

**MINUTES OF SIXTY-SEVENTH MEETING OF THE CERTIFICATION COMMITTEE**  
**September 25<sup>th</sup> – 26<sup>th</sup>, 2018**  
**DoubleTree Suites Charlotte, NC**

(X = Vote)

		<b>Dates and Votes Present</b>	
		<b>9/25/2018</b>	<b>9/26/2018</b>
<b>Member by Virtue of Being a Public Interest Participant</b>			
Public Interest (PI) (Vision Engineering & Design Inc)	Geoff Francis	X	X
PI (Raths, Raths & Johnson)	Dennis Johnson	X	X
PI (Wiss, Janney, Elstner Associates, Inc.)	Bruce Kaskel	X	X
PI (East Central Ohio Building)	Nicholas Montan	X	X
PI (Homeowners Association)	Elaine Rodman	X	X
<b>Member by Virtue of Being a Licensee with a Certified Product</b>			
Andersen Corp. (Silverline/KML)	Kate Graham	X	X
Andersen Corp. (Silverline/KML)	Nicholas Kopp	Present	Present
Associated Materials	Christian Cirino	X	X
Cardinal IG	Michelle Phan	X	X
Guardian Fabrication Inc.	David Cooper	X	X
Guardian IG LLC	David Cooper	X	X
Intigral	Mark Hutchinson	X	X
Marvin Windows	David McDonald	X	X
ODL	Sean Murray	X	X
Oldcastle BuildingEnvelope	Rick Wright	X	X
Pella Corporation	Aaron Ryan	X	X
Pella Corporation	Tyler Owen	Present	Present
Trulite	Jeff Haberer	X	X
Viracon Inc.	Mike Nelson	X	X
<b>Member by Virtue of Being a Supplier Participant</b>			
Allmetal	Jon DeVoogd	X	X
Argon Filling Systems	Richard Brevik	X	X
Chem Source	Eric Rall	X	X
Dow Corning	Steve Altum	X	X
FDR	Dan Haglin	X	X
Glasslam	Gerhard Reichert	X	X
HB Fuller	Brian White	X	X
Marvin Windows	Dave McDonald	X	X
SparkLike	Mike Burk	Present	Present
Technoform	Milind Jhaveri	X	X
Quanex	Joe Erb	X	X
<b>Votes Present</b>		<b>27</b>	<b>27</b>
<b>Guest, Laboratories, Legal Counsel and Staff</b>			
AMS, Inc	John Kent	Present	Present
AMS, Inc.	Katrina Stafford	Present	Present
IGCC Legal Counsel	Lee Badger	Present	Present
IGMA	Bill Lingnell	Present	Present
Intertek	Thomas Mickley	Present	Present
Intertek	Dan Braun	Present	Present
Intertek	Dan Johnson	Present	Present
Molimo	Nathaniel Young	Present	Present
<b>Persons Present</b>		<b>38</b>	<b>38</b>

## MOTIONS

Agenda Item #	Ref #	Moved	Second	Motion	Vote A/N/A	P/F
3	9.25.18.1	Mark Hutchinson	Christian Cirino	Approve minutes of the January 30 <sup>th</sup> meeting in Tucson, AZ	UA	P
8A	9.26.18.1	Gerhard Reichert	Aaron Ryan	Motion to approve the Intertek China Laboratory to be approved as an IGCC®/IGMA® approved testing laboratory	UA	P
8C	9.26.18.2	Brian White	Christian Cirino	Mandate starting 1/1/2019 any technicians signing IGCC/IGMA test reports are required to take and pass the IGCC Laboratory Integrative Animation Training exam (Test Result = 100%).	UA	P
9A	9.26.18.3	Jeff Haberer	Gerhard Reichert	<p>Motion to approve Guideline G.8 Internal Components as below:</p> <p style="padding-left: 40px;">G.8 Internal Components (IC)</p> <p>Baseline testing to ASTM E2189 shall be performed during each regular certification test on units identical to those fabricated for ASTM E2188 testing. Initially and at least each 4 years, sets of three (3) double pane, five (5) multiple cavity test specimens shall be constructed under auditor witness for E2189 internal component performance testing utilizing all the components of an internal components (IC) system, which are used in the ultimate product. Only ASTM E2189 testing shall be required in each of the following categories of internal components. The specific internal component to test in each category shall be 1) worst case product or 2) highest sales volume product, at the fabricators discretion:</p> <ol style="list-style-type: none"> <li>1) Bars, grills or muntins (BA)</li> <li>2) Blinds (BL)</li> <li>3) Glass, or other glazing materials (GI)</li> <li>4) Other internal components not in the above categories (i.e. insulating materials, electronics) (OI)</li> </ol> <p>When testing muntins or grills, test samples shall be fabricated dividing the sample into four areas in an off-set pattern in accordance with ASTM E2189. A licensee may use the same IGCC®/IGMA® number for units manufactured with and without internal components (IC) providing regular testing has been accomplished in accordance with the above procedure. (Modified xx/xx/xx)</p> <p><b>Implementation:</b> First Feb 1st or Aug 1st 12 months after final approval of new ASTM E2190-XX. <b>Initial compliance shall not require auditor witness.</b></p>	26/1/0	P
9B	9.26.18.4	Jon DeVoogd	Michelle Phan	<p>Motion to approve language, see below:</p> <ol style="list-style-type: none"> <li>a. Delete N.SE.4 and N.SE.5 <i>from Procedural Guide</i></li> <li>b. Revise Lab Manual Guideline A.12               <ol style="list-style-type: none"> <li>A.12 <b>Sealant Dimensions</b>- Regarding reporting sealant dimensions, per ASTM E2188 paragraph 10.1.11 “<b>Sealant Type (s) and dimensions, if provided</b>”, shall be interpreted that this information shall only be reported if “provided” by the fabricator to the laboratory and verified by the laboratory.</li> </ol> </li> <li>c. <b>Revise CPD Guideline A.SE.1</b> If a fabricator produces IGUs with the same sealant/spacer system, but with different sightline dimensions (i.e., with a narrow and standard sightline dimension), they must certify the system with the smallest sealant/spacer sightline dimension. Verification of smallest sightline shall be confirmed during IGCC/IGMA fabrication audits. (Revised xx/xx/xx).</li> </ol> <p><b>Implementation:</b> 1/1/2019</p>	26/1/0	P

9C	9.26.18.5	Aaron Ryan	Brian White	Motion to change <b>Reactive Hot Melt Butyl</b> to <b>Reactive Hot Melt (RHM)</b> . And allow this Sub Committee to approve similar changes, nomenclature, in the future.	UA	P
11	9.26.18.6	Jon DeVoogd	Dave Cooper	Motion to approve Guideline G.6 Specimens – Quantity as written below:  G.6 Specimens – Quantity No more than 4 additional test units shall be labeled by the auditor for testing ( <del>13 units required up to 17</del> for double pane, <u>VIG and VIG hybrid</u> , and <del>15 units required up to 19</del> for multiple air space.) When gas content testing (GCIA), <u>it is recommended to ship some or all of</u> the additional auditor “labeled” units to the testing laboratory. (Modified 8/23/2007)	UA	P
11	9.26.18.7	Mark Hutchinson	Jon DeVoogd	Motion to approve Certification Notes CN IG 0211 Certification of Testing of VIG and HVIG revisions further defining the use of a VIG unit as one component of an IG assembly ( <b>Attachment 1</b> )	UA	P
12	9.26.18.8	Gerhard Reichert	Christian Cirino	Motion to approve the revisions to Guideline G.38 Inactive Certification as written below:  G.38 Inactive Certification After initial certification, a licensee, with <b>a multiple</b> certified products, may place a different (non- equivalent) certified product into an “inactive status”. During inactive status, directory listing would still occur but with an “IN” designation. Regular retesting would not be required. Returning to a “Certified” status and labelling of production units would not be allowed without notification of the Administrative office. When returned to “Certified” status, an audit and witness fabrication of retest specimens must occur within 45 days of reactivation, unless current test reports are within one year of the report date. A product may only remain in “IN” for up to 5 years. (Modified x/xx/xxxx)	26/0/1	P

### **ASSIGNMENTS (Action Items)**

No.	Assigned	Assignment	Due Date
6	PC & Advanced Testing SC	Information and material were reviewed and discussed. Questions were fielded. In the absence of specific direction, the Board of Governors and the Sub Committee (SC) will continue discussions and look to continue moving RAC efforts forward with deliberation.	
7A	AMS	Provide information on Fingerprint ‘Score’ and include disclaimer of the ‘Score’	5/2019
7B	Material SC	In the absence of specific direction, the Sub Committee (SC) will continue to review validation of comparative performance metrics for Desiccants. Recommended to review CEN documents.	
8A	AMS	Lab Status continue reviewing laboratories every 2 years, no action items at this time.	
8C	Laboratory SC	See Motion Agenda Item 8C. Discuss revision system and requirements for annual refresher training.	1/1/2019
9A&B	AMS & Jeff H.	Implementation of Guideline G.8 following ASTM Approval	1/1/2019
9B	AMS	See Motion Agenda Item 9B for revisions to the CPD and IGCC Lab Manual	1/1/2019
9C	CPD Guidelines & Equivalency SC	<ol style="list-style-type: none"> <li>1. Consider possible metrics of generic reviewed spacer sealant combinations. Consider data from IGCC database</li> <li>2. Desire expressed to reduce the number of generic categories.</li> </ol>	5/2019

11	Dave Cooper	Need to add a definition in the CPD of a Hybrid VIG (HVIG). Add definition to CN IG 0211 Certification Notes.:  <b>Hybrid VIG (HVIG)</b> Consists of 3 (or more) pieces of glass. HVIG Dual utilizes two glass lites constructed into a VIG assembly with a third lite attached to the VIG assembly by usual means of spacer/sealant(s)/desiccant components. The cavity between the VIG and mate lite may be filled with air or other gasses. The mate lite can be clear or coated. Other HVIG combinations are possible, such as a VIG sandwiched between two outer mate lites having two gas cavities, or two VIG units with a single gas cavity between them.	
11	AMS	Add to next IGCC/IGMA meeting Certification Committee Agenda to re-address VIGH and the status of the new ISO testing requirements (if it has been approved by IGMA and ASTM).	5/2019
13	All	<b>Next Meeting</b> – Tampa, FL DoubleTree Suites by Hilton Hotel Tampa (May 7 <sup>th</sup> & 8 <sup>th</sup> , 2019)	
13	All	Next meeting 2020 will be in Nashville, TN (tentative May 5 <sup>th</sup> & 6 <sup>th</sup> )	

**Attachments are included with initial meeting material or attached hereto if changed during the meeting.**

### **Certification Committee Meeting Agenda**

1. Call to order and self-introduction of all present: Completed at 1:03pm by Chairman Joe Erb
2. Determination of quorum, committee voting rights, responsibilities and eligibility
3. Approval of minutes of last meeting
4. Sub-committee list
5. Standing reports
  - A. Legal report and anti-trust review – Lee Badger  
Lee Badger reviewed fiduciary duties: Care, Obedience, Loyalty  
Reviewed Anti-Trust policy – referenced print out and Certification committee was given time to read “IGCC Antitrust Compliance Program Guidelines”
  - B. IGCC Board of Governors – Bruce Kaskel
  - C. Administrative report – John Kent
  - D. Certification appeals committee report – John Kent
  - E. IGMA report – Bill Lingdell
  - F. NFRC and DOE/EPA update – John Kent
  - G. ASTM update – Jeff Haberer
  - H. Marketing – Dave Cooper
6. Provisional Certification (PC) and Advanced Testing (RAC) Sub-Committee – John Kent
7. Materials Sub-Committee
  - A. Sealant Finger Print – Katrina Stafford
  - B. Desiccant – John Kent & Eric Rall

**\*\*\*\* End Day One \*\*\*\***

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- Call to order Day two at 8:02am by Chairman Joe Erb
  8. Laboratory Sub-Committee
    - A. Lab Status – Katrina Stafford
    - B. Lab Manual Revisions
    - C. Interactive Lab Training – John Kent
  9. Guidelines and Equivalency
    - A. Internal Components – John Kent
    - B. MVTR – John Kent
    - C. Product Codes
  10. Gas Content Initial and After Weathering (GCIA) - Exotics
  11. VIG
  12. Old/New business
  13. Next meeting – May 7-8, 2019 - Tampa
  14. Adjournment at Joe Erb by Chairman 11:15am



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### Certification Notes

(CN IG 0211)

#### **Certification and Testing of Vacuum Insulating Glass (VIG) and Hybrid VIG (HVIG)**

##### 1. Reference:

At the June 23, 2010 IGCC/IGMA Certification meeting a motion was made that ASTM E2190 may not be the best standard to evaluate Vacuum Insulating Glass (VIG), but in the absence of another more applicable standard, IGCC/IGMA shall allow certification and testing of VIG with a qualifying note. This motion passed.

##### 2. General:

- A. The IGCC/IGMA certification program encourages new products and technologies and has always attempted to structure guidelines and procedures to be inclusive rather than exclusive. With this in mind, IGCC/IGMA has agreed to offer certification for Vacuum Insulating Glass (VIG), although the ASTM E2190 standard was not written with VIG as a focus and may not give consideration to issues specific to VIG. IGCC/IGMA would encourage the VIG industry to develop a standard specific for VIG. Until such time as there is a specific VIG test, those submitting products for IGCC/IGMA Certification shall provide any additional testing documentation that has been done that would support ASTM E 2190 testing and provide evidence of consistent performance over time.
- B. Sample Fabrication Requirements – It is recognized that some VIG processes may not be able to meet the sample fabrication requirements of ASTM E2190 for glass and cavity thickness. In these situations, testing of the closest normal production practices to ASTM E2190 shall be allowed.
- C. Apertures, Ports, Other - Test specimens shall be constructed utilizing all of the components of the VIG system, which are used in the ultimate product.

C.D. Guidelines – All IGCC/IGMA certification guidelines shall apply to VIG and HVIG<sup>1</sup>, unless otherwise noted below.

- E. Testing- If the VIG is one component of an IG assembly, the assembly would need to be tested. and certified separately (HVIGybrid VIG). Either VIG or HVIG may be initially certified.
- a. Coated glass – Guideline G.19 shall apply to VIG and HVIG
- a.b.HVIG Test sample glass and cavity – The VIG “mate” glass and cavity shall adhere to normal dual pane requirements (glass and cavity thickness), mate glass to be clear if gas content testing.
- c. Number of samples – 13 units minimum shall be fabricated for VIG or HVIG test, when testing internal components (IC), 3 units must include IC’s.
- d. HVIG ASTM E2189 (Volatile fog) testing and internal components – Only the “mate” glass and cavity shall be tested per normal dual pane requirements.
- e. VIG and HVIG frost point and gas testing – All cavities shall be frost point tested. When applicable, only the “mate” cavity shall be gas tested.

Certification Notes (CN IG0211)

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Initial Publish Date: 02/18/11

Approval Date: XX4/XX34/XX42

Revision Date: X4/XX9/XX42

### 3. CPD Listing (sample)

<u>Example</u>	FRAME CONSTRUCTION	SUBSTRATE	SPACER	DESICCANT	SEALANT	GICIA
<u>VG Unit</u>	VG	U/C	VG	VG	VG	
<u>Hybrid VIG Unit</u>	<u>VG/BC3/MC1/AF</u>	<u>U/-U/C</u>	<u>VG/FS</u>	<u>VG/IB</u>	<u>VG/PIB/SI</u>	<u>Yes</u>

U/C = Un-Coated, Coated

VG = Vacuum Glazing

#### Definition:

1. Hybrid VIG (HVIG) - Consists of 3 (or more) pieces of glass. HVIG Dual utilizes two glass lites constructed into a VIG assembly with a third lite attached to the VIG assembly by usual means of spacer/sealant(s)/desiccant components. The cavity between the VIG and mate lite may be filled with air or other gasses. The mate lite can be clear or coated. Other HVIG combinations are possible, such as a VIG sandwiched between two outer mate lites having two gas cavities, or two VIG units with a single gas cavity between them.

DRAFT