

28 Nov 2007

Re: Docket No. 07-BSTD-1

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Comments and Questions the ACM and Reference Appendices related to Slab/Ground Model

Note: These comments and questions are requests and suggestions for clarifications.

Residential ACM

p. 3-29, Sec 3.6.2: Language regarding how to model a heated slab floor seems confusing. “The perimeter of heated slabs shall be modeled in minimum compliance with the prescriptive requirements. Note, insulation conditions for heated slabs shall be reported in this table, even though slab losses for heated or radiant floors are not modeled since losses are taken into account when the system efficiency is determined.”

For a heated slab floor, does this mean?: a) model the slab using “ α ” coefficients of Table R3-25 corresponding to insulation values prescribed in Table 118-B (“Slab Insulation Requirements for Heated Slab-On-Grade”) of the Building Energy Efficiency Standards? b) slab losses are not modeled, even during the cooling season? c) something else (I couldn’t quickly find where “system efficiency” is determined) ?

Also, the previous ACM had separate (higher) F-factors for heated slabs (which are still published in Joint Appendix 4), and I’m wondering if a similar table of “ α ” factors should be developed eventually for heated slabs ... or did I just miss seeing this?

p. 3-30, Sec 3.6.3: For T_{monthly} and T_{annual} , are these the *ground* temperatures from Table R3-26? If yes, say so in the definitions.

p. 3-30, Sec 3.6.3: For α_{1-5} , “Coefficients from ...”, are these from Table R3-25?

p. 3-31, Table R3-25: Header would be more clear if “Interior” and “Core” were written as “Interior Core” and centered in a merged cell, or if only “Core” were used in both cells (i.e., replace “Interior” with “Core”).

p. 3-79, Table R3-50: In header change “2006 and Later” to “2006-2007”? Then for 2008 and later the F-factors are proposed as replaced with “ α ”-factors, so perhaps make some note about that.

Non-Residential ACM

p. 2-30, Sec 2.3.6: Include “Basement Walls” in section title.

p. 2-31: For T_{monthly} and T_{annual} , are these the *ground* temperatures? If yes, say so in the definitions. Also, reference the table where to find these (looks like it should be same as Table R3-26 of Resl ACM)

p. 2-31: For α_{1-5} , “Coefficients from Table XX ...”, replace “XX” with “N2-2”?

p. 2-31, Modeling Rules for Proposed Design: Do the underground walls also get an additional foot of soil adjacent to the walls?

p. 2-31, Table N2-2: Header would be more clear if “Interior” and “Core” were written as “Interior Core” and centered in a merged cell, or if only “Core” were used in both cells (i.e., replace “Interior” with “Core”).

p. 2-32, Table N2-3: Typo “Wallsr” to “Walls”

Appendix JA4

p. JA4-62, Table 4.4.7: Should this table of proposed-to-be obsolete F-factors be deleted? ... as they have been replaced by α -factors in the ACMs.

p. JA4-63, Table 4.4.8: Should this table of proposed-to-be obsolete F-factors also be deleted?

p. JA4-65, Sec 4.6.5: Is this section also obsolete?