SLS Thermal Break





Thermal bridging is the unintended passage of heat energy between the outside and inside of the building envelope that directly impacts efficiency. Addressing thermal break issues reduces the level of condensation which reduces the chance of mold and increases health outcomes.

THERMAL BREAK

Thermal breaks are materials with low levels thermal transmittance placed strategically within the building assembly to restrict the flow of energy through materials with higher levels of thermal transmittance.

Thickness of SLS Thermal Break (mm)	R VALUE
8	R.021
16	твс
20	твс





MEETS NCC 2022 COMPLIANCE

AS1530.1 Non-Combustible AS4859.1 Thermal Resistance* *R0.21 at 23°C

WHEN IS A THERMAL BREAK REQUIRED

As per J3D6 of the National Construction Code (NCC) 2022 a thermal break is required in a Class 1, 2 and 4 buildings for a metal framed wall when the wall lining is either attached directly to the frame or has no lining and is clad with weatherboards, fibre-cement sheet or similar or metal cladding attached to a metal frame.

CLASS 1, 2 and 4 BUILDINGS.



Class 1: A house, stand alone, detached or in a row.



Class 2: A building with 2 or more single occupied apartments.



Class 4: Part of a building with another class that has a resident part.

THERMALBREAK

Tested to AS4859.1 as per J4D3 of the NCC Vol. 1 at a thickness of 8mm, SLS Thermal Break achieved a rating of R0.21.

NON-COMBUSTIBLE

Tested to AS1530.1 and deemed not to be combustible as per Clause 3.4. Certificate available on request

HYDROPHOBIC AND VAPOURPERMEABLE

Allows vapor to pass through while still repelling water.

ACOUSTIC DECOUPLING

Reducing the sound energy from structural borne noise.













WEATHERBOARDS

A layered cladding with one board starting on top of the one before.

METAL CLADDING

A varied group of claddings working from a Colorbond type sheet to an Aluminum Composite panels.

FIBRE CEMENT SHEETS

Made of a cement mix and cellulose fibres, Fibre-cement sheets are used for external cladding.

METAL CLADDING ON TOPHATS

Same cladding as metal cladding but on tophats.





External Cladding	Thermal Break	Wall Framing	Internal Lining
Weatherboards	SLS Thermal Break	Steel Studs	No Lining
Fibre Cemenbt Sheets	SLS Thermal Break	Steel Studs	No Lining
Metal Cladding	SLS Thermal Break	Steel Studs	Plasterboard fixed directly to studs
Metal Cladding on Tophats	SLS Thermal Break	Steel Studs	Plasterboard fixed directly to studs
EXTERNAL CLADDING: The outer face of a building that protects the building from the environment outside of the building.	THERMAL BREAK: A barrier reducing the movement of heat from one side of an external wall to the other.	METAL FRAME: A metal frame wall is a commonly used framing. The metal framing are the studs, tracksand noggings that create the substructure both the internal lining & externally cladding are attached to.	INTERNAL LINING: The inside cladding of the wall. Most commonly plasterboard.

NON-COMBUSTIBLE

NON-COMBUSTIBLE MEANING The NCC Vol. 1 determines a material to be Non-Combustible as defined by the test AS1530 Part 1.

SLS Thermal Break has been tested to AS1530.1 by a NATA approved lab and has been deemed as Non-Combustible. This means that in the event of a fire the product will not add to the fire load. Clause C2D10.1 states that external walls including all components needs to be non-combustible, including insulation.

Clause C2D10.4 does state that a thermal break does not comply with C2D10.1 as long as the break is only used when required, does not extend past one story or beyond one fire compartment.

Having a non-Combustible Thermal Break solution provides piece of mind knowing you have installed to the code but also you have a safer building.

MOISTURE MANAGEMENT

SLS Thermal Break manages moisture in 2 ways. It repels water but allows vapor to pass through itself thus preventing moisture to be trapped within the building assembly.

In doing so it can be useful in reducing the likelihood of condensation within the building envelope and as such could reduce the potential for causing illness, injury or loss of amenity for the building occupants.

Additionally, its ability to manage moisture within metal wall assembles means that the impact of Corrosion Under Insulation (CUI) may be significantly reduced.

Available From



PAD - INSTALLATION

Attaching directly to stud

SLS Thermal Break

Step1:

Ensure studs are clean of any containments and burrs.

Step 2:

Work out size of SLS Thermal Break required.

Step3:

Cut length of SLS Thermal Break.

Step 4:

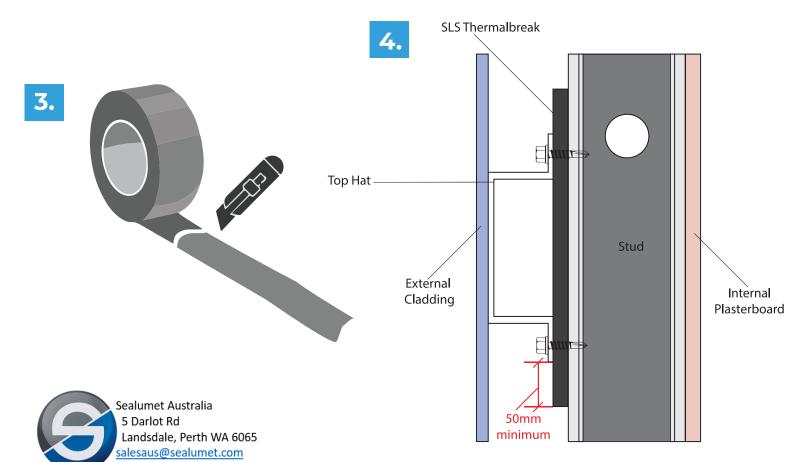
Place SLS Thermal Break under cladding and screw through cladding into stud.





2.

Length of		
SLS Thermal Break (mm)		
60		
70		
80		
90		
100		
110		
120		
130		
140		
150		



FULL LENGTH STRIP - INSTALLATION



Attaching directly to stud

Step1:

Ensure studs are clean of any containments and burrs.

Step2:

Measure size of SLS Thermal Break required.

Step3:

Cut length of SLS Thermal Break.

Step 4:

Attach SLS Thermal Break insulation strip on stud

- **A)** Apply preferred construction adhesive in 10mm dots at no greater than 1000mm spacing.
- **B)** Use a clamp to hold strip in place until façade or top hat attached.

Repeat until all studs covered.

