



INSTALLATION GUIDELINES

AIR-SHIELD™ ROUGH OPENING

This document has been created as an addendum to our **AIR-SHIELD** technical data sheets to provide some additional information regarding the application of transition membranes for rough openings, such as windows and doors.

To remain current in the industry and provide our customers with an economical and user friendly air barrier assembly, we would like to provide various application procedures to address the use of transition membranes. W. R. MEADOWS currently recommends three different procedures for detailing of rough openings. The first is the use of our **AIR-SHIELD** self-adhesive membrane as we have always used; second is the use of our fluid-applied air barrier materials, **AIR-SHIELD LMP**, **AIR-SHIELD TMP**, and **AIR-SHIELD LSR**; and third, use of our **AIR-SHIELD LIQUID FLASHING**. All of these materials are suitable for various substrates including concrete, concrete masonry, exterior gypsum sheathing and metal surfaces.

For wood substrates such as OSB and plywood, the only recommended detailing procedure for rough openings is the use of **AIR-SHIELD** self-adhesive membrane.

Apply the specified air barrier membrane system on the whole wall ensuring adequate overlap with the transition membrane. It is important to review each application as there may be situations that would require either of these procedures to be modified based on the project requirements. Following are the procedures that we would recommend to achieve continuity of the transition membrane.

NOTE: AIR-SHIELD LM and AIR-SHIELD LM (ALL SEASON) are not recommended to be used as a fluid-applied transition membrane for rough openings.

AIR-SHIELD

SELF-ADHESIVE TRANSITION MEMBRANE:

- Prime the area to be detailed using **MEL-PRIME™** or **MEL-PRIME W/B**. On exterior sheathing surfaces, ensure that enough primer has been applied as typically two coats of primer are required.
- Pre-cut the **AIR-SHIELD** for each area of the rough opening to ensure ease of handling.
- Apply the first pre-cut strip at the base of the rough opening by removing the release paper and rolling firmly into place, ensuring that there is a minimum of 3" (76.2 mm) of membrane extending onto the wall. Also, ensure that there is a minimum of 3" (76.2 mm) of membrane extending into the rough opening.
- Repeat this procedure for the vertical areas of the rough opening and finally apply the membrane at the header portion of the opening.
- Ensure all edge overlaps are a minimum of 2" (50.8 mm) and end-to-end overlaps are 4" (101.6 mm).
- Seal all terminations with **POINTING MASTIC** or appropriate liquid air barrier membrane (**AIR-SHIELD LMP**, **AIR-SHIELD LSR**, **AIR-SHIELD LM**).

FLUID-APPLIED TRANSITION MEMBRANE

(to be used with AIR-SHIELD LMP, AIR-SHIELD LSR and AIR-SHIELD TMP)

- If applying this system on exterior sheathing, ensure that any joints or gaps 1/4" (6.4 mm) or greater are initially filled with **AIR-SHIELD LIQUID FLASHING** or **BEM** prior to proceeding.
- Apply an initial wet coat of applicable fluid-applied **AIR-SHIELD** product at the recommended wet mil thickness*, ensuring a minimum of 3" (76.2 mm) of membrane extending onto the wall. Also, ensure that there is a minimum of 3" (76.2 mm) of membrane extending into the rough opening.



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INSTALLATION GUIDELINES AIR-SHIELD™ ROUGH OPENING

*Please note: **AIR-SHIELD TMP** is required to be applied at a minimum 15 wet mils for each coat to ensure full embedment of the **REINFORCING FABRIC HCR**.

- Embed a layer of **REINFORCING FABRIC HCR** into this initial first coat.
- While the first coat is still wet, completely cover **REINFORCING FABRIC HCR** with a second coat of applicable product at the recommended wet mil thickness, again extending 3" (76.2 mm) onto the wall and 3" (76.2 mm) into the rough opening. This will allow for maximum adhesion of the two coats. Again, please note that applicable coat thickness is 30 mils for **AIR-SHIELD LMP**, 15 mils for **AIR-SHIELD TMP**.

*Please note: **AIR-SHIELD TMP** is required to be applied at a minimum 15 wet mils for each coat to ensure full embedment of the **REINFORCING FABRIC HCR**.

	Completed wet mil thickness (2 coats)	Dry mil thickness (2 coats)
AIR-SHIELD LMP	60 mils	30 mils
AIR-SHIELD LSR	75 mils	40 mils
AIR-SHIELD TMP	30 mils	15 mils

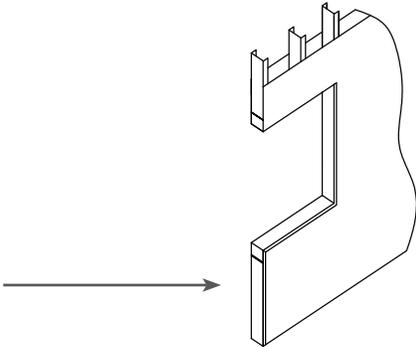
- If the substrate is concrete or concrete masonry, **REINFORCING FABRIC HCR** is not required. Apply product in one or two coats in order to achieve the recommended wet and dry mil thicknesses.

NOTE: AIR-SHIELD LM and AIR-SHIELD LM (ALL SEASON) are not recommended to be used as a fluid-applied transition membrane for rough openings.

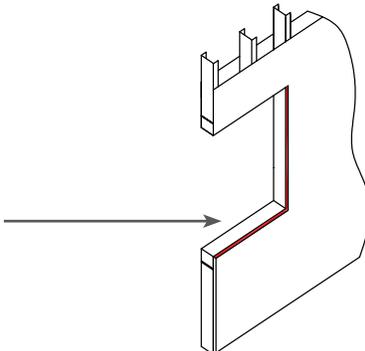
AIR-SHIELD LIQUID FLASHING

AIR SHIELD LIQUID FLASHING is high-quality, gun-grade, low-odor, elastomeric, polyether liquid-applied flashing and detailing membrane that is compatible with the entire line of **AIR-SHIELD** air, vapor, and liquid moisture barriers. This general purpose, wet flashing membrane is used to seal rough openings and detail joints and bonds to most construction materials, such as aluminum, brick, concrete, wood, and vinyl and exterior gypsum board.

1. Inspect rough opening and ensure that all areas to receive **AIR-SHIELD LIQUID FLASHING** are clean, dry, smooth, and free from all bond-breaking contaminants.
2. Remove and replace any damaged structural wall components.



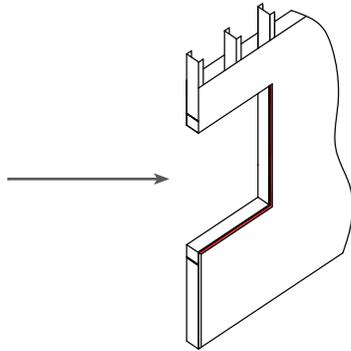
3. Apply a coat of **MEL-PRIME** on the raw edges of exterior gypsum board.





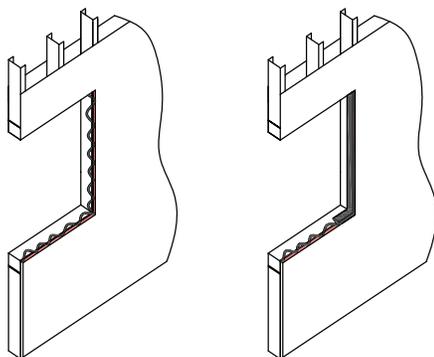
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4. Prefill any joints or cracks that are larger than ¼" (6.35 mm) and less than ½" (12.7 mm) with **AIR-SHIELD LIQUID FLASHING**. Apply a generous bead of material over the joint, press, and spread into the joint. Allow material to skin over prior to full application of **AIR-SHIELD LIQUID FLASHING**.

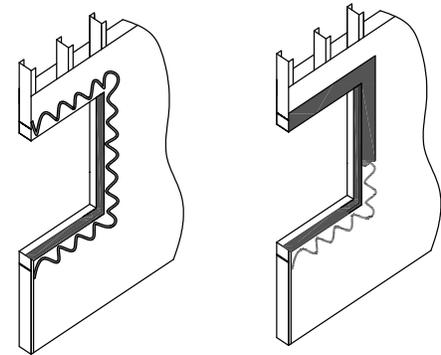


5. Prefill any joints or cracks larger than ½" (12.7 mm) with **AIR-SHIELD LIQUID FLASHING**. Install **KOOL-ROD™** into the joint to control sealant depth and apply **AIR-SHIELD LIQUID FLASHING**. Smooth out using a **W. R. MEADOWS SPREADER TOOL** or putty knife and allow to cure prior to full application of **AIR-SHIELD LIQUID FLASHING**.

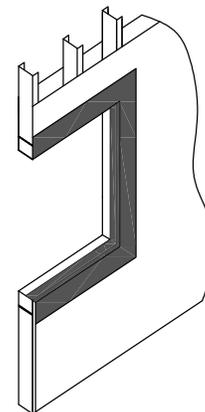
6. Starting at the top of the rough opening, apply a bead of **AIR-SHIELD LIQUID FLASHING** in the rough opening to be sealed and spread the material using a **W. R. MEADOWS SPREADER TOOL** or putty knife across the rough opening surface at an even consistency. Test the thickness of the material and ensure that it has a thickness of 12-15 mils using a wet mil gauge.



7. Apply a generous bead of **AIR-SHIELD LIQUID FLASHING** to the vertical surface around the rough opening and spread this material with a **W. R. MEADOWS SPREADER TOOL** or putty knife in an even, monolithic manner 4" – 6" (100 – 152 mm) onto the vertical surface around the rough opening. Make sure material contains no pinholes and is void-free. Again, make sure material is even, monolithic, and undamaged. Test the thickness to ensure the material has a thickness of 12-15 mils.



8. Allow **AIR-SHIELD LIQUID FLASHING** to dry before installing windows, doors, wall assembly, and the specific **AIR-SHIELD** membrane being applied.



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