

27 July 2009

Jessica Ferris, CMA Program Manager  
National Fenestration Rating Council, Inc.  
6305 Ivy Lane, Suite 140  
Greenbelt, MD 20770

Dear Ms. Ferris:

via email: [jferris@nfrfc.org](mailto:jferris@nfrfc.org)

I appreciate the work NFRC has done with regard to getting the residential window industry playing on a level field as it relates to ratings for energy performance. I have misgivings the same can be said for the planned rollout of the site built fenestration rating system as described in the 15 July, 2009 NFRC-hosted webinar.

I have no doubt that energy is a prime concern. As an architecture major in the late '70's, I took both passive and active solar energy design courses in school. That was avant-garde then, and things like LEEDS, the high cost of energy, and long gas lines of the 70's have made a lot of us conscious of the energy side of the products we build and sell. I drive a Prius. I know the issues, and NFRC's planned rollout and more immediately California's requirement that site built fenestration be certified by 1 Jan 2010 does not appear to be ready to respond to actual, everyday conditions as they presently exist.

Having 28 years in the glass and glazing industry, both as a subcontractor, a consultant and now as a frame supplier, there appears to be many loose ends. Can you help me with some answers with the questions herein, please? And thank you.

1. The NFRC size for modeling may or may not represent actual conditions on site. Certification of a window of an arbitrary size that doesn't duplicate the site built conditions may lead to:
  - a. A unitized wall panel for example, with its varying framing methods, which cannot be accurately modeled in the CMAST program as demonstrated yesterday.
  - b. Certifications of walls that may perform better or worse than the NFRC size expose the qualifying entity, most like the subcontractors to huge liability issues.
  - c. As a result, NFRC certification may or may indicate actual performance of a given wall product.
  - d. Is this a possibility, and what do we do if we encounter this? What is NFRC prepared to do to assist the glazing subcontractor if this occurs?
  
2. Fenestration Rating for curtain walls: does this just cover the glass industry? What about the other "curtain walls" (non-load bearing building skins) that are out there? Does NRFC have a say in rating precast concrete and window systems? How about Stucco? Masonry? GFRC? Stud-built systems with either terra cotta, stone, brick, or EIFS? How do we get those rated come 1 January 2010?
  - a. Should we just be concerned about the glazing portion of these walls?
  - b. What about other glazing materials that get mounted into any of the variety of steel or aluminum curtain walls? Composite metal panels for one, or granite? How do we get a California Building Inspector to accept a certification in January that NFRC is not presently prepared to offer? Architects aren't going to stop designing these systems with these

components.

3. Has the NFRC involved the one entity that has to pay for all of this, the building owners? This includes Federal, State, and local governments, who can fob it off to the taxpayers, but
  - a. Time to schedules will be required to allow testing of custom curtain walls not previously built to be tested and certified. The response to this question in the webinar was it could happen in as little as two months. If it takes longer, then what?
  - b. What happens if the designed custom wall the owner's architect has put in the drawings doesn't get rated or certified? Is that the glazing subcontractor's problem? The architect's?
  - c. The owner's going to be impacted, that's for sure. Do the building owners realize that a HUGE cost impact to their projects just got dumped on them?
  - d. And do they know that a Certificate of Occupancy can hang in the balance should the certification not meet the Building Inspector's expectation?
  
4. NFRC is out there trying to alert the one entity that will be charged with getting the certifications, that being the glazing subcontractors. They'll enlist the help of the glass or frame suppliers, but they have to include the cost and schedule impact into their estimates.
  - a. Glass Association of North America (GANA) has been trying to clue the glass and glazing subcontractors in, but they haven't been made to understand the impact. They won't until they have to experience it first hand.
  - b. Jobs being bid right now for 2010 will miss a significant cost in their estimates. That's never good for owners or subcontractors. They'll be burned on the cost of the first one, and then the owners will feel the impact on the next job.
  - c. Except there will be one glazing sub on the next project being bid that won't know what they are about to walk into, and their price won't include any of certification, and they get the job because they were the low bidder. The playing field will NOT be level at bid day. And delays will be incurred while they absorb the cost impact to get certification.
  - d. All while at or near the end of the job, when the owner's trying to get the CO, the owner, architects, general contractors as well as the sub's bankers and bonding company will be breathing heavily on their necks to get the certification.
  
5. TGP's in a unique position: what has priority, fire rated partitions or the energy requirements both of which by code are required.? The issue comes down to public safety or energy code compliance? Who gets to decide the fate of that issue if a fire rated fenestration product can't get certified as being compliant with the energy code?

I don't think I'm overstating the case as it presently stands. And NFRC may have plans to implement and eventually deal with the contingencies. But what do we do in the meantime? Seems the only resort is to plead our case for the Building Inspectors of the world to grant us an exemption. That's a risk, too. It can be naïve to think they may approve the exception, and worse, the consequences when they won't. It's also naïve to think the NFRC CMA certification will cover all conditions after 1 January 2010.

There appear to be too many loopholes. How we can work within what appears to be a very difficult situation is of extreme interest to us. I'd be curious as to NFRC's reaction to all this. It may help us plan and implement TGP's approach a little better.

Sincerely,

A handwritten signature in black ink, appearing to read 'CKK' followed by a horizontal line and a stylized 'M' or 'N' at the end.

Chuck Knickerbocker  
Curtain Wall Manager  
Technical Glass Products

Cc: Ashley Charest, Greg Carney, GANA  
Max Perilstein, Arch Aluminum  
Megan Headley, US Glass Metal and Glazing  
Jenni Chase, Glass Magazine  
Marc LaFrench, US Dept. of Energy  
John Lewis, Jim Benney, NFRC