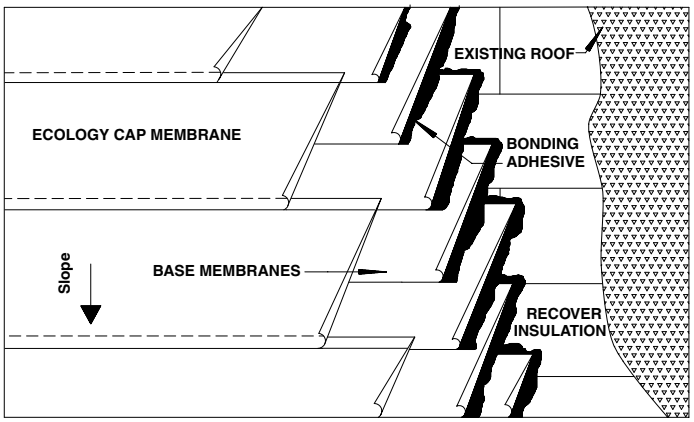
SPECIFICATION 3000-3-INRC-M (C)(G)

Torch Applied Specifications

➥ ***FOR APPLICATIONS OVER EXISTING ROOF SYSTEMS***



MATERIALS LIST AND MEMBRANE OPTIONS

Insulation/Fasteners:

Insulation and Fasteners shall be as required for the project per Ecology Design Specifications. Ecology's ERS-*INSULHESIVE* may be used to bond the base layer of insulation to a properly prepared smooth surface roof with 3/4" - 1" beads layed 12" o.c.

Bonding Bitumen For Base Plies:

ERS- All Temp:	Steep Grade (Type III) ASTM D-312-84 at a minimum 25 lbs. per 100 SF.
ERS-All Temp:	Special Steep Grade (Type IV) ASTM D-312-84 at 25 lbs. per 100 SF.
ERS Hot Flex:	Modified Mopping Asphalt at 25 lbs. per 100 SF.

Primer:

ERS-301	Quick Dry Asphalt Primer at 125 - 150 SF. per gallon.

Ecology Base Membrane Options (Select 2 Plies):

Asphalt Based:	ERS-400, ERS-400-6 or ERS-401
SBS Based:	ERS-500, ERS-500-4, ERS-500-6 or ERS-500-6P
SBS Torch Based:	ERS-500-4T, ERS-500-6T or ERS-602

Ecology Cap Membrane Options:

SBS/SEBS:	ERS-602, ERS-603, ERS-604T, or ERS-703

Surfacing Options For Non-Granulated Sheets:

Ecology Coating	Membranes Accepted	Min. Coverage Rate
ERS-305:	All except ERS-600, ERS-602, & ERS-703	1-1/2 - 2 gal. per 100 SF.
ERS-308:	All except ERS-602 & ERS-703	1-1/2 - 2 gal. per 100 SF.
ERS-200:	All except ERS-703	3 gal. per 100 SF.
ERS-White Top:	All except ERS-600, ERS-602, & ERS-703	2 gal. per 100 SF.

Additional Surfacing Options For SBS:

ERS All Temp:	Hot Applied Asphalt at 60 - 70 lbs. per 100 SF. with pea gravel embedded at the rate of approx. 400 lbs. per 100 SF.
ERS Hot Flex:	Hot Applied Rubberized Asphalt at 60 - 70 lbs. per 100 SF. with pea gravel embedded at the rate of approx. 400 lbs. per 100 SF.
ERS-302/ or 309:	Cold Process Adhesive at 2 gallons per 100 SF. for mineral granules. At a minimum 5 gallons per 100 SF. for graveled surfaces.
ERS Granules:	Apply in wet adhesive to cover surface.
Roofing Gravel:	ASTM D1863 roofing aggregate at 400 lbs per 100 SF.

SPECIFICATION PROCEDURES

GENERAL:

This specification provides for the combined selection of two Ecology Base Ply Membranes and an Ecology Cap Membrane over an exisitng roof system. These specifications apply to positive slope roof systems with slopes up to 2", which have an insulation base attached to the deck system per the published design specifications of Ecology Roof Systems®, the insulation manufacturer, fastener manufacturer, and latest Factory Mutual guidelines. All rolls should be unrolled and relaxed prior to installation. All bad decking and any wet roofing must be replaced prior to installing the new Ecology roof system.

Insulation installed over steel decks shall be secured per the latest recommendations of FM Loss Prevention Bulletin 1-28. Unless specifically approved by Ecology and the insulation manufacturer, all isocyanurate and other cellular foam boards must be overlayed with minimum 1/2" wood fiber or 3/4" perlite, basalt wool, or fiberglass insulation in accordance with NRCA recommended procedures.

BASE MEMBRANES (MINIMUM 2 PLIES):

Install the selected Ecology Base Membranes in hot asphalt in accordance with Ecology's approved procedures. For mop applications, where the maximum slope is 1/2" in 12", Type III asphalt can be used. Where the slope is over 1/2", use Type IV asphalt. Begin by starting at the low point in the roof, with an 18" starter membrane layed up in shingle fashion perpendicular to the slope. Install a full layer over the starter ply, with subsequent plies overlapping the mid-point of the membrane below it by 1". All end laps should be staggered no less than 3' apart.

NOTE: Where different types of base plies are used, the first ply shall be installed with 2" side laps and 4" end laps, or as marked and required for the selected membrane. The second layer should be staggered a minimum of 12" from the laps of the first ply. If, in this situation, the second base ply is a torch sheet, the initial base ply must not be ERS-400 or 400-6. Any torch applied base membrane must be welded to a torchable surface. Mechanical fastening of the initial base ply, still requires two additional fully adhered layers of base membrane. Mechanical attachment of ERS Redi Deck is the only exception.

CAP MEMBRANE:

Install the Ecology membrane with heat welded torch application beginning at the low point on the roof running parallel to the installed base membrane. Stagger the side and end laps of the cap membrane a minimum of 9" from the side and end laps of the base membrane. Heat should be applied to the full width of the roll until the modified bitumen has properly softened to provide adhesion to the substrate and provides a uniform flow of bitumen of about 1/4" around all seams. Unless otherwise marked, side laps on the Ecology membranes shall be a minimum of 4" and end laps a minimum of 8". For slopes of 1" - 2" per lineal foot, apply material parallel to the slope with head laps backnailed 6" on center approximately 2" in from the edge. Stagger end laps a minimum of 36" from ends of the previous roll. Follow Ecology's published installation procedures for more detailed instructions.

SURFACING:

All smooth surface membranes must receive surface protection. Factory finished mineral and metal surface membranes do not require any additional protection, but mineral surfaces can be coated, if desired, using higher coverage rates for the rougher membrane surface. Smooth surface APP membranes should be coated with one of Ecology's reflective coatings. Application can be done, after the installation has weathered for 30 days, by roller, soft bristle brush or airless spray at the nominal rate of 1 - 2 gallons per 100 sq. ft. per coat depending on the coating selected. Follow application procedures outlined by Ecology Roof Systems® regarding preparation and dry time required.

Smooth surfaced SBS membranes, after a 30 day curing process, may be coated wth one of the Ecology reflective coatings or can be surfaced with one of Ecology's hot applied asphalt blends with graded roofing aggregate embedded. The membranes may also be surfaced with an Ecology cold process adhesive with mineral granules embedded to cover the adhesive.

ECOLOGY ROOF SYSTEMS SPEC SHEET

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