

Roof Deck and Substrate Criteria

A. The following table identifies the acceptable roof decks/substrates and the minimum underlayment requirements:

Roof Deck & Substrate Criteria for Mechanically Fastened Roofing Systems

Acceptable Roof Deck/Substrate	FleeceBACK EPDM Membrane	FleeceBACK TPO Membrane	FleeceBACK PVC / KEE HP PVC Membrane
NEW CONSTRUCTION			
Steel (min. 22 gauge)(1)(2)	Insulation	Insulation	Insulation
Plywood (min. 15/32" thick) or Oriented Strand Board (min. 7/16" thick)	Direct Application	Direct Application	Direct Application
Wood Planks (minimum 3/4" thick)	Direct Application	Direct Application	Direct Application
Lightweight Insulating Concrete	Direct Application	Direct Application	Direct Application
RETROFIT / NO TEAR-OFF			
Existing Smooth Surface BUR (4)(8) or Mineral Surface Cap Sheet	Direct Application (3)(8)	Direct Application (8)	Insulation
Gravel Surfaced BUR (4)(5)	Insulation	Insulation	Insulation
Coal Tar Pitch (4)(5)	Insulation (5)	Insulation (5)	Insulation (5)
Modified Bitumen	Direct Application	Direct Application (7)	Direct Application
Existing Single-Ply	Direct Application (6)	Direct Application (6)	Direct Application (6)
RETROFIT / TEAR-OFF			
Existing roof material removed (steel or wood decks)	Insulation	Insulation	Insulation

Notes:

- (1) Local codes must be consulted regarding thermal barrier requirements.
- (2) Mechanically Fastened Systems cannot be specified on steel decks less than 22 gauge or for corrugated steel decks, regardless of gauge.
- (3) Mechanically Fastened Systems (Sure-Seal (black)) may be applied directly to the substrate providing asphalt on existing smooth surfaced built-up roof has a softening point above 185°F (85°C).
- (4) Loose gravel or granules must be removed to avoid moisture entrapment.
- (5) Existing coal tar could drip back into the building, especially when new insulation does not provide sufficient thermal value to prevent the surface of the coal tar from softening.
- (6) An approved Insulation/underlayment is required over existing ballasted single-ply systems and PVC roofing systems of any type.
- (7) Direct application permitted over smooth surfaced modified bitumen. Membrane shall be positioned with length of sheets parallel to modified bitumen field seams. At end laps or other locations where splices intersect modified bitumen field seams. Refer to FleeceBACK specification for end laps. For side laps refer to appropriate Mechanically Fastened Specification and applicable Carlisle Details.
- (8) Existing Type III or IV smooth asphalt BUR Only.

END OF ATTACHMENT