



ROCKWOOL Cool 'n' Comfort

Fire, Thermal and Acoustic Insulation for Metal Roof

ROCKWOOL Cool 'n' Comfort series is designed for single or double skin metal roof, with or without skylight, to satisfy U-value requirements in order to achieve the desired roof thermal transmittance value (RTTV). It is also available with a radiant barrier facing to suit the requirements of all types of roofs in commercial and industrial buildings.

Cool 'n' Comfort is highly effective in reducing solar heat gain through the roof for non air-conditioned buildings; and where air-conditions are used, Cool 'n' Comfort helps to save energy and reduce energy costs. The unique properties of Cool 'n' Comfort contribute to make an energy efficient, environmentally sustainable and fire safe roofing system, thereby creating a cool, comfortable and safe indoor environment.



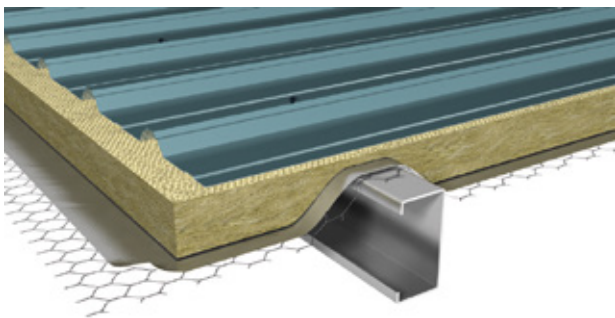
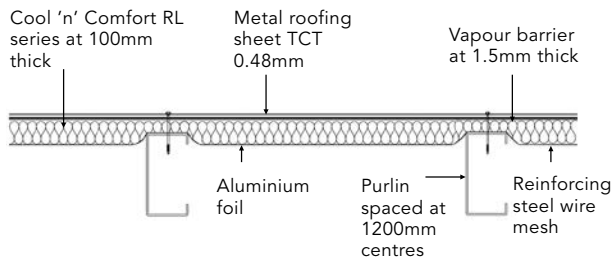
Superior Acoustic Properties

Enhance with unique fiber structure to absorb sound and reduce noise traveling from one room to another, improving occupant comfort.

ROCKWOOL Cool 'n' Comfort

Applications

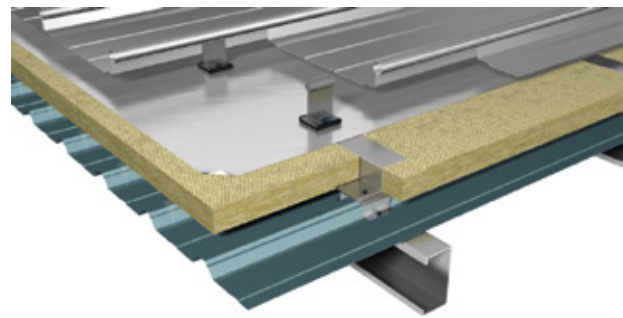
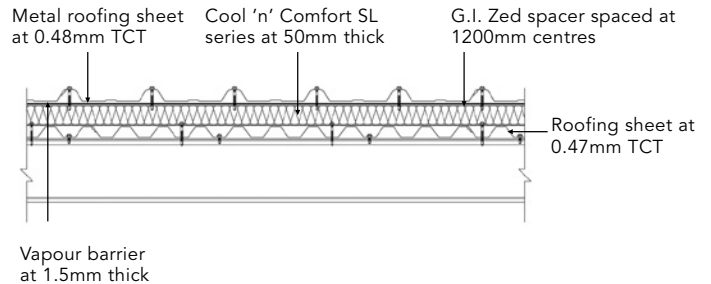
Metal roofing systems are generally categorized as single skin metal roof or double skin metal roof. In single skin roof system, insulation is installed below the metal cladding sheet held by reinforcing steel wire mesh and aluminum foil rolled over purlins. This roofing system is an economically sound option for most industrial buildings. Cool 'n' Comfort RL Series is the ideal non-combustible light weight thermal insulation solution for single skin roofing system.



Single Skin Roof System

The double skin roofing system is a high performance roofing system comprising of an aesthetically designed trapezoidal or standing seam profile metal sheet on the top and a metal trapezoidal tray at the bottom. The two metal sheets are fixed together with a z-purlin creating a gap in the roof space for installation of insulation and vapor barrier. When coupled with Cool 'n' Comfort SL Series stone wool insulation, it boost the performance of the double skin metal roofing system with improved level of thermal insulation, acoustic and fire protection.

Cool 'n' Comfort SL, a semi rigid slab product, is a versatile insulation that is available in various sizes to provide ease of installation and a perfect fit between purlins.



Double Skin Roof System

Note: All systems drawings are not drawn to scale.

ROCKWOOL Cool 'n' Comfort

Water Repellent

Cool 'n' Comfort Series is specially formulated with a water repellent coated onto each strand of the stone wool fibres. *This special coating allows Cool 'n' Comfort to repel rain water that comes into contact with the product, at the same time ensuring the product's excellent thermal and acoustic performance even after exposure to water.

As Cool 'n' Comfort is commonly applied or left outdoor during installation, the water repellent is added into the product as a standard offering.



Product Range and Packaging

Cool 'n' Comfort comes in the form of blankets or slabs to suit many different metal roofing designs and installation needs.

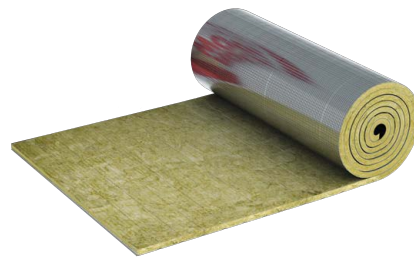
Cool 'n' Comfort is shrink-wrapped in polyethylene sheets for ease of handling, transportation and storage.



Selected range of blanket products are in compressed roll which gives significant reduction in size compared to folded blankets, thereby further reducing your warehousing cost. Please refer to the local sales representatives on the ranges that are available in compressed roll packaging.

Facings

Cool 'n' Comfort series is available as plain products and additionally with options of foil facing or glass tissue on oneside or two-sided.



Cool 'n' Comfort RL series with foil facing



Cool 'n' Comfort RL series without facing

**Note: Water repellent test standard is based on GBT 10299. For more information, please contact your local representatives.*

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Cool 'n' Comfort

Technical Data Sheet

Metal Roof Insulation

1st November 2023

Technical Parameters

Product Name	Cool 'n' Comfort RL920	Cool 'n' Comfort RL940	Cool 'n' Comfort SL920	Cool 'n' Comfort SL940	Cool 'n' Comfort SL950	Cool 'n' Comfort SL960	Standard
Thermal Conductivity Value (W/mk) at 15°C	0.035	0.034	0.035	0.034	0.033	0.033	ASTM C518
Water Absorption (partial immersion) (kg/m ²)	1.0	1.0	0.5	0.5	0.5	0.5	EN ISO 29767
Water Vapor Absorption	Less than 0.04 Vol %	Less than 0.04 Vol %	Less than 0.04 Vol %	Less than 0.04 Vol %	Less than 0.04 Vol %	Less than 0.04 Vol %	ASTM C1104 C1104M
Water Repellent	99%						GB/T 10299
Fire Performance Non Combustibility	Non-combustible Euroclass A1						AS 1530.1 EN13501-1
Fire Hazard Properties	Ignitibility: 0 Spread of flame: 0 Heat evolved: 0 Smoke developed: 0-1						AS 1530.3
Melting Point	More than 1000°C						ASTM E794

Sound absorption coefficient at different Octave Band (50mm thickness)

Product	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	NRC	α_w
Cool 'n' Comfort RL920	0.20	0.60	1.00	1.00	1.00	1.00	1.00	0.90
Cool 'n' Comfort RL940	0.20	0.70	1.00	1.00	1.00	1.00	1.05	1.00
Cool 'n' Comfort SL920	0.20	0.60	1.00	1.00	1.00	1.00	1.00	0.90
Cool 'n' Comfort SL940	0.20	0.70	1.00	1.00	1.00	1.00	1.05	1.00
Cool 'n' Comfort SL950	0.20	0.75	1.00	1.00	1.00	1.00	1.05	1.00
Cool 'n' Comfort SL960	0.30	0.85	1.00	1.00	1.00	1.00	1.05	1.00

* For UL approved products, please contact our local representative.

Compliance with the New Zealand Building Code

ROCKWOOL stone wool products when used, installed and maintained in accordance with the requirements outlined in this datasheet, will meet or contribute to meeting the following provisions of the NZBC:

1. Clause B2 DURABILITY: Performance B2.3.1 (a) not less than 50 years and B2.3.1 (b) 15 years.

Where the building is maintained so that provisions of the NZBC E2 and E3 Clauses are met, and where the insulation is not crushed or exposed to conditions that will diminish its thermal performance, ROCKWOOL Stone Wool Insulation can expect to have a serviceable life of at least 50 years. Refer to Installation Guideline and Product Handling and Storage Guideline for more information.

2. Clause E3 INTERNAL MOISTURE: Performance E3.3.1.

ROCKWOOL Stone Wool Insulation contributes to meeting this requirement.

3. Clause F2 HAZARDOUS BUILDING MATERIALS: Performance F2.3.1.

ROCKWOOL Stone Wool Insulation is safe when handled.

4. Clause H1 ENERGY EFFICIENCY: Performance H1.3.1 (a) and H1.3.2 E.

ROCKWOOL Stone Wool Insulation will contribute to meeting the requirements of NZBC Clause H1, Performance H1.3.1 (a) and H1.3.2 E by complying with NZBC Verification Methods H1/VM1, H1/VM2, NZBC Acceptable Solutions H1/AS1, or H1/AS2.

For more information contact www.outright.co.nz

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Health & Safety

ROCKWOOL stone wool products are manufactured from FBS-1 stone wool. FBS-1 stone wool is safe to use and the fibre component of these products is listed by Safe Work Australia as Man-made Vitreous Fibre (stone wool) of low bio persistence as specified under Note Q in the Australian Hazardous Substances Information System and in the Australian Approved Criteria.

Product specification

Cool 'n' Comfort RL920

R-Value m ² K/W	Thickness (mm)	Width (mm)	Length (mm)	# Pieces per pack	Area per pack (m ²)
1.45	50	1200	5000	1	6
2.15	75	1200	4000	1	4.8
2.85	100	1200	4000	1	4.8

Cool 'n' Comfort RL940

R-Value m ² K/W	Thickness (mm)	Width (mm)	Length (mm)	# Pieces per pack	Area per pack (m ²)
1.45	50	1200	5000	1	6
2.20	75	1200	4000	1	4.8
2.95	100	1200	3000	1	3.6

Cool 'n' Comfort SL920

R-Value m ² K/W	Thickness (mm)	Width (mm)	Length (mm)	# Pieces per pack	Area per pack (m ²)
0.70	25	600	1200	12	8.64
1.45	50	600	1200	8	5.76
1.85	64	600	1200	5	3.60
2.15	75	600	1200	4	2.88
2.55	90	600	1200	4	2.88
2.85	100	600	1200	3	2.16

Cool 'n' Comfort SL930

R-Value m ² K/W	Thickness (mm)	Width (mm)	Length (mm)	# Pieces per pack	Area per pack (m ²)
0.75	25	600	1200	12	8.64
1.45	50	600	1200	6	4.32
1.90	64	600	1200	5	3.60
2.20	75	600	1200	4	2.88
2.65	90	600	1200	4	2.88
2.95	100	600	1200	3	2.16

Cool 'n' Comfort SL950

R-Value m ² K/W	Thickness (mm)	Width (mm)	Length (mm)	# Pieces per pack	Area per pack (m ²)
0.75	25	600	1200	12	8.64
1.50	50	600	1200	6	4.32
1.95	64	600	1200	5	3.60
2.25	75	600	1200	4	2.88
2.75	90	600	1200	4	2.88
3.05	100	600	1200	3	2.16

Cool 'n' Comfort SL960

R-Value m ² K/W	Thickness (mm)	Width (mm)	Length (mm)	# Pieces per pack	Area per pack (m ²)
0.75	25	600	1200	12	8.64
1.50	50	600	1200	6	4.32
1.95	64	600	1200	5	3.60
2.25	75	600	1200	4	2.88
2.75	90	600	1200	4	2.88
3.05	100	600	1200	3	2.16



Disclaimer: The information contained in this data sheet is only applicable for New Zealand and is believed to be correct at the date of publication and is subject to change after the date of printing. This data sheet was designed for general information purpose only. It's contents should not be construed as representing all performance for these insulation materials. You should not act or rely on any of the information contained herein without seeking professional advice. We make no representations as to accuracy, completeness, correctness, suitability or validity of any information in this document and will not be liable for any errors, omissions, or delays in this information or any losses, injuries or damages arising from it use. All information is provided on a as-is basis.

For more information contact www.outright.co.nz

North Island Phone: 027 449 6750
60D Leon Leicester Ave, Mt Wellington,
Auckland

South Island Phone: 027 250 6832
76A Hayton Road, Wigram, Christchurch

ROCKWOOL Malaysia Sdn. Bhd.
Lot 4, Solok Waja 1, Bukit Raja Industrial Park,
41050 Klang, Selangor, Malaysia.