



GLASS PERFORMANCE DAYS 2019
JUNE 26-28, TAMPERE FINLAND



WORKSHOP

STATE OF THE ART CALCULATION METHODS FOR SILICONE STRUCTURAL GLAZING JOINT DIMENSIONING

SUMMARY

Silicone Structural Glazing (Glass Bonding) has been applied successfully for more than 50 years on glass façades. Historically, joint dimensions have been calculated using an analytical simplified equation which is implemented in various standards (e.g. ETAG002, ASTM C1401). As modern glass façade projects increase in design complexity and performance requirements, it becomes necessary to develop alternative calculation methods tailored to these modern bonded glass façades.

This workshop studies different methods for calculating silicone joints meeting real life conditions in state-of-the-art facades. Topics covered include an in-depth review of current and advanced analytical calculation methods and how to successfully apply Finite Element Analysis and Spring Modeling to silicone joint dimensioning.

N.B. To attend this workshop, it is recommended that participants have a basic knowledge in structural mechanics.

TIMETABLE 26TH OF JUNE

9.00 - 13.00

Duration: 4 hours



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ORGANISERS

VALERIE HAYEZ, DOW



Valérie Hayez holds a PhD in Applied Sciences from the University of Brussels, Belgium. She is Global Façade Engineering & Architectural Design Engineer for High Performance Building at Dow, Belgium. In her current role, she provides technical service to the design community, including façade system manufacturers, architects and engineers. Valérie is responsible for identifying and communicating industry needs to Dow's Research and Development Community and supporting the development and commercialization of new products.

JON KIMBERLAIN, DOW



Jon Kimberlain currently provides technical expertise and application support for Dow Silicones as a Technical Services and Development Scientist. With 20 years with Dow Corning and Dow Chemical, Jon has published 15+ research papers on the use of silicone sealants in high performance buildings which have been presented at venues such as Façade Tectonics, ASTM Symposiums, GlassCon and GPD Finland. Currently a founding board member of Architectural Glass and Metal Certification Council, he has also been active in leadership with GANA and NGA.

MICHAEL DRASS, TECHNICAL UNIVERSITY DARMSTADT



Michael Drass M.Eng. holds a Master degree in structural engineer from University of Applied Sciences in Mainz, Germany. After completing his studies, he began his PhD at the Technical University of Darmstadt at the Institute for structural mechanics and design, where he is particularly concerned with adhesive joints of all kinds in glass construction which is the subject of his nearly completed dissertation on "Constitutive Modelling and Failure Prediction of Silicone Adhesives in Façade Design".