



Half-day Seminar on Latest Requirement and Quality Control of Structural Glazing Application

Organized by
Façade Group, Hong Kong Institute of Steel Construction

Supported by
Department of Civil and Environmental Engineering, The Hong Kong Polytechnic University
Structural Division, The Hong Kong Institution of Engineers

Sponsored by
Dow Chemical Pacific Limited – Dow Performance Silicones

Date	:	20 July 2018 (Friday afternoon)
Venue	:	Room Y305, The Hong Kong Polytechnic University
Time	:	1:45 pm (registration) for 2:00 pm to 5:45 pm

Scope and Objective

Code of Practice for Structural Use of Glass 2018 was launched on 9 February 2018 by Buildings Department. Some new safety requirements against broken glass are given in the new Glass Code together with quality assurance and quality control for glass production and structural sealant. Structural silicone sealant is commonly used for connecting glass pane to metal frame or another glass pane. The structural sealant should be compatible with the glazing system and the supporting structural frame.

The structural performance of a structural sealant depends on a number of factors such as risks to building occupants and pedestrians, long-term durability, degree of redundancy, nature of applied loads, and quality control during fabrication and erection. Façade system or glass element with structural sealant glazing application shall be designed to prevent any fall of glass pane in the event of bond failure in the structural sealant.

With reference to Singapore practice, retaining devices for such structural sealant glazing shall be designed and constructed to prevent glass pane from dislocation or falling in case of bond failure of structural sealant. The design and the quality assurance of structural sealant will be discussed in this workshop.

The seminar is tailor-made for the practising building professionals comprising Authorized Persons, Registered Structural Engineers, Technically Competent Persons and Façade practitioners to attend.

Language: English and Cantonese.



Fees & Registration

Registration rates are devised, please make your reservation now.

Registration	HKISC member	HKIE member or Group of 5+	Others
		HK\$500 each	HK\$600 each

The registration includes a copy of the lecture notes, a CPD certificate and tea refreshment.

Should you have further query, please do not hesitate to contact Mr. Tommy Li at man@hkisc.org.

Programme

Time	Programme
1:45 pm – 2:00 pm	Registration
2:00 pm – 2:30 pm	Safety Requirements and Design Considerations to the Code of Practice for Structural Use of Glass 2018 <i>Ir Dr. Dominic Yu</i>
2:30 pm – 3:30 pm	Structural Silicone in Curtain Walls: the Science and Durability <i>Mr. Larry Carbary, Dow Chemical Pacific Limited</i>
3:30 pm – 4:00 pm	Tea Break
4:00 pm – 4:30 pm	Quality Control of Structural Sealant to the Code of Practice for Structural Use of Glass 2018 <i>Ir Dr. Dominic Yu</i>
4:30 pm – 5:30pm	Inspection Method and Quality Assurance of the Structural Sealant <i>Mr. Jerry Ma, Dow Chemical Pacific Limited</i>
5:30 pm – 5:45 pm	Q & A Collection of CPD certificates



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DEPARTMENT OF
CIVIL AND ENVIRONMENTAL ENGINEERING
土木及環境工程學系

香港理工大學, 土木及環境工程學系

THE HONG KONG POLYTECHNIC UNIVERSITY
Department of Civil and Environmental Engineering

REGISTRATION FORM

(To be replied on or before 13 July 2018)

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Please follow the 2-step registration procedure:

1. Fax the completed registration form to *Mr. Tommy Li* (Fax: 852-2334 6389) for preliminary registration.
2. Post the completed registration form within 7 days together with a crossed cheque payable to **Hong Kong Institute of Steel Construction Limited** to *Mr. Tommy Li*, at:
HKISC, Room ZS 972, Department of Civil and Environmental Engineering,
The Hong Kong Polytechnic University, Hunghom, Kowloon, Hong Kong
on or before the deadline.

To: Mr. Tommy Li

Fax: 852- 2334 6389

Personal Details:

Title	Name in full (Block Letter)	Name of Company	Tel.	E-mail address	HKISC/HKIE Membership No. (if any)
1.					
2.					
3.					
4.					
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6.					
7.					
8.					

Postal Address: _____

Signature: _____ Date: _____

CPD Certificate of Attendance Please tick the appropriate box to indicate your choice:

Yes, I/ we would like to have CPD certificate(s). Not request for certificate(s).

Registration Fee

Registration	HKISC member	HKIE member or Group of 5+	Others
	HK\$500 each	HK\$600 each	HK\$800 each

Biography of speakers



Ir Dr. Dominic YU is a specialist in the structural design and use of glass. He is a Principal (Structural Fire and Façade) of Alpha Consulting Limited, providing consultancy services on glass and facade engineering, non-linear integrated design and analysis, structural fire engineering analysis and design, steel and composite design etc. He is a Part-time Lecturer in Fire Safety Engineering Programme of University of Central Lancashire & CityU SCOPE. He is also a Visiting Lecturer for MSc Module of Façade Engineering in Civil Engineering Programme at the Hong Kong Polytechnic University. Before joining Alpha Consulting Limited, Dr. Yu served as a Specialist and Test Consultant of Research Engineering Development Façade Consultants Limited (RED Façade and Fire HOKLAS Testing Laboratory).

Dr. Yu obtained Doctoral Degree of Philosophy in Structural Engineering, Master Degree in Fire Safety Engineering, and Bachelor Degree in Civil Engineering. He worked as a Research Associate in the Department of Civil and Structural Engineering at the Hong Kong Polytechnic University to serve as a Technical Secretary of the consultancy study contributing to the “Code of Practice for the Structural Use of Steel 2005” and the 2011 version; and compiled the Explanatory Materials of the Steel Code for Buildings Department. Dr. Yu is also served as Professional Consultant for consultancy study of “Structural Use of Glass” for Buildings Department. He is also actively serving the industry and the university by delivering various technical seminars and lectures.

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Mr. Lawrence Carbary joined Dow Corning in 1982 in research & development where he began working on the development and application of one-and-two part silicone sealant technologies for the construction industry. He is currently working on new high-performance technologies for commercial façade performance with regard to insulation, sealing and glazing techniques. He has been located in Fremont California (1985-1989), Seoul Korea (1997-2000) and Midland Michigan (currently) and is internationally known in the high performance façade construction field. His primary responsibilities are to design, develop, and validate new technologies for commercial façade performance. This includes insulation, sealing and glazing materials, energy efficiency, durability, sustainability and performance of buildings and infrastructure.

He is based at the company headquarters in Midland, Michigan where he is the senior member of Dow Corning's Façade Engineering and Architectural Design Team. He was the principal investigator of the US Department of Energy AARA project DE-EE0003915 on high performance facades.

Lawrence holds a Bachelor of Science degree in Chemical Engineering from the Michigan Technological University. His industry accomplishments include but are not limited to:

- More than 30 publications for ASTM and construction trade journals on the topics of curtain wall sealing, aesthetic considerations and restoration.
- Lawrence is the lead delegate for the US on ISO TC 59/SC 8 International Committee on Building Sealants and is the US working group expert on ISO TC 163 Energy Performance of Buildings and ISO TC 160 Glass in Buildings.
- Lawrence is very active within ASTM C24 Committee on Building Sealants as demonstrated by his chairmanship of ASTM C24.87 International Standards, ASTM C24.30 Adhesion, his election into the ASTM C24 Sealants Hall of Fame in 2005, and a recipient of the ASTM Award of Merit with accompanying title of Fellow of ASTM in 2007. He served on COTCO 2009-2014 and is currently elected to the ASTM Board of Directors for 2015-2017.

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Jerry Ma joined Dow Corning in 1996, with over 20 years technical experience in construction industry, who had been served the customers in ASEAN area and now for Greater. China.

Jerry owned a Chemical Engineering master degree and is a USA ASTM organization C21 sealant technical committee active member. He has several technical publishes on silicone sealant application such as 2004 ASTM symposium STP 1453 “Effects on Silicone Sealant Adhesion Buildup on Float Glass Substrates”; “Structural Sealant Glazing –An Advanced Glass fixing System Used In Constructing Safe And Green Building Facades” at

Proceedings of the Second Symposium on Advanced Façade Engineering and Technology in May 2010 organized by HKISC; “Usage of Finite Element Analysis in Sealant Joint Design and Constructions” at Hong Kong Façade Vol. 14, 2014; “Sealant in Construction” at Second Edition Of Construction Technical Information published by Taiwan Architectural Magazine in Oct. 2016. He also co-author on Construction Science & Technology 2004 Vol. 23 (45th publishes) “Sealant Issues in Glass Curtain Wall”; and “Protective Structural Sealant Glazing in Window Design” in 2005 May Vol. 76 Building Doors Windows Curtainwall & Equipment magazine.

He involved and provided technical services on many landmark and tall buildings such as Hong Kong IFC, Taipei 101, Burj Kalifa, Shanghai Centre...etc and helped customers and façade consultants in façade system safety review and sealant application QA/QC evaluation. In 2012, he worked as member of committee to develop a new industry code “Technical Code For Appraisal Of Reliability and Strengthening Of Existing Building Curtain Wall” by Ministry of Housing and Urban-Rural Development of People’s Republic of China (MOHURD), he also helped and mentor 1st Sealant Applicator Certification Program organized by Construction And Planning Agency, Ministry Of Interior, Taiwan and have been invited as speaker for many events such as 2007 ASTM C24 committee conference, 2007 & 2010 HKISC Symposiums, 2011 CTBUH (Council on Tall Buildings and Urban Habitat) 4th Super Tall Building Summit, China 2010 Eco Building and 2014, 2017, 2018 CMSA annual technical conference.