

GPD Glass Performance Days 2019 • Program • June 27, THURSDAY

8:00 REGISTRATION								
Complex Geometry & Curved Glass	Laminated Glass	Arch Challenges & Solutions	Research & Development	Facade Engineering	Glass Technology Applications	Tempering / Preprocessing	Future Opportunities in Business	
Session Chairs: Benjamin Beer, Ramboll Martien Teich, Seele	Session Chairs: Julia Schimmelpenningh, Eastman Chemical BV Vaughn Schaus, Kuraray	Session Chair: Werner Wagner, Sika	Session Chairs: Jens Schneider, TU Darmstadt Jan Beis, Ghent University Christian Louter, TU Dresden	Session Chairs: Saverio Passetto, Skanska, Jon Kimberlain, DOW	Session Chairs: John de Baere TBA, O'Callaghan	Session Chairs: Francis Serruys, Saint-Gobain BU Miika Äppelqvist, Glaston Finland Oy		
9:00 Durability of Structural Silicone Sealant in Cold Bent Glazing Design Jon Kimberlain, Dow Performance Silicones	Design and Validation of Large Format Self supporting Laminated Glass Robert Moisy, Surface Design Consulting	Glass Creep of Unsupported Lites in Laminated Glass Julia Schimmelpenningh, Eastman Chemical Company	Parametric Thermal Transmittance Numerical Modeling of a Curtain Wall Fenestration Olivier Brouard, Skidmore Owings and Merrill	Hybrid Façade Elements Made of FRP and Glass Alina Joachim, Technische Universität Dresden	Glass Igloos and Large Scale Architectural Case Studies Timo Saukko, Finnlass Oy	A Micro-mechanical Model to Calculate the Optimal HST Holding Time Gabriele Pisano, Construction Technologies Institute - National Research Council of Italy (ITC-CNR)		
9:25 Mistral Tower: Solutions for SSG Joints Optimization in Cold Bent Units Viviana Nardini, Sika Services AG	Metal-to-glass Bond Strength of Structural PVB Christian Louter, TU Delft	"The Tallest, Heaviest Sliding Glass Door of All": A Case Study Pedro Borges de Araújo, Jofebar s.a. / panoramah!®	Edge Strength: Crack System and Possibilities of Increasing the Strength Steffen Müller-Braun, Technische Universität Darmstadt	Total Transparency: All-glass Designs and its Features Christoph Bauchinger, seele / se-austria GmbH & Co. KG	Visual Quality of Glass – Anisotropic Effects - Status of the Guideline Stefan Goeddertz & Michael Elstner, Herzog & de Meuron, AGC Interpane	Checking if Heat Soak Testing was carried out Ignatius Calderone, Calderone and Associates		
9:50 Options for Complex Geometry Facades – Single Corner vs. Free Form Cold-Bending Benjamin Beer, Ramboll	Interlayer modulus properties in contemporary European standards Wim Stevels, Eastman Chemical Company	Structural Glass Challenges: Hudson Yards Observation Deck Eoin Casserly, schlaich bergermann partner	Impact on Glass Panes and the Fracture Energy Equilibrium Sagar Vanapalli, Anhalt University of Applied Sciences	RESERVED	Thin Facades with Sustainable Environmental Depth Stig Mikkelsen, Mikkelsen Arkitekter AS	Spontaneous Breakages of Toughened Glass: The H.S.T. is better than Presumed Andreas M Kasper, Saint-Gobain		
10:15 COFFEE BREAK, ONE-ON-ONE MEETINGS								
					Coatings Technology and Applications Session Chairs: Steffen Borneman & John Winnik, Folienwerk & Wolfen			
11:00 Cold Warped Glass Engineering and Durability Robert Moisy, Surface Design Consulting	Next Generation Ionplast for Improved Glass Lamination Jennifer Schneider, Kuraray America Inc	Laminated glass panels; understanding a new failure mechanism Graham Coult, Eckerley O'Callaghan	Extension of Pseudo-Elastic Cavitation Model for Cyclic Loading for TSSA Michael Drass, Technische Universität Darmstadt	Innovative Façade Types – The Closed Cavity Façade Valentin Balog, Drees & Sommer	Trends in Offline and Inline Monitoring of Coatings along the Value Chain of Architecture, Automotive, Solar and Smart Glass Marcus Klein, SURAGUS GmbH	RESERVED	Step Change – Reverse Pitching Julia Ahvenainen & Victor Jason, HEAL Lab & Step Change	
11:25 Enhancing the Light – Curved Insulated Glass Unit Design Study Adam Nizich, Walter P. Moore and Associates, Inc.	Experimental and Methodical Investigations on the Hyperelasticity of Standard PVB Alexander Pauli, Universität der Bundeswehr München	HIGH TEC Achievable for Everyone Miguel A. Núñez Díaz, Enar, Envolvertes Arquitectónicas	Post-breakage In-plane Stiffness of Laminated Glass. An engineering Approach Laura Galuppi, University of Parma	Building Sky View Agnes Koltay, Koltay Facades	Laser – a Tool for Glass Processing Thomas Rainer, HEGLA boraident GmbH & Co. KG	Influence of Cooling Jets on Stress Pattern and Anisotropy in Tempered Glass Reijo Karvinen & Antti Aronen, Tampere University of Technology, Glaston Finland Oy	Miika Äppelqvist & Kai Knuutila, Glaston Finland Antti Vuolli, Stora Enso Sing Koo, NSG Pilkington	
11:50 Curved and 3D Glass – the New Hope in Top End Architecture Helmut Hohenstein, Dr. Hohenstein Consultancy	Investigations on the Visco- and Hyperelastic Behaviour of Polyvinylbutyral Interlayers at Different Temperatures Miniam Schuster, Technische Universität Darmstadt	Inspection of Glass Facades Barbara Siebert, Dr. Siebert Consulting Engineers	Health Monitoring of Adhesively bonded Glass Elements by Microcapsules Martin Kahlmeyer, University of Kassel	Structural Silicone Joint Dimensioning: ETAG002 and Beyond Valérie Hayez, Dow Silicones Belgium	Digitalization of Industrial Coating Production Harald Hagenström, VON ARDENNE GmbH	Anisotropy Measurement for Architectural Glass Louis Moreau, AGNORA	Raine Hermans, Xinoa Finland Jean-Paul Hautekeer, Dow Consumer Solutions	
12:15 LUNCH, ONE-ON-ONE MEETINGS		IGU & Window technology Session Chairs: Bystronic / Hannes Spiss, Isolair			LUNCH, ONE-ON-ONE MEETINGS			Aalto University Innovation Services – From Idea to Impact Janne Halme, Aalto University
13:20		Thermoplastic spacer (TPS) – increasing productivity in IG production AND product performance Dietmar Walz from Bystronic Maschinen AG (CH)					On façade innovation Robert Jan Van Santen, VS-A	
13:45 Curved Glass: Reshaping Architectural Glass with New Possibilities and Frontiers Javier Sanchez-Gil, CristaCurva	Automating Flat Glass Lamination Process Riku Färm, Glaston	The Evolution of Windows and Insert Elements has been Driven by Trends and Enabled by Technology – Where are the Limits? Karl Stefan Dewald, Schüco International KG	The KLEBTECH-network – SMEs Join Forces on Quality Management and Damage-tolerance of Adhesive bonding for Glass Constructions Silke Tasche, Technische Universität Dresden	Advanced Calculation Method for Design of SSG Joints Viviana Nardini, Sika Services AG	Glass Coatings that Recycle Sunlight Instead of Throwing it Away Joe Kao, PHYSEE	Thermal radiation and forced convection in glass tempering furnaces Mikko Rantala, Glaston Finland Oy		
14:10 We can Dream it, Can We Deliver it... Curved Unitized Glazing William R. Halter, Elkus Manfredi Architects	A Comparison of Various Deairing Methods for Windshields, Sidelites and Sunroofs Serhat Oran, OLBRIGHT AUTOMATION GMBH	Maximizing Façade Transparency with Crystal Clear Silicone Spacers Valérie Hayez, Dow Silicones Belgium	A UV-cured Functional Coating to Prevent Glass Stress Corrosion Mauro Corrado, Politecnico di Torino	Development of a Novel CCF Glass Tube Façade in Hong Kong Martien Teich, seele GmbH	Glass Coatings Useful for the Prevention of Bird Collisions Enos "Andy" Axtell, Ferro Corporation	New Trends in ERP software for the flat glass industry Horst Mertes, Fenetech EUROPE SARL		
14:35 The Hot & Cold of Free-form Glass Facades Walter Hartnett, Thornton Tomasetti	Controlling Lamination Result of EVA Laminating Films for Several Lamination Processes Steffen Bornemann, Folienwerk Wolfen GmbH	Large Cavities between Glass Panes by Pressure-equalised Insulating IGU Ansgar Rose, ift Rosenheim	Optically Tunable Dynamic Windows Based on Reversible Metal Electrodeposition Tyler Hernandez, Stanford University	Next Step in Structural Glass – Digital Design and Fabrication Peter Lenk, Arup	Functionality and Performance Tests for Coatings on Glass for Solar Application Elisabeth Klimm, Fraunhofer Institute for Solar Energy Systems	RESERVED		
15:00 COFFEE BREAK, ONE-ON-ONE MEETINGS								
15:45 Glass Quality and Specification of Curved Panels Naomi Schlösser, Eckerley O'Callaghan	RESERVED	Climatic Load Design Parameters for the United States James Griffith, Arup	Novel Method for Cold Bending Glass – Transparent Structural Silicone Adhesive Jon Kimberlain, Dow Performance Silicones	Complex Geometry Glass Balustrade: Eleftheria Square, Design and Construction Frederico Figueiredo, Pentagonal Lda	Phosphorescent Paint in Glass Laminates Stefan Reich, Anhalt University of Applied Sciences	Load-Bearing Behaviour of Laminated Tempered Glass with Reground Edges Maximilian Möckel, Technische Universität Dresden		
16:10 Innovative Glass Bending Technology for Manufacturing Expressive Shaped Glasses with Sharp Curves Tobias Rist, Fraunhofer Institute for Mechanics of Materials IWM	Many Glass Plies Do Really Increase Safety of Laminated Glass? Gabriele Pisano, Construction Technologies Institute - National Research Council of Italy (ITC - CNR)	Load Sharing of Insulating Glass Unit with Laminated Glass Stephen Morse, Michigan Tech University	Determination of Prestress Profiles in Chemically toughened Glass by Means of Photoelasticity Maximilian Laurs, RWTH Aachen	Nike Flagship Façade – From Design to Realization Georgia Ewen-Campen, Heintges Consulting Architects & Engineers, P.C	The True Colour of Glass in a Façade, Technology versus Reality and how to Overcome the Misunderstanding Hannes Spiss, Isolair Glas	Counting of fragments in tempered glass fragmentation test Antti Aronen & Juho Ruusunen, Glaston Finland Oy		
16:35 High Performance Coated Bent Tempered Glass Dirk Schulte, Roschmann Steel & Glass Constructions, Inc..	Modified ASTM Methodology for Insulating Glass Units with Two-Sided Support Mark Schmidt, Wiss, Janney, Elstner Associates, Inc.	A Window for Today Carlos Machado e Moura, Jofebar s.a. / panoramah!®	Statistical Method to Evaluate the Process Capability Index of Laminated Glass Regarding Impact Resistance Keyvan Piroird, Saint-Gobain	BPC® WorkFlow for Coupled Day-light and Energy Simulations Helle Foldbjerg Rasmussen, Microshade	Design Coatings – a Game with Colours and Patterns Stefan Goebel, Arnold Glas			
17:00 BREAK, ONE TO ONES, HAPPY HOUR								
19:30 CONFERENCE DINNER @ TAMPERE-TALO								
23:00								

GPD Glass Performance Days 2019 • Program • June 28, FRIDAY

8:00 REGISTRATION								
Smart Technology	Glass & Sustainability	IGU & Window technology	Research & Development	Market Trends in the Glass Industry	Quality Management	Structural Glass Applications	Future Opportunities in Business	
<p>Session Chairs: TBA, Merck Glaston</p> <p>9:00 Wireless Powering for Glass Laminated Functionalities Kimmo Keränen, VTT</p> <p>9:25 A Smart Glazing Technology addressing Color, Tint Uniformity and, Cost Challenges Guillermo Garcia, Heliotrope Technologies</p> <p>9:50 Developing Active Windows and Façades through Innovation and Collaboration Rory Back, NSG Pilkington Glass</p>	<p>Session Chairs: Stanley Yee, DOW TBA, Siemens</p> <p>9:00 Energy Efficient Glazing to Reduce CO2 Emissions and Energy Consumption Cédric Janssens, Glass for Europe</p> <p>RESERVED</p> <p>Why Fenestration U-factor is Important in Hot Climates Helen Sanders, Technoform</p>	<p>Session Chairs: Bystronic Hannes Spiss, Isolair</p> <p>9:00 The Past, Present, and Future of the Vacuum Insulated Glazing Technology Cenk Kocer, University of Sydney</p> <p>9:25 The Application and Development Trend of Vacuum Insulated Glass Liang Zhang, LandGlass</p> <p>9:50 The Thermo-Mechanical Performance of a Vacuum Insulated Glazing Window Franz Paschke, University of Sydney</p>	<p>Session Chairs: Jens Schneider, TU Darmstadt Jan Belis, Ghent University Christian Louter, TU Dresden</p> <p>9:00 Lower Tail Fit of the Weibull Distribution for Edge-line Glass Strength for Structural Use of Glass Stephen Morse, Michigan Ttech University</p> <p>9:25 SBREAK – Calibrating Stochastic Tessellations for the Prediction of Fracture Patterns of Thermally Pre-stressed Glass Michael Kraus, Universität der Bundeswehr München</p> <p>9:50 Testing Artificially Aged Silicone Sealants for Advanced Applications Florian Gast, Dr. Siebert Consulting Engineers</p>	<p>Session Chairs: TBA, Fenetech TBA, Siemens</p> <p>9:00 Does Safety Glass Manufactured Abroad Meet US Building Code? Vicente Montes-Amoros, CDC</p> <p>9:25 Transformational Use of 3D Printing in Facade Construction Stanley Yee, DOW Silicones Corporation</p> <p>9:50 The Global Float Glass Industry in the 21st Century Bernard Savaète, BJS.Différences</p>	<p>Session Chairs: A+W</p> <p>9:00 Take your Tempering Process to the Next Level with Data Analysis, & Automatic Quality Measurement Riku Färm, Glaston & Tarun Bhatia, Viridian</p> <p>9:25 Optimized Furnace Settings with New Anisotropy and Haze Measurement Methods Kai Vogel, Viprotron GmbH</p> <p>9:50 Overlooked NYC Construction & Post Occupancy Considerations for Limit Devices in Large Size Awning Type Windows Frank Seta, Frank Seta & Associates</p>	<p>Session Chairs: Wim Stevels, Eastman Chemical BV Ingo Stelzer, Kuraray</p> <p>9:00 Enhanced Effective Thickness Method for Cantilevered Laminated Glass Balustrades Adam Nizich, Walter P. Moore and Associates, Inc.</p> <p>9:25 Stiff PVB and Annealed Laminated Glass for Balustrades fixed on One lower Side: Experimental and Numerical Analysis in Regards to Local European Legislation Hugues Lefèvre, AGC Glass Europe</p> <p>9:50 Comparative Study of Cantilevered Laminated Glass Balustrades using Full-scale Testing, FEM, and ASTM E1300 Formulas Vaughn Schauss, Kuraray</p>		
10:15 COFFEE BREAK, ONE-ON-ONE MEETINGS		<p>Thin Glass and Applications Session Chairs: TBA, Glaston / Jürgen Neugebauer, FH JOANNEUM Gesellschaft mbH</p>	10:15 COFFEE BREAK, ONE-ON-ONE MEETINGS					Glass Technology, TBA
<p>11:00 Buildings Deserve a Skin that Positively Impacts their Energy and Comfort Levels Ferdinand Grapperhaus Jr., PHYSEE</p>	<p>Re-thinking the Life-cycle of Architectural Glass Graeme DeBrincat, Eva Babic, Arup</p>	<p>Advances in Prototyping with Ultra-Thin Glass Sophie Pennetier, Enclos</p>	<p>Transparent Epoxy Resin Adhesives for Glass to Metal Joints Christian Kothe, Technische Universität Dresden</p>	<p>Looking Beyond Industry 4.0 – The Digital Factory AJ Piscitelli, FeneTech Inc.</p>	<p>Surface Compression Comparative Measurements on Tempered Glass, with Different Instruments Ennio Mognato, Stazione Sperimentale del Vetro</p>	<p>Modelling Laminated Glass based on Multi-layer Interlayers: Effective Modulus Approach Pol D'Haene, Eastman Chemical Company</p>		
RESERVED	<p>Unlocking the Re-use Potential of Glass Façade Systems Rebecca Hartwell, University of Cambridge</p>	<p>Load bearing Behaviour of Innovative Lightweight Glass-Plastic-Composite Panels Julian Hänig, Technische Universität Dresden</p>	<p>An Engineered Tool for the Soft-body Impact on Glazed Surfaces Gianni Royer Carfagni, Maffeis Engineering</p>	<p>How Can Glass Manufacturers Successfully Manage their Digital, Transformation Journey? Philippe Thiel, Siemens AG</p>	RESERVED	<p>Determination of Interlayer Mechanical Properties for Use in Laminated Glass Design Michael Härth, Kuraray Europe GmbH</p>		
<p>11:50 Impact of Novel Glass and Insulation Technology on Future Transportation Fabio Favoino, Politecnico di Torino</p>	<p>The Use of High Performance Glass in Renovation while Maintaining the Building's Identity Michael Elstner, AGC Interpane</p>	<p>Adaptive Façades Systems made from Thin Glass Jürgen Neugebauer, University of Applied Science FH-Joanneum</p>	<p>Structural Silicone Performance after 31 Years in Service in Japan, Fumihiko Chiba, YKK AP Inc</p>	<p>The Future of Software in Glass Processing Hans Kull, Inmatic</p>	<p>Seismic Testing Results of a Decorative Glass Wall Mounting System James Gulnick, McGrory Glass, Inc.</p>	<p>One Single Model: Structural Glazing Analysis for Complex Shape Structures Massimo Maffeis, Maffeis Engineering</p>		
12:15 LUNCH, ONE-ON-ONE MEETINGS		<p>Facades from Concept to Realization Session Chairs: Peter Smithson, BGE Facades</p>			12:15 LUNCH, ONE-ON-ONE MEETINGS		<p>How to Fall out of Love with your Own Idea, Mirkka Lämsä, Futurice</p>	
<p>13:45 Mobile-friendly Glass – comparing Solutions from the End User Viewpoint Juha Liija, Stealthcase Oy</p>	<p>Truly Transparent Solar for Electricity Generating Façades Miles Barr, Ubiquitous Energy</p>	<p>The Gravity Project: "Innovative Use of Thin Glass and Adhesives, Structurally" Vladimir Marinov, Define Engineers Ltd</p>	RESERVED	<p>High Efficient processing of Display Glass for Automotive, Applications Robert Prange, Bystronic Maschinen AG (CH)</p>	<p>Technical Considerations and Performance of Structural Glazing Glass Façade of High-Rise Building in Extreme Climate Valérie Hayez, Dow Silicones Belgium</p>	<p>Transparency Revisited – a Structural Glass Approach to Pei's Louvre Entrance Gregor Horstmeyer & Lisa Rammig, Eckersley O'Callaghan</p>	<p>Study on Market Demands and technical potential for Innovative Glazing Solutions for Cultural heritage Aenne Chalhoub, TU Berlin</p>	
<p>14:10 Investigation of 5G Radio Frequency Signal Losses of Glazing, Structures Katsuyuki Haneda, Aalto University</p>	<p>Printed Perotech – New Architectural BIPV Solution Technology Vesa Jääskö, Aalto University</p>	<p>Structural Behaviour of Thin Glass-Polycarbonate Composite Panels Sebastián Andrés López, Universität Siegen</p>	<p>171, A Three Part Exploration of Daylight and Glass Tim Leslie, Batessmart</p>	<p>Standardization of Machine Interfaces Gesine Bergman, VDMA</p>	<p>The effects of high strain-rate and in-plane restraint on the quasi-static blast response of laminated glass: a theoretical study Socrates Angelides, University of Cambridge</p>	<p>The Glass Swing of the University of Delft Rob Nijse, University of Delft</p>		
<p>14:35 Physically Accurate Visual Representation of Advanced Glass Façades Nebojsa Jakica, University of Southern Denmark</p>	<p>Analysis of Natural Dust for Soiling Tests and Qualification of Solar Glass with a Soiling Sensor Elisabeth Klümm, Fraunhofer Institute for Solar Energy Systems</p>	RESERVED	<p>Specific Solution for a Specific Opportunity Keith Boswell, Skidmore Owings and Merrill</p>	<p>North American Market Trends and Drivers Urmilla Sowell, NGA</p>	<p>An Engineering Approach for the Basic Design of Glazed Surfaces under Blast Waves Gianni Royer Carfagni, Maffeis Engineering</p>	<p>Challenging Laminated Glass Projects in Russia Stanislav Chesnokov, Glass Research Institute</p>		
15:00 COFFEE BREAK, ONE-ON-ONE MEETINGS								
<p>15:45 Track and Trace Using State of the Art IoT Technology Sarah Kugler, A+W Software GmbH</p>	<p>Solution Processed Thermochromic Coatings for Energy Efficient Glazing Pascal Buskens, Brightlands Materials Center / TNO</p>	<p>Scaling Thin Glass Use to the Architectural World Marco Zaccaria, AGC Glass Europe</p>	<p>Just Meeting the Specified Standards is not Good Enough Andreas Hiersemenzel, HS&A Ltd</p>	<p>HEAL Lab Develops New Digital Services around Healthy and, Affordable Living Julia Ahvenainen, Stora Enso</p>	<p>Adhesives for Blast Scenarios – Extreme Conditions for Structural Sealant Glazing Viviana Nardini, Sika Services AG</p>	<p>Structural Glass walls – Gravity and Stability Elements Peter Lenk & Graham Dodd, Arup</p>		
<p>16:10 User-centred Control of Automated Shading for Intelligent Glass Façades Rebecca Hartwell, University of Cambridge</p>	<p>ISOshade – Latest Development in Double Skin Façades Heiko Mertel, iconic skin GmbH</p>	<p>Thin Glass for Architectural Applications Christian Louter, TU Delft</p>	<p>Façade Performance – Real Time Sensor Based Data Collection Oliver Ng, BG&E Façades (Façade Consultants)</p> <p>High Rise Façades: Managing Risk for Architects Peter Smithson, Smithson Associates</p>	<p>The Effects of Aerodynamic Damping on Cable-Net Glass Walls Eoin Casserly, schlaich bergemann partner</p>	<p>Modular Safe Glass Beam System: Experiments and Design Aspects Kenny Martens, Vitroplena</p>			
17:00 HAPPY HOUR								
18:00								
19:30 DAWN								
19:30 FAREWELL PARTY @ RUSTHOLLI								