Product Specs
ICYNENE LD-C-50® US
ICYNENE LD-C-50® CDN
ICYNENE LD-R-50®

Design Notes

Vapor Barriers

Water vapor can be transported by two mechanisms: vapor diffusion and air leakage. Under most circumstances, the dominant mechanism by far is air leakage and vapor diffusion is relatively minor. Since Icynene® controls air leakage so effectively, a vapor barrier is usually not required in addition to Icynene®. However, in extremely cold climates (climates colder than 7,500 heating degree days eg. Madison, Wisconsin or colder), swimming pool areas, refrigeration rooms, insulated air conditioning ducts, or any other condition where the vapor drive is high a vapor barrier would be required. We also recommend to apply a vapor barrier to the surface of Icynene® in unvented attic applications in cold climates and to Icynene applied underneath floor decks in crawlspaces located in hot and humid climates. In some areas a vapor barrier is required by the building code.

A vapor barrier paint is usually the simplest solution in cases where a vapor barrier is needed. The surface of the drywall can be painted with this paint or the paint can be sprayed directly onto the surface of Icynene®. It is important that the vapor barrier be placed on the warm side.

Product data sheets of some vapor barrier paints are provided as a reference. These are only examples and any similar products can be used. Since most building inspectors are accustomed to polyethelene vapor barriers, it would be recommended to discuss this alternative method with the building inspector prior to application.

- Benjamin Moore (Super Spec) (PDF-67kb)
- Devoe (Wonder-Prime) (PDF-3kb)
- Dulux (Ultra-Hide) (PDF-58kb)
- Sherwin Williams (Promar Vapor Barrier) (PDF-154kb)
- Sherwin Williams (SF-1) (PDF-19kb)