

**For discussion
on 28 February 2012**

**LEGISLATIVE COUNCIL
PANEL ON DEVELOPMENT**

**Proposed amendments to the Building (Standards of Sanitary Fitments,
Plumbing, Drainage Works and Latrines) Regulations, Cap 123I**

PURPOSE

This paper seeks Members' views on a proposal to amend the Building (Standards of Sanitary Fitments, Plumbing, Drainage Works and Latrines) Regulations, Cap 123I, (the Regulations) so as to modernise the Regulations and to upgrade the standards for the provision of sanitary fitments, plumbing and drainage works in private buildings.

BACKGROUND

2. Broadly speaking, the Regulations govern -
 - (a) the minimum standards for the provision of sanitary fitments (including waterclosets, urinals and lavatory basins) in residential buildings, offices, industrial undertakings and other places of work, and public places such as cinemas, restaurants and other places of public entertainment, etc;
 - (b) the design and construction of plumbing systems for the disposal of soil and waste water, including the dimensions and the materials used for the flushing system and the supply of water for flushing, etc;
 - (c) the design and installation of drains and sewers for the disposal of foul and surface water from buildings, as well as the design and construction of septic tanks and cesspools; and
 - (d) the testing of underground drains to ensure the drains are constructed to prescribed standards.

3. These Regulations were first made in 1959. Although minor amendments have been made from time to time, with the development in the design and construction of sanitary wares and plumbing systems over the years, the Regulations have become outdated. Furthermore, the prescriptive standards stipulated in the existing Regulations are rigid and do not allow the flexibility needed to cater for advancement in building technology.

PROPOSED AMENDMENTS

4. The Buildings Department has completed a comprehensive review of the Regulations. In the light of the review findings, we propose to amend the Regulations so as to –

- (a) rationalise the statutory provisions and bring them up-to-date;
- (b) improve the standards for design and provision of the various sanitary fitments, plumbing and drainage facilities; and
- (c) replace the existing prescriptive standards by performance-based requirements in order to cater for new and changing building technology.

The principal amendments are presented in the following paragraphs.

Deletion of obsolete provisions

5. Certain facilities and practices provided for in the current Regulations are either unacceptable by present-day building and hygiene standards or out-of-use. The relevant provisions have therefore been rendered obsolete and should hence be deleted. These include, for example –

- (a) Regulation 9 which stipulates the provision of latrine fitments and bucket urinals in lieu of watercloset fitments and urinals, respectively;

- (b) Regulation 12 which allows the discharge of waste water in the open air;
- (c) Regulation 15 which prescribes the standard for design and construction of trough waterclosets;
- (d) Regulation 47A(1)(c) which provides for the use of lead for the jointing of drain and sewer;
- (e) Regulation 50(3) which requires the use of asbestos gaskets for bolting of cast iron flanged pipes; and
- (f) Regulations 69 to 72 which provide for the location, design and construction of cesspools.

Classification of buildings

6. Under the Regulations, buildings are classified by their uses for the purpose of determining the quantity of sanitary fitments to be provided. There are five groups, each guided by a different standard of provision –

- (a) residential buildings (Regulation 4);
- (b) offices, industrial undertakings and other places of work (Regulation 5);
- (c) places of public entertainment (Regulation 6);
- (d) cinemas (Regulation 7); and
- (e) restaurants (Regulation 8).

7. In order to cover the increased diversity of uses in buildings in Hong Kong, three additional categories of uses are proposed, viz.,

- (f) sports stadiums;
- (g) shopping arcades and department stores; and
- (h) religious institutions and funeral parlours.

With the addition of these three categories, the Regulations should cover most of the buildings in Hong Kong, without duplicating the provisions in

other legislation which govern the provision of sanitary facilities in, for instance, child care centres, schools and boarding schools, clubs, etc., and those for disabled persons. As necessary, the Building Authority (BA) will give separate consideration to buildings which fall outside the prescribed categories, taking into account the detailed layout of the premises and assessment of the expected number of users.

Provision of sanitary fixtures

8. The opportunity is taken to increase the provision of waterclosets in female toilets in shopping arcades and department stores, cinemas and places of public entertainment.

9. Existing Regulations 4 to 8 prescribe the minimum quantity of sanitary fitments (including the numbers of waterclosets, urinals and lavatory basins) to be provided in different categories of uses. In recognition of the different capacity of the venues, as well as the differences between male and female in the demand for sanitary fitments, usage time, and the tolerance for queuing, the Regulations provide different standards for provision of male and female sanitary fitments in different types of premises.

10. In recent years, the inadequate provision of female toilets in public places, evidenced by the long waiting time and the queues often found outside these toilets, has become a matter of increasing public concern. There are reasonable and justified public aspirations for the statutory standards to be raised.

11. Following a comprehensive review which involved empirical surveys¹ of the provision of sanitary fitments in various premises, the level of usage, queuing time, usage time and level of user satisfaction, as well as a

¹ According to the surveys, the majority of male shoppers (88%) recollected that they did not need to queue for use of the toilets. On the other hand, only 44% of the female shoppers recalled they did not need to wait in a queue before they could use the toilets. 15%, 13% and 12% of female shoppers claimed that they had to on average wait for 5 minutes, 2 minutes and 3 minutes respectively. As for cinemas/places of public entertainment, again most of the male audiences (80%) recalled that they did not need to queue for the use of the toilets. On the other hand, only 47% of the female audiences recollected that they did not need to wait in a queue before they could use the toilets. 16% and 21% of female audiences perceived that they had to wait for on average 5 minutes and 2-3 minutes respectively. Another 7% of female audiences claimed they had to on average wait for 6 minutes or more. Overall, the “dissatisfaction” rates among female toilet users ranged between 11% and 35%, depending on the location of the shopping malls, cinemas or places of public entertainment. The proposed amendments aim at reducing the “dissatisfaction” rate among female toilet users to an average of 10%.

study of the standards adopted in overseas countries and consultation with various stakeholders including women organisations, we propose to amend the Regulations to provide for an enhanced standard of provision, taking into account the assessed numbers of male and female users in different types of venues. In addition, we propose to adopt a ratio of 1:1.5 (instead of the current 1:1) for assessing the numbers of male to female in the premises, thereby further raising the level of provision of female sanitary fitments.

12. Taken together, the proposed amendments are expected to result in an increase in the provision of female sanitary fitments in shopping arcades/department stores, cinemas and places of public entertainment by 60%, 160% and 150% respectively. We also propose to revise the ratio for assessing the proportion of male to female users in workplaces from the present 2:1 to 1:1, thus increasing the number of female sanitary fitments to be provided.

Performance-based requirements

13. As mentioned in paragraph 3, the majority of the design requirements in the present Regulations are prescriptive in nature. To enhance flexibility in building design, we propose transforming the current prescriptive standards, in particular those relating to design and installation of sanitary fitments and drainage works, to performance-based requirements. This will also bring the statutory provision into line with modern and internationally accepted practice.

14. For illustration, the prescriptive requirements in relation to size and fall of urinal channels, flushing pipes, rain water pipes, eave gutters, drains and surface channels will be transformed to performance-based requirements such that these pipes and channels are required to be of such size and laid with such fall as to provide sufficient handling capacity for discharge of the sanitary fitments connected thereto and for the purposes for which they are provided.

15. To facilitate compliance with the performance-based requirements, the BA will issue a Code of Practice setting out detailed technical guidelines and the national or international standards for reference of the practitioners. For flexibility and to encourage creativity, practitioners may also, as they

wish, adopt a design that can be demonstrated to satisfy the stipulated performance measures.

Title and presentation of the Regulations

16. The present title of the Regulations is long and cumbersome. We propose to simplify by amending it to “Building (Drainage) Regulation”. This will make it consistent with the simplicity of title in other regulations made under the Buildings Ordinance, e.g. the Building (Administration) Regulations, Building (Planning) Regulations and Building (Construction) Regulations.

17. We would also rationalise the structure of the Regulations, both to improve presentation and to reflect the changes made by the various amendments. The amended Regulations are likely to be in twelve Parts, compared to ten at present.

PUBLIC CONSULTATION

18. The BD has consulted relevant stakeholders/parties, professional bodies of the construction industry including the Hong Kong Institute of Architects, the Hong Kong Institution of Engineers, the Hong Kong Institute of Surveyors, relevant Government departments as well as other concerned associations such as the Hong Kong Toilet Association, Ladies Committee of Chinese General Chambers of Commerce, Women’s Commission and Hong Kong Federation of Women on the relevant amendments which are of interest to them. The stakeholders generally welcome the proposed amendments.

19. The proposed amendments have also been discussed at the Building Sub-Committee of the Land and Development Advisory Committee as well as at the Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers Committee. Members of these two committees are supportive of the proposals.

ADVICE SOUGHT

20. Members' views are sought on the proposal to amend the Regulations.

**Development Bureau
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