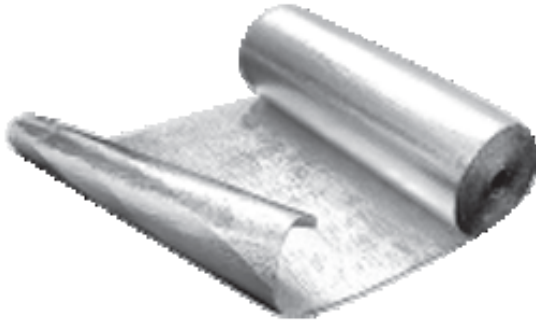


Premium CP3

Thermal reflective insulation made of two external High Resistance pure (99.4%) aluminium surfaces, with low emissivity (3% for each reflective surface) covering a single core layer of fire retardant non-dripping polyethylene air bubble film. Reflects 97% of radiant heat.



Roll size : 1.2m (W) x 60m (L) x 3.8mm (T)
 Coverage : 72m²
 Roll Weight : ± 16 kg

Technical Data

PROPERTY	UNITS	DIR	COOLMAX™ PREMIUM CP3
Emissivity (ASTM C 1371, E-408)	%		3
Reflectivity (ASTM 1371, E-408)	%		97
Heat Resistance (AS/NZS 4859.1)	m ² x °C / w		2.80 (typical residential tiled roof) 2.30 (typical commercial roof without ceiling) 3.50 (typical commercial roof with ceiling)
Noise Reduction Coefficient (ASTM E-384)	%		45
Tensile Strength @ Peak (ASTM C-1336)	g/cm-width	MD	5800
		TD	7100
Elongation @ Peak (ASTM D-882)	%	MD	15.0
		TD	10.0
Tear Strength (ASTM D-1004)	N	MD	22.0
		TD	20.0
Operation Temperature	49°C to +88°C	MD	-
		TD	
Puncture Resistance (TAPPI T803)			5-3
Classification Of Reaction To Fire •	joule		(EN 13501-1 : 2002) Euroclass B-s2,d0
Surface Burning Characteristic •			BS 476
Flame Spread Classification And Smoke Density Developed According to: UL 723, NFPA No. 255, UBC No. 8-1			Class 1
SNPE Non Flaming Dripping Test for PE Bubbles	SNPE non		PASS
Linear Dimensional Changes (ASTM C 1136-92) at 110°C	°C		< 0,2
Linear Shrinkage (24 hours in water)			0%
Water Vapour Transmission (ASTM E-96)	g/f ² hr		0.018 (method A)
Dry Delaminating (AS4201.1 under 4859.1)			Pass
Wet Delaminating (AS4201.1 under 4859.1)			Pass
Fungal Resistance Test (ASTM C 1338)			No fungal growth
Corrosion Resistance (internal test)	conc.HCl		High resistance
Surface Corrosion Test (AS4201.1 under 4859.1)			Pass
Yield (nominal)	g/m ²		~ 250

Key Benefits

- Accoustic**
up to 45% NRC
- Advanced Thermal Performance**
reflecting 97% of radiation heat
- 3 in 1**
provide a protective insulation barrier, radiant barrier and waterproofing membrane
- No Health Hazard Fiber Free**
anti bacteria and anti fungal, non-asthmatic and poses no health and safety risks
- Easy Installation**
no wire mesh no additional protective film fast & easy
- Energy Saving, Cost Saving**
- Fire Retardant**
achieved Class 0 Classification & all International Standards
- Long Lasting**

Terreal CoolMax™ Premium are designed and manufactured under control of a Quality Management System, which meets the requirements of ISO 9001:2000 as certified by :



* All products are supplied with high resistance (H.R.) treatment against corrosion as standard.

Installation Guide



Step 1
Measure the width of the roof and by using blade cut the length accordingly.



Step 2
Starting from trusses edge, lay CoolMax™ across the purlins.



Step 3
Using self-tapping screw for light weight trusses or stapler for timber trusses to secure CoolMax™.



Step 4
Make sure overlapping shall be at least 50mm and stick with PP all weather tape which is heavy duty self extinguished tape.



Step 5
Batten can be installed on top of CoolMax™ following the roof profile spacing.




Step 6
Install roof tiles according to manufacturer's recommendations.



Step 7
View from roof underneath.

Certificates & Approvals

CERTIFICATION	COUNTRY	STANDARD	TEST RESULT	CERTIFICATION BODY
Quality Management System	International	ISO 9001:2000	Comply	 Certificate No. 98188
Product Safety in Food Packaging Applications	International U.K.	HACCP BRC / IOP	Comply Comply	
FIRE SAFETY	United States	ASTM E 84 Equivalents: UL 723 ANSI/NFPA#255 UBC No. 8-1	Class A	SGS U.S. Testing Company Inc.
	Japan	ISO 5660	Non-combustible	General Building Research Corp. of JAPAN Officially approved By the Ministry of Land, Transport and infrastructure
	European Union	EN 13501-1:2000	B - s2, d0	Warrington Fire Research Centre Ltd. - U.K.
	France	NF P 92 - 507	M1	SNPE-Laboratoire d'Essais au Feu - France
	Spain	UNE 23-727-90	M1	CIDEMCO - Spain
	Germany	DIN 4102	B1	HT Troplast AG - Germany
	U.K.	BS 476:Part 7	Class 1	Warrington Fire Research Centre Ltd. - U.K.
	Malaysia / Singapore	BS 476:Part 7 BS 476:Part 6	Class 1 Class 0	Fire and Rescue Department Malaysia. (JPBM:PPP/005/14/79) Singapore Productivity & Standards Board (PSB Corporation)
	Australia	AS 1530 Part 3	Pass all categories	APL, Applied Physics Laboratories, New Zealand
	Australia	AS / NZS 1530.02	Pass all categories	Pass (Flammaricity index <5)
ASBESTOS FREE	International	X-ray diffraction method RTM-2 (AIA)	No asbestos fibres identified No asbestos fibres found	Ministry of National Infrastructures, Geological Institute "Millennium Hygiene" - Enviromental measurement
THERMAL RESISTANCE MEASUREMENT	United States	ASTM C 236	1.567 m ² °C / W	Celotex Corporation Testing Services, U.S.A.
	European Union	DIN 52.611	1.801 m ² °C / W	CIDEMCO - Spain
	Korea	KS F 2273	1.695 m ² °C / W 3.550 m ² °C / W (multiple layers)	Fire Insurers Laboratories of Korea [FILK]
	United States	ASTM C 236	R=21 Btu'in/(hr'ft ² 'F)	Geo Science Laboratory, San Diego, California
THERMAL CONDUCTIVITY				
Emmisivity	Singapore	ASTM C 1371	0.04	Singapore Productivity & Standards Board (PSB Corporation)
Reflectivity			96%	
Emmisivity	Australia	ASTM E 408	0.03	The University of Western Australia
Reflectivity			97%	
MOISTURE BARRIER	United States	ASTM E 96	0.018 perm	SGS U.S. Testing Company Inc.
MOLD RESISTANCE	United States	ASTM C 1338	No fungal growth	
THERMAL STABILITY TESTS	United States	ASTM D 1204	< 0.25% change	Technion Research & Development Foundation Ltd.
		ASTM C 1263	No Cracks / No delamination	
TECHNICAL APPROVALS	Poland	AT-15-5167/2002	Approved	Instytut Techniki Budowlanej
	Spain	DIT	Approved	Instituto Eduardo Torroja de Ciencias de la Construcion
	Australia	AS/NZS 4859.1:2002	Approved	JMF, Australia
	United States	AS/NZS 4859.1:2002	Approved	R&D Services, U.S.A.

DISCLAIMER: The information contained in this Technical Data Sheet is the result of extensive laboratory testing performed on our products during standard production. The values given here are typical average values and are believed to be correct to the best of our knowledge, but user should not rely on them absolutely and must confirm their validity and suitability in each particular case. Terreal Malaysia Sdn Bhd makes no guarantee of results and assumes no obligation or liability in connection with this advice.

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