

TECHNICAL NOTE 97.02

Loose Applied Membranes with Protected Membrane over Monolithic Concrete Decks

Building codes often require a specific slope. Some existing decks will require tapered insulation to achieve the code mandated slope or to overcome a negative drainage situation. A cost effective solution is to use a loose applied single-ply membrane with tapered insulation over the concrete deck.

When this solution is proposed, T. Clear Corp. will provide a 10-year Total Performance Warranty, if the system is installed by a T. Clear Authorized Contractor; and the following conditions are met:

1. The membrane is currently approved and is installed in accordance with T. Clear Corp. Specifications for EPDM or Thermoplastic membranes.
2. A peel and stick or other adhered asphalt-based vapor barrier,* with a thickness of 20 mil or greater, is bonded to the concrete deck prior to the application of the tapered or other insulation. (See T. Clear Specification C-MB-1-AD)
3. Total average insulation R-Value beneath the membrane is no more than 50% of the total R-Value of the system. (Note: for high humidity applications a specific analysis of the system is required to determine R-Values that bring the dew point above the membrane.)
4. All deck penetrations shall be sealed to prevent air infiltration. (See T. Clear Tech Note #20 for details)

Exceptions to No. 2 and No. 3 will be considered where there is limited vapor drive and/or mild climatic conditions. T. Clear Corp. does not approve dead level decks with loose applied membranes.

* Currently acceptable vapor barriers are W.R. Grace Ice & Water shield, Hyload PMVB, Tamko Moisture Guard, Malarkey Artic Seal, Jiffy Seal, any modified bitumen self-adhering membrane, any one/two-ply BUR vapor barrier. Check membrane manufacturer for compatibility.