

Making the Map

IGMA Working Groups Start New Projects During 8th Annual Conference

by Megan Headley

The Insulating Glass Manufacturers Alliance (IGMA) held its 8th annual conference January 28-31 at the Sundial Beach Resort in Sanibel, Fla. Whether considering a drastic turn for a document, introducing an old document to a fresh set of eyes or growing ever closer to completion of a long-term project, these matters had IGMA members looking toward future projects.

For the Visual Quality Working Group, it was a new twist to an old document. The June meeting had seen a motion to revise the visual quality guidelines draft document to reflect the differences between residential and commercial insulating glass (IG) units (see *September 2007 USGlass*, page 108).

A “what if” document had been produced since the last meeting to show what a separate commercial document might look like.

Bob Spindler of Cardinal IG pointed out that window manufacturers present at the meeting manufacture IG units both residential and high- to mid-rise buildings. Group chairperson Tracy Rogers of Edgetech IG, in fact, took a straw poll of those in the room who manufactured 100 percent residential products, 100 percent nonresidential and those who produced a blend of both; hands were scarce on the first two options. The idea, presumably, was that when manufacturers produced a blend of both, the document should reflect the same.

“Having two documents gives a wrong impression of what the glass manufacturer can and cannot produce,” Spindler said. “From an architect’s standpoint, why would you have two documents? Does that mean you can do something better for one application than another?”

Rogers suggested that the next step would be to look at where the differences lie in the document between residential and commercial visual quality. Some were addressed during the discussion. For example, installation was seen as a much more important qualification to the commercial

product’s visual quality than residential products, since once the commercial units are installed some obstructions at the edge will no longer be visible.

“Back to the original question . . . what’s the direction that we wish to take based on what we looked at here?” Rogers said at the end of the run-through.

One document, with sections that reflect differences between visual quality for residential and commercial IG units, appeared to be the consensus. The group agreed to send a revised draft around for a second review.



IGMA members began to address new research and courses, while coming closer to completion on industry guidelines.

Certification and Education

Direction was on the agenda for the Certification and Education Committee as well. Specifically, the committee looked at educational opportunities that have been offered since its last meeting in June and potential courses for the future.

It first analyzed its last educational seminar, a presentation on preventing IG failure made at GlassBuild America in September.

"I would not say the last 'Preventing IG Failures' educational seminar was a resounding success," said Margaret Webb, IGMA executive director. "I've never seen comments so all over the map . . ."

Since, as committee chair Rogers pointed out, "We got excellent reviews every other place we presented," group members advised against presenting at the meeting later this year. That led to the discussion of other options. Should the courses be offered only online? Should a course be developed for architects? A survey of manufacturers or members interested in continuing education was suggested.

Topic presentations were the next question; that is, the group looked at further developing a seminar on IG quality procedures.

"This thing has been stalled for basically two years," Webb said. At a previous meeting the preparation of this seminar had been assigned to an outside group, who has since withdrawn. Webb added, "I personally think we need to do this. The most common question we get is on quality procedures."

"This has been talked about in China and other places and all around the world now," added IGMA technical consultant Bill Lingnell.

According to Webb, one of the things that makes the development of this potential seminar so tricky is that it isn't just teach a skill, it's teaching a way of thinking. "One of the things you actually have to transfer is a different way of thinking; a different commitment," Webb said. "Give a larger picture as to what would happen if you fill your spacer bar with super saturated desiccant"—as opposed to simply saying "don't do it."

"The biggest problem is not how to run a desiccant test but why to run a desiccant test," said John Kent of the Insulating Glass Certification Council (IGCC).

Webb added, "In the long haul what it means is you'll have better performing IG units."

Rogers and Webb agreed to work on putting together an outline to distribute to everyone interested in a working group for this seminar; Rogers is aiming to get an introduction to the seminar out by its next meeting.

"First one should be the why—why is it important to do this?" Kent said.

"That's objective number-one," Webb agreed.

With education covered, the committee meeting turned toward certification.

With regard to harmonization of IGMAC and IGMA certification procedures, Kent said, "We're not quite there yet but we're a lot closer than we were three or four years ago."



The next IGMA meeting will be held in June in Whistler, British Columbia.

Kent also provided information about current participation levels and IG certification activities. In an interesting note on participation, Kent noted that in August the first non-North American lab, in Beijing, was approved to participate. Kent said this lab would be able to test product sent to them from other countries.

In other certification news, Webb briefly noted that Keystone Certifications has terminated its relationship with IGMA. "The only administrator for IGMA now is IGCC," Webb said.

Glazing Guidelines Working Group

The Glazing Guidelines Working Group continued its discussion about capillary tubes, but this time had a guideline in front of it. Per the June meeting, Lingnell and group chair Ken Shelbourn of Truseal Technologies combined their research on closing capillary tubes to include in a guideline (see *September 2007 USGlass*, page 108). Shelbourn explained the verdict on sealing tubes after their research: "If you're going to seal a tube in the field, you crimp or snip it with wire cutters . . . but then put a little dab of sealant on the end of that which will give you a 100-percent seal."

Shelbourn had been charged with drafting the guidelines on capillary tubes, but instead he brought to the table guidelines for use of capillary and breather tubes from the former Sealed Insulating Glass Manufacturers Alliance (SIGMA). Shelbourn had made additional comments throughout the document, which the group addressed.

With the question of closing the tubes answered, the group asked if a note should be added to its document cautioning individuals not to use capillary tubes in gas-filled units.

Spindler noted that it does happen that people use tubes in gas-filled units.

"The intent is that the claim cannot be made that the unit has a specific performance," Spindler said.

Keyed in to Global Trends

“There are massive global trends that I think are sometimes easy to ignore when you’re out in the field,” said Michael Collins of Jordan, Knauff and Co. at the open of his keynote address at the Insulating Glass Manufacturers Alliance (IGMA) 8th annual conference. To bring his audience up-to-date, Collins, a columnist for USGlass magazine’s sister publication, DWM magazine, took IGMA members through some of those global and industry trends impacting the door and window industry and commercial construction market.

With regard to windows, Collins noted that vinyl window suppliers are being pinched by rising fuel costs and energy surcharges from glass suppliers that they often aren’t able to pass onto customers because of the competitiveness of the marketplace. Despite these difficulties and the slow residential construction market, he has noticed that many window manufacturers are searching for acquisitions within the traditional door and window industry, “and that’s extremely positive.” Several such companies have examined an acquisition as a way to gain excess plant capacity, a positive step, Collins said, that indicates that these manufacturers are preparing to need that space once the market picks up.

While Collins said that consensus shows that a bottom to the residential construction decline is coming in mid- to late-2008, the commercial construction market is expected to remain favorable in 2008. As Collins commented, “You’ll still be happier on the commercial side in ’08 than on the residential side.”

Jordan, Knauff & Co. anticipates continued strong interest in acquiring commercial door and window companies. While Collins said that increased consolidation in the commercial area is likely, he expects that Pella’s acquisition of EFCO in 2007 (see *October 2007 USGlass*, page 17) will not be the last instance of a residential door and window manufacturer purchasing a commercial company.

Collins also touched briefly on building information management (BIM) systems, which he explained will be the “replacement to 3D CAD.” This software is able to store a variety of information regarding every part and component of a building, much like 3D CAD. However, where CAD libraries were private, companies are being formed to create

BIM libraries for a number of manufacturers, allowing architects to reference this information.

According to Collins, this is a trend that all commercial building product manufacturers will be following—especially because overseas companies will be jumping on it. As he explained, the BIM library provides overseas manufacturers an instant audience of architects. “I’m encouraging companies to get ahead of this,” he said.

And speaking of overseas competition, Collins also touched on the topic of competition with China. During his research on this topic, he said, “it became clear that different companies were at risk and different companies were not at risk.”

Product areas with a high threat assessment included architectural flat glass, curtain-wall, extrusions, door and window production machinery and hardware, due to their long, uniform production runs; high labor and materials content; and high ratio of value to weight and volume.

One member of the audience asked if the lower quality of Chinese products was swaying customers from buying overseas.

“Companies that are outsourcing there will tell you that the quality’s there,” Collins replied. “It didn’t use to be, but now it’s there.”

In order to compete effectively, Collins advised his audience on several points:

- Spend as much time as possible interacting with the end customer and their customers. “I’m always stunned about how little [manufacturers] know about the people who use their product,” Collins said. “You’ve got to be a miner of data about your company.” That data can provide early indicators of market needs, he explained.
- Cater to those customers with “tough” requests. Customers with frequent changes and short lead times will find it difficult to switch to an overseas supplier.
- Support innovation. Collins noted that patents from small companies are twice as likely as large companies to be among the top one percent of high-impact patents. While large companies tend to focus on making existing products better, or more affordable, it’s innovation that will help keep companies ahead of Chinese competition.
- Embrace lean manufacturing. Shortening lead times and becoming more cost-competitive will help give North American manufacturers an edge.



“Any gas content will change if capillary or breather tubes are used,” Lingnell added.

“We’re not a group that gives permission or not,” said Chris Barry of Pilkington. “It physically can be done.” That the instruction should say not to use capillary tubes with gas-filled units was the prevailing recommendation.

Once the capillary tubes are inserted, Greg Carney of the Glass Association of North America (GANA) said that it’s not unlikely that glaziers will try to take them out.

“I have seen situations where they are in the way and they cut capillary tubes, altering them dramatically,” Carney said.

Section 6.0 on glazing thus gained a recommendation that capillary tubes not be shortened or removed during glazing.

Rogers next brought up the joint IGMA-GANA working group and its goal of developing guidelines for use of capillary tubes. Rogers said customers are asking for guidance.

“It was asked that the two associations create a standardized recommendation,” he said, adding, “To date we haven’t come to terms as to how.”

Webb and Carney agreed to further discuss the joint work and develop the “how.”

Gas Permeability Working Group

The gas permeability working group continued its discussion on its research project, which is growing ever closer to completion.

“We have now the executive summary, it’s been circulated, but you haven’t seen the completed document,” said chair Bruce Virnelson of PRC DeSoto International. “That now will be the final document for that test protocol.”

This will create a test for the industry if they want to qualify and create new materials, Virnelson explained.

“Again the purpose of this was to have all the testing done, same place, same time, so it’s apples to apples, and I think we’ve done this pretty well,” Virnelson said.

The group then turned to its request for proposal seeking a lab to develop a test protocol for argon permeability through IG units. To date, the group had received proposals from two different test labs, while a third lab had expressed interest and requested an extension.

Speakers from TNO and CAN-BEST were at the meeting to offer presentations on how they would conduct the tests, as well as the approximate costs of each step.

Following the big numbers, a member of the audience asked whether there was someplace else from which some of this test data could be pulled rather than seeking funding for testing.

“This will be the first time it’s broken down into a small component,” Virnelson responded. “We’re pioneers.”

He explained that if the test provides good data, “then other people who want to qualify for gas fill would run this method.”

The group will aim to get additional proposals in for consideration before the next meeting, and to have time to “really digest these proposals” made in Florida. The group’s goal is make a decision in time for its next meeting.

Thermal Stress Working Group

The Thermal Stress Working Group still had no responses to its survey about thermal stress breakage case studies, Webb reported.

“I think some people got a little conservative,” Carney said. “If you start having problems, you don’t necessarily want to report them to others.” However, the group noted that case studies could be reported anonymously.

The group is still looking for data to proceed on its thermal stress guidelines.

A “Recommendations to Reduce Instances of Thermal Stress” technical bulletin is also being sent back to the group for comments.

Tying Up Technical Ends

The Technical Services Committee first heard a report on its 25-Year Field Correlation Study. Webb reported that the last ballot on the document received a 60-percent response, with most of the comments being editorial in nature. According to Webb, the only items missing from the study were photos for the report and a final chart.

“I think we’re actually ready to vote on this,” she said.

Upon a vote, the committee moved the document through to the technical policy committee.

During updates from the working groups, a motion brought a new document to the Technical Services Committee’s realm of responsibility.

“We now have a draft document on guidelines for thermal stress,” commented Haberer, chair of the Thermal Stress Working Group.

A vote moved the document to the committee, where it will now be balloted by that committee, bringing it a step closer to completion.

The group also revisited a proposal submitted in June on the use of the GasGlass device in the field.

“Basically, it was to validate the use of the handheld GasGlass unit in the field . . . as a viable way of checking gas levels in installed IG units,” Webb said.

A review task group examined the proposal in October; however, since it came with a hefty price tag, it ultimately was decided that the group would have to focus on one research project at a time, and the gas permeability project mentioned the previous day would have funds thoroughly tied up.

The next IGMA meeting will be held June 16-19, 2008, at the Westin Resort and Spa in Whistler, British Columbia. ■

the author



Megan Headley is the editor of USGlass.