



HARVI-FOIL® MF 800

PRODUCT DESCRIPTION

HARVI-FOIL® MF 800 is a 6-layer double-sided aluminium foil laminate with superior strength and puncture resistant properties. The multi-layer laminates are bonded by co-polymer substrates to a central core of poly weave for all-round durability, high mechanical and puncture strength.

HARVI-FOIL® MF 800 has a special polyester film on one side which seals and embeds the metalised aluminum film deposit between the poly films to prevent and withstand corrosive vapour or liquid attack from any hostile environment. Its low permeability has further enhanced this unique performance.

LOWEST PERMEABILITY

WATER VAPOUR PERMEANCE LESS THAN 0.2 ng/Ns OR EQUIVALENT 0.002 gm OF WATER/M² 24 hrs mm Hg PRESSURE.

RADIANT HEAT BARRIER FOR ROOF INSULATION – HIGH R-VALUE

REDUCTION OF HEAT FLOW BY 70-80% DEPENDING ON ROOF DESIGN.

APPLICATION

HARVI-FOIL® MF 800 is designed for use as a radiant heat barrier for roofs.

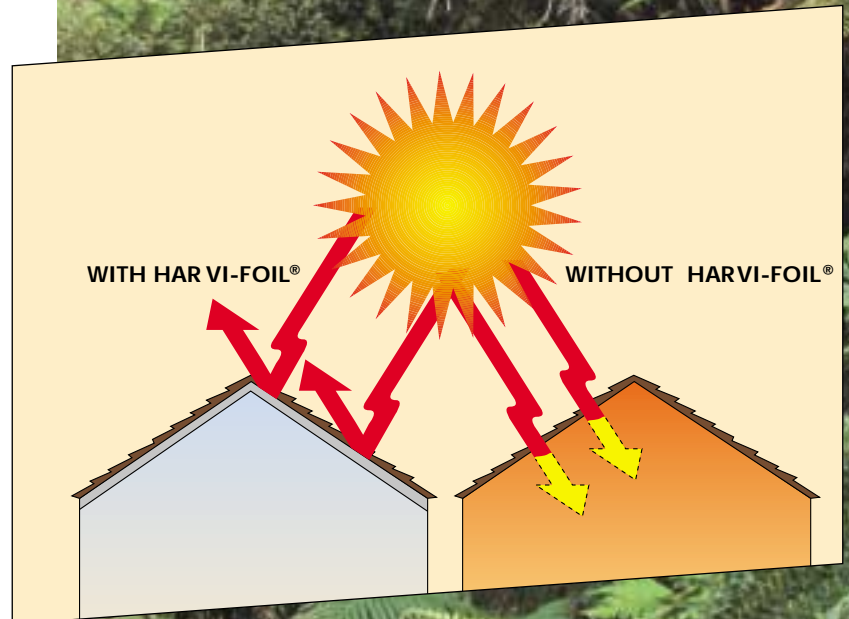
HARVI-FOIL® MF 800 is strongly recommended for all roof insulation for Residential, Commercial, Industrial and animal / poultry farm facilities.

HARVI-FOIL® MF 800 is particularly suitable for new and retrofit installations for animal and poultry farms. For best results, especially in animal housing the polyester film should face down to prevent any corrosive effect on installation surface. HARVI-FOIL® MF 800 is printed on one side to clearly identify installation method.

ROLL SIZE:

1.25m x 60m = 75m²

ALUMINIUM RADIANT HEAT BARRIER FOR ROOF INSULATION AND AGRICULTURAL HOUSING



THE
ISO 9000
series of
quality
management
system
standards

PROJECT REFERENCE

Below are just some of the projects which have used HARVI-FOIL®. A full list is available on request.



Pig Farm - Chile



Residential House - Asia



School Buildings



Radiant heat barrier - Chicken Farm, Philippines

TYPICAL R-VALUE* (M²K/W) OF HARVI-FOIL® MF 800 FOR ROOF INSULATION

1. METAL ROOF – FOIL INSULATION UNDER PURLINS		R-Value
<p>Roof pitch 2 to 23°</p>	1 Surface film outside	0.04
	2 Air gap 100mm (low emissivity)	1.08
	3 Foil insulation	0.00
	4 Surface film inside	0.20
	Total R-Value M²K/W	1.32
<i>Thermal transmittance value, U-value = 0.58 W/M²K</i>		

2. METAL ROOF NOISE DAMPENED WITH FIBREGLASS		R-Value
<p>Roof pitch 2 to 23°</p>	1 Surface film outside	0.04
	2 Glass fibre x 50mm building insulation blanket	1.20
	3 Foil insulation	0.00
	4 Surface film inside (low emissivity)	0.60
	Total R-Value M²K/W	1.84
<i>Thermal transmittance value, U-value = 0.58 W/M²K</i>		

3. TILED ROOF – FOIL INSULATION UNDER BATTENS AND HORIZONTAL CEILING		R-Value
<p>Roof pitch 2 to 23°</p>	1 Surface film outside	0.04
	2 Air gap 75mm (low emissivity)	1.00
	3 Foil insulation	0.00
	4 Attic space unventilated	0.40
	5 Gypsum board 12mm	0.07
	6 Surface film inside (high emissivity)	0.16
Total R-Value M²K/W		1.67
<i>Thermal transmittance value, U-value = 0.42 W/M²K</i>		

4. CONCRETE SLAB ROOF – WITH CEILING LINING		R-Value
<p>Roof pitch 0 to 1°</p>	1 Surface film outside	0.04
	2 Concrete 100mm	0.07
	3 Foil insulation	0.00
	4 Air gap 50mm (low emissivity)	1.06
	5 Gypsum board 12mm	0.07
	6 Surface film inside (high emissivity)	0.16
Total R-Value M²K/W		1.40
<i>Thermal transmittance value, U-value = 0.71 W/M²K</i>		

5. METAL ROOF WITH FOIL INSULATION OVER PURLINS AND CONCRETE DECK		R-Value
<p>Roof pitch 2 to 23°</p>	1 Surface film outside	0.04
	2 Metal roof	0.00
	3 Air gap 100mm (low emissivity)	1.08
	4 Foil insulation	0.00
	5 Attic space unventilated	0.40
	6 Concrete	0.07
	7 Surface film inside (high emissivity)	0.16
Total R-Value M²K/W		1.75
<i>Thermal transmittance value, U-value = 0.41 W/M²K</i>		

*Actual R-VALUE depends on roof design and materials used.

PHYSICAL PROPERTIES OF HARVI-FOIL® MF 800

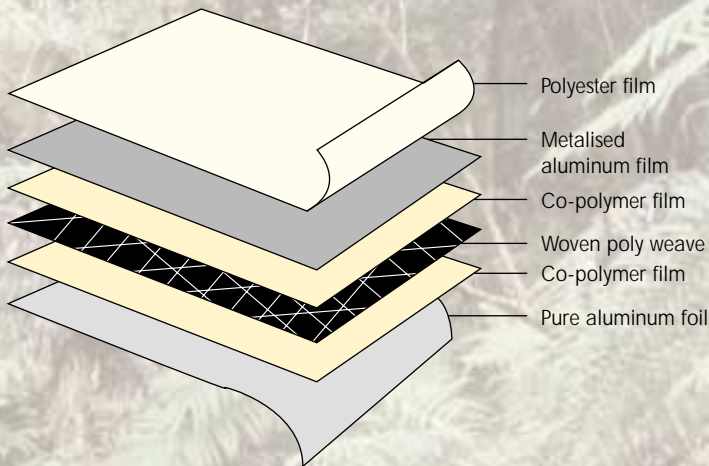
PROPERTIES	STANDARD	UNITS
Weight	Measurement	137gm/m ²
Water vapour permeance	ASTM E96-E	Less than 0.2ng/Ns Less than 0.004 (Perms)
Tensile strength	ASTM 828	M.D. 12 KN/m C.D. 8.6 KN/m
Edge tear	TAAPI T470 OM-89	M.D. 570 KN/m C.D. 360 KN/m
Bursting Strength	AS2001.2.19-1988	209N
Reflectivity of AL foil surface	ASTM E468-71	Not less than 95%
Emissivity	-	Not more than 5%

The data above are typical results and subject to change without notice. Test reports are available on request.

ENVIRONMENTAL EVALUATION

DESCRIPTION	RESULTS
Temperature resistance	Suitable for use in tropical countries of up to 80°C without delaminating and loss of product integrity.
Dry Delamination	No corrosion or delamination after exposure to 60°C, for 24 hours.
Wet Delamination	No corrosion or delamination after exposure to 60°C for 24 hours.
Durability	Stable with 15%-25% elongation.
Water Barrier	High – No penetration after 24 hours of 100mm water pressure tested to AS/NZ4201.4 1994
Corrosion resistance	No corrosion after ageing at 60°C, 95% R.H. for 30 days
Mold and mildew resistance	Does not promote growth of organisms.

The above are typical results obtained from evaluation.



Manufactured and supplied by Tasman Insulation New Zealand,
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www.tasmaninsulation.com



Clay / Concrete Tile



New Commercial Roof

INSTALLATION

As a radiant heat barrier for roof insulation: Printed surface down

- For Roofing Sheet – lay over purlins. Unroll foil down length of roof from ridge. Join overlap 50mm recommended.
- For Tile Roof – lay across structure under tile battens commencing from eaves. Joint overlap 150mm recommended.
- For retrofit fix underneath purlins using adequate support to hold HARVI-FOIL® MF 800 in position. Consult distributor for suitable system.
- Seal all overlaps and around all penetrations with HARVI-FOIL® 40 Micron tape. Overlap foil with a minimum of 50mm both longitudinally and crosswise.

SPECIFICATION GUIDE

HARVI-FOIL® MF 800 or its equivalent has the following technical properties:

- 5-layers laminate with polyweave.
- Reflectivity of 95% on foil side.
- Water vapour permeance less than 0.2ng/Ns.
- Tensile strength – minimum M.D. 12KN/m, C.D. 8.6 KN/m
- Burst strength – 209N

HARVI-FOIL® is a registered Trade Mark.

Distributed by: _____