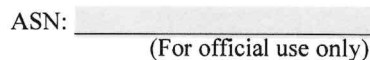
³ If there is practical alternative but the private source is not adequate and requires mains water supply for augmentation to meet the demand, application should be referred to the DWS for approval.

⁴ For irrigating the plants on footbridges and flyovers, the supply point with a water meter will be provided normally at the pedestrian pavement under or near the footbridge/flyover. The project department/user department or its agent is to extend the water mains from the supply point to the greening areas/planter boxes on the footbridge/flyover.

⁵ For the safety of maintenance personnel the use of water wagons is preferred for the provision of water for watering the greening area/planter boxes/waterworks at the central median of a roadway. If water wagons cannot be used, supply points with water meters will be given at locations that staff of WSD can access the water meter readily and safely. If the water meter is installed at the ground level of the nearby pedestrian pavement, the project department/user department or its agent is to extend the water mains across the road to the central median.

⁶ Only applicable to system operating without pumps.

#4.2.5.3 An anti-vacuum valve and a non-return valve should be installed at the draw-off point in lieu of a water storage tank for preventing back syphonage when the potential hazard of water contamination is relatively low. 'Section B Irrigation' of Table 4.2.5.2.1 shall be referred for relevant usages.



3. Types of Water Supply Applied for

(Please tick (✓) the appropriate box ☐. You can tick more than one box.)

<p>(a) <input type="checkbox"/> New Building <i>Ne</i> *Potable / Flushing / Fire Service <i>w</i> <i>Bui</i> <i>Idi</i> <i>ng</i> <input type="checkbox"/> <u>Equipped with own septic tank / sewage treatment facility (Note 2)</u></p>	<p>(e) <input type="checkbox"/> *On-line / Off-line Replumbing *Potable / Flushing / Fire Service</p>		
<p>(b) <input type="checkbox"/> Village Type House *Potable / Flushing / Fire Service <input type="checkbox"/> Equipped with own septic tank / sewage treatment facility (Note 2)</p>	<p>(f) <input type="checkbox"/> Temporary Water Supply for a Construction Site</p>		
<p>(c) <input type="checkbox"/> Separate Metering (Existing meter no.: _____)</p>	<p>(g) <input type="checkbox"/> Conversion to Salt Water for Flushing (Existing TMF meter no: _____)</p>		
<p>(d) <input type="checkbox"/> Reconnection of Meter (The premises should be installed with inside service) (The premises must have previous record of water account and meter, please provide the previous *account / meter no.: _____)</p>	<p>(h) <input type="checkbox"/> Relocation of Meter (Existing meter no.: _____)</p>		
<p>(i) <input type="checkbox"/> Enlargement of Meter (Existing meter no.: _____)</p>			
<p>(j) Others</p> <table style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <input type="checkbox"/> Irrigation <input type="checkbox"/> Cleansing <input type="checkbox"/> Food Business / Hydro-Vent <input type="checkbox"/> Drinking Fountain / Water Dispenser <input type="checkbox"/> Improved Fire Sprinkler System / Fire Hose Reel System / Fire Hydrant </td> <td style="width: 50%; vertical-align: top;"> <input type="checkbox"/> Swimming Pool / Water Features <input type="checkbox"/> Water Cooling Tower <input type="checkbox"/> Temporary Meter for Systematic Flushing <input type="checkbox"/> <u>Water Misting System for Cooling</u> Others (please specify: _____) <input type="checkbox"/> <u>Others (please specify: _____)</u> </td> </tr> </table>		<input type="checkbox"/> Irrigation <input type="checkbox"/> Cleansing <input type="checkbox"/> Food Business / Hydro-Vent <input type="checkbox"/> Drinking Fountain / Water Dispenser <input type="checkbox"/> Improved Fire Sprinkler System / Fire Hose Reel System / Fire Hydrant	<input type="checkbox"/> Swimming Pool / Water Features <input type="checkbox"/> Water Cooling Tower <input type="checkbox"/> Temporary Meter for Systematic Flushing <input type="checkbox"/> <u>Water Misting System for Cooling</u> Others (please specify: _____) <input type="checkbox"/> <u>Others (please specify: _____)</u>
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4. Classification of Water Account

(Please tick (✓) the appropriate box ☐.)

I/We declare that the type of water supply required (Note 3) is:

☐ Domestic supply

☐ Non-domestic supply (Note 4)

☐ Trade Effluent Surcharge (TES) Chargeable Trade (refer to the 30-27 trades, businesses or manufactures listed in the booklet "Classification of Water Consumer Accounts", e.g. restaurants, bakery products, etc.)

☐ Others

<u>Classification Code (Notes 5 to 7)</u>	<u>Description</u>	<u>Estimated No. of Meters</u>

Estimated No. of ~~meters~~ Meters = _____

* Delete where inappropriate
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5. Information of Designer of Plumbing Proposal

Name: _____ Company: _____
Day-time Tel. No.: _____ Fax No.: _____
Mailing Address: _____
Email: ~~Mailing Address~~ _____

6. Applicant's Undertaking and Agreement

I / We fully understand and agree to abide by the content of items (A)-(E) of the undertaking and agreement below, as well as the payment rules (if applicable) in accordance with the provisions of this undertaking form (*Note 9*).

UNDERTAKING AND AGREEMENT

(A) The applicant agrees:

- (i) if the application includes a fire service, to register as the consumer of the fire service;
- (ii) if the application includes an inside service (including fresh water and/or flushing water), to register as the consumer of the inside service included; and
- (iii) if the application includes a communal service (that is, part of a fire service or inside service which is used in common by more than one consumer in the same premises), to register as the agent of the communal service.

(B) Pursuant to Section 7 and Section 19 of the Waterworks Ordinance (Cap 102), the applicant undertakes:-

— (for application to become a consumer of a fire service/inside service)

to pay to the Government of the Hong Kong Special Administrative Region any charges and deposit (*Note 9*) due in respect of the fire service or inside service in the premises as provided in the Waterworks Ordinance (Cap. 102) and the Waterworks Regulations (Cap. 102A). The applicant undertakes to be responsible for the custody and maintenance of the above-mentioned fire service or inside service and the custody of any meter pertaining to the fire service or inside service in the premises (*Note 10*).

— (for application to become an agent of a communal service)

to pay to the Government of the Hong Kong Special Administrative Region any charges and deposit (*Note 9*) due as provided in the Waterworks Ordinance (Cap. 102) and the Waterworks Regulations (Cap. 102A) and to be responsible for the custody and maintenance of the communal service in the premises and the custody of any meter pertaining to the above-mentioned communal service (*Note 10*).

Please note that the consumer/agent may also be required to pay charges and surcharges (including but not limited to sewage charges and trade effluent surcharges) imposed under the Sewage Services Ordinance (Cap. 463) and any regulations made under the Sewage Services Ordinance.

- (C) The applicant agrees to comply with all the provisions of the Waterworks Ordinance (Cap. 102), the Waterworks Regulations (Cap. 102A) and the Sewage Services Ordinance (Cap. 463) and any regulations made under the Sewage Services Ordinance.
- (D) The applicant agrees to pay to the Government of the Hong Kong Special Administrative Region the cost of the work requested by the applicant under this Form to be carried out by the Water Authority including all costs, fees, required to be paid by reason of any enactment or regulation or bye-law in relation to or for the execution of the works and including prescribed fees and economic costs referred to in Schedule 3 of the Land (Miscellaneous Provisions) Ordinance Cap 28 ("the Ordinance") for an extension in respect of an excavation permit made under the Ordinance for the execution of the works, labour, materials and supervision charges. The applicant shall pay the cost of the work within 14 days of receiving the demand note from the Water Authority.
- (E) The applicant fully understands and agrees that the Water Authority may use the data collected from the applicant in connection with this application for the purposes of, or directly related to, the processing of this application, any work to be carried out by the Water Authority and the general management and administration of the waterworks or the above mentioned fire service/inside service/communal service. If the applicant does not provide sufficient data, the Water Authority may not be able to process the application. The applicant agrees that the data collected may be transferred to other Government bureaux and departments and any other relevant parties for the aforesaid purposes. The applicant further agrees that data collected from the applicant (including the name of the applicant and the address of the premises) may be made known to the general public (e.g. by publishing the same on the internet). The applicant understands that he/she/they may make a request to the Departmental Secretary of the Water Supplies Department at 48/F, Immigration Tower, 7 Gloucester Road, Hong Kong for access to and correction of the personal data.

Date:

Date:

Applicant's signature / Signature of

Applicant's signature / Signature of authorised person and company's chop:
authorised person and company's chop:

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Notes:

1. This application must be properly completed by the applicant who intends to be the consumer/agent in respect of a fire service/inside service/communal service to be constructed in the premises applying for water supply. Please complete Form WFO 1 instead of this form if you are applying for change of consumership/agentship of an existing inside service/communal service/fire service.
2. Pursuant to Section 5 of the Sewage Services Ordinance, sewage charges and trade effluent surcharges (if applicable) are payable by the consumer/agent whose premises are connected to public sewers. For enquiry, please contact the Drainage Authority.
3. The applicant must select either "domestic supply" or "non-domestic supply".
4. In the event "non-domestic supply" is selected, the applicant must select either "Trade Effluent Surcharge" or "Others".
5. In the event "non-domestic supply" is selected, six-digit classification code and description must be filled in.
6. If discrepancies exist between the stated classification code and description, the classification code shall prevail. The classification code and description are listed in the booklet "Classification of Water Consumer Accounts" which can be ~~downloaded~~ ~~obtained~~ from our website at <http://www.wsd.gov.hk/en/application-public-forms/waterworks-form-wfo-542/index.html> or ~~obtained from~~ our Customer Enquiry Centres.
7. Should there be any subsequent changes to your business which affect the classification, please notify the Water Authority and Drainage Authority of the new classification code and trade description.
8. For a firm/company, a photocopy of the Business Registration Certificate should be attached to the application. For individual applicant, the applicant should attach a photocopy of his/her identity card or identity proof document (e.g. Passport) for our checking of his/her identity. The photocopy of identity card and identity proof document will be destroyed immediately after the checking process.
9. The deposit paid under this undertaking is not transferable and may be applied by the Water Authority at any time to the payment of any charges.
10. Pursuant to Section 20 of the Waterworks Ordinance (Cap. 102) and Section 5 of the Sewage Services Ordinance (Cap. 463), the liability of the consumer/agent shall continue until:
~~(a) (a) another consumer/agent is approved by the Water Authority in his/her place; or~~
~~(b) this undertaking is cancelled by the Water Authority, notwithstanding that~~
~~(i) the consumer/agent ceases to occupy the premises;~~
~~(b) this undertaking is cancelled by the Water Authority, notwithstanding that~~
~~(i) the consumer/agent ceases to occupy the premises;~~
~~(ii)~~
~~(ii) the consumer/agent ceases to be responsible for the management of the premises or any part thereof,~~
or
~~(iii)~~
~~(iii) the Water Authority exercises any power under Sections 8, 9, 10 or 19(2) of the Waterworks Ordinance (Cap. 102).~~
Should the consumer/agent wishes to cancel the undertaking, the consumer/agent should promptly notify the Water Authority.
11. Address of the Drainage Authority: G/F, Western Magistracy, 2A Pok Fu Lam Road, Hong Kong / Tel: 2834 9432 / Fax: 3104 6433 / Email: customer_services@dsd.gov.hk
- 11.12. Name of the applicants stated in this application should ~~be matched with that one~~ stated in the applicant's Hong Kong Identity Card/Travel Document/Business Registration Certificate.

For official use only	ASN:	Account No.:
Date received:		CCID.:
Approved by:		ID/BR verified by:
D/N No:		Connection(s) from government main: Yes / No

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