STYRO®

QUALITY QUEST

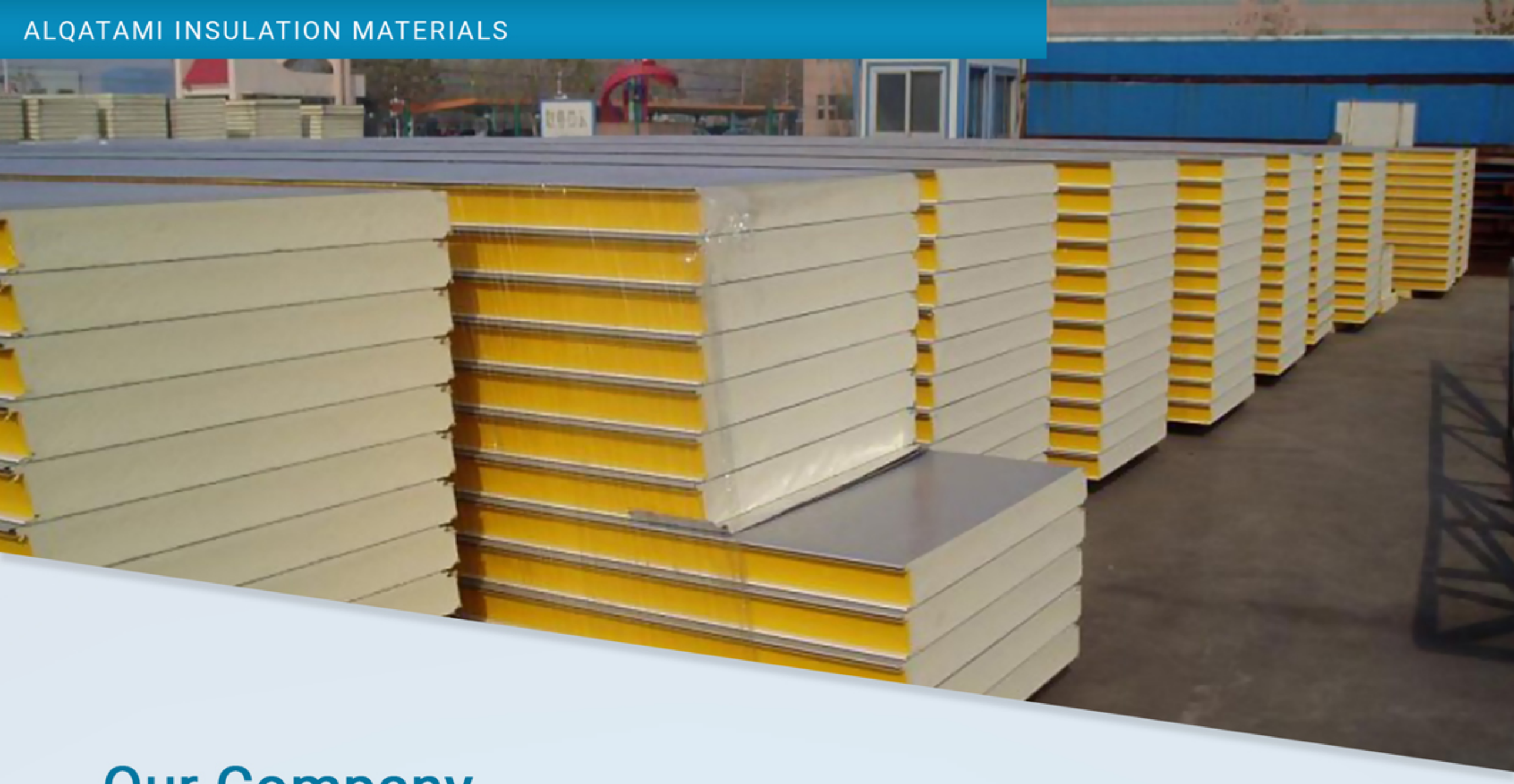
مصنع القطامي للمواد العازلة

Al-Qatami Insulation Material Factory

SANDWICH PANELS

Q PANEL®

QUALITY QUEST



Our Company

As part of the family-owned Works and Building Co. Al-Qatami Insulation Materials Factory represents one of the most respected and progressive names in the thermal insulation industry worldwide.

Al-Qatami Insulation originally entered the Middle East market in 1969 with focus on thermal insulated foam. Rapidly grown to become one of the world's fastest-growing insulation manufacturers with full ownership of its activities since 1992.

The Fastest-Growing and Innovative Insulation Supplier

Al-Qatami Insulation acquired good reputation in Kuwait and GCC Countries. The company is rapidly expanding its thermal insulation manufacturing activities with the roll-out of a world class new manufacturing site producing both insulated foam and sandwich panels while continuously upgrading its facilities to increase output and cost efficiency.

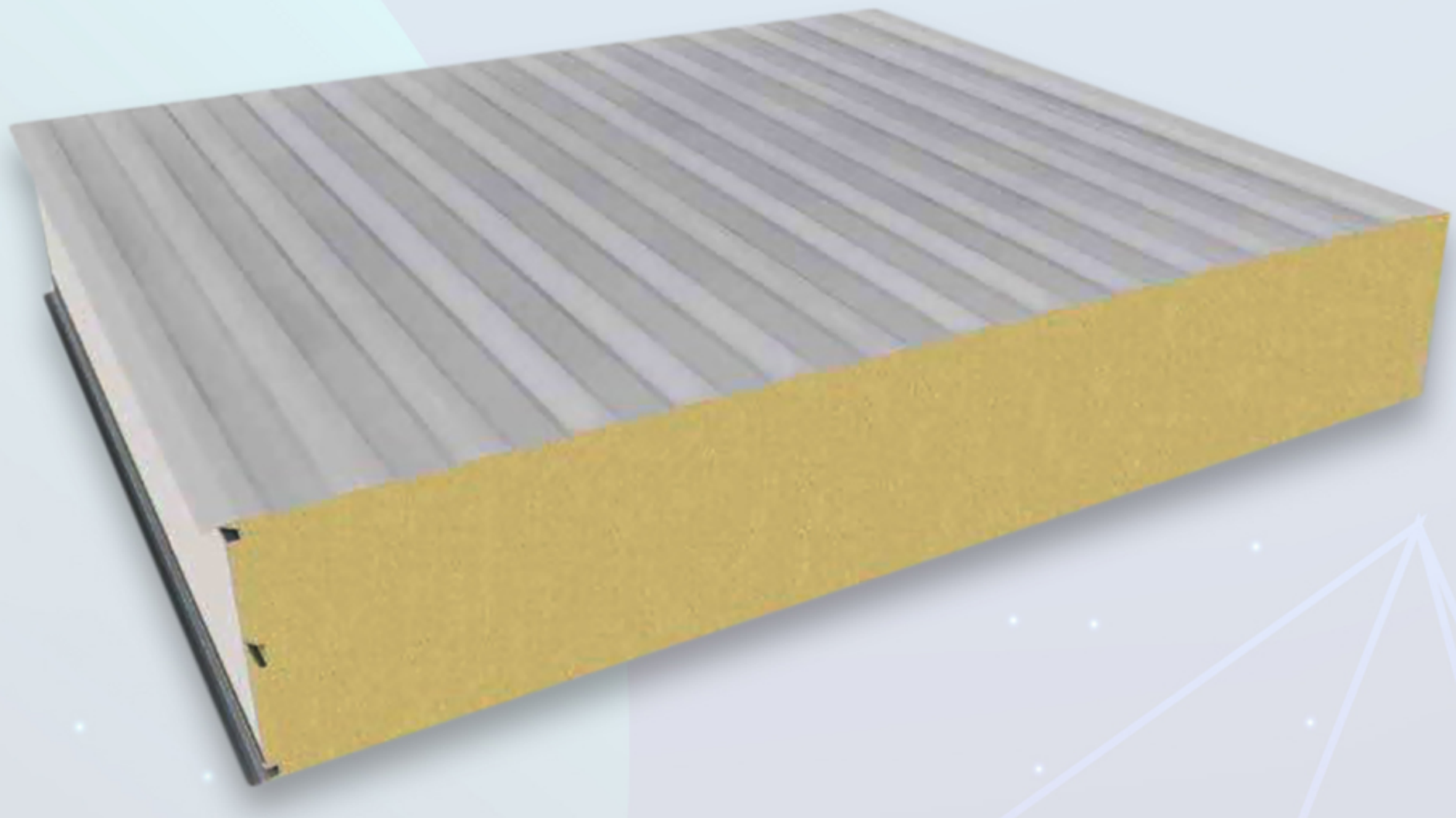
Today, Al-Qatami Insulation is the fastest growing and one of the largest insulation manufacturers in the Middle East. Offering a wide range of insulation materials to meet the growing demand for energy efficiency, acoustic performance in newly developed, existing homes, commercial buildings and industrial applications. Today, Al-Qatami Insulation has over than 200 employees active in several factories in Kuwait.

Wide Range Of Solutions For All Needs

Al-Qatami Insulation solutions includes extruded polystyrene (XPS), expanded polystyrene (EPS) and PU sandwich panel. We offer a wide range of solutions to meet insulation needs for new and existing buildings, industrial applications, power or chemical plants, refineries, heating, ventilation and air conditioning (HVAC)

Sandwich Panels Construction

Al Qatami insulation Company provides wide range of Galvanized steel faced sandwich panels with polyurethane core. Sandwich panels are composite materials produced of two Galvanized or Aluminum corrugated plates filled With polyurethane for thermal insulation. Used as coating materials in roof, wall, internal partition, cold rooms and sandwich panels to provide quite high level of thermal, water, sound insulation and prevent moisture condensation. Distinguished with Bearing Capacity the sandwich panel depends on the density, thickness of its filling material and the form of its metal surfaces. Thickness of the metals (PPGI steel or Aluminum) and filling materials determined in accordance with area of usage and the amount of load they will bear. Along with climate conditions for region of usage should be taken into account while determining thickness of the filling material. Sandwich panels set the outer shell of buildings in an aesthetic and affordable way by providing thermal, water and sound insulation without the need for any coating such as plaster. They are procured with best prices and widely used in buildings which load-bearing system is made of steel and prefabricated concrete.

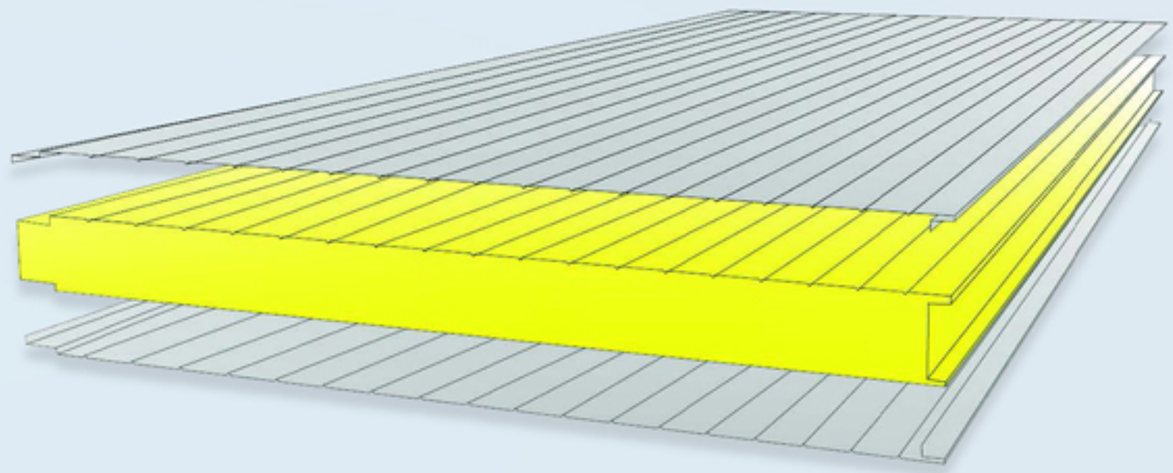


Sandwich Panels Application

- Factories
- Aircraft hungers
- Offices and Portacabins
- Cold stores
- Warehouses, convection halls and commerical buildings
- Sport facilities
- Schools and museums
- Oil and gas camps

Production Technology

Base on highest manufacturing technology standards PU Sandwich panels are filled under pressure with Polyurethane foam one piece each time by injection. Insulation foam can lead to higher insulation value achieved by various densities made to specifications required.



Steel Coils Specification

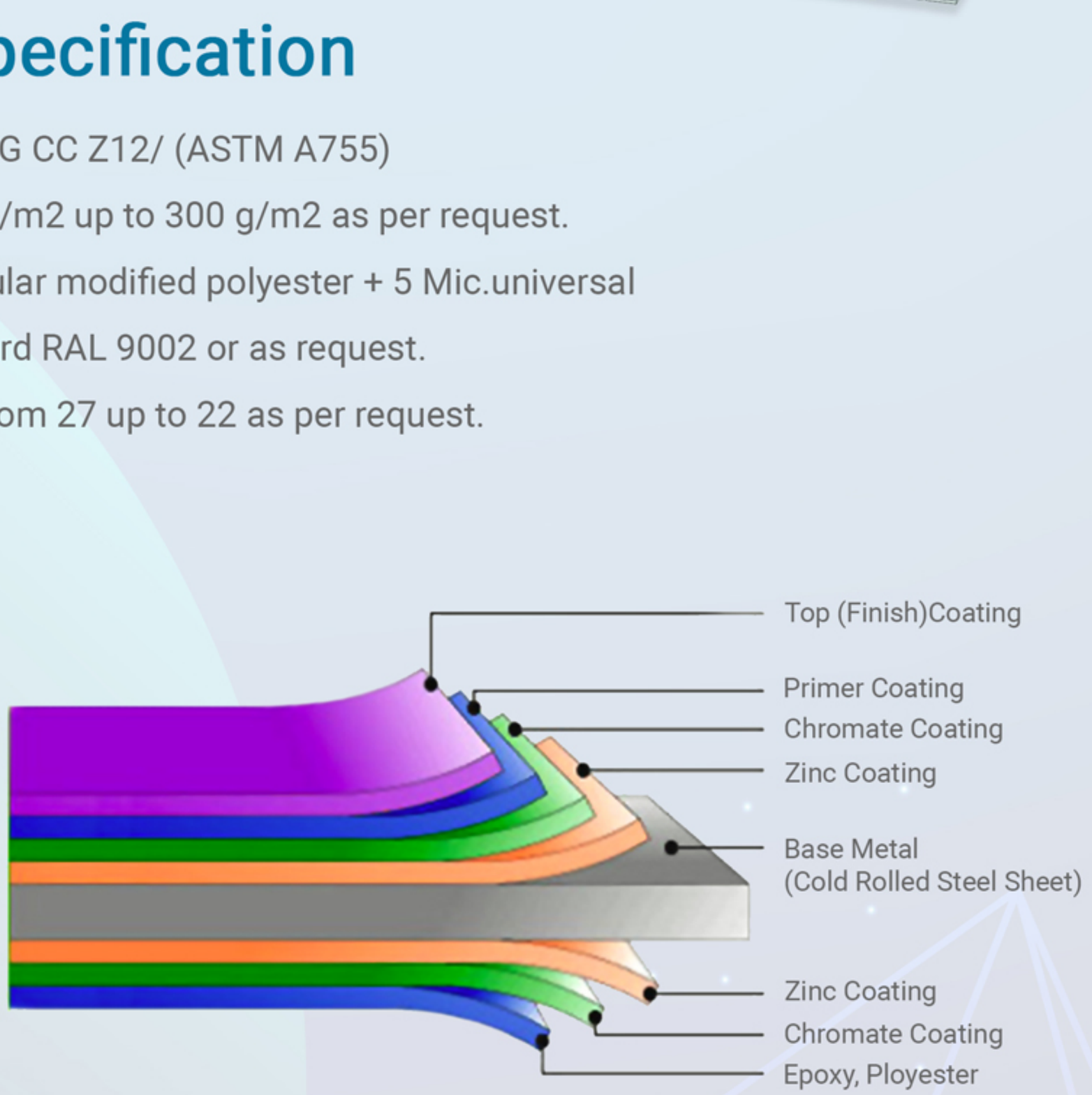
Base metal = JIS G 3302 SG CC Z12/ (ASTM A755)

Zinc Coating = From 100 g/m2 up to 300 g/m2 as per request.

Paint Top = 25 micron regular modified polyester + 5 Mic.universal primer on side with standard RAL 9002 or as request.

Both Side Steel gauge = From 27 up to 22 as per request.

With PE protecting film.



Cold Store

Our sandwich panel is perfect for modular and customized walk-in cold storage rooms of all shapes and sizes.

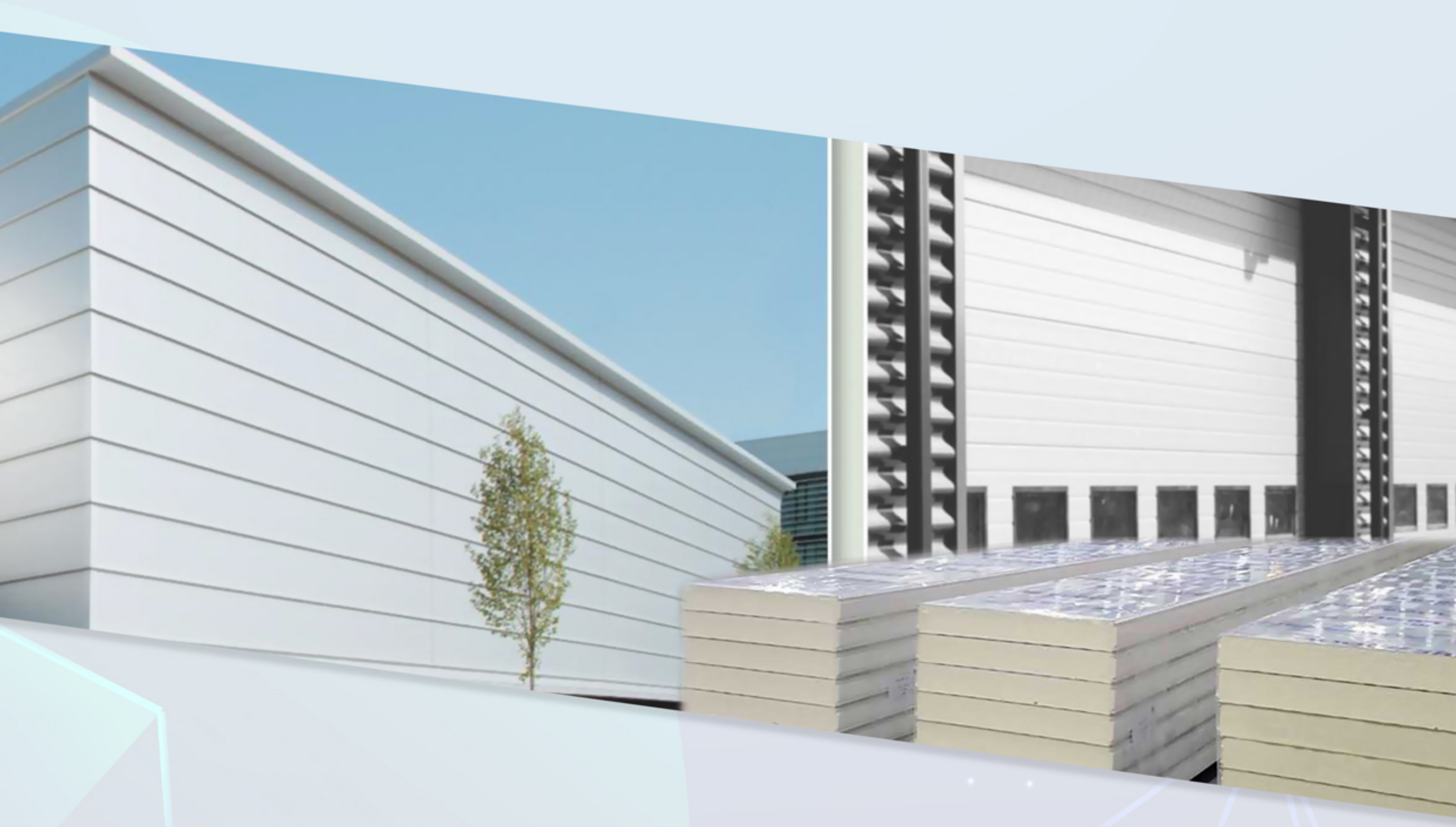
Cold rooms and freezer rooms suitable for a range of sectors.

Our modular range is designed to be adaptable to almost any situation or configuration and provides cost effective cold storage solutions to a large range of business categories:

1. Industrial & Warehouse cold storage
2. Pharmaceutical / Laboratory Control temperature rooms & Stability chambers
3. Supermarket & Convenience Store chill / freezer combination rooms
4. Hotel & Kitchen cold rooms
5. Butcher, Ice cream and complete food preparation facilities

PU Sandwich Panels Advantges

- Fast installation and ease of handling
- Crane assembly therefore no scaffolding required
- No thermal bridges and good thermal insulation properties
- Design flexibility with choice of color finishes
- Panels can be installed horizontally or vertically
- Reliable robust mechanical performance
- Outstanding noncombustible and acoustic performance
- Resistance to weather and aggressive environment
- Long life and very low maintenance cost



Wall Panels (Polyurethane)

Specification at Density of 38-42 Kg/m³

Mechanical Properties			
Thickness (mm)	50	75	100
Modular Width (mm)	1,000		
Weight Kg/m2 *	9.5	10.5	11.5
Length (mm)	** 1,000-16,000		
Insulation Power			
U-Value (W/m².k°)	0.45	0.28	0.22
R-Value (ft².F°.hr/Btu)	12.6	20.3	25.8
Burning Behavior			
PUR resistance to fire	DIN 4102 , B3&B2 ***/ EN 13501-1 Class D&E ***		
PIR resistance to fire	DIN 4102 , B2 / EN 13501-1 Class E		
Reaction to fire	B-s2,d0		
Leakproofness			
Air permeability	Perfect leak proofness at pressure difference -50/+50 Pa		
Blowing rain resistance	A class - perfect leak proofness at 1200 Pa		

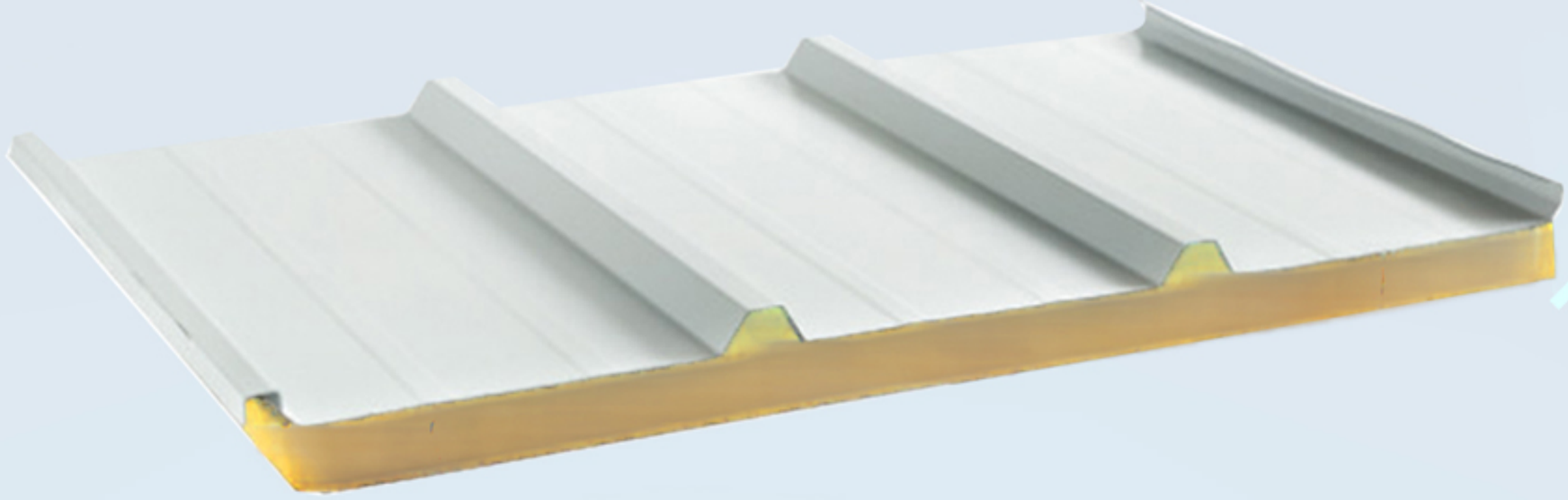
** More than 12,000 mm is not recommended for loading
*** Depends upon customer requirement
For 0.4 mm standard steel thickness

Type / Weihgt KG / L.M	5cm G26	7.5cm G26	10cm G26	5cm G24	7.5cm G24	10cm G24
Roof KG/L.M	10.4	11.4	12.4	15.9	16.9	17.9
Wall KG/L.M	9.4	10.4	11.4	15.4	16.4	17.4

Standard deviation rate (+/-) 10%

Roof Panels

* For 0.4 mm standard steel thickness



Roof Panel Specification @ Density of 38-42 Kg/m³

Mechanical Properties			
Thickness (mm)	50	75	100
Modular Width (mm)	1,000		
Weight Kg/m2 *	10	11	12
Length (mm)	** 1,000-16,000		
Insulation Power			
U-Value (W/m².k°)	0.39	0.27	0.21
R-Value (ft².F°.hr/Btu)	14.5	21	27
Burning Behavior			
PUR resistance to fire	DIN 4102 , B3&B2 ***/ EN 13501-1 Class D&E ***		
PIR resistance to fire	DIN 4102 , B2 / EN 13501-1 Class E		
Reaction to fire	B-s2,d0		
Leakproofness			
Air permeability	Perfect leak proofness at pressure difference -50/+50 Pa		
Blowing rain resistance	A class - perfect leak proofness at 1200 Pa		

** More than 12,000 mm is not recommended for loading

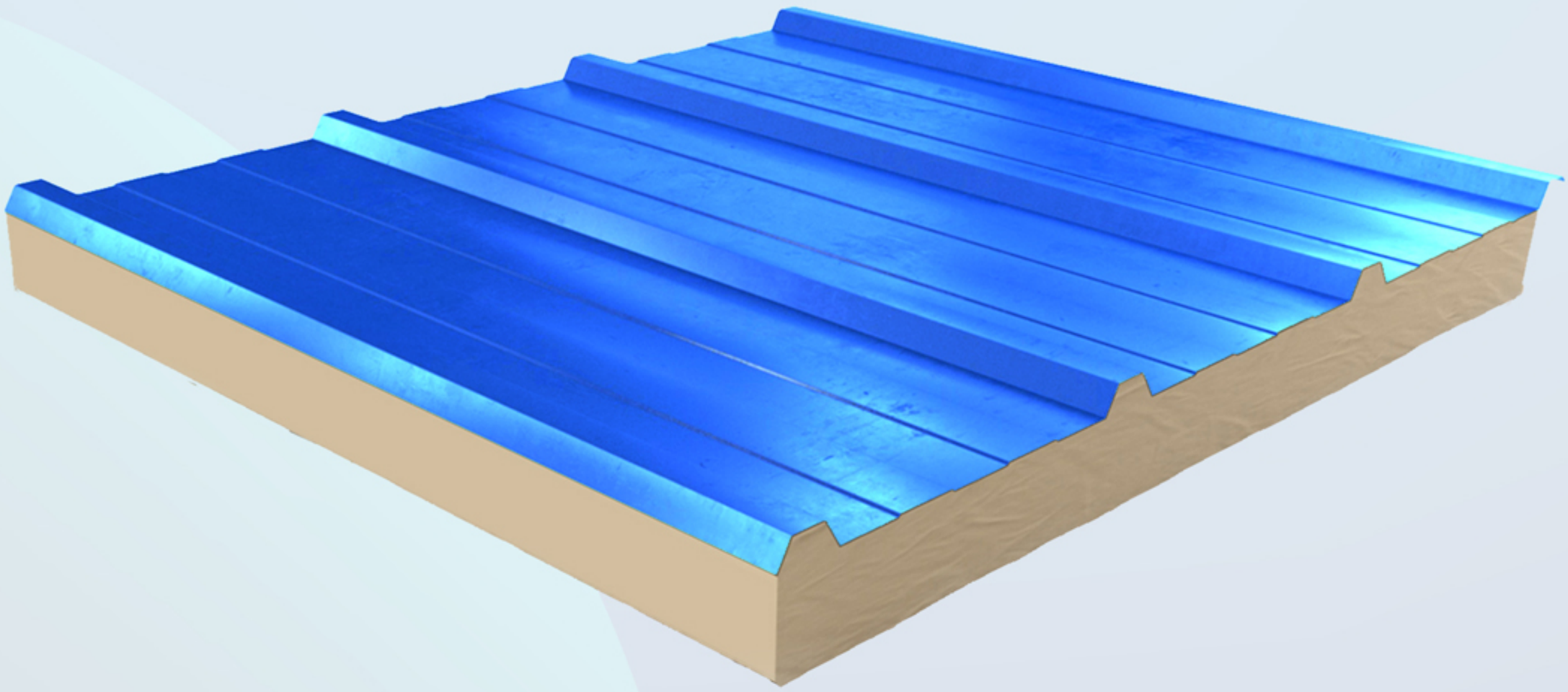
*** Depends upon customer requirement

Load Bearing Characteristics

The following table shows the amount of load bearing of sandwich panels in various thicknesses and lengths with pre-painted galvanized or aluzinc steel.

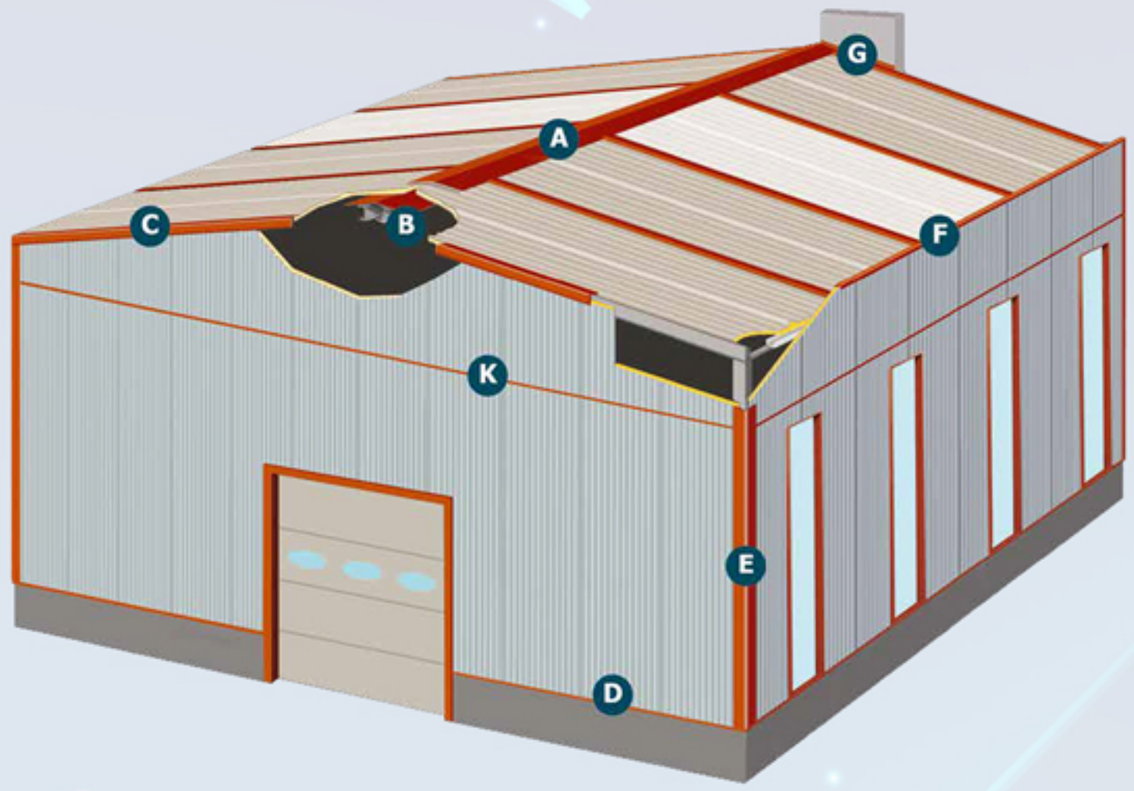
Roof Panel Thickness	Load Kg/m²						
	120	150	200	250	300	350	400
50 mm	m 2.50	m 2.00	m 1.50	m 1.00	m 0.85	m 0.75	m 0.60
75 mm	m 3.50	m 3.00	m 1.75	m 1.75	m 1.50	m 1.25	m 1.00
100 mm	m 5.00	m 4.00	m 2.00	m 2.00	m 1.85	m 1.50	m 1.20

- Load values for uniformly-distributed loads.
- Maximum distance between supports (meters).
- Equivalence. 1 Kg = 0.98 N
- Steel sheet 0.5 mm
- This table for 2 supports/one span

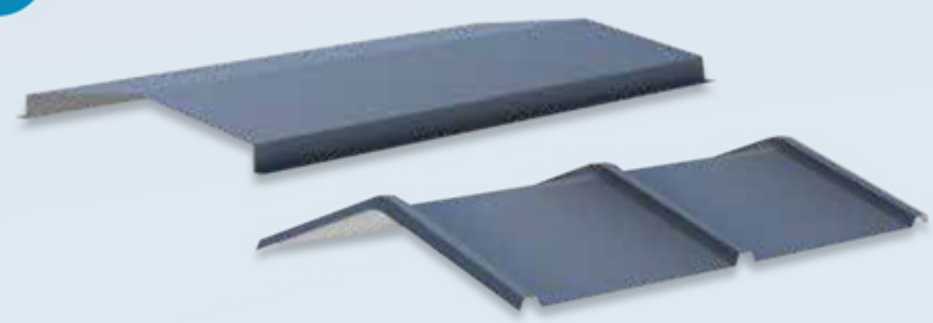


Flashing and Trims Details

Any variations of flashing and trims can be manufactured upon client request and measurements.

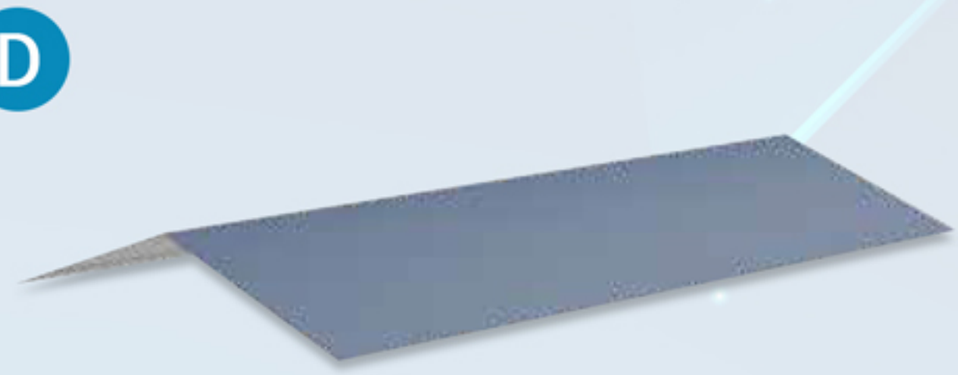


A



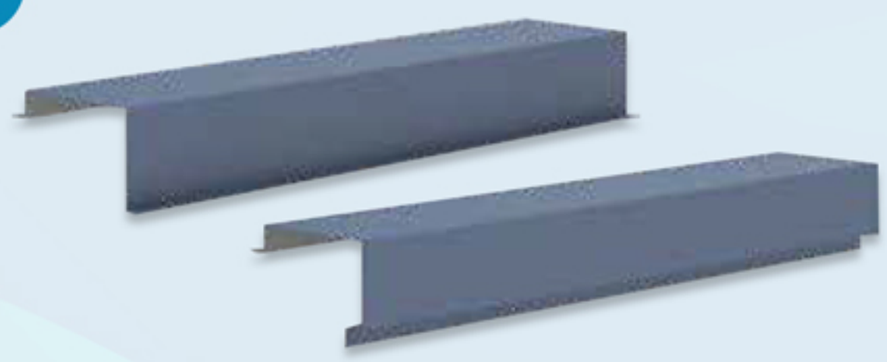
External Ridge Flashing

D



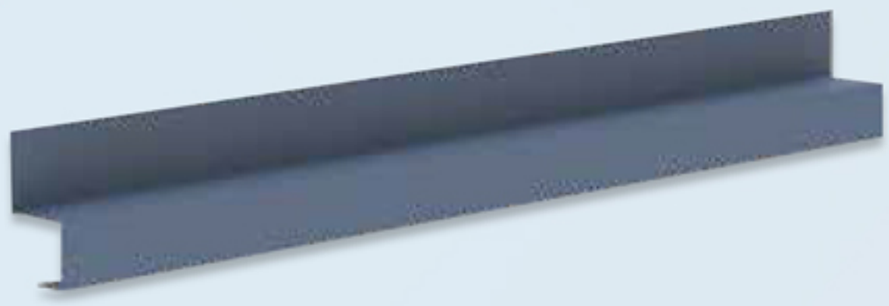
Internal Ridge Flashing

C



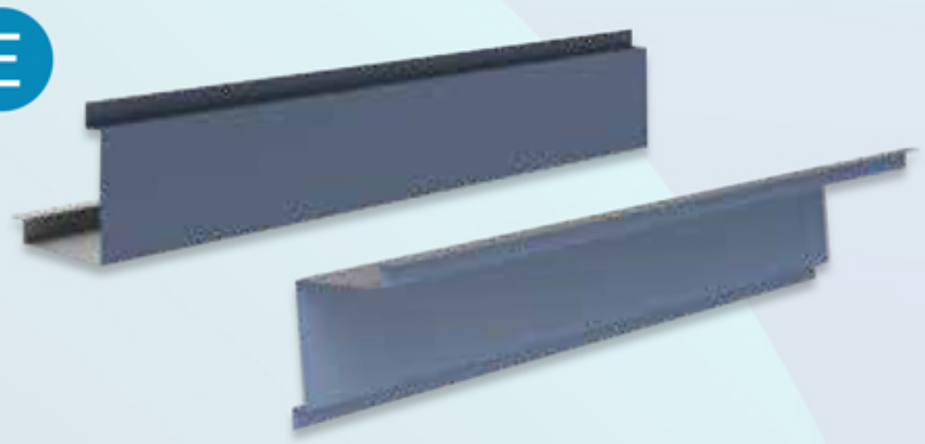
Shed Ridge Flashing

D



End Wall Flashing

E

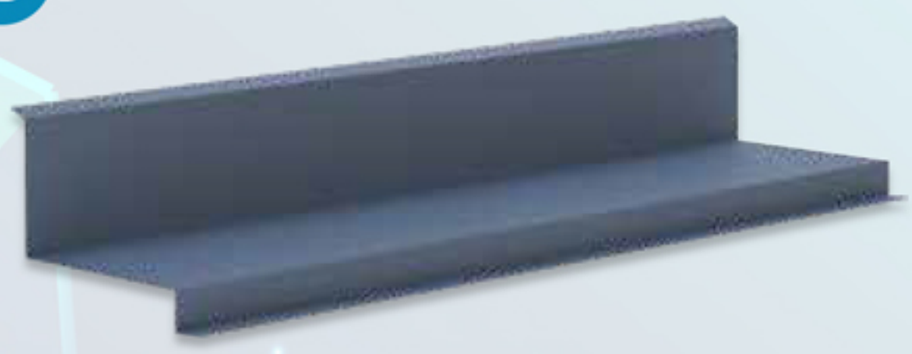


External and Internal Corner Flashing

F

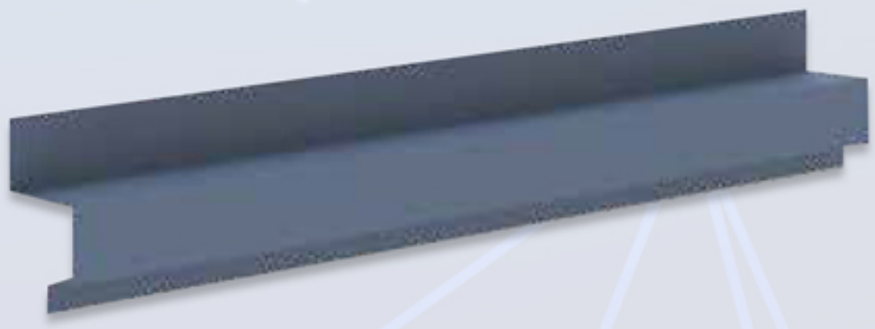
Coping Flashing

G



Sill Flashing

K



Wall Adddings Flashing

- Best Service
- Best quality
- Best price
- ISO certification

9001

الأطامي

AL-OATAMI

شركة الأشغال والبناء

WORKS & BUILDING CO.

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OUR STANDARD — YOUR GUARANTEE

ISO 9001 Quality

ISO 14001 Environment

OHSAS 18001 Health & Safety

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