

FleeceBACK[®] RL[™]

RapidLock Membrane

FleeceBACK RL EPDM, TPO & PVC

Code Approval Guide

January 2024

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UL Approval - ANSI/UL 790 Spread of Flame Test (Class A)
FleeceBACK RL Roofing Systems

Membrane Type: Sure-Seal FleeceBACK RL - Minimum 115-mil thickness
Sure-Weld FleeceBACK RL - Minimum 115-mil thickness
Sure-Flex FleeceBACK RL - Minimum 115-mil thickness

System ID	Deck Type	Barrier	Insulation	Cover Board	Maximum Slope		
					Sure-Seal FleeceBACK RL	Sure-Weld FleeceBACK RL	Sure-Flex FleeceBACK RL
1	Non-Combustible	N/A	(Optional) Any UL Classified Insulation, except EPS and XPS, any combination, any thickness	½-inch SecurShield HD RL	1/2"	1/2"	1/2"
2	Non-Combustible	N/A	InsulBase RL, SecurShield RL any combination, any thickness. Optionally, any UL Classified Insulation, except EPS and XPS may be used below.	N/A	1/2"	1/2"	1/2"
3	Combustible (1)	Minimum ¼-inch DensDeck®, DensDeck® Prime, SECUROCK Glass-Mat or SECUROCK Gypsum Fiber Roof Board (2)	(Optional) Any UL Classified Insulation, any combination, any thickness	½-inch SecurShield HD RL	1/2"	1/2"	1/2"
4	Combustible (1)	Minimum ¼-inch DensDeck®, DensDeck® Prime, SECUROCK Glass-Mat or SECUROCK Gypsum Fiber Roof Board (2)	InsulBase RL, SecurShield RL any combination, any thickness	N/A	1/2"	1/2"	1/2"
5	Combustible (1)	N/A	(OPTIONAL) Any UL Classified Insulation, except EPS and XPS, any combination, any thickness (3)	½-inch SecurShield HD RL (3)	1/2"	1/2"	1/2"
6	Combustible (1)	1 layer of Carlisle FR Base Sheet	Minimum 1.4-inch layer of InsulBase. (2)	½-inch SecurShield HD RL (2)	1/2"	1/2"	1/2"
7	Combustible (1)	N/A	Minimum 4-inch layer of any UL Classified EPS (2)	½-inch SecurShield HD RL (2)	1/2"	1/2"	1/2"

Footnotes:

- Any roof covering system listed for use over a combustible roof deck can be installed over a non-combustible roof deck and achieve the same classification.
- All insulation joints must be staggered a minimum of 6 in. from the deck joints or from the insulation joints directly below.
- All insulation joints must be staggered a minimum of 12 in. from the deck joints or from the insulation joints directly below.

UL Approval - ANSI/UL 790 Spread of Flame Test (Class B)
FleeceBACK RL Roofing Systems

Membrane Type: Sure-Seal FleeceBACK RL - Minimum 115-mil thickness
Sure-Weld FleeceBACK RL - Minimum 115-mil thickness
Sure-Flex FleeceBACK RL - Minimum 115-mil thickness

System ID	Deck Type	Barrier	Insulation	Cover Board	Maximum Slope		
					Sure-Seal FleeceBACK RL	Sure-Weld FleeceBACK RL	Sure-Flex FleeceBACK RL
1	Combustible (1)	N/A	Minimum 1.4-inch InsulBase. (2)	½-inch SecurShield HD RL (2)	1/2"	1/2"	1/2"

Footnotes:

- Any roof covering system listed for use over a combustible roof deck can be installed over a non-combustible roof deck and achieve the same classification.
- All insulation joints must be staggered a minimum of 6 in. from the deck joints or from the insulation joints directly below.

UL Approval - ANSI/UL 790 Spread of Flame Test (Class C)
FleeceBACK RL Roofing Systems

Membrane Type: Sure-Seal FleeceBACK RL - Minimum 115-mil thickness
Sure-Weld FleeceBACK RL - Minimum 115-mil thickness
Sure-Flex FleeceBACK RL - Minimum 115-mil thickness

System ID	Deck Type	Barrier	Insulation	Cover Board	Maximum Slope		
					Sure-Seal FleeceBACK RL	Sure-Weld FleeceBACK RL	Sure-Flex FleeceBACK RL
1	Combustible (1)	N/A	(Optional) Any UL Classified Insulation, any combination, any thickness	½-inch SecurShield HD RL	Unlimited	Unlimited	Unlimited
2	Combustible (1)	N/A	InsulBase RL, SecurShield RL any combination, any thickness. Optionally, any UL Classified Insulation, except EPS and XPS may be used below.	N/A	Unlimited	Unlimited	Unlimited

Footnote:

- Any roof covering system listed for use over a combustible roof deck can be installed over a non-combustible roof deck and achieve the same classification.

Factory Mutual Approvals
FleeceBACK RL Roofing Systems

InsulBase RL, SecurShield RL & SecurShield HD RL Polyiso Ratings - New Construction

Membrane Type: Sure-Seal FleeceBACK RL - Minimum 115-mil thickness
Sure-Weld FleeceBACK RL - Minimum 115-mil thickness
Sure-Flex FleeceBACK RL - Minimum 115-mil thickness

Insulation Adhesive: Flexible FAST and Flexible FAST Dual Tank- Applied in ribbons, splatter and/or full spray as noted.

Base Insulation Layer	Base Layer Fastening	Top Insulation Layer	Top Layer Fastening	Rating	Sure-Seal FleeceBACK RL	Sure-Weld FleeceBACK RL	Sure-Flex FleeceBACK RL
					RoofNAV Number		
Steel Deck (Min. 22-Gauge) (Note 1)							
Min. 1-1/2" InsulBase	Loose-laid	Min 2" SecurShield HD Composite RL	6 (5.33 sq. ft) (Notes 2 & 3)	1-90	Pending	Pending	Pending
Min. 1-1/2" InsulBase	Loose-laid	Min 2" InsulBase RL or SecurShield RL	8 (4 sq. ft) (Notes 2 & 3)	1-90	430381-0-0	430340-0-0	510074-0-0
Min. 1-1/2" InsulBase	Loose-laid	1/2" SecurShield HD RL	16 (2 sq. ft) (Notes 2, 3 & 4)	1-90	430386-0-0	430385-0-0	510075-0-0
Min. 1-1/2" InsulBase	Loose-laid	Min 2" InsulBase RL, SecurShield RL or SecurShield HD Composite RL	20 (1.6 sq. ft) (Notes 2 & 3)	1-150	430630-0-0	430426-0-0	510076-0-0
Min. 1-1/2" InsulBase	32 (1 sq. ft) (Note 2)	1/2" SecurShield HD RL	Flexible FAST Dual Tank-ribbons 4" o.c.	1-165 (C DECK)	445230-0-0	445223-0-0	510080-0-0
Min. 1-1/2" InsulBase	32 (1 sq. ft) (Note 2)	1/2" SecurShield HD RL	Flexible FAST Dual Tank-ribbons 4" o.c.	1-225 (E DECK)	445231-0-0	445229-0-0	510081-0-0
Steel Deck (Min. 22-Gauge)/ VapAir Seal 725TR and Cav-Grip III or 702 Primer							
Min. 1/2" Dens-Deck Prime or SECUROCK Gypsum Fiber	8 (4 sq. ft) (Note 2)	Min 2" InsulBase RL or SecurShield RL over Min. 1-1/2" InsulBase	Flexible FAST or Flexible FAST Dual Tank- ribbons 12" o.c.	1-90	479012-0-0	479016-0-0	Pending
Min. 1/2" Dens-Deck Prime or SECUROCK Gypsum Fiber	8 (4 sq. ft) (Note 2)	1/2" SecurShield HD RL over Min. 1-1/2" InsulBase	Flexible FAST or Flexible FAST Dual Tank- ribbons 12" o.c.	1-90	479018-0-0	479021-0-0	Pending
Min. 1/2" Dens-Deck Prime or SECUROCK Gypsum Fiber	20 (1.6 sq. ft) (Note 2)	Min 2" InsulBase RL, SecurShield RL or 1/2" SecurShield HD RL over Min. 1-1/2" InsulBase	Flexible FAST - Rig Splatter	1-135	Pending	Pending	Pending
Min. 1/2" Dens-Deck Prime or SECUROCK Gypsum Fiber	32 (1 sq. ft) (Note 2)	1/2" SecurShield HD RL over Min 1.5" InsulBase or SecurShield	Flexible FAST - Rig Splatter.	1-225	Pending	Pending	Pending
Steel Deck (Min. 22-Gauge) / SureMB 70 SA and Cav-Grip III Primer							
Min. 1/2" Dens-Deck Prime or SECUROCK Gypsum Fiber	8 (4 sq. ft) (Note 2)	Min 2" InsulBase RL, SecurShield RL or 1/2" SecurShield HD RL over Min. 1-1/2" InsulBase	Flexible FAST or Flexible FAST Dual Tank- ribbons 12" o.c.	1-90	Pending	Pending	Pending
Min. 1/2" Dens-Deck Prime or SECUROCK Gypsum Fiber	20 (1.6 sq. ft) (Note 2)	Min 2" InsulBase RL, SecurShield RL or 1/2" SecurShield HD RL over Min. 1-1/2" InsulBase	Flexible FAST - Rig Splatter.	1-135	Pending	Pending	Pending
Steel Deck (Min. 22-Gauge) / SureMB 90TG or 120TG Base Torch Applied							
Min. 1/2" Dens-Deck Prime or SECUROCK Gypsum Fiber	8 (4 sq. ft) (Note 2)	Min 2" InsulBase RL, SecurShield RL or 1/2" SecurShield HD RL over Min. 1-1/2" InsulBase	Flexible FAST or Flexible FAST Dual Tank- ribbons 12" o.c.	1-90	Pending	Pending	Pending
Min. 1/2" Dens-Deck Prime or SECUROCK Gypsum Fiber	20 (1.6 sq. ft) (Note 2)	Min 2" InsulBase RL, SecurShield RL or 1/2" SecurShield HD RL over Min. 1-1/2" InsulBase	Flexible FAST or Flexible FAST Dual Tank- ribbons 6" o.c.	1-135	Pending	Pending	Pending

Factory Mutual Approvals
FleeceBACK RL Roofing Systems

InsulBase RL, SecurShield RL & SecurShield HD RL Polyiso Ratings - New Construction

Membrane Type: Sure-Seal FleeceBACK RL - Minimum 115-mil thickness
Sure-Weld FleeceBACK RL - Minimum 115-mil thickness
Sure-Flex FleeceBACK RL - Minimum 115-mil thickness

Insulation Adhesive: Flexible FAST and Flexible FAST Dual Tank- Applied in ribbons, splatter and/or full spray as noted.

Base Insulation Layer	Base Layer Fastening	Top Insulation Layer	Top Layer Fastening	Rating	Sure-Seal FleeceBACK RL	Sure-Weld FleeceBACK RL	Sure-Flex FleeceBACK RL
					RoofNAV Number		
Structural Concrete Deck							
Min. 1-1/2" InsulBase	Flexible FAST or Flexible FAST Dual Tank- ribbons 12" o.c.	Min 2" InsulBase RL, SecurShield RL or 1/2" SecurShield HD RL	Flexible FAST or Flexible FAST Dual Tank- ribbons 12" o.c.	1-285	460108-0-0	460110-0-0	Pending
Min. 1-1/2" InsulBase	Flexible FAST- Full Spray or Splatter	Min 2" InsulBase RL, SecurShield RL or 1/2" SecurShield HD RL	Flexible FAST- Full Spray or Splatter	1-285	430413-0-0	430423-0-0	510077-0-0
Min. 1-1/2" InsulBase (Optional)	Flexible FAST- Full Spray or Splatter	Min 2" InsulBase RL, SecurShield RL or 1/2" SecurShield HD RL	Flexible FAST- Full Spray or Splatter	1-285	430424-0-0	430425-0-0	Pending
Min. 1-1/2" InsulBase	Loose-laid	Min 2" InsulBase RL or SecurShield RL	20 (1.6 sq. ft) (Note 5)	1-150	Pending	460469-0-0	Pending
Structural Concrete Deck / VapAir Seal 725TR and Cav-Grip III, 702-LV or 702 Primer							
Min. 1-1/2" InsulBase	Flexible FAST or Flexible FAST Dual Tank- ribbons 12" o.c.	Min 2" InsulBase RL, SecurShield RL or 1/2" SecurShield HD RL	Flexible FAST or Flexible FAST Dual Tank- ribbons 12" o.c.	1-285	460107-0-0	460109-0-0	Pending
Structural Concrete Deck / SureMB 70 SA and Cav-Grip III Primer							
Min. 1-1/2" InsulBase	Flexible FAST or Flexible FAST Dual Tank- ribbons 12" o.c.	Min 2" InsulBase RL, SecurShield RL or 1/2" SecurShield HD RL	Flexible FAST or Flexible FAST Dual Tank- ribbons 12" o.c.	1-285	Pending	Pending	Pending
Structural Concrete Deck / SureMB 90TG and 120TG Base Torch Applied / Cut-Back Asphalt Primer							
Min. 1-1/2" InsulBase	Flexible FAST or Flexible FAST Dual Tank- ribbons 12" o.c.	Min 2" InsulBase RL, SecurShield RL or 1/2" SecurShield HD RL	Flexible FAST or Flexible FAST Dual Tank- ribbons 12" o.c.	1-285	Pending	Pending	Pending

Notes:

1. Optional VapAir Seal MD or the combination of gypsum and VapAir 725TR may be applied over the steel deck.
2. Securement using InsulFast Fastener & Insulation Fastening Plate.
3. Securement using InsulFast Fastener & SecurFast Plate.
4. Securement using HP Fastener & Insulation Fastening Plate.
5. Securement using CD-10 or HD 14-10 Fasteners & Insulation Fastening Plate.

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