

## Performance and Cost Benefits of Adhered FleeceBACK® Roof Recovery Systems

For many years, Carlisle's FleeceBACK adhered roofing systems have been used to recover existing roof systems. Recovery applications using adhered FleeceBACK systems provide a quick, non-intrusive, and economical option for owners seeking a new 15- or 20-year warranty for their roof. This recovery option consists of a FleeceBACK EPDM, TPO, PVC, or KEE HP membrane adhered with Flexible FAST™ Adhesive or mechanically fastened to an acceptable roofing membrane. FleeceBACK recovery applications provide an ideal solution for aged single-ply, or existing modified asphalt systems when a tear-off is not required.

### FEATURES AND BENEFITS

- » FleeceBACK systems' non-penetrating, quiet, low odor application makes them ideal for occupied buildings
- » Flexible FAST Adhesive is VOC- and HFC-free, providing an ideal solution for VOC and HFC regulated states
- » Flexible FAST Adhesive provides an additional R-value of 0.2 to 0.5 per layer when used in full coverage application
- » FleeceBACK membranes provide up to 50% greater puncture resistance when compared to standard single-ply membranes
- » FleeceBACK membranes provide increased hail protection when compared to standard single-ply membranes
- » FleeceBACK recovery application minimizes disposal, landfill, and material costs and increases jobsite productivity
- » FleeceBACK recovery applications eliminate the need for a coverboard, reducing the application process by 50%

### WARRANTY ENHANCEMENTS

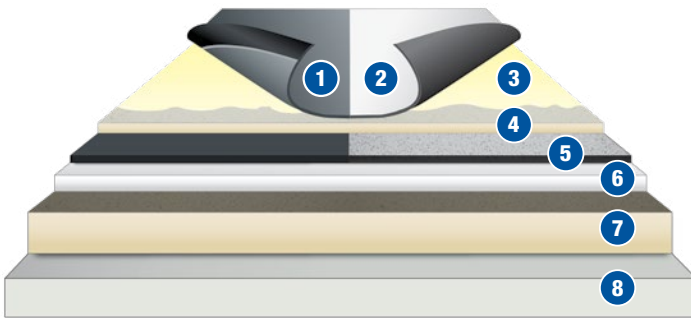
#### Direct Recovery Warranty Comparison

Warranty Coverage	FleeceBACK Membranes 115-mil FleeceBACK (EPDM, TPO, PVC, or KEE HP)	Standard Membranes 60-mil Membrane (EPDM, TPO, PVC, or KEE HP)
Hail	2"	1" (Requires Adhered Cover Board Only)
Accidental Puncture	16-hours	N/A
Max Warranty Term	20-year	20-year

## TYPICAL RECOVERY APPLICATIONS

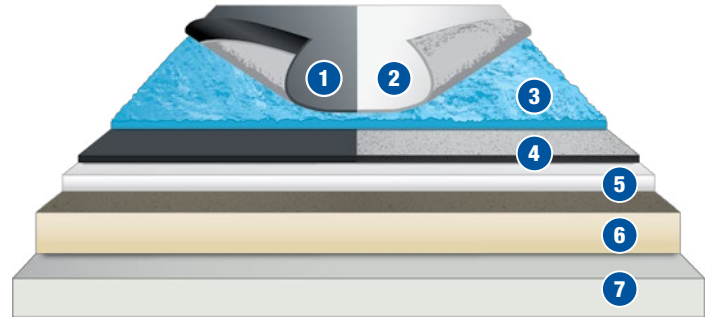
The drawings shown highlight two of the most common types of recoveries: Existing Asphalt Systems or Aged Single-Ply. One side shows the system build using FleeceBACK and Flexible FAST; the other shows Standard Membrane using a Cover Board.

**Standard Membrane with Cover Board to Existing Asphalt System**



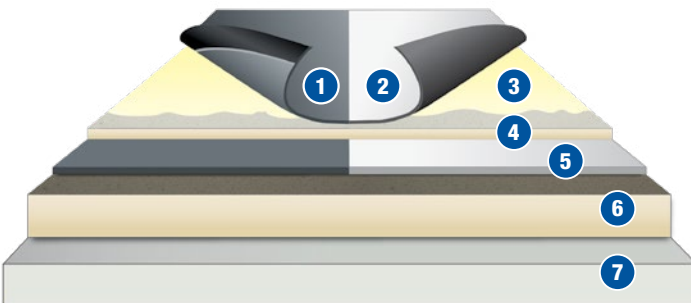
- 1 Sure-Seal® EPDM Membrane with Factory-Applied Tape™
- 2 Sure-Weld® TPO, Sure-Flex™ PVC, or Sure-Flex KEE HP Membrane
- 3 Bonding Adhesive
- 4 Carlisle Approved Cover Board
- 5 Existing Modified Asphalt System
- 6 Existing Cover Board
- 7 Existing Insulation
- 8 Existing Roof Deck

**FleeceBACK Direct to Existing Asphalt System**



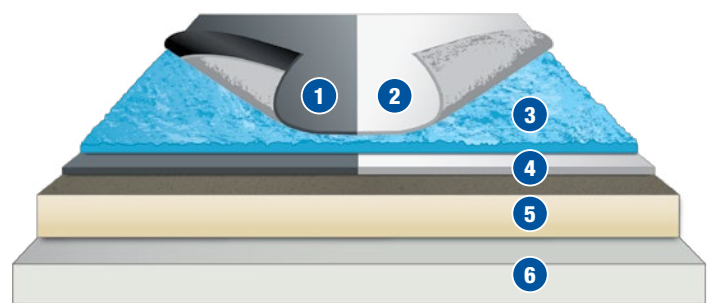
- 1 FleeceBACK EPDM Membrane with Factory-Applied Tape
- 2 FleeceBACK TPO, PVC, or KEE HP Membrane
- 3 Flexible FAST Adhesive
- 4 Existing Modified Asphalt System
- 5 Existing Cover Board
- 6 Existing Insulation
- 7 Existing Roof Deck

**Standard Membrane with Cover Board to Aged Single-Ply**



- 1 Sure-Seal EPDM Membrane with Factory-Applied Tape
- 2 Sure-Weld TPO, Sure-Flex PVC, or Sure-Flex KEE HP Membrane
- 3 Bonding Adhesive
- 4 Carlisle Approved Cover Board
- 5 Aged Single-Ply Membrane
- 6 Existing Insulation
- 7 Existing Roof Deck

**FleeceBACK Direct to Aged Single-Ply**



- 1 FleeceBACK EPDM Membrane with Factory-Applied Tape
- 2 FleeceBACK TPO, PVC, or KEE HP Membrane
- 3 Flexible FAST Adhesive
- 4 Aged Single-Ply Membrane
- 5 Existing Insulation
- 6 Existing Roof Deck

## RECOVERY CALCULATOR

The recovery calculator is a great tool when comparing single-ply recovery system options. Use the tool below to input your material costs and warranty coverage to determine the most suitable choice for your project.

\*Required field

## Project Specifications

## Recovery Type

(Ex. Existing modified asphalt)

## Square Footage of Project\*

(Ex. 100,000)

Recovery Option 1:  
Traditional Recovery

Material Type	Product Name	Cost per Sq. Ft.*
<b>Membrane Type</b> (EPDM, TPO, PVC, or KEE HP)		
<b>Adhesive Type</b> (CAV-GRIP® III, CAV-GRIP PVC, or Bonding Adhesive)		
<b>Cover Board Type</b>		
<b>Insulation Fastener Type</b>		
<b>Total Cost per Sq. Ft.</b>		
<b>Total Project Material Cost</b>		

Recovery Option 2:  
FleeceBACK Recovery

Material Type	Product Name	Cost per Sq. Ft.*
<b>Membrane Type</b> (FleeceBACK Membrane)		
<b>Adhesive Type</b> (Flexible FAST Adhesive)		
<b>Total Cost per Sq. Ft.</b>		
<b>Total Project Material Cost</b>		

## Estimated Material Savings

(per square foot)

## Estimated Project Material Savings