

Polyprop non-woven membrane with foil laminates
SANS 1381-4:1985 Class C

ECO SHIELD[™] ULTRA DOUBLE FOIL[®] – SANS 1381-4:1985 Class C

Data	Unit	Unit
Class	–	C
Form	–	Roll
Length	m	40 m
Width	mm	1250 ± 5%
Mass per unit area	g/m ²	208 ± 10%
Resistance to delamination		
a) Dry at elevated ambient temperatures	–	No delamination
b) Wet at elevated ambient temperatures	–	No delamination
c) Resistance to corrosion	–	No corrosion
Shrinkage:		
a) Machine direction	%	<1.5
b) Cross machine direction	%	<1.5
Emissivity	–	<0.05
Water vapour permeance:	g/(s.MN)	<0.002
Reflective surface fire index	Class	1
Tensile breaking strength:		
a) Machine direction	kN/m	>3.5
b) Cross machine direction	kN/m	>3.4
Bursting strength	kPa	>490
Puncture resistance	mJ	>1500
Edge tear resistance		
a) Machine direction	N	>70
b) Cross machine direction	N	>50
System thermal resistance:		
Reflective surface facing hot surface	(m ² .K)/W	>1.2
Installation Instructions		
1) Domestic specifications		
One layer of Eco Shield Ultra over rafters and under battens. Lay Eco Shield longitudinally over the rafters working from the eaves to the ridge and lapped 150 mm at joints.		
2) Industrial specifications		
Fix strainer wires from ridge to eave purlins at 300 to 600 mm centres depending on the application. The wires must run on top of the purlins. Lay Eco Shield Ultra over the strainer wires from the ridge to the eave. Secure Eco Shield to leg face of top purlin, pull taut down to the eave and fix to bottom purlin. The Eco Shield should be overlapped 150 mm at each point to ensure that the strainer wires support each lap.		
Special precautions		
The foil layer has a poor resistance to acids and alkalis and must not be used in contact with wet concrete or be exposed to a corrosive environment. Unless special precautions are taken, the atmosphere in the roof space can cause corrosion of the foil layer that will directly effect its emissivity and therefore its thermal insulation properties.		

Eco Shield[™] Ultra Double Foil

Eco Shield[™] Ultra Double Foil is a five-layer laminate which carries the SANS 1381-4 mark Class C. It has been used extensively as an insulation membrane under tiled and metal roofs. The aluminium foil layers provide insulation, the top layer through reflectivity and the bottom layer through its low emissivity. There must be an air space of at least 50 mm for the reflective surfaces to function efficiently. The product does not need to be scrim reinforced as the spunbond layer provides adequate strength and stability.

The product will also act as a dustproof layer when used under roof tiles and has excellent vapour resistance.

