### Office of the Water Authority

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Reference (31) in WWO 10/3318/75 II Date 3 March 1995

Distribution: To all Licensed Plumbers and Authorised Persons

Dear Sir,

# WSD Circular Letter No. 2/95 Amendments to the Hong Kong Waterworks \_\_\_\_\_Standard Requirements (HKWSR)

Your attention is drawn to the following amendments to the Hong Kong Waterworks Standard Requirements (Revised September 1992) which will be effective on all plumbing proposals submitted on or after 1 April 1995 :

a. HKWSR Sheet 1 Clause 4, Sheet 2 Clause 3, Sheet 3 Clause 2 and Sheet 7 Clause 7 are amended to read:

"All water meters, including vacant meter positions and check meter positions, shall be arranged in groups and housed in meter rooms or meter boxes. The meter room shall be used solely for housing the water meters to protect them against exposure to weather, falling objects and other undue external interferences. Furthermore, adequate floor space, headroom, lighting, ventilation, drainage, hygienic environment and an independent entrance located at communal corridor should be provided to facilitate meter reading and maintenance of the water meters. Safe, free and uninterrupted access to the meter room should also be provided and maintained at all times. It is also advisable to reserve additional space for additional water meters, if any, in the future. Meter boxes in line with the above requirements may also be considered in lieu of meter rooms. The door of the meter room/box shall be clearly marked 'Water Meters' for easy identification. Siting and the details of the meter room/box are subject to the approval of the Water Authority".

b. All reference to 'G.I.' in HKWSR Sheet 1 Clause 3, Sheet 2 Clause 5, Sheet 3 Clause 5, Sheet 7 Clause 4 and Sheet 8 Clause 9 should be deleted.

c. The following new clause is added to HKWSR Sheets 1 to 9:

"A tee-branch valve refers to an isolation valve at a branch pipe and which is located close to the main pipe. To facilitate maintenance and repair, tee-branch valves shall be provided:

- (i) for all underground water pipes;
- (ii) if the main pipe is a communal inside service;
- (iii) in a flushing system if the main pipe serves more than one domestic unit or commercial floor.
- d. The following new clause is added to HKWSR Sheet 4:

"The invert of an outlet pipe from a water storage tank with capacity less than 5000 litres shall be at least 30 mm above the bottom of the tank; this distance shall be increased to 100 mm if the storage tank capacity is 5000 litres or more."

e. A new HKWSR Sheet 10 entitled 'The Use of Pipes and Fittings and the Associated Installation Requirements in Insider Service' at Appendix I is introduced.

Yours faithfully,

Signed

(Bobby M. T. NG) for Water Authority

#### c.c. Hong Kong Institute of Architects

Hong Kong Institution of Engineers

Hong Kong Licensed Plumbers Association Ltd

Hong Kong Plumbing and Sanitary Ware Trade Association Ltd

The Association of Registered Fire Services Installation

Contractor of Hong Kong

Hong Kong & Kowloon Ironwork Workers Union

Hong Kong Construction Industry Employees General Union

Institute of Plumbing Hong Kong Council

Vocational Training Council

Director of Building

Director of Housing (Attn: Technical Secretary/1)

Director of Architectural Services

Director of Fire Services

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## Hong Kong Waterworks Standard Requirements: Sheet No. 10 The Use of Pipes and Fittings and the Associated Installation Requirements in Inside Service

(To be read in conjunction with Schedule 2, Waterworks Regulations Chapter 102)

- 1. The type of pipe materials to be used in an inside service shall be detailed in the plumbing proposal. The licensed plumber shall also submit details of the pipes and fittings he intends to use in Form WWO 1037, to be submitted together with Form WWO 46 and Form WWO 1036, for the approval of the Water Authority.
- 2. Pipes and fittings shall conform to Schedule 2 of the Waterworks Regulations. From time to time the Water Authority may approve other pipe materials for use in cold water, hot water or salt water inside service. The following pipe materials may be used in cold water, hot water or salt water inside service as appropriate:
  - cast iron pipe to BS 4622.
  - ductile iron pipe to BS 4772.
  - copper pipe to BS 2871.
  - unplasticised polyvinyl chloride (uPVC) pipe to BS 3505 Class D;
  - chlorinated polyvinyl chloride (PVC-C) pipe to BS 7291 Parts 1 & 4;
  - polyethylene (PE) pipe to BS 6730 or BS 6572;
  - crosslinked polyethylene pipe to BS 7291 Parts 1 & 3;
  - polybutylene (PB) pipe to BS 7291 Parts 1 & 2;
  - lined (uPVC/polyethylene lining) galvanized steel pipe of the approved type.
- 3. uPVC fittings shall be used at the meter position if uPVC materials are used as inside service. Brass fittings shall be used at the meter position if copper, lined galvanized steel or thermoplastic materials are used as inside service.
- 4. The metal work of an inside service shall not be used as an earth electrode. [Para 12C(1)(b) of the Code of Practice for the Electricity (Wiring) Regulations, 1992 Edition] Therefore, the use of non-metallic pipes or fittings should not have had any effect on the earthing arrangement of the building.
- 5. However, for some old buildings metallic water pipes might have been used to form part of the earthing arrangement. Under such circumstances, whenever an electrical insulation is to be introduced in the inside service, the applicant or his licensed plumber is advised to consult his registered electrician to confirm that the earthing arrangement in the premises/building is still acceptable. If the earthing arrangement becomes sub-standard, then actions should be taken to comply with the Electricity (Wiring) Regulations [HK Law Cap. 406].