Meetings with Façade Industry Representatives in Japan

April 16 – 23, 2018

OSAKA – CTBUH Research Division visited the General Building Research Corporation (GBRC) of Japan. The Corporation was officially authorized as a non-profit foundation in 1964 by the Government, with the mission to promote public welfare by improving the quality and ensuring the safety of buildings based on wide-ranging research, testing and evaluating activities related to building technologies. The GBRC has upheld the third party position by conducting strict and fair analyses and judgments consistently on the activities related to overall building technologies.

Yasushi Tsukamura from the GBRC organized the visit to their Cladding and Curtain Wall test lab and Toshiyuki Kanyama, the Wind Engineering Lab Manager, presented their activities. In their equipment there is the air cannon to conduct the missile impact test which simulates the wind-borne debris of the typhoon-prone regions. Furthermore, they have the pressure chamber to conduct the positive and negative pressure cycling test. In the end, they have the necessary apparatus to conduct the entire test procedure according to the ASTM or ISO standard for typhoon-resistant façades.

General Building Research Corporation of Japan, Osaka. From right to left: Toshiyuki Kanyama, GBRC Wind Engineering Lab Manager; Angela Mejorin, CTBUH Research Assistant; Yasushi Tsukamura, GBRC Manager.

Osaka, Umeda District. Fukoku Seimei Building.
TOKYO – The CTBUH Research Division and Shuji Miyamoto, Sales Manager of the research project sponsor Trosifol, visited the Japan Sash Manufacturer Association (JSMA) - Windows & Doors - which has representatives from the four principal Japanese façade suppliers: YKK AP Inc., LIXIL Corporation, Sankyo Tateyama Aluminium, Fujisash Co. Ltd., Akira Kudou, Standardization Project Manager and ISO/TC 162 Secretary, and Fumihiko Chiba, Manager at the Central Research Laboratory of YKK AP Inc., organized the meeting. The curtain wall experts explained the Japanese best practices for curtain wall design and testing procedure for strong winds-prone construction. They illustrated their guideline and the minimum safety requirements for façades that have to face frequently typhoon events. Furthermore, they presented the equipment and testing facilities that the principal Japanese curtain wall suppliers have in their own factories in order to verify before the installation their products performances.
Angela Mejorin and Shuji Miyamoto had a meeting at one of the most important Japanese general contractors for the tall building construction, the **Takenaka Corporation**. Dr. Masayoshi Nakai, Deputy General Manager of the Engineering Department, and Dr. Hideo Oka, Senior Manager and representative of the Spatial Technology Group of the Engineering Department, kindly discussed about the performance-based wind-resistant design for the Japanese tall building construction. They discussed about the minimum safety requirements and performances, based on the Architectural Institute of Japan Recommendations for Loads on Buildings and the Building Standard Law of Japan. Furthermore, CTBUH had the opportunity to ask some questions about the Japanese tallest building, the **Abeno Harukas**, which will be included as a building case study in the technical publication 'Strong Winds- and Cyclone-Resistant façades: the Best Practices'.