

#### OUR VISION

Proudly made in Egypt to serve the Egyptian market — reducing imports, boosting local industry, and reaching global markets with quality Egyptian products

#### OUR PRODUCTS

Pre-Painted Galvanized Iron (PPGI) Sandwich panel





# 

Our PPGI coils are available in a variety of standard and custom colors, offering exceptional surface finish, durability, and UV resistance

#### FEATURED RAL COLORS

THICKNESS:

0.18 mm - 1.00mm

**COATING MASS:** 

zinc 80,120,180,275

**WEIDTH:** 

800m- 1250mm

**COATING SYSTEMS:** 

Polyester (PE), SMP, PVDF Glossy, Matte, Textured

**TYPE OF SPANGLE:** 

zero spangle

**COATING THICKHNESS:** 

top: 18:30 micron back: 6:30



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Pyramids Steel ensures high-quality PPGI coils by following a precise, fully controlled production line. Each step is designed to guarantee superior surface quality, consistent coating thickness, corrosion resistance

#### 1- UNCOILING:

Uncoiling is the process of unwinding metal from a large coil (also called a roll) to prepare it for further processing, such as cutting, forming, or rolling. The material is fed from the coil into the production line in a straightened or flattened form



#### 2-DUAL HEAD UNCOILER SYSTEM:

A system that uses two coil mandrels to feed the production line without interruption. One coil is in use while the other is prepared as a backup, allowing for immediate switching and ensuring continuous operation



#### 3-WELDING:

Welding in this context refers to joining the end of one coil to the beginning of the next



#### 4- ENTRY ACCUMULATOR

An Entry Accumulator is a mechanical storage system used at the beginning of a continuous processing line to temporarily hold material (usually metal strip from coils) in order to ensure uninterrupted operation of the main production line while coil changeover (uncoiling and welding) takes place



#### 5- CLEANING & DEGREASING

Cleaning & Degreasing is a surface preparation process used in manufacturing—especially in metal processing—to remove contaminants such as oil, grease, dirt, dust, and metal particles from the material surface before further processing like coating, painting, plating, welding, or forming.



## PPGI COIL PRODUCTION LINE

#### 6-CHEMICAL PRETREATMENT:

Chemical Pretreatment is a surface treatment process applied to metal materials before painting, coating, or plating to enhance corrosion resistance, paint adhesion



#### 7- PRIMER COATING:

is the first layer of coating applied to a surface to improve adhesion, provide protection against corrosion, and create a smooth base for the topcoat. It enhances the durability and appearance of the final finish



#### 8- BACK COATING:

is a layer of protective coating applied to the back or reverse side of a material, such as metal. It helps improve durability, resistance to environmental factors, and provides additional protection against corrosion or damage.



#### 9- CURING OVEN:

is a heated chamber used to harden or set coatings, paints, adhesives, or materials by applying controlled heat over a specific period. This process speeds up chemical reactions, ensuring proper bonding, strength, and durability of the applied coating



#### 10- COOLING SECTION:

is a stage in a production line where processed materials are cooled down after heating, curing, or coating to stabilize their structure and prepare them for handling, further processing, or packaging

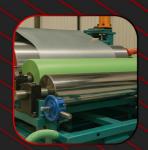


## PPGI COIL PRODUCTION LINE



#### 11- TOP/FINISH COAT

is the final layer of paint or coating applied to a surface to provide the desired appearance, color, and protection against environmental factors like UV, moisture, and wear.



#### 12- EXIT ACCUMULATOR:

is a storage system at the end of a continuous production line that temporarily holds material to allow the main line to keep running while downstream processes like cutting, stacking, or packaging are paused or adjusted.



#### 13- RECOILING (IN COIL COATING):

is the process of rewinding the coated metal strip back into a coil after coating, drying, and inspection, preparing it for storage, transport, or further processing.



#### PPGI APPLICATIONS

Pyramids Steel's PPGI coils are renowned for their durability, corrosion resistance, and versatility across multiple industries. Below are major applications where our products demonstrate their exceptional quality.

#### SANDWICH PANELS

Protective and weather-resistant outer layers for insulated panels



#### WALL CLADDING

Modern facades and architectural designs with high weather resistance



#### HOME APPLIANCES

Appliance bodies like refrigerators, washing machines, and microwaves



#### ADVERTISING BOARDS & SIGNAGE

Used in vibrant displays and durable outdoor signage



#### CORRUGATED SHEET

Roofing and cladding with classic profiles for weather resistance.



# SANDWICH



#### WHAT IS A SANDWICH PANEL?

Sandwich panels are advanced building components made of two outer layers of pre-painted galvanized steel (PPGI) and a core of high-performance insulation material. They provide excellent thermal insulation, structural strength, and fast installation — making them ideal for industrial, commercial, and cold storage applications.

#### FEATURED COLORS

**PANEL THICKNESS:** 

3cm,4cm,5cm

THICKNESS OF SHEET:

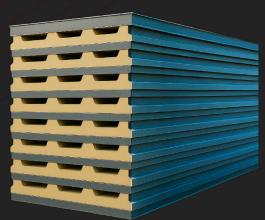
0.30,035,0.40,0.50,0.70 mm

**GALVANIZATION:** 

zinc 80 to zinc 275 g/m2

**DESTINY:** 

38 TO 45 KG /M3



#### PANEL STRUCTURE

**OUTER SHEETS:** 

Pre-Painted Galvanized Steel (PPGI) for superior protection

**INSULATION CORE:** 

PUR (Polyurethane) fire rated, a high-performance foam material used as the insulation core inside sandwich panels

**SURFACE FINISH:** 

Available in flat, ribbed, or corrugated profiles



#### **APPLICATIONS**



**INDUSTRIAL FACTORIES** 



**WAREHOUSES** 



COLD STORAGE ROOMS



**POULTRY FARMS** 



**COMMERCIAL BUILDINGS** 



PREFABRICATED UNITS

#### PRODUCTION STAGES

(CONTINUOUS LINE)

#### **ROLL FORMING**

The steel sheet passes through a roll forming machine to create the final surface shape — whether flat, corrugated, or patterned — according to the required design.



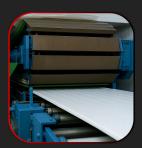
#### PU FOAMING INJECTION

A chemical mixture consisting of two components (Polyol and Isocyanate) is injected directly between the two steel sheets using a high-precision mixing head, where it expands automatically to form a uniform insulation layer.



#### **DOUBLE BELT CONVEYOR**

The panels pass through a double belt press of a specified length to ensure uniform thickness and consistent foam curing.



#### **CUTTING UNIT**

After complete curing, the sandwich panels are cut to the required lengths using an automatic flying saw to achieve precise dimensions.



#### PACKING & STACKING

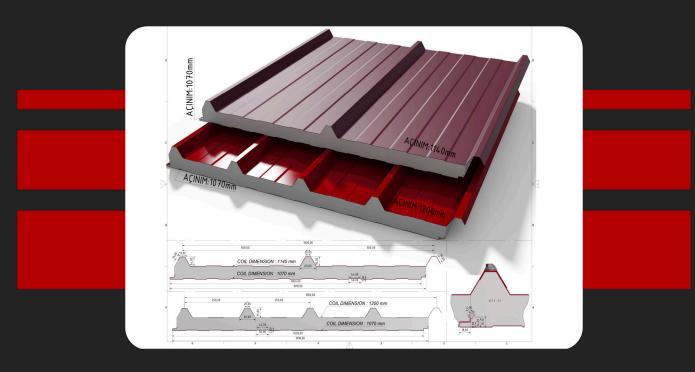
The panels are wrapped with protective plastic and stacked in an organized manner, ready for storage or shipping, ensuring protection against scratches and damage during transport



#### **ROOF SANDWICH PANEL**



Roof sandwich panels are designed for industrial and commercial roofing applications. They offer excellent waterproofing, thermal insulation, and mechanical strength while allowing fast installation.

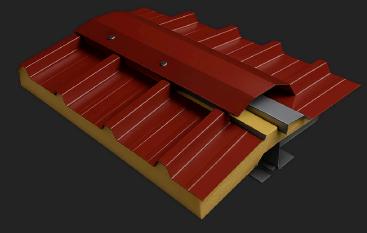


#### STRUCTURE

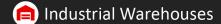
Top Sheet, Pre-Painted Galvanized Steel (PPGI) Corrugated Profile

Core, PUR (Polyurethane), a high-performance foam material used as the insulation core

Bottom Sheet, Flat or slightly profiled steel



#### **COMMON USES:**





**Cold Storage Roofs** 



Poultry Farms



**Commercial Buildings** 

#### **KEY FEATURES:**

High thermal insulation

Waterproof and weather-resistant

Long lifespan

#### WALL SANDWICH PANELS

#### STRUCTURE

Outer Sheet: Pre-Painted Galvanized Steel (PPGI) — Smooth or Ribbed Profile

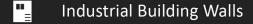
Core, PUR (Polyurethane), a high-performance foam material used as the insulation core inside sandwich panels.

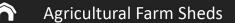
Bottom Sheet, Flat or slightly profiled steel

#### **KEY FEATURES:**

- Superior thermal insulation
- Easy and fast installation
- Excellent fire resistance options
- Wariety of colors and finishes

#### **COMMON USES:**







Warehouses



Commercial Office Walls

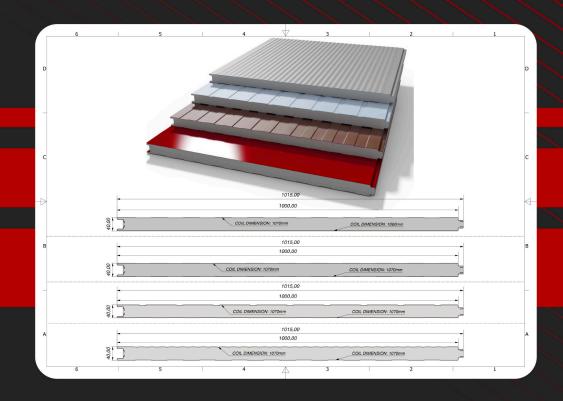
### FLAT WALL SANDWICH PANELS



Flat wall sandwich panels are specially designed for modern industrial and commercial buildings where a smooth, elegant appearance is required. They provide excellent thermal insulation, fast installation, and an aesthetically clean facade.

Flat Wall Sandwich Panels

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#### STRUCTURE

**OUTER SHEETS:** 

Pre-Painted Galvanized Steel (PPGI) — Completely Flat

CORE:

Core, PUR PUR )Polyurethane(, a high-performance foam material used as the insulation core inside sandwich panels.

**INNER SHEET:** 

Pre-Painted Galvanized Steel — Flat Finish

### FLAT WALL SANDWICH PANELS

#### KEY FEATURES:

Completely flat and elegant surface finish

High thermal insulation efficiency

Fast and easy installation

Excellent weather and water

Durable and long-lasting material

Suitable for modern architectural designs

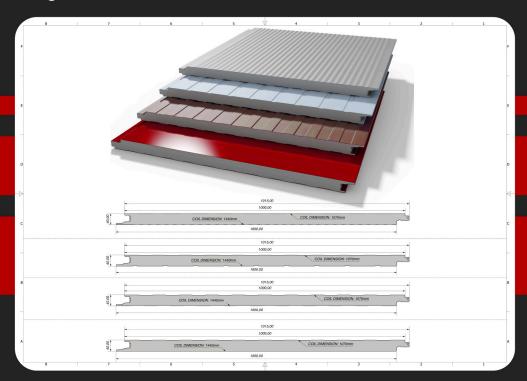
#### **COMMON USES**

- Industrial Building Walls
- Commercial Building Facades
- ★ Cold Storage Facilities
- 🔬 Clean Rooms and Laboratories
- T Prefabricated Office Walls

#### **SECRET FIX WALL PANELS**



Secret Fix sandwich panels offer a smooth, modern appearance with no visible screws or fasteners. They are ideal for high-end industrial and commercial building facades.



#### STRUCTURE

**OUTER SHEETS:** 

Pre-Painted Galvanized Steel (PPGI) — Smooth or Lightly

CORE:

PUR PUR )Polyurethane(, a high-performance foam material used as the insulation core inside sandwich panels

**INNER SHEET:** 

Pre-Painted Galvanized Steel (Flat Finish)

#### **KEY FEATURES:**

Completely hidden fixing system
Sleek modern finish
High water and air tightness
Enhanced thermal and fire resistance
Elegant, clean aesthetics

#### **COMMON USES**

Commercial Buildings

🖺 Showrooms

Office Walls

Premium Prefabricated Units

#### SANDWICH PANELS APPLICATIONS

#### CLEAN STORAGE FACILITIES

Specialized panels for temperature-controlled environments.



#### INDUSTRIAL WAREHOUSES

Durable roofing and wall panels for factories and storage buildings.



#### POULTRY AND LIVESTOCK FARMS

Insulated and hygienic spaces for animal farming.



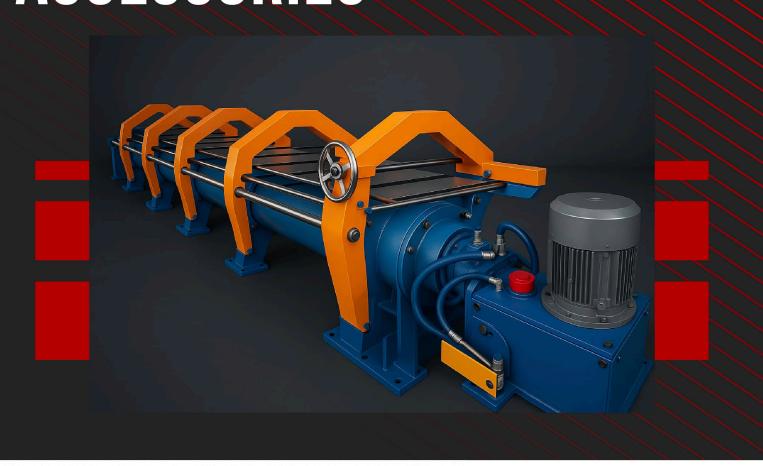
#### COMMERCIAL BUILDINGS (CARVANS)

Fast-construction offices, cabins, and modular houses.



# SANDWICH PANELS ACCESSORIES



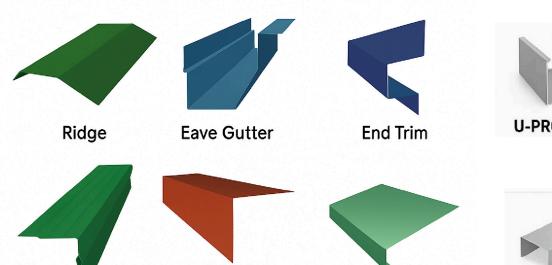


**Eave End Flashing** 



Gable End

Flashing



Corner Flashing







**FASCIA TRIM** 







































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