

30 September 2019

To All Authorized Persons
Registered Structural Engineers
Registered Geotechnical Engineers
Registered Inspectors
Registered General Building Contractors
Registered Specialist Contractors
Registered Minor Works Contractors

Dear Sir/Madam,

Code of Practice on Wind Effects in Hong Kong 2019

I have pleasure to announce the publication of the Code of Practice on Wind Effects in Hong Kong 2019 (2019 Code), which may be used with immediate effect. The 2019 Code is formulated on the basis of a consultancy study commissioned by the Buildings Department to research on the latest development in wind engineering and technologies, review the Code of Practice on Wind Effects in Hong Kong 2004 (2004 Code) taking into account the available international codes of practice on wind loading and draft a comprehensive and up-to-date code of practice on wind effects for building design in Hong Kong.

2019 Code

2. The major updates and new features in the 2019 Code are summarised below:

- (a) A unified approach based on gust pressure and the use of size factor and size and dynamic factor for the consideration of vertical distribution of along wind forces;
- (b) Calculation of torsional and across-wind forces;

/(c)...

- (c) Load combination factors for lateral and torsional forces;
- (d) Calculation of building acceleration and evaluation of occupant comfort;
- (e) Calculation of wind loads on temporary structures;
- (f) Consideration of direct sheltering effect of surrounding buildings by way of reducing the actual height to effective height of building for the calculation of wind reference pressure, turbulence intensity and force coefficients;
- (g) Force and pressure coefficients for the design of typical buildings and building elements;
- (h) Additional guidance on requirements for wind tunnel testing;
- (i) Wind directionality factors accounting for the reduced probability of strong winds from various wind directions;
- (j) Pressure coefficients for buildings with dominant openings; and
- (k) Damping ratios in relation to the aspect ratios of buildings.

3. The Explanatory Notes to the 2019 Code (EN) providing further guidance on the use of the 2019 Code with theoretical background, assumptions, sources of reference and illustrative examples have also been compiled.

Implementation of 2019 Code

4. The 2019 Code may be used with immediate effect. Submission of plans for foundation or superstructure works designed to the 2004 Code will be accepted during a 12-month grace period commencing on the date of this circular letter. After the expiry of the 12-month grace period, only submission of plans for foundation or superstructure works designed to the 2019 Code will be accepted. However, for building development or alteration and addition

/proposal...

proposal, if the plans¹ for foundation or superstructure works have been submitted before the expiry of the grace period and eventually are approved by the Building Authority, the subsequent submission of plans for foundation or superstructure works may continue to adopt the same code of practice on wind effects used in the original design.

Access to the 2019 Code

5. The 2019 Code and EN are available in the Buildings Department website <http://www.bd.gov.hk> under the “Codes and design manuals” page of the “Resources” section. The document may be downloaded subject to the terms and conditions stipulated in the website.

Yours faithfully,

A handwritten signature in black ink, consisting of a large, stylized 'W' followed by a flourish that loops back to the left.

(HO Hon-kit, Humphrey)
Assistant Director/New Buildings 2
for Building Authority

¹ Including those plans for foundation or superstructure works designed with loading allowance for future structures.