HK Building Department Met CTBUH for the Cyclone-Glazing Project
June 11 – 15, 2018

HONG KONG – CTBUH Research Division and the research sponsor representative had a meeting at the Hong Kong Building Department (HKBD). They discussed about the local best practices for the design, construction and maintenance process of façades, with a deep focus on the strong wind- and typhoon-performances. This conversation was fundamental for the output of the research project and the proactive exchange of information established a contact for future collaborations between CTBUH and the HKBD.

The department provides services for owners and occupants of both existing and new private buildings through enforcement of the Buildings Ordinance. As regards existing buildings, HKBD services include reducing risks and nuisances caused by unauthorized building works and advertisement signboards; promoting the importance of proper repairs and maintenance of old buildings, drainage and slopes; considering and approving alteration and addition works; processing submissions under the simplified requirements and the household minor works validation scheme of the minor works control system; improving fire safety measures in buildings and advising on the suitability of premises for the issue of licenses for specified commercial uses. As regards new buildings, the department scrutinizes and approves building plans, carries out audit checks on construction works and site safety and issues occupation permits upon completion of new buildings. The HKBD takes into account the maintenance process of the building envelopes and, under the Mandatory Window Inspection Scheme (MWIS), Hong Kong owners of buildings aged 10 years or above (except domestic buildings not exceeding 3 storeys) and served with statutory notices are required to appoint a Qualified Person (QP) to carry out the prescribed inspection and supervise the prescribed repair works found necessary of all windows of the building. Where a prescribed repair is required, the owners concerned must appoint a registered contractor to carry out the prescribed repair under the supervision of a QP.
Mr. Tam A-ray, Chief Structural Engineer / New Territories, Mr. Ku, Senior Structural Engineer / Hong Kong 3, Ms. Au Pui-ling, Technical Secretary / Structural, Mr. Sze, Structural Engineer / Technical Services 3, gave a presentation about the most updated local requirements for façades.

The HKBD released in 2004 the Code of Practice on Wind Effects in Hong Kong which is the basis for every façade designer in the wind pressure calculation. The code is currently under revision and soon a new issue will be available. Furthermore, the Buildings Department prepared the 2018 Hong Kong Code of Practice for Structural Use of Glass, on the basis of a consultancy study on the structural use of glass commissioned by the HKBD and overseen by a Steering Committee with members from the academia, professional institutions and relevant government departments. This code is effective from 2019 and requests the use of laminated glass solutions for building exterior façades when the size of glass pane exceeds 2.5 m² and any point of the glass pane installed is at a height 5 m or more above the finished floor level of the accessible area on either side of the pane. But this document still doesn’t reference any procedure for wind-borne debris simulations, related with the typhoon-prone location of the buildings in Hong Kong. Hong Kong is an area where the first recladding processes have begun and there is a high concentration of tall buildings and of curtain walls: it would be very important to introduce strong reference test methods for the typhoon resistance for the newest curtain walls, according to the ASTM.

Angela Mejorin, presented the research project on Cyclone Glazing and Façade Resilience for the Asia-Pacific Region, the first findings of the research activities and the current international best practices in terms of flying debris resistance during strong wind and typhoon events. These tests, adopted by US and Australia, proved their effectiveness. The data presented through the post disaster event Assessments of the Miami Dade County and the ones published in the Technical Reports by the Cyclone Testing Station were shared.

CTBUH and the HKBD aim to continue the collaboration, sharing the research projects’ findings for activities and for different topics’ updating in Hong Kong.

Attendees:

Fion Au Pui-ling  
Wai-ming Ku  
Charles Sze  

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