



## Out Of Ideas?

Government R&D agencies are trying to give away money

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Government R&D agencies are trying to give away money.

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# BATTLE CRY

by RICH PORAYKO

The presentation everyone was fired up to see at the Glass Association of North America's Building Envelope Conference, was the keynote, "The Battle for the Wall" by Scott Thomsen, president of the Global Flat Glass Group for Guardian Industries.

Thomsen is trying to rally the troops before it truly is too late. In May, the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) filed a proposed change to Addendum "am" to ASHRAE 189.1, "Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings" that would limit the window-to-wall ratio to 30 per cent in small and medium-sized buildings "for the purpose of reducing energy use."

So what happens to the



Photo credit: Rich Porayko

## Guardian's Scott Thomsen calls for action.

industry if this goes through and there is a reduced WWR? According to Thomsen, moving from 40 to 30 per cent WWR means 25 per cent less glass. "There will be less glass per facade," said Thomsen. "There is about five million tons of glass that is sold each year in North America. The commercial market makes up 17 to 20 per cent or about a million tons of all of the glass consumed. If we lose 25 per cent of the commercial market, that is 250,000 metric tons of glass. That is massive change in the amount of glass in the facade."

Everyone is well aware of the building recession in the United States and Canada. Thomsen told the captivated audience that commercial building floor space installed in the U.S. dropped from 1.6 billion to 650 million square feet since 2008. "The more stark number is the average construction dollar value of a commercial space has plummeted from \$600 million to \$230 million over five years," said Thomsen. "So we are all playing in

a smaller marketplace with less opportunity to grow your businesses. If anything, companies are scratching and clawing to find the bare minimum to keep their businesses going forward."

"The ASHRAE Building Code is pushing very hard right now for a WWR of 30 per cent. ASRAE, the HVAC community and the alternative facade materials are saying to the government that less glass is better. This leaves out a lot of the other factors. Day-lighting, work environment, human comfort, performance. Who wants to work in brick box? Not many people."

"There are going to be fewer windows," warned Thomsen. "There are going to be smaller windows. Curtainwall becomes strip windows and strip windows become punched openings. This is a supply chain shift. Curtain wall suppliers start battling against commercial window companies with shop-glazed units. The competitive space is getting bigger and there are more players in the channel. In Europe, Latin America and Asia Pacific, we are seeing

**ABOVE: Thomsen pointed out that proposed changes to ASHRAE's green building standards would lead to a 25 per cent reduction in the amount of glass used. If these standards were to be widely adopted, it would spell disaster for many glass construction companies and their suppliers.**

traditional curtainwall being reduced. So 40 per cent to 30 per cent means 25 per cent less glass. Last time I checked, most of the people in this room get paid by the surface area of the building. What does this mean to your business? Less profit per building.”

Thomsen says the glass industry needs to understand our competition. “To me, the true competitors are solid surface wall materials. They are the other building materials that vie for that square meter of facade. Cement manufacturers want to sell more cement.”

The big question for our industry is how do we keep the WWR at 40 per cent. According to Thomsen, depending on what part of the world you travel to, you will see both increasing and decreasing window-to-wall ratio. “The challenge is to get prepared for the future. In Europe, the glaziers that didn’t prepare 10 years ago are either not around or they are half the companies they used to be.”

“We have to serve two masters,” said Thomsen. “Energy code legislation and architect vision and creativity. The bottom line is that we need to improve the energy efficiency of the glazing and create value at each step of the channel. If a glass company does a lot of R&D to develop an electrochromic glass and the fabricator doesn’t have the capability to handle the electrical wiring or the glazier doesn’t have the skills to install it into a facade because of the complexity of electrical current, the whole channel breaks down. We need to improve the way we pull innovation on energy efficiency through the channel and minimize the adoption chain risk.”

Thomsen says the best way to compete with solid walls is to improve energy efficiency including full migration to high performance coatings. “When you look at the U.S., commercial facades are about 65 per cent and residential is north of 95 per cent,” he said. “The first step is for everyone to encourage energy-efficient coatings to increase the value of the facade. Argon gas filling is an easy way to improve the energy efficiency of an insulating glass unit. Warm edge spacers are improving. Surface four coatings are becoming available. Silkscreen patterns to reduce the solar heat gain. Triple-glazed IG units. The more value, the more money you can put into your pocket.”

“Larger glass sizes are becoming more popular and you have to be able to handle this. In Europe, they have been very suc-

cessful in migrating to triple-glazed and double-skin facades.”

Thomsen urged the attendees to get engaged in the industry. “GANA is not a four letter word. We need more people to be active voices and participate. This might take years. You need to get educated. And don’t wait for everyone else to do it first. We need some early adopters.”

“Embrace the more stringent codes. Partner with suppliers throughout the channel that are working on zero energy buildings. Improve energy efficiency or lose surface area.”

## **“We have to serve two masters: energy code legislation and architect vision and creativity.”**

The other presentation that created a lot of buzz was an informative update entitled New Tariffs on Chinese Curtain Wall by David M. Spooner of Squire Sanders, who represents American curtain wall manufacturers AGA, Bagatelos and W&W. According to Spooner, on November 30, 2012, the Department of Commerce ruled in favor that “curtain wall units and other parts of curtain wall systems are within the scope of the anti-dumping and countervailing duty orders on aluminum extrusions from China.”

“In late December 2012, the Department of Commerce sent instructions to customs, requiring all ports to collect anti-dumping and countervailing duty tariffs in the form of cash deposits on all Chinese imports of curtainwall units and parts,” said Spooner. He told the audience that at the time of BEC, ports were collecting tariffs of 171 per cent on imports of curtainwall units from China.

“My colleagues and I as well as the many companies we have worked with are working very actively with the ports to make sure that inspectors understand and are enforcing Commerce’s order. Port inspectors find the order confusing and they don’t understand the curtain wall industry so they eat up the presentation.

“It’s also very important to be careful about transshipment, mislabeling and undervaluation. An example of transship-

ment is importing products that were made in China but declaring them as made in Vietnam to avoid tariffs. Mislabeling means declaring the contents are doors as opposed to curtainwall. Undervaluing could be claiming that the units inside the container are worth less than they actually are or undervaluing the aluminum within the curtain walls. And we work with Customs to identify those issues.

“I feel like everyone should know this because I have had clients that have got into a heap of trouble because if someone

gets caught, it’s up to five years in jail and hundreds of thousands of dollars in fines.”

According to Spooner, it is also important to note that tariffs can change yearly and usually do. “We don’t know when the Department of Commerce will likely recalculate the tariff or whether or not it will be 400 per cent or 50 per cent but it will almost certainly change.”

Yuanda, the world’s biggest curtainwall company and Jangho have challenged the Department of Commerce’s ruling. According to Spooner, they have filed a complaint with the Court of International Trade in January 2013. “Customs still continues to collect tariffs even during the course of litigation,” says Spooner. “The case will not move quickly and it’s unlikely to result in a full reversal of the tariffs.”

The presentation definitely struck a chord. One of the comments online after the BEC event stated “As an American that is gainfully employed by a Chinese curtainwall contractor, I found this presentation offensive to myself, my company, and other attendees that are employed by the Chinese.” It’s not worth attending if someone isn’t getting offended. •

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