

TDD Task Group Minutes

Thursday March 26, 2009

11:00 A.M. – 12:00 P.M.

Chair: Dave De Block, ODL

1. Call to Order:

Chair called the meeting to order at 11:05 A.M. Anti-trust reminder was given. Marcia Falke agreed to take notes. On the call was D. DeBlock, G. Riopel, G. Dhami, J. Allardyce, K. Taylor, M. Falke, N. Pena, R. McCluney, P. Jaster, M. Fuller, R. LeBrun, D Anderson

2. Review and Approve Agenda:

Meeting agenda was reviewed and approved.

3. Discussion on Energy Star & TDD's

a) History – Research Project

Thirteen tests were performed under the NFRC Research Project. When simulation and test results were compared it was determined that the test lab mixed components of different manufacturers. Later 3 manufacturers had tests of their products run and results were similar. At such time we moved ahead with a test only plan for u factor.

In the initial test, the attic temperature was not controlled and it was allowed to FLOAT. During subsequent certified tests the attic temperature was maintained at 0°. These results were much higher. There also may have been issues with thermocouples used during the Research Project testing. We need more input from Mike Thoman who unfortunately could not be on this call. We need a summary of all previous sim & test results. We knew at the time the simulation method was agreed on that there were issues and that ratings would change when more research was completed and when a test chamber was built small enough to run TDD's.

b) By July NFRC meeting Mike Thoman will present a Peer Review Paper on the Research project.

c) Energy Star

Energy Star is a residential program. Most homes would have a few TDD's so the effect on heating and cooling will not be great. They will however provide illumination. How do we use this benefit? This is not a consideration at this time.

d) NFRC has approved a Test Only Method

Can we compare existing simulation ratings to test ratings? How do we use the old sim ratings? Emily Zachary, Rich Karney and Alice are making the decisions for Energy Star – how do we get them to understand the history and change their decision to drop TDD's from the Energy Star program. We need someone to talk with them. Is there someone at NFRC other than the manufacturers that can take this on? The membership agreed with the sunrise and sunset, as manufacturers ratings need renewal.

4. Next Scheduled Conference Call:

We will schedule a call at 11 am EDT Monday March 30, 2009, as Mike Thoman is available.

5. Meeting adjourned at 12:15 P.M. and to continue on Mon, Mar. 30th.

Respectfully submitted by Marcia Falke.

Tubular Daylighting Device Task Group

Present on the call Dave D, Dan S, Roger L, Kerri T, Mike T, Marcia F, Jim A, Robert W, Marty F, Dennis A, Werner L

Meeting Minutes: 3/30/09 Kerri T

U-Factor

The summary report of the research project, and a comparison of the certified physical test and simulated numbers are needed from Mike Thoman. The original (simulated) u-factor testing results have increased 10%, and we would like to understand why. By July, Mike will finalize and present peer review paper (which is not related to recent DOE activity regarding TDD's and ENERGY STAR).

What short-term results do the TDD manufacturers want from ATI? Roger proposed the following data points:

- Last simulation certified by NFRC
- Simulated in Research project
- Tested in Research project
- Tested after Research project
- Tested in Accredited apparatus

Group agreed to following definitions/configurations for test:

- TDD – 14" with insulation @ ceiling
- HTDD – 21" with insulation at roof
- **A Sample size less than 3 was discussed but will eliminate most data.**

Mike has samples ranging from:

- Single diffuser & dual dome
- Single dome & dual diffuser
- Rigid & flex tubing

Recommend using single dome, double diffuser. Not enough samples if we break down other combinations.

Mike will report test single dome, dual diffuser and average the results.

Paul Jester's notes indicated the following values

- STI 0.49
- ODL 0.48
- Velux 0.46

Mike T cannot validate the numbers Paul recorded. Mike's note for physical test results prior to accreditation on apparatus: 0.33, 0.36, & 0.48 (in no order). No official report on these results was generated. Temperature floated in the attic in the research project. When apparatus was accredited temperature in the attic was held to zero.

Results from other manufacturers currently in the program and not in attendance will be included.

- Huvco
- SunTek
- Natural Light
- Elite Solar

Data will be provided back to the TDD Task Group. NFRC executive committee is meeting 3/31/09. Roger may speak to the data at the meeting. Meeting objective is to review a request for NFRC to approve a sunset provision for the new TDD method to allow simulation to be no longer effective. This is already included but some feel it should be sooner than at the renewal date of each existing certification. We want to avoid conflict between manufacturers who can still report simulated results while other manufacturers will be forced to report physical testing results. Proposed DOE should accept simulated AND physical – so we don't all have to retest before end of year.

DOE Proposal Regarding TDD's & ENERGY STAR

- Mike T will contact them to express his opinion as a lab-testing representative.
- Mike T is comfortable with both simulation & physical test results.
- ENERGY STAR should allow NFRC to establish the test protocol.
- NFRC has not discredited simulation results.
- Separate category not needed for TDDs vs. all skylights until we deviate from SHGC & U-Factor as the criteria for energy efficiency.

Visible Transmittance

Samples need to be supplied to the labs. Conference call scheduled for tomorrow.

Adjourn 11:47 am