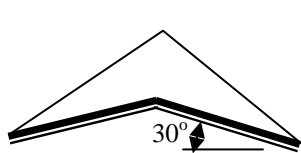


Comm 22.21 (2) (a) Wind Wash Protection. Except as provided under s. Comm 22.39 (4) for cathedral ceilings, all air-permeable insulation materials installed in any position other than horizontal, shall be covered on the cold-in-winter side with wind wash protection consisting of a permanently attached material of low air permeability.

Comm 22.39(4) CATHEDRAL CEILINGS. Air-permeable insulation in a cathedral ceiling assembly shall fill the entire cavity space unless an air barrier separates the top of the insulation from the ventilation space.

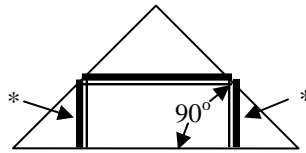
Discussion: It is the intent of s. Comm 22.21(2)(a) to require the wind wash protection for walls or ends of floor systems insulated with air-permeable insulation material that is exposed to attic space or other unconditioned space. The intent of incorporating the phrase “in a position other than horizontal” into this section is intended to exclude insulated ceilings, other than cathedral ceilings from the wind wash protection requirement.

If that is the intent of that section, what is a wall? In model building codes and in the energy software



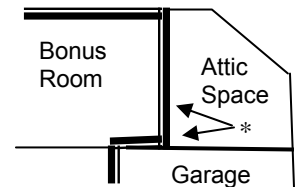
Bottom Chord Less Than 60° to Horizontal - Ceiling

* Wind Wash Protection Above Insulation Not Required.



Building Segment More Than 60° to Horizontal - Wall.

* Wind Wash Protection on Cold-in-Winter Side Required.



Building Segment More Than 60° to Horizontal - Wall.

* Wind Wash Protection on Cold-in-Winter Side Required, Including the End of the Floor Insulation.

In Summary: Wind wash protection required by Comm 22.21 (2) shall be provided on the cold side of walls or the ends of floor systems insulated with air-permeable insulation materials and exposed to attic or other unconditioned spaces. A wall is defined as a building element that is sloped 60 degrees or more to the horizontal. Wind wash protection is not required for ceilings insulated with air-permeable materials. A ceiling is defined as a building element that is horizontal or tilted at less than 60 degrees to the horizontal.