

BULLETIN

Product Updates · News & Information

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Should I tape the seams when installing IKO Enerfoil?

Determining if the seams should be taped

IKO's Enerfoil is manufactured using foil facers that are laminated to both sides of the insulation board. These facers have a low vapour transmission rate, in simple terms, Enerfoil does not "breathe" very much. Enerfoil can be used as an all-in-one insulation, sheathing and weather barrier however, if used as an all-in-one, consider the following before taping the seams when dealing with a conventional wall construction which includes cavity insulation.

1. Is there a vapour barrier? An interior vapour barrier, such as polyethylene, acts as a safety mechanism by controlling the rate at which moisture from within the home is permitted to penetrate or diffuse into the wall system. NO vapour barrier? Do not tape the seams.
2. Minimum thickness of Enerfoil required? The National Building Code has published guidelines for low permeance insulations such as Enerfoil. In section 9.25.1.2 of the NBC, there are set guidelines that determine the "minimum ratio" of insulation sheathing required in order to reduce the risk of condensation. If you don't know what this "minimum ratio" is, then we recommend that the seams not be taped. So when is it ok to tape the seams? As a rule of thumb, if there is an existing vapour barrier AND 1" or more of Enerfoil (applies to major Canadian cities, refer to local code authorities for exact minimum requirements) is being installed, the seams can be taped.

Leaving seams un-taped?

1. Use Enerfoil in combination with batting. Enerfoil offers a thermal resistance of R-6 per inch. By simply adding an exterior insulation, the insulating efficiency of the home is increased by approximately 30%-50% depending on the type of framing material.
2. If you are uncertain about taping the seams because of the reasons mentioned in this bulletin contact IKO for more information or do the following:
 - i. Install Enerfoil horizontally as to cover all framing members
 - ii. Fasten using washered nails or screws and leave seams un-taped.
 - iii. Install a weather barrier (house wrap) ensuring that the building envelope is completely sealed.

The above system is a typical construction type for residential dwellings. Wall damage is often the result of moisture that has been driven into the wall, some potential causes can be attributed to air leakage, excess interior RH, water leakage or improper insulation practices. When used in combination with other air and vapour controls such as mentioned above, Enerfoil functions only as an added insulation barrier and sheathing, outperforming most rigid insulations offered in the market today.