

CSTB
le futur en construction

FSF 

FIRE SAFETY OF FACADES

2nd International conference | 11/13 May 2016, Lund - Sweden

Preliminary programme



Wednesday 11 May 2016

Afternoon: Workshop sessions

- Workshop session 1: Fire safety of facades on multi-storey buildings
- Workshop session 2: Test methods: can we rely on the test methods available?

More details of the content of each workshop will be provided in the coming weeks.

Evening: Breaking glass event

Temporary programme

Thursday 12 May 2016

- 08.00 Registration
09.00 Welcome and introduction

Regulation and standardization work, case study

- 09.30 **A Case Study of Fires in Structural Elements**
N. Johansson, P. van Hees, Lund University, Sweden
- 09.50 **Post Incident Analysis Report, Lacrosse Docklands**
G. Badrock and R. Bryant, Metropolitan Fire and Emergency Services Board, Australia
- 10.10 **Development of full-scale façade tests in ISO TC92**
P. van Hees, Lund University, Sweden
- 10.30 Coffee break

Poster presentation

- 12.20 Lunch and poster session

Test and assessment method

- 14.00 **Experimental investigation of the fire behavior of facades with EPS exposed to different fire loads**
C. Northe, O. Riese, J. Zehfuß, Technische Universität Braunschweig, Germany
- 14.20 **Fire Propagation over Combustible Exterior Facades exposed to intensified flame in Japan**
Y. Nishio, University of Tokyo, Japan, H. Yoshioka, National Institute for Land and Infrastructure Management, Japan, T. Noguchi, University of Tokyo, Japan, M. Kanematsu, Tokyo University of Science, Japan, T. Ando, M. Tamura, University of Tokyo, Japan and Y. Hase, Mitsubishi Plastics, Inc., Japan
- 14.40 **Fire Behaviour of the "Ventilated Façade" System: A Large-Scale Fire Test**
D. Kolaitis, E. Asimakopoulou and M. Founti, National Technical University Athens, Greece
- 15.00 **Investigations of the performance of facades made of ETICS with polystyrene under external fire exposure and fire safety measures for their improvement**
J. Riemesch-Speer, Deutsches Institut für Bautechnik, Germany, O. Riese, Technische Universität Braunschweig, Germany, I. Kotthoff, Ingenieurbüro für Brandschutz bei Fassaden, Germany and S. Hauswaldt, MFPA Leipzig GmbH, Germany
- 15.20 **A new fire performance test for cavity wall insulation**
K. Jamison, FM Global Research, USA and D. Boardman, FM Approvals, USA
- 15.40 Coffee break

Numerical modeling

- 16.20 **An Experimental and Numerical Study to Characterize the Transient Effects of Externally Venting Flames in Under-Ventilated Compartment Fires**
E. Asimakopoulou, D. Kolaitis and M. A. Founti, National Technical University of Athens

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- 16.40 **Experimental Study and Advanced CFD Simulation of Fire Safety Behaviour of Building External Thermal Insulation System**
Z. Yan, Simtec Soft Group AB, Sweden, C. Zhao, National Fire Protection Quality Supervision and Inspection Center of Building Materials, China, Y. Liu, Fire Safety Design AB, Sweden, X. Deng, X. Ceng, S. Liu, B. Lan, G. Lu, National Fire Protection Quality Supervision and Inspection Center of Building Materials, China, S. Jeansson, R. Nilsson, Fire Safety Design AB, Sweden and P. van Hees, Lund University, Sweden
- 17.00 **Numerical simulations of the ISO 13785-2 façade fire tests**
Gleb Bytskov, Simo Hostikka, Aalto University, Finland
- 17.20 **Repeatability of façade fire tests – measurements and modeling**
J. Anderson, L. Boström, R. Jansson, SP Technical Research Institute of Sweden, Sweden and B. Milovanović, University of Zagreb, Croatia
- 17.40 **Large-Scale Performance Testing and CFD Simulation of Fire Propagation in Ventilated Facades and the influence of Insulation materials**
M. Pilar Giraldo, Catalan Institute of Wood, Spain, X. Sindt, A. Lacasta, L. Haurie, Universitat Politècnica de Catalunya BarcelonaTech, Spain, E. Pastor, E. Planas, O. Rios, Centre for Technological Risk Studies, Spain, E. Cuerva, Universitat Politècnica de Catalunya BarcelonaTech, Spain
- 20.00 Gala dinner
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Friday 13 May 2016

Fire Safety Engineering

08.40 **Full-scale Experiments to Investigate the use of a Water Curtain over Openings to Prevent Fire Spread to Adjacent Properties**
M. Turco, G. Hadjisophocleous, Carleton University, Canada, and P. Lhotsky, Carleton University, Canada

09.00 **Fire safety engineering applied to high-rise building facades**
P. Setti, Politecnico di Milano/FSC Engineering srl, Italy, L. Mazziotti, Italian National Fire Services, Italy, G. Amaro, Gae Engineering srl, Italy, G. Paduano, P. Cancelliere, Italian National Fire Services, Italy, S. Sassi and M. Madeddu, Italian National Fire Services, Italy

09.20 **Development of Fire Risk Assessment Method of Building External Thermal Insulation System based on Advanced CFD Simulation**
Y. Liu, Fire Safety Design AB, Sweden, Z. Yan, Simtec Soft Group AB, Sweden, S. Jeansson, Fire Safety Design AB, Sweden, X. Han, Shanghai Institute of Disaster Prevention and Relief, Tongji University, China, A. Johansson, National Board of Housing, Building and Planning, Boverket, Sweden, R. Nilsson, Fire Safety Design AB, Sweden and P. van Hees, Lund University, Sweden

09.40 **Numerical investigation on compartment fire with external flames**
M. Duny, D. Dhima, Scientific and Technical Centre for Building, France, J-P Garo, H.Y. Wang, Institut P', France

10.00 **A System Approach to Verify Performance of the Building Fire Protective Envelope**
T. Jarnskjold & G. Jensen, COWI AS, Norway

10.20 Coffee break

Products, material and facade systems

10.50 **Fire risk related to the use of PV systems in building facades**
L. Mazziotti, Italian National Fire Services, Italy, P. Cancelliere, G. Paduano, Italian National Fire Services, Italy, S. Sassi, Italian National Fire Services, Italy and P. Setti, Politecnico di Milano/FSC Engineering srl, Italy

11.10 **Means of regulating combustible materials in external walls**
E. Mikkola, KK-Fireconsult Ltd, Finland

11.30 **Reaction-to-fire Performance of Fire-retardant Treated Wooden Facades in Japan with Respect to Aging Degradation Caused by Weathering**
H. Yoshioka, National Institute for Land and Infrastructure Management, Japan, M. Kanematsu, Tokyo University of Science, Japan, T. Noguchi, The University of Tokyo, Japan, S. Hagihara, Japan Testing Centre for Construction Materials, Japan, A. Yamaguchi, Koshii & Co, Ltd, Japan, and T. Sugita, Misawa Homes Co., Ltd, Japan

11.50 Large glazing in curtain walls - study on impact of fixing methods on fire resistance
J. Kinowski, B. Sędlak and P. Sulik, Building Research Institute, Poland

12.10 **Durability of the reaction to fire performance for fire retardant treated (FRT) wood products in exterior applications – a fifteen years report**
B. A-L Östman and L. D Tsantaridis, SP Wood Building Technology, Sweden

12.30 Summary and closure

12.50 Lunch

Technical visit - The detail of the technical visit will be provided later



Building the future

CSTB, Scientific and Technical Center for Building, is a public organization for innovation in building which performs four key activities, namely research, expertise, evaluation and dissemination of knowledge, organized to satisfy sustainable development challenges in the world of construction.

Its field of expertise covers construction products, buildings and their integration into districts and cities.

With more than 900 employees, subsidiaries and networks of national, European and international partners, CSTB offers its service to all parties involved in construction to improve the quality and safety of buildings.