Membership has Its Benefits!

NEW & REVISED PUBLICATIONS
All manufacturer & supplier members in good standing receive a complimentary copy of each new and revised publication

**TM-300-90(16), North American Glazing Guidelines for Sealed Insulating Glass Units for Commercial & Residential Use**
- Includes guidelines for multiple cavity IGUs

**TM-3000-90(07) F, Recommandations pour L’installation en Amérique du Nord de Vitrages Isolants Scellés dans des Constructions Commerciales et Résidentielles**

- Quality management system for the fabrication of insulating glass units

**TB-1200-83(16), Guidelines for Insulating Glass Dimensional Tolerances**
- Includes dimensional tolerances for multiple cavity IGUs plus additional manufacturing tolerances

December 2016, Issue 4

This winter, join us in Clearwater, Florida

**SAVE THE DATE**
SHERATON SAND KEYS RESORT / January 23–26, 2017

Technical Presentations:

Thermochromic Photovoltaic Switchable Glazing:
Lance Wheeler, NREL

Quality Management Systems for IG Production:
Ron Michalzuk, RPM Consulting
**IGMA Research Update:**

**Advanced Fenestration Testing**, chaired by Tracy Rogers (Quanex Building Products): the work of the task group is waiting for testing results from the various test methods. Once the data has been compiled and reviewed, the task group will determine which of the three test methods should be the area of focus going forward.

**Development of ASTM standard for Thermal Stress in Insulating Glass Units:** The work is now close to completion and it is anticipated that the models and data will be presented at the 2017 Winter Conference and at the next ASTM meetings. Once the task group has reviewed all the materials, the next step will be to incorporate the models into an ASTM standard.

**ASTM Field Correlation Study**, chaired by Jim Blamble, (SIKA Corporation): The task group is currently developing the parameters of the test samples including size, framing, glazing and components. The next conference call is scheduled for Friday, January 13th when the task group will review the results of the ballot comments.

**Emerging Technology & Innovation Committee – Helen Sanders (SAGE Electrochromics, Chair)**

Gas Measurement & Validation Task Group, chaired by Randi Ernst (FDR Design) is a joint task group between AAMA, IGCC, and ASTM. The task group is continuing to work with Toll Gas & Welding Supply and the activities with the ASTM E2190 and ASTM E2269 standards. Four sets of three gas mixes we bought for the testing, 50% argon 50% compressed breathable air, 80% argon 20% compressed breathable air, and 90% argon 10% compressed breathable air. One of the issues that arose during validation of the GasGlass device may be attributable to the desiccant. The task group is considering recommending to ASTM to develop a new standard for desiccant.

Vacuum Insulating Glazing Task Group, chaired by David Cooper (Guardian Industries) is monitoring the development of the ISO standard for VIG. David Cooper also chairs the VIG task group at NFRC.

**Life Cycle Assessment Task Group** has completed the PCR for Processed Glass (published September 2016). There have been some discussions between the 4 industry organizations (AAMA, GANA, IGMA and WDMA) on whether to work on the Use Phase of the PCR for Windows. No decision has been made at this date.

**Technical Services Committee – Jeff Haberer (Trulite Glass & Aluminum Solutions, Chair)**

The joint IGMA-GANA PIB Migration task group is developing a technical bulletin on PIB and Primary Sealants focusing on the composition of PIB, edge seal system design, quality procedures, performance attributes and compatibility with other materials. The document includes a section on manufacturing considerations and guidelines and will address unanticipated field conditions, examining potential root causes associated with these conditions.

The Glazing Guidelines Task Group, chaired by Tracy Rogers (Quanex) completed work on revising Section 5.0, Setting Blocks to include multiple cavity IGU’s. The section has now been included in TM-3000-90(16), North American Glazing Guidelines for Sealed Insulating Glass Units for Commercial and Residential Use. The task group is now working jointly with the GANA Insulating Division on developing a technical bulletin identifying a burping method, temperature manipulation at the manufacturing environment and bladders (on-site sealing).

The joint IGMA-AAMA Edge Pressure on Insulating Glass Units, co-chaired by Helen Sanders (SAGE Electrochromics) and Paul Bush (Vitro Architectural) is reviewing proposals to develop a test fixture to measure edge seal pressure. The task group will be finalizing the test parameters at their next conference call.

The IG Cavity Compensation task group, chaired by Aaron Ryan (Pella Corporation) met in mid-December and established the scope of the work activity. The task group will develop a technical manual providing generic design alternatives for cavity compensation for insulating glass units and determine conditions that impact the pressure in the IGU cavity. These design alternatives include Capillary Tubes (On-site sealing / leave open), breather tubes, valves (burping method), desiccant adsorption/desorption, pre-inflating/pre-deflating the unit, temperature manipulation at the manufacturing environment and bladders (on-site sealing).

The IG Cavity Width task group, chaired by Dan Braun (Intertek/Architectural Testing) has reached an impasse on the content of the manual and has asked the Committee to review the current document and scope to provide clarification to the task group on whether the document should just include manufacturing tolerance recommendations or additional information on the impact of cavity width reduction. The Technical Services Committee is meeting by conference call in early January 2017 to discuss this matter.
Certification Committee – Roland Rossman (Garibaldi Glass, Chair)

The Sealant Adhesion to Spacer task group, chaired by Steve Marino (Vitro Architectural) have now completed the test procedure. The procedure was successfully balloted to the Certification Committee and will now be balloted to the IGMA Technical Policy Committee. Once the procedure has passed all levels of the IGMA Approval Process, the video will be filmed to provide hands-on instructions to manufacturers. Once the procedure has been approved, the Spacer and Integrated Spacer System task group, chaired by Tracy Rogers (Quanex Building Products) will reconvene and continue work on developing performance criteria for equivalency.

The new manual, TM-4500-16, IGMA Quality Management System for the Fabrication of Insulating Glass Units (ISO 9001:2008) has been published and is available from the IGMA Publication Store. The TM-4510 task group has just completed resolving the comments received from the Certification Committee ballot and the 14 procedures will be balloted to the IGMA Technical Policy Committee. The task group is now developing work instructions and will be seeking input from IGMA supplier members to develop product specific work instructions.

Education & Safety Committee – Bill Briese (GED Integrated Solutions, Chair)

The committee has been extremely busy in 2016. The committee sponsored three education sessions; 2 IG Fabricator Workshops both at Intertek/ATI test facilities (Plano, TX and St. Paul, MN.) and the Preventing IG Failures Education Seminar at GlassBuild 2016. All events were extremely successful. The sessions at the Preventing IG Failures seminar were recorded with the objective to hosting his seminar online.

The IG Fabricator Workshop, professionally moderated by Oak Moser (Oak Hill Consulting) limits participation to 4-5 attendees per workstation to ensure that everyone has the hands-on experience. The workstations were Frost Point (Bill Lingnell, Lingnell Consulting Services), Volatile Fog (Jeff Haberer, Trulite Glass & Aluminum Solutions), Glass Cutting (Bill Briese, GED Integrated Solutions), Desiccant / Desiccated Matrix (Shulin Cui, SilicaStar and Brian White, H.B. Fuller), Sealants (David Cooper, Guardian Industries, Steve Altum, Dow Coming and Michael Speicher, Royal Adhesives & Sealants), and Gas Filling (Randi Ernst, FDR Design). Mike Burk (GED Integrated Solutions), chair of the IGMA Glass Safety Awareness Council provided a comprehensive safety presentation and all attendees were provided with safety glasses, arm sleeves and gloves. The task group is considering expanding the workshop to include two additional workstations; Spacer/IG Fabrication (where attendees fabricate their own IG) and Forensic Investigations (which will include real case studies of insulating glass failures).

The next workshop is tentatively scheduled for February 28-March 2, 2017 at the Exova testing facilities in the Toronto, ON area.

A new education program will commence February 2017. The IGMA Leadership Development Program is a 12-month online series consisting of 1-1.5 hour sessions covering topics such as communicating with all personality types, coaching vs. managing, developing a communications plan, dealing with a difficult person, motivating for performance, building trust and other areas that distinguish good leaders.
CODE UPDATE

Safety Glazing

The CAN/CGSB 12.1, Safety Glazing standard will be published January 2017. The last edition of the CAN/CGSB 12.1, was published in 1990, addressing tempered and laminated safety glass. The objectives of the Canadian Glass Committee were threefold:

1. To clearly define safety glass and its product categories.
2. To update the standard to address technologies and products introduced into the market since 1990.
4. To ensure that the updated standard was developed under the rules of the Standards Council of Canada.
5. To ensure that this standard is applicable to Canadian building practices and compliant with Canadian codes.

A special thank you is extended to the members of the ANSI Z97.1 Committee for providing members of the Canadian Glass Committee with a copy of the ANSI Z97.1-2015 standard and in providing background and information in developing the CAN/CGSB 12.1, Safety Glazing standard.

ASTM Standards

The ASTM E 2188, E 2189 and E 2190 are now up for review. A number of proposals have been received and the E06.22 task group has started with E 2188 and E 2189 identified as Work Items Wk49698 and Wk49699. The updates to both standards is to provide clarity and consistency. There is a proposal to de-couple the volatile fog test in the ASTM E 2190. John Kent, Margaret Webb and Jeff Haberer will be developing a proposal for testing all internal components for fog.

Randi Ernst is heading up the review of ASTM E 2269, GC and E2249, SES identified as Work Items Wk49701 and Wk49550. Changes to the GC standard include adding an option of using an argon carrier gas instead of helium and also includes proposed improvements to extracting the gas sample from the specimen. Changes to the SES are based on the validation procedure study that was presented at a previous meeting. These revisions require further review and some validation testing.

Want to know what's coming up in 2017 and beyond?

Visit the IGMA website to view the new online industry event calendar. If you have an event of interest to the industry, please contact the IGMA office to have it posted.

Upcoming Events

2017 Winter Conference
January 23-26 / Sheraton Sand Key Resort, Clearwater, FL

IGMA Leadership Development
February 2017 / Online

IG Fabricator Workshop
February 28-March 2
Exova Test Facilities, Mississauga, ON

2017 Summer Conference
July 31-August 2 / Sheraton Centre Montreal, Montreal, QC

2018 Winter Conference
January 29-February 1 / Tucson, AZ

2018 Summer Conference
July 30-August 1 / Vancouver, BC

USA: 27 N Wacker Drive, Suite 365, Chicago, IL 60606-2800 / Canada: 1500 Bank Street, Suite 300, Ottawa, ON. K1H 1B8
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LEADERSHIP DEVELOPMENT PROGRAM

60–90 minute online modules
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First module, February 22, 2017
Later modules third Wednesday each month

Final module, January 31, 2018
2018 IGMA Winter Conference, Tucson, AZ
Ensure you and your IG business’s success—now and into the future.

1. **Leadership Spectrum**  Description of the skills required to be an effective leader in today’s complex world (personalities, values, issues, world events, millennial employees).

2. **Character Strength Finder**  Help every leader identify their natural strengths and begin to understand how and when to use them.

3. **Communicate with all Personalities**  Provide insights into the likes and dislikes of each style and help people move from tolerating each other towards valuing our differences.

4. **Culture and Values**  Organizations with a strong culture have clarity in their purpose, cause and belief. We gravitate towards them because of how they make us feel.

5. **Building Trust**  People want the unity of hope, affection and high purpose. We focus on the activities and behaviors associated with building people up, while remaining authentic.

6. **Leadership Multiplier**  Identify the activities and actions that lead towards “Diminisher” vs. “Multiplier” effects in everyday leadership. High performers want to work for Multipliers.

7. **Skills Development**  A skilled team will beat a tenured team, every day. We help you identify, track and develop skill for your team.

8. **Coaching vs. Managing**  Lessons learned and best practices found in competitive business and sports sectors. Great leaders incorporate a “coaching” mindset to develop their teams.

9. **Communications Plan**  Leaders must map out their planned communications for the month, quarter and year. The aim is to get “buy-in”!

10. **Motivating for Performance**  Developing skill within your natural presenter style on how to inspire and engage each personality style and sell your vision/idea with traction.

11. **Emotional Intelligence**  Often referred to as the most important set of skills in leadership. Increase the understanding of your behavior through a focus on the 15 subscales found in emotional intelligence.

12. **Dealing with a Difficult Person**  People trigger emotions in one another. Understand how to leverage your training to reach the best possible outcome in confronting bad behavior.