

## DURO-LAST® VAPOR BARRIER

### DESCRIPTION:

Duro-Last® Vapor Barrier (DL VB) is a self-adhesive vapor barrier composed of SBS modified bitumen adhesive on the bottom surface and a tri-laminated woven polyethylene on the top surface. A silicone release film covers the self-adhesive on the bottom surface.

DL VB can be used within a Duro-Last roofing system to minimize vapor transmission. Duro-Last recommends the use of vapor barriers, however it is the responsibility of the Duro-Last contractor of record to ensure that all applicable specifications, building codes, regulations and ordinances are complied with and followed. A roofing professional, such as a consultant or architect, should be utilized for correct roofing system design prior to installing any roofing system.

DL VB can provide a durable, walkable, temporary surface that protects the decking for up to 4 months until a Duro-Last roofing system can be installed (See Figure 1). Duro-Last does not warrant the water-tightness of DL VB when used as a temporary surface. Temporary surfaces do not carry any type of warranty and must only be used under the direction of a licensed roofing consultant or architect.

### BENEFITS

- Meets IECC air barrier requirements for mechanically fastened roofing systems
- Quick release film
- Self-sealing
- Temporarily protects against inclement weather
- Slip resistant
- Substrate board not required for most applications
- UV protection for up to 4 months
- Puncture resistant
- No primer required on steel decks or within mechanically fastened roofing systems.
- Ideal for mechanically fastened or adhered roofing systems
- Highly resistant to work crew traffic

### ACCEPTABLE DECKS:

Prior to installation of DL VB, the deck must be smooth and level without significant surface irregularities or depressions. It must be clean, dry and free of grease, dust and loose debris. Do not apply to wet or damp surfaces. Concrete and gypsum decks must be cured prior to installation.



Figure 1. Duro-Last Vapor Barrier as temporary surface

The installing contractor is responsible for following applicable building, plumbing and electrical codes.

Duro-Last VB Primer (DL VB Primer) is not required when the roofing system is mechanically fastened or when the deck is steel. When used within an adhered roofing system, the following decks will require the use of DL VB Primer prior to installing DL VB:

- Structural Concrete (poured in place or precast)
- Gypsum (poured in place or precast)
- Lightweight Concrete (insulating or cellular)
- Wood (Plywood, OSB or Lumber)
- Cement Block/Masonry

### APPROVED DIRECT-CONTACT ASSEMBLIES

The following membrane assemblies are approved for direct contact with DL VB. All other assemblies must be separated from DL VB by any Duro-Last slip sheet, insulation or cover board.

- Duro-Fleece® and Duro-Fleece Plus®
  - Adhered directly to DL VB with Duro-Fleece Membrane Adhesive or Duro-Fleece CR-20 Membrane Adhesive (Splatter)
- Duro-Last, Duro-Tuff® and Duro-Last EV
  - Adhered directly to DL VB with SB IV Adhesive WB II Adhesive is not allowed.

### FACTORY MUTUAL REQUIREMENTS

Factory Mutual projects that require DL VB will require an increase in the preliminary attachment of insulation and/or cover boards underneath mechanically fastened roofing systems. Each board must be fastened at a rate of one fastener and plate per two square feet. Corner and perimeter enhancements are not required for preliminary attachment.

**PRECAUTIONS:**

1. Read Safety Data Sheets (SDS) prior to using.
2. Wear proper personal protective equipment, such as gloves and eye protection, per the SDS.

**ORDERING:**

Rolls may be ordered individually. Each roll measures 3.75 ft. by 133 ft. and will cover 465 square feet with a 3-inch overlap.

- 80-lb roll (Item #1344)

**INSTALLATION:**

1. Limitations
  - a. **The minimum ambient and surface temperature before application should be 14° F and rising.**
  - b. Do not use during wet weather.
  - c. Do not use on wet surfaces.
  - d. Do not use on dirty or greasy surfaces.
  - e. Do not use on surfaces that show signs of deterioration or loss of structural integrity.
  - f. Do not use product after expiration date.
2. When DL VB is immediately covered by a roofing system
  - a. Install according to the 6 steps shown in the pictures below.

3. When DL VB is used as a temporary surface and not immediately covered by a roofing system
  - a. Install according to the 6 steps shown below.
  - b. Cover and seal all T joints, transitions and any other openings with Sopramastic.
  - c. Contractors are responsible for providing adequate slope to roof drains to allow for proper drainage of the roof area.

TABLE 1. PHYSICAL PROPERTIES<sup>2</sup>

	Standards	Results
<b>Thickness</b>	-	31 mils
<b>Weight</b>	-	0.16 lb/sqft
<b>Tensile Strength</b>	ASTM D 5147	54 lbf/in x 74 lbf/in <sup>1</sup>
<b>Elongation</b>	ASTM D 5147	33% x 25%
<b>Cold Bending</b>	ASTM D 5147	-58° F
<b>Static Puncture</b>	ASTM D 5602	90 lbf
<b>Tear Resistance</b>	ASTM D 1970	95 lbf x 103 lbf <sup>1</sup>
<b>Lap Adhesion</b>	ASTM D 1876	68 lbf/ft
<b>Water Absorption</b>	ASTM D 5147	0.1% maximum
<b>Peel Resistance</b>	ASTM D 903	5.4 lbf/in
<b>Water Vapor Permeance</b>	ASTM E 96 (Pro. B)	.03 perm
<b>Air Permeability</b>	ASTM E 283 (75 Pa)	< 0.001 L/sec·cm <sup>2</sup>

<sup>1</sup> Values are shown for both machine and cross machine directions. The machine direction results are listed first.

<sup>2</sup> All values are nominal.

The installation photos shown below were taken on a ground-level mock deck for demonstration purposes. Safety equipment should always be used in actual roofing situations.



1. Roll out the Duro-Last Vapor Barrier over a clean, dry deck.



2. Once the vapor barrier is in place, while holding the product tight, peel off the silicone release film by pulling diagonally.



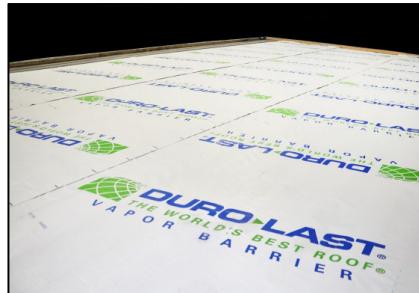
3. Install subsequent rolls of vapor barrier in the same way, taking care to overlap the longitudinal joints by 3 inches.



4. On steel decks, at the end of a roll, install a metal plate (6 in. by 42 in.) to support the vapor barrier end lap between the metal flutes ensuring a complete end lap seal. End laps must overlap by 6 inches.



5. The vapor barrier offers extra protection from heavy foot traffic during installation. The slip-resistant surface allows for safe movement across the roof.



6. Once installation is complete, the Duro-Last Vapor Barrier temporarily protects against inclement weather. If not immediately covered, follow extra steps per 3a and 3b in the instructions above.