

R702.7 Vapor retarders.

Class I or II vapor retarders are required on the interior side of frame walls in Climate Zones 5, 6, 7, 8 and Marine 4.

Exceptions:

1. Basement walls.
2. Below-grade portion of any wall.
3. Construction where moisture or its freezing will not damage the materials.

R702.7.1 Class III vapor retarders.

Class III vapor retarders shall be permitted where any one of the conditions in Table R702.7.1 is met.

**TABLE R702.7.1
CLASS III VAPOR RETARDERS**

CLIMATE ZONE	CLASS III VAPOR RETARDERS PERMITTED FOR:^a
Marine 4	Vented cladding over wood structural panels. Vented cladding over fiberboard. Vented cladding over gypsum. Continuous insulation with R -value ≥ 2.5 over 2×4 wall. Continuous insulation with R -value ≥ 3.75 over 2×6 wall.
5	Vented cladding over wood structural panels. Vented cladding over fiberboard. Vented cladding over gypsum. Continuous insulation with R -value ≥ 5 over 2×4 wall. Continuous insulation with R -value ≥ 7.5 over 2×6 wall.
6	Vented cladding over fiberboard. Vented cladding over gypsum. Continuous insulation with R -value ≥ 7.5 over 2×4 wall. Continuous insulation with R -value ≥ 11.25 over 2×6 wall.
7 and 8	Continuous insulation with R -value ≥ 10 over 2×4 wall. Continuous insulation with R -value ≥ 15 over 2×6 wall.

For SI: 1 pound per cubic foot = 16 kg/m³.

- a. Spray foam with a maximum permeance of 1.5 perms at the installed thickness, applied to the interior cavity side of wood structural panels, fiberboard, insulating sheathing or gypsum is deemed to meet the continuous insulation requirement where the spray foam R -value meets or exceeds the specified continuous insulation R -value.

R702.7.2 Material vapor retarder class.

The vapor retarder class shall be based on the manufacturer's certified testing or a tested assembly.

The following shall be deemed to meet the class specified:

Class I: Sheet polyethylene, unperforated aluminum foil.

Class II: Kraft-faced fiberglass batts.

Class III: Latex or enamel paint.

R702.7.3 Minimum clear airspaces and vented openings for vented cladding.

For the purposes of this section, vented cladding shall include the following minimum clear airspaces. Other openings with the equivalent vent area shall be permitted.

1. Vinyl lap or horizontal aluminum siding applied over a weather-resistive barrier as specified in Table R703.3(1).
2. Brick veneer with a clear airspace as specified in Table R703.8.4.
3. Other approved vented claddings.