CTBUH at Glass Performance Days Conference in Tampere, Finland


Angela Mejorin

TAMPERE - The 25th edition of Glass Performance Days Conference (GPD), chaired by Jorma Vitkala and focusing on “Growth, Knowledge, New Generation”, was held at the Tähtí Areena in Finland from June 28th to 30th, 2017.

This forum represented the opportunity for experts of the glass market, from the building to the automotive sector, to share their most innovative developments, practical experience, and advanced visions. Jonathan Cohen, Global Marketing & Development Director of Trosifol, expressed his satisfaction with the event, stating “(The GPD conference) is the most important conference on architectural glass in the world and we have a chance to meet many of the best glass engineers in the world at the same time”.

On Thursday 29th Dario Trabucco, CTBUH Research Manager, presented the paper published in the GPD 2017 Conference Proceedings, entitled “Cyclone Resistant Glazing Solutions in the Asia-Pacific Region: A Growing Market to Meet Present and Future Challenges” and authored by Dario Trabucco, Angela Mejorin and Will Miranda of CTBUH and Reisuke Nakada, Christoph Troska and Ingo Stelzer of Trosifol. The paper summarizes the findings of the research project “Cyclone-Glazing and Façade Resilience for the Asia-Pacific Region” that is currently being conducted by CTBUH, thanks to a research grant received from Kuraray –Trosifol World of Interlayers. The risk to tall buildings due to typhoon events in the Asia-Pacific region has been examined in detail on a country-by-country basis through the Geographic Information System (GIS) modeling, using data from the Skyscraper Center and historic typhoon events data from the United Nations Environmental Programme. In the analyzed countries, a total amount of 6,618 tall buildings were analyzed, with 1,772 having been affected by a typhoon event in the past, but a profound 4,290 buildings are currently in a typhoon prone area.

Current state-of-the-art cyclone-resistant façade technology requirements in the Asia-Pacific region have been investigated and compared against the best practices. The purpose of the research is to sensitize Asia-Pacific governments on security issues for typhoon resistant façades. As mentioned in the paper that Dario Trabucco presented, “(tall buildings have) always represented a symbol – for a company, for the society, a landmark in the city. This kind of construction has to follow the best practice for typhoon resistant glazing because in addition to interior damage, the potential effects to the external area due to storms is invaluable”.

During the conference days Angela Mejorin, CTBUH Research Assistant, and Dario Trabucco submitted two surveys to the expert attendees. The first survey disseminated the current research to the professional community, with a few to abating more information about the Asia-Pacific façades market. The second survey was created with the view to identify the main gaps in Asia-Pacific glazing system requirements.

The GPD event represented the chance for the second face-to-face CTBUH research project meeting with Trosifol® experts. It was held at the Cumulus Koskikatu Hotel in Tampere on Wednesday June 28th, 2017. The final output of the first phase of the research – code analysis and identification of main gaps in cyclone resistant glazing systems requirements – was discussed. This phase of the research will address a major problem faced by contractors operating in the Asia-Pacific region: the decision on which code to comply with.

In some Asia-Pacific countries, the US standard tests are required but, in most cases, no test requirements are needed for the façade construction authorization process. Australia and New Zealand currently offer the most advanced codes and standards for this region, but they still differ from the best practices in the US. Furthermore, many analyzed countries have been affected by typhoons every year in the past decade, but they still don’t have typhoon resilience construction safety requirements.
A possible future phase of the research was also discussed during the meeting: the proposition of a new general guideline for the design of typhoon-resistant façades in the Asia-Pacific market.

Second research meeting – Participants:

Ingo Stelzer – Trosifol®
Malvinder Singh Rooprai – Trosifol®
Vaughn Schauss. – Trosifol®
Dario Trabucco – CTBUH
Angela Mejorin – CTBUH