



# Fire Test Certificate

This is to certify that the specimen described below has been  
examined by BRANZ Ltd on behalf of

EPS Panel Division, PACIA  
and  
CSIRO Manufacturing and Infrastructure Technology

*Test standard:* AS ISO 9705

*Specimen name:* Sandwich Panel with an Expanded Polystyrene (EPS) core

*Specimen description:*

Insulating sandwich panel, with nominal thickness 150 mm or less.

Panel core of Class S or SL (to AS 1366.3) expanded EPS.

Clad both sides with "Colorbond" steel, thickness 0.4 mm or greater.

Panel to panel corner junctions require aluminium angles fixed to the steel skins at not more than 300mm centres, with aluminium rivets.

*Orientation:* N/A

*Full descriptions of the test specimen and the complete results of the examination are given in the following Test Reports and Assessments:*

CMIT-(c)-2003-201 CMIT-(c)-2004-089 CMIT-(c)-2004-368 CMIT-(c)-2004-469  
BRANZ FAR 2489

*Conditions of laboratory registration by IANZ do not allow assessments expressed by the Registered Laboratory to be covered by IANZ.*

*Regulatory authorities are advised to examine test reports and assessments before approving any product.*

**The assessed results were as follows:**

Group Number 2 in accordance with BCA 2005 specification Cl.10a

Smoke Growth Rate Index (SMOGR<sub>ARC</sub>) < 100.

*Test Dates:* 15/9/03, 23/1/04, 6/2/04, 6/9/04  
22/9/04, 24/11/04, 6/12/04

*Test Supervisor(s):* N/A

*This Certificate issued:*

*Certificate Number:* 373

29 April 2005

**Colleen Wade, Principal Scientist**

*Fire Testing Supervisor  
For BRANZ Limited*

## Technical Data

### AUSTRALIAN STANDARD

The expanded Polystyrene insulating core (EPS) of Burton panels possesses the properties designated under Australian Standard 1366, Part 3-1992. EPS contains no Fluorocarbons.

### PANEL LISTINGS

0.6mm CRP Colourbond (R) prepainted steel most commonly used. (off white, 25% gloss). Alternative colours and lining material options available.

Mill finish aluminium trims standard.

### PANEL ADHESIVE

Panel linings bonded to EPS core with synthetic thermo-setting polyurethane adhesive creating a permanently stable panel under a wide range of conditions and temperatures, thereby avoiding the adverse softening and deforming tendencies often synonymous with thermo plastic adhesives.

### PANEL DIMENSIONS

**Width** 1200mm Standard

**Length** manufactured to customer's requirements and only limited to transport constraints.

**Thickness** as per general properties table.

- ▶ Insulated
- ▶ Cyclone tested
- ▶ Lightweight
- ▶ Strong
- ▶ Easily Mounted
- ▶ Demountable
- ▶ Vermin proof

### PANEL ASSEMBLY

Prefabricated panels are assembled and sealed to form an effective vapour barrier. No framework or stud system is used in this construction system. The high strength to weight ratio of Burton panel generally allows wall construction without the need for load bearing foundations. A steel framed roof is normally required where panels are used for ceiling/roof construction in large buildings.

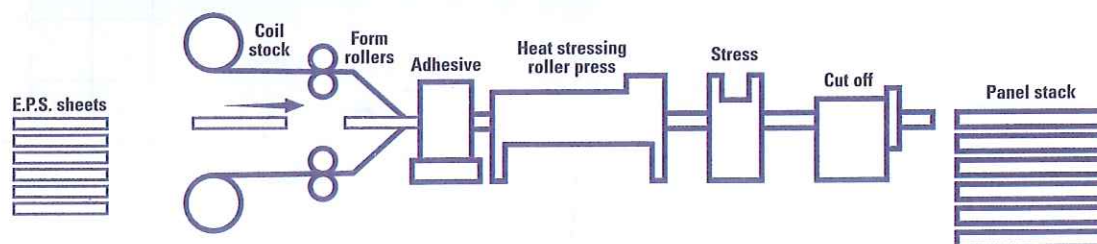
### ELEVATED SURFACE TEMPERATURE

Maximum continuous surface temperature is 76.7°C, although Burton panel can be exposed to higher temperatures for short periods without affecting its properties.

GENERAL PROPERTIES OF BURTON PANELS						
THICKNESS (MM)	MASS Kg/M <sup>2</sup> (0.6-C' BOND)	THERMAL PERFORMANCE (26°C) S.L.GRADE EPS		TEMPERATURE RANGE AND END USE SUITABILITY	MAXIMUM CEILING SPAN (UNSUPPORTED)	MAXIMUM WALL HEIGHT (UNSUPPORTED)
		U-VALUE (W/M <sup>2</sup> K)	R-VALUE (M <sup>2</sup> K/W)			
50	11.00	0.76	1.32	16°C UPWARDS AIR CONDITIONED AREAS	3600	3600
75	11.35	0.51	1.96	0°C TO 6°C CHILLERS/COOLROOMS	4400	4800
100	11.70	0.38	2.63	-15°C TO 0°C FREEZERS	5000	5800
125	12.05	0.30	3.33	-20°C TO -15°C FREEZERS	5600	6400
150	12.40	0.25	3.99	-28°C TO -20°C LOW TEMP HOLDING ROOMS	6000	7000
175	12.75	0.22	4.54	-28°C TO -20°C LOW TEMP HOLDING ROOMS	6400	7600
200	13.10	0.19	5.26	-40°C TO -28°C BLAST FREEZERS	6700	8200
250	13.45	0.15	6.66	-40°C TO -28°C BLAST FREEZERS	7300	9200

NB. Above specifications are intended as an indicative guide only and subject to fluctuation.

### SCHEMATIC DIAGRAM OF PANEL PRODUCTION ON CONTINUOUS LAMINATING MACHINE.



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