

# LEGISLATIVE COUNCIL BRIEF

Buildings Ordinance  
(Chapter 123)

## **BUILDING (CONSTRUCTION) REGULATION**

## **BUILDING (ADMINISTRATION) (AMENDMENT) REGULATION 2020**

## **BUILDING (VENTILATING SYSTEMS) (AMENDMENT) REGULATION 2020**

## **BUILDING (CONSTRUCTION) REGULATIONS (REPEAL) REGULATION**

### **INTRODUCTION**

In exercise of the power conferred by section 38 of the Buildings Ordinance (“BO”) (Cap. 123), the Secretary for Development has made the following four pieces of subsidiary legislation for the implementation of a performance-based building control system and the enhancement of standards on the design and construction of buildings, streets, building works and street works under the BO –

#### Annex A to D

- (a) the Building (Construction) Regulation (“the New Regulation”) (at **Annex A**);
- (b) the Building (Administration) (Amendment) Regulation 2020 (at **Annex B**);
- (c) the Building (Ventilating Systems) (Amendment) Regulation 2020 (at **Annex C**); and
- (d) the Building (Construction) Regulations (Repeal) Regulation (at **Annex D**).

## JUSTIFICATIONS

2. The extant Building (Construction) Regulations (Cap. 123 sub. leg. B) (“B(C)R”) were first enacted in 1956 and substantially amended in 1975 and 1990. They govern the design and construction of buildings, streets, building works and street works. The extant B(C)R comprise both prescriptive and performance-based provisions. The performance-based provisions specify the objectives and functional requirements rather than prescribe detailed technical requirements.

3. Most of the provisions in the extant B(C)R have been in use for some 30 years. Practitioners have expressed concern that the existing prescriptive provisions are not conducive to innovative building designs. With the advancements in building technology and developments in international building codes and standards, a comprehensive review of the extant B(C)R has been conducted with a view to ensuring that the statutory requirements could meet modern-day requirements and international standards on construction quality and safety.

4. Taking into account the outcome of the review and the concerns of the industry, the New Regulation converts the current prescriptive provisions in the extant B(C)R into performance-based provisions as far as practicable<sup>1</sup> on the following grounds –

- (a) the conversion of prescriptive provisions into performance-based ones is in line with international practices, which mandate the expected performance of the design and construction of buildings rather than definitive requirements, to facilitate innovations and advancements in building technology as well as to provide flexibility;

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<sup>1</sup> The extant prescriptive provisions regarding loads imposed on buildings (which could not be replaced by performance-based provisions) would be retained to ensure that the current regulatory regime of the extant B(C)R will not be compromised.

- (b) the performance-based provisions do not alter the objectives of the BO or reduce the control of the Building Authority (“BA”). Following the current practice, the BA will issue and update codes of practice and practice notes on an administrative basis to provide guidelines, standards and technical specifications, the compliance with which would be regarded by the BA as satisfying the performance-based requirements set out in the New Regulations. It is open to registered building professionals (viz. Authorized Persons, Registered Structural Engineers or Registered Geotechnical Engineers registered under the BO) to demonstrate any other means of achieving the objectives and functional requirements set out in the performance-based provisions; and
  
- (c) the performance-based provisions also reflect the current practices whereby the BA exercises the discretion under section 42 of the BO to permit modifications to certain prescriptive provisions and accept alternative yet agreeable approaches proposed by registered building professionals. The adoption of performance-based provisions instead of prescriptive provisions in the New Regulations would enhance the clarity of the criteria against which the proposed design and construction of buildings would be considered for approval.

The conversion of the prevailing prescriptive requirements into performance-based ones in the New Regulation does not alter the objectives of the BO and the degree of the BA’s control under the BO will not be diminished. The revamped B(C)R will not limit the BA’s powers to disapprove submissions under the BO.

## LEGISLATIVE AMENDMENTS

### The New Regulation

5. The New Regulation is made based on the extant B(C)R and contains twelve parts. As compared with the extant B(C)R, the New Regulation seeks to –

- (a) transform the remaining prescriptive provisions into performance-based provisions as far as practicable;
- (b) enhance the standards on building construction by adding new definitions and provisions to meet modern-day requirements and align with the prevailing legislation;
- (c) introduce new provisions to require adequate means of access for maintenance at the exterior of buildings in order to provide better protection of workers' safety;
- (d) remove obsolete and redundant provisions; and
- (e) re-structure the extant B(C)R for a coordinated and coherent presentation.

6. The main provisions under the twelve parts of the New Regulation are briefly described as follows –

- (a) **Part 1** provides for the commencement and the interpretation of the New Regulation;
- (b) **Part 2** removes prescriptive requirements for certain materials and requires that the suitability and performance of materials must be verified by recognised tests;
- (c) **Part 3** provides for requirements in dealing with dead loads, imposed loads and wind loads in building design and construction. Tables 1, 2 and 3 in the Schedule to the New

Regulation set out the relevant load intensity in calculating imposed loads of various usages, such that building, street, building works or street works must not be subjected to a load beyond its proper bearing capacity. Requirements in dealing with loads of new usages have also been added;

- (d) **Part 4** sets out requirements for design and construction relating to the design methodology, strength and serviceability, stability, as well as construction methods and procedures;
- (e) **Part 5** relates to site investigations in respect of building works or street works;
- (f) **Part 6** sets out requirements for foundations and includes requirements for on-site tests and proof tests in relation to foundation units;
- (g) **Part 7** sets out requirements for site formation works, retaining walls and bulk excavation. This part also imposes restrictions and geotechnical controls on bulk excavations in area number 1 of the scheduled areas set out in Schedule 5 to the BO (i.e. the Mid-levels area);
- (h) **Part 8** deals with requirements for external walls, cladding and curtain walls and introduces new provisions to mandate the provision of adequate means of access for maintenance of external features of buildings;
- (i) **Part 9** deals with protection against water and moisture penetration;
- (j) **Part 10** sets out requirements in relation to fire resisting construction;
- (k) **Part 11** relates to user safety and consists of two Divisions. Division 1 deals with protective barriers. Division 2 deals

with building works associated with lifts and escalators; and

- (l) **Part 12** provides for requirements relating to ground treatments, wells, chimneys and flues, fireplaces, preventing places for habitation by vermin, and large-sized ducts allowing person's entry for maintenance.

### **Other Amendments**

7. As a result of the New Regulation, the following amendments have also been made to other regulations under the BO, namely the Building (Administration) Regulations (“B(A)R”) (Cap. 123 sub. leg. A) and the Building (Ventilating Systems) Regulations (“B(VS)R”) (Cap. 123 sub. leg. J), and to repeal the extant B(C)R (collectively referred to as “the associated amendments”) –

- (a) the Building (Administration) (Amendment) Regulation 2020 updates the cross reference to the New Regulation in B(A)R;
- (b) the Building (Ventilating Systems) (Amendment) Regulation 2020 removes the extant requirements under B(VS)R on large-sized ducts which are covered under Part 12 of the New Regulation; and
- (c) the Building (Construction) Regulations (Repeal) Regulation repeals the extant B(C)R.

8. The New Regulation will come into operation on 1 February 2021, which is not less than 12 months after its gazettal with a view to allowing sufficient time for stakeholders to familiarise with the change.

## **LEGISLATIVE TIMETABLE**

9. The legislative timetable is as follows –

|  |                 |
|--|-----------------|
| Publication in the Gazette                 | 10 January 2020 |
| Tabling in the Legislative Council         | 15 January 2020 |
| Commencement of the subsidiary legislation | 1 February 2021 |

## **IMPLICATIONS OF THE REGULATION**

10. The New Regulation and the associated amendments are in conformity with the Basic Law, including the provisions concerning human rights. The New Regulation and the other associated amendments will not affect the binding effect of the BO and the regulations made thereunder. They have no financial and civil service implications.

## **PUBLIC CONSULTATION**

11. We consulted the Building Sub-Committee of the Land and Development Advisory Committee as well as the Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers Committee, which comprise representatives from relevant professional bodies and associations of the building and construction industry, on the New Regulation and the associated amendments. Members of these two committees were generally supportive of the legislative amendments.

12. We consulted the Panel on Development of the Legislative Council on the New Regulation and the associated amendments on 26 February 2019. Members generally supported the legislative amendments, but passed a motion requesting the Government to mandate in the New Regulation the provision of platforms as passageways at newly-completed buildings with air-conditioners (“A/C”) installed on

external walls (except for window-type A/C) for workers to carry out installation and maintenance works safely.

13. The New Regulation mandates the provision of adequate means of access for maintenance to external features (which include A/C placed external to a building) and represents an improvement from the extant legislation, which does not empower BA to disapprove building plans that do not provide for adequate maintenance and repair (“M&R”) access to external features. Besides, the Buildings Department (“BD”) also promulgated the “Code of Practice on Design for Safety - External Maintenance” (“the Code”) on 19 September 2019, which specifies the deemed-to-satisfy requirements for compliance with the new provisions in the New Regulation on means of access for maintenance to the exposed sides of external walls, cladding, curtain walls, roofs and projections of buildings. Relevant stakeholders including the A/C trade have been consulted when drafting the Code. Specifically, in response to the A/C trade’s earlier request of provision of physical M&R access to an A/C unit placed external to a building, the Code requires that, if the design of a building results in the main part of an A/C placed on an A/C platform external to a building, M&R access to the A/C platform should be provided either by a maintenance access window or a balcony/utility platform combined with the A/C platform having regard to the prevailing technology, regulations and practices relating to building design. Guidelines on the dimension and design requirements for the M&R access to be provided by a maintenance access window or a balcony/utility platform combined with an A/C platform are also given in the Code. The A/C trade generally supports the Code. The Code has already been in force and serves as comprehensive guidelines for the building industry. Upon commencement of the New Regulation, compliance with the Code will be deemed to satisfy the statutory requirements set out in the regulation. While compliance with the Code before commencement of the New Regulation is voluntary, with effect from 1 December 2019, compliance with the Code is a pre-requisite for disregarding A/C platforms from plot ratio and site coverage calculations in new building plans and major revision of plans for building development or alterations and additions proposals. The arrangement would encourage practitioners to comply with the Code before the



commencement of the New Regulation.

## **PUBLICITY**

14. A press release will be issued on 10 January 2020 when the New Regulation, the amendment regulations and the regulation to repeal the extant B(C)R are published in the Gazette. BD will publicise these regulations via its website and through communication with stakeholders including building professionals and industry practitioners.

## **ENQUIRY**

15. Enquiry on this brief can be addressed to Ms. Jasmine Choi, Principal Assistant Secretary (Planning & Lands) 3 of the Development Bureau at 3509 8806.

**Development Bureau**

**8 January 2020**

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**Building (Construction) Regulation**

(Made by the Secretary for Development under section 38(1) of the Buildings Ordinance (Cap. 123))

**Part 1****Preliminary****1. Commencement**

This Regulation comes into operation on 1 February 2021.

**2. Interpretation**

In this Regulation—

*carriageway* (車路) means a part of a private street, cul-de-sac or access road, used or intended to be used by vehicular traffic;

*dead load* (恆載)—see section 4;

*foundation* (基礎) means the part of a building, street, building works or street works that—

- (a) is in direct contact with the ground; and
- (b) transmits load to the ground;

*imposed load* (外加荷載)—see section 5;

*inaccessible roof* (非開放屋頂)—see section 36(2);

*site investigation* (地盤勘測), in relation to a site, means investigation of the physical characteristics of the site and includes documentary studies, site surveys and ground investigation;

*wind load* (風荷載)—see section 6.

**Part 2****Requirements for Materials****3. Materials**

- (1) All materials used in building works or street works must be—
  - (a) of a nature and quality suitable for their intended use or purpose;
  - (b) adequately mixed or prepared; and
  - (c) applied, used or fixed so as to perform adequately their intended functions.
- (2) To ensure that subsection (1) is complied with, the materials used must be adequately tested by recognized tests.

**Part 3****Loads****4. Dead loads**

- (1) In this Regulation, a reference to dead load is to be construed according to this section.
- (2) Dead load is a load of permanent nature.
- (3) The dead load of any building, street, building works or street works is, in each case, the total weight of its walls, floors, roofs, finishes, permanent partitions and any other permanent constructions.
- (4) For the purposes of subsection (3), the dead load must be calculated on the basis of the unit weight of the materials derived from reliable data.

**5. Imposed loads**

- (1) In this Regulation, a reference to imposed load is to be construed according to this section.
- (2) Imposed load is a load other than dead load or wind load.
- (3) The imposed load on any building, street, building works or street works is, in each case, the greatest applied load likely to arise from its intended use or purpose (including forces exerted by the adjacent ground).
- (4) For the purposes of subsection (3), the greatest applied load must be derived from reliable data.

**6. Wind loads**

- (1) In this Regulation, a reference to wind load is to be construed according to this section.

- (2) Wind load is any load due to the effects of wind pressure or suction.
- (3) The wind load on any building, street, building works or street works must be based, in each case, on its response to the effect of winds from any direction.
- (4) The effect of winds referred to in subsection (3) must be suitably determined by considering the magnitude of winds having a return period of not less than 50 years.

**7. Imposed loads to be applied**

- (1) The minimum imposed load on a building, street, building works or street works must be whichever of the following that produces the greater adverse effect on the building, street, building works or street works—
  - (a) the distributed load specified in column 3 of Table 1 in the Schedule applied uniformly on plan; or
  - (b) either of the following—
    - (i) the concentrated load specified in column 4 of the Table applied on plan over any square with a 50 mm side (or other dimension specified in that column);
    - (ii) the line load specified in column 4 of the Table.
- (2) If the floor of a building is to support partitions but the positions of the partitions are not indicated on the plan of the building, the weight of the partitions—
  - (a) is to be regarded as the distributed imposed load applied uniformly on plan; and
  - (b) in addition to other imposed loads—
    - (i) has to be not less than one-third of the weight per metre length of the partitions uniformly distributed per square metre; and

(ii) has to be not less than 1 kPa if the floor is used for office purposes.

- (3) If the floor of a building is to support equipment, machinery or displaying items that will result in an imposed load greater than that specified in Table 1, the load of the equipment, machinery or displaying items must be taken into account in determining the imposed load on the floor.

#### 8. Reduction of imposed loads

- (1) Subject to subsections (2), (3), (4) and (5), in determining the total imposed load on a column, pier, wall or foundation (*the member under consideration*), a reduction specified in Table 2 in the Schedule may be applied to the distributed imposed load on the roof and on every floor carried by the member under consideration.
- (2) If a single span of beam supports not less than 45 m<sup>2</sup> of floor at any level, for the purpose only of designing the beam, a reduction referred to in subsection (3) may be applied to the distributed imposed load on the floor that the beam supports.
- (3) The reduction that may be applied is—
- 5% for each complete 45 m<sup>2</sup> of the floor that the beam supports; and
  - not more than 20% in total for the floor that the beam supports.
- (4) For factories and workshops designed for a distributed imposed load of 7.5 kPa or more, the total imposed load must not be reduced below the value of the imposed load that is obtained if all the floors had been designed for a distributed imposed load of 7.5 kPa without the reduction specified in Table 2.
- (5) The imposed loads must not be reduced in relation to—

- floors of a building that support the equipment, machinery or displaying items referred to in section 7(3);
- floors of factories and workshops designed for a distributed imposed load of less than 7.5 kPa;
- floors used by vehicles;
- office areas used for storage and filing purposes;
- forces produced by dynamic effects;
- floors used for storage purposes; or
- loads from partitions the positions of which are not indicated on the plan of the building.

#### 9. Imposed loads—design of protective barrier

- (1) A protective barrier installed to restrict or control the movement of persons must be designed to resist the minimum horizontal imposed loads specified in Table 3 in the Schedule when separately applied (*relevant imposed load*).
- (2) If the wind load is applicable, the protective barrier must be designed to resist the relevant imposed load or the wind load, whichever produces the greater adverse effect.
- (3) A vehicle barrier for a carriageway, floor, driveway or ramp used by vehicles must be designed to withstand the greatest impact force anticipated, subject to the following requirements—
- the minimum design impact force on a vehicle barrier is to be  $[0.5 Mv^2 / (\delta c + \delta b)]$  kN where—
    - M is the gross mass in kg of the heaviest vehicle that would be allowed to use the carriageway, floor, driveway or ramp;
    - v is the velocity of the vehicle normal to the barrier in metre per second;

$\delta_c$  is the deformation of the vehicle in mm; and

$\delta_b$  is the deflection of the barrier in mm; and

- (b) the impact force is to be uniformly distributed over any length of 1.5 m and acting horizontally at the bumper height of the vehicle.

#### 10. Imposed loads—forces produced by dynamic effects

- (1) Forces produced by dynamic effects are considered as additional imposed loads in the design of any building, street, building works and street works.
- (2) Subject to subsection (3), the forces produced by dynamic effects in a factory, workshop or other building for industrial use may be determined on the basis of information about the factory, workshop or building.
- (3) If the forces referred to in subsection (2) are not determined on the basis of information about the factory, workshop or building—
  - (a) for the purpose only of determining the design of slabs and beams—the forces are taken to be an additional vertical imposed load of 2.5 kPa; and
  - (b) for the purpose of determining the design of structural frames and foundations—the forces are taken to be an additional horizontal force (which may be assumed not to act together with the wind load) of 10% of the imposed load specified in paragraph (a), acting simultaneously on the number of floors (*the number*) that will produce the greatest adverse effect, where the number should be a whole number not less than 0.2 times the total number of floors subject to dynamic effects.

#### 11. Notice as to load

- (1) This section applies to industrial buildings and warehouses.

- (2) A notice stating the designed distributed imposed load of a floor of an industrial building or warehouse must be displayed permanently and conspicuously at—
  - (a) each staircase of every storey of the building or warehouse; or
  - (b) another appropriate place of the building or warehouse.
- (3) If different parts of a floor of the building or warehouse have different designed distributed imposed loads, a notice stating the designed distributed imposed load of each part of the floor must be displayed permanently and conspicuously at that part.
- (4) A notice referred to in subsection (2) or (3) must be legible and made of durable materials.
- (5) In this section—

*designed distributed imposed load* (設計分布外加荷載), in relation to a floor of an industrial building or warehouse, means the distributed imposed load in terms of weight per square metre, excluding the dynamic effects, for which the floor of the industrial building or warehouse is designed.

#### 12. Overloading

- (1) Subject to subsection (2), any building, street, building works or street works is not to be subject to a load beyond its proper bearing capacity.
- (2) This section does not apply in relation to any load that may be required for the purpose of testing.

**Part 4****Requirements for Design and Construction****13. Design methodology**

The design for any building, street, building works and street works must be in conformity with—

- (a) the laws of mechanics;
- (b) recognized engineering principles; and
- (c) recognized engineering practices.

**14. Strength and serviceability considerations**

- (1) This section applies to the structure of any building, street, building works and street works.
- (2) The structure must be capable of—
  - (a) safely sustaining the combination of the dead loads, imposed loads and wind loads; and
  - (b) safely transmitting the loads referred to in paragraph (a) to the ground.
- (3) The structure must be designed and constructed with an adequate factor of safety.
- (4) The design and construction of the structure must not—
  - (a) cause any cracks, deflection, deformation or other movement that may adversely affect the intended use or performance of—
    - (i) the whole or any part of the building, street, building works or street works; or
    - (ii) the whole or any part of any other building, structure, land, street or services;

- (b) cause any damage to—
    - (i) the building, street, building works or street works; or
    - (ii) any other building, structure, land, street or services; or
  - (c) render inadequate the factor of safety of any other building, street, building works or street works.
- (5) The loads referred to in subsection (2)(a) are to be determined in accordance with Part 3.

**15. Stability**

A building, street, building works or street works must be designed and constructed with an adequate margin of safety against instability.

**16. Construction methods and procedures**

- (1) In carrying out building works or street works—
  - (a) appropriate construction methods and procedures must be adopted; and
  - (b) appropriate precautionary measures must be taken.
- (2) Without limiting subsection (1), that subsection is not taken to be complied with in relation to a building, structure, land, street or services if—
  - (a) the factor of safety or margin of safety against instability of the building, structure, land, street or services is rendered inadequate;
  - (b) damage is caused to any building, structure, land, street or services; or
  - (c) crack, undue deformation or other movement of the whole or any part of the building works or street works (whether in its temporary or permanent state) occurs to the extent



that the structure of the works would exceed its acceptable dimensional tolerance.

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## **Part 5**

### **Requirements for Site Investigation**

- 17. Site investigation**
- (1) This section applies to a site investigation of a site in respect of building works or street works.
  - (2) A site investigation that provides adequate geotechnical and any other relevant data for the design and construction of the works must be carried out in conformity with recognized standards.
-

**Part 6****Requirements for Foundations****18. Foundations**

- (1) A foundation of a building, street, building works or street works must be capable of—
  - (a) safely sustaining the combination of the dead loads, imposed loads and wind loads from the building, street, building works or street works, and any other loads, exerted on the foundation; and
  - (b) safely transmitting the loads referred to in paragraph (a) to the ground.
- (2) The design and construction of a foundation must take into account—
  - (a) the conditions of the ground on which the foundation rests;
  - (b) its installation method; and
  - (c) the group effects of the foundation system.
- (3) The foundation must be designed and constructed with an adequate factor of safety.
- (4) The design and construction of a foundation of a building, street, building works or street works must not—
  - (a) impair the stability of any other building, structure, land, street or services;
  - (b) cause any damage to any other building, structure, land, street or services; or
  - (c) render inadequate the factor of safety of any other building, structure, land, street or services.

- (5) A site investigation of the relevant site must be carried out in compliance with section 17 before a foundation is constructed.
- (6) The ground on which the foundation of any building, street, building works or street works rests must be capable of safely sustaining the combination of the following loads with an adequate factor of safety—
  - (a) the dead loads of the building, street, building works or street works;
  - (b) the imposed loads on the building, street, building works or street works;
  - (c) the wind loads on the building, street, building works or street works; and
  - (d) any other loads exerted on the foundation.

**19. Building Authority may require on-site tests**

- (1) If the Building Authority has any doubt as to the design assumption or load carrying capacity of a foundation, the Building Authority may require tests to be carried out on-site.
- (2) The tests may be carried out on the foundation or on the ground on which the foundation rests—
  - (a) by means of imposition of test loads; or
  - (b) by means of any other suitable method.

**20. Proof tests on foundation units**

- (1) To ascertain the performance of a foundation under load, representative foundation units of the foundation must be adequately tested by proof tests.
- (2) The proof tests may be carried out by means of any of the following methods that is appropriate to the type of foundation—

- (a) imposition of test loads;
  - (b) core drilling of the completed cast-in-place concrete foundation;
  - (c) any other suitable method.
- 

## Part 7

### Requirements for Site Formation Works

#### 21. Site formation works

- (1) Site formation works must be designed and constructed so as to provide an adequate margin of safety of the works and the remainder of the site during and after the construction.
- (2) The design and construction of site formation works must not—
  - (a) cause any damage to any building, structure, land, street or services; or
  - (b) render inadequate the margin of safety of any building, structure, land, street or services.

#### 22. Interpretation—sections 22, 23 and 24

In this section and sections 23 and 24—

*minor retaining wall* (小型擋土牆) means a retaining wall that meets the following descriptions—

- (a) the difference between the upper ground level, and the lower ground level, next to the wall does not exceed 1.5 m;
- (b) the average inclination of the ground on the upper ground level next to the wall does not exceed 15 degrees to the horizontal; and
- (c) the surcharges from the foundation or any other structures do not impose any loading on the wall;

*retaining wall* (擋土牆) means a permanent structure on land that retains earth or fill.

**23. Retaining wall—design and construction**

- (1) A retaining wall must be capable of safely supporting—
  - (a) the earth or fill it retains; and
  - (b) other loads exerted on the wall.
- (2) The design of a retaining wall must—
  - (a) enable the function referred to in subsection (1) to be performed under the most onerous loading conditions during the wall's construction and throughout the service life of the wall;
  - (b) be in conformity with recognized engineering principles; and
  - (c) be based on data from a site investigation of the relevant site carried out in compliance with section 17.
- (3) A retaining wall must be designed with an adequate factor of safety against—
  - (a) sliding;
  - (b) overturning;
  - (c) ultimate bearing failure; and
  - (d) failure on a surface passing beneath the wall.
- (4) The design and construction of a retaining wall must not—
  - (a) impair the stability of any building, structure, land, street or services; or
  - (b) cause any damage to any building, structure, land, street or services.

**24. Retaining wall—drainage and other requirements**

- (1) This section applies to a retaining wall other than a minor retaining wall.

- (2) The design and construction of a filter of a retaining wall that is placed against soil must—
  - (a) allow water to flow through the filter; and
  - (b) restrain migration of particles from the soil.
- (3) If a drainage system is provided for a retaining wall to reduce any water pressure that may be imposed on the wall, the system must be designed and constructed so that the performance of the system can be maintained throughout the service life of the wall.
- (4) Backfill of a retaining wall must consist of material that can be compacted to form a stable fill.
- (5) To carry away any water seepage or surface water of a retaining wall, there must be, on both the upper ground level and the lower ground level next to the wall—
  - (a) channels of suitable size; or
  - (b) paving.
- (6) The channels or paving referred to in subsection (5) must be laid to an adequate gradient to direct the water to flow into a surface water drain.

**25. Bulk excavation in area number 1 of scheduled areas**

- (1) In this section—

**bulk excavation** (大型挖掘工程) means any kind of excavation except excavation for—

- (a) ground investigation;
- (b) public utility trenches;
- (c) drains;
- (d) sewers; or
- (e) pile installation;

*cumulative adverse effect* (累積不利影響), in relation to area number 1 of the scheduled areas, means the overall adverse effects on the stability of the hillside in the area due to bulk excavation at 2 or more sites in the area.

- (2) Bulk excavation carried out in area number 1 of the scheduled areas must be limited to a level that minimizes the cumulative adverse effect to the area.
- 

## Part 8

### Requirements for External Wall, Cladding and Curtain Wall

#### 26. Interpretation—Part 8

- (1) In this Part—

*cladding* (覆蓋層), in relation to a building, means a facing or architectural decoration additional to the structural elements of the building;

*curtain wall* (幕牆), in relation to a building, means a non load-bearing enclosure of the building that is fixed on to a load-bearing structure of the building;

*non-combustible materials* (不可燃物料) means materials that pass a recognized non-combustibility test.

- (2) In this Part, a structure of a building is load-bearing if it bears a load that is not due to—
- (a) its own weight; or
  - (b) wind pressure on its surface.

#### 27. External wall

- (1) An external wall of a building must be constructed of materials that are—
- (a) permanent and impervious; and
  - (b) non-combustible materials.
- (2) Adequate means of access to the outer surface of an external wall of a building or a projection from the wall must be provided for the maintenance or repair of the wall or projection.

**28. Cladding**

- (1) A cladding of a building must be—
  - (a) constructed of non-combustible materials;
  - (b) of suitable thickness, strength and durability; and
  - (c) fixed and supported in a suitable manner and sequence, so as to maintain the long-term stability and integrity of the cladding.
- (2) To allow differential movement between a cladding of a building and the structure of the building to which it is attached, the cladding must be permanently provided with a sufficient number of flexible joints horizontally and vertically.
- (3) Suitable metal dowels and fixings must be used to fix the cladding on to a building.
- (4) The metal dowels and fixings referred to in subsection (3) must be—
  - (a) permanently fixed on to the structural elements of the building throughout the service life of the dowels and fixings; and
  - (b) adequately protected against corrosion.
- (5) If the cladding of a building is exposed to weather, adequate means of access to the outer surface of the cladding or a projection from the cladding must be provided for the maintenance or repair of the cladding or projection.

**29. Curtain wall—design**

- (1) A curtain wall of a building must be capable of—
  - (a) safely sustaining the combination of the dead loads, imposed loads and wind loads; and
  - (b) safely transmitting the loads referred to in paragraph (a) to a load-bearing structure of the building,

without causing any deflection or deformation that may damage the wall or impair its stability.

- (2) A curtain wall of a building must be designed in conformity with recognized engineering principles relating to the design and structural use of materials.
- (3) To prevent water seepage or condensation from damaging a curtain wall of a building, provision must be made for the collection and discharge of any water seepage or condensed water from the wall.

**30. Curtain wall—materials**

- (1) A curtain wall of a building must be constructed of non-combustible materials only.
- (2) If any material used in the construction of a curtain wall of a building may be affected by electrolytic or chemical action due to its contact with other materials, the surface of the material must be satisfactorily treated or separated to prevent corrosion.
- (3) The materials used for anchors and fixings in a curtain wall system must be suitable and adequately protected against corrosion.

**31. Curtain wall—fixing of supports and maintenance**

- (1) A curtain wall support of a building must be fixed on to a load-bearing structure of the building—
  - (a) by a cast-in anchorage in a structural concrete member of the structure; or
  - (b) by welding or bolting to a structural steel member of the structure.
- (2) The fixing of a curtain wall support to a load-bearing structure of a building must not—

- (a) impair the structural integrity of the member of the structure to which the support is fixed; or
  - (b) adversely affect the performance of the member.
- (3) Adequate means of access to the outer surface of a curtain wall of a building or a projection from the wall must be provided for the maintenance or repair of the wall or projection.
- 

## Part 9

### Protection against Moisture and Water

#### 32. Walls—protection against moisture penetration

A wall of a building that may be in contact with damp must be provided with adequate protection to prevent moisture penetration.

#### 33. Floor and adjoining ground surface

- (1) The ground surface within the external walls of a building must be covered with a suitable material to prevent moisture penetration.
- (2) Adequate means must be provided to prevent ingress of water from the ground surface outside a building to the adjoining floor of the building.
- (3) To carry away any surface water on the ground surface (except in any landscaped area) outside a building, the surface must be provided with paving laid to an adequate gradient to direct the water to flow into a surface water drain.
- (4) If a room of a building is provided with a water supply, the floor of the room must be constructed so as to prevent water penetration.
- (5) The floor of a balcony (including utility platform) and a verandah of a building must be constructed so as to prevent water penetration.

#### 34. Roof

- (1) The roof of a building must be designed and constructed so as to make it weatherproof.
- (2) Adequate means must be provided to prevent ingress of water from the roof of a building to the adjoining floor.

- (3) Adequate means of access to the roof of a building or a projection from the roof must be provided for the maintenance or repair of the roof or projection.
- 

## Part 10

### Requirements for Fire Safety

#### 35. Fire resisting construction

A building must be designed and constructed so as to, in case of fire—

- (a) inhibit the spread of fire within the building and to the buildings nearby;
  - (b) provide adequate resistance to the spread of fire and smoke—
    - (i) between different buildings; and
    - (ii) in the building between different uses;
  - (c) maintain the stability of the building to—
    - (i) allow adequate time for safe evacuation;
    - (ii) allow adequate time for rescue and firefighting operation; and
    - (iii) avoid any consequential damage to the buildings nearby; and
  - (d) provide adequate resistance to the spread of fire over the roof of the building to any other building having regard to the location of the building.
-



**Part 11****Requirements for User Safety****Division 1—Protective Barrier****36. Application—Division 1**

- (1) This Division does not apply to—
- (a) a stage in an assembly hall;
  - (b) a vehicle parking bay for loading and unloading of goods;
  - (c) an inaccessible roof;
  - (d) an inaccessible area; or
  - (e) any space (other than an accessible roof) within domestic premises for occupation by 1 family.

- (2) In this section—

*inaccessible area* (非開放地方) means an area that—

- (a) is not intended to be used for human occupation; and
- (b) is intended to be only accessible to personnel for maintenance or repair works;

*inaccessible roof* (非開放屋頂) means a roof that—

- (a) is not intended to be used for human occupation; and
- (b) is intended to be only accessible to personnel for maintenance or repair works.

**37. Provision of protective barrier**

- (1) A protective barrier must be provided at the edge of a balcony, verandah, floor, roof, staircase, landing or projection to restrict or control the movement of persons, objects and vehicles.

- (2) If the difference between 2 adjacent levels (whether or not within a building) exceeds 600 mm, a protective barrier must be provided at the higher level to restrict or control the movement of persons, objects and vehicles.

**38. Protective barrier—design and construction**

A protective barrier required under section 37 must be designed and constructed so as to—

- (a) prevent a person or object from falling, rolling, sliding or slipping through the gap of the barrier; and
- (b) prevent a person from climbing over the barrier.

**Division 2—Lift and Escalator****39. Application and interpretation—Division 2**

- (1) This Division applies to a building in which a lift or escalator is installed or is to be installed other than—
- (a) an amusement device, including an amusement ride as defined by section 2(1) of the Amusement Rides (Safety) Ordinance (Cap. 449);
  - (b) a belt, bucket, scoop or roller conveyor or any similar machine;
  - (c) a hoist, including a skip hoist, used mainly for charging furnaces or similar appliances;
  - (d) a hoist used solely for lifting or feeding material directly into a machine or used solely for both of those purposes;
  - (e) a lift the height of travel of which does not exceed 3.5 m and that—
    - (i) does not pass through any floor; and

- (ii) is used solely for the carriage, stacking, loading or unloading of any goods or materials or any 2 or more of those purposes;
  - (f) a lift the height of travel of which does not exceed 3.5 m and that—
    - (i) does not pass through any floor; and
    - (ii) is used solely for raising motor vehicles;
  - (g) a lift that is provided, in connection with a building under construction, solely—
    - (i) for carrying persons employed in the construction of the building;
    - (ii) for carrying materials used in connection with the construction of the building; or
    - (iii) for carrying persons referred to in subparagraph (i) and materials referred to in subparagraph (ii);
  - (h) a ramp that is connected to a wharf or pier;
  - (i) a stage or orchestra lift;
  - (j) a stairlift with a guided carriage for use by persons (whether or not with a wheelchair) that travels substantially along the direction of a flight of stairs; or
  - (k) a lifting platform for carrying persons with a disability (whether or not with a wheelchair) if—
    - (i) the platform travels between different levels; and
    - (ii) the difference between the highest and lowest of the levels does not exceed 2 m.
- (2) In this Division—
- associated equipment or machinery* (相聯設備或機械), in relation to a lift or escalator, has the meaning given by section 2(1) of the Lifts and Escalators Ordinance (Cap. 618);

*restricted space* (限進空間) means—

- (a) in relation to a lift—the lift shaft and the space containing the associated equipment or machinery of the lift; or
- (b) in relation to an escalator—the space containing the associated equipment or machinery of the escalator.

#### 40. Design and construction in connection with lift and escalator

- (1) A building must be designed and constructed so as to—
  - (a) provide adequate structural strength, space, protection, access and ventilation for the safe operation, inspection and maintenance of a lift or escalator; and
  - (b) ensure that the restricted space of a lift or escalator is inaccessible except for inspection, maintenance, repair or rescue.
- (2) If a lift or escalator is added to a building after the completion of the building, the design and construction relating to the addition must comply with subsection (1).

#### 41. Warning notices on use of lift and escalator

- (1) A notice must be displayed permanently at a conspicuous location of a door or other form of access to the restricted space of a lift or escalator in a building, to caution against—
  - (a) the danger of entering the restricted space; and
  - (b) the danger of interfering with the operation of the lift or escalator.
- (2) A notice must be displayed permanently at a conspicuous location of every entrance of a lift to caution against using a lift when there is a fire.
- (3) A notice referred to in subsection (1) or (2) must be legible and made of durable materials.

**Part 12****Miscellaneous****42. Ground treatment**

- (1) If a ground treatment is to be carried out to improve the load carrying capacity of a ground, adequate proof of the suitability of the method and materials to be used for the treatment must be given to the Building Authority.
- (2) If a ground treatment has been carried out on a ground, the Building Authority may require adequate tests of the ground to be carried out.
- (3) If a ground treatment may affect any building, structure, land, street or services, adequate precautionary measures must be taken.

**43. Well**

- (1) A well associated with a building or building works must not be sunk or reopened except with the permission of the Building Authority.
- (2) The design, construction and operation of a well must not—
  - (a) impair the stability of any building, structure, land, street or services; or
  - (b) cause any damage to any building, structure, land, street or services.
- (3) A well must not be sunk in the vicinity of a septic tank, cesspool, sewage sump or in a contaminated ground.
- (4) A well must be provided with adequate means to prevent surface water or sullage water from getting into the well from its top opening.

- (5) A well must be properly lined to prevent contamination.
- (6) If a well is likely to be adversely affected by accumulation of particles, a suitable filter must be provided.
- (7) A well must be designed and constructed so as to prevent unauthorized entry.

**44. Chimney and flue**

- (1) This section applies to a chimney and flue—
  - (a) the internal diameter, breadth or width of which exceeds 200 mm; or
  - (b) the height of which exceeds 3 m.
- (2) A chimney of a building—
  - (a) must be constructed, positioned or shielded so as to prevent ignition of any part of the building or any other building; and
  - (b) must be constructed so as to ensure that the temperature of its outer surface would not reach a level that may cause any danger to a person in or near the building.
- (3) A flue of a building, whether installed inside or outside the building—
  - (a) must be constructed, positioned or shielded so as to prevent ignition of any part of the building or any other building; and
  - (b) must be positioned or shielded so as to minimize the risk of accidental damage to the flue and the danger to a person in or near the building.
- (4) To prevent a fire in a building, a flue must terminate at a position so that the products of combustion will not enter the windows or openings, fresh air inlets, mechanical ventilation inlets or exhausts of the building or any other building.

(5) In this section—

*chimney* (煙囪) means—

- (a) a structure that performs the same functions as a flue; or
- (b) a structure enclosing a flue or flues;

*flue* (煙道) means a duct through which products of combustion pass or are intended to pass before reaching the open air;

*products of combustion* (燃燒產物) include—

- (a) smoke;
- (b) fumes from a stove, oven or any other cooking apparatus; and
- (c) vitiated air.

**45. Fireplace**

A hearth or fireplace recess in a building must be constructed so as to prevent a fire in the building or any other building.

**46. Habitation by vermin**

A building must be constructed so as not to provide a place of habitation for vermin.

**47. Duct**

If the size of a duct allows a person to enter the duct, the duct—

- (a) must be fitted with an access opening to allow a person to enter it; and
- (b) must be constructed so as to bear the weight of the person.

**Schedule**

[ss. 7, 8 & 9]

**Calculations in relation to Imposed Loads**

**Table 1**

**Minimum Imposed Loads**

| Column 1 | Column 2   | Column 3  | Column 4   |
|----------|--|---|--|
| Class    | Use  | Distributed load in kPa to be applied uniformly on plan | Concentrated load in kN to be applied on plan over any square with a 50 mm side (or other dimension specified in this column), or line load in kN per metre length |
| 1        | Floors for—  |   |  |
|          | (a) domestic uses  | 2   | 2  |
|          | (b) dormitories  | 2   | 2  |
|          | (c) private sitting rooms, bedrooms and toilet rooms in hotels, motels and guesthouses | 2   | 2  |

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| Column 1 | Column 2  | Column 3  | Column 4   |
|----------|---|---|--|
| Class    | Use   | Distributed load in kPa to be applied uniformly on plan | Concentrated load in kN to be applied on plan over any square with a 50 mm side (or other dimension specified in this column), or line load in kN per metre length |
| (d)      | wards, bedrooms and toilet rooms in hospitals, nursing homes and residential care homes for elderly persons | 2   | 2  |
| (e)      | bathrooms (load from Jacuzzi to be assessed separately), pantries and kitchens in domestic premises         | 2   | 2  |

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| Column 1 | Column 2   | Column 3  | Column 4   |
|----------|--|---|--|
| Class    | Use  | Distributed load in kPa to be applied uniformly on plan | Concentrated load in kN to be applied on plan over any square with a 50 mm side (or other dimension specified in this column), or line load in kN per metre length |
| 2        | (1) Floors for—  |   |  |
|          | (a) medical consulting or treatment rooms                                  | 2.5   | 3  |
|          | (b) hospital operating theatres and X-ray rooms                            | 2.5   | 3  |
|          | (2) Floors for—  |   |  |
|          | (a) laboratories   | 3   | 4.5  |
|          | (b) light workrooms with neither central power-driven machines nor storage | 3   | 4.5  |
|          | (c) offices for general use  | 3   | 4.5  |
|          | (d) rooms for lightweight  | 3   | 4.5  |

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| Column 1 | Column 2   | Column 3  | Column 4   |
|----------|--|---|--|
| Class    | Use  | Distributed load in kPa to be applied uniformly on plan | Concentrated load in kN to be applied on plan over any square with a 50 mm side (or other dimension specified in this column), or line load in kN per metre length |
|          | electrical and electronic installations          |   |  |
| (e)      | rooms for meters and not for storage             | 3   | 4.5  |
| (f)      | pantries in offices or non-industrial workplaces | 3   | 4.5  |
| (3)      | Floors for—                                      |   |  |
| (a)      | banking halls                                    | 4   | 4.5  |
| (b)      | kitchens and laundries not in domestic premises  | 4   | 4.5  |
| (4)      | Floors for projection rooms                      | 5   | 4.5  |

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| Column 1 | Column 2   | Column 3  | Column 4   |
|----------|--|---|--|
| Class    | Use  | Distributed load in kPa to be applied uniformly on plan | Concentrated load in kN to be applied on plan over any square with a 50 mm side (or other dimension specified in this column), or line load in kN per metre length |
| 3        | (1) Floors for childcare centres and kindergartens   | 2.5   | 3  |
|          | (2) Floors for—  |   |  |
|          | (a) billiard rooms and bowling alleys  | 3   | 4.5  |
|          | (b) classrooms, lecture rooms, tutorial rooms, computer rooms and reading rooms without book storage | 3   | 4.5  |
|          | (c) internet computer services centres   | 3   | 4.5  |
|          | (d) dance practice rooms   | 3   | 4.5  |
|          | (e) leisure, recreational and  | 3   | 4.5  |

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| Column 1 | Column 2  | Column 3  | Column 4   |
|----------|---|---|--|
| Class    | Use   | Distributed load in kPa to be applied uniformly on plan | Concentrated load in kN to be applied on plan over any square with a 50 mm side (or other dimension specified in this column), or line load in kN per metre length |
| (f)      | amusement areas that cannot be used for assembly purposes<br>massage rooms, sauna rooms and bath houses (load from water pools and fountains, or the like, to be assessed separately) | 3   | 4.5  |
| (3)      | Floors for—   |   |  |
| (a)      | assembly areas with fixed seating <sup>(1)</sup>  | 4   | 4.5  |
| (b)      | chapels, churches and places of   | 4   | 4.5  |

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| Column 1 | Column 2  | Column 3  | Column 4   |
|----------|---|---|--|
| Class    | Use   | Distributed load in kPa to be applied uniformly on plan | Concentrated load in kN to be applied on plan over any square with a 50 mm side (or other dimension specified in this column), or line load in kN per metre length |
| (c)      | worship with fixed seating <sup>(1)</sup><br>columbaria (other than areas for niches)                       | 4   | 4.5  |
| (d)      | restaurants, nightclubs, lounges, bars, canteens, fast food shops and dining rooms not in domestic premises | 4   | 4.5  |
| (e)      | cafes, mahjong parlours and amusement game centres  | 4   | 4.5  |
| (4)      | Floors for—   |   |  |

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| Column 1 | Column 2  | Column 3  | Column 4   |
|----------|---|---|--|
| Class    | Use   | Distributed load in kPa to be applied uniformly on plan | Concentrated load in kN to be applied on plan over any square with a 50 mm side (or other dimension specified in this column), or line load in kN per metre length |
|          | (a) art galleries and museums                           | 5   | 4.5  |
|          | (b) grandstands   | 5   | 4.5  |
|          | (c) public halls  | 5   | 4.5  |
|          | (d) theatres and cinemas <sup>(4)</sup>                 | 5   | 4.5  |
|          | (e) concert halls                                       | 5   | 4.5  |
|          | (f) conference rooms and waiting rooms                  | 5   | 4.5  |
| (5)      | Floors for—   |   |  |
|          | (a) assembly areas without fixed seating <sup>(1)</sup> | 5   | 4.5  |
|          | (b) dance halls and discotheques                        | 5   | 4.5  |

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| Column 1 | Column 2   | Column 3  | Column 4   |
|----------|--|---|--|
| Class    | Use  | Distributed load in kPa to be applied uniformly on plan | Concentrated load in kN to be applied on plan over any square with a 50 mm side (or other dimension specified in this column), or line load in kN per metre length |
|          | (c) footbridges between buildings  | 5   | 4.5  |
|          | (d) footpaths, terraces, plazas and areas used for pedestrian traffic            | 5   | 4.5  |
|          | (e) open areas in gardens (including short grass turf suitable for foot traffic) | 5   | 4.5  |
|          | (f) karaoke establishments   | 5   | 4.5  |
|          | (g) gymnasia   | 5   | 4.5  |
|          | (h) refuge floors  | 5   | 4.5  |
|          | (i) ice rinks (weight of ice to be assessed separately), ball                    | 5   | 4.5  |



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| Column 1 | Column 2  | Column 3  | Column 4   |
|----------|---|---|--|
| Class    | Use   | Distributed load in kPa to be applied uniformly on plan | Concentrated load in kN to be applied on plan over any square with a 50 mm side (or other dimension specified in this column), or line load in kN per metre length |
|          | courts and golf driving ranges  |   |  |
| (6)      | Floors for stages and television studios used as stages   | 7.5   | 9  |
| 4        | Floors for department stores, supermarkets, markets and shops for display and sale of merchandise | 5   | 4.5  |
| 5        | (1) Floors for—   |   |  |
|          | (a) library rooms with book storage (excluding library stack rooms)                               | 5   | 4.5  |
|          | (b) offices for storage and normal filing purposes  | 5   | 4.5  |

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| Column 1 | Column 2                                    | Column 3   | Column 4   |
|----------|---|--|--|
| Class    | Use   | Distributed load in kPa to be applied uniformly on plan                  | Concentrated load in kN to be applied on plan over any square with a 50 mm side (or other dimension specified in this column), or line load in kN per metre length |
|          | (2) Floors for—                             |  |  |
|          | (a) stack rooms in bookstores and libraries | 3.5 for each metre of storage height <sup>(2)</sup> but not less than 10 | to be determined according to the weight of storage material, but not less than 9  |
|          | (b) cold storage                            | 5 for each metre of storage height <sup>(2)</sup> but not less than 15   | to be determined according to the weight of storage material, but not less than 9  |
|          | (c) paper storage in printing plants        | 8 for each metre of storage height <sup>(2)</sup>                        | to be determined according to the weight of storage  |

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| Column 1 | Column 2  | Column 3  | Column 4   |
|----------|---|---|--|
| Class    | Use   | Distributed load in kPa to be applied uniformly on plan | Concentrated load in kN to be applied on plan over any square with a 50 mm side (or other dimension specified in this column), or line load in kN per metre length |
| (d)      | battery rooms and uninterruptible power supply rooms  | 10 for each metre of storage height <sup>(2)</sup>      | material, but not less than 9 to be determined according to the weight of storage material, but not less than 9  |
| (e)      | refuse storage or general storage other than those specified in (a), (b), (c) or (d) immediately above, including storage in warehouses | 2.5 for each metre of storage height <sup>(2)</sup>     | to be determined according to the weight of storage material, but not less than 9  |
| (3)      | Floors for plant rooms, boiler rooms, fan   | 7.5   | 9  |

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| Column 1 | Column 2  | Column 3  | Column 4   |
|----------|---|---|--|
| Class    | Use   | Distributed load in kPa to be applied uniformly on plan | Concentrated load in kN to be applied on plan over any square with a 50 mm side (or other dimension specified in this column), or line load in kN per metre length |
| (4)      | Floors for factories, workshops and other buildings or parts of buildings of similar category for industrial use— |   | rooms, motor rooms and the like  |
| (a)      | for light weight loads  | 5   | 9  |
| (b)      | for medium weight loads   | 7.5   | 9  |
| (c)      | for heavy weight loads  | 10  | 9  |
| (d)      | for printing plants   | 12.5  | 9  |
| 6        | Areas for car parking, carriageways, floors,  |   |  |

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| Column 1 | Column 2   | Column 3  | Column 4   |
|----------|--|---|--|
| Class    | Use  | Distributed load in kPa to be applied uniformly on plan         | Concentrated load in kN to be applied on plan over any square with a 50 mm side (or other dimension specified in this column), or line load in kN per metre length |
|          | driveways and ramps used by vehicles—                |   |  |
|          | (a) for vehicles not exceeding 3 000 kg gross weight | 3   | 20 to be applied on plan over any square with a 200 mm side (instead of a 50 mm side)  |
|          | (b) for vehicles exceeding 3 000 kg gross weight     | to be determined according to recognized engineering principles | to be determined according to recognized engineering principles  |
| 7        | (1) Inaccessible roofs with a slope—                 |   |  |
|          | (a) of 5° or less                                    | 2   | 1.5  |

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| Column 1 | Column 2   | Column 3   | Column 4   |
|----------|--|--|--|
| Class    | Use  | Distributed load in kPa to be applied uniformly on plan    | Concentrated load in kN to be applied on plan over any square with a 50 mm side (or other dimension specified in this column), or line load in kN per metre length |
|          | (b) greater than 5° but of 20° or less   | 0.75   | 1.5  |
|          | (c) greater than 20° but less than 40°   | linear interpolation from 0.75 to 0 according to the slope | 1.5  |
|          | (d) of 40° or greater  | 0  | 1.5  |
|          | (2) Roofs (other than inaccessible roofs or roofs for use of Class 1, 2, 3, 4, 5 or 6) with a slope— |  |  |
|          | (a) of 20° or less   | 2  | 1.5  |
|          | (b) greater than 20° but less than 40°   | linear interpolation from 2 to 0 according to the slope    | 1.5  |

| Column 1 | Column 2                           | Column 3  | Column 4   |
|----------|------------------------------------|---|--|
| Class    | Use                                | Distributed load in kPa to be applied uniformly on plan               | Concentrated load in kN to be applied on plan over any square with a 50 mm side (or other dimension specified in this column), or line load in kN per metre length |
|          | (c) of 40° or greater              | 0   | 1.5  |
| (3)      | Canopies                           | 0.75 <sup>(3)</sup>   | 1.5 <sup>(3)</sup>   |
| 8        | (1) Floors for utility platforms   | same as the floors to which they give access, but not less than 4     | line load of 2 kN per metre length to be applied along the outer edge  |
|          | (2) Floors for—                    |   |  |
|          | (a) balconies                      | same as the floors to which they give access, but not less than 3     | line load of 2 kN per metre length to be applied along the outer edge  |
|          | (b) stairs, landings and corridors | same as the floors to which they give access, but not less than 3 and | 4.5  |

| Column 1 | Column 2   | Column 3  | Column 4   |
|----------|--|---|--|
| Class    | Use  | Distributed load in kPa to be applied uniformly on plan | Concentrated load in kN to be applied on plan over any square with a 50 mm side (or other dimension specified in this column), or line load in kN per metre length |
|          |  | not more than 5   |  |
|          | (c) projecting window hoods, air conditioner hoods (lower and upper slabs) and air conditioner platforms | —   | line load of 1.5 kN per metre length to be applied along the outer edge  |
|          | (d) maintenance catwalks   | —   | 1 at 1 m centre  |

Notes:

- (1) Seating is regarded as fixed if the removal of the seating and the use of the relevant space for other purposes are unlikely.
- (2) **Storage height** (儲存高度) means the height of the space between the floor and a physical constraint to the height of storage formed by—
  - (a) a ceiling;
  - (b) a soffit of a floor;

- (c) a roof; or
  - (d) any other obstruction.
- (3) The minimum imposed loads to be applied for canopies do not take into account uncontrolled accumulations of construction materials that may occur during maintenance or repair.
- (4) **Cinema** (電影院) means a building or part of a building that is designed for cinematographic displays.

**Table 2**

**Reductions of Total Distributed Imposed Loads**

| Column 1  | Column 2  |
|---|---|
| Number of floors (including the roof) with loads qualifying for reduction carried by the member under consideration | Percentage reduction of total distributed imposed loads on every floor (including the roof) carried by the member under consideration |
|   | (%)   |
| Classes 1, 2, 3, 4 and 7 of Table 1   | Factories and workshops under Class 5(4) of Table 1 with distributed imposed load of not less than 7.5 kPa                            |
|   |   |
| 1   | 0   |
| 2   | 5   |
| 3   | 10  |
| 4   | 25 maximum  |

| Column 1  | Column 2  |
|---|---|
| Number of floors (including the roof) with loads qualifying for reduction carried by the member under consideration | Percentage reduction of total distributed imposed loads on every floor (including the roof) carried by the member under consideration |
|   | (%)   |
| Classes 1, 2, 3, 4 and 7 of Table 1   | Factories and workshops under Class 5(4) of Table 1 with distributed imposed load of not less than 7.5 kPa                            |
|   |   |
| 5   | 25 maximum  |
| 6   | 25 maximum  |
| 7   | 25 maximum  |
| 8   | 25 maximum  |
| over 8  | 25 maximum  |

**Table 3**

**Minimum Horizontal Imposed Loads on Protective Barriers to Restrict or Control Movement of Persons**

| Column 1 | Column 2   | Column 3   | Column 4   | Column 5   |
|----------|--|--|--|--|
| Item     | Category   | Line load to be applied <sup>(1)</sup><br>(kN/m) | Uniformly distributed load to be applied on the infill between floor and top rail<br>(kPa) | Concentrated load to be applied on any part of the infill between floor and top rail<br>(kN) |
| 1.       | Areas where congregation of people is not expected                 | 0.75   | 1  | 0.5  |
| 2.       | Areas where people may congregate but overcrowding is not expected | 1.5  | 1.5  | 1.5  |
| 3.       | Areas susceptible to overcrowding                                  | 3  | 1.5  | 1.5  |

## Note:

- <sup>(1)</sup> The line load is to be applied at—
- a height of 1.1 m above the floor level; or
  - the top edge of the protective barrier,
- whichever is the lower.



Secretary for Development

6 January 2020

**Explanatory Note**

This Regulation replaces the Building (Construction) Regulations (Cap. 123 sub. leg. B). It mainly provides for the performance requirements in relation to the design and construction of a building, street, building works and street works.

2. The Regulation is divided into 12 Parts and a Schedule.
3. Part 1 provides for the commencement and interpretation of the Regulation.
4. Part 2 deals with the requirements for materials used in building works and street works.
5. Part 3 sets out the requirements relating to dead loads, imposed loads and wind loads. Tables 1, 2 and 3 in the Schedule set out the relevant figures to be applied in calculating imposed loads. It also requires a notice stating the designed distributed imposed load of a floor to be displayed in certain buildings. Part 3 further disallows overloading of buildings etc.
6. Part 4 sets out the requirements relating to the design methodology, strength and serviceability, stability, and construction methods and procedures.
7. Part 5 relates to site investigations in respect of building works and street works.
8. Part 6 deals with the requirements for foundations. It also provides for the carrying out of on-site tests and proof tests in relation to foundations.
9. Part 7 sets out the requirements for site formation works, retaining walls and bulk excavation.
10. Part 8 deals with the requirements for external walls, cladding and curtain walls.

11. Part 9 deals with protection against moisture and water penetration.
12. Part 10 sets out the requirements in relation to fire resisting construction.
13. Part 11 relates to user safety and consists of 2 Divisions. Division 1 deals with protective barriers. Division 2 deals with lifts and escalators being installed or to be installed in a building.
14. Part 12 provides for the requirements relating to ground treatments, wells, chimneys and flues, fireplaces, preventing places for habitation by vermin and ducts.

## Building (Administration) (Amendment) Regulation 2020

(Made by the Secretary for Development under section 38 of the Buildings Ordinance (Cap. 123))

### 1. Commencement

This Regulation comes into operation on 1 February 2021.

### 2. Building (Administration) Regulations amended

The Building (Administration) Regulations (Cap. 123 sub. leg. A) are amended as set out in section 3.

### 3. Regulation 8 amended (prescribed plans in respect of building works)

(1) Regulation 8(1)(bb)(E) and (F)—

#### Repeal

“regulation 20 of the Building (Construction) Regulations (Cap. 123 sub. leg. B)”

#### Substitute

“section 21 of the Building (Construction) Regulation”.

(2) Regulation 8(1)(bc)(E) and (F)—

#### Repeal

“regulation 4 of the Building (Construction) Regulations (Cap. 123 sub. leg. B)”

#### Substitute

“section 14 of the Building (Construction) Regulation”.



Secretary for Development

6 January 2020



**Explanatory Note**

This Regulation amends the Building (Administration) Regulations (Cap. 123 sub. leg. A) to replace the references to certain provisions of the Building (Construction) Regulations (Cap. 123 sub. leg. B) with the references to the corresponding provisions of the newly made Building (Construction) Regulation.

## **Building (Ventilating Systems) (Amendment) Regulation 2020**

(Made by the Secretary for Development under section 38 of the Buildings Ordinance (Cap. 123))

### **1. Commencement**

This Regulation comes into operation on 1 February 2021.


### **2. Building (Ventilating Systems) Regulations amended**

The Building (Ventilating Systems) Regulations (Cap. 123 sub. leg. J) are amended as set out in section 3.

### **3. Regulation 4 amended (requirements with respect to ventilating systems)**

Regulation 4(1)(e)—

**Repeal sub-subparagraph (iii).**



Secretary for Development

6 January 2020

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## **Explanatory Note**

This Regulation amends the Building (Ventilating Systems) Regulations (Cap. 123 sub. leg. J) to repeal a certain requirement with respect to ventilating systems in relation to ducts in view of section 47 of the newly made Building (Construction) Regulation.

## **Building (Construction) Regulations (Repeal) Regulation**

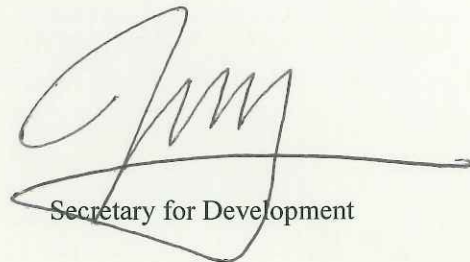
(Made by the Secretary for Development under section 38 of the Buildings Ordinance (Cap. 123))

### **1. Commencement**

This Regulation comes into operation on 1 February 2021.

### **2. Repeal**

The Building (Construction) Regulations (Cap. 123 sub. leg. B) are repealed.



Secretary for Development

6 January 2020

## **Explanatory Note**

This Regulation repeals the Building (Construction) Regulations (Cap. 123 sub. leg. B) in view of the making of the new Building (Construction) Regulation.