

REVIEW AND RECOMMENDATION FOR VAPOR RETARDER CLASS DEFINITION:

The following is the specific code section from the 2009 IRC:

Current Code:

VAPOR RETARDER. A vapor resistant material, membrane or covering such as foil, plastic sheeting or insulation facing having a permeance rating of 1 perm or less, when tested in accordance with the desiccant method using Procedure A of ASTM E 96. Vapor retarders limit the amount of moisture vapor that passes through a material ~~or wall assembly~~. *See my recommendation below*

Proposed Code – deletes above Vapor Retarder definition and replaces it with:

VAPOR RETARDER CLASS. A measure of the ability of a material or assembly to limit the amount moisture that passes through that material or assembly. Vapor retarder class shall be defined using the desiccant method with Procedure A of ASTM E 96 as follows:

Class I: 0.1 perm or less

Class II: >0.1 perm to <1.0 perm

Class III: 1.0 perm to <10 perm

Recommendation: Retain “Vapor Retarder” definition (as amended above) AND use new “Vapor Retarder Class” in new code. See discussion below.

Discussion

1. The model code no longer addresses “Vapor Retarder” in Chapter 11. The old requirement in chapter 11 (model code) applied to “all” exterior assemblies – walls, ceilings and floors. The 2009 IRC only addresses Vapor Retarder (class) in 601.3, which is the Wall Construction chapter. I’m in the process of verifying this (floor and ceiling vapor retarder) deletion is correct, with my contact at ICC.
2. Oregon still addresses Vapor Retarder requirements in Chapter 11. When we review Chapter 11, it would be reasonable to remove the reference to “wall” vapor retarder requirements in Chapter 11, since it better addressed in Chapter 6 (based on “good” building science) of the new code.
3. Oregon should retain both the Vapor Retarder “definition” and requirements for floor and ceiling vapor retarder requirements in Chapter 11. Without retaining these requirements, the code is silent on this important “moisture control” requirement. There was clear direction from the (past) Construction Claims Task Force that stipulated buildings codes should have reasonable requirements to control moisture-related issues (and the code did contain these requirements when the CCTF made their recommendations).
4. If you get into reviewing Chapter 6 in my absence (at the next meeting), we should amend 601.3 to reflect the amendments/modifications made to Oregon Structural Specialty Code, 1405.3 (mirror section in the Structural Code) – I was involved with amending that section.
5. I will update the committee if I find that floor and ceiling vapor retarder requirements are hidden in a location within the code that I cannot locate.