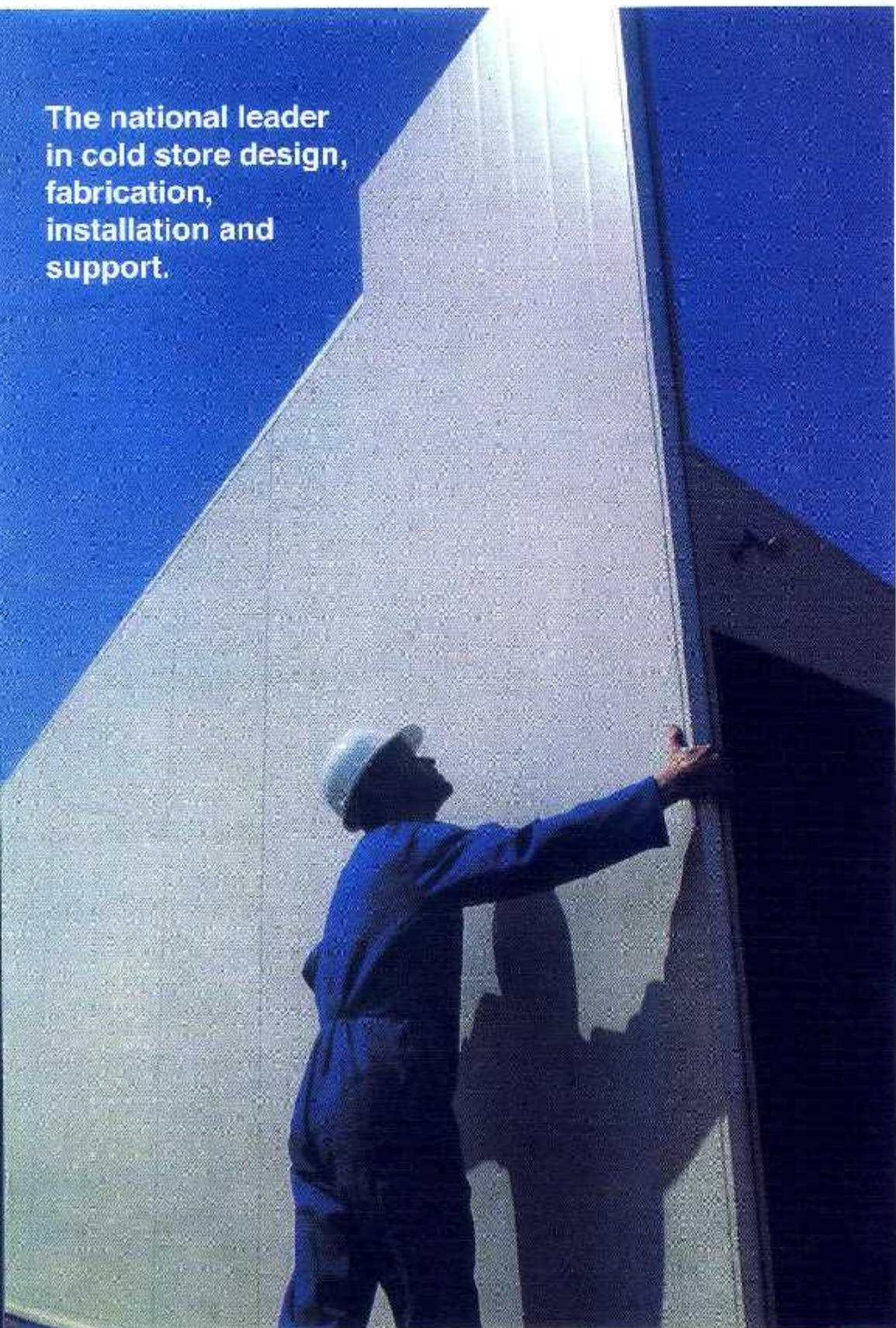


# COULD STORAGE AND FOOD PROCESSING

The national leader  
in cold store design,  
fabrication,  
installation and  
support.



Steel Panel LLC

## STEEL PANEL "COOLPANEL"

### COOLPANEL, WHAT IS IT ?

Whether you are building a modern food processing or storage facility, or a hi-tech industrial building, COOLPANEL is the choice of professional designers, builders & installers.

Steel Panel "COOLPANEL" is a manufactured structural sandwich panel consisting of metal outer faces bonded to a core of fire-retardant polystyrene foam CFC free with a stable thermosetting adhesive.

As a structural sandwich panel Coolpanel has exceptional strength for its weight. Its method of joint panel to panel as a unique tongue and groove interlocking joint (Slip-Joint) creates a

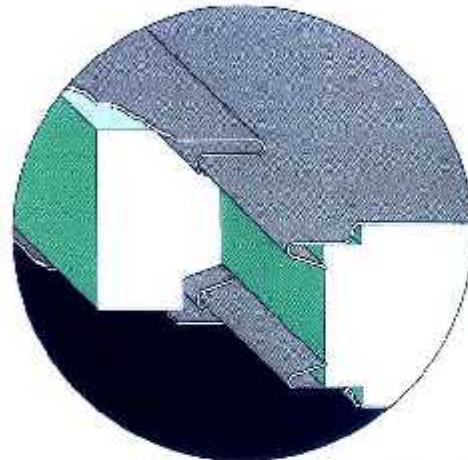


superior weather and vapour barrier, which makes it an ideal building panel.

The strength and spanning ability depends upon the thickness of the panel. The modular nature of the panel system allows buildings to be relocated or recycled and many examples can be provided that show little or no loss of material.

The Coolpanel system offers high strength with great reduction in weight. Its ability to free span reduces the need for structural supports and reduces the load on slabs and footings.

Coolpanel is weather resistant and the pre finish surface repels dirt and dust due to the self-cleaning properties during normal rainfall.



### APPLICATIONS

#### **Food Industry**

- Cold and Freezer Stores
- Chillers
- Blast Freezers
- Processing Plants

#### **Agriculture**

- Growing Rooms
- Animal Housing
- Flower Storage and markets
- C.A. Rooms
- Incubators
- Dairies

#### **Drying Rooms**

- Ceramic Products
- Timber
- Fruit

#### **General building**

- Offices
- Factories
- Warehouses
- Gymnasiums
- Laboratories
- Clean Rooms
- Shops

#### **Portable Buildings**

- Accommodation
- Camps
- Equipment Shelters
- Ablation Blocks
- Gate Houses
- Caravan Annexes
- Residential Houses

# COLDROOM DOORS

## Standard Coldroom Doors (75mm or 150mm thick)

- PERSON DOOR 2000(H) x 800 (W) clear opening
- TROLLEY DOOR 2100 (H) x 1600 (W) clear opening
- FORKLIFT DOOR 3000 (H) x 2300 (W) clear opening

## CONFIGURATIONS

- Hinged or Sliding
- Left Hand or Right Hand
- Heated or Unheated
- Sill or Sill-less

The comprehensive Steel Panel range of DOORS can be designed as hinged or sliding, single or bi-parting, manual or automatic for personnel and fork-lift traffic.

All Steel Panel lockable doors feature an in-built internal safety release as standard equipment. Door's heated fascia resist condensation and frosting around doorways and seals.

## The benefits of Coolpanel systems :

- Reducing footing sizes
- Reducing or eliminating support structure
- Eliminating the need for internal lining
- Reducing in heating and cooling costs
- Reducing overall construction time
- Reducing handling costs
- Simple to transport
- Dust-free internal surfaces to hygienic standards
- Readily designed for relocation and expansion
- Designed for internal partitioning as well as external cladding
- Designed as a roofing system and also a ceiling system.



Our Sales Team are available to give you technical support, assistance and advice at all stages of the building development. The personnel involvement of our site installation advisors maintains the smooth progress of all installation work through their on-site production management and problem solving. These site monitoring advisors have been chosen for their broad experience and their ability to work in harmony with on-site construction crew. With Steel Panel, you have all the support you need to get job done right-on time and on budget.



Steel Panel LLC

## COOLPANEL STANDARD SPECIFICATION AND TECHNICAL DATA

### Panel Dimensions

Width 1160 mm standard, 1000 upon request  
 Length To design requirements  
 (limited to 12m by transport  
 and handling conditions).

### Panel thickness

50, 75, 100, 125, 150, 200, 250mm, 300mm  
 Aluminium extrusions are normally mill  
 finished and can be coated to an available  
 colour range.

### Properties

Thickness (mm)	50	75	100	125	150	200	250	300
Mass Kg/m <sup>2</sup> (26 GA steel facing sheets)	9.8	10.3	10.8	11.3	11.8	12.8	13.8	14.8
<b>Panel spans (26GA)</b> Internal cold store rooms								
Walls (mm) - Ribbed (supporting ceiling & doors)	3500	4700	5500	6100	6700	7700	8600	
Walls (mm) (not supporting ceiling)	4300	5400	6300	7000	7600	9000	10000	
Ceiling (mm) - Ribbed	3200	4300	5000	5500	5700	6500	7300	

### Thermal Performance

(Properties at 8 Deg. C)

'U' Value (W/m <sup>2</sup> K)	0.76	0.51	0.38	0.31	0.25	0.19	0.15
'R'	1.31	1.96	2.62	3.28	3.94	5.26	6.57

### Early Fire Hazard - Fire Test

Index	Test Range	External Skin	Exposed Core	Enclosed Panel*
Ignitability	0 - 20	0	12	0
Spread of the Flame	0 - 10	0	9	0
Heat Evolved	0 - 10	0	7	0
Smoke Developed	0 - 10	1	7	0 to 1

\* Results of Tests for Early Fire Hazard on Enclosed Panel are based on Australian Standards 1538.3  
 1982 for Slip Joint Sandwich Panel.

- Note 1.** Panel thicknesses of not less than 75mm are recommended for chillers and not less than 150mm are recommended for freezers, depending on structural consideration.
- Note 2.** The above table applies for cold storage rooms constructed wholly within a larger enclosed building. Pressure relief porting is to be provided for a freezer in accordance with manufacturer recommendations.
- Note 3.** The spans for Coolpanel ceilings and supporting walls include allowance only for light duty fixtures (lights etc. total < 10kg/m<sup>2</sup>) and provision for light duty maintenance traffic, (refer manufacturer for advice). Engineering assessment is required for structural connections and for other building details.

#### Steel Panel Llc

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**Steel Panel LLC**