SPS 322.39(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.

Question: If I have a sloped ceiling that is not a cathedral ceiling, such as that created by scissor trusses, that is insulated with an air-permeable insulation material, e.g. fiberglass and cellulose, do I need the wind wash protection required by this section?

Answer (July 15, 2011): No, if the ceiling is sloped less than 60 degrees from the horizontal and it is not a cathedral ceiling, wind wash protection is not required. A cathedral ceiling is a sloped ceiling, with closely-spaced, parallel ceiling and roof finishes. Discussion.

Vapor Retarder SPS 322.38(1)(b)

If I overlap the vapor retarder at least 6 inches at a stud or ceiling rafter/truss and have drywall or other rigid material permanently fastened to the stud or rafter/truss do I still need to tape or caulk/seal the vapor retarder’s lapped joint?

No. The code allows seams over framing members to be held in place with other building components such as drywall. This is no different when SPS 322.38(2)(c)3 of the code only requires the nailing tabs of foil or Kraft paper be tightly fastened to the face of the framing members.

SPS 322.38 Vapor retarders. (1)
(b) Continuity. 1. The vapor retarder shall be continuous. All joints in a vapor retarder consisting of sheet material shall be overlapped 6 inches and taped or sealed, except as provided in subd. 2. Rips, punctures, and voids in the vapor retarder shall be patched with vapor retarder materials and taped or sealed. Seams that are not over a framing member shall be taped or sealed.

2. Taping or sealing a vapor retarder is not required around doors and windows, behind bathtub enclosures, and at top and bottom wall plates, if the retarder is held to those materials in an airtight manner by other building components, such as gypsum wallboard.

Concrete Slabs, Vapor Retarder SPS 322.38(3)

Do I need to extend my vapor retarder up the edges to the top of the floor slab?

No. The vapor retarder shall be provided beneath the entire concrete floor slab, but need not extend up the edge to the top of the slab provided the floor slab is cast over a code-complying footing and is tight against the wall the footing is supporting or, if it is not poured over the footing, is cast tight against the concrete footing itself. The foundation which the floor slab extends over, or is cast against, provides an equivalent degree of protection from the propagation of moisture in the soil beneath the foundation that a vapor retarder alone would provide.

Note: This Q&A is for a concrete floor slab cast against concrete walls or footings. Concrete floor slabs cast against wood foundations shall have a vapor retarder installed in accordance with the adopted installation standard ANSI/AWC PWF-2007 specified in Table 320.24-6m.
SPS 322.38 Vapor retarders.
(3) CONCRETE FLOORS. (a) Except as allowed under par. (d), a vapor retarder shall be installed directly under the concrete floor slab or under the base course of concrete floor slabs.
   (b) Vapor retarder material shall be at least 6 mils in thickness or shall be a reinforced material.
   (c) Joints in the vapor retarder shall be overlapped at least 6 inches and taped or sealed.
   (d) A vapor retarder is not required under the slab of an unconditioned attached garage.

SPS 322.39 Ventilation and moisture control.
(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.

Sloped Ceiling, Wind Wash Protection SPS 322.21(2)

If I have a sloped ceiling that is not a cathedral ceiling, such as that created by scissor trusses, that is insulated with an air-permeable insulation material, e.g. fiberglass and cellulose, do I need the wind wash protection required by this section?

No, if the ceiling is sloped less than 60 degrees from the horizontal and it is not a cathedral ceiling, wind wash protection is not required. A cathedral ceiling is a sloped ceiling, with closely-spaced, parallel ceiling and roof finishes. Discussion.

SPS 322.21 Protection of insulation.
(2) WIND WASH PROTECTION. (a) Except as provided under s. SPS 322.39 (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 a permanently attached material of low air permeability to maintain the R-value of the insulation.