LEXCOR Flexible Flashing

FR-40

Protective reinforcement

for high stress areas of built-up roofs

09/11
PRODUCT DESCRIPTION
Lexcor’s FR-40 Flashing is a flexible yet highly durable flashing membrane designed specifically for use with conventional built-up roofs. It is asphalt compatible and formulated to withstand damage from sunlight, ozone, fungi, temperature extremes and numerous chemicals and solvents.

The Flashing membrane consists of 1 mm (40 mil) thick of a proprietary, polymeric alloy*, integrally laminated to a polyester reinforcing scrim. When properly applied to a roofing membrane and/or a substrate, FR-40 Flashing provides a strong yet flexible tie-in that will assure years of problem-free, leak-free performance.

* Note: See “FEATURES” section for further information on Lexcor’s proprietary polymeric alloy.

USES
Most conventional roofing membranes are not designed to stand up to the additional stresses arising from differential movement between the roof deck and other building components such as walls, parapets and curbs. If cants are used, the built-up membrane is also left insufficiently protected because it lacks its normal cover of slag or gravel. Lexcor’s FR-40 is designed for use as a flashing reinforcement in all such areas. Being fully flexible down to the coldest temperatures, FR-40 assures leak-free watertightness even when the building is subject to significant, temperature induced expansion and contraction. In addition, FR-40 is durable enough to be left fully exposed to the elements. Possible Applications of FR-40 include:

- Roof Edges
- Valley & Ridge Flashings
- Expansion / Control Joints
- Gutter or Eave Flashing
- Roof Drain or Vent Stack Tie-Ins
- Wall Flashings
- Parapet Flashings
- Curb Flashings
- Column Protrusions

FEATURES

Proven, Long-Term Performance - FR-40 has demonstrated problem-free service on hundreds of thousands of installations over the past thirty-five years.

Labor Saving Application - FR-40’s flexibility enables a much simpler, longitudinal application instead of vertical “stripping”. Not only does this provide greater labor savings, it eliminates 90% of the seams in comparison to alternative flashing applications.

Cost Effective - FR-40 compares favorably to the cost of metal or other types of flashing materials.

Bonds with Hot Asphalt or Cold Adhesive - FR-40 may be applied with hot Type III asphalt or Lexcan PVC Bonding Adhesive.

Heat Welded Seams - Seams are heat welded with heat welding gun.

TECHNICAL DATA

PACKAGING
FR-40 is packaged in 100’ (30.48 m) long Rolls, available in the following widths:

<table>
<thead>
<tr>
<th>Widths</th>
<th>Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>12”</td>
<td>30.5 cm</td>
</tr>
<tr>
<td>18”</td>
<td>45.7 cm</td>
</tr>
<tr>
<td>24”</td>
<td>61.0 cm</td>
</tr>
<tr>
<td>36”</td>
<td>91.4 cm</td>
</tr>
<tr>
<td>72”</td>
<td>182.9 cm</td>
</tr>
</tbody>
</table>

ACCESSORIES
Lexcan PVC Bonding Adhesive
Lexcan PVC Bonding Adhesive is a high strength solvent based contact adhesive that allows bonding of FR-40 to various porous and non-porous substrates.

Coverage Rates:
Lexcan PVC Bonding Adhesive - 5.6 square m (60 ft²) per gallon finished surface. Coverage rates are average and may vary due to conditions on the job site. Porous surfaces and substrates may require more bonding adhesive than the typical coverage rate.

Lexcan Termination Bar
Double thickness galvanized Termination Bars provide an effective seal for terminating flashing on a vertical wall. (See Detail #3). Lexcan termination bars come with pre-punched fastener holes on 15 cm (6”) centres for easy fastening. Upper edges of the bars must be caulked with an appropriate, high quality sealant.
LIMITATIONS

- Do not use coat tar pitch or coal tar plastic cement to secure FR-40.
- Do not use PVC Bonding Adhesive to bond to asphalt or coal tar substrates.
- Do not substitute any other adhesive in lieu of PVC Bonding Adhesive.

PHYSICAL PROPERTIES

<table>
<thead>
<tr>
<th>PROPERTY</th>
<th>TEST METHOD</th>
<th>VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thickness, nominal</td>
<td>ASTM D751</td>
<td>1.0 mm [40 mil]</td>
</tr>
<tr>
<td>Weight</td>
<td>ASTM D1004, Die C</td>
<td>1.48 kg / m² (0.3 lbs / ft²)</td>
</tr>
<tr>
<td>Breaking Strength</td>
<td>ASTM D1204</td>
<td>113 kg (250 lbs)</td>
</tr>
<tr>
<td>Tear Resistance</td>
<td>ASTM D1204</td>
<td>27 kg (60 lbs)</td>
</tr>
<tr>
<td>Dimensional Stability</td>
<td>ASTM D1204 [15 min. @ 100°C]</td>
<td>MD: 1.0 % Maximum</td>
</tr>
<tr>
<td>Water Absorption</td>
<td>ASTM D570-63</td>
<td>0.4% by weight</td>
</tr>
<tr>
<td>Adhesion to Asphalt</td>
<td>ASTM D903-49</td>
<td>71°C for one month Excellent, no change</td>
</tr>
<tr>
<td>Adhesion to CA-103</td>
<td>ASTM D903-49</td>
<td>17.5 N/cm</td>
</tr>
<tr>
<td>Cold Temp. Flexibility</td>
<td>ASTM D2136 [180° over 3.2 mm mandrel]</td>
<td>Passed @ -40°C</td>
</tr>
<tr>
<td>Weatherometer (7300 hrs)</td>
<td>ASTM D1499-64</td>
<td>No significant change</td>
</tr>
<tr>
<td>Outdoor Aging</td>
<td>ASTM D1435-69</td>
<td>No significant change</td>
</tr>
<tr>
<td>Ozone Resist. (7300 hrs)</td>
<td>ASTM D1203 (A) [7 days @ 110°C]</td>
<td>0.6% max.</td>
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<tr>
<td>Fire Resistance</td>
<td>ASTM D1692-68</td>
<td>Self-extinguishing</td>
</tr>
</tbody>
</table>

Tests performed on unsupported alloy compound:
- Specific Gravity: ASTM D792 (A) 1.25
- Hardness: Shore A 73
- Elongation @ Break: ASTM D882
  - MD: 350 %
  - TD: 350 %

DETAIL 1: Standard Roof Edge Flashing

DETAIL 2: Low Parapet Application

DETAIL 3: High Parapet with mid-wall termination

DETAIL 4: Curb Flashing

DETAIL 5: Vent Stack Flashing
INSTALLATION INSTRUCTIONS

1. Broom clean the roof deck and substrate and remove all stones, dirt, debris, oil and grease. Surface must be clean and free of all sharp or protruding objects. If applying with hot asphalt to metal or a dusty/dirty surface such as masonry, concrete or an existing built-up roof, apply a primer coat of Lexcor’s LexPrime to the substrate first.

2. Cut FR-40 into appropriate lengths. The flashing should extend a minimum 15 cm (6") out onto the roof deck. Upper edges terminating on wall and parapets must either be a/ mechanically fastened with Termination Bars (see Detail #3) b/carried into a reglet and caulked or c/fastened with appropriate mechanical fasteners on 20 cm (8") centres and counter-flashed a minimum of 5 cm (2") with metal flashing. On high vertical surfaces, batten bar mechanical securement is required at all upper membrane edges or every 45 cm (18") if bonding with asphalt; 182 cm (72") if bonding with Lexcor PVC Bonding Adhesive. Sides and ends of adjacent FR-40 pieces must be lapped a minimum of 10 cm (4").

BONDING...
with Type III Asphalt - to asphalt roof surfaces, concrete, wood or steel
3a. Apply a full mopping of Type III asphalt to the area to be flashed, ensuring that the temperature of the asphalt does not fall below 180°C (350°F) before the FR-40 is positioned in place. Using a broom or roller, immediately press the FR-40 into the asphalt assuring a positive bond and avoiding air entrapment. After all seams have been completed (refer to “Seaming”), flood coat over the FR-40 with hot asphalt on the portion that extends out onto the roof deck. Embed slag or gravel up to the edge or cant.

3b. Using a brush or roller, apply a coat of Lexcor PVC Bonding Adhesive to both the substrate and the underside of the FR-40. Wait 5 to 10 minutes until the adhesive is tacky but does not string when touched with a dry finger, then roll the FR-40 onto the substrate, avoiding air entrapment. Ensure a positive bond by brushing the flashing with a push broom.

with PVC Bonding Adhesive - to concrete, wood or steel

SEAMING ...
by Heat Welding
4. Ensure that FR-40 pieces overlap a minimum of 10 cm (4"). Using a hand held hot air gun, simultaneously apply heat to both mating surfaces until the surfaces become shiny. Immediately press the seam flaps together and roll the seam using a steel hand roller, ensuring a complete bond.

INSTALLATION INSTRUCTIONS

All [Roof edges, curbs, valleys, ridges . . . etc.] shall be flashed with Lexcor FR-40 Flexible Flashing bonded to the roofing membrane with Type III hot asphalt, and other substrates with [Type III asphalt, Lexcan PVC Bonding Adhesive] and seamed using a hot air heat weld.

Flashing shall be a 1 mm thick polymeric alloy, reinforced with a polyester scrim, demonstrating a minimum breaking strength of 113 kg according to ASTM D751 and a minimum tear strength of 27 kg according to ASTM D1004, Die C. It shall remain flexible to -40°C according to ASTM D2136 (3.2 mm mandrel) and not experience any significant change when exposed to 7300 hours of weatherometer, outdoor aging or ozone at 50 pphm, according to ASTM D1499-64 and ASTM D1435-69.

Application of the Flashing shall be in strict accordance with the manufacturer’s installation instructions.

AVAILABILITY & TECHNICAL ASSISTANCE

Lexcor FR-40 Flashing is available across North America through our local offices or distributors. Lexcor representatives will be pleased to assist you in design or layout. For the address or telephone number of the office nearest you, please call our head office at (800)268-2889.

WARRANTY

All Lexcor products are warranted to be free from defects in material and workmanship, if installed properly in accordance with instructions, for five years after the date of purchase. Note: certain conditions and exclusions apply.

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