



# THERMOSPAN INSULATED PANELS (GREATER THAN 2.5 kPa DESIGN WIND LOADS)

### PURPOSE

Metalcraft Insulated Panel Systems supplies ThermoSpan Insulated Panels for use as load bearing and non-load bearing roofing panels, for conditions where design wind loads greater than 2.5 kPa apply.

#### **EXPLANATION**

ThermoSpan Insulated Panels are lightweight, thermally efficient, and supplied with ancillary components, necessary for installation.

They are fully finished internal/external panels manufactured from a core of expanded polystyrene (EPS) sandwiched between 0.59 mm layers of Colorsteel®. The panels have a material group number of 1S. The panels are available in a variety of colours and in the following thicknesses (mm):

50, 75, 100, 150, 200, 250, 300.

ThermoSpan panels are supplied in a variety of profiles, and the weathertightness of the connection relies on a lapped corrugation.

# SCOPE AND LIMITATIONS OF USE



For further assistance please contact: +6492778844 0





Scope	Limitations
Location	
Up to a design wind pressure (ULS) of 4.3 kPa.	
In all corrosion zones as defined in NZS 3604:2011.	<ul> <li>Should not be installed within 50 m of breaking surf.</li> <li>Where the system is to be used in a micro-climate (as defined in para 4.2.4 NZS 3604:2011), Metalcraft Insulated Panel Systems is to be consulted.</li> </ul>
Any distance from a relevant boundary.	<ul> <li>The panels may only be installed within 1 m of a relevant boundary where an unprotected area is permitted.</li> <li>The design must be in accordance with Acceptable Solution C/AS2.</li> </ul>
Building	
In new buildings where the relevant part of the building complies with the NZ Building Code or in the existing buildings where the designer and installer have assured themselves that the relevant part of the building is adequate for the intended building work.	
Any building height up to a maximum design differential wind pressure of 4.3 kPa.	> Where the building has a building height greater than 10 m and upper floors contain sleeping uses or other property, then the external wall must be subject to specific fire engineering design in respect of vertical spread of flame.
With a minimum roof pitch of 3°.	> Must be fixed with 14 g tek screws (or equivalent) at each rib.
With joinery that complies with the Building Code.	> Where the design differential wind pressure exceeds 2.5 kPa the joinery and weathertight details are subject to specific design.



### **PERFORMANCE CLAIMS**

If designed, installed and maintained in accordance with all Metalcraft Insulated Panel Systems requirements, the ThermoSpan Insulated Panels will comply with or contribute to compliance with the following performance claims:

NZ Building BASIS OF COMPLIANCE			
Code clauses	Compliance statement	Demonstrated by	
<b>B1 Structure</b> B1.3.1, B1.3.2, B1.3.3 (a), (b), (c), (e), (f), (g), (i), (j), (l), (m), (q), B1.3.4 (a), (b), (c), (d), (e)	ALTERNATIVE SOLUTION	<ul> <li>&gt; Evaluation by Global-Mark for Product Certification, Metalcraft Insulated Panel System Certificate of Conformity GM-CM30078-RevC, issued by Global-Mark [Global-Mark, 05/02/2020].</li> <li>&gt; Loadspan capacities for permissible wind pressure up to 4.3 kPa [Metalcraft Insulated Panels, July 2020].</li> </ul>	
<b>B2 Durability</b> B2.3.1 (a)	ALTERNATIVE SOLUTION	Evaluation by Global-Mark for Product Certification, Metalcraft Insulated Panel System Certificate of Conformity GM-CM30078-RevC, issued by Global-Mark [Global-Mark, 05/02/2020].	
C3 Fire affecting areas beyond the fire source C3.4 (a)	ALTERNATIVE SOLUTION	> Evaluation by Global-Mark for Product Certification, Metalcraft Insulated Panel System Certificate of Conformity GM-CM30078-RevC, issued by Global-Mark [Global-Mark, 05/02/2020].	
<b>E2 External moisture</b> E2.3.1, E2.3.2, E2.3.7 (b), (c)	ALTERNATIVE SOLUTION	Evaluation by Global-Mark for Product Certification, Metalcraft Insulated Panel System Certificate of Conformity GM-CM30078-RevC, issued by Global-Mark [Global-Mark, 05/02/2020].	
<b>E3 Internal moisture</b> E3.3.1	ALTERNATIVE SOLUTION	Evaluation by Global-Mark for Product Certification, Metalcraft Insulated Panel System Certificate of Conformity GM-CM30078-RevC, issued by Global-Mark [Global-Mark, 05/02/2020].	
<b>F2 Hazardous building</b> materials F2.3.1	ALTERNATIVE SOLUTION	> Evaluation by Global-Mark for Product Certification, Metalcraft Insulated Panel System Certificate of Conformity GM-CM30078-RevC, issued by Global-Mark [Global-Mark, 05/02/2020].	
H1 Thermal efficiency H1.3.1 (a), (b), H1.3.2E, H1.3.3 (c), (e)	ALTERNATIVE SOLUTION	> Evaluation by Global-Mark for Product Certification, Metalcraft Insulated Panel System Certificate of Conformity GM-CM30078-RevC, issued by Global-Mark [Global-Mark, 05/02/2020].	
Other performance	ć	BASIS OF STATEMENT	

other performance		
statement	Performance statement	Demonstrated by
ThermoSpan Insulated Panels will	AS/NZS 4020:2005	> Claimed by manufacturer: New Zealand Steel.
not contaminate potable water.		Refer to the BRANZ statement that metal roof is suitable:
		www.level.org.nz/water/water-supply/mains-or-rainwater

## SOURCES OF INFORMATION

- Global-Mark. [05/02/2020] Metalcraft Insulated Panel System Certificate of Conformity. GM-CM30078-RevC. Retrieved from https://www.building. govt.nz/assets/Uploads/building-code-compliance/certificationsprogrammes/product-certification-scheme/product-certificate-register/ metalcraft-insulated-panel-system.pdf. [Accessed on 06/05/2021].
- Metalcraft Insulated Panels. [July 2020] ThermoSpan Brochure Version July 2020. Retrieved from https://www.metalcraftgroup.co.nz/technicalresources/technical-downloads/product?productId=1225&shownDetail#. [Accessed on 06/05/2021].

Scan or click this QR code for a full download of Compliance Documentation for this pass<sup>™</sup>. www.metalcraftgroup.co.nz



- 1. Where a standard is referenced it is to be read as amended by the acceptable solution or verification method as applicable.
- 2. Sources of information also include the Building Act 2004 and its regulations, including the Building Code (Schedule 1 of the Building Regulations 1992), Acceptable Solutions and Verification Methods, and relevant cited standards.
- 3. The quality and assurance that the supplied products meet the performance claims stated in this pass<sup>TM</sup> are the responsibility of the company that is the holder of this pass<sup>TM</sup>.

Metalcraft Insulated Panels confirms that if ThermoSpan Insulated Panels and Thermopanel is used in accordance with the requirements of this pass™ the product will comply with the Building Code and other performance claims set out in this pass™ and the company has met all of its obligations under s14 G of the Building Act.

Date of first issue:	19/06/2021
Date of current issue:	19/12/2022
NZBN:	9429036310852

Kevín Brunton

Kevin Brunton, Technical Director, TBB confirms that this pass has been prepared on behalf of the Metalcraft Insulated Panels and in accordance with MBIE PTS guidelines and in accordance with the TBB pass™ process which is within the scope of TBB's ISO 9001 certification.

9606D66ADE51EA6CCC25850D00239F99

139 Roscommon Road, Wiri, Auckland > peter.z@metpanels.co.nz > +64 9 277 8844 > www.metalcraftgroup.co.nz