Daylight Potential Rating Task Group
Conference Call Notes
March 8, 2011
Co-Chairs: Roger LeBrun (VELUX), Mudit Saxena (Heschong Mahone Group)

1. Roger LeBrun called meeting to order at 1:05 pm EST, summarized Antitrust and NFRC meeting guidelines, and reviewed the brief agenda.


3. Reviewed the November 8, 2010 minutes from the membership meeting, and the comments dated November 23 from Dr. McCluney regarding a Board Chairman’s concern about our future direction. (See attached)

4. Steve Selkowitz identified two needs - one to understand what NFRC/users wants in terms of a Daylighting Rating, the other to understand what is technically possible, i.e. the technical advancements/constraints in the field of daylighting research to develop such a rating.

5. Mudit Saxena summarized that the TG’s efforts thus far had focused on providing a simple rating (Phase1), focused on residential products that addressed a need for a quick rating based on available data (i.e VT). A more complex rating (Phase 2) that focused on commercial products, needing more research, would come after the Phase 1 rating. This approach however has since been questioned, and we were asked to look at an alternate approach that focused on tackling the research required for the Phase 2 rating right away, and that a simple rating would be a resultant of this research.

6. Ross McCluney, and Steve Selkowitz said that they support the alternative approach.

7. The TG agreed to draft a letter to the Board and to the membership which would outline our group’s suggestions for NFRC coordination of its current and future daylight-related activity, with the needs of the building industry and the public in mind. Mudit Saxena agreed to lead this effort. LBNL (person to be determined), Ross McCluney, Roger LeBrun, and Willie du Pont will offer assistance. A tentative face-to-face meeting of this work group has been set for the evening of March 28, at the NFRC meeting location. (Staff is asked to confirm the details of this session.)

8. TG members are asked to reply with their comments regarding the following suggestions made during our last meeting by Steve Selkowitz as an alternative to the controversial Phase 1 “simplified” VT-based new rating that we previously agreed to pursue:

   "something other than a rating could be achieved faster, perhaps quarterly documents from NRFC with guidelines on how to use the VT"
ratings. … some UK history about daylight factors, - VT of window, size of window, size of room.”

Received from Dr. Ross McCluney in an email on November 23, 2010:

Mudit and Roger,

Steve Strawn, NFRC Board Chair, has directed me to convey to the Daylighting TG the following sentiment concerning the direction of daylighting ratings development at NFRC, which was expressed during a recent BOD meeting.

There is a concern that several different groups with somewhat different interests are touching on various parts of a daylighting potential rating development for fenestration products, and do not seem to be able to get together very well on the best direction NFRC should take. For example, there seems to be an independent group working on a VT rating for TDDs in OPS and hence upward to R & T. Part of our group is pushing for a simplified daylighting performance rating for residential fenestrations and a later, or possibly parallel track, toward a more comprehensive performance-type set of rated values for commercial buildings. Another group feels that it is more important to develop a rigorous scientific and engineering underpinning for any rating program we develop, including a simplified consumer-friendly rating.

There seems to be a lack of coordination or some kind of consensus to tie the groups together toward a common purpose. For one thing, there are discussions in NFRC under different programmatic auspices and a feeling that all should report upward to the same place in the NFRC committee structure. The Board would like to provide some direction toward that goal, but, I think, would first like to see how the discussions go in our TG, especially in the light of the comments Lisa Heshong made regarding the NFRC role in a larger daylighting discussion and research program toward more general daylighting metrics. I think the Board would like to see us think more about what might be the best path forward for NFRC and communicate those thoughts back to the Board.

Following are my personal responses to the above concerns, as a member of the daylighting TG.

It seems to me that the following efforts could be helpful to us:

1. Discuss whether it makes sense to bring the TDD VT rating and the fenestration daylighting potential rating efforts together under one Subcommittee and make a recommendation regarding this to the BOD
2. In the light of Lisa Heshong’s presentation and comments during the Q&A session at the San Francisco meeting, perhaps we should consider a small project to gather information about current research in daylighting metrics and computer simulations of daylight performance, even if this means proposing and funding a very small research project to assess these efforts and their meaning and usefulness for NFRC. Perhaps Lisa could provide much of the needed information and research results references to us. I’m sure our LBNL colleagues could be also very helpful in this regard.
3. Outline in a document what tools currently exist and which might be available in the near term to provide a scientific underpinning for predicting the daylighting performance of a set of fenestrations in a few representative building spaces. It seems clear to me that the core fenestration property needed for such an assessment is the BTDF of each fenestration product. If we can conclude this definitively, then we can begin discussing whether or how NFRC might play a role in creating an individual layer or component BSDF database in support of a more comprehensive technical optical performance rating and a BTDF database for commercial fenestration products.
4. Presuming, for the sake of discussion, that such a BTDF library will lie at the core of daylighting performance ratings for fenestration products, and that a way will be developed to obtain BTDFs for products through a combined measurement and simulation program, we can begin to examine how complex BTDF matrices can be turned into more simplified consumer-friendly ratings based on a good scientific underpinning.
5. Prepare a research and program development strategy and timeline for completing the above pursuits and put that in a report to the BOD regarding the direction NFRC should take toward fenestration daylighting product ratings.

This is but one of several other areas being considered by the BOD regarding near and far term future NFRC directions. The more informed suggestions we can provide to NFRC on the path forward toward daylighting ratings, the better the guidance we can expect to receive from that body in the future.

Dr. Ross McCluney