

Fletcher
Insulation

Building Better, Together



**BUILDING BETTER –
HEALTHCARE**

FLETCHER INSULATION AND HEALTHCARE



Above / Darwin Hospital
Front Cover / Royal Hobart Hospital

FLETCHER INSULATION HAS BEEN AT THE FOREFRONT OF INNOVATION AND DEVELOPMENT OF ACOUSTIC, ENERGY EFFICIENT AND FIRE PROTECTION INSULATION TECHNOLOGIES FOR HEALTHCARE FACILITIES SINCE THE 1930'S.

Our strong focus on patient comfort and well-being has driven us to offer a range of insulation products and design advice that can support healthcare designers achieve this outcome.

With one of Australia's widest distribution and sales networks, we pride ourselves on providing excellent service to our customers. Fletcher Insulation's Australian manufacturing plants are supported by state-of-the-art research and development facilities, excellent customer service, sales and technical support.



We are fortunate enough to live in a country with an excellent healthcare system centred on some of the most modern, world-class healthcare facilities constructed in recent years.

Fletcher Insulation has worked to develop a range of products specific to the requirements of the latest healthcare buildings.

Fundamental to the operation of a modern healthcare facility is the ability to provide a safe, healing environment to promote recovery from illness. It has long been established that thermal and acoustic comfort have an enormous impact on the well-being of building occupants.

The need to create a healing environment has driven the development of our range of insulation products to meet Building Code requirements, while giving architects and designers solutions for their most complex designs.

Our products offer a range of solutions that include:

- Acoustics
- Moisture management
- Fire protection
- Thermal comfort
- Energy Efficiency
- Indoor air quality



It is critical to consider the right combination of insulation products at the design phase of a project to ensure it can be built in correctly from the start. Once a building is complete it can be difficult, expensive, and occasionally impossible, to rectify poor thermal, acoustic, fire or moisture control product selections or omissions.

This brochure aims to support specification of leading insulation systems for all types of healthcare buildings.

Our aim is to improve healthcare facilities through:

- Providing privacy and comfort
- A healthier indoor environment for patients, medical staff and visitors
- Reducing energy use
- Enabling higher Green Star and WELL certification



INSULATION FOR BETTER HEALTHCARE

Healthcare facilities deliver some of the most critical services to any community. Fletcher Insulation delivers insulation solutions for all elements of the built environment, from the building envelope, to internal walls, HVAC and plant rooms.



/ Roofing



/ External Walls



/ Slabs & Soffits



/ Fire Partitions

BUILDING ENVELOPE

Whatever challenging climatic conditions you need to build for, partnering with Fletcher Insulation enables you to design your healthcare projects to deliver healthy indoor environments, thereby assisting patient recovery and staff well-being. Alongside this we have wide ranging solutions available to ensure patient and workforce safety from fire is maintained to the highest standards.

ROOFING

We offer a range of products that can be used in healthcare roofing designs including suspended ceilings under concrete slabs and flat metal deck roofs for smaller healthcare buildings or plant rooms. Our range covers all climate zones from cold, to temperate to hot and humid; all designed to maximise thermal efficiency and manage condensation.

EXTERNAL WALLS

We have developed a range of glasswool and stonewool solutions for external walls in healthcare buildings to maximise thermal performance, acoustics and protect patients and healthcare workers from fire. The NCC requires all insulation components for fire resisting walls in type A or B healthcare buildings to be non-combustible. Our solutions are classified non-combustible under AS: 1530.1 and will satisfy the requirements of the NCC. We also offer non-combustible acoustic insulation solutions for more sensitive wards and operating theatres. Our Sisalation® building wrap products also meet the required flammability index of the NCC.

SLABS & SOFFITS

We provide solutions for concrete slabs and walls requiring acoustic and thermal treatment to ensure that underground car parks, building HVAC systems and internal environments are appropriately insulated. In areas including service corridors, reception areas or carparks, slab, soffit and wall insulation must be non-combustible, durable, reduce condensation risk and manage heat flow.

Our semi-rigid and rigid insulation solutions have optional aesthetic treatments to enhance the look and feel of all areas in healthcare buildings. Our Pink® Thermal Slab products are Material Group 1 rated in accordance with AS 5637.1.

FIRE PARTITIONS

The safety of patients and staff in healthcare facilities is paramount. We offer non-combustible and fire-resistant products to separate building occupants from the risk of fire for service corridors, ceilings and partitions.

Our Pink® Batts, blankets and boards are all tested to the required Australian Standards for fire. We can help you select the right product to suit your specific applications, guarantee compliance and enhance your design freedom.

INSULATION TO MEET AND EXCEED BUILDING PERFORMANCE STANDARDS

Fletcher Insulation has a broad range of products developed for healthcare. Our dedication to product and system development gives designers the flexibility to exceed existing standards and deliver specifications which achieve even better outcomes. Our Australian manufacturing plants offer short lead times, and the capability to deliver bespoke solutions on larger projects.



/ Internal fitout



/ Ceilings



/ Services

INTERNAL FITOUT

Healthcare facilities provide protection for some of the most vulnerable in our society. A well insulated and healthy indoor environment for patients and staff is essential to provide the excellent care we all expect.

For rest and recovery, or in the operating and consulting rooms where patients are treated, Fletcher Insulation's experience is unsurpassed in helping Australian architects and designers deliver high performance fire and acoustic control within healthcare buildings.

INTERNAL PARTITIONS

Extensive research globally proves acoustic comfort is essential for patient well-being and recovery. Our partition insulation products ensure you can specify non-combustible partition systems that are both space-efficient and meet the highest acoustic and fire protection standards expected, providing peace of mind for all.

CEILING

There are many types of ceiling systems available for healthcare buildings, depending on the type of function the room within the healthcare building is providing. All of these should be designed with the overarching goal to achieve patient comfort, privacy and safety.

Our range of non-combustible ceiling insulation products are designed to work in conjunction with any ceiling system and provide superior airborne noise control and sound absorption for enhanced patient comfort.

SERVICES

Building mechanical services, including HVAC systems, are a significant element of all healthcare facilities and need to be efficient, quiet and maintain hygiene standards. Our range of flexible, semi-rigid and rigid duct insulation provides HVAC engineers with great choice and flexibility in HVAC system specification.

Our services and HVAC solutions offer:

- Reduced heat transfer in and out of the system
- Sound attenuation (of airflow along the ducts)
- Board facing options for hygiene and pathogen control, plus improved aesthetics.

HOSPITALS

FITOUT

CEILING & HVAC SERVICES



BUILDING ENVELOPE

EXTERNAL WALLS, SLABS & SOFFITS



BUILDING ENVELOPE

ROOFING



DIAGRAM KEY:

-  Vapour / moisture control product
-  Bulk Glasswool products (thermal, acoustic & fire)
-  Vapour / Moisture control
-  Thermal control
-  Acoustic control
-  Fire protection

PRODUCT HIGHLIGHTS



/ For Metal Roofs

Starting at the top we recommend using our Roof Razor® insulation spacer to retain the thickness of insulation and ensure your metal roof complies with Section J Thermal Bridging requirements. Roof safety mesh also helps you maintain a safe working environment for contractors whilst working at heights.



/ Building Blankets

With Pink® Building Blanket, Permastop® Building Blanket, and Permastop® Tropic Building Blanket we offer roofing products suitable for all climate zones and locations. Pink® Building Blanket is unfaced and Permastop® products have foil facings. All of our building blanket products help control surface temperatures and reduce the risk of condensation within construction systems such as metal roofs and external walls.



/ HVAC

FI22 Ductwrap, FI32 Semi Rigid Insulation, FI48 Rigid Glasswool Sheets and FI96 High Density Equipment Insulation provide excellent options for ensuring HVAC systems run efficiently and quietly.

FITOUT

INTERNAL PARTITIONS



SMALL PRIVATE HOSPITALS DAY SURGERIES MEDICAL CENTRES

BUILDING ENVELOPE

ROOFING



FITOUT

INTERNAL PARTITIONS



BUILDING ENVELOPE

EXTERNAL WALLS



BUILDING ENVELOPE

SLABS & SOFFITS



FITOUT

HVAC SERVICES



DIAGRAM KEY:

-  Vapour / moisture control product
-  Bulk Glasswool products (thermal, acoustic & fire)
-  Vapour / Moisture control
-  Thermal control
-  Acoustic control
-  Fire protection

PRODUCT HIGHLIGHTS



/ Membranes

We provide a range of membranes recommended for use in walls and under roofs to manage condensation within the building envelope. The Sisalation® range includes vapour permeable products, such as Vapawrap™ and vapour barriers such as Sisalation® Tuffwrap, Sisalation® Multipurpose EHD (456), plus Sisalation® Metal Roof in Medium and Heavy Duty reflective foil laminates to suit a wide range of situations.



/ Partition Batts

To meet or exceed fire, acoustic and thermal performance requirements, Pink® Partition and Pink® Soundbreak® provide insulation options for internal partition walls. Simple to install for better project cost control; and in a range of thicknesses down to 25mm you have options available to maximise floorspace, whilst maintaining performance. Pink® Partition HD provides additional acoustic performance, where extra privacy is required.



/ For Slabs & Soffits

Pink® Thermal Slab is a highly effective rigid insulation board, comprising glasswool combined with a layer of Sisalation® reflective foil laminate on one side, it achieves Material Group 1 rating compliant with AS5637.1. Available in various thicknesses to provide optimal energy efficiency performance alongside excellent acoustic properties for a range of system designs.

ENHANCED ACOUSTICS FOR HEALTHCARE BUILDINGS

BUILDING ENVELOPE

ROOFING



FITOUT

INTERNAL PARTITIONS



BUILDING ENVELOPE

EXTERNAL WALLS



BUILDING ENVELOPE

SLABS & SOFFITS



FITOUT

HVAC SERVICES



BUILDING IN BETTER ACOUSTICS FOR BETTER PATIENT CARE

Even with Australia's advanced healthcare facilities, healthcare workers often endure incredibly challenging working conditions; with patient health and well-being depending on their skill and attention.

Both patients and staff need a calm, relaxing environment to promote recovery from illness or injury. Australian and International research in recent years clearly demonstrates positive outcomes for patient recovery and healthcare staff well-being when enhanced acoustics are provided in healthcare workplaces. To improve acoustics, building envelope and internal fitout solutions are best considered during the design phase and must be built into the walls, roofs, ceilings and services of the healthcare facility.

We can assist you to select the right insulation products for each application to deliver the best acoustic solutions available.

Whether the building envelope needs to minimise noise transmission from external sources through roofs, walls and slabs, or the internal fitout needs to address internal noise within a building through internal walls, ductwork and ceilings, we have a range of products suited to all healthcare buildings.

DIAGRAM KEY:

-  Vapour / moisture control product
-  Bulk Glasswool products (thermal, acoustic & fire)
-  Vapour / Moisture control
-  Thermal control
-  Acoustic control
-  Fire protection

PRODUCT HIGHLIGHTS



/ Walls and Ceilings

The Pink® Partition range is available in densities from 11kg/m³ up to 32kg/m³ to deliver the best acoustic outcomes, whether that is to reduce reverberation within a room, or transmission between rooms. For enhanced acoustic treatment Fletcher Insulation also has Pink® Sonomatt, Pink® NoiseSTOP™, Pink® Partition HD Panels and FI32 Semi Rigid insulation to suit every possible acoustic treatment.



/ HVAC

As well as delivering energy efficiency, it is important in healthcare to ensure acoustic treatment of HVAC systems is built in right from the beginning.

Alongside Ductwrap products, Fletcher Insulation also provides FI32 Semi Rigid and FI48 Rigid insulation boards that reduce reverberation and sound transmission in HVAC ducting. These products are available in various facing options for enhanced aesthetics, hygiene and air quality.



/ Quadzero™ Loaded Vinyl Barrier

Its dense core mass layer reflects and absorbs the transmission of sound through walls, ceilings and floors, reducing the critical frequencies generated from mechanical equipment, engine noise and electronic audio technologies. It can be combined with bulk insulation, or used where space is limited to deliver fantastic results.

SUPERIOR BUILDING PERFORMANCE FOR SUPERIOR HEALTH OUTCOMES

Fletcher Insulation conducts extensive research and product testing ensuring all our products and solutions are compliant with the latest standards and building code requirements. This allows you to design healthcare buildings that deliver excellent outcomes for patients and healthcare workers.



/ Fire

FIRE

Safety is paramount in building design, with the reduction of fire hazards and prevention of spread of fire considered critically important for designers of healthcare buildings, especially considering the risk of moving patients in the event of a fire.

Our specialists will advise you on passive fire prevention requirements for roofs, external wall construction, internal wall systems and HVAC services, including:

- AS 1530.1 – Combustibility (BCA Vol 1 C1.9)
- AS 1530.2 – Flammability of materials (BCA Vol 1 C1.9, C1.10 & Spec C1.10)
- AS/NZS 1530.3 – Fire Hazard Properties (BCA Vol 1 C1.10 & Spec C1.10)
- AS 1530.4 – Fire resistant construction (BCA Vol 1 C1.9 & Spec C1.1)
- AS 5637.1 – Internal lining material group numbers (BCA Vol 1 C1.10 & Spec C1.10)
- AS 3959 – Bushfire Construction up to BAL-FZ

Our products and solutions are compliant for use in external cladding and internal partition applications, offering peace of mind and permitting architects to express design freedom in selecting cladding and partition materials.

THERMAL PERFORMANCE

It is well established that thermal comfort contributes enormously to the well-being of building occupants, which is most critical in healthcare environments.

With the breadth of climate zones across Australia we make sure your design works whether in the extreme heat, extreme cold, or somewhere in between.

We also offer advice on BCA Class 9a thermal compliance, upgrade specifications and for general installation to deliver healthier and more sustainable outcomes.

Our Bulk Insulation products comply with:

- AS/NZS 4859.1 – Materials for the thermal insulation of buildings
- AS 3999 – Thermal Insulation of dwellings – Bulk insulation – Installation requirements
- AS 4426 – Thermal Insulation of pipe-work, ductwork and equipment – Selection, installation and finish.
- AS 4508 – Thermal resistance of insulation for ductwork used in building air-conditioning
- BCA Vol 1 Parts J1.2, J1.3, J1.5 & J1.6

Building membranes / wraps specification and installation compliance with:

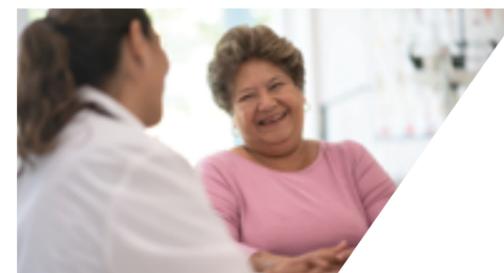
- AS/NZS 4200.1 – Pliable building membranes and underlays – materials
- AS/NZS 4200.2 – Pliable building membranes and underlays – Installation requirements
- BCA Vol 1 Parts JP1(e), JV4 and J3.6



/ Thermal Performance

FLETCHER INSULATION – BUILT-IN SUPPORT FOR THE HEALTHCARE SECTOR.

There are enough challenges in the design of world class healthcare facilities, without worrying about compliance of construction systems. Selecting Fletcher Insulation as your insulation partner in designing a healthcare facility means you get access to world class building expertise, and assurance that your great design won't be let down by sub-standard insulation, wherever it is installed in the building, or in Australia.



/ Acoustics

ACOUSTICS

Healthcare has its own set of demands when it comes to the acoustic treatment of walls, ceilings, and services. Our solutions deliver peaceful environs for patients.

Our products assist in reducing airborne sound through ductwork, wall and floor construction, in accordance with:

- AS/NZS ISO717.1 – Acoustics – Rating of sound insulation in buildings and of building elements
- AS/ISO 11654 – Acoustics – Rating of sound absorption – Materials and systems
- BCA Vol 1 – FP5.4 FP5.5 & FP5.6 for minimum compliance standards
- Project specific high-performance acoustics

Our high density acoustic insulation helps target broad spectrum frequency bands for all round acoustic attenuation in:

- Patient care areas for rest and privacy
- Building plant and equipment isolation
- HVAC ducts



/ Condensation & Moisture Management

CONDENSATION & MOISTURE MANAGEMENT

With the vast contrasts in climates and myriad construction systems available, specifying the correct material layers can be very challenging.

We help identify which systems work best in different climates to avoid interstitial condensation – leave the worry and specification details to us.

We can help you to ensure that your next healthcare building supports healthy indoor environments and won't suffer damp or mouldy conditions in the future, our expertise can assist you with compliance with:

- AS/NZS 4200.1 – Pliable building membranes and underlays – materials
- AS/NZS 4200.2 – Pliable building membranes and underlays – Installation requirements
- Moisture control membranes classified to ASTM-E96 (Vapour control) and compliant with AS 4201.4 (Water control)
- BCA Vol 1 Part F6.2
- Project specific humidity control

Our membranes and insulation systems can be tailored for vapour permeable or barrier construction, with nominated air control layers and air-tight tapes, so you don't have to worry about matching project specific climatic and/or humidity control requirements.

COMPLIANCE AND DESIGN ASSISTANCE



GREEN STAR

Green Star is Australia's trusted mark of quality for the design, construction and operation of sustainable buildings, fitouts and communities. As a member of the GBCA, Fletcher Insulation plays a key role in developing insulation systems that can enhance the Green Star ratings of your next project across energy efficiency, IAQ and IEQ.



WELLNESS RATING

WELL is the leading tool for advancing health and well-being in buildings globally. Fletcher Insulation can provide you with advice and solutions to help you deliver improved results in the areas of:

- Air Quality
- Thermal Comfort
- Sound



FLETCHERSPEC™ PRO

We have developed 'FletcherSpec™ Pro', an app intended to overcome many traditional issues architects and builders face when specifying insulation. The app provides a near complete support structure guiding users through the entire insulation specification process. **FletcherSpec™ Pro** delivers centralisation of the multitude of tasks associated with typical System R-value calculations including but not limited to; determining the relevant climate zone, referencing applicable energy efficiency requirements, considering solar absorption values of roof cladding and selecting the correct insulation products for the application. This drastically minimises the need to manually cross reference inconsistent or out-dated handbooks, technical data sheets and so on. Instead, users simply answer a series of targeted questions which the app uses to determine relevant energy efficiency requirements as outlined in the National Construction Code Deemed to Satisfy provisions. The app then progresses to calculate the Total R-value of the design based on the inputs entered by the user.

TECHNICAL DATA SHEETS & INSTALL GUIDES

Visit www.insulation.com.au to discover the excellent array of technical information available for you to download, whether you need to get into the product details yourself, or reassure the project team that our products are safe and easy to install.

WHY CHOOSE FLETCHER INSULATION?

Fletcher Insulation is your resource for all of your thermal, acoustic, fire and moisture control solutions. Contact us for insulation design and specification assistance.

We manufacture and distribute some of Australia's most well-known and trusted residential and commercial insulation brands.

We pride ourselves on continually improving our processes to provide products of the highest national and international standards, alongside technical support offering extraordinary value to our customers.

For more information contact us or visit our online specifier advisory service for help finding the perfect insulation products for your project.

PRODUCT SELECTION

	Application Categories				
	Roofing	External Walls	Slabs & Soffits	Ceilings, Partitions & Services	HVAC
Roof Razor®	•				
Roof Safety Mesh	•				
Pink® Building Blanket (unfaced)	•	•		•	
Permastop® Building Blanket	•	•	•		
Permastop® Tropic Building Blanket	•	•			
Pink® Thermal Slab			•		
Pink® Partition		•		•	
Pink® NoiseSTOP™			•	•	
Pink® Sonomatt Blanket				•	
Pink® Partition HD Panels		•		•	
FI22 Ductwrap	•				•
FI32 Semi-Rigid			•	•	•
FI48 Rigid Board			•	•	•
Sisalation® Foam Cell Multipurpose	•	•			
Sisalation® Metal Roof MD (433) & HD (453)	•				
Sisalation® Multipurpose EHD (456)	•	•			
Sisalation® TuffWrap™ Wall Wrap (497)		•			
Sisalation® Vapawrap™ Vapour Permeable Metal Roof	•				
Sisalation® Vapawrap™ Vapour Permeable Wall Wrap		•			
Quadzero™ Loaded Vinyl Barrier				•	•

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BR032_Revision_0_Issue_Date_10022021

GET IN TOUCH



**CALL OUR
TECHNICAL TEAM**

for advice on specifying your next project

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