
Code of Practice on Wind Effects in Hong Kong 2004

Main Features of the Code

The Code of Practice on Wind Effects in Hong Kong 2004 (The 2004 Code) replaces the existing 1983 wind code by taking into account additional wind data collected in Hong Kong and enriched knowledge of structural response under wind effects. It introduces several changes to the wind design which include the adoption of a single terrain wind velocity profile, a new approach to address the site topographic effects, the assessment of resonant dynamic response effects for slender and/or dynamic significant buildings under wind load, and necessary provisions for wind tunnel testing.

Explanatory Materials

2. As the 2004 Code aims to retain the essence of simple format for ease of application, a supplementary technical document – ‘*Explanatory Materials to the Code of Practice on Wind Effects in Hong Kong 2004*’ will be issued in parallel to give a summary of background information and considerations that were reviewed during the preparation of the Code. The document also addresses special situations where the application of the Code might require special attention. Nevertheless, the document should NOT be construed as a part of the Code.

Transitional Period for the Application of the Code

3. To allow sufficient time for the building industry to migrate to the 2004 Code, a one-year transition period starting from 15 December 2004 would be implemented. During the transitional period, all first structural submissions and their subsequent re-submissions, if applicable, including those for alterations and additions works, received by the Buildings Department may be designed to either the 2004 Code or the 1983 Code. After the transitional period, i.e. starting from 15 December 2005, all structural submissions for new building development proposals received by the Buildings Department should be designed in accordance with the 2004 Code.
4. Building development proposals for which the superstructure or foundation plan submissions have been received by the Buildings Department during the transitional period and structural plans which have been designed according to the 1983 Code and submitted/approved before the transitional period may continue to be designed using the 1983 Code for both the foundations and superstructures including its subsequent amendments until the Occupation Permit has been granted.

5. For foundation works for which plans have been submitted and approved using the 1983 Code, the RSE may choose to design the superstructure works to the 2004 Code provided he has checked and satisfied the Buildings Authority that the foundation works already approved are structurally adequate to resist the wind loads and the combinations with other loads transmitted from the superstructure.

6. For new alteration and addition works to be submitted after the transitional period, the design of new structural elements and/or checking of structural adequacy of the existing structure should follow the guidance given in PNAP 249.

7. Notwithstanding the aforesaid administration arrangements, you are required to advise the owners that the Building Authority may under BO section 16(3)(d) refuse to give his consent to the commencement of any building works when a period exceeding 2 years has elapsed since the approval of the prescribed plans in respect of the building works.

Design of External Building Elements

8. External building elements, e.g. canopies, cladding to building façade, curtain walls and architectural features etc. are subject to wind channel down effect the design requirements of which are described in Clause 6.2 of the 2004 Code. Such design requirement is not postulated in the 1983 Code. However, RSEs are strongly advised to consider such effect in the design of external building elements even though the building has been designed to the 1983 Code.

Access for the Code

9. Both the Code and the Explanatory Materials are available for viewing in the Buildings Department website <<http://www.info.gov.hk/bd>> under the "Codes of Practice and Design Manuals" page of the "Publications" section. The documents may be downloaded subject to terms and conditions stipulated in the website.



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