

Change Request Ruling

Change Request: 3.3.1 Minimum Effective Thermal Resistance of Opaque Assemblies

ID #: CR-000014

Submitted By: Derek Satnik

Submitted On: September 13, 2021

Ruling Date: September 20, 2021

Ruling: **Change Request Declined.**

Reason for Change Request and Recommended Alternative: The prescriptive requirements for the minimum effective thermal resistance of opaque assemblies, as outlined in 3.3.1 Table 4, limits design alternatives that warrant similar energy performance while being more competitive on cost. One example of such limitation arises for a slab-on-grade building (www.evepark.ca) where modelling efforts found that moving the R10 slab-on-grade insulation to the outboard of foundation walls down to footing can provide nearly identical energy performance (within 1%) while providing substantial savings in cost, for that project specifically.

Recommended Alternative:

We recommend that CHBA's NZ Home Labelling program add a Note 9 to the Notes of 3.3.1. Table 4 as follows:

"9. Foundation wall insulation may be used instead of lab insulation required for unheated floors on ground above frost line may be disregarded in favour of foundation wall insulation if an energy model is provided (using software listed in NECB 2015) to demonstrate less than 2% difference in thermal performance." Note 9 would then need also to be added to the superscript (along with the references to notes 4, 5, 6) in the table row for "Unheated floors on ground above frost line". This would allow consideration of alternatives if their energy performance can be proven to be within 2% of the prescriptive option noted in the Table 4, using an energy modelling software listed in NECB 2015.

Additional Comments / Actions: Change request was declined on the basis that this is a requirement for ESNH. It is recommended to consider submitting a change request to NRCan.

Program Participants may use the amendments once they are posted - prior to the official version update.