Overview
VapAir Seal MD Air and Vapor Barrier is used for direct application over metal decks when insulation is to be mechanically fastened and is suitable for all internal conditions, including very high humidity. VapAir Seal MD air and vapor barrier is quick to install and creates an air- and vapor-tight seal. Its enhanced vapor resistance is sufficient to accommodate extreme internal conditions such as buildings containing wet industrial processes, breweries, swimming pools, sports halls, kitchens, and bathrooms, etc.

VapAir Seal MD consists of a reinforced composite aluminum foil with a tenacious self-adhesive SBS backing and removable poly release film.

Features and Benefits
- Self adhering
- Cold applied
- Creates an airtight and vapor-tight seal
- Extremely high tear resistance
- Withstand foot traffic on profiled metal decking, without puncturing
- Can be bonded with complete confidence at ambient temperatures of 30°F (-1°C) to 40°F (4°C) if material is kept above 50°F (10°C)
- Reduced fire load – has a calorific value of \( \leq 10,500 \text{ kJ/m}^2 \) and complies fully with fire protection requirements for reduced fire load vapor barriers – meets FM requirements
- Fully complies with FM Approval Standard Class No. 4470

Coverage Rate
Standard roll size of 42.5” wide x 131.23’ long will cover approximately 460 ft².
*Effective coverage rate is 420 ft² after seaming.

Precautions
1. Materials must be kept above 60°F.
2. Rolls must be protected from long exposure to UV rays.
3. It is not intended as a temporary roof.
4. Only use when insulation is mechanically fastened.
5. Must be used on metal decking only.
6. Sunglasses that filter ultraviolet light are strongly recommended as aluminum surfaces are highly reflective to sunlight. Roofing Technicians should dress appropriately and wear sunscreen protection.
7. Primer is not required when applying MD to the metal deck substrate.
8. It is recommended to use CAV-GRIP III, 702 or 702LV when temperatures are below 40°F. All other substrates must be primed.

Storage
- In their original packed condition, the rolls have a shelf life of 12 months. They should be stored upright in a cool, dry environment.
- VapAir Seal MD vapor barriers must be transported and stored on end, in their original packaging. Pallets are wrapped in a gray, light-reflecting, UV-protective plastic film. Rolls should remain under this cover until ready for use.
- When working in strong sunlight, it is important to ensure that rolls taken from the pallet are installed immediately. Rolls left on the pallet should remain under the above-mentioned protective cover until ready to be installed.
**Installation**

1. Surface must be dry and clean from debris.
2. Primer is required on all substrates except for metal substrates.
3. Roll the VapAir Seal MD out flat, without creases.
4. Align and set the position.
5. Overlaps must be at least 2”.
6. Remove the release film.
7. Press the sheet down uniformly using, for example, a wide broom. All laps must be rolled down using a hand roller.
8. On profiled decking, end laps in the VapAir Seal MD should be laid over with an additional strip of VapAir Seal MD or flat metal plate, approximately 6” wide, for support.
9. Any large gaps at angle change must be filled in with insulation to support membrane.
10. Install roofing system on the same day.

REVIEW CURRENT WEATHERBOND INSTALLATION INSTRUCTIONS FOR SPECIFIC INSTALLATION REQUIREMENTS.
Internal Corners

Apply the first flashing strip around the corner, forming an internal fold/pleat.

Apply the second flashing strip up to the corner. Adhere the fold/pleat onto the second strip.

External Corners

Adhere a rounded patch of VapAir Seal MD, approx. 7½” in diameter, directly over the corner.

Press all creases down to achieve a tight seal.
Apply the first flashing strip beyond the corner, mitre at 45° and roll it down onto both surfaces.
Apply the second flashing strip up to the corner.

Note: WeatherBond’s Uncured EPDM Flashing may be used to complete flashing details.
Typical Properties and Characteristics

<table>
<thead>
<tr>
<th>Physical Property</th>
<th>Standard</th>
<th>Typical</th>
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<tbody>
<tr>
<td>Overall Thickness</td>
<td>ASTM D5147</td>
<td>.015&quot;</td>
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<tr>
<td>Weight</td>
<td>EN 1849-2</td>
<td>0.06 lb/sf</td>
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<tr>
<td>Rolls per Pallet</td>
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<td>24 rolls</td>
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<tr>
<td>Roll Length</td>
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<td>131.23'</td>
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<tr>
<td>Roll Width</td>
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<td>42.5&quot;</td>
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<tr>
<td>Tensile Strength</td>
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<td>Elongation</td>
<td>ASTM D1970</td>
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<td>Low Temperature Flexibility</td>
<td>ASTM D1970</td>
<td>-20°C</td>
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<tr>
<td>Air Permeance</td>
<td>ASTM E2178</td>
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<td>Hydrostatic Pressure Test</td>
<td>AATCC 127</td>
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<td>(water column 2 m high for 15 mins)</td>
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<td>Peel Adhesion</td>
<td>ASTM D903</td>
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<td>Water Vapor Permeability sd-value</td>
<td>ASTM E96 D1970</td>
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<tr>
<td>Water Vapor Resistance</td>
<td>BS EN ISO 12572</td>
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<td>Tear Strength</td>
<td>ASTM D1970</td>
<td>135 lbf</td>
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<td>Puncture Resistance</td>
<td>ASTM D5602</td>
<td>54.6 lbf</td>
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<tr>
<td>Calorific Value</td>
<td>DIN 51900-1</td>
<td>≤10,500 kJ/m²</td>
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Typical properties and characteristics are based on samples tested and are not guaranteed for all samples of this product. This data and information is intended as a guide and does not reflect the specification range for any particular product of this product.

Packaging

- **Product**: VapAir Seal MD Direct to Metal Deck Air/Vapor Barrier
- **Size/Weight**: 42.5" x 121' / 28 lbs
- **Actual Coverage Rate**: 458 ft²
- **Part Number**: 321931

LEED® Information

- **Pre-consumer Recycled Content**: 0%
- **Post-consumer Recycled Content**: 0%
- **Manufacturing Location**: Germany
- **Solar Reflectance Index**: N/A

Pipe Penetrations

Cut the flashing strip into a series of ‘tongues’ (approx. 1¼" wide). Take the strip around the pipe and press the tongues down onto the roof surface.

Pull a ‘ring’ flashing over the pipe and roll it down to the substrate, making sure it encapsulates the tongues.

- **Step 1**: Apply the first flashing strip around the corner, forming an internal fold/pleat.
- **Step 2**: Apply the second flashing strip up to the corner. Adhere the fold/pleat onto the second strip.
- **Step 3**: Adhere a rounded patch of ALUTRIX®, approx. 200 mm diameter, directly over the corner.
- **Step 4**: Press all creases down to achieve a tight seal.

- **Step 5**: Apply the first flashing strip beyond the corner, mitre at 45° and roll it down onto both surfaces.
- **Step 6**: Apply the second flashing strip up to the corner.

Please comply with general installation instructions for each type of detailing!