

VAPOR PERMEABLE LIQUID AIR BARRIERS:
HENRY Air-Bloc 07, Air-Bloc 31MR, and Air-Bloc 33MR

What is a vapor permeable air barrier?

A material that resists the passage of air and bulk water, but allows the passage of moisture vapor through diffusion under a difference in pressure.

Where should a vapor permeable air barrier be located within the wall assembly?

Since it allows the passage of moisture vapor it can be located anywhere within the wall assembly – even on the cold in winter side. However, since these membranes resist the passage of water they are of most value when positioned in the cavity of a typical double wythe wall assembly to act as a waterproofing layer preventing the ingress of water from the outside to the inside of the building envelope.

What is a typical application?

Normally a vapor breathing air barrier is used where insulation is to be installed within or inside of the back-up wall. Moisture protection is still required but in cold climates, we don't like to see a vapor barrier on the "cold in winter" side of the insulation.

What's the difference between Air-Bloc 07, Henry Air-Bloc 31MR, Air-Bloc 33MR?

Air-Bloc 07 is a single component, solvent type, polymer modified bitumen membrane, suitable for year round use.

Air-Bloc 31MR is a single component, non-asphaltic, rubberized emulsion membrane. It is low odor, and can be applied from the inside side of the wall in occupied buildings making it ideal for retrofits. It is water-based with a minimum recommended application temperature of 40°F.

Air-Bloc 33MR is a single component, UV Resistant, fire resistive, rubberized emulsion membrane. Because it is UV resistant, it is ideal for wall assemblies with open face cladding panels. It is water-based with a minimum recommended application temperature of 40°F.

How are these membranes applied?

Air-Bloc 31MR and **Air-Bloc 33MR** can be applied by spray, roller or trowel application.

Air-Bloc 07 is a trowel applied material. Walls with fewer openings lend themselves well to spray application of Air-Bloc 31MR or Air-Bloc 33MR and these are normally done by specialty contractors who own the equipment required to apply the membranes.

What happens at locations where there is a change in substrate?

The appropriate Henry self-adhered transition membrane and primer must be used at the interface of most dissimilar materials. Examples are sheathing to window or door, wall to column or shear wall, etc. (Refer to the respective Henry Air-Bloc technical data sheet for specific transition sheet recommendations). The Henry self-adhered transition membranes are typically installed prior to application of the Air-Bloc liquid air barrier.

What are the steps involved in a successful Henry Air-Bloc project?

1. Typical installation of Air-Bloc system requires application of Henry primer and self-adhered transition membrane at fenestrations, change-in-plane, interface of dissimilar substrates, wall penetrations, etc.
2. Joints in sheathing are treated per the options listed on the respective Henry Air-Bloc technical data sheet.
3. Finally, Air-Bloc liquid air barrier is applied to the field of the wall.

How long can Henry Air-Bloc 07, Air-Bloc 31MR, or Air-Bloc 33MR be left exposed?

Good practice is to allow all **Air-Bloc** membranes to be left uncovered for 48 hours to allow curing. After curing, **Air-Bloc 07** and **Air-Bloc 31MR** membrane should be covered as soon as practical to protect them from damages caused by UV or from other trades. Contact Henry if exposure beyond six weeks is expected.

Air-Bloc 33MR is UV resistant and can be left exposed.

Do we need to treat the joints in the sheathing?

Yes. The Henry Air-Bloc Technical Data Sheet lists several options for treating seams of exterior sheathing.

For complete installation requirements and recommendations, refer to the Henry Air-Bloc Technical Data Sheets at www.henry.com or upon request from Henry Product Support at 800-486-1278.