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 over lapping 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 recommenda-tions.

Step 7

View from roof underneath.

Certificates & Approvals

CERTIFICATION	COUNTRY	STANDARD	TEST RESULT	CERTIFICATION BODY
Quality Management System	International	ISO 9001:2000	comply	
Product Safety in Food Packaging Applications	International	HACCP	comply	
	U.K.	BRC / IOP	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	Class 1	Fire and Rescue Department Mlaysia. (JPBM:PPP/005/14/79) Singapore Productivity & Standards Board (PSB Corporation)
		BS 476:Part 6	Class 0	
	Australia	AS 1530 Part 3	Pass all categories	APL, Applied Physics Laboratories, New Zealand
ASBESTOS FREE	International	X-ray diffraction method	No asbestos fibres identified	Ministry of National Infrastructures, Geological Institute
		RTM-2 (AIA)	No asbestos fibres found	"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	Fire Insurers Laboratories of Korea [FILK]
			3.550 m^2 °C / W (multiple layers)	
	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 Construccion
	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 perfomed 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.

Terreal Malaysia Sdn Bhd(202237-P)
No. 25, Jalan TPK 1/5, Taman Perindustrian Kinrara, Seksyen 1, 47180 Puchong, Selangor Darul Ehsan.
Tel : 603-8075 4010 / 4020 / 4060 Fax : 603-8075 1090 Website : www.terreal.com.my

TERREAL SUPER PREMIUM

THERMAL REFLECTIVE INSULATION

15 YEARS WARRANTY

COOLMAX THERMAL REFLECTIVE INSULATION

CLAY ROOF TILES & WALL CLADDINGS
TERREAL
TERRACOTTA

TERREAL SUPER PREMIUM

Our range of superior Thermal Reflective Insulation, is constructed of pure aluminium layers attached to polyethylene bubble film which effectively blocks radiant heat transfer as well as heat conducted through it.

Using of mineral-based insulating materials (such as fiberglass, rock-wool etc.) may delay the heat penetration into a building, but does not offer complete insulation. As a matter of fact, using these materials actually increases insulation cost and causes allergies.

Thermal reflective insulation made of two external pure aluminium foil layers covering a single core layer of large polyethylene bubble film with special fire retardant material.

Roll size : 1.2m(W) x 30m(L) x 8mm(T)

Coverage : 36m²

Roll Weight : ±8.6kg

With Super Premium you achieve total insulation in any weather, at a reasonable cost and with the best results, where this insulation system insures that 97.4% of the radiant heat will not enter your structure. Using one of the largest polyethylene bubble film available in Asia, Terreal Super Premium offers superior sound and heat insulation. No other insulation material will present similar accoustic and heat insulation performance.

Key Benefits >>>

Advanced Thermal Performance prevents up to 97% of radiant heat transfers in your home.

Save on Energy Cost ensuring reduction up to 55% of air condition compressor running time.

3 in 1 provide a protective insulation barrier, radiant barrier and waterproofing membrane.

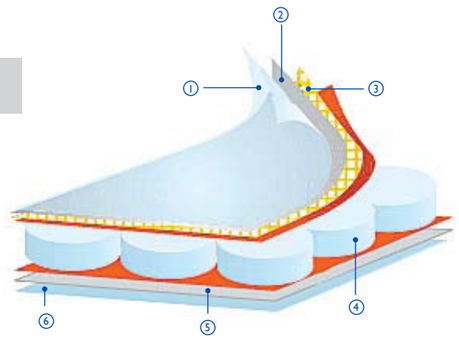
Non-allergenic, non-irritant and non-carcinogenic anti bacteria and anti fungal, non-asthmatic and poses no health and safety risks.

Lightweight, Strength and Durability manufactured from a unique anti-tear surface and lightweight material resulting in easy installation and does not require wire mesh to support.

Fire Retardant Achieved Class 0 Classification & all International Standard.

Structure of Insulation

1. High Resistance - Anti Corrosive Treatment
2. High Purity, Low Emmisivity Aluminium Layer
3. Reinforcing Net
4. Thermally Insulating Air Bubble Layer
5. High Purity, Low Emmisivity Aluminium Layer
6. High Resistance - Anti Corrosive Treatment



Technical Data

PROPERTY	UNITS	DIR	VALUE - Reinforce(AN)
Nominal Thickness	mm		8.0
Emmisivity (ASTM C 1371)	%		3
Reflectivity (ASTM C 1371)	%		97
Heat Resistant (R)-under roof	$m^2 \cdot °C/W$	Down	3.06
Noise Reduction Coefficient (ASTM E-384)	%		55%
Tensile Strength @peak (ASTM C-1336)	g/cm-width	MD	4400
		TD	6000
Elongation @peak (ASTM C-1336)	%	MD	12.5
		TD	10.5
Tear Strength (ASTM C-1938)	N	MD	20.0
		TD	20.0
Surface Flame Spread (BS 476 : Part 7)			Class 1
Fire Propagation (BS 476 :Part 6)			Class 0
Puncture Resistance (TAPPI T 803)	Joule		7.1
Water Vapor Transmission (ASTM E-96)	$g/ft^2 \cdot hr$		0.018 (method A)
Fungal Resistance Test (ASTM C 1338)			No fungal growth
Corrosion Resistance (Internal Test)	Conc.HCl		High Resistance *
Yield (nominal)	g/m^2		240
Standard Roll Size	m X m		1.2m X 30m
Standard Roll Weight (Gross)	kg		±8.6 kg

Terreal Super Premium are designed and manufactured under control of a Quality Management System, Which meets the requirements of ISO 9001:2000 as certified by : Certificate No. 163183

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