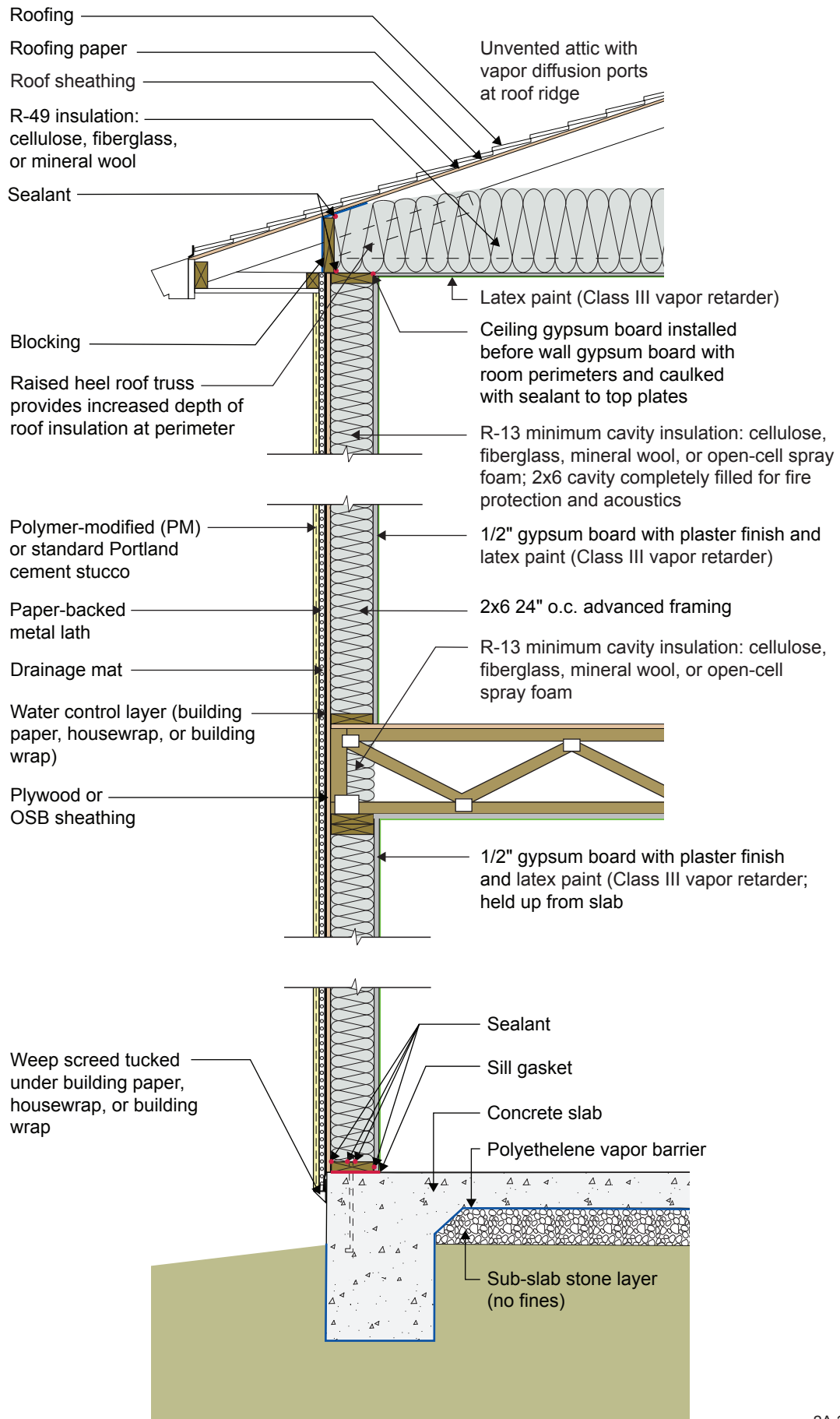


## 2021 IECC Climate Zone 2A: Unvented Attic, 2x6 Wall, Monolithic Slab



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- The attic insulation in this unvented attic is located on the attic floor. The moisture in the attic space is controlled by vapor diffusion ports, not with attic venting. Unvented attics are more resistant to wind uplift under hurricane conditions.
- If a raised-heel roof truss is used to allow R-38 attic insulation over the full width of the exterior wall, R-38 can be used throughout the attic rather than R-49. See Section R402.2.1 of the 2021 IECC.
- A drainage mat is provided behind the stucco layer installed over the frame wall to control hydrostatic pressure. This assembly is drained to the exterior at a weep screed located at the bottom of the wood framing. The stucco layer should not be extended into the ground to control wicking and insect entry.
- The wood frame wall is framed with 2x6 24" o.c. advanced framing as it uses less board footage (volume of wood framing) than standard 2x4 16" o.c. framing and therefore is less expensive in material cost. It is also less expensive in labor (25% fewer framing members) and is faster to assemble. Although the code allows for 2x4 framing and lower R-value cavity insulation, the use of advanced framing and the associated cost savings more than offset the increase in the cost of cavity insulation (this of course depends on relative price fluctuations in labor and materials).
- Although the minimum R-value of the insulation in this wall is R-13 per IECC, fire code may require the entire cavity to be filled, likely resulting in a higher R-value for a 2x6 wall.
- Avoid vinyl wallpaper and oil-based paint or coatings in Climate Zone 2A. These wall coverings are vapor impermeable and increase the risk of condensation within the wall.
- The entire monolithic concrete slab should have a polyethylene vapor barrier wrapping the underside of the thickened slab edge to control capillary uptake. The polyethylene should extend upward from the bottom of the monolithic slab to grade on the exterior.
- No foundation or slab insulation is required in Climate Zone 2. However, vertical rigid foam insulation may improve comfort. If insulation is installed, a termite inspection strip must be included. See other assembly drawings in this climate zone for examples.