

# HiGenik Building Supplies Inc.

209 #306 Amang Rodriguez Ave. Barangay Manggahan, Pasig City

## FM APPROVED PIR Sandwich Panel Technical Specifications

### Product Overview

Polyisocyanurate (PIR) foam panels have excellent thermal conductivity, do not support the growth of fungi, are resistant to moisture ingress and are CFC-free, PIR Foam panels can only be produced on a continuous production line.

PIR panels are extremely lightweight and are accepted worldwide as the best fire rated solution for insulated panel construction. In preparation for PIR foam, a different set of catalysts are used in the production of PIR foam as compared with the PUR foam. This reaction is achieved at higher temperatures which creates strong isocyanurate linkages in the molecular structure. The linkages are much stronger than the normal PUR linkages and much more difficult to break, hence making the PIR foam chemically more stable.

#### PIR APPLICATIONS

PIR panels are suitable for both temperature-controlled and hygiene safe environments for temperature range between +20°C to -40°C.



## Choices of Panels

We offer a variety of panel core insulation and sheet materials depending on the nature of the business and specific requirements.

PIR core material has the best insulation rating of all materials shown. In addition to its excellent thermal performance, our FM Approved PIR panel offers:

**Superior Fire Resistance** as a result of reduced flammability compared with other panel cores;

**Moisture Resistant** due to the foam's closed-cell properties;

**Stronger parallel compression strength** because PIR foam has better dimensional stability;

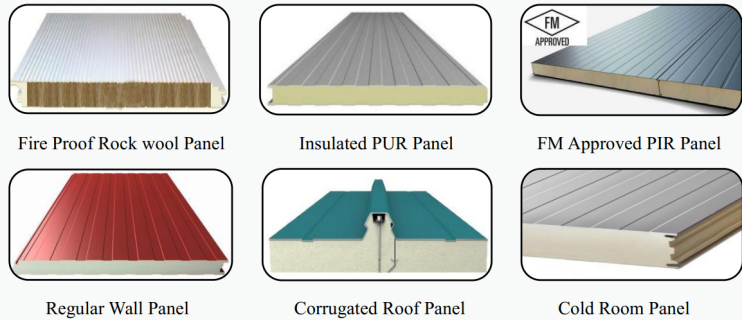
**More savings** by reduction in the energy costs in both heating and cooling;

**Faster delivery time** as the manufacturing process line speed increases;

**No restrictions on length in a single panel** due to continuous line;

**Environmentally benefits** as PIR cores contain no CFCs or HCFCs.

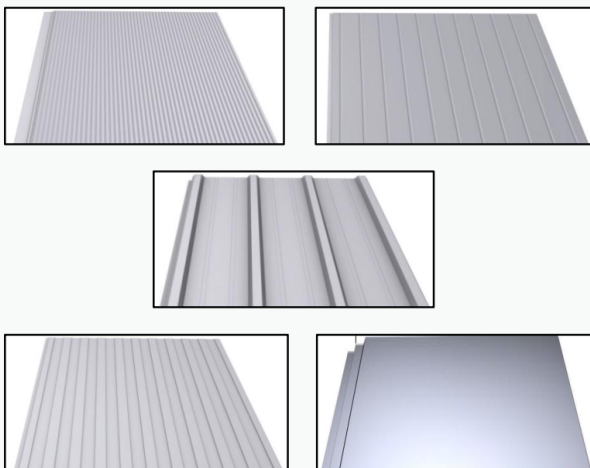
### Variety of Panel Types



### Sandwiched Sheet Materials

Exterior	Interior	Application Variety
PPGI/PPGL	PPGI/PPGL	Regular environment
Stainless Steel	PPGI/PPGL	Pharmaceutical, food processing
Stainless Steel	Stainless Steel	In particular required hygienic occasion
PPGI/PPGL	Alum Foil	Poultry farm with cost effective requirements

### Profile Type Options



### Profile Options

- Micro Ribbed
- Standard Ribbed
- Corrugated
- Squared
- Flattened

### Technical Data Sheet

PUR/PIR panel	Width (mm)	Thickness (mm)	Exterior sheet thk (mm)	Interior sheet thk (mm)	Density (kg/m <sup>3</sup> )	Weight (kg/m <sup>2</sup> )
Wall panel	1000	50	0.5	0.5	40-43	11.30
		60	0.5	0.5	40-43	12.50
		80	0.5	0.5	40-43	13.40
Roof panel	1000	75	0.5	0.5	40-43	11.65
		95	0.5	0.5	40-43	12.50
Cold room panel	1135	50	0.5	0.5	40-43	11.40
		60	0.5	0.5	40-43	11.60
		80	0.5	0.5	40-43	12.40
		100	0.5	0.5	40-43	14.00
		120	0.5	0.5	40-43	14.90
		150	0.5	0.5	40-43	15.30
		180	0.5	0.5	40-43	16.70
		200	0.5	0.5	40-43	17.50

### General Features of Steel Sheet in Coil

Material standard	JIS3312, ASTM792, EN10346
Coating mass	80-275g/m <sup>2</sup>
Paint thickness	5+15(20) / 8~10um
Finishing type	Sheet in coil, strip, sheet plate
Application	Building material, household appliances

## FM Approval Certificate of Quality:

**HIGENIK BUILDING SUPPLIES INC.** has well a couple of established high quality insulation panel manufacturers. This ensures that we can serve the product requirements to various customers with the shortest possible lead time. Our quality is guaranteed as all of our suppliers have FM Approved Certificates. FM Approved Certificate provides the assurance that all panels manufactured will have a consistent quality and durability as required by FM Global Standards. The panels also have wind load tests and recommended installation methods in the typhoon prone area such as in the Philippines.



FM approvals class: 4880 4881 4471  
Covers all panel types, with sheet  
over 0.5mm in thickness



AS4040.2, BCA2012 for roof panel  
AS1170.0, AS1562.1, AS4040.1  
AS4040.2, AS4040.3 for wall panel