



Buildings Department



# New Building (Construction) Regulation Webinar

13 November 2020





# New Building (Construction) Regulation

Commencement on **1 February 2021**





# New Building (Construction) Regulation

Part 2	Requirements for Materials
Part 3	Loads
Part 4	Requirements for Design and Construction
Part 5	Requirements for Site Investigation
Part 6	Requirements for Foundation
Part 7	Requirements for Site Formation Works





# New Building (Construction) Regulation

Part 8	Requirements for External Wall, Cladding, Curtain Wall
Part 9	Protection against Moisture and Water
Part 10	Requirements for Fire Safety
Part 11	Requirements for User Safety
Part 12	Miscellaneous





# New Building (Construction) Regulation

## Part 2

### Requirements for Materials





# New Building (Construction) Regulation

*Performance-based Requirements*

效能表現為本的規定

*Prescriptive Requirements*

訂明標準為本的規定



# New Building (Construction) Regulation

## Part 2 Requirements for Materials

### Extant B(C)R:

### Reg.3

#### Materials

All materials used in any building works or street works shall be—

- (a) of a suitable nature and quality for the purposes for which they are used;
- (b) adequately mixed or prepared; and
- (c) applied, used or fixed so as to perform adequately the functions for which they are designed.



### New B(C)R:

### Section 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.

**ADDED**



# New Building (Construction) Regulation

## Part 2 Requirements for Materials

- Removal of prescriptive requirements

### Extant B(C)R

*Prescriptive requirements*

Part II Materials

Part XII Structural Use of  
Concrete

**REMOVED**



# New Building (Construction) Regulation

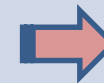
## Part 2 Requirements for Materials

### Removal of prescriptive requirements

**Extant B(C)R :**

**PART II    Materials**

- Cement, Sand
- Water, Chunam



**REMOVED**





# New Building (Construction) Regulation

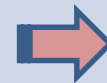
## Part 2 Requirements for Materials

### Removal of prescriptive requirements

**Extant B(C)R :**

#### **PART XII Structural Use of Concrete**

- Cement, Aggregate
- Water, Admixtures
- Reinforcement
- Pre-stressing tendons



**REMOVED**



# New Building (Construction) Regulation

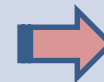
## Part 2 Requirements for Materials

### Removal of prescriptive requirements

**Extant B(C)R :**

#### **PART XII Structural Use of Concrete**

- Designed mix concrete strength
- Concrete cubes
- Minimum cover of reinforcement
- Core testing



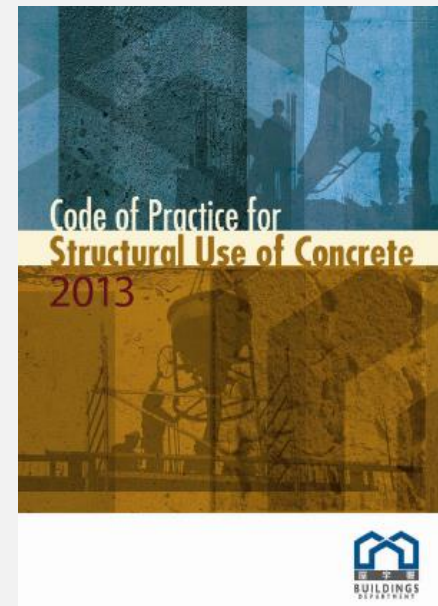
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# New Building (Construction) Regulation

## Part 2 Requirements for Materials

Prescriptive  
Requirements



# New Building (Construction) Regulation

## Part 2 Requirements for Materials



Codes of Practice

Buildings Department	Practice Note for Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers	APP-53
Building (Construction) Regulations		
The Building (Construction) Regulations set out the performance requirements for the design and construction of building, street, building works and street works. However, they do not contain reference to any specific prescriptive standard.		
2.	Appendix A Building Authority as Regulations. Plans to be shown to achieve such plans of full back with local conditions, 1	Appendix A (PNAP APP-53)
Standards/Technical Criteria Acceptable to the Building Authority		
(1) Design and Construction		
Category	Standard/Technical Criterion	Title
Concrete	Hong Kong Code of Practice	Code of Practice for Structural Use of Concrete 2013
Fire Resisting Construction	Hong Kong Code of Practice	Code of Practice for Fire Safety in Buildings 2011
Foundation	Hong Kong Code of Practice	Code of Practice for Foundations
Precast Concrete	Hong Kong Code of Practice	Code of Practice for Precast Concrete Construction 2016
Steel	Hong Kong Code of Practice	Code of Practice for the Structural Use of Steel 2011
	Explanatory Materials	Explanatory Materials to Code of P for the Structural Use of Steel 2011
	BS 4076: 1989	Specification for steel chimneys
Wind Effect	Hong Kong Code of Practice	Code of Practice on Wind Effects in Hong Kong 2004
	Explanatory Materials	Explanatory Materials to the Code of Practice on Wind Effects in Hong Kong 2004
Dead and Imposed Loads	Hong Kong Code of Practice	Code of Practice for Dead and Imposed Loads 2011
Aluminium	BS 8118: Part 1: 1991	Structural use of aluminium. Code of practice for design

Ref.: BD GP/BREG  
This PNAP is previous  
First issue December  
Last revision March 2  
This revision July 201

Practice Notes

L.N. 5 of 2020

### Building (Construction) Regulation

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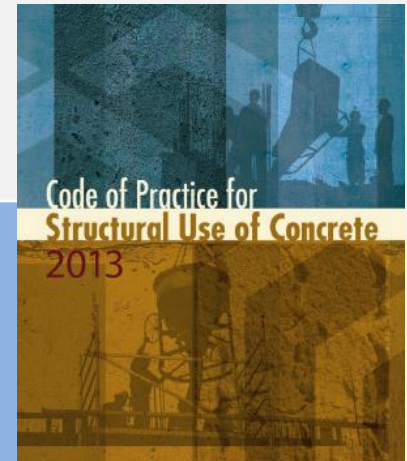
# New Building (Construction) Regulation

## Part 2 Requirements for Materials

### Removal of prescriptive requirements

Extant B(C)R :

#### PART XII Structural Use of Concrete



#### Reg. 58 Concrete Cubes

The compressive strength of concrete shall be determined by testing standard 150 mm cubes 28 days after mixing.

**REMOVED**



**Modification not required**

##### (a) Concrete Cubes

The compressive strength of concrete shall be determined by testing 100mm or 150mm cubes 28 days after mixing. A representative sample shall be taken from fresh concrete to make test cubes and each sample shall be taken from a single batch. The rate of sampling shall be at least that specified in table 10.1 and at least one sample shall be taken from each grade of concrete produced on any one day.

Specified Grade Strength	Compliance Criteria	Column A		Column B	
		Average of 4 consecutive test results shall exceed the specified grade strength by at least		Any individual test result shall not be less than the specified grade strength minus	
		150mm Cubes	100mm Cubes	150mm Cubes	100mm Cubes
C20 and above	C1	5 MPa	7 MPa	3 MPa	2 MPa
	C2	3 MPa	5 MPa	3 MPa	2 MPa
Below C20	C1 or C2	2 MPa	3 MPa	2 MPa	2 MPa



# New Building (Construction) Regulation

## Part 3

## Loads





# New Building (Construction) Regulation

## Part 3 Loads

### Extant B(C)R:

Reg. 16 Dead Loads

Reg. 17 Imposed Loads

Reg. 18 Wind Loads



### New B(C)R:

Section 4 Dead Loads

Section 5 Imposed Loads

Section 6 Wind Loads





# New Building (Construction) Regulation

## Part 3 Loads

### Extant B(C)R:

Reg. 17

(2) Reduction of  
imposed loads

(5) Dynamic effects



### New B(C)R:

Section 8 Reduction of  
imposed loads

Section 10 Dynamic  
effects



# New Building (Construction) Regulation

## Part 3 Loads

### Table 1 Minimum Imposed Loads

#### Building (Construction) (Amendment) Regulation 2011



#### New Building (Construction) Regulation

Building (Construction) Regulation			
Schedule		L.N. 5 of 2020 B139	
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) 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



# New Building (Construction) Regulation

## Part 3 Loads

New Uses added in the New B(C)R :

<b>Table 1 Minimum Imposed Loads</b>	<b>Distributed Load (in kPa)</b>
Internet computer services centres	3
Floors for projection rooms	5
Massage rooms	3
Sauna rooms	3
Columbaria	4





# New Building (Construction) Regulation

## Part 3 Loads

New Uses added in the New B(C)R :

<b>Table 1 Minimum Imposed Loads</b>	<b>Distributed Load (in kPa)</b>
Cafes	4
Mahjong parlours	4
Amusement game centres	4
Concert halls	5
Ice rinks	5
Open areas in gardens	5



# New Building (Construction) Regulation

## Part 3 Loads

### New B(C)R - Table 3 Minimum Horizontal Imposed Loads on Protective Barriers

Note:

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

Table 3  
Minimum Horizontal Imposed Loads on Protective Barriers to Restrict  
or Control Movement of Persons

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

## Part 4

# Requirements for Design and Construction

New building works





# New Building (Construction) Regulation

## Part 4 Requirements for Design and Construction

### Extant B(C)R:

### Reg. 5

#### Method of design

Structural designs submitted to the Building Authority for approval under the Ordinance shall comply with the laws of mechanics and recognized engineering principles.

### New B(C)R:

### Section 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.

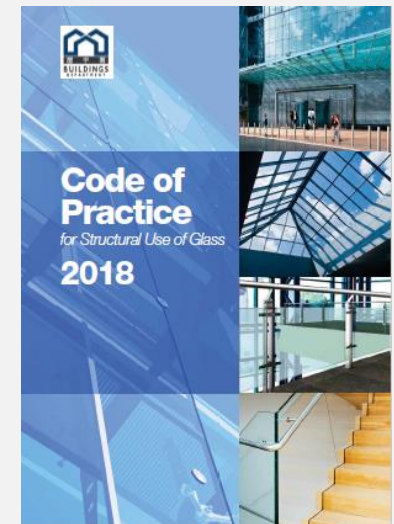
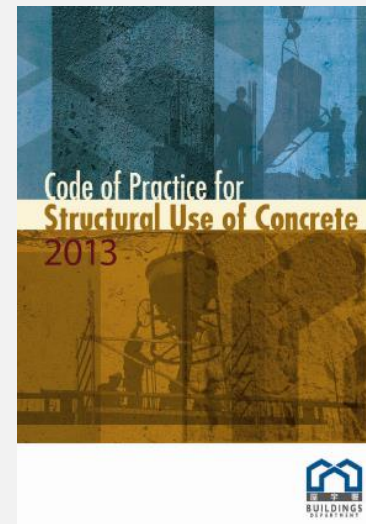
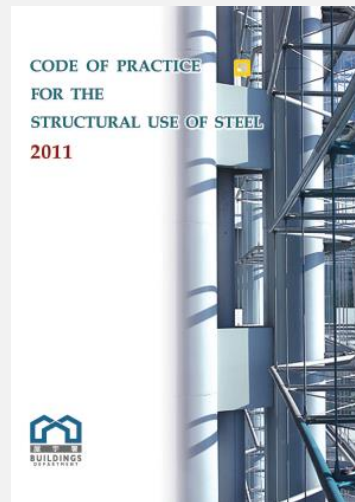
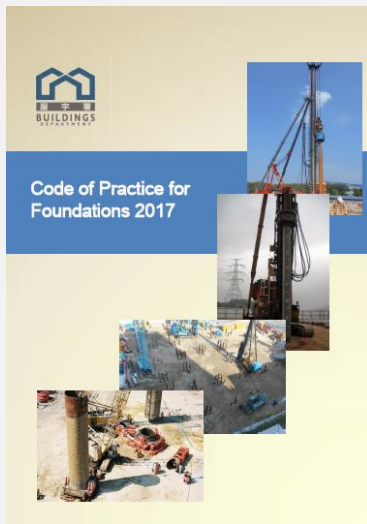
**ADDED**



# New Building (Construction) Regulation

## Part 4 Requirements for Design and Construction

### Recognized Engineering Practices



Codes of Practice



# New Building (Construction) Regulation

## Part 4 Requirements for Design and Construction Recognized Engineering Practice

Buildings Department  
Practice Note for Authorized Persons,  
Registered Structural Engineers and  
Registered Geotechnical Engineers  
APP-16

### Cladding Works

Cladding means a facing or architectural decoration additional to the external walls of a building: e.g. aluminium or metal cladding, polished granite slabs or limestone cladding, marble facing and the like. Cladding should comply with the performance requirements stipulated in Regulation 39 of the Building (Construction) Regulations in respect of material type, fixings, strength and durability.

2. Cladding shall be provided with sufficient permanently flexible joints horizontally and vertically to cater for differential movement in the cladding and in the structure to which it is attached. All external anchors, dowels and fixings should be of stainless steel or other corrosion resistant materials. Any metal dowels and fixings securing the cladding panels should be suitable, permanent and adequately protected from corrosion. For testing of anchors and cladding panels, see paragraphs 8 to 14 below.

### Submission of Cladding Plans

3. Where cladding is to be affixed to any part of the exterior of a building, details such as the location and material should be shown in the general building plan submitted to the Building Authority (BA) for approval. When the cladding to be installed is above 6 metres from the adjoining ground level or adjoining floor, in addition to the building plans, details such as the thickness, strength, durability, and type of the cladding, material of fixings and sequence of support should also be shown in the structural plans submitted to the BA for approval. Failure to do so may result in delay in or refusal of approval/consent of the cladding plans. As regards the fixings of stone cladding, sand/cement bedding and/or epoxy bonding alone is not considered a suitable and permanent fixing.

Appendix B  
(PNAP APP-16)

### Stone Cladding Panels

#### Criteria for Tests on Stone Cladding Panels

carried out in accordance with paragraph 11 in the PNAP APP-16 shall be if the test results comply with the following requirements:

1. characteristic flexural strength is greater than 3 times the design flexural strength;  
2. design flexural strength is greater than the design allowable flexural strength multiplied by the Flexural Safety Factor (FSF);  
3. characteristic anchorage strength is greater than 4.2 times the design anchorage strength; and  
4. design anchorage strength is greater than the design allowable anchorage strength multiplied by the Anchorage Safety Factor (ASF).

1. of paragraph 1 above, the following applies:

1. design strength = Average strength  $\times K \times \alpha$

2. K-factor for at least 5 test specimens and may be taken as 3.41 factor corresponding to larger nos. of test specimens may be used (appropriate); and  
3.  $\alpha$  = standard deviation.

ASF may be obtained as follows:

$$F = VF \times DF$$
$$F = FSF \times 1.4$$

2. VF and DF are Variation Factor and Durability Factor obtained from below:

Extent of variance	Variation Factor (VF)		
	Granite	Limestone	Marble
0% - 5%	2.0	3.0	2.5
5% - 10%	2.5	3.5	3.0
10% - 20%	3.0	4.0	3.5
Above 20%	3.5	4.5	4.0
Extent of Initial Flexural Strength	Durability Factor (DF)		
	100%	1.0	
	95% - 75%	1.2	
	75% - 60%	1.5	
	Less than 60%	1.8	

Buildings Department  
Practice Note for Authorized Persons,  
Registered Structural Engineers and  
Registered Geotechnical Engineers  
APP-37

### Curtain Wall, Window and Window Wall

#### Structural Submission of Curtain Wall Plans

Curtain wall shall be designed to meet the specific requirements set out in regulation 43 of the Building (Construction) Regulations (B(C)R). In addition, attention should be paid to the requirements for wind loads, horizontal imposed loads specified in Table 3 of regulation 17(3) of the B(C)R on curtain wall when there is no protective barrier provided, protection of openings, protection against corrosion and the quality of materials.

2. The following details are required to be included in the curtain wall plans for submission to the Building Authority (BA) for approval:

- structural framing and key structural details and the installation procedures excluding any unnecessary shop fabrication details;
- structural calculations comprising design check on the parent structure, analysis on the structural adequacy and stability of the proposed curtain wall, element design for aluminium alloy, fixing components, glazing, and deflection check on major load carrying members;
- workmanship specifications for welding, galvanisation measures to overcome bi-metallic effects, and corrosion prevention;
- elevations including pane arrangements;

### Devices of Openable Sashes/Sub-frames

Locking devices are used to restrain openable sashes/sub-frames of windows, doors and curtain walls in locked positions. All components of locking devices should be made of durable and non-combustible materials.

Locking devices should be evenly distributed along the sash/sub-frame to ensure a uniform load distribution on the window frame/curtain wall. The locations and the design strength of the locking points should be shown on structural plans for approval.

The ultimate design strength should be the characteristic strength divided by the safety (FOS) of 1.8. The characteristic strength should be verified by means of a load test in accordance with the test criteria set out in Appendix C and the test should be endorsed by RSE and submitted to BD prior to the application for an approval or the submission of Form BA14 as appropriate. Proof load tests of locking devices may not be required if the type of the proposed locking devices is already in the BD's Central Data Bank.

In order to ensure all locking points can be triggered effectively, a single locking point should not be connected to more than 8 locking points.

Hinges for openable sashes/sub-frames should be adequate in holding its own weight. In general, the size of a top-hung sash should not exceed 2.5m<sup>2</sup>. Similarly, the size of a side-hung sash should not exceed 700mm.

AP/RSE should ensure the openable sash/sub-frame and the locking devices are properly designed and assembled to meet the performance requirements and on tolerance. In normal circumstance, the FOS of 1.8 is considered adequate for construction tolerance. Improper assembly may cause additional moment on the locking devices. Adequate site supervision should also be provided to ensure that the works are properly assembled.

## Practice Notes

# New Building (Construction) Regulation

## Part 4 Requirements for Design and Construction Recognized Engineering Practice

Buildings Department Practice Note for Authorized Persons,  
Registered Structural Engineers and  
Registered Geotechnical Engineers APP-53

### Building (Construction) Regulations

The Building (Construction) Regulations set requirements for the design and construction of building, street, but works. However, they do not contain reference to any specific pres

2. Appendix A lists those standards or technical criteria as complying with the performance requirement Regulations. Plans based on other standards or technical criteria can be shown to achieve the performance requirements. It will be such plans if full background to other standards or technical criteria, with local conditions, is detailed in the submission.

3. In this connection, please approach the Buildings I stage for agreement in principle to any alternative standard being co

(HUI Siu-wai)  
Building Author

Ref.: BD GP/BREG/C/23

This PNAP is previously known as PNAP 140

First issue: December 1990

Last revision: March 2011

This revision: July 2016 (AD/NB2) - Appendix A revised

### Standards/Technical Criteria Acceptable to the Building Authority

#### (1) Design and Construction

Category	Standard/ Technical Criterion	Title
Concrete	Hong Kong Code of Practice	Code of Practice for Structural Use of Concrete 2013
Fire Resisting Construction	Hong Kong Code of Practice	Code of Practice for Fire Safety in Buildings 2011
Foundation	Hong Kong Code of Practice	Code of Practice for Foundations
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Aluminium	BS 8118: Part 1: 1991 <sup>4</sup>	Structural use of aluminium. Code of practice for design

Appendix A  
(PNAP APP-53)

BRITISH STANDARD

### Structural use of aluminium

Part 2. Specification for materials,  
workmanship and protection

BS 8118:  
Part 2: 1991

Incorporating  
Amendment No. 1

SCI PUBLICATION P291

### Structural Design of Stainless Steel

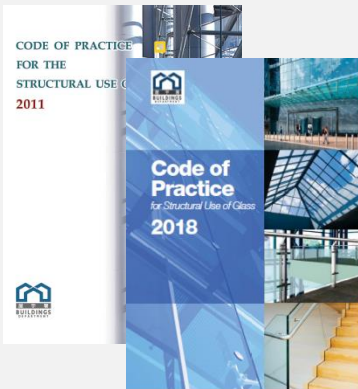
N R BADDOO MA CEng MICE

B A BURGAN BSc MSc DIC PhD CEng MStructE

## Recognized standards

# New Building (Construction) Regulation

## Part 4 Requirements for Design and Construction



### Codes of Practice

Buildings Department	Practice Note for Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers	APP-36
Cladding Works	Practice Note for Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers	APP-37
<p>Cladding means a facing or architectural decoration external walls of a building e.g. aluminium or metal cladding, polished limestone cladding, marble facing and the like. Cladding should performance requirements stipulated in Regulation 39 of the Building Regulations in respect of material type, fixings, strength and durability.</p> <p>2. Cladding shall be provided with sufficient permeance horizontally and vertically to cater for differential movement in the structure to which it is attached. All external anchors, dowels and stainless steel or other corrosion resistant materials. Any metal securing the cladding panels should be suitable, permanent and free from corrosion. For testing of anchors and cladding panels, see 1 materials below.</p> <p>3. Where cladding is to be affixed to any part of the exterior details such as the balconies and material should be shown in the plan submitted to the Building Authority (BA) for approval. When 1 installed is above 6 metres from the adjoining ground level or 1 addition to the building plans, details such as the thickness, stress type of the cladding, material of fixings and sequence of support due to the structural plans submitted to the BA for approval. Failure to 1 delay in or refusal of approval/comment of the cladding plans. As req water cladding, sand/cement bedding and/or epoxy bonding alone 1 suitable and permanent fixing.</p> <p>4. The following details are required to be included in the curtain wall plans for submission to the Building Authority (BA) for approval:</p> <ul style="list-style-type: none"><li>(a) structural framing and key structural details and the installation procedures including any temporary shop fabrication details;</li><li>(b) structural calculations comprising design check on the parent structure, analysis on the structural adequacy and stability of the proposed curtain wall, element design for aluminium alloy, fixing components, glazing, and deflection check on major load carrying members;</li><li>(c) workmanship specifications for welding, galvanization measures to minimize bi-metallic effects, and corrosion prevention;</li><li>(d) elevations including pane arrangements;</li></ul>		

### Practice Notes

L.N. 5 of 2020

#### Building (Construction) Regulation

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# New Building (Construction) Regulation


## Part 4 Requirements for Design and Construction

### Exant B(C)R

#### Reg. 15

#### *Prescriptive requirements*

##### **Resistance to sliding, uplift and overturning**

- (1) Except where otherwise provided in these regulations, a building, street, building works or street works shall be so designed and constructed that—
    - (a) the resistance to the sliding force acting thereon shall be not less than 1.5 times the sliding force due to any loads;
    - (b) the resistance to the uplift force acting thereon shall be not less than 1.5 times the uplift force due to any loads; and
    - (c) the resistance to the overturning moment acting thereon shall be not less than 1.5 times the overturning moment due to wind loads and 2 times the overturning moment due to loads other than wind loads.
- 

### New B(C)R

#### Section 15

#### *Performance-based requirement*

##### **Stability**

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





# New Building (Construction) Regulation

## Part 4 Requirements for Design and Construction

### Extant B(C)R

#### Reg. 4

The structure of every building, street, building works and street works shall be capable of safely sustaining and transmitting to the ground the combined dead loads, imposed loads and wind loads, determined in accordance with the provisions of Part III, in such a manner as not to—

- (a) cause any deflection, deformation or other movement, which would impair the stability of, or cause damage to, the whole or any part of that building, street, building works or street works or any other building, structure, land, street or services; or
- (b) exceed the appropriate limitations of design stresses of the whole or any part of that or any other building, street, building works or street works.

### New B(C)R

#### Section 14(4)

- (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—  
**REVISED**
    - (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





# New Building (Construction) Regulation

## Part 4 Requirements for Design and Construction

### Extant B(C)R

#### Reg.7

**Adjoining and other building or land not to be adversely affected**

No building works shall be carried out which may affect adversely the stability of any adjoining building, structure, land, street or services.

#### Reg. 61

#### *Prescriptive requirements*

##### **Formwork**

- (1) The formwork for concrete shall support safely the combined effects of all loads so that the final concrete structure is within the limits of acceptable dimensional tolerances.
- (2) The minimum period which must elapse before formwork may be removed shall not be less than that given in Table 10.

### New B(C)R

#### Section 16

#### *Performance-based requirement*

##### **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



# New Building (Construction) Regulation

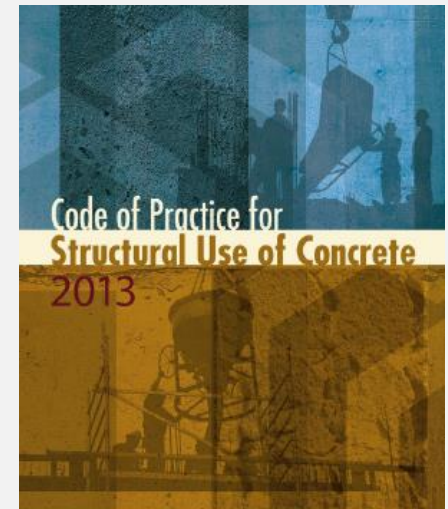
## Part 4 Requirements for Design and Construction

TABLE 10

MINIMUM PERIOD BEFORE STRIKING FORMWORK

Type of formwork	Minimum period before formwork may be removed
Vertical formwork to column, walls and large beams	12 hours
Soffit formwork to slabs with props left in	4 days
Soffit formwork to beams with props left in	7 days
Props to slabs	10 days
Props to beams	14 days

**Modification**  
**not required**



- (f) 12 hrs: vertical formwork for sides of beams, columns, walls
- (g) 4 days: soffit formwork of slabs with props left in;
- (h) 7 days: soffit formwork of beams with props left in;
- (i) 10 days: props for slabs;
- (j) 14 days: props to beams; and
- (k) 14 days: props to cantilevers.

**Extant B(C)R – Reg. 61**  
**Period before striking formwork**





# New Building (Construction) Regulation

## Part 5

### Requirements for Site Investigation



# New Building (Construction) Regulation

## Part 5 Requirements for Site Investigation

- Performance-based requirements remains in New B(C)R



Re-issued under new categorization in August 2009 as Practice Note for Authorized Persons, Registered Structural Engineers and Registered Geotechnical Engineers APP-49

Buildings Department Practice Note for Authorized Persons and Registered Structural Engineers 132

### Site Investigation and Ground Investigation

#### Introduction

"Site investigation" (地質勘察) is defined in s.2 of Building (Construction) Regulation as "investigation of the physical characteristics of the site and includes documentary studies, site surveys and ground investigation". These works are carried out to obtain adequate geotechnical and other relevant data for the design and construction of building works such as foundation and site formation works. This practice note sets out the acceptable standards of site investigation in general and ground investigation, which constitutes a major part of site investigation, in particular.

2. In this practice note, the term "site investigation" covers a broad scope of investigation including the topography and history of the site. "Ground investigation" refers to actual surface or subsurface investigation by such methods as boreholes and test pits, including on-site and laboratory tests.

#### Technical Guidance Documents

3. The Geotechnical Engineering Office (GEO) Technical Guidance Note No.1 provides a list of technical guidance documents including GEOGUIDE 2 (Guide to Site Investigation) and GEOGUIDE 3 (Guide to Rock and Soil Descriptions), and other relevant documents currently used by the GEO as de facto geotechnical standards in Hong Kong. Site investigation carried out in accordance with the recommendations of these technical guidance documents will be deemed to meet the minimum acceptable standards. For the standards of carrying out ground investigation field works and the acceptance criteria of ground investigation works, reference should be made to the Code of Practice for Site Supervision.

## Extant B(C)R:

### Reg. 9

Site investigation in respect of any building works or street works shall be carried out in such a manner and to such **recognized standards** as to provide adequate geotechnical and other relevant data for the design and construction of the building works or the street works.

## New B(C)R:

### Section 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.**



# New Building (Construction) Regulation

## Part 6

## Requirements for Foundations



# New Building (Construction) Regulation

## Part 6 Requirements for Foundations

### - Removal of prescriptive requirements

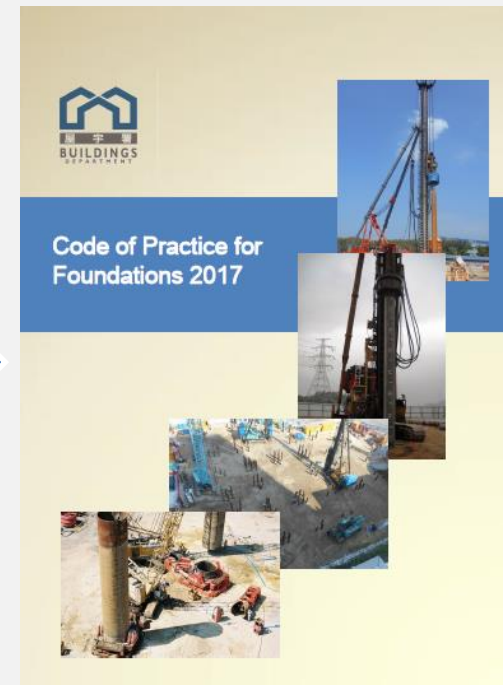
#### Extant B(C)R:

**Reg.25** Allowable capacity for bearing, bond or friction  
(e.g. increased by not more than 25% due to wind loads)

**REMOVED**

**Reg.26** Pile foundations  
(e.g. pile spacing, group reduction factor)

**REMOVED**



# New Building (Construction) Regulation

## Part 6 Requirements for Foundations

### - Removal of prescriptive requirements

#### Extant B(C)R:

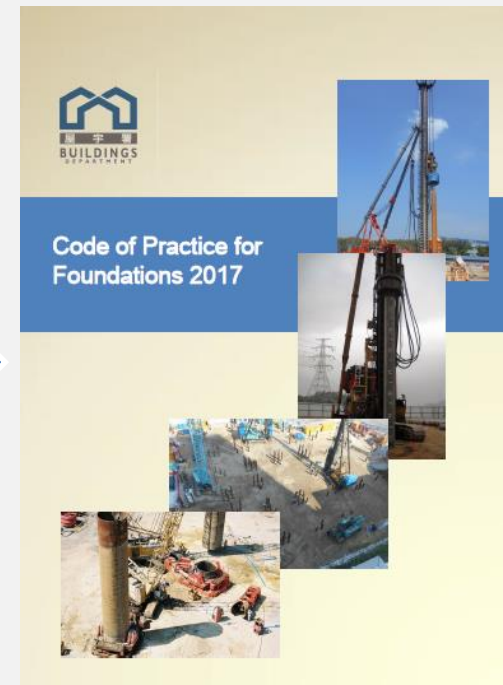
**Reg.27** Cast-in place concrete foundations

(e.g. design stress reduced to 80% when concreting under water)

**REMOVED**

**Reg.28** Horizontal restraints to piles and pile caps

**REMOVED**





# New Building (Construction) Regulation

## Part 6 Requirements for Foundations

### Extant B(C)R

#### Reg. 23

- (1) Foundation works shall be carried out so as not to render inadequate the margin of safety of, or impair the stability of, or cause damage to any building, structure, land, street or services.



### New B(C)R

#### Section 18

- (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.





# New Building (Construction) Regulation

## Part 6 Requirements for Foundations

### - Performance-based requirements in New B(C)R

#### 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.

**ADDED**

(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.

**ADDED**

# New Building (Construction) Regulation

## Part 6 Requirements for Foundations

Regulations remains in New B(C)R

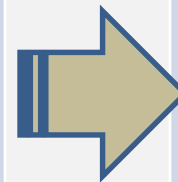
**On-site tests**

**Proof tests**

**Extant B(C)R:**

Reg. 29

Reg. 30



**New B(C)R:**

Section 19

Section 20



## Part 7

### Requirements for Site Formation Works





# New Building (Construction) Regulation

## Part 7 Requirements for Site Formation Works

- Performance-based requirements remain in New B(C)R

### Extant B(C)R: Reg. 20

#### Site formation works

- (1) Site formation works shall be designed and constructed so that during construction and thereafter there is an adequate margin of safety of the works and the remainder of the site.
- (2) The carrying out of site formation works shall not render inadequate the margin of safety of, or cause damage to, any building, structure, land, street or services.



### New B(C)R : Section 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.



# New Building (Construction) Regulation

## Part 7 Requirements for Site Formation Works

- Performance-based requirements remain in New B(C)R

### Extant B(C)R: Reg. 65

- (1) Retaining walls shall be designed and constructed to support safely the earth or fill they retain and other loads without impairing the stability of, or causing damage to, any other building, structure, land, street or services.



### New B(C)R : Section 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.
- (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.



# New Building (Construction) Regulation

## Part 7 Requirements for Site Formation Works

- Performance-based requirements remain in New B(C)R

### Extant B(C)R Reg. 71-74

#### 71. Retaining wall design

Retaining walls shall be designed in accordance with engineering principles.

#### 72. Loading condition

The design of a retaining wall shall take due account of the most onerous loading conditions whether during the construction or the service life of the wall.

#### 73. Site investigation

The design of a retaining wall shall be based on data from an appropriate site investigation.

#### 74. Adequate factor of safety

Retaining walls shall be designed to provide adequate factors of safety against sliding, overturning and ultimate bearing failure and against failure on a surface passing beneath the retaining wall.



### New B(C)R : Section 23

#### (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.

# New Building (Construction) Regulation

## Part 7 Requirements for Site Formation Works

### - Removal of some extant regulations

Extant B(C)R :

#### PART XIII Retaining Walls

Reg. 68 Earth Pressure

Reg. 69 Water Pressure

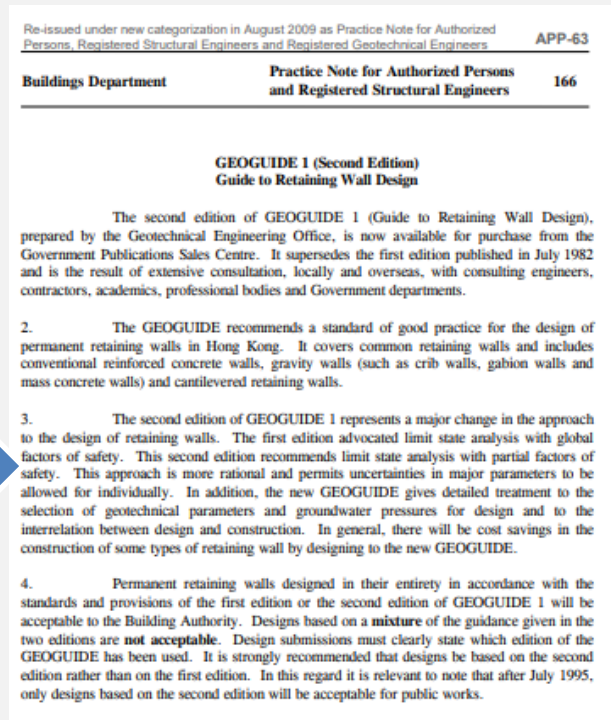
Reg. 70 Minimum Pressure

Reg. 75 Validity of design  
earth pressure

Reg. 80 Safety during

excavation and construction

**REMOVED**





# New Building (Construction) Regulation

## *Other Amendments*





# New Building (Construction) Regulation

## Part 7 Requirements for Site Formation Works

### New B(C)R s.22 : Interpretation

***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;

**ADDED**

- Making reference to Para.3 of PNAP APP-54

# New Building (Construction) Regulation

## Part 7 Requirements for Site Formation Works

### Extant B(C)R

Reg. 64

### New B(C)R s.22 : Interpretation

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

**REFINED**

# New Building (Construction) Regulation

## Part 7 Requirements for Site Formation Works

### Extant B(C)R

Reg. 66-67 &  
78 -79

### New B(C)R s.24 : Retaining wall – drainage and other requirements

#### 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.



# New Building (Construction) Regulation

## Part 7 Requirements for Site Formation Works

### Extant B(C)R 21

#### 21. Bulk excavation in area number 1 of the scheduled areas

- (1) Bulk excavation in area number 1 of the scheduled areas shall not be carried out below levels determined by the Building Authority.
- (2) For the purposes of this regulation “bulk excavation” (大型挖掘工程) means all excavation except excavation for ground investigation, public utility trenches, drains, sewers or piles.

### New B(C)R s.25(1) &(2)



*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



# New Building (Construction) Regulation

## Part 8 Requirements for External Wall, Cladding and Curtain Wall

Extant B(C)R

Reg. 2, 37 & 42



### New B(C)R s.26 : Interpretation – Part 8

#### 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.

**REFINED**

# New Building (Construction) Regulation

## Part 8 Requirements for External Wall, Cladding and Curtain Wall

### Extant B(C)R 38

#### 38. External wall of buildings

**REMOVED**

Every external wall of a building shall be constructed of—

- (a) masonry not less than 225 mm thick;
- (b) plain concrete or reinforced concrete not less than 100 mm thick;
- (c) any of the materials mentioned in paragraph (a) or (b) in combination with a framework of steel or reinforced concrete; or
- (d) other suitable materials of permanent, non-combustible and impervious construction.

### New B(C)R s.27 : External Wall

#### 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.

### Extant B(C)R 40

#### 40. No timber in walls

No timber shall be built into the thickness of any brick, concrete or masonry wall.

**REMOVED**



# New Building (Construction) Regulation

## Part 8 Requirements for External Wall, Cladding and Curtain Wall

### Extant B(C)R

Reg. 39

Reg. 43(1) 43(2)(b) & 43(4)

Reg. 43(2)(a) & 43(5)

Reg. 43(3) & 43(6)



### New B(C)R

s. 28: Cladding

s.29 : Curtain Wall - design

s.30: Curtain Wall – materials

s.31 – Curtain wall –fixing of supports and maintenance



# New Building (Construction) Regulation

## Part 8 Requirements for External Wall, Cladding and Curtain Wall

### New B(C)R s.30: Curtain 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.

**ADDED**

# New Building (Construction) Regulation

## Part 8 Requirements for External Wall, Cladding and Curtain Wall

### Extant B(C)R Reg. 43

- (3) The connection of curtain wall supports to the load-bearing structure shall not in any way impair the structural integrity or behaviour of the member to which the support is being fixed and the supports shall be fixed to the structure by—
- (a) a cast-in anchorage in a structural concrete member; or
  - (b) being welded to a structural steel member.



### New B(C)R Section 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

**REMAINED**

(b) by welding or bolting to a structural steel member of the structure.

**ADDED**

# New Building (Construction) Regulation

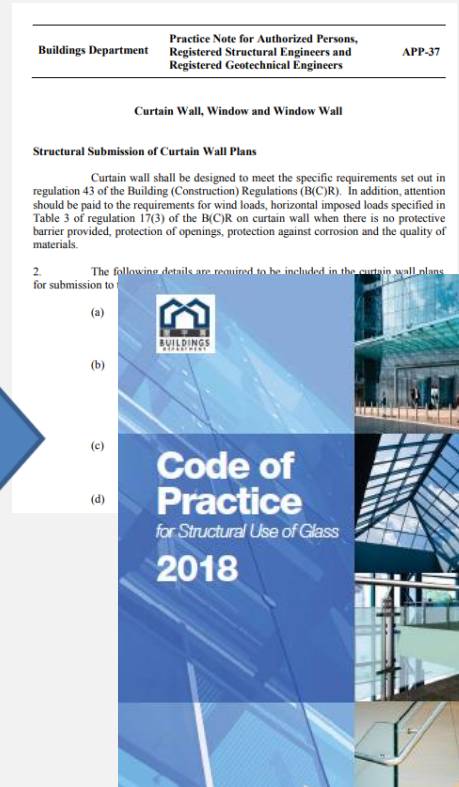
## Part 8 Requirements for External Wall, Cladding and Curtain Wall

Extant B(C)R

Reg. 43

(6) The suitability and adequacy of every curtain wall shall be demonstrated by tests.

**REMOVED**





# New Building (Construction) Regulation

## Part 8 Requirements for External Wall, Cladding and Curtain Wall

**New B(C)R s.27(2), 28(5) & 31(3)**

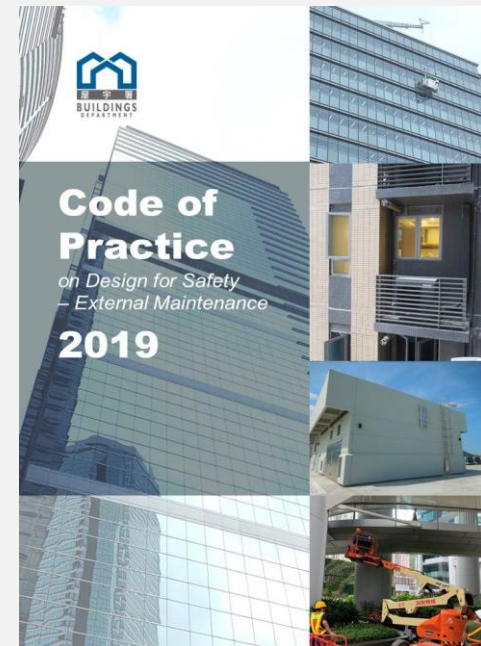
**ADDED**

- New requirements on the provision of adequate means of access for maintenance of external wall, cladding, curtain wall or the projection therefrom.
- Similar requirement for roof under Part 9

# New Building (Construction) Regulation

## Part 8 Requirements for External Wall, Cladding and Curtain Wall

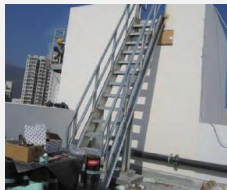
- Issued in September 2019
- Sets out guidelines for providing access for carrying out Maintenance & Repair (M&R) works to the outer face of external building elements.
- Compliance with the Code will be deemed to satisfy the statutory performance-based requirements.



# New Building (Construction) Regulation

## Part 8 Requirements for External Wall, Cladding and Curtain Wall

- Means of M&R Access in the Code
  - Maintenance access window / door
  - Power-operated elevating work platform
  - Suspended working platform
  - Maintenance staircase
  - Fixed maintenance ladder or external walkway
  - Maintenance access ladder and gantry system



# New Building (Construction) Regulation

## Part 8 Requirements for External Wall, Cladding and Curtain Wall

### - M&R Access Plans Submission

- Location and design of the proposed M&R access
- Technical specification demonstrating the adequacy of proposed M&R access
- Summary of the proposed M&R access  
→ Appendix E of the Code



# New Building (Construction) Regulation

## Part 8 Requirements for External Wall, Cladding and Curtain Wall

- Appendix E of the Code – Checklist for Provision of Maintenance and Repair Access

Means of Access Provided		External Building Elements (specify the location as appropriate)
<input type="checkbox"/>	Suspended working platform	<input type="checkbox"/> Air-conditioner platform
		<input type="checkbox"/> Balcony and utility platform
		<input type="checkbox"/> Canopy
		<input type="checkbox"/> Cornice, eave, fin, moulding, overhang, reflector, sun-shade, and other architectural projections
		<input type="checkbox"/> Curtain wall
		<input type="checkbox"/> Drying rack
		<input type="checkbox"/> External cladding
		<input type="checkbox"/> External drainage pipe
		<input type="checkbox"/> External vertical greenery
		<input type="checkbox"/> External wall
		<input type="checkbox"/> Inaccessible roof
		<input type="checkbox"/> Planter box
		<input type="checkbox"/> Projections from a roof
		<input type="checkbox"/> Projecting window

<input type="checkbox"/>	Power-operated elevating work platform	<input type="checkbox"/> Others (please specify)
		<input type="checkbox"/> Air-conditioner platform
		<input type="checkbox"/> Balcony and utility platform
		<input type="checkbox"/> Canopy
		<input type="checkbox"/> Cornice, eave, fin, moulding, overhang, reflector, sun-shade, and other architectural projections
		<input type="checkbox"/> Curtain wall
		<input type="checkbox"/> Drying rack
		<input type="checkbox"/> External cladding
		<input type="checkbox"/> External drainage pipe
		<input type="checkbox"/> External vertical greenery
		<input type="checkbox"/> External wall
		<input type="checkbox"/> Inaccessible roof
		<input type="checkbox"/> Planter box
		<input type="checkbox"/> Projections from a roof
		<input type="checkbox"/> Projecting window
		<input type="checkbox"/> Signboard
		<input type="checkbox"/> Others (please specify)

# New Building (Construction) Regulation

## Part 8 Requirements for External Wall, Cladding and Curtain Wall

- Indicated in the first GBP:

### + General Note

Before applying for the [consent to commence the superstructure works](#), the provision for M&R access required under the Code of Practice on Design for Safety – External Maintenance will be submitted to and approved by BD.





# New Building (Construction) Regulation

## Part 9

### Protection against Moisture and Water



# New Building (Construction) Regulation

## Part 9 Protection against Moisture and Water

### Extant B(C)R

Reg. 41

### New B(C)R s.32

- 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.

### Extant B(C)R 36

- 36. Skirting**  
Every skirting shall be solidly bedded against the wall to which it is attached.

**REMOVED**

# New Building (Construction) Regulation

## Part 9 Protection against Moisture and Water

### Extant B(C)R 33, 35

#### 33. Areas to be paved

- (1) The ground surface of every external area of every building unless landscaped shall be suitably paved.
- (2) Such surface paving shall be laid to fall at a gradient of not less than 1 in 80 to a gully trap or drainage channels connected to a surface water drain.

#### 35. Floor next above external ground level

The level of the floor next above the external ground of every building shall be not less than 150 mm above the level of the external ground or paving at the entrance to that floor.

**REMOVED**

### New B(C)R s.33

#### 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.

**ADDED**

- Exemption or modification is no longer required.
- Compliance with **PNAP APP-125** will be deemed to satisfy the statutory performance-based requirements.

# New Building (Construction) Regulation

## Part 9 Protection against Moisture and Water

### Extant B(C)R 49(1)

#### 49. Flat roof

- (1) A flat roof adjoining any building shall be at a level of not less than 150 mm below any adjoining usable floor space.

**REMOVED**

### New B(C)R s.34(2)

#### 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.

- Exemption or modification is no longer required.
- Compliance with [PNAP APP-125](#) will be deemed to satisfy the statutory performance-based requirements.



# New Building (Construction) Regulation

## Part 9 Protection against Moisture and Water

### Extant B(C)R 49(2)

(2) Access for maintenance shall be provided to every flat roof.



### New B(C)R s.34(3)

(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.

- Compliance with [Code of Practice on Design for Safety - External Maintenance](#) will be deemed to satisfy the statutory performance-based requirements.

# New Building (Construction) Regulation

## Part 9 Protection against Moisture and Water

### ➤ Inaccessible roof

- **Guard-rails** satisfying the occupational safety shall be provided when stepping onto the roof for **maintenance is required**.





# New Building (Construction) Regulation

## Part 10

### Requirements for Fire Safety



# New Building (Construction) Regulation

## Part 10 Requirements for Fire Safety

### Extant B(C)R 90

#### 90. Fire resisting construction

Every building shall be designed and constructed so as to—

- (a) inhibit the spread of fire within the building and to nearby buildings by dividing the building into compartments;
- (b) provide adequate resistance to the spread of fire and smoke by the separation of different uses in a building by compartment walls and floors and by the separation of the building from any adjoining building or site;
- (c) maintain the stability of the building in case of fire; and
- (d) provide adequate resistance to the spread of fire over the roof of one building to another having regard to the position of the building.

**REMOVED**

### New B(C)R s.35

#### 35. Fire resisting construction

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

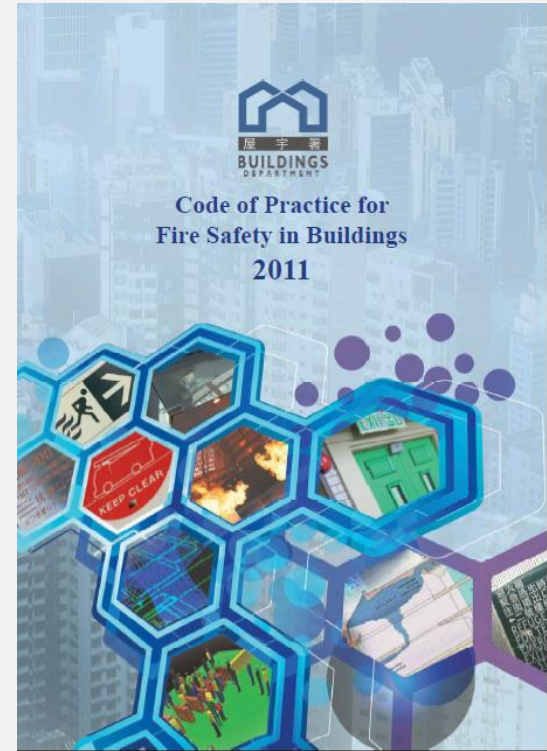
- (a) inhibit the spread of fire within the building and to the buildings nearby;
- (b) provide adequate resistance to the spread of fire and smoke—
  - (i) between different buildings; and
  - (ii) in the building between different uses;
- (c) maintain the stability of the building to—
  - (i) allow 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.

**ADDED**

# New Building (Construction) Regulation

## Part 10 Requirements for Fire Safety

- New B(C)R s.35 : Fire resisting construction
  - Compliance with the **extant Code of Practice for Fire Safety in Buildings 2011** deemed to satisfy the statutory performance-based requirements.



## Part 11

### Requirements for User Safety Division 1: Protective Barrier



# New Building (Construction) Regulation

## Part 11 Requirements for User Safety

### Division 1: Protective Barrier

#### Extant B(C)R 8(4)

- (4) This regulation shall not apply to a stage in an assembly hall, a loading bay in a factory, or spaces within domestic premises for occupation by one family.

#### New B(C)R s.36

##### 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.

**ADDED**



# New Building (Construction) Regulation

## Part 11 Requirements for User Safety

### Division 1: Protective Barrier

#### Extant B(C)R 8(1)

##### 8. Changes in level

- (1) At the outer edge of all balconies, verandahs, staircases, landings or projections, or where there is a difference in adjacent levels greater than 600 mm, protective barriers shall be provided to restrict or control the movement of persons and vehicles.



#### New B(C)R s.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.

**ADDED**



# New Building (Construction) Regulation

## Part 11 Requirements for User Safety

### - Division 1: Protective Barrier

#### Extant B(C)R 8(2), 8(3) & 8(3A)

- Height of not less than 1.1m
- Inhibit the passage of articles more than 100mm in their smallest dimension
- Lowermost 150mm built solid
- Requirements for PPE



#### New B(C)R s.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.

- Prescriptive guidelines in [PNAP APP-110](#)

## Part 11

### Requirements for User Safety Division 2: Lift and Escalator



# New Building (Construction) Regulation

## Part 11 Requirements for User Safety Division 2: Lift and Escalator

### Extant B(C)R 9A(5)

- (g) a ramp connected with any wharf or pier;
- (h) an amusement device;
- (i) a stage or orchestra lift;
- (j) a stairlift for transporting a person or person with a wheelchair between 2 or more levels by means of a guided carriage moving substantially in the direction of a flight of stairs and travelling in both upward and downward direction; and
- (k) a lifting platform for use by persons with a disability, with or without wheelchairs, travelling between fixed levels, which may include intermediate levels, where the maximum height of the platform above the lowest level does not exceed 1.98 m. (L.N. 240 of 1997)



### New B(C)R s.39

- (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.

**ADDED**



# New Building (Construction) Regulation

## Part 11 Requirements for User Safety Division 2: Lift and Escalator

### Extant B(C)R

Reg. 9A(1)



### New B(C)R s.40(1)(b)

#### 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.

**ADDED**



# New Building (Construction) Regulation

## Part 11 Requirements for User Safety Division 2: Lift and Escalator

### Extant B(C)R

Reg. 9A(2), 9A(3) &  
9A(4)(a)



### New B(C)R s.41

#### 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.

# New Building (Construction) Regulation

## Part 11 Requirements for User Safety Division 2: Lift and Escalator

### Extant B(C)R 9A(4)(b) – (d)

- (b) the words on the notice shall be in English and in Chinese and shall be incised or embossed;
- (c) the height of the letters and characters on the notice shall be, in the case of a sign referred to—
  - (i) in subregulation (2), 25 mm; and
  - (ii) in subregulation (3), 15 mm; and
- (d) the notice shall be made of metal, plastic or other durable material and shall be affixed in a manner that will ensure permanence.

**REMOVED**



# New Building (Construction) Regulation

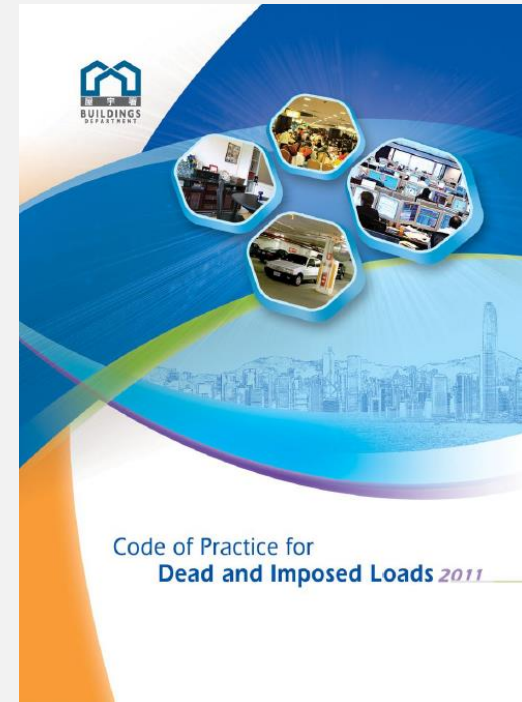
- Similarly, New B(C)R s.11 of Part 3 – notice as to load at industrial buildings and warehouses

## New B(C)R s.11

### 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.





# New Building (Construction) Regulation

## Part 12

## Miscellaneous





# New Building (Construction) Regulation

## Part 12 Miscellaneous

### Extant B(C)R

Reg.31



### New B(C)R s.42

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.

# New Building (Construction) Regulation

## Part 12 Miscellaneous

### Extant B(C)R

Reg. 85-87, 88(1) & 88(5)

Reg. 88(2)-(4) & 89

Prescriptive requirements on  
proper lined well & prevent of  
unauthorized entry **REMOVED**



### New B(C)R s.43

#### 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.

# New Building (Construction) Regulation

## Part 12 Miscellaneous

### Extant B(C)R

Reg. 2, 44, 46(1)(b),  
46(2)(a) & 46(3)



### New B(C)R s.44: Chimney & flue

(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.

**ADDED**

### Extant B(C)R

Reg. 45, 46(1)(a), 46(2)(b)  
& 47

**REMOVED**



Covered by new B(C)R s.3 – Materials



# New Building (Construction) Regulation

## Part 12 Miscellaneous

### Extant B(C)R

Reg. 46(1)

Reg. 91



### New B(C)R

s.45 : Fire Place

s.46 : Habitation by vermin

# New Building (Construction) Regulation

## Part 12 Miscellaneous

### Extant B(VS)R 4(1)(e)(iii)

- (e) every duct shall—
- (i) be wholly constructed of non-combustible material having a strength and durability not less than that of galvanized sheet-iron or steel;
  - (ii) be accessible for the purposes of cleaning throughout its entire length;
  - (iii) where its size is sufficient to allow any person to enter therein, be fitted with access openings to allow a person to enter the same and shall be constructed to bear the weight of any person who has so entered;

**REPEALED**

### New B(C)R s.47

#### 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.



# New Building (Construction) Regulation

**Thank you**

