



Bay Insulation Systems Technical Bulletin 001:

Air Barriers and Insulation Vapor Retarders

Are air barriers required?

Yes. The 2016 ASHRAE 90.1, ASHRAE 189.1, and IECC codes are now calling for air barriers.

What are methods for compliance?

1. Materials Compliance Option: Skyliner, Opti-Liner and Lamtec facings all pass the ASTM E2178 test as an approved air barrier.
2. Assembly Compliance Option: Skyliner, Opti-Liner and faced fiberglass using Lamtec facings in standard assemblies when properly installed have performed well and were within the required leakage requirements in the MBMA tests to determine if standard metal building roof and wall assemblies pass the air infiltration requirements. Special attention should be given to joints and transitions between floor to wall, wall to roof and corners.
3. Whole Building Compliance Option (Air Blower): this is probably the most difficult of the three options. For this option final compliance is the passing of an Air Blower test, per ASTM E779-03 "Standard Test Method for Determining Air Leakage Rate by Fan Pressurization". If the building fails this test, the contractor must fix and seal joints and then test again, and again until it passes. If this option is selected for compliance the contractor cannot switch to the Materials or Assembly option for compliance.

Can the traditional assemblies meet the air barrier requirements?

Yes, Skyliner, Opti-Liner and Lamtec facings are all ASTM E2178 compliant. However, IECC requires that all joints be sealed.

Is an additional air barrier needed if a vapor barrier is already being used?

Air barriers require both the correct material and the proper installation. Metal Building Insulation Systems with properly sealed vapor barriers such as SkyLiner, OptiLiner, Lamtec facings, or other approved exposed vapor barriers, qualify as an air barrier. Separate air barriers are not required with properly installed vapor barriers. SkyLiner, OptiLiner, Lamtec facings, or other approved exposed vapor barriers that are ASTM E2178 compliant will be acceptable as air barriers with proper installation. Again, IECC requires that all joints be sealed to meet the air barrier requirement.

Questions? Contact your Bay District Manager.