



Technical Document

VER: 1.0 SEPTEMBER 2022

gibs.com.au



OUR STORY

GI Building Sciences (GIBS) is one of Australia's most innovative insulation manufacturing specialists with over 20 years in the insulation industry. With its home base in Brisbane, Queensland, Australia, and a national distribution network, this Australian Family Owned and Operated business is developing ground-breaking insulation products that advanced construction and project management companies are now demanding.

GIBS energy efficient and labour saving solutions to commercial, industrial and residential applications have been recognised by the Australian Government and industry bodies resulting in greater inclusion in project specification documents. GIBS also has national sales and supply agreements with major buying groups, builders and suppliers nationwide. This progressive Australian company is continuously developing product improvements and seeking out commercial opportunities throughout Australia.



WORLD CLASS INNOVATION

The benefits of these products over conventional insulation solutions lies in its encapsulated reinforced core. This simple solution to insulation means that insulation suppliers are able to offer a highly effective and efficient product that creates a significant efficiency at the time of insulation.

MULTIPLE BENEFITS

In addition to labour savings, the GIBS products are delivering other benefits to construction and insulation companies. Such benefits include acoustic improvements, condensation reduction and aesthetic finish. Our reflective aluminium foil bubble insulation represents a substantial insulation advancement.

AUSTRALIAN MADE

GIBS is an Australian owned and run business. After more than 20 years of developing products for the Australian market, our newest innovation is creating interest nationally. Our patented *All-in-One* product has recently been rolled out.

ENVIRONMENTALLY FRIENDLY

We are fully committed to insulation research and development that focuses on a brighter, greener and more prosperous future for all. We take our responsibility as caretakers of this planet seriously. Our products contain recycled products in our product mixes.

OUR PRODUCTS



- ✓ Insulation and fall arrest enfused into one product
- ✓ No requirement for Top Hats or Roof Spacers
- ✓ Delivers superior thermal performance when included as part of a CRIS system (double layer)
- ✓ Single pass product for safer install to commercial projects
- ✓ No specialty fixings required
- ✓ Cost effective solution
- ✓ 15 year warranty

Reflecta All-In-One™ is the latest innovation in the GIB Building Sciences™ range. This patented product suits commercial and industrial buildings.

Reflecta-Guard Plus™ thermo-cellular core insulation recommended for residential, educational, healthcare and aged-care projects.

- ✓ Fall arrest on a single storey building
- ✓ Will support itself up to 2m span
- ✓ Can be used on new and retro fit projects
- ✓ Delivers superior thermal performance when included as part of a CRIS system (double layer)
- ✓ Vapour Barrier
- ✓ 15 year warranty



- ✓ Fall arrest on a single storey building
- ✓ Manufactured with a 150mm flap to reduce bulky overlap
- ✓ Will support itself up to 2m span
- ✓ Can be used on new and retro fit projects
- ✓ Can be used with other reflective insulation
- ✓ Vapour Barrier
- ✓ 15 year warranty

Reflecta-Guard Plus V2™ thermo-cellular core insulation recommended for residential, educational, healthcare and aged-care projects.

Reflecta-Cell Plus™ is the first of the range created by GI Building Sciences™. Initially designed as an alternative to fibrous insulation materials. Versatile product for all residential and commercial projects.

- ✓ Will support itself up to 1.5m span
- ✓ Can be used on new and retrofit projects
- ✓ Can be used with other reflective insulation
- ✓ Vapour Barrier
- ✓ Light weight and easy to transport and install
- ✓ No specialty fixings required



- ✓ Delivers superior thermal performance
- ✓ Lightweight for easy transport and install
- ✓ Vapour Barrier
- ✓ 15 year warranty

Reflecta-Shield Plus™ and other thermo-cellular insulation materials have now been used by the building industry for well over 20 years. Initially designed as an alternative to fibrous insulation materials **Reflecta-Shield Plus™** offers great performance benefits for almost every building application.

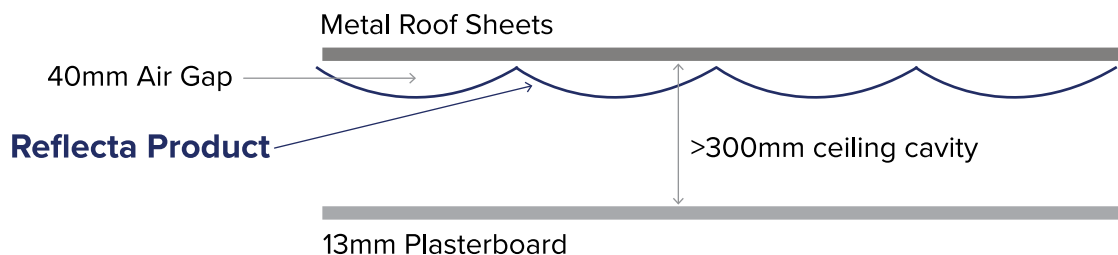
Reflecta-White Plus™ is the ultimate choice of insulation for increasing indoor reflective lighting performance. Reflecta-White Plus™ contains an exposed Ice White face and reinforced scrim foil backing with a thermo-cellular structure.

- ✓ Effective for light diffusion in attics and showroom spaces
- ✓ Has an Ice White decorative finish
- ✓ Delivers superior thermal performance when included as part of a CRIS system (double layer)



COMMERCIAL BUILDINGS

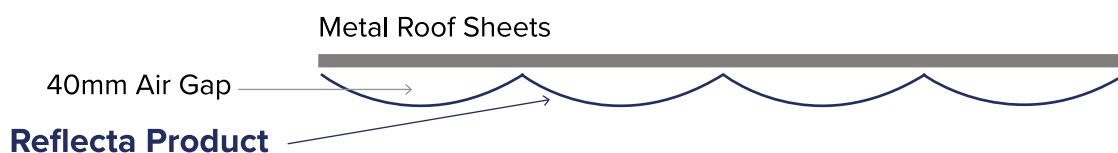
Commercial Project: School, Hospital



Thermal Outcome

Product	Roof Pitch				Roll Size
	0-5°	5-10°	10-15°	10-20°	
Reflecta-Guard Plus™	R3.67	R3.48	R3.29	R3.10	30m ²
Reflecta All-In-One™	R3.59	R3.40	R3.21	R3.02	37.5m ²
Reflecta-Cell Plus™	R3.59	R3.40	R3.21	R3.02	30m ²
Reflecta-Shield Plus™	R3.57	R3.38	R3.19	R3.00	45m ²
Reflecta-White Plus™	R1.80	R1.78	R1.72	R1.67	30m ²

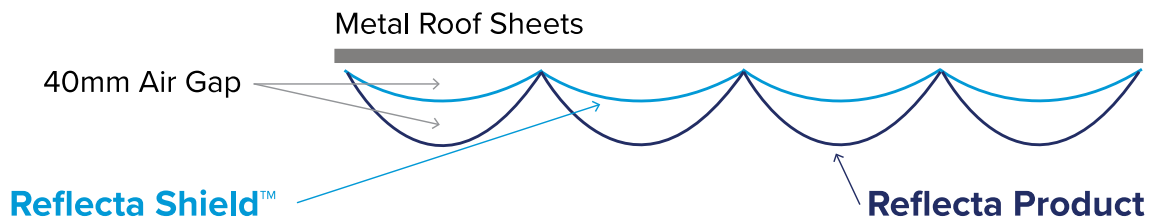
Commercial Projects: Gymnasium, Plane Hanger



Thermal Outcome

Product	Roof Pitch				Roll Size
	0-5°	5-10°	10-15°	10-20°	
Reflecta-Guard Plus™	R2.09	R2.00	R1.91	R1.82	30m ²
Reflecta All-In-One™	R2.00	R1.92	R1.83	R1.74	37.5m ²
Reflecta-Cell Plus™	R2.00	R1.92	R1.83	R1.74	30m ²
Reflecta-Shield Plus™	R1.98	R1.89	R1.81	R1.72	45m ²
Reflecta-White Plus™	R1.55	R1.50	R1.49	R1.49	30m ²

Commercial Projects, Gymnasium, Warehouse



Thermal Outcome DOUBLE LAYER CRIS System

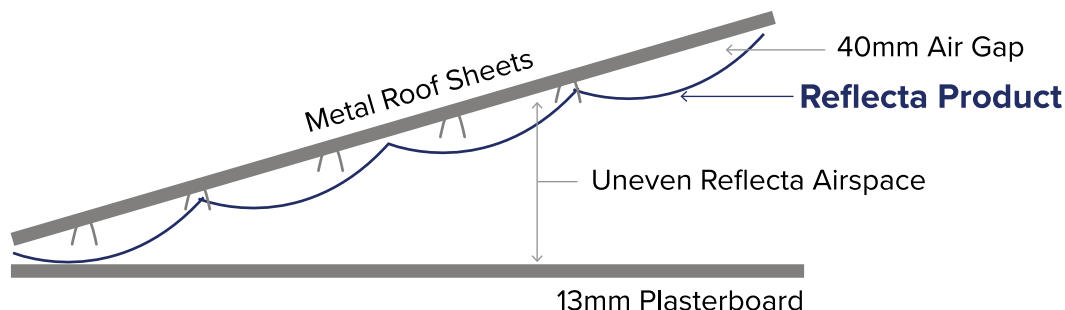
Product	Roof Pitch				Roll Size
	0-5°	5-10°	10-15°	10-20°	
Reflecta-Guard Plus™ + Reflecta-Shield Plus™	R3.73	R3.57	R3.42	R3.24	30m ² / 45m ²
Reflecta All-In-One™ + Reflecta-Shield Plus™	R3.65	R3.48	R3.32	R3.15	37.5m ² / 45m ²
Reflecta-Cell Plus™ + Reflecta-Shield Plus™	R3.65	R3.48	R3.32	R3.15	30m ² / 45m ²
Reflecta-Shield Plus™ + Reflecta-Shield Plus™	R3.63	R3.46	R3.30	R3.13	45m ² / 45m ²
Reflecta-White Plus™ + Reflecta-Shield Plus™	R3.04	R2.92	R2.80	R2.68	30m ² / 45m ²

For improved thermal performance we recommend the use of our Commercial or Residential Insulation System.

CRIS™ is a unique system that is driving building costs down and R-values up. This patented system allows you to choose a cheaper building material such as our **Reflecta-Shield Plus™** in combination with our other **Reflecta Products™**, without compromising on quality. With more building companies making our **Reflecta Range™** their product of choice, more customers are enjoying the many benefits of our top of the range insulation and are saving money on the building costs!

RESIDENTIAL & SHED BUILDINGS

Residential & School Builds Pitched Roof



Thermal Outcome

Product	Roof Pitch				Roll Size
	0-5°	5-10°	10-15°	10-20°	
Reflecta-Guard Plus™	R2.64	R2.60	R2.55	R2.51	30m ²
Reflecta All-In-One™	R2.55	R2.51	R2.46	R2.42	37.5m ²
Reflecta-Cell Plus™	R2.55	R2.51	R2.46	R2.42	30m ²
Reflecta-Shield Plus™	R2.53	R2.49	R2.45	R2.40	45m ²
Reflecta-White Plus™	R1.93	R1.88	R1.82	R1.77	30m ²

Sheds and Garages

Shed and Garage Insulation Install

Metal Roof Sheets

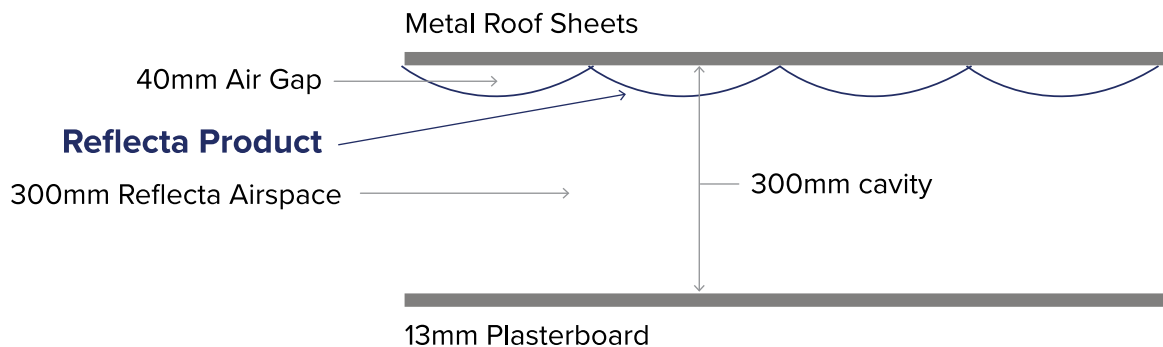


Reflecta-Shed Plus™

Thermal Outcome

Product	Roof Pitch				Roll Size
	0-5°	5-10°	10-15°	10-20°	
Reflecta-Shed Plus™	R0.95	R0.89	R0.85	R0.80	45m ²

Residential & School Builds Cathedral Roof



Thermal Outcome

Product	Roof Pitch				Roll Size
	0-5°	5-10°	10-15°	10-20°	
Reflecta-Guard Plus™	R3.67	R3.49	R3.30	R3.10	30m ²
Reflecta All-In-One™	R3.59	R3.40	R3.21	R3.02	37.5m ²
Reflecta-Cell Plus™	R3.59	R3.40	R3.21	R3.02	30m ²
Reflecta-Shield Plus™	R3.57	R3.38	R3.19	R3.00	30m ²
Reflecta-White Plus™	R1.83	R1.78	R1.72	R1.48	30m ²

OTHER BENEFITS

- ✓ Lighter to transport
- ✓ Easier to install
- ✓ Replaces builders blanket at the roofline or in combination with ceiling batts for performance
- ✓ University tested as a great insulator from Rain and Airborne noise
- ✓ Fibre free, vermin proof and available in 30m and 45m rolls
- ✓ Can be cut to length for large scale projects
- ✓ Reflective insulation is the latest technology reflecting 97% of radiant heat away from a building
- ✓ Our reflective products do not absorb heat so do not continue to radiate heat over night

FAQS

Reflecta All-In-One™

How do you install Reflecta All-In-One™?

GIBS Reflecta All-In-One™ is installed by securing along the gutter edge by screw & washer. There is no requirement for twitching the wire, no requirement to remove wire from the product.

Do I need to overlap Reflecta All-In-One™?

Reflecta All-In-One™ is overlapped along longitudinal join by 150mm. Where deemed necessary for superior condensation control a 72mm or 100mm reinforced foil tape the join.

Do you have to tape GIBS Reflecta All-In-One™?

It is recommended taping GIBS Reflecta All-In-One™ on commercial buildings.

Do I have to use a Safety Wire as well as GIBS Reflecta All-In-One™?

No, the fall arrest wire is built into the fabric of the insulation.

Can you GIBS Reflecta All-In-One™ in a corrosive environment?

Yes, the wire is enclosed in the fabric of the insulation and is suitable for most corrosive environments.

Can you cut GIBS Reflecta All-In-One™ to a desired length?

Yes, GIBS Reflecta All-In-One™ can be cut to length for most projects. However, there is a recommended minimum & maximum length for safety.

All GIBS Reflective Insulation

How are GIBS Reflective Insulation installed?

With the Green side up, GIBS Reflective Insulation are rolled out over the steel purlins or timber roof structures. Allow a 40mm sag between the GIBS Reflective Insulation and roof sheeting. The metal roof sheets are installed by screwing through the GIBS Reflective Insulation into purlins.

Can GIBS Reflective Insulation be cut to length?

Yes. We will manufacture and custom cut to length for most projects. However, there is a recommended minimum & maximum length for safety.

Do you have to tape the joins?

Where overlapping is less than 150mm, but not less than 50mm, use 72 mm wide (or greater) reinforced aluminium tape to join.

Can I use GIBS Reflective Insulation on an outdoor project?

All GIBS Reflective Insulation should be kept dry, however used in an undercover area where the GIBS Reflective Insulation will be dry, the strength of GIBS Reflective Insulation will provide a robust thermal shelter.

Can GIBS Reflective Insulation be used in a corrosive environment?

Yes, the fabric of the insulation is suitable for most corrosive environments.

INSTRUCTION GUIDES

Before you begin installing; please download and read the instructions in our product guides.

Always make sure you have the right tools on hand.

GI Building Sciences Products are a precise combination of new and recyclable components that provide the right balance of thermal comfort and heat protection in the hot Australian conditions. Combining new and recyclable materials we have created patented processes that not only provide optimal performance, but support our goal to do our part to make the world greener, one home/commercial building at a time.

INSULATION FOR HEALTHY LIVING

DOWNLOAD GUIDES HERE





GET IN TOUCH

Your comments and inquiries are important to us.

For information about our products:

P 07 3200 6522

E sales@gibs.com.au

W www.gibs.com.au

A GI Building Sciences Pty Ltd
1/13 Meakin Road
Meadowbrook, QLD, 4131

If you prefer to speak to us in person, we will be glad to assist you in our head office, during our opening hours, Monday - Friday, 8:30AM - 5:00PM.

