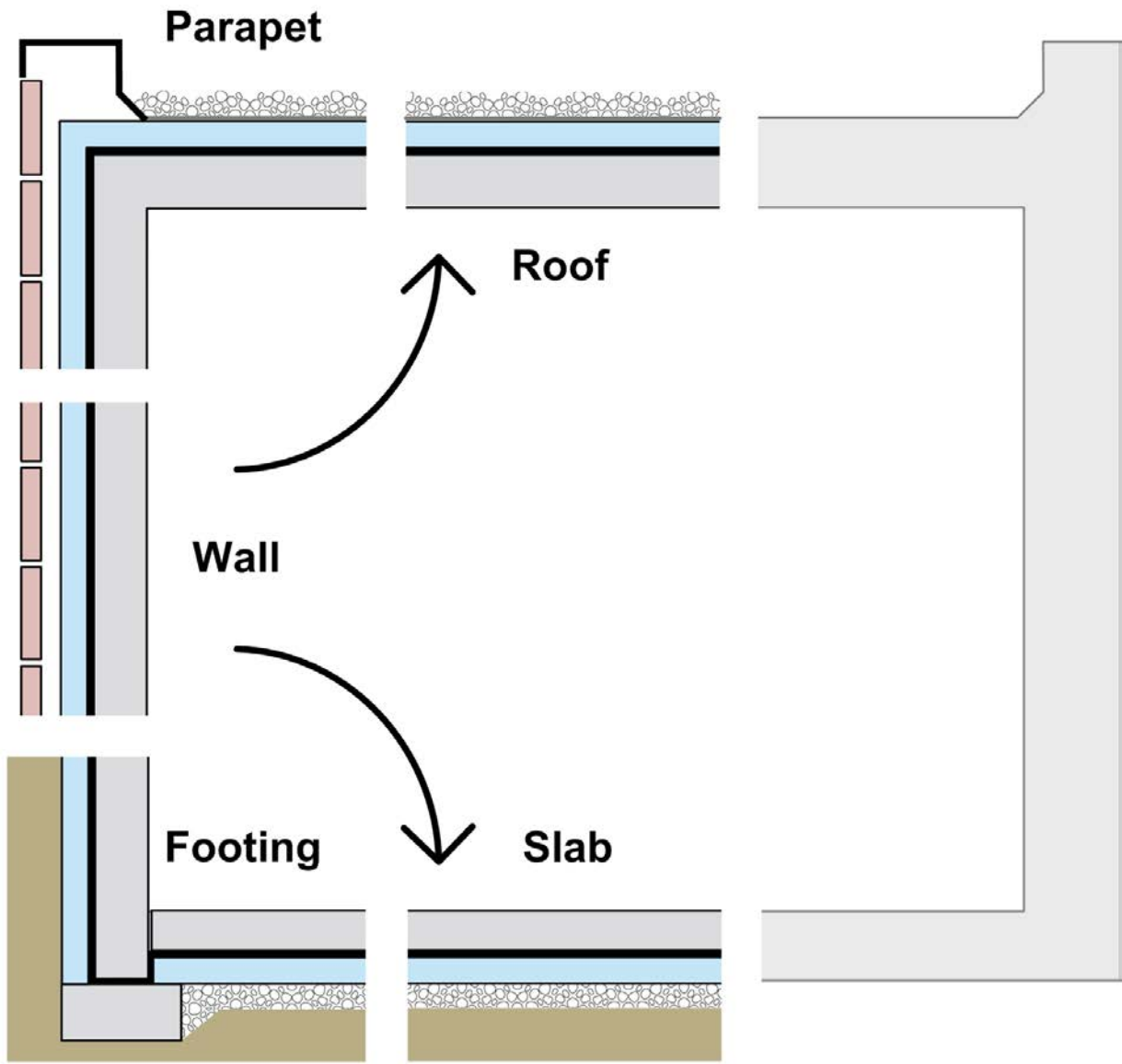


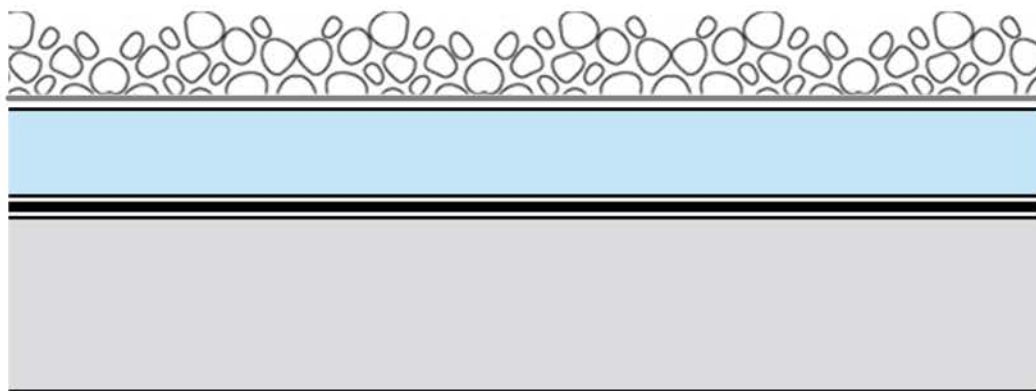
Joseph Lstiburek, Ph.D., P.Eng, ASHRAE Fellow

Building Science

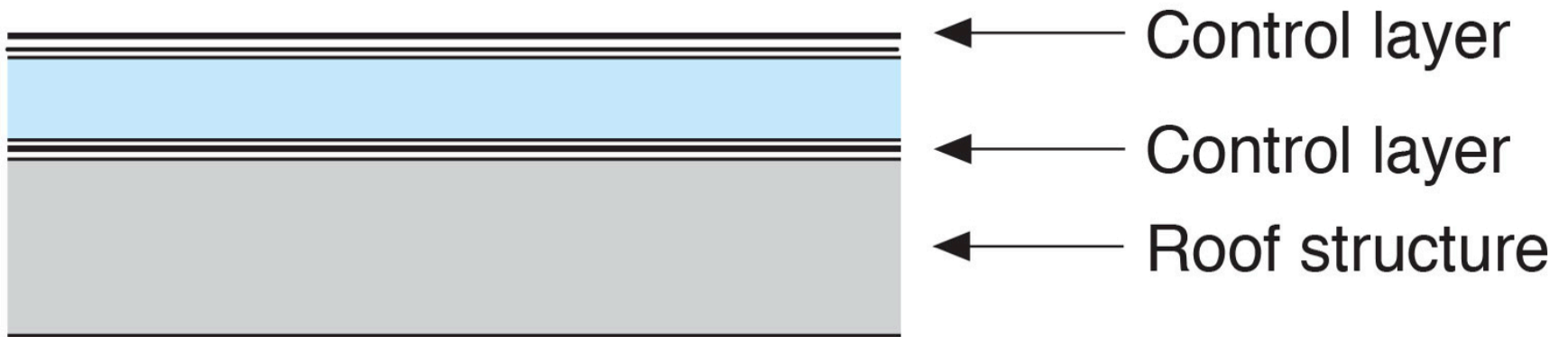
Adventures In Building Science

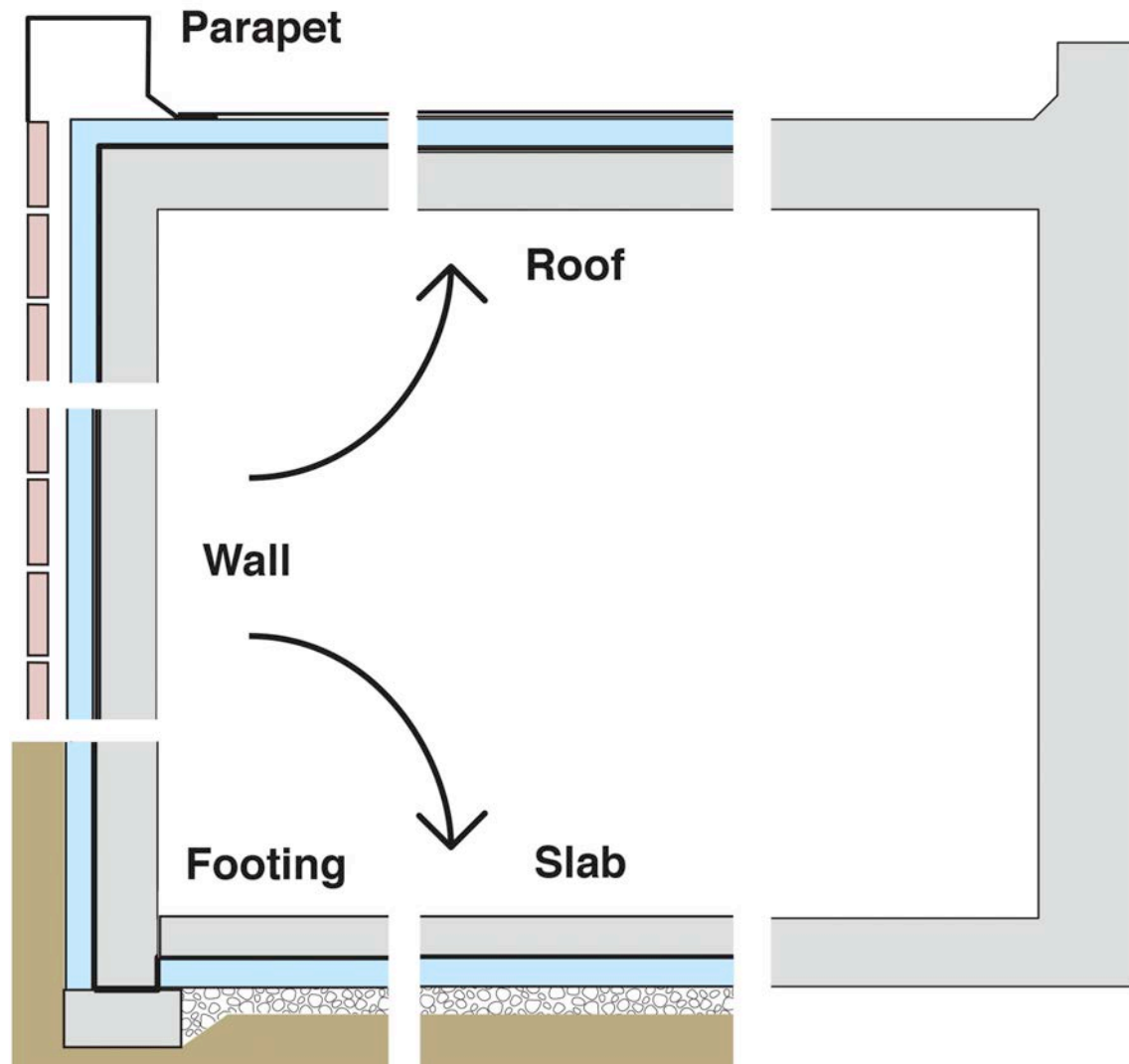
www.buildingscience.com

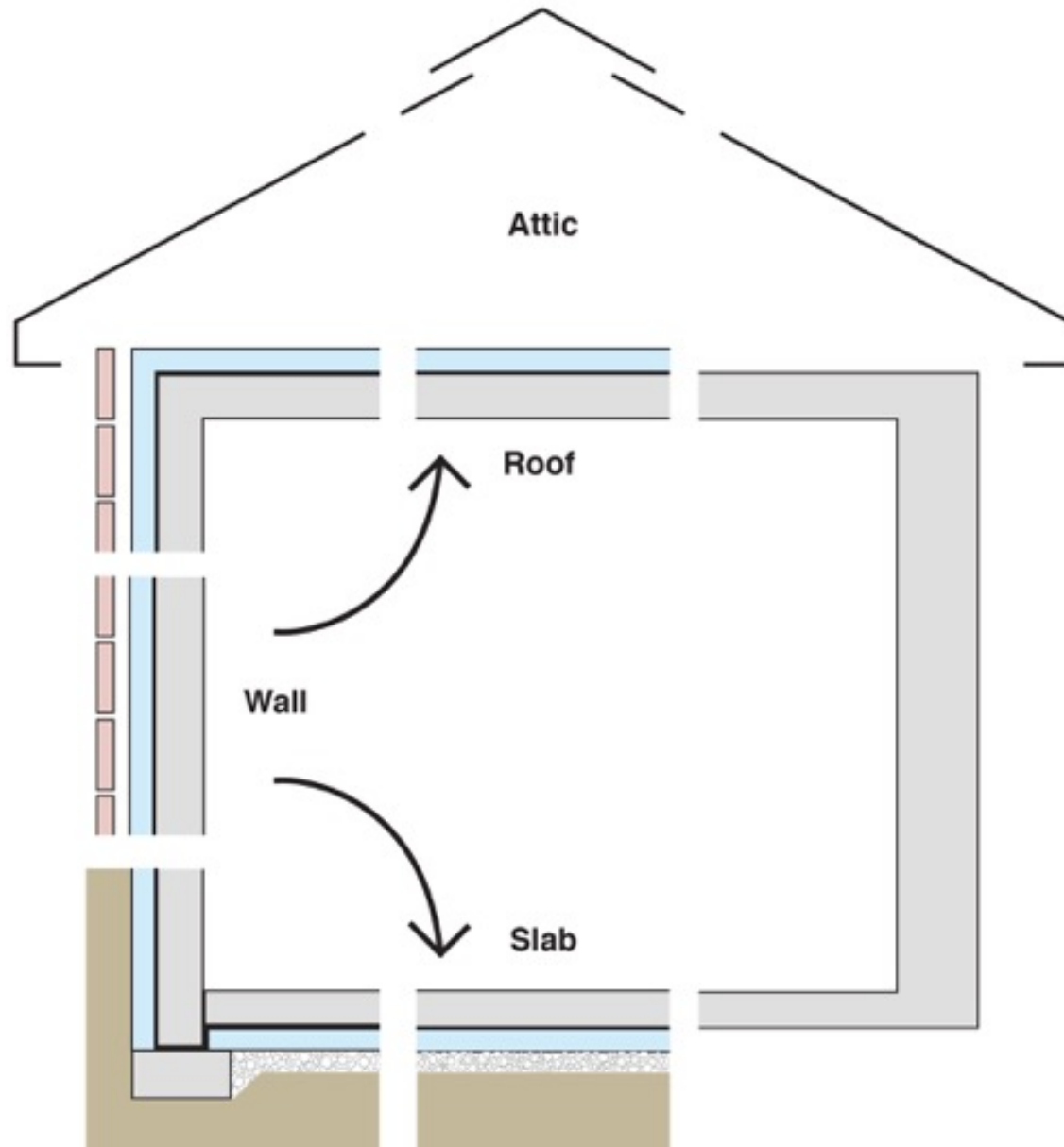


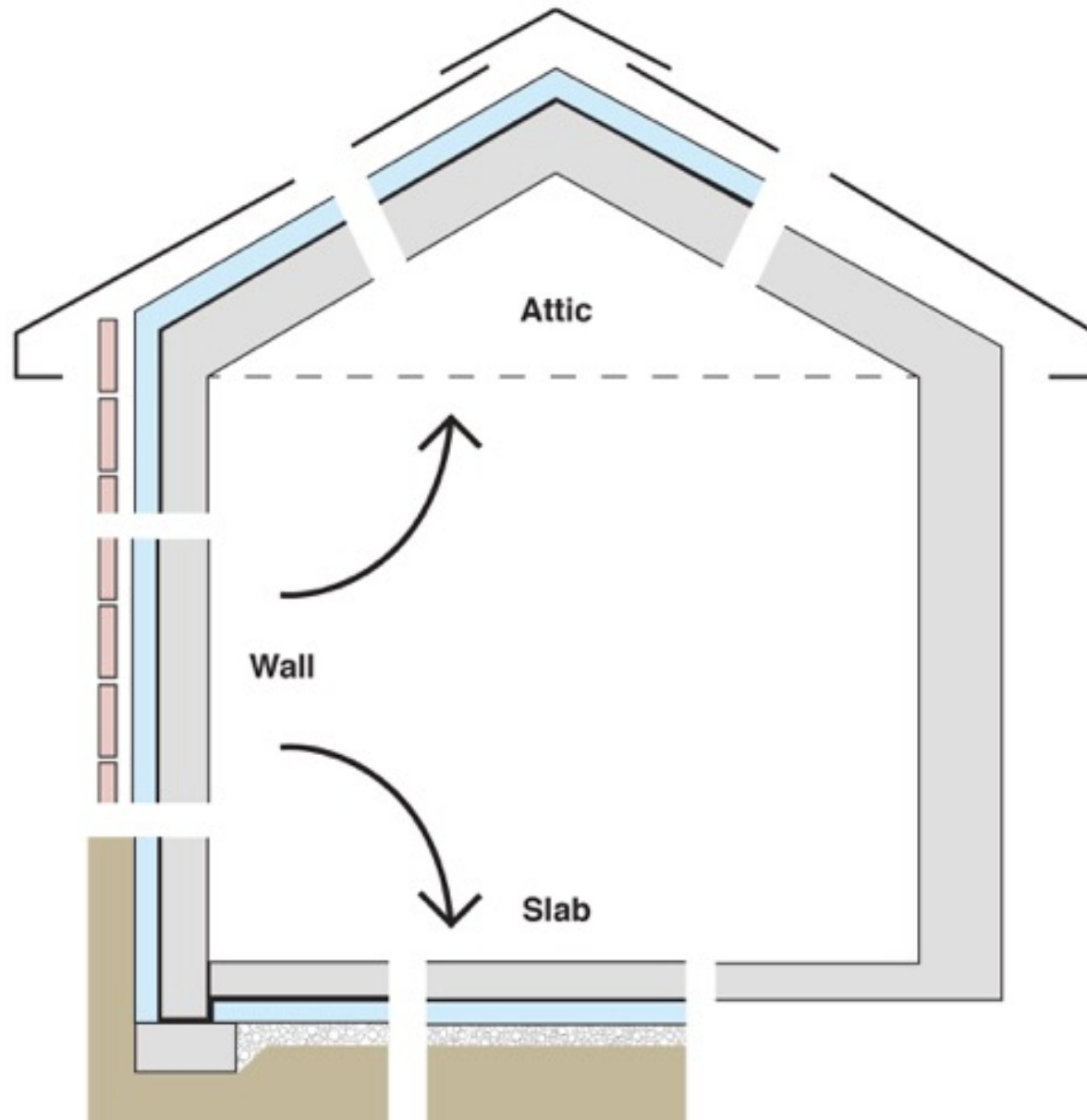


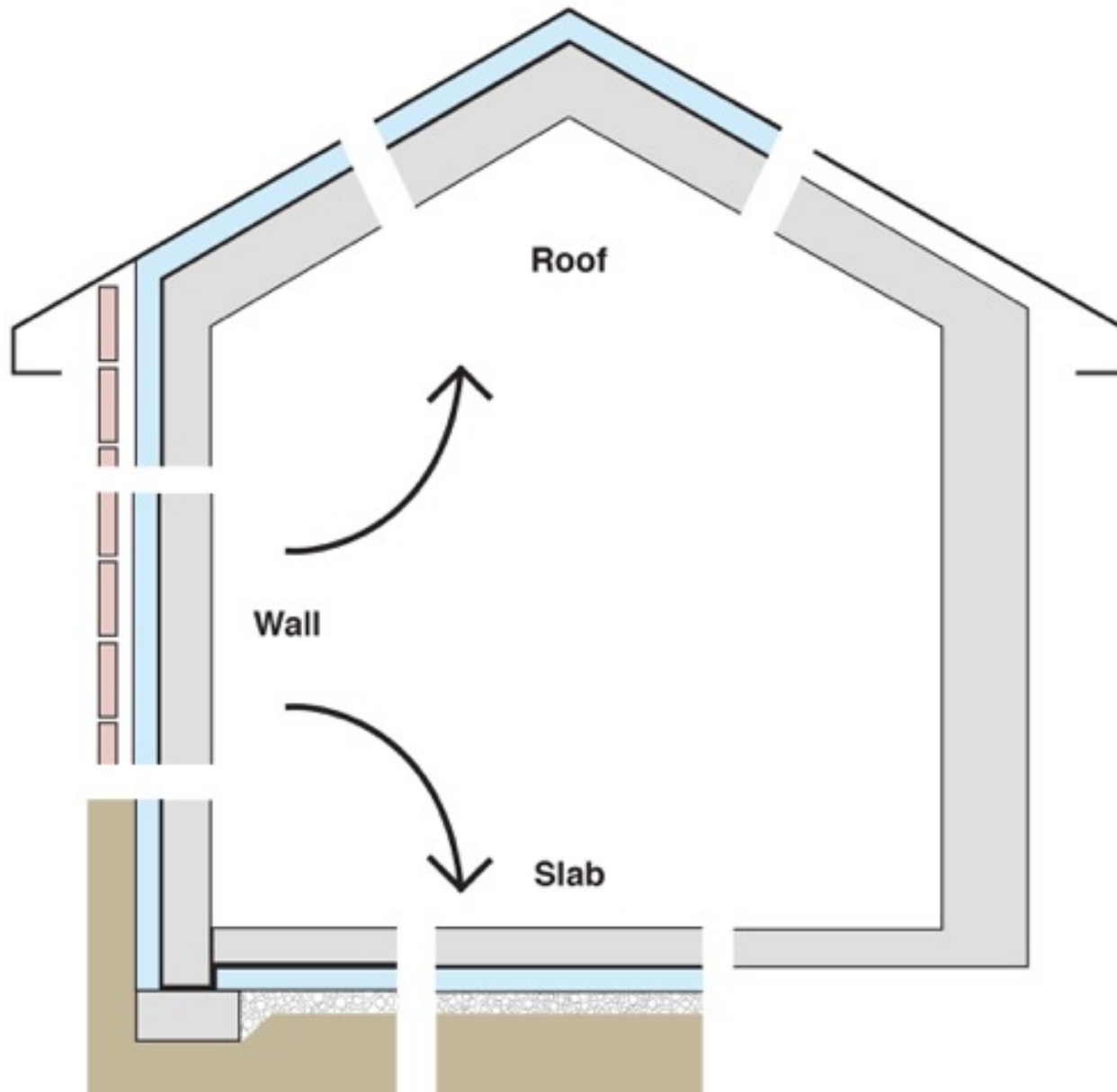
- ← Ballast
- ← Filter fabric
- ← Control layers
- ← Roof structure

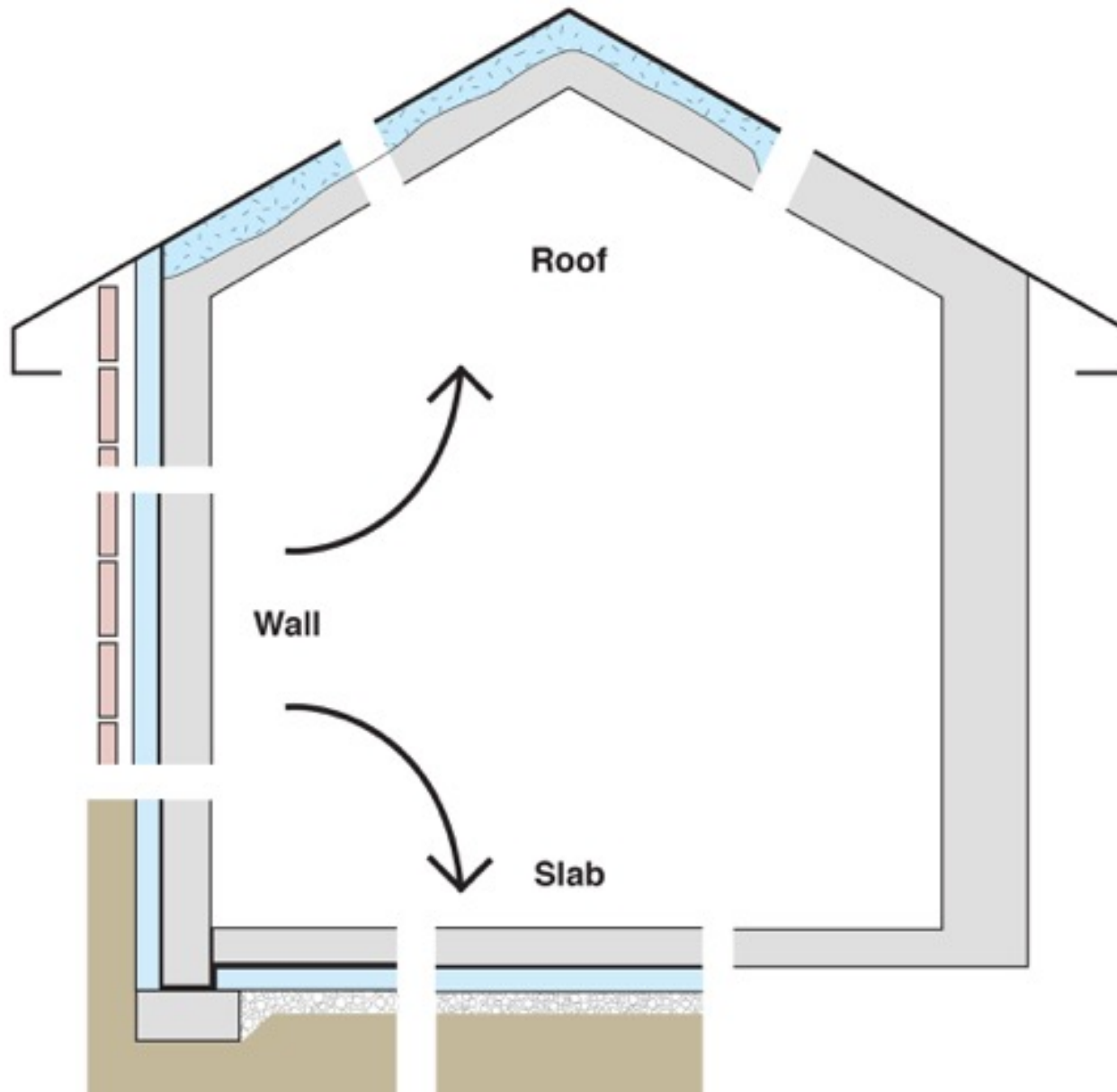


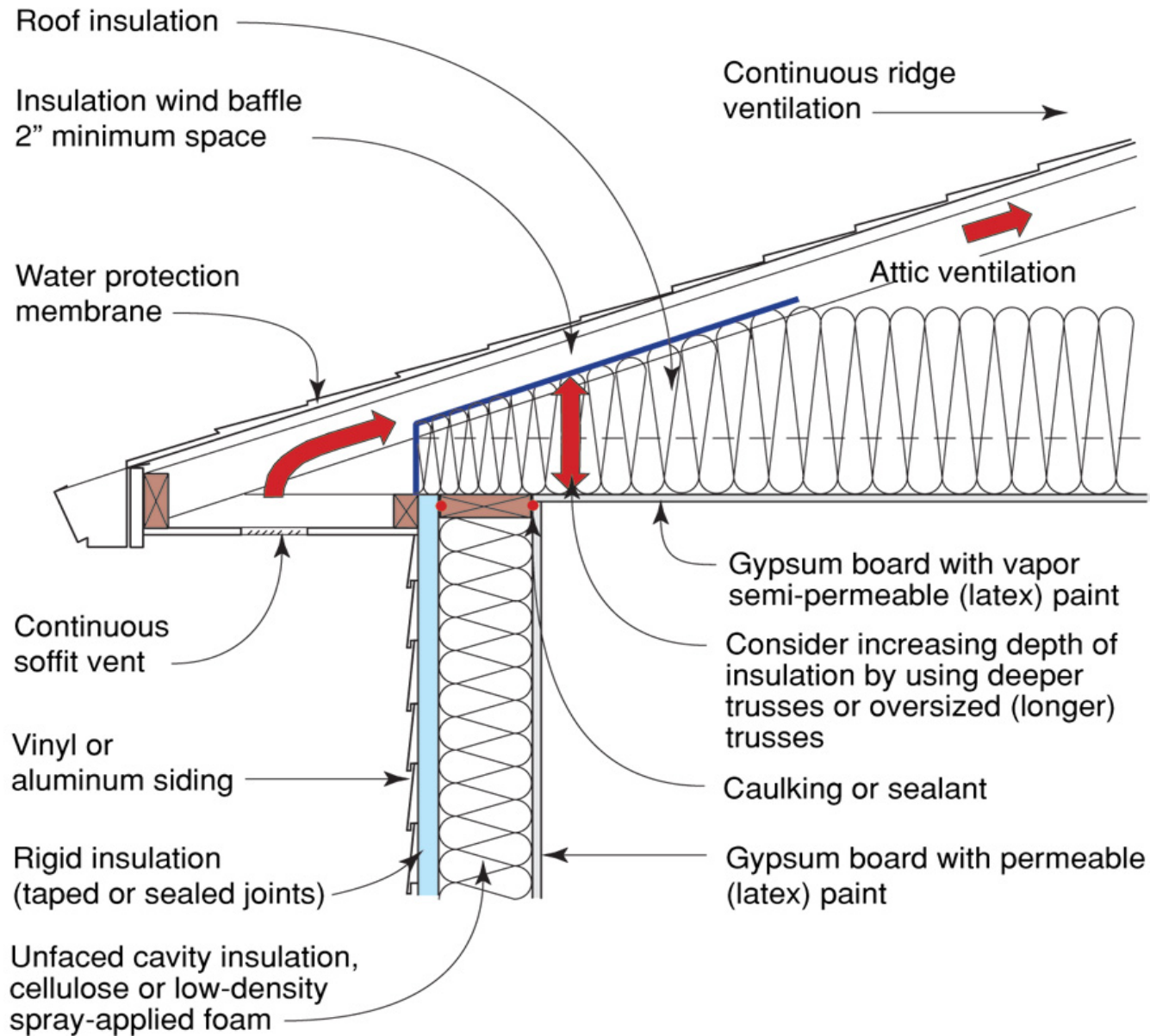




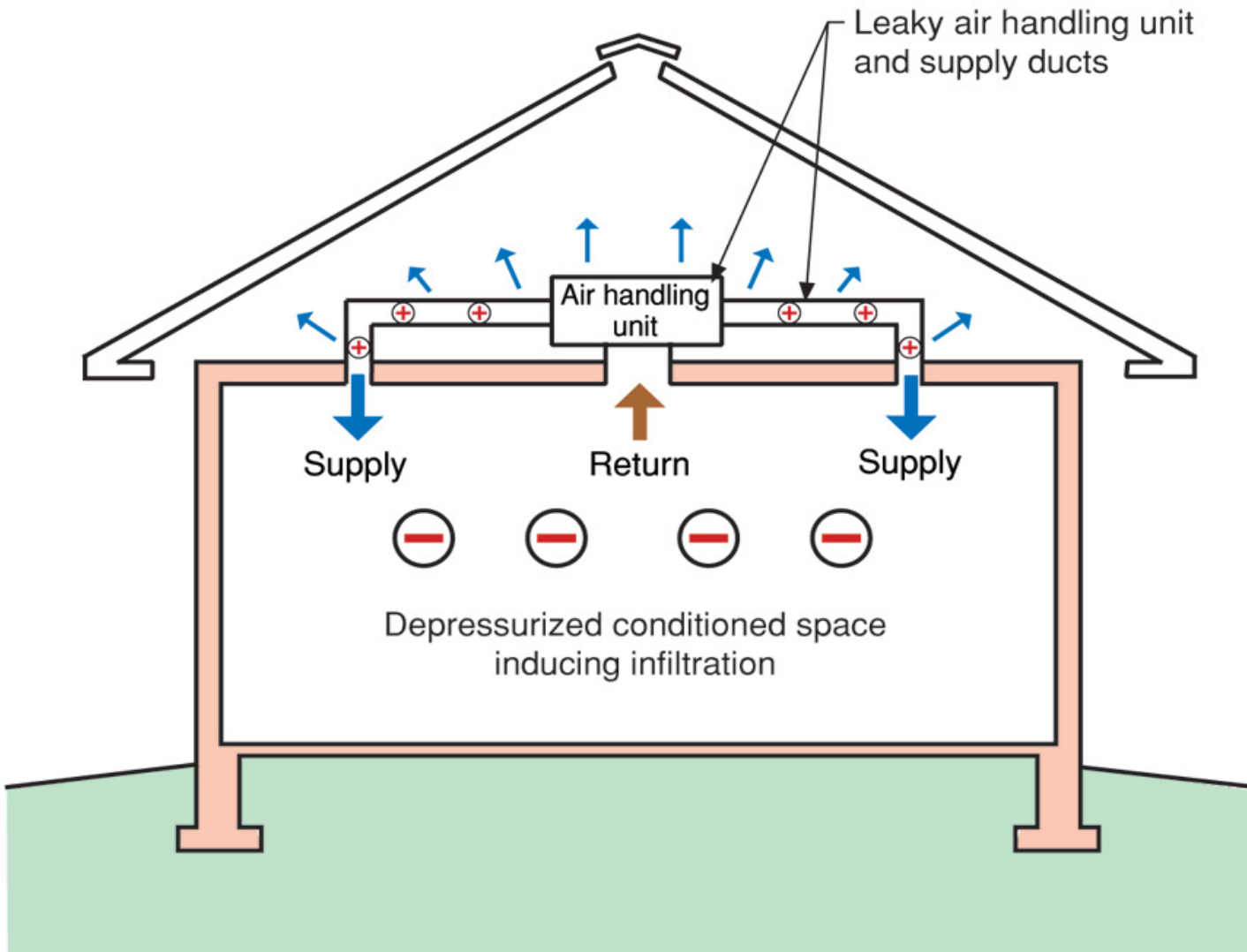






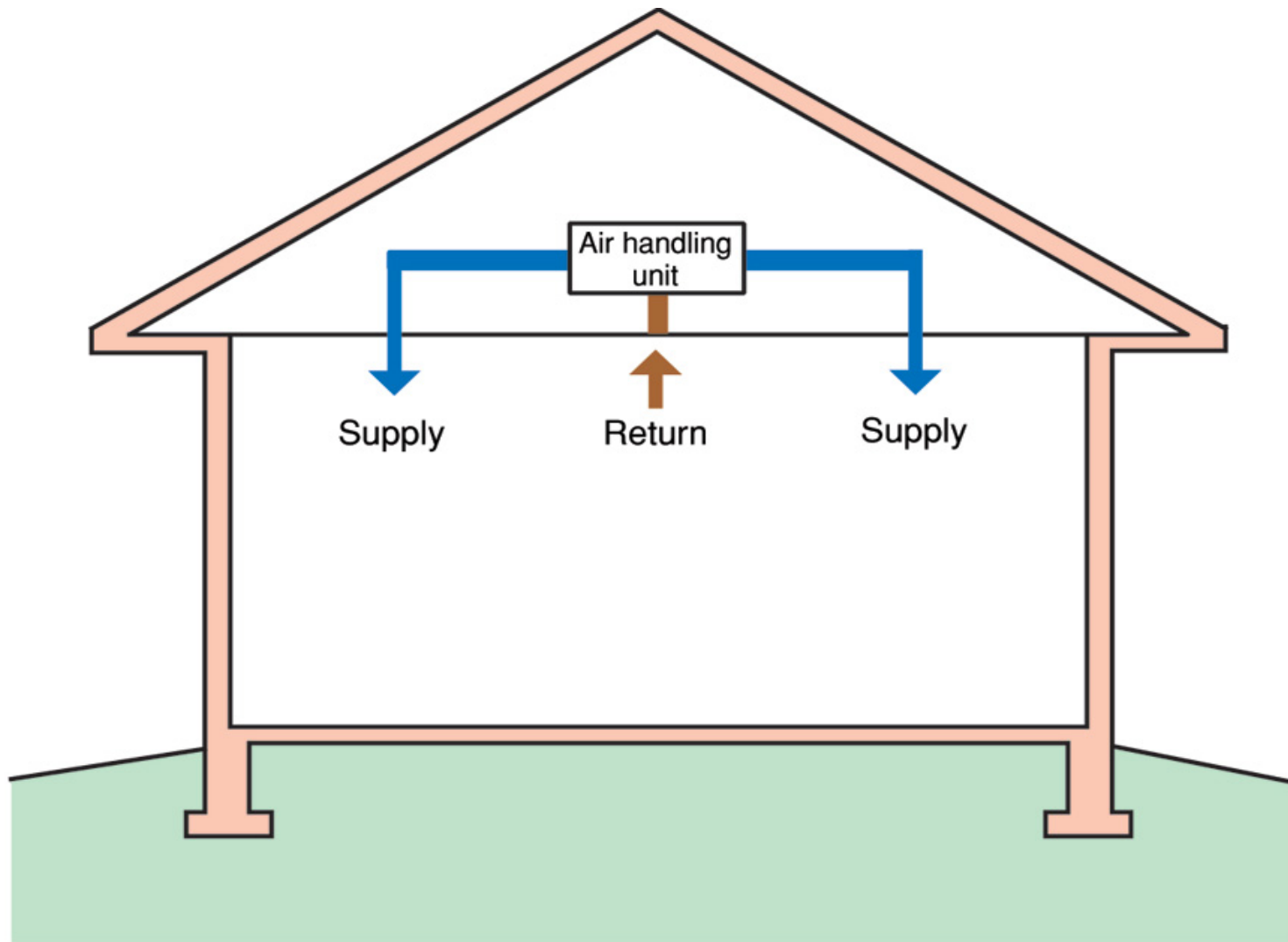






Note: Colored shading depicts the building's thermal barrier and pressure boundary. The thermal barrier and pressure boundary enclose the conditioned space.

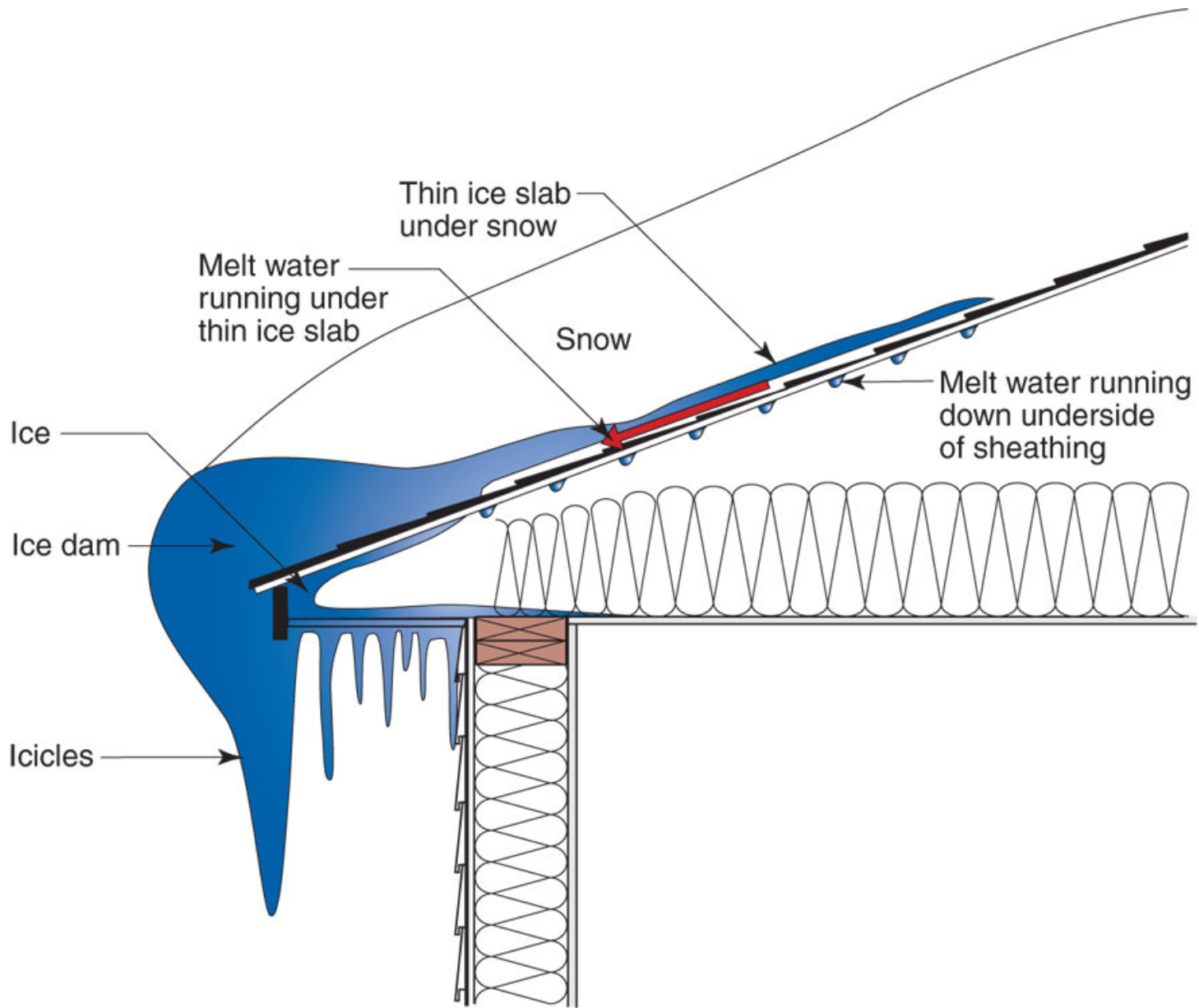




Note: Colored shading depicts the building's thermal barrier and pressure boundary. The thermal barrier and pressure boundary enclose the conditioned space.













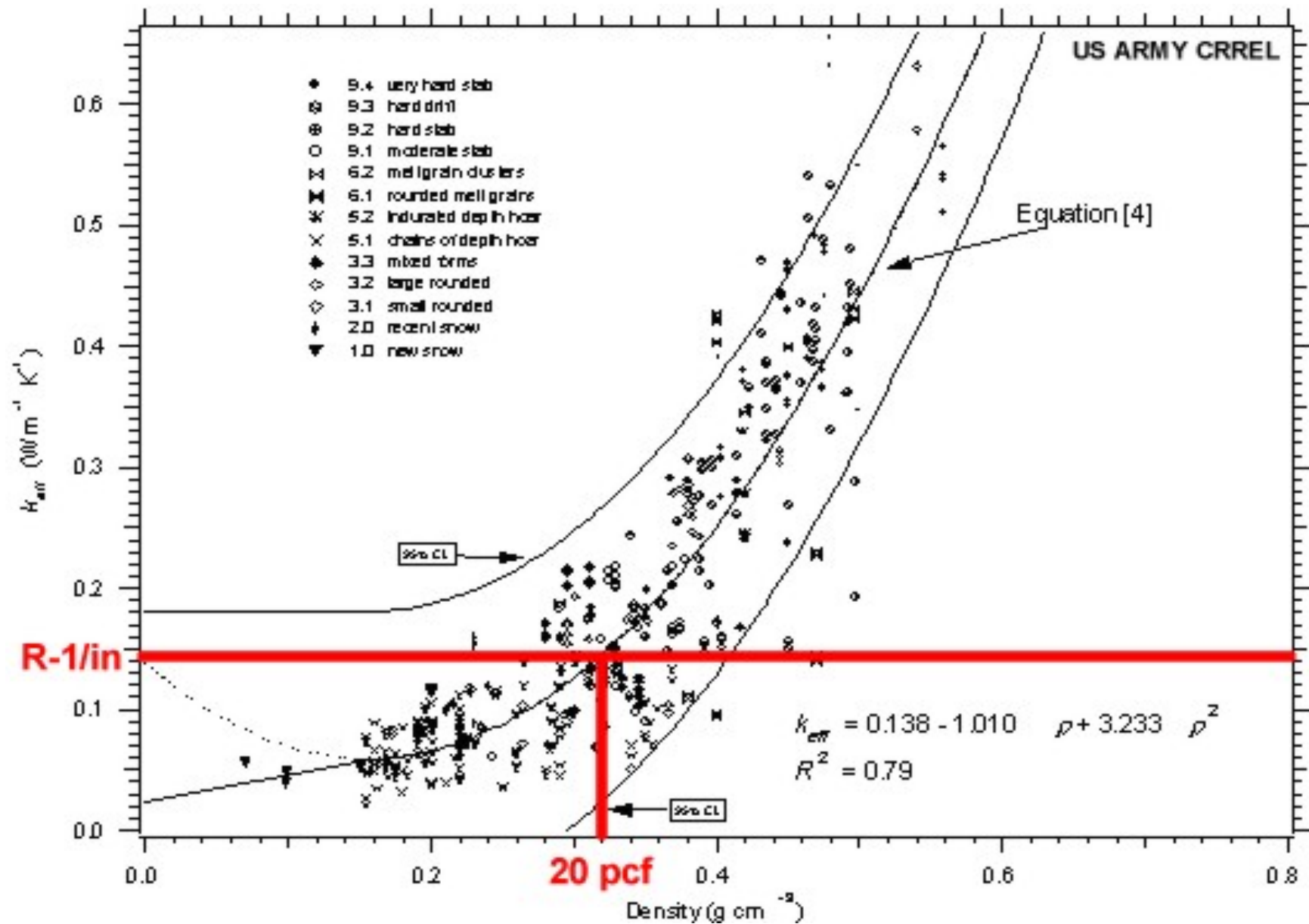






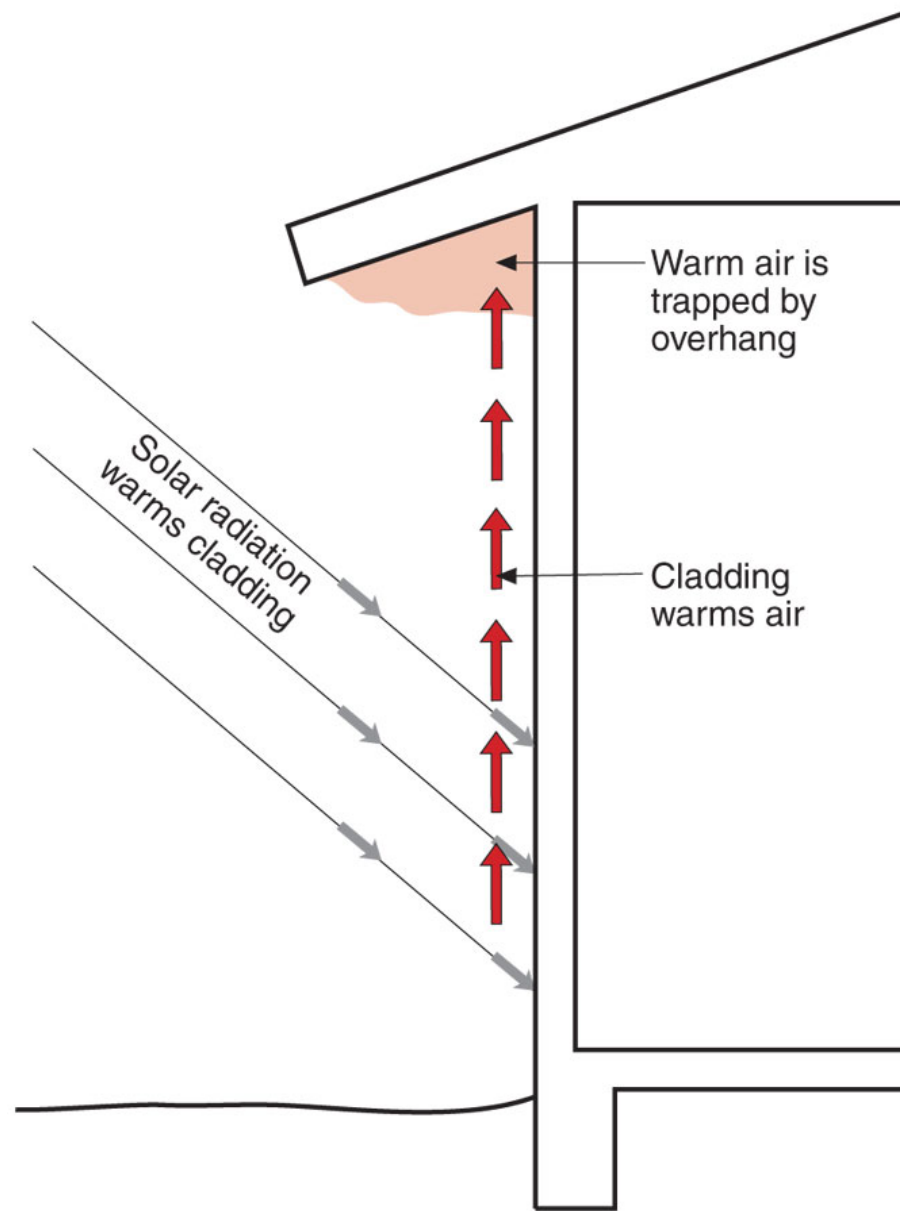










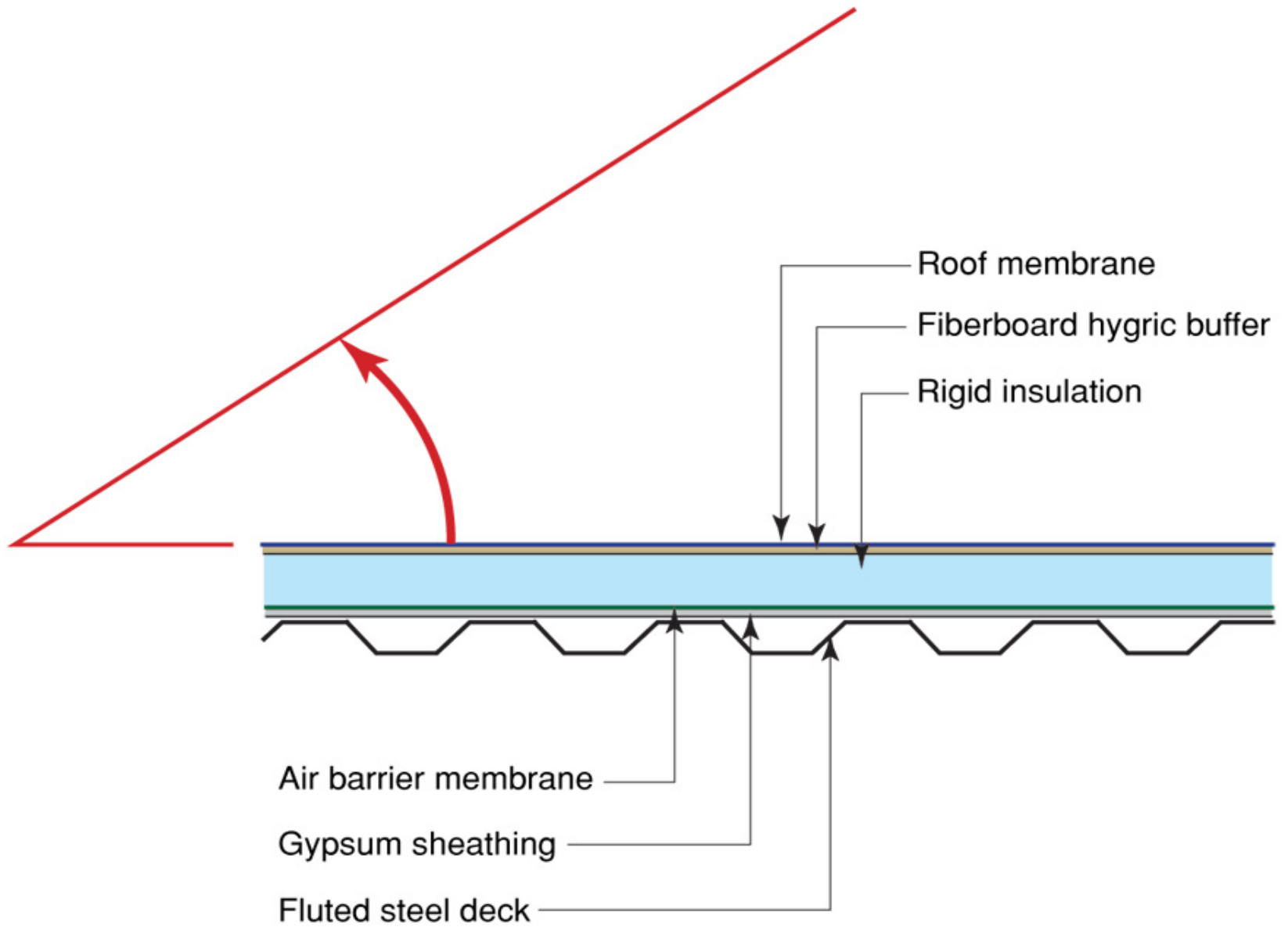


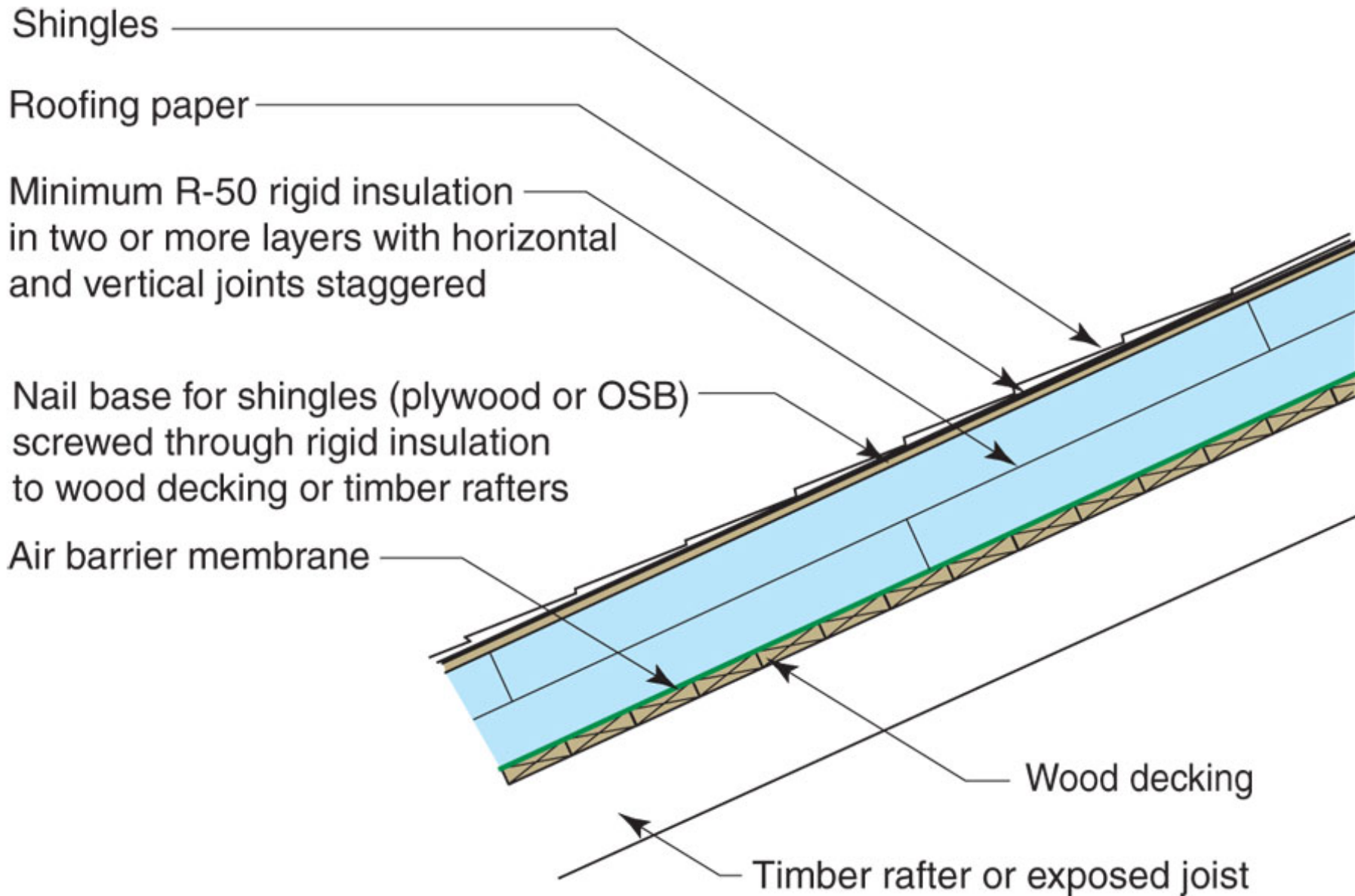


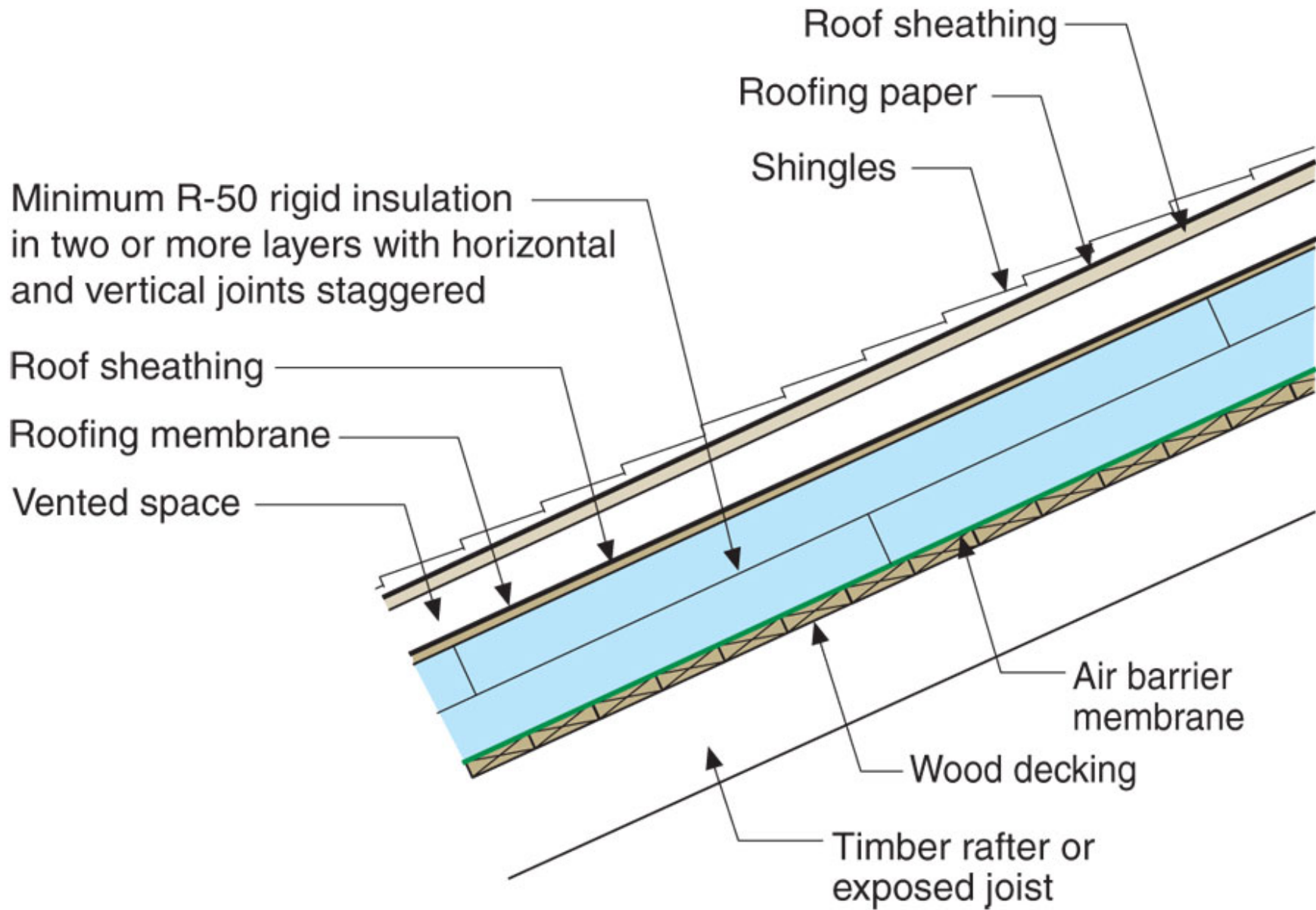


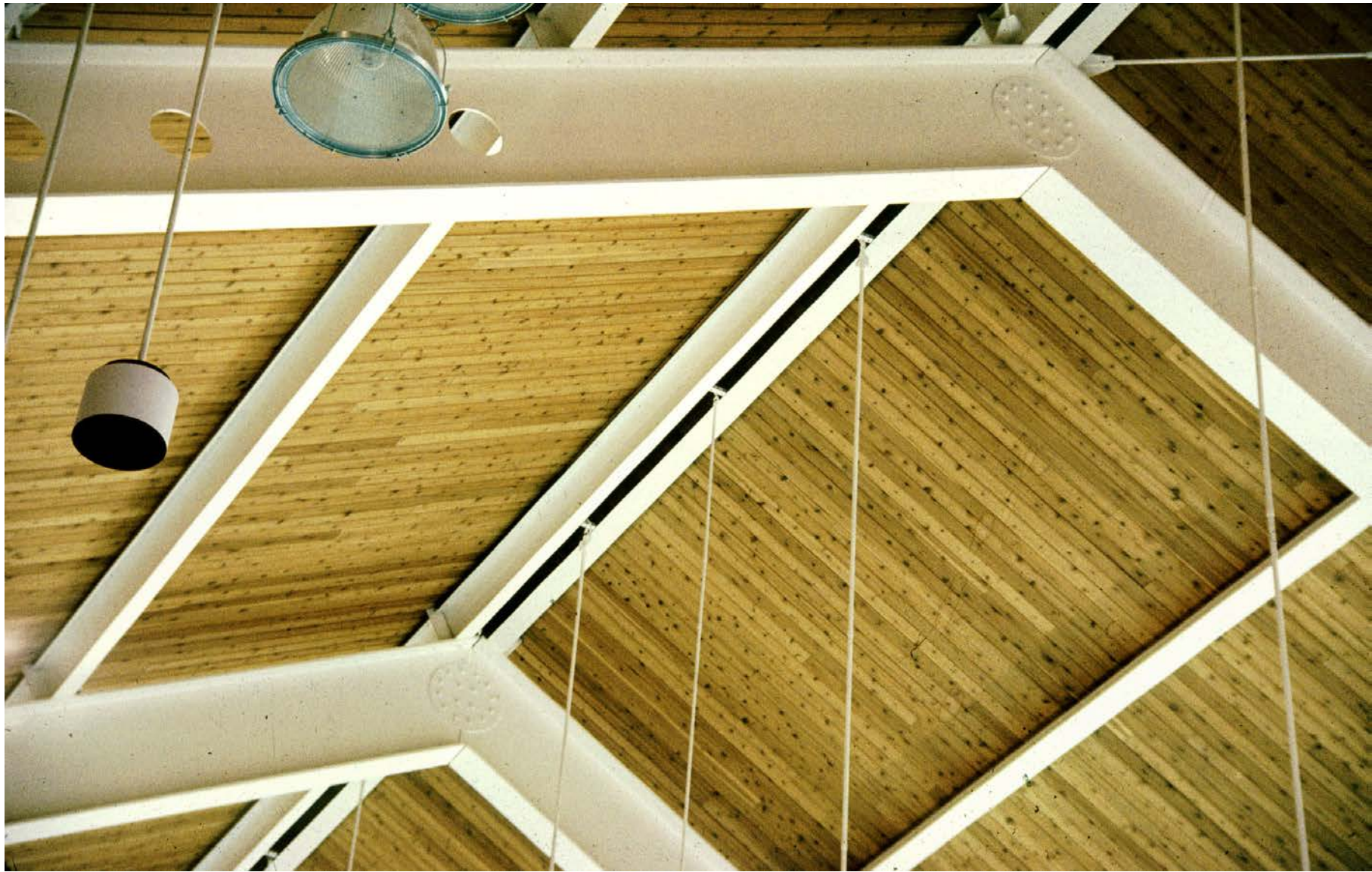




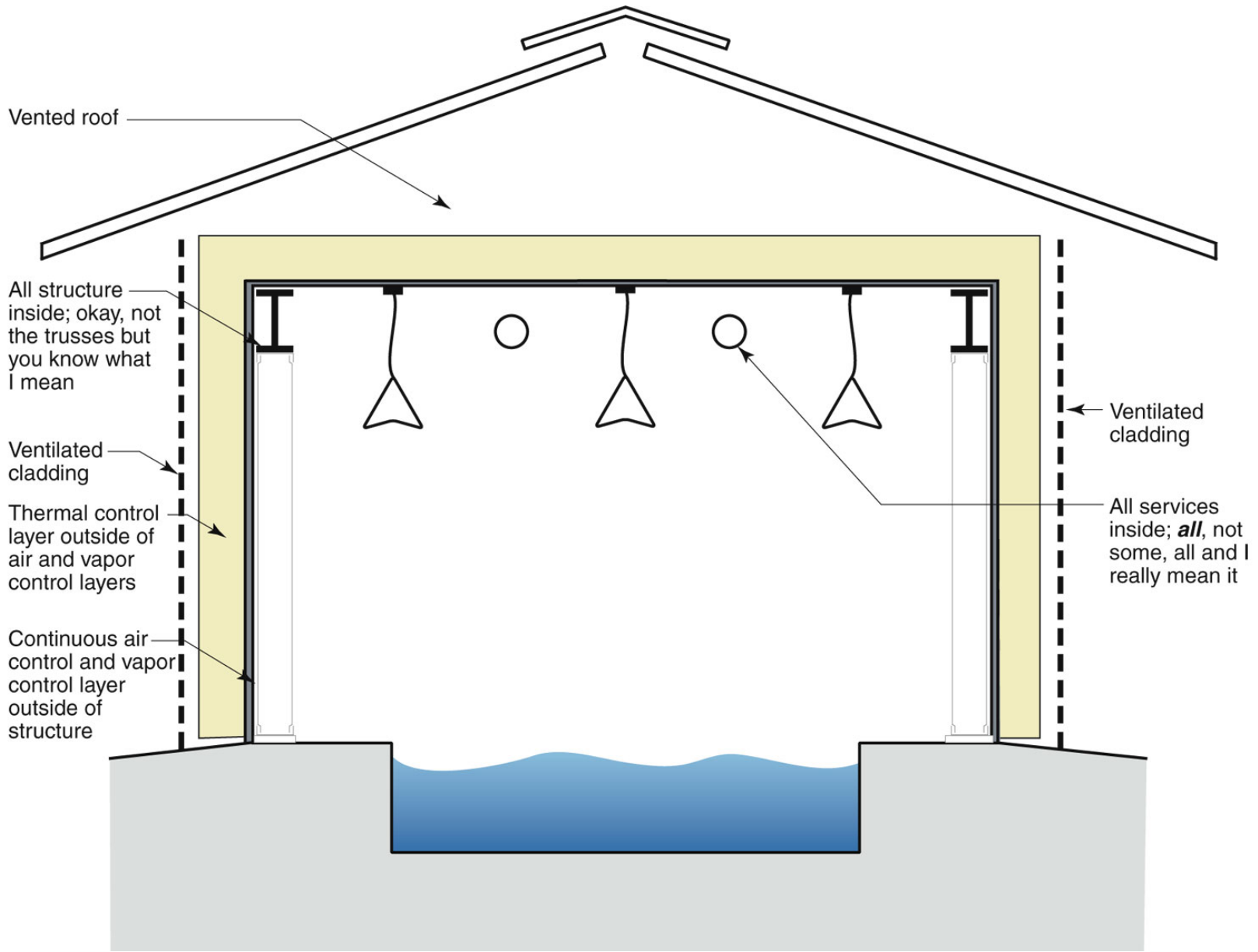


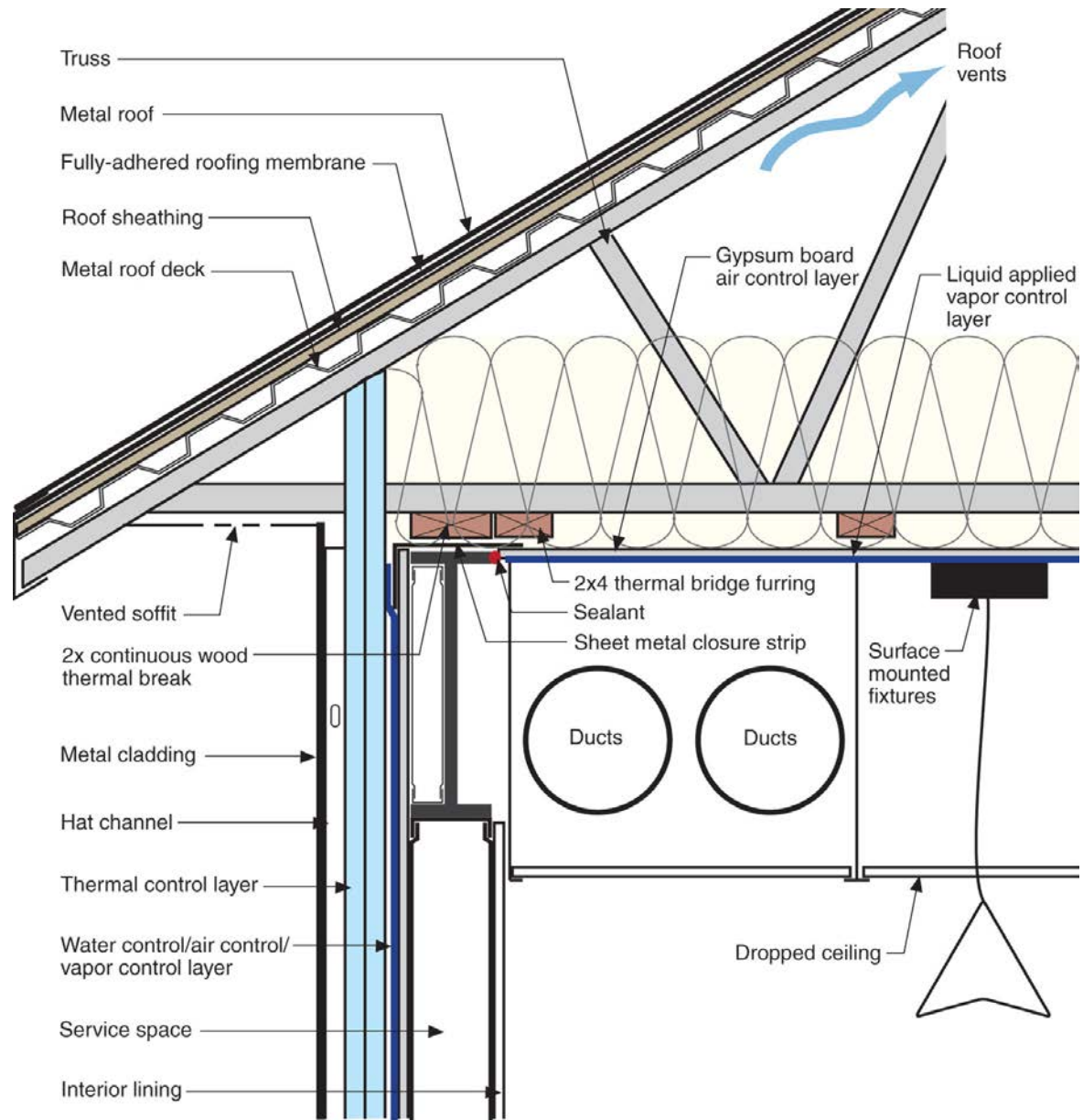


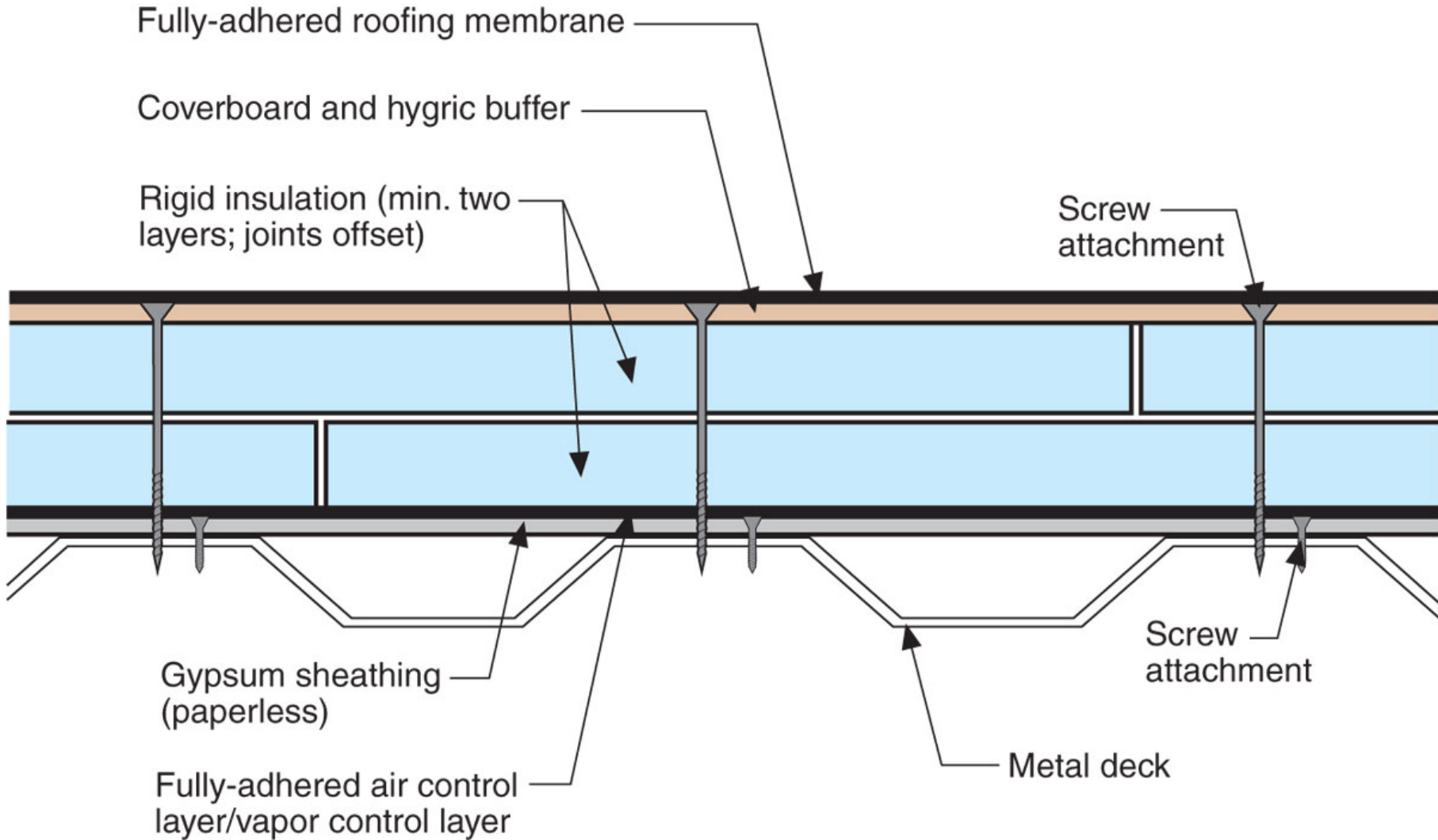


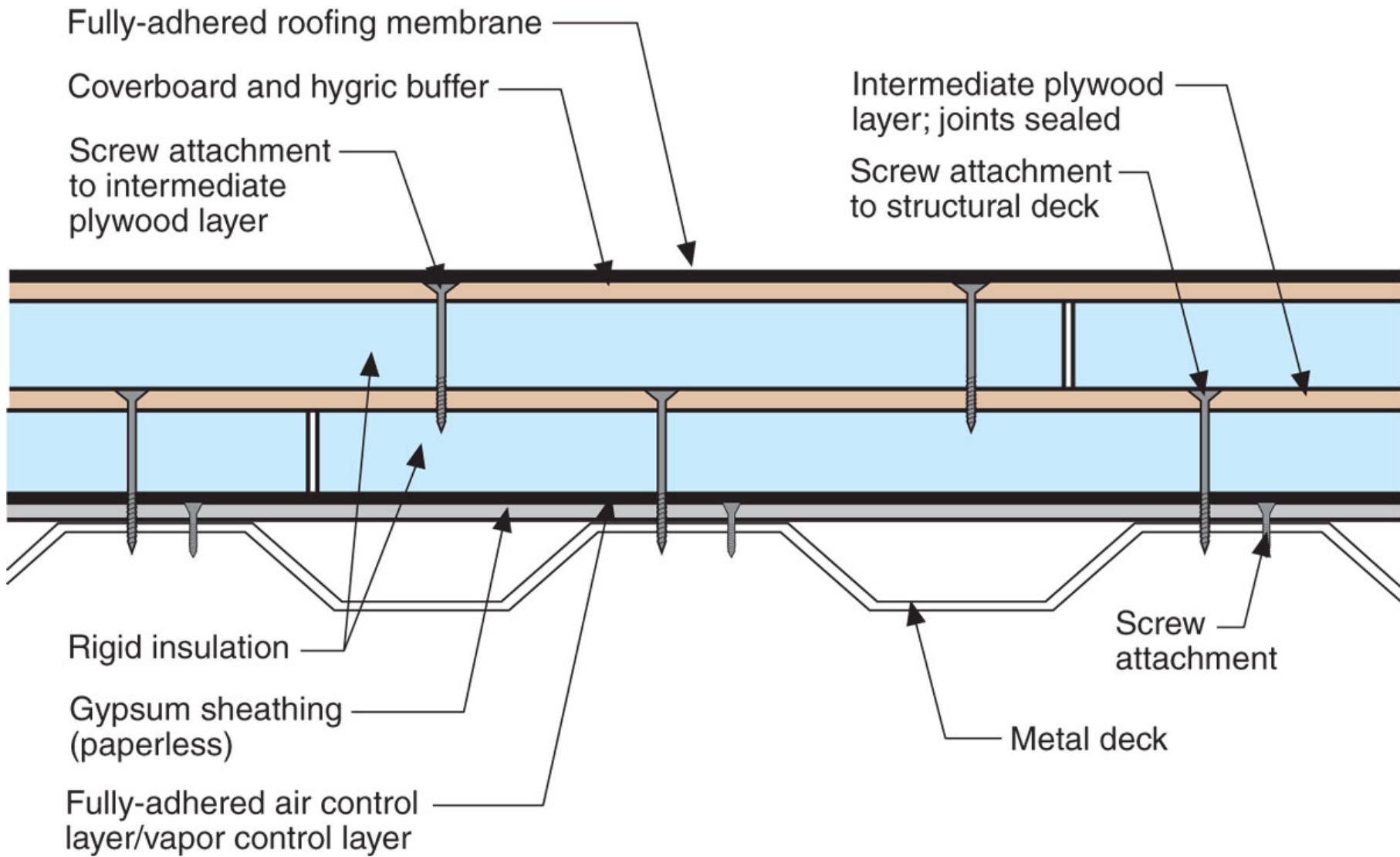


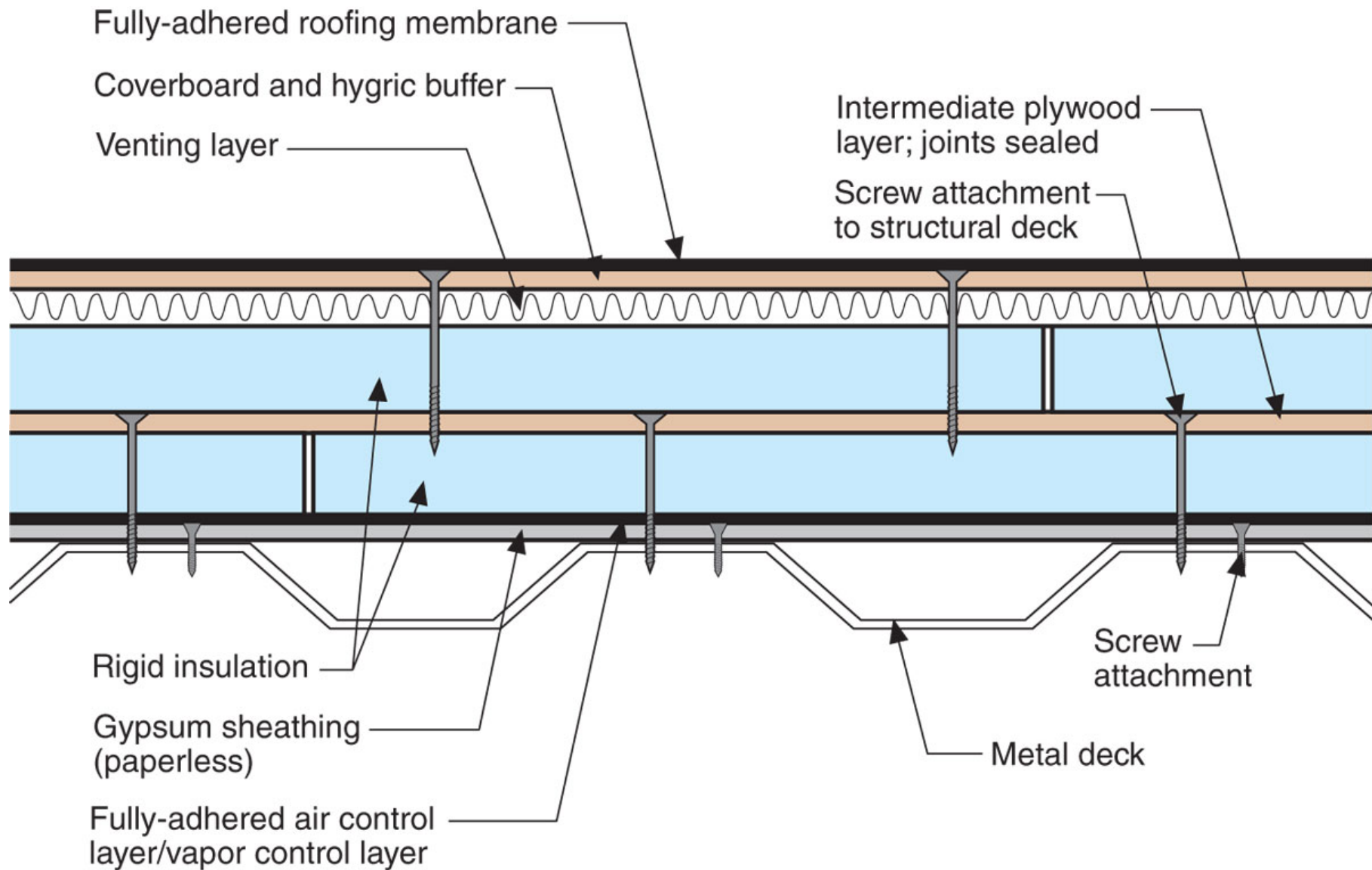


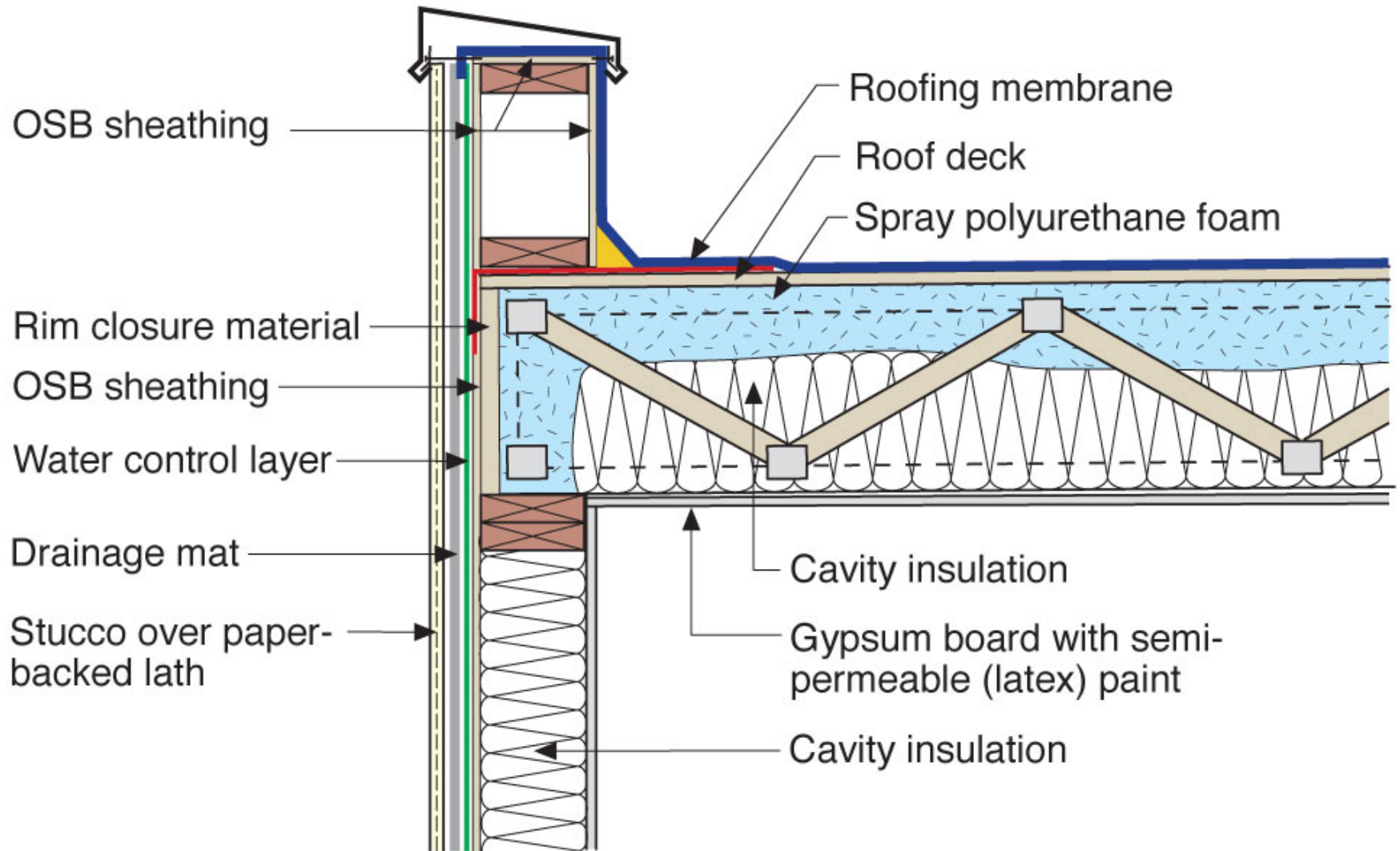


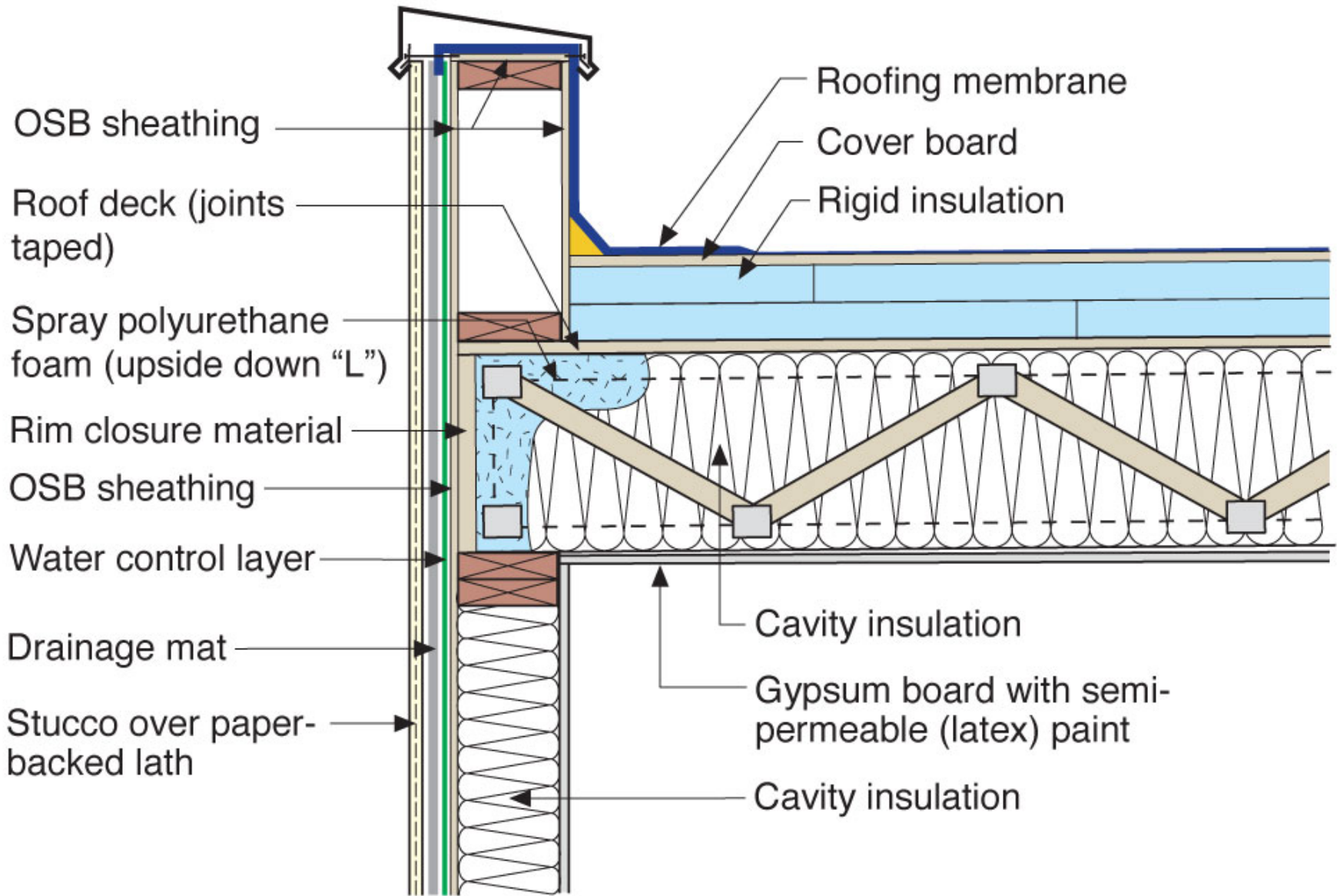


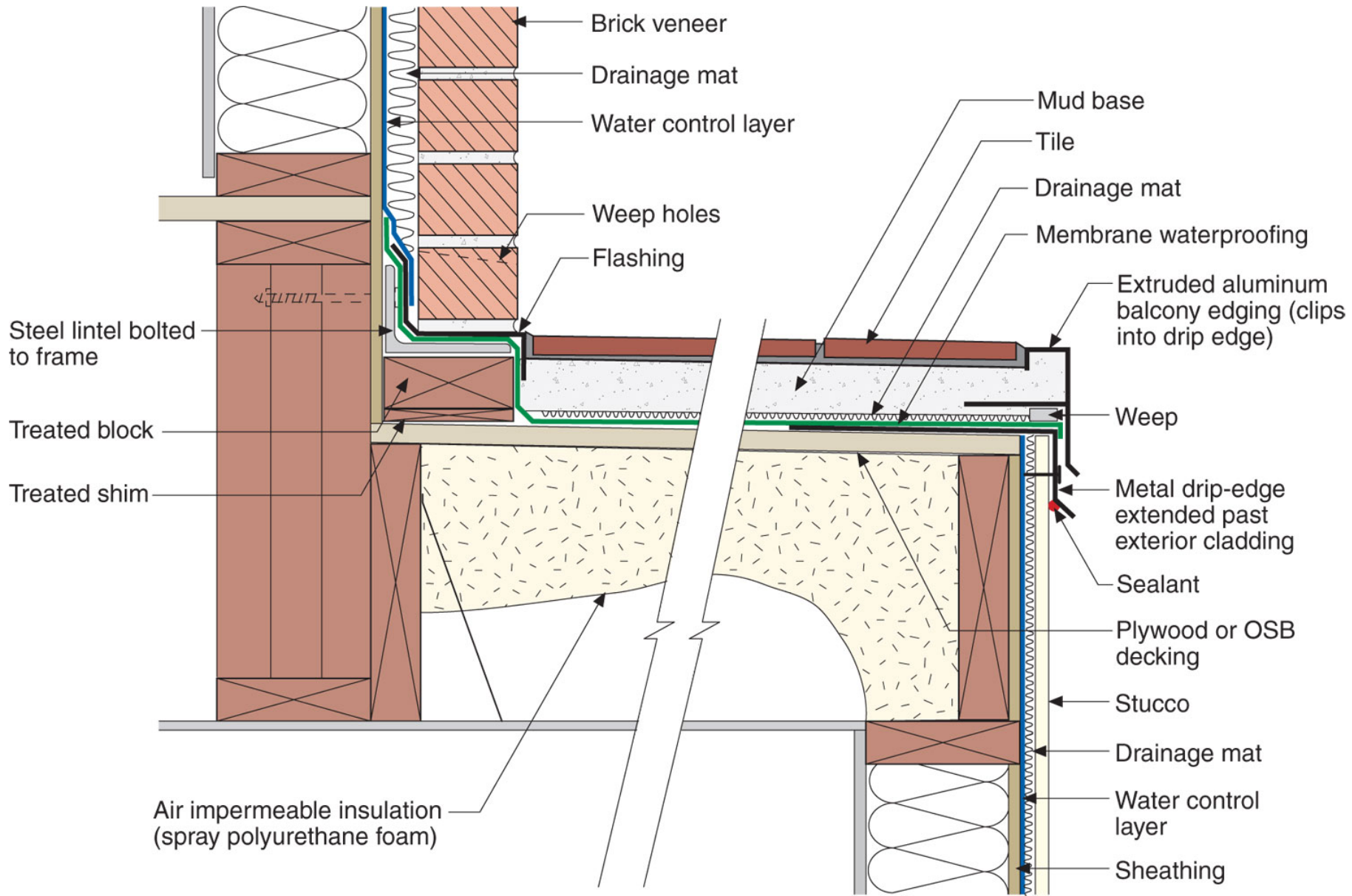






















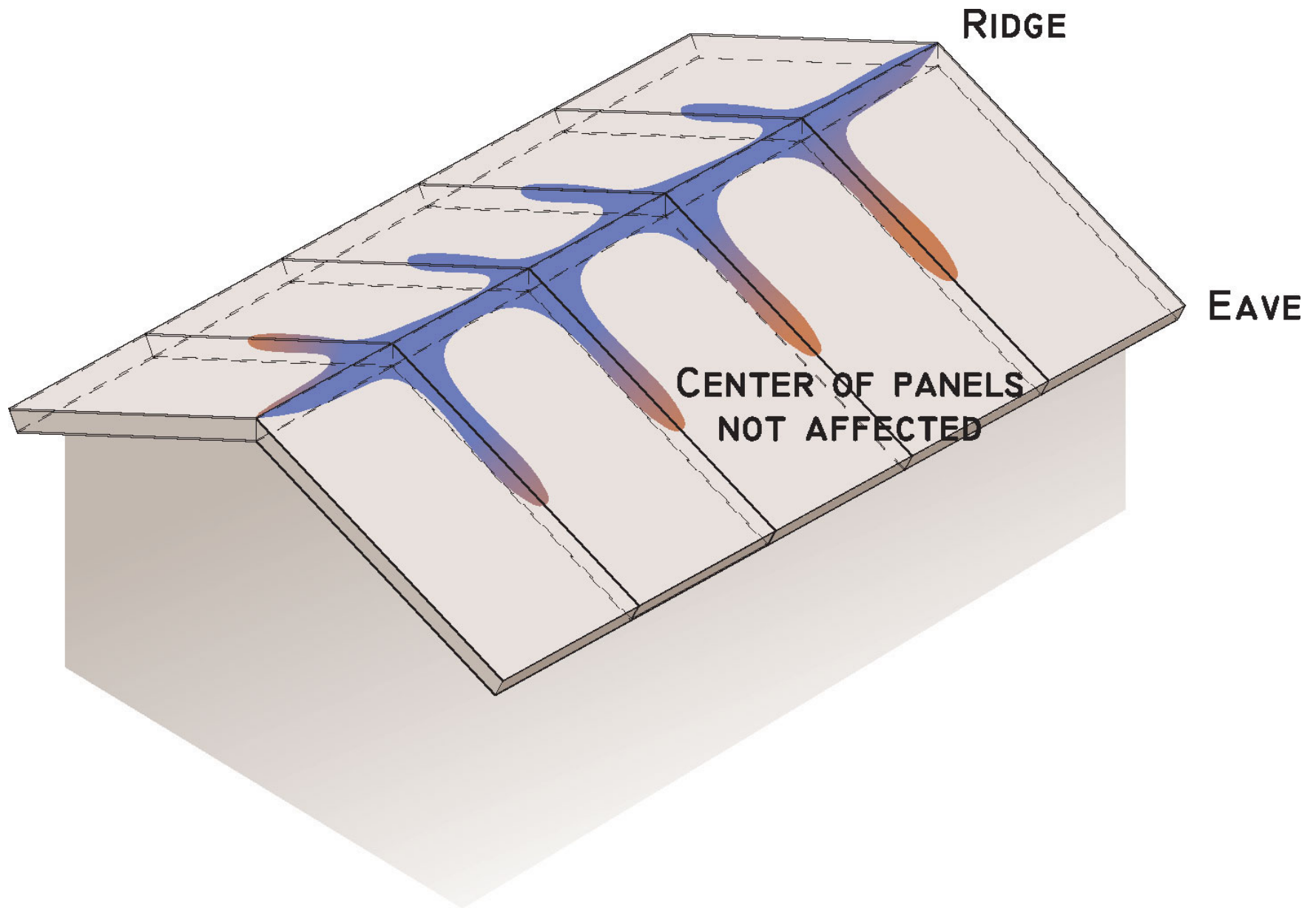




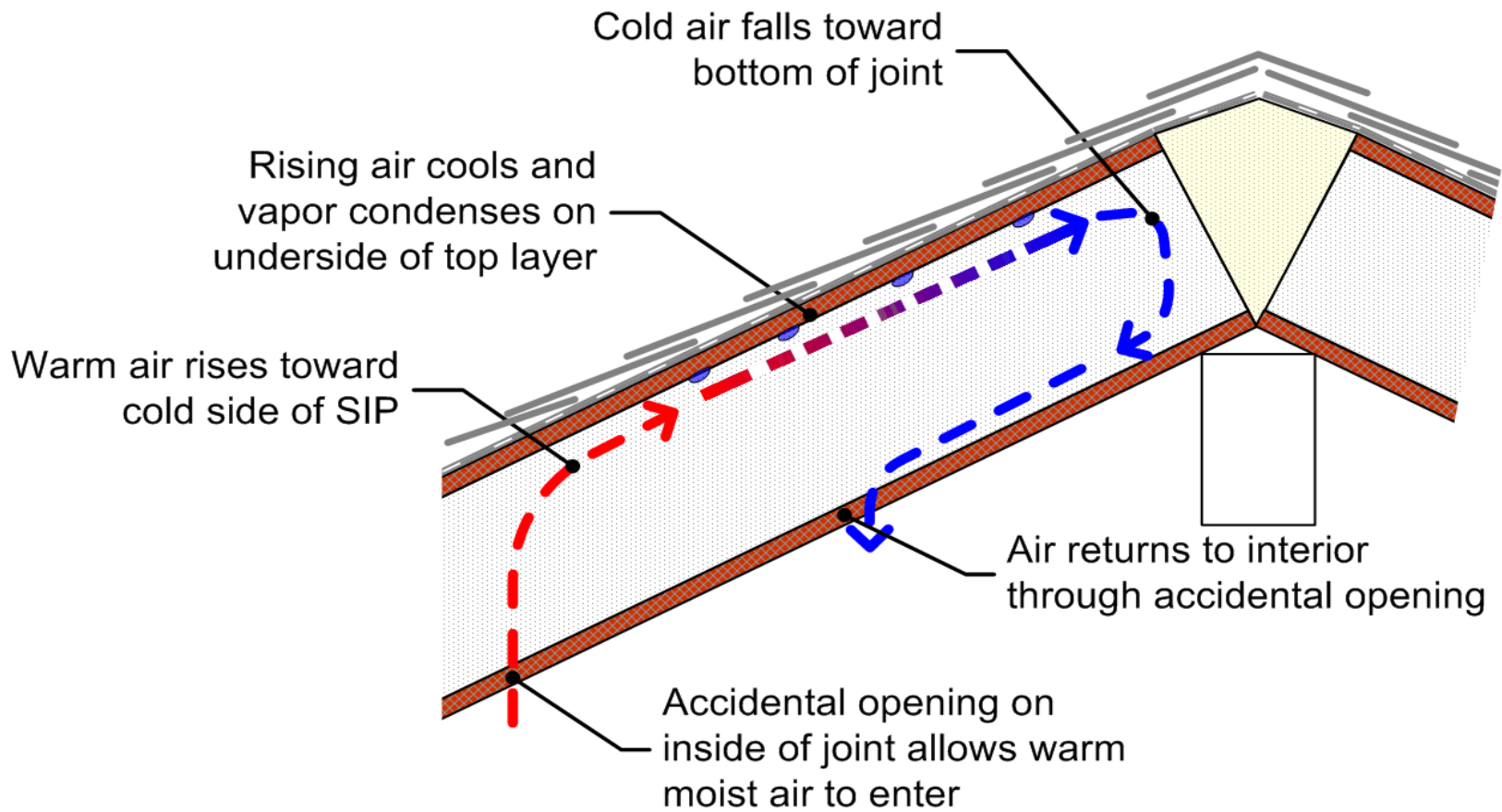


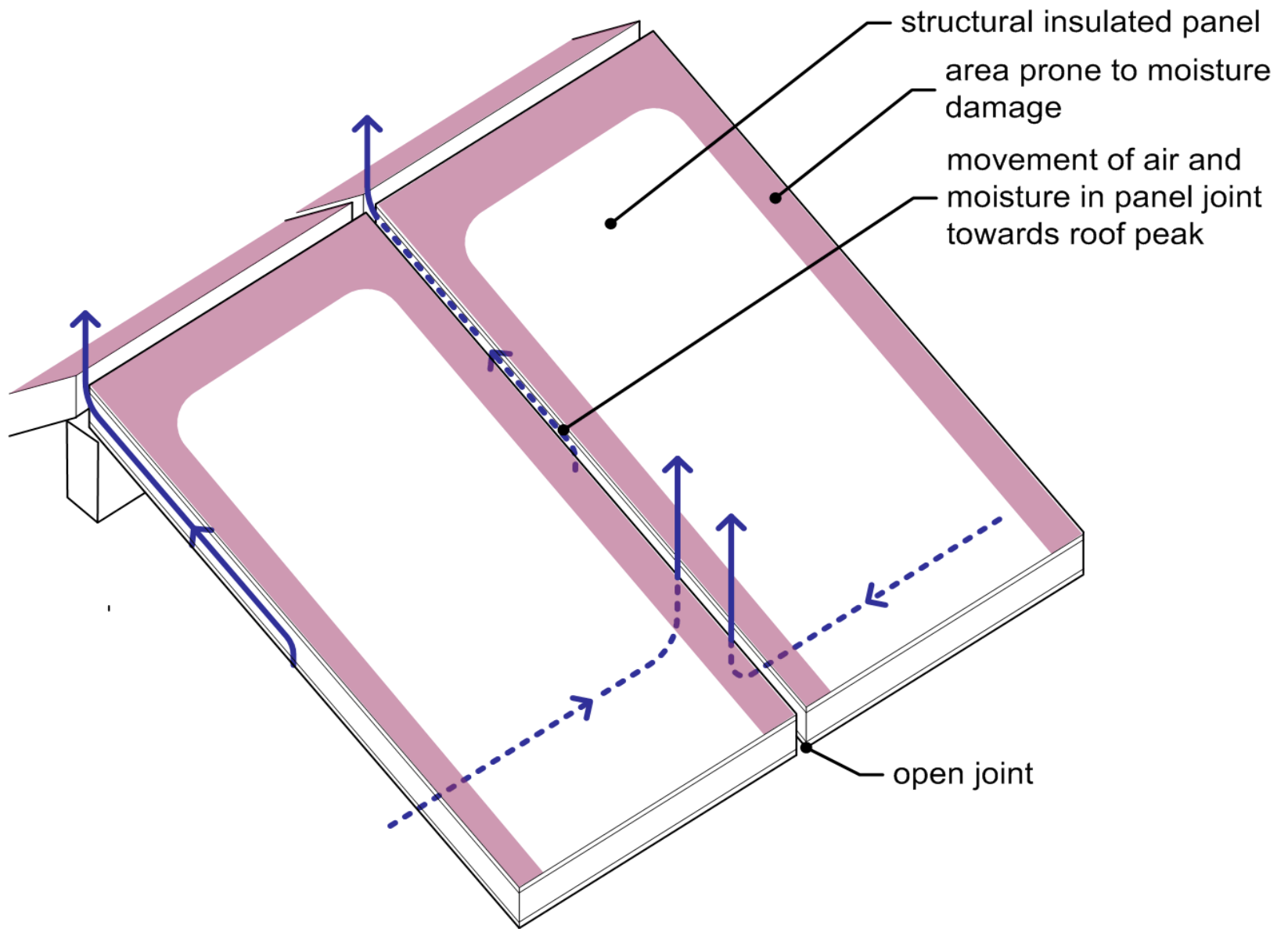


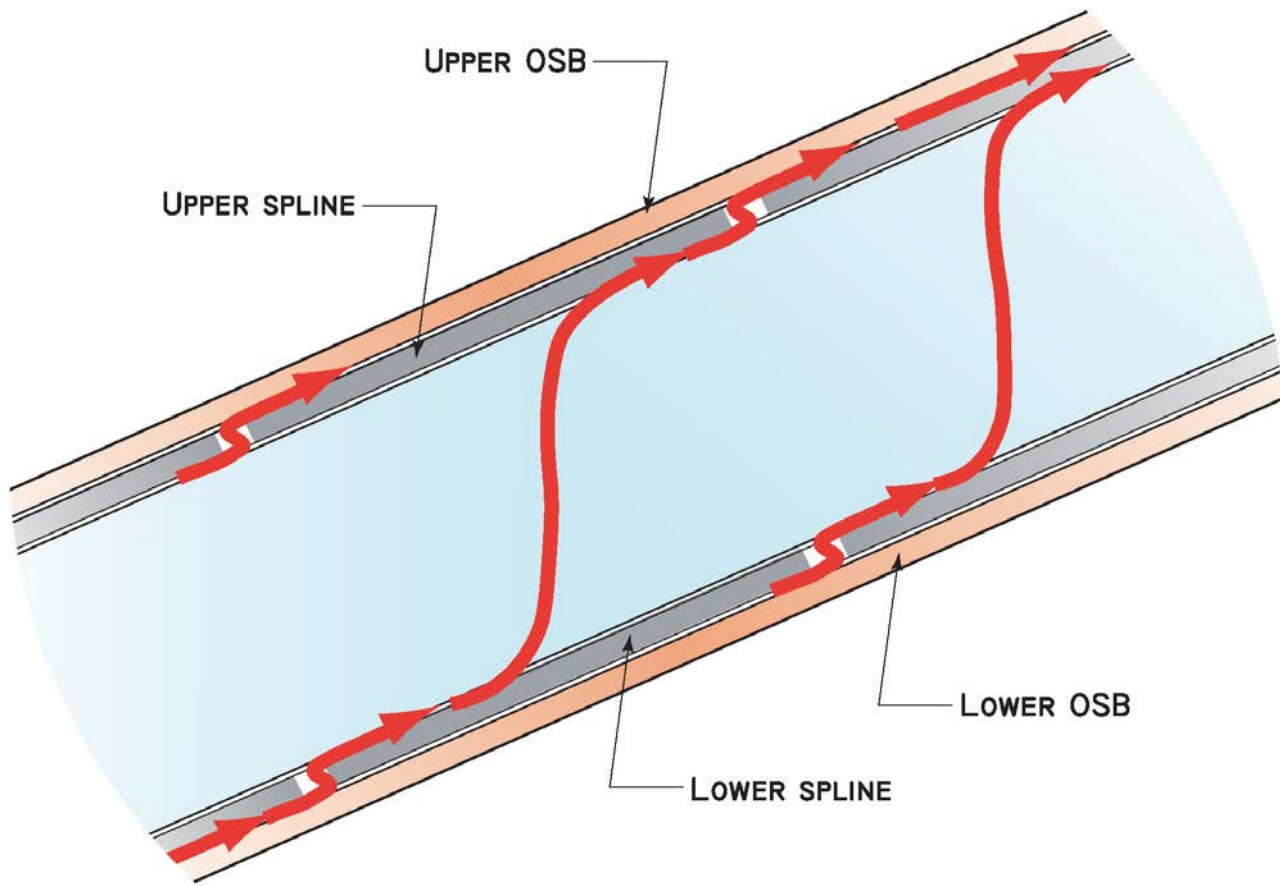




















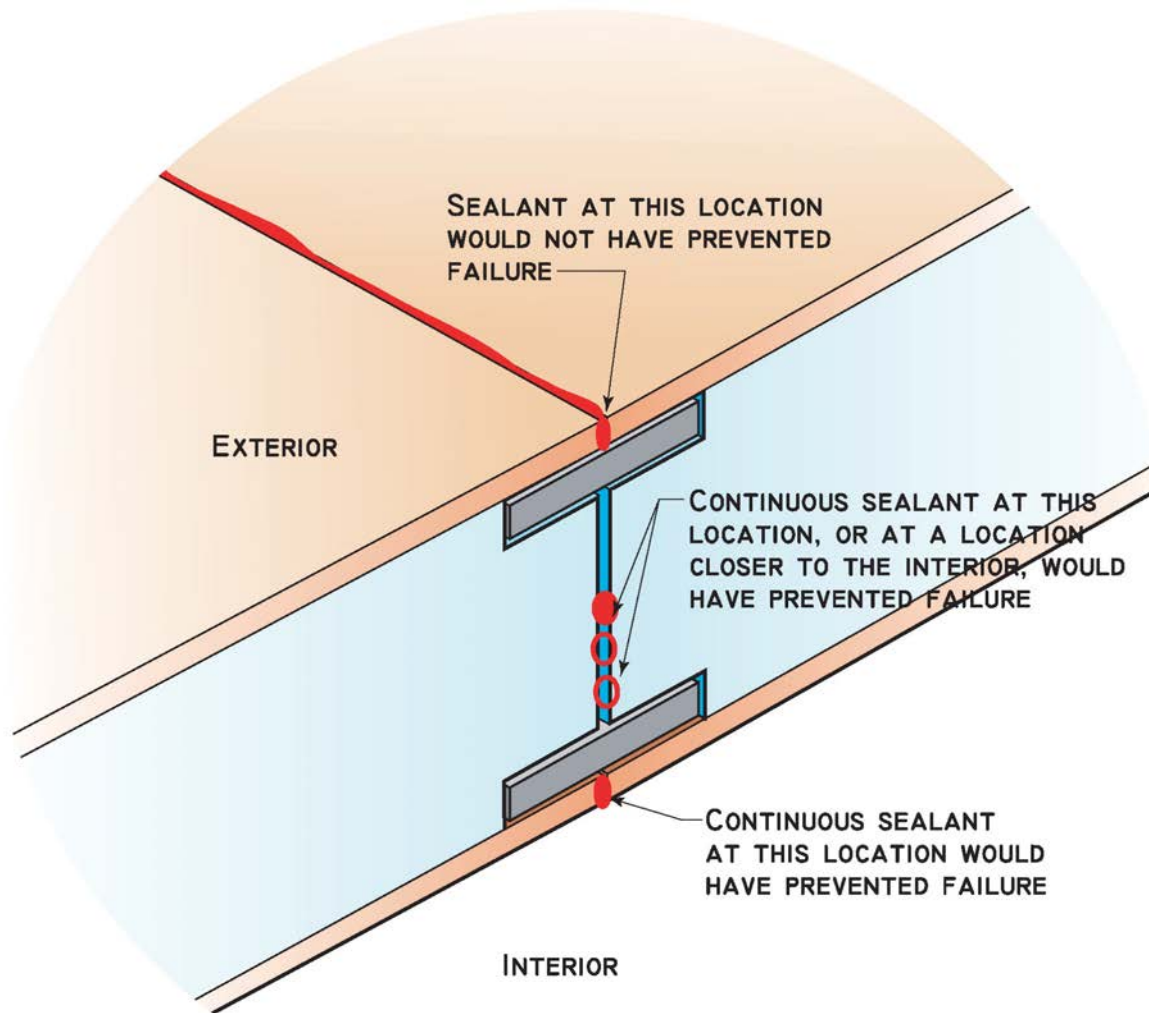


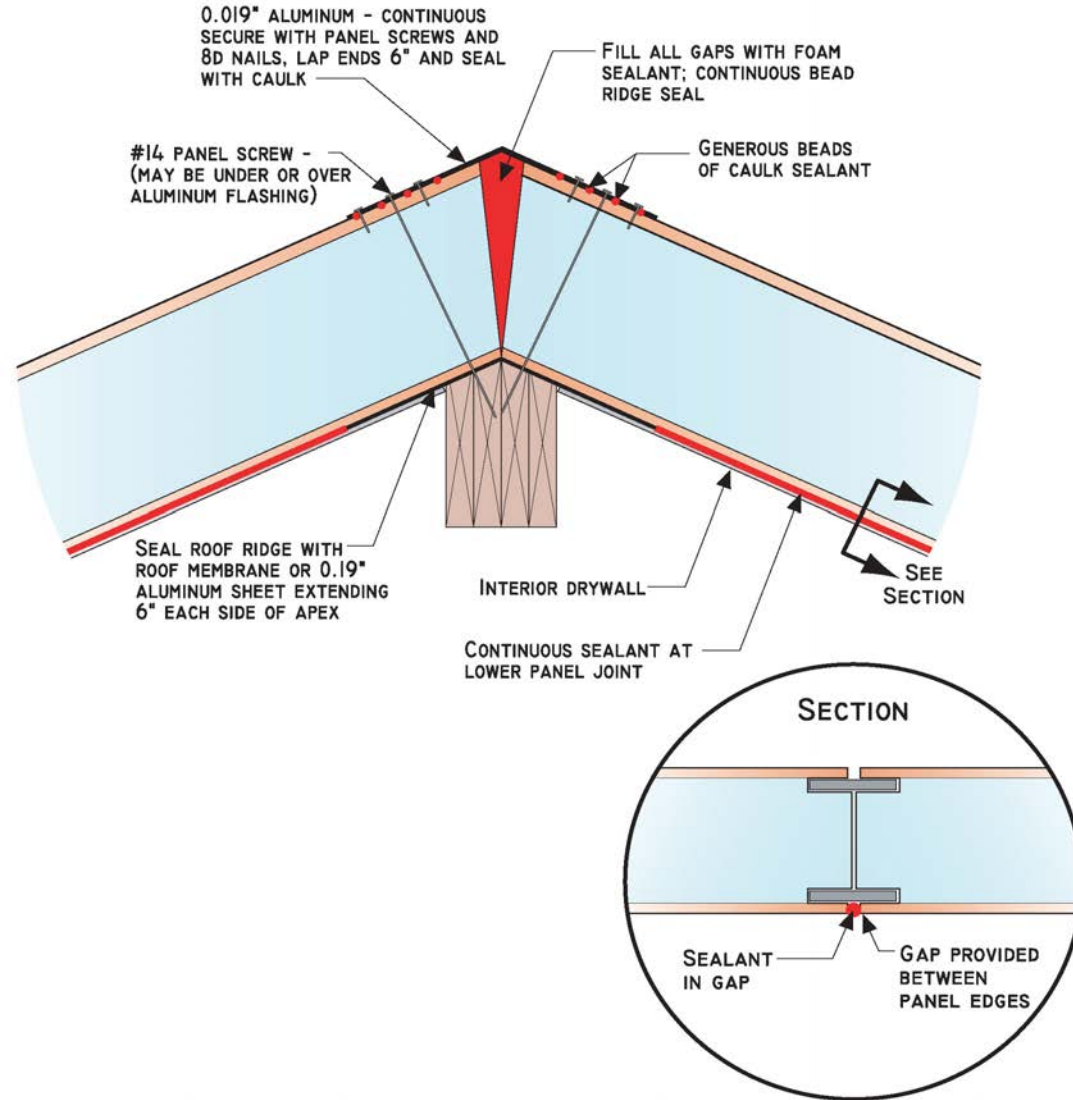














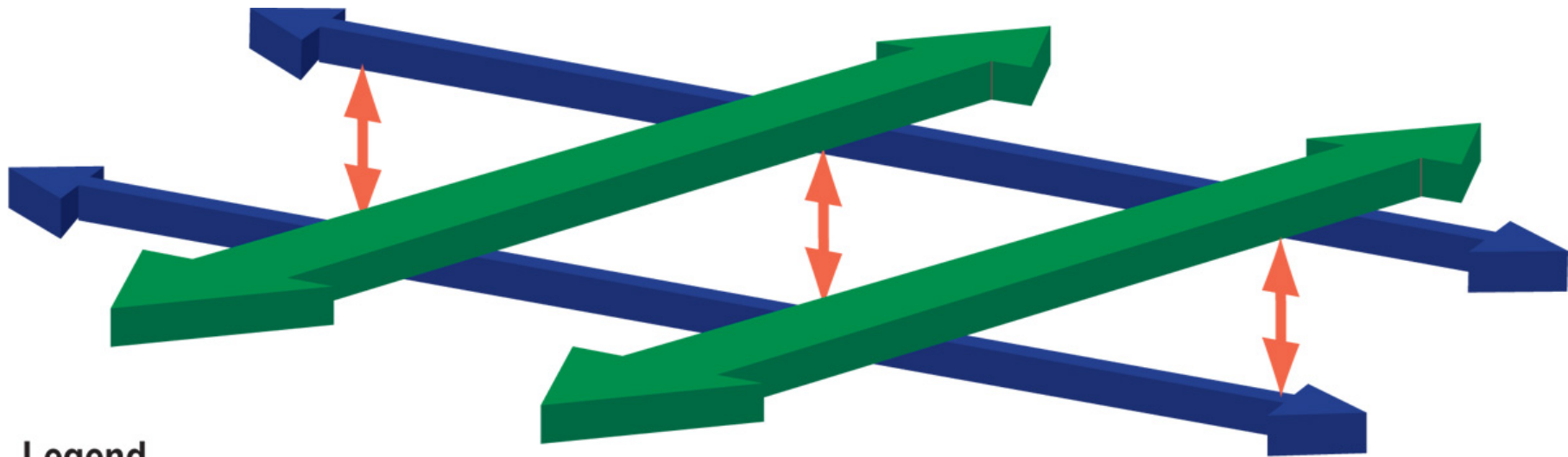









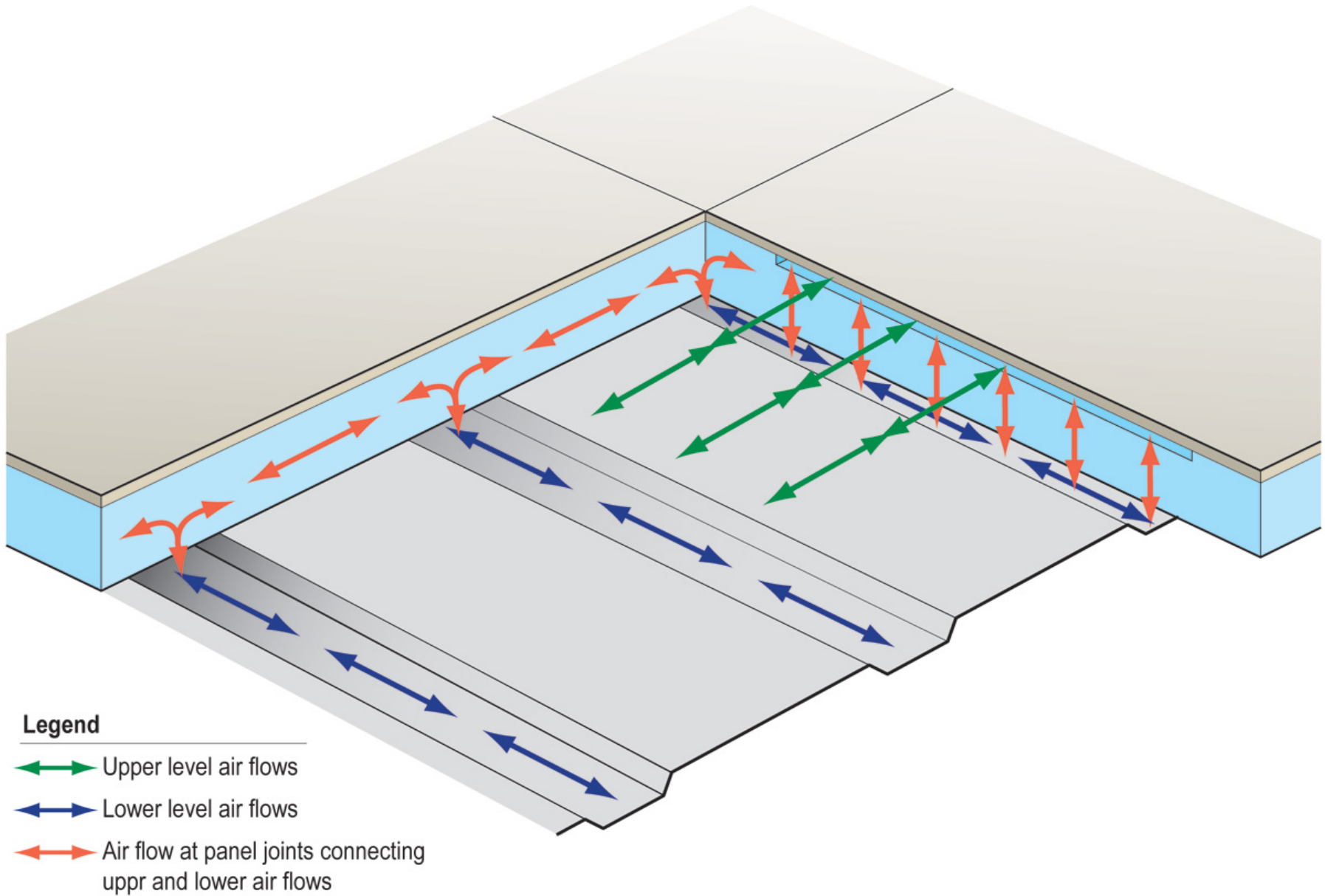


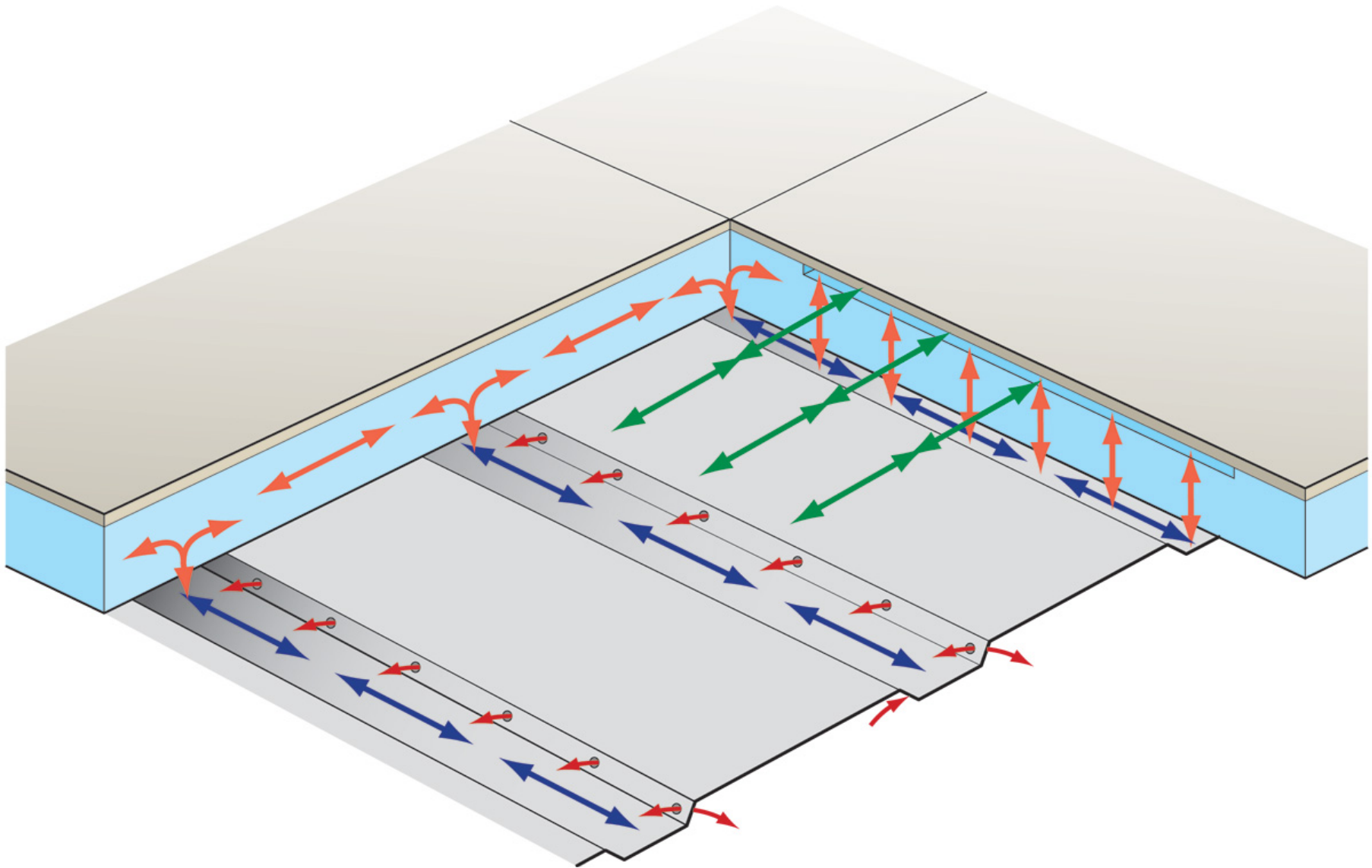




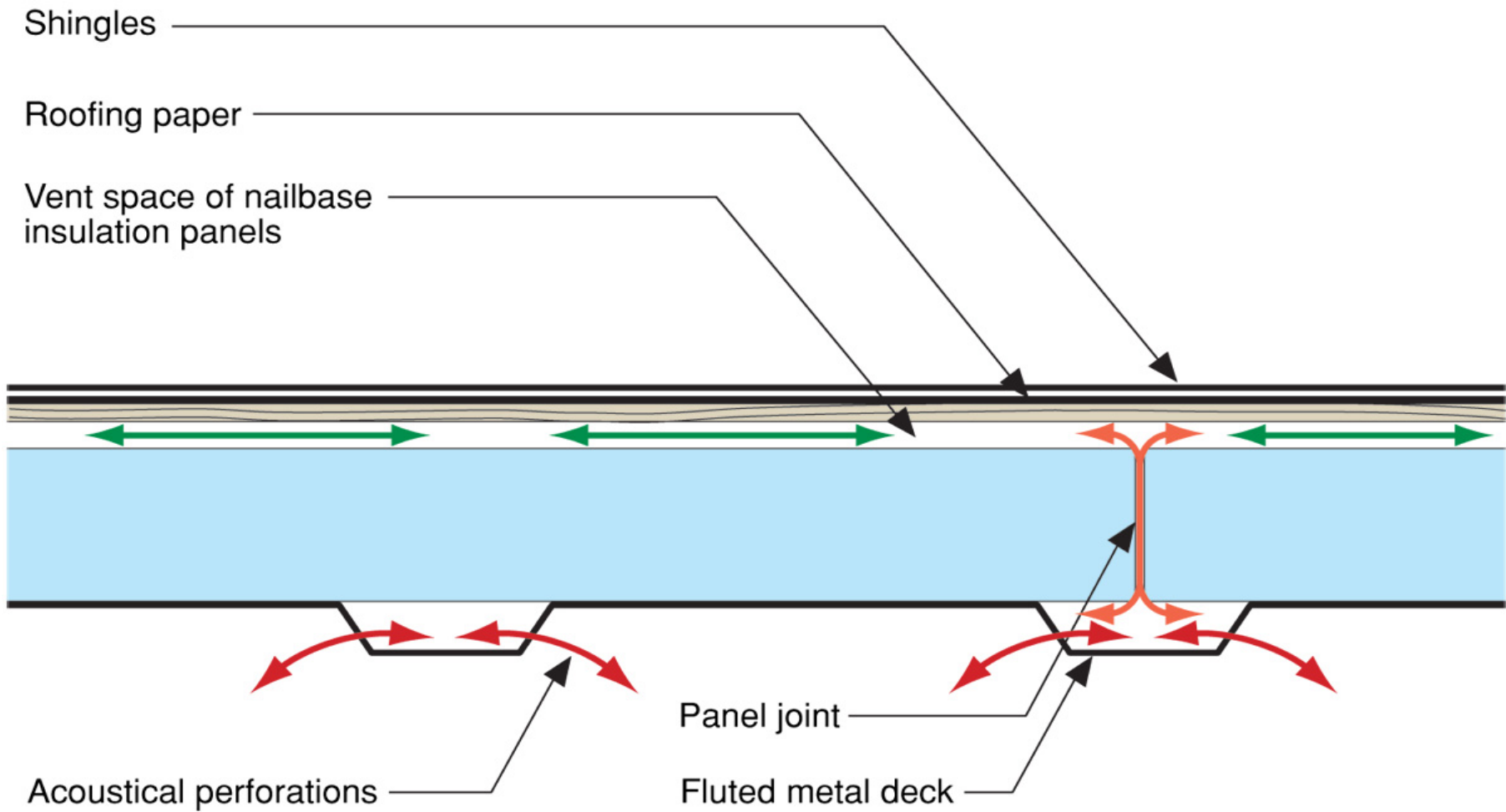
Legend

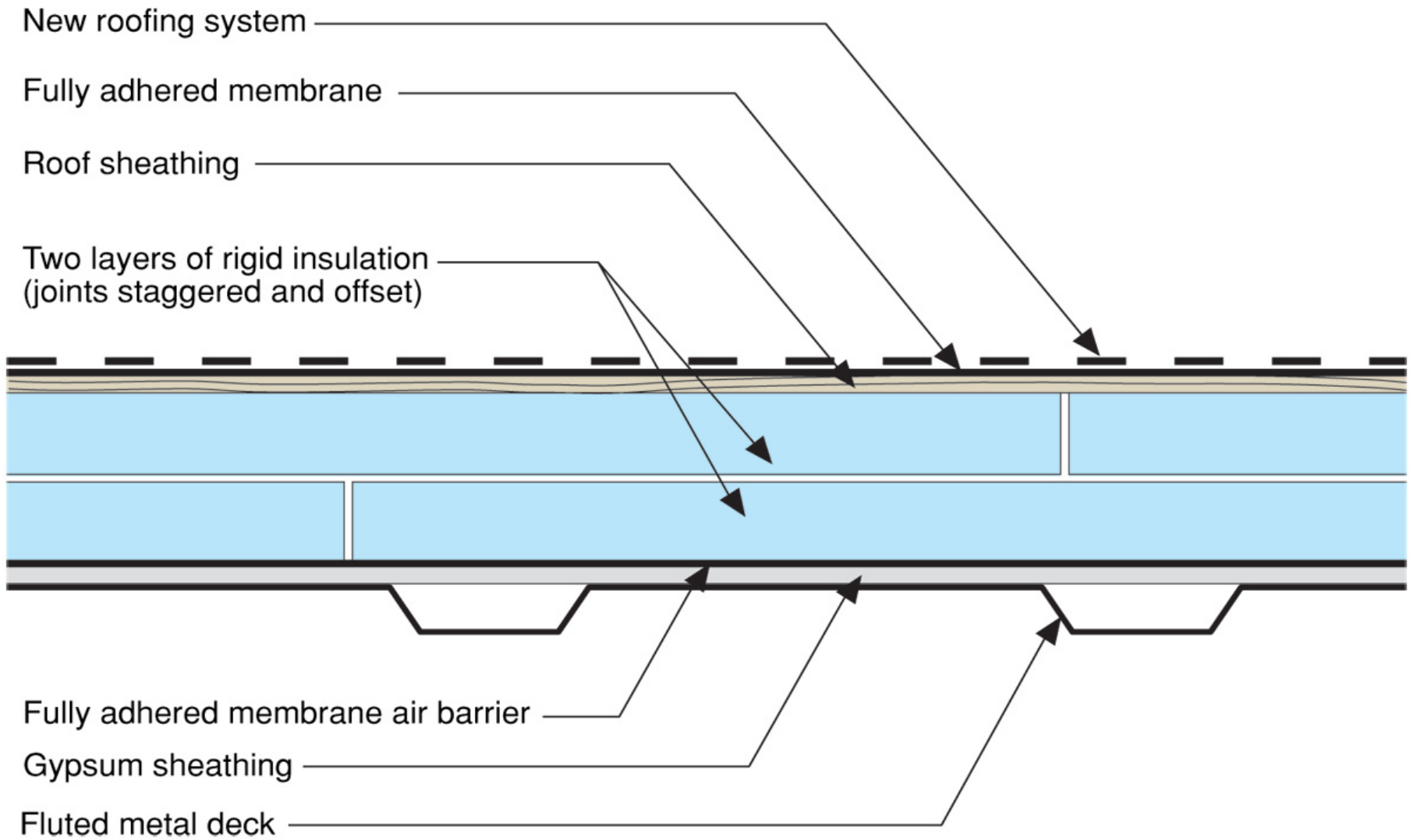
-  Upper level air flows
-  Lower level air flows
-  Air flow at panel joints

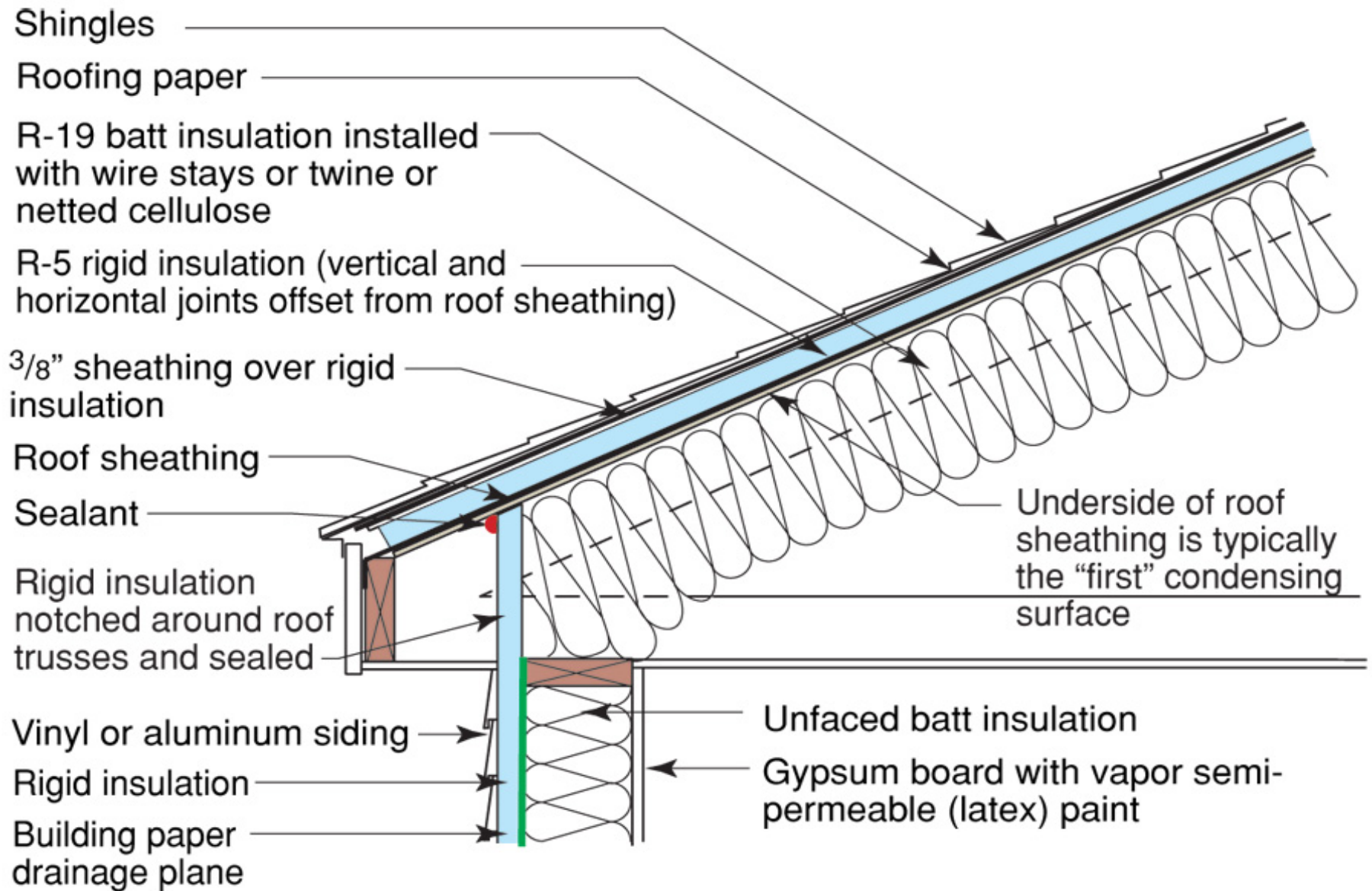


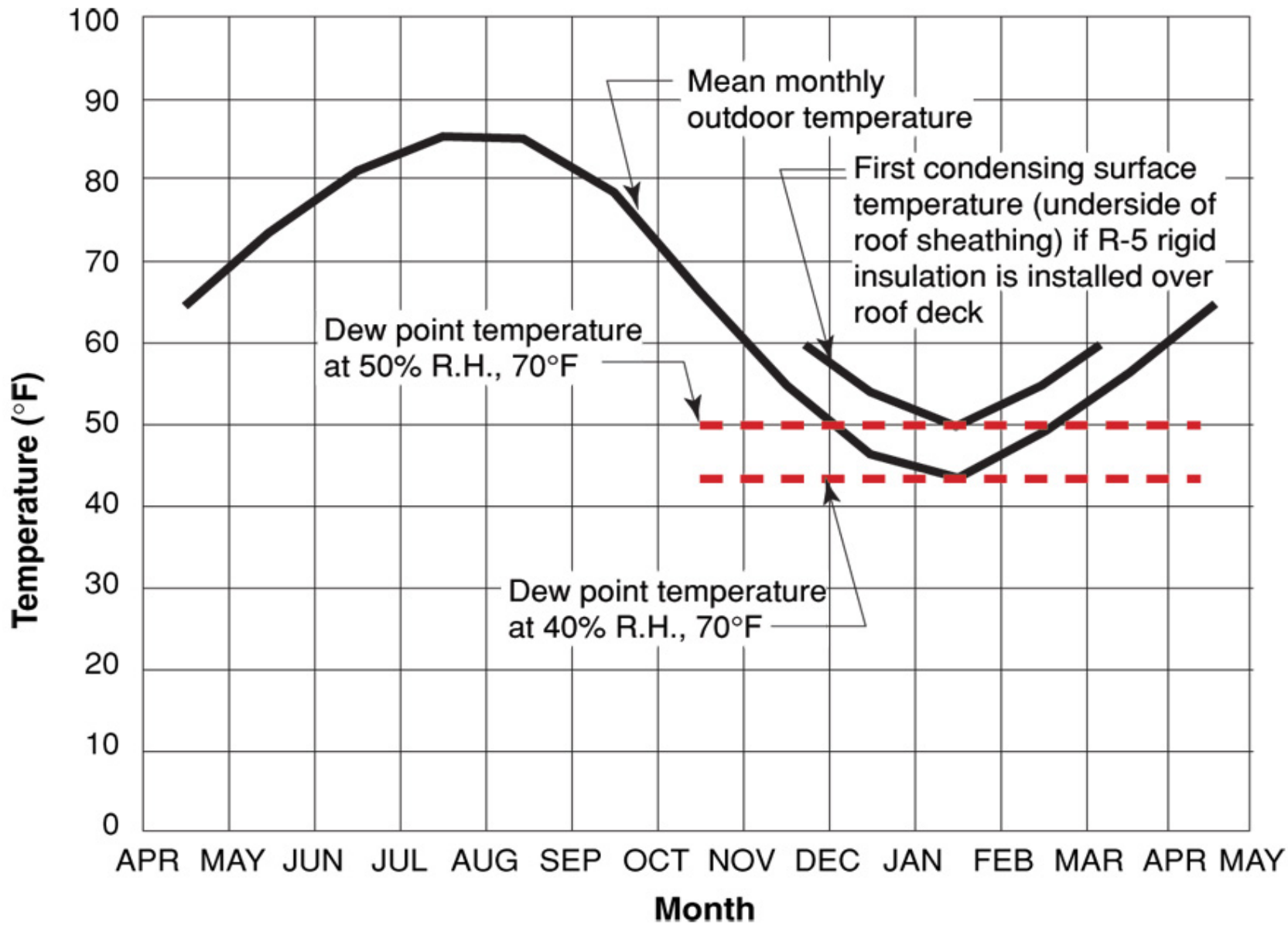


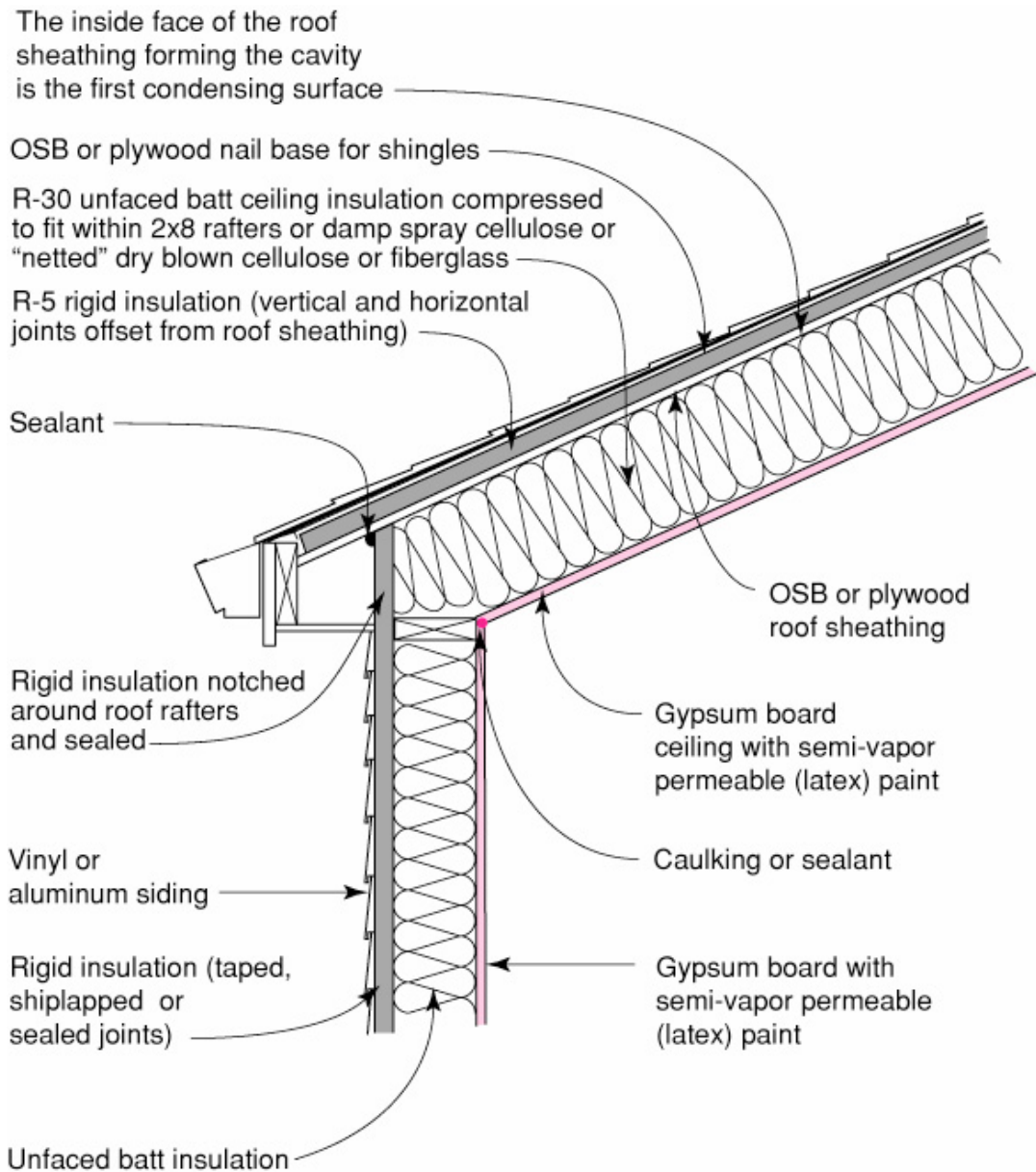


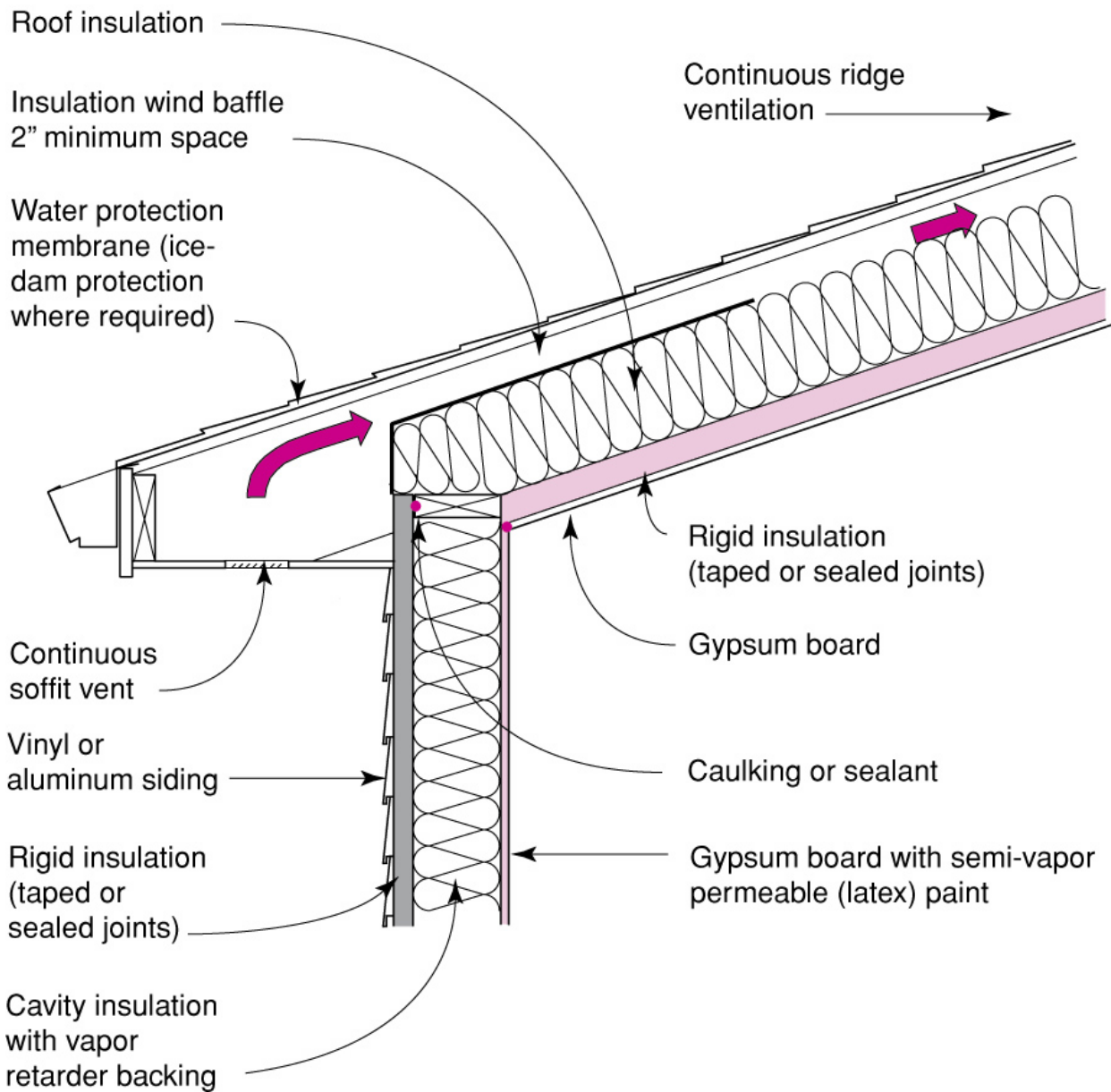


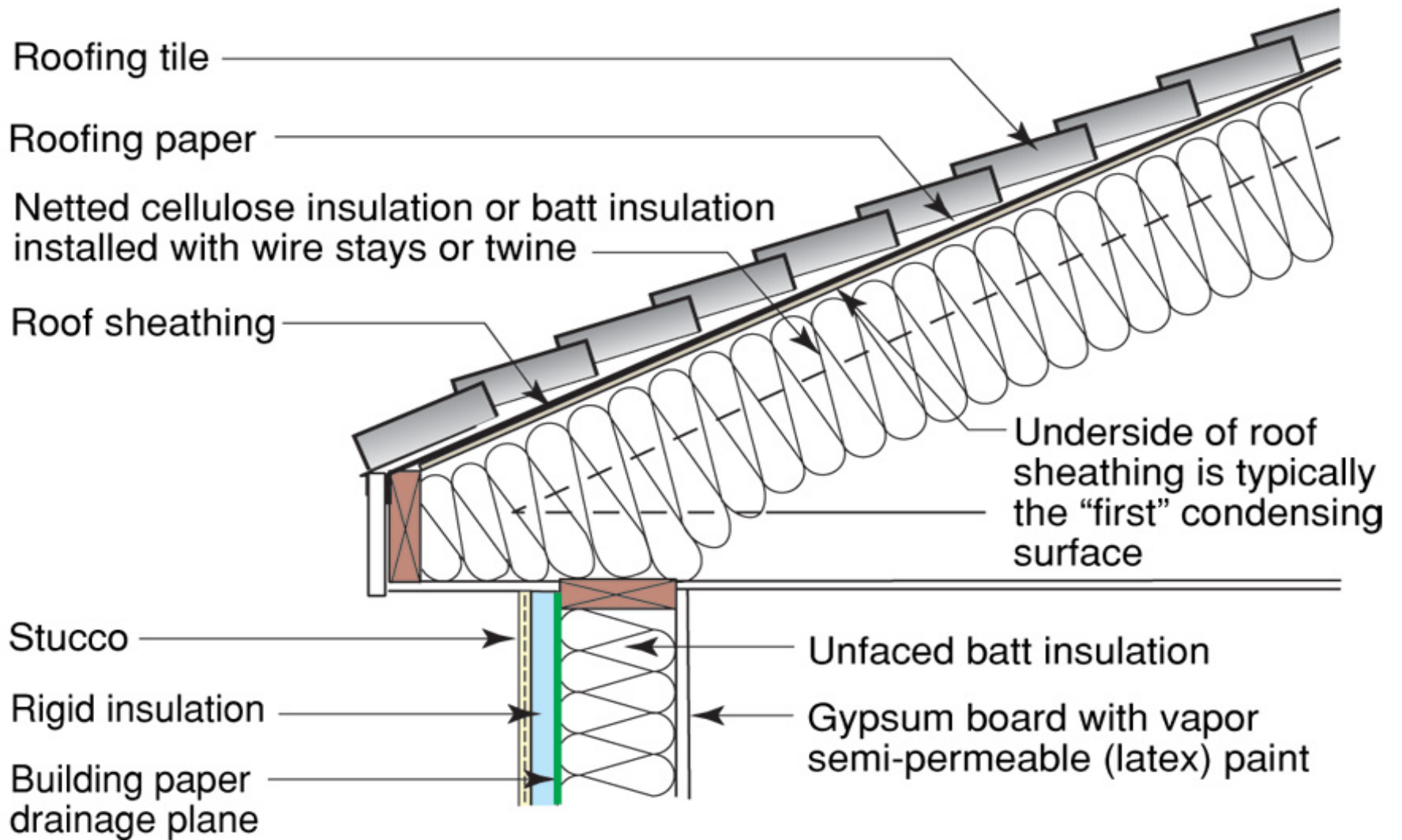








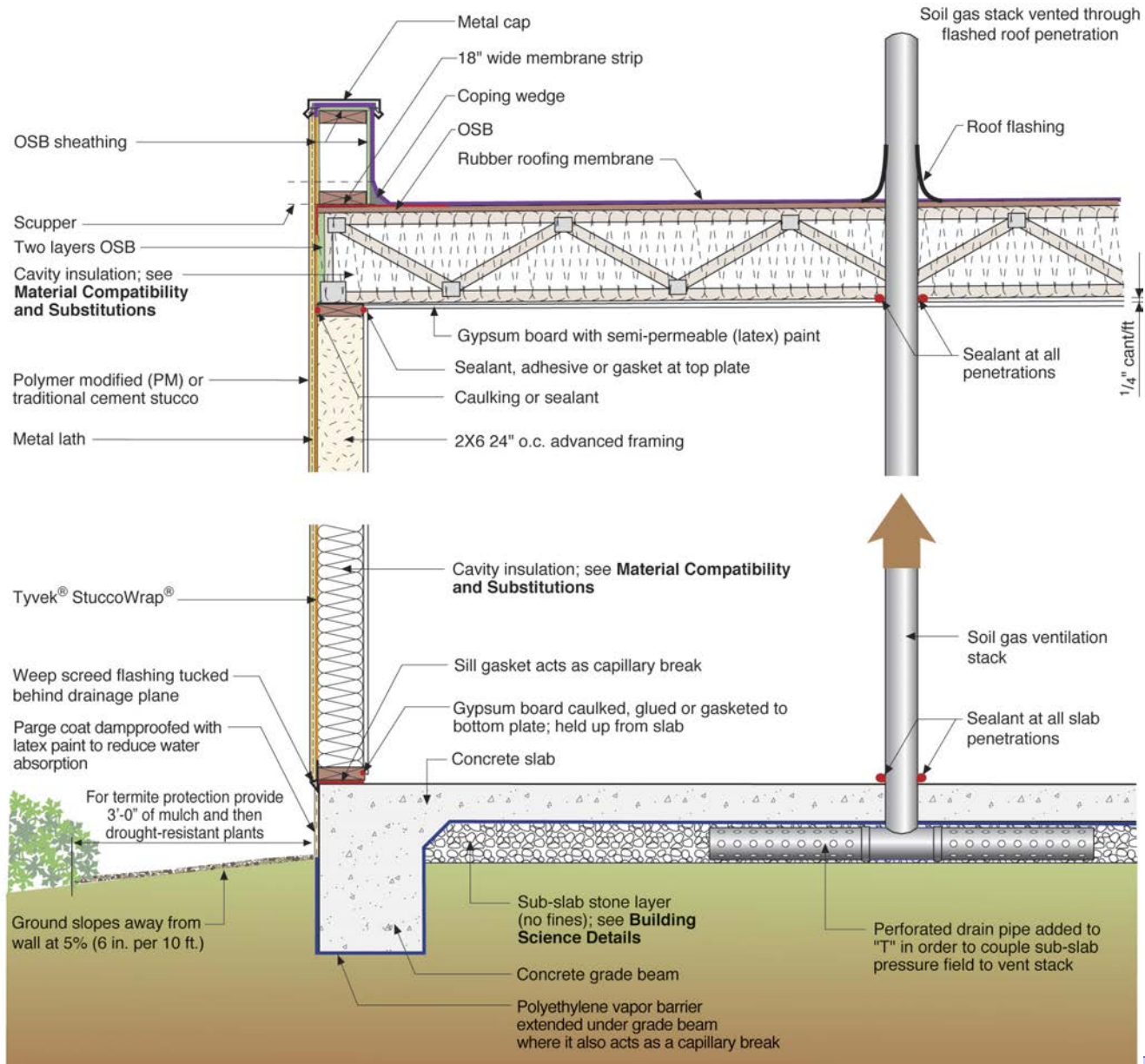


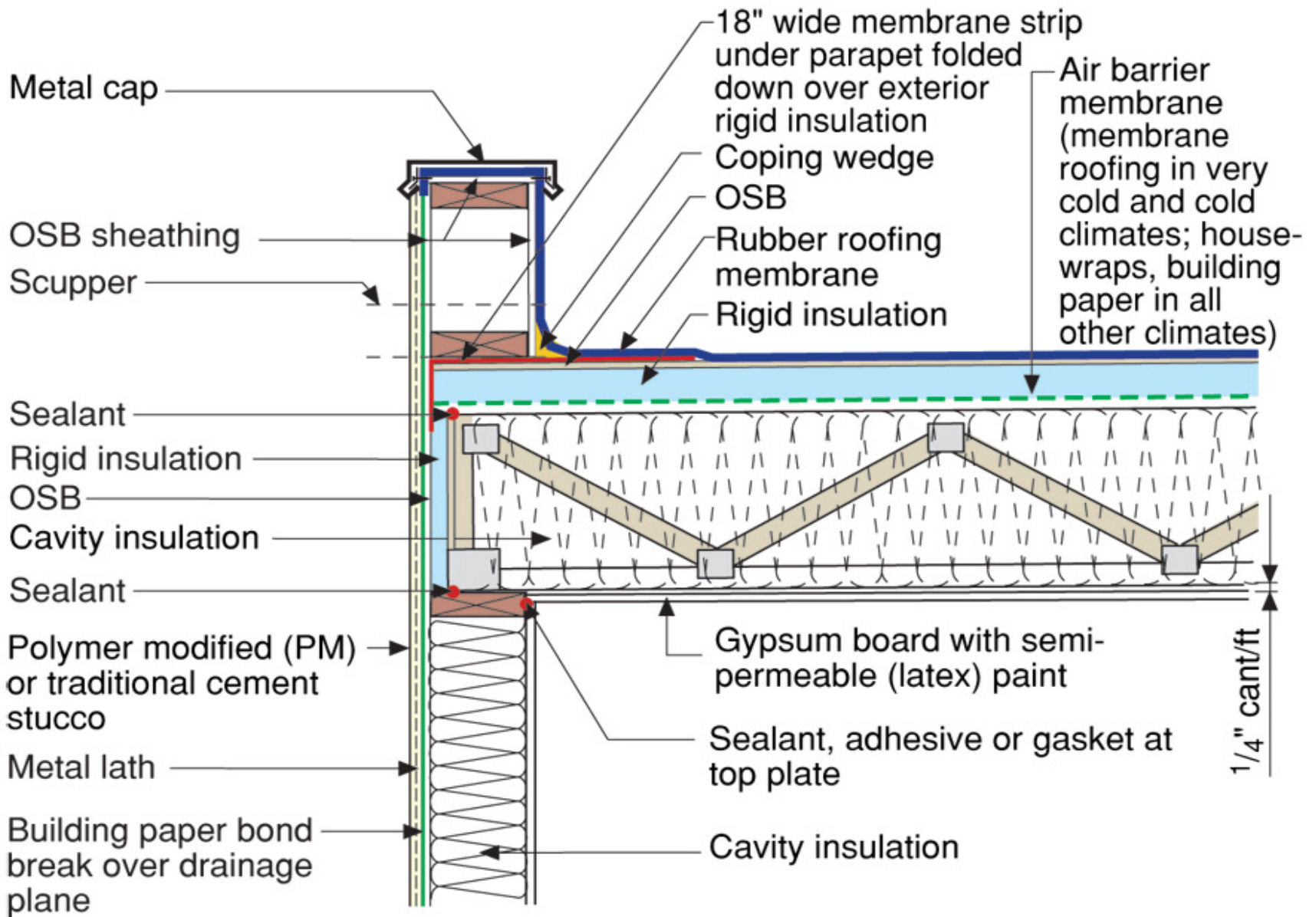


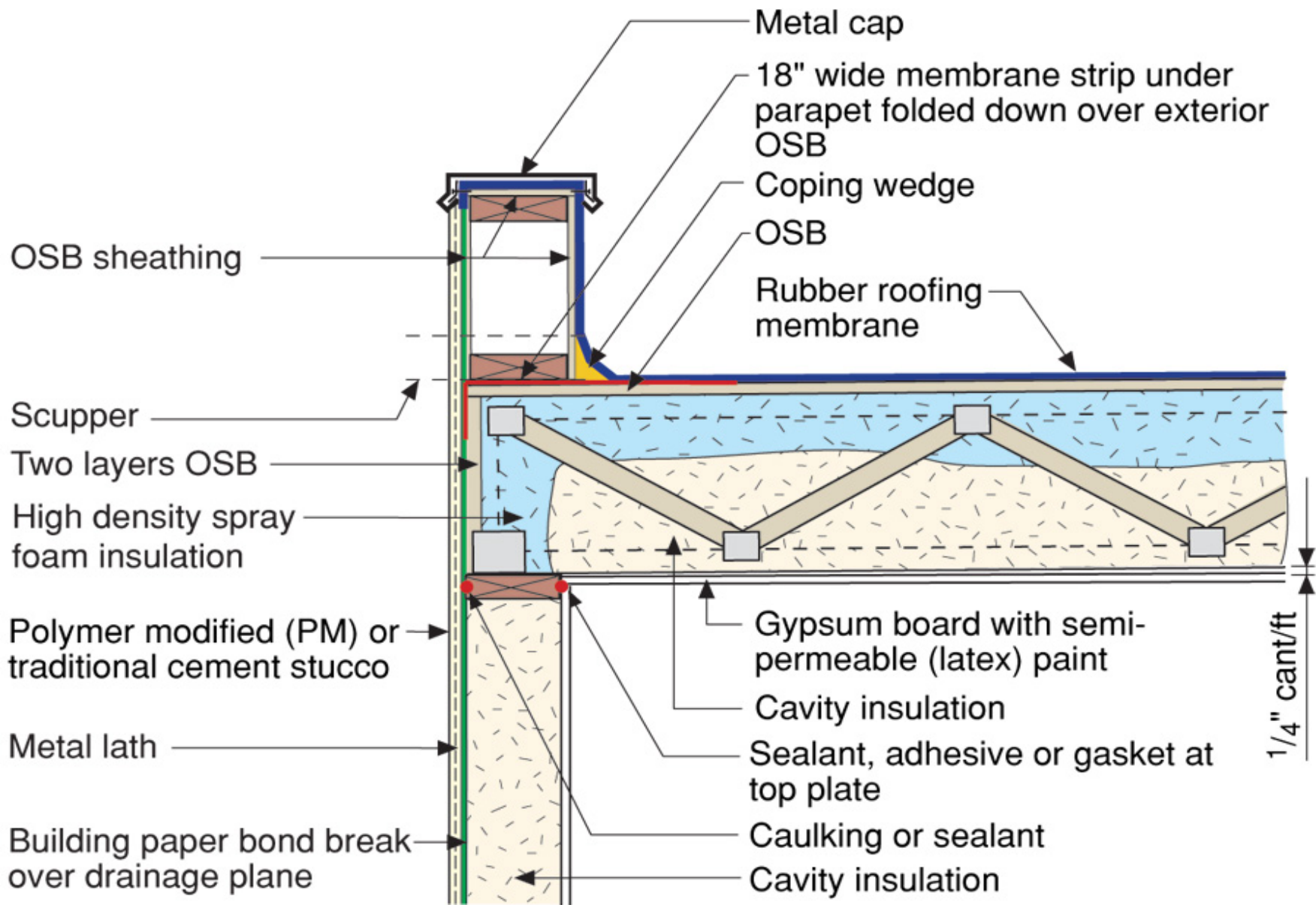




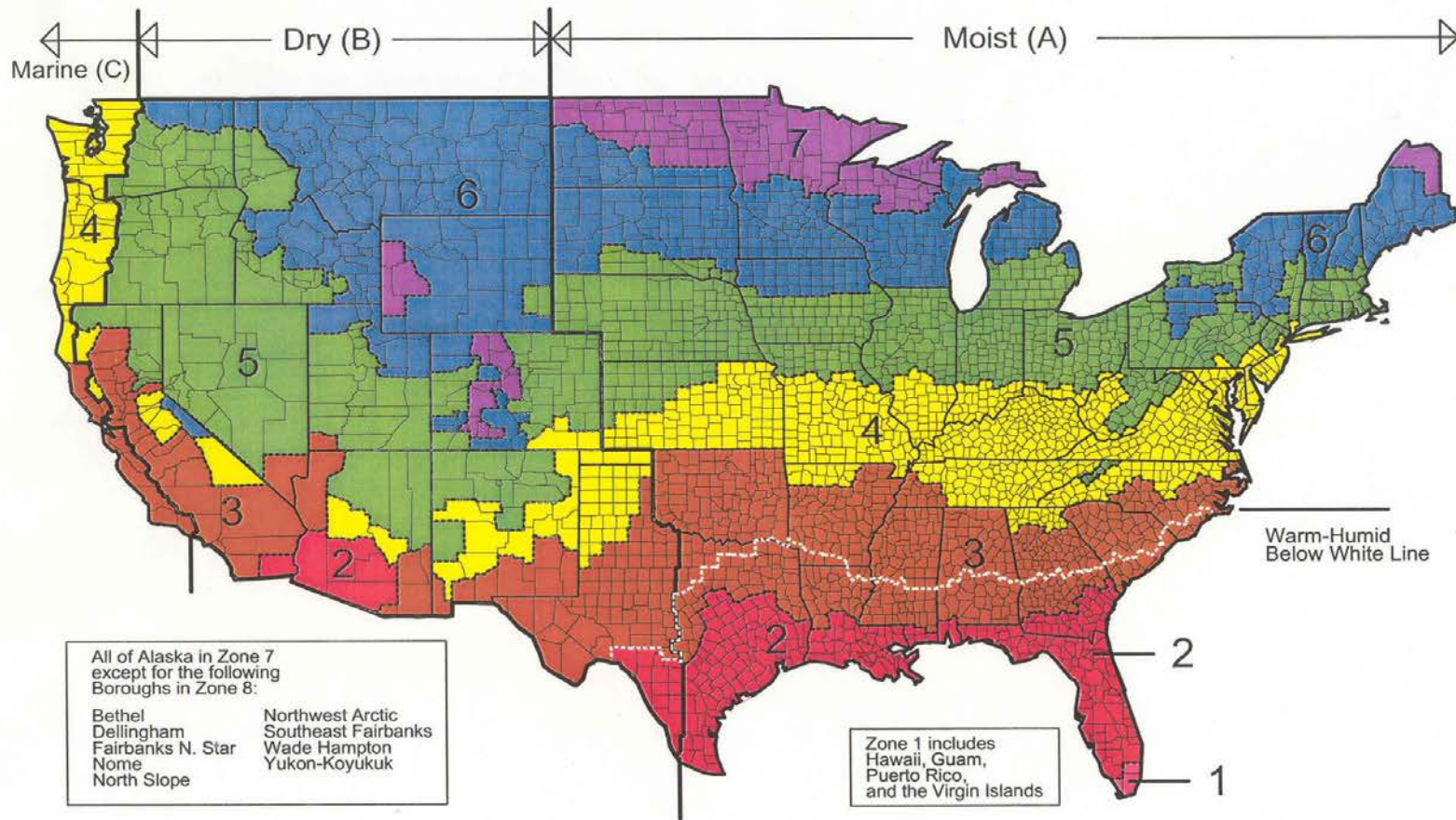








Map of DOE's Proposed Climate Zones



March 24, 2003

