

**ENG STEEL**



**SinüsPanel®**

**TrapezPanel®**

**ENG STEEL CONSTRUCTION LTD**

**IRDEN BUILD PANEL LTD**

**SINUS PANEL LTD**

**TRAPEZE PANEL LTD**

***CATALOG 2022-2023***

***PRODUCTS AND PROJECTS***

**CONTACT : +905319122965**

**ADRESS : H.Q: Eyüp Sultan Mahallesi Kızılay Caddesi Damatris Life Sitesi C Blok No:71 Daire: 8 Kat: 4  
Sancaktepe – İstanbul / TÜRKİYE**

**WEBSITE : <https://www.engsteelcons.com/>**

# ABOUT US ;

Our group companies is a company where knowledge and experience of 17 years are combined together. We became the first choice for the investors with our solution generating, constructive perspectives and our exemplary projects and applications. We have carried out notable projects inland and abroad. We have delivered facilities in compliance with international quality standards to our businessmen by handling each project with the same precision and building them meticulously. Building a facility means investing in your future. We are building exemplary and contemporary structures in compliance with the international quality standards to meet the requirements of sector leaders, investors and businessmen. We are dealing with such business issues as Cold Storage Rooms, Plants, Depot, Bonded Warehouses, Hangars, Food Storage Rooms, Agricultural Buildings, Production Facilities, Industrial Buildings, sales of Polyurethane Panels for roofs, walls and cold storage rooms to, and contracting and installation works for leading domestic or foreign companies engaged in industrial production.

## معلومات عنا

شركات مجموعتنا هي شركة يتم فيها الجمع بين المعرفة والخبرة لمدة 17 عامًا. لقد أصبحنا الخيار الأول للمستثمرين من خلال حلولنا التي تولد الحلول ، ووجهات النظر البناءة ومشاريعنا وتطبيقاتنا النموذجية. لقد قمنا بتنفيذ مشاريع بارزة في الداخل والخارج. لقد قمنا بتسليم المرافق وفقًا لمعايير الجودة الدولية لرجال الأعمال لدينا من خلال التعامل مع كل مشروع بنفس الدقة وبناءها بدقة. بناء مرفق يعني الاستثمار في مستقبلك. نقوم ببناء هياكل نموذجية ومعاصرة وفقًا لمعايير الجودة الدولية لتلبية متطلبات قادة القطاع والمستثمرين ورجال الأعمال. نحن نتعامل مع مثل هذه القضايا التجارية مثل غرف التخزين البارد ، المصانع ، المستودعات ، المستودعات ، الحظائر ، غرف تخزين الطعام ، المباني الزراعية ، مرافق الإنتاج ، المباني الصناعية ، مبيعات ألواح البولي يوريثين للأسطح والجدران وغرف التبريد والتعاقد. وأعمال التركيب للشركات المحلية أو الأجنبية الرائدة العاملة في الإنتاج الصناعي.

ENG STEEL



SinüsPanel®

TrapezPanel®

# OUR PRODUCTS AND SERVICE

- Steel Structure Construction, Project Implementation and Commitment
- Industrial Plants Steel Construction Commitment
- Factory and Production Facilities Steel Construction Commitment
- Food Production and Storage Steel Project, Implementation and Consulting
- Prefabricated, Conventional and Concrete Industry Building System Project and Commitment
- Logistics warehouse, warehouse, hangar Construction
- Civil Engineering and Architecture Service
- Agricultural and Industrial Steel Buildings Construction
- Parking, school, hospital, airport, port and silo Steel System Applications
- Trapeze Roof and Wall Panels Panel Sales, Application and Installation
- Polyurethane Insulated Sandwich Wall and Roof Panel Sales, Application and Installation
- Rockwool Insulated Sandwich Wall and Roof Panel Sales, Application and Installation
- Sinus Panel Sales, Application and Installation
- The roof, front and Cold Storage Renovation and Modernization Works
- Cold Storage Panel Project Implementation and Commitment
- Cold Storage Room Floor Insulation systems (Floormate, XPS ,Polyurethane Foam)
- Marble products Sales and application.

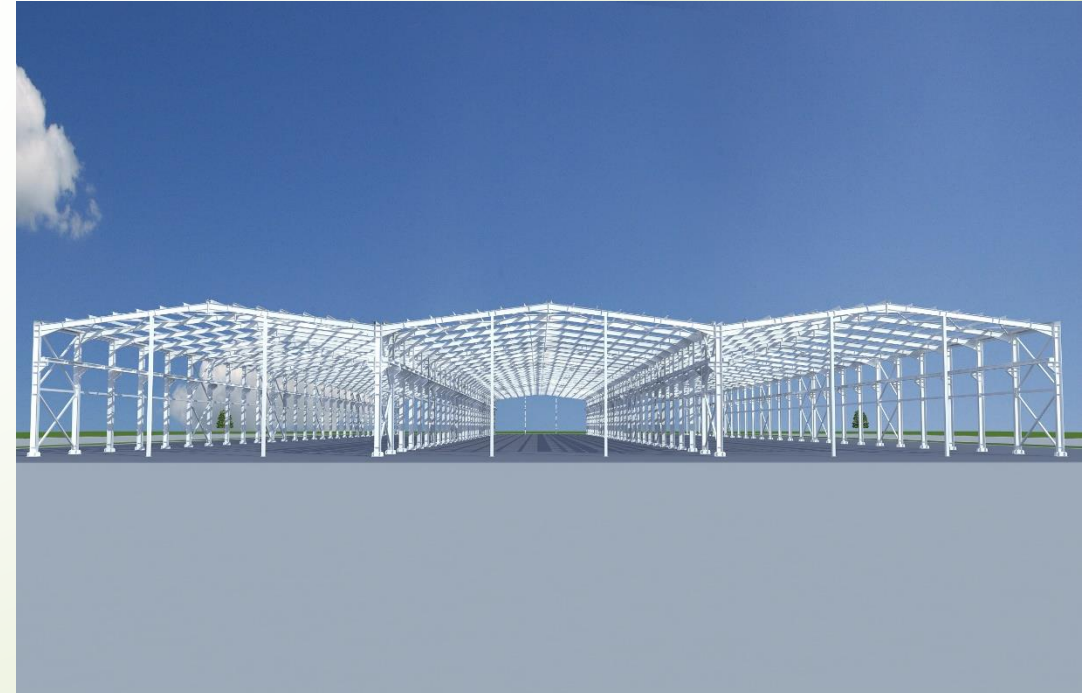


SinüsPanel®

TrapezPanel®

# منتجاتنا وخدماتنا

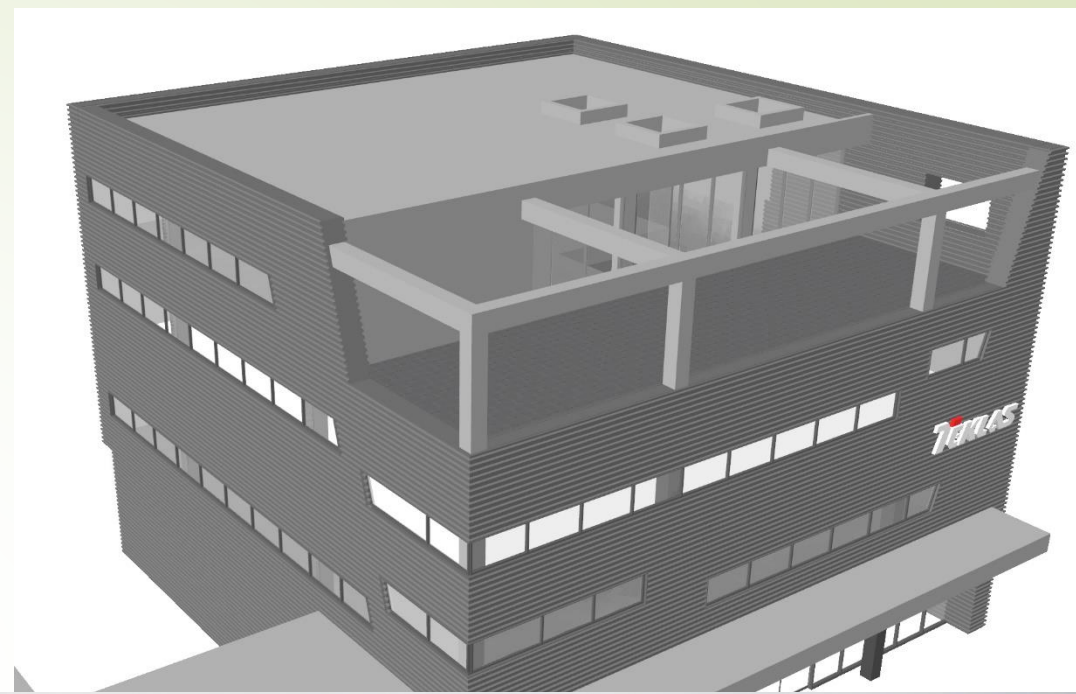
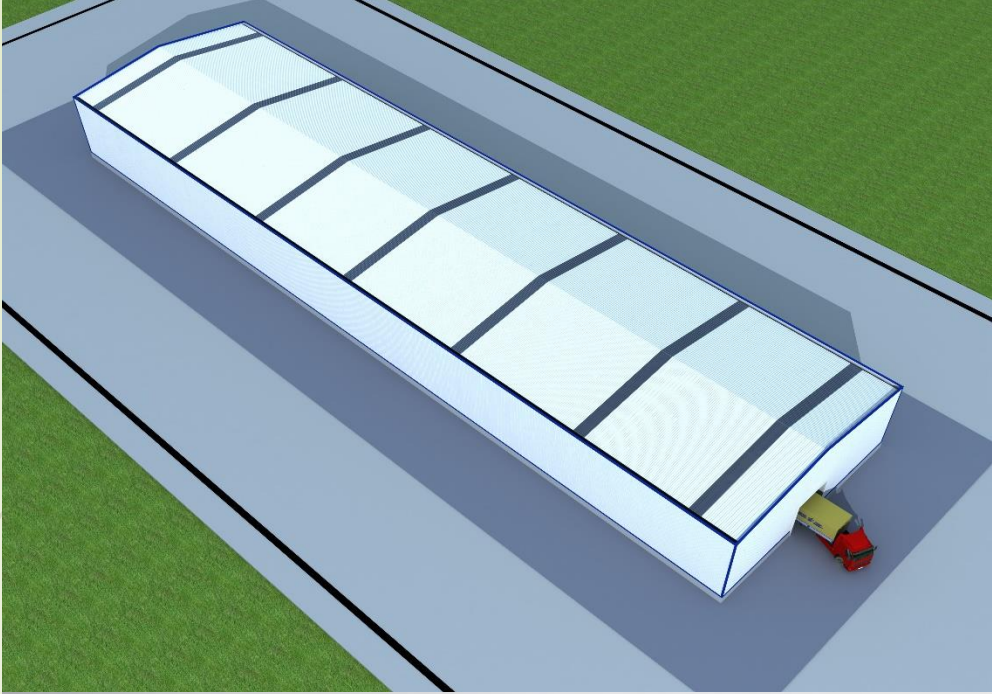
- إنشاء الهياكل الفولاذية وتنفيذ المشروع والالتزام
- التزام إنشاءات الصلب في المصانع الصناعية
- التزام المصنع والمنشآت الإنتاجية بالإنشاءات الفولاذية
- مشروع إنتاج وتخزين الحديد الصلب ، التنفيذ والاستشارات
- مشروع والالتزام نظام بناء الصناعة الجاهزة والتقليدية والخرسانة
- المستودعات اللوجستية والمستودعات وبناء حظائر الطائرات
- الهندسة المدنية وخدمة الهندسة المعمارية
- تشييد المباني الزراعية والصناعية الفولاذية
- تطبيقات نظام الصلب وقوف السيارات والمدارس والمستشفيات والمطارات والموانئ والصوامع
- مبيعات لوحات السقف والجدار أرجوحة ، والتطبيق والتركيب
- مبيعات ألواح البولي يوريثين المعزولة للجدار والسقف ، والتطبيق والتركيب
- روكوول معزول جدار ساندويتش ومبيعات لوحة السقف والتطبيق والتركيب
- مبيعات الألواح الجيبية والتطبيق والتركيب
- أعمال تجديد وتحديث السقف والتخزين الأمامي والمخازن الباردة
- تنفيذ مشروع ألواح التخزين البارد والالتزام به
- Floormate ، XPS • أنظمة عزل أرضية غرف التخزين البارد رغوة البولي يوريثان
- مبيعات منتجات الرخام والتطبيقات.



# ENGINEERING AND DESIGN SOLUTIONS- حلول هندسية وتصميم

- -Detail Project designed drawings of the project,
- -Discovery, cost analysis and calculations,
- -Design, material selection and technical support.
- -Feasibility studies and services.
- -Project services.
- Research & Development.
- Consulting Services (Consulting Services).
- -Inspection, Application Management.
- -Relieve Project.
- -Discovery, specifications, tender documents editing services.
- -Progress and Final Account services
- -Preliminary and Preliminary Design for Architecture,
- -Application Architecture Projects,
- -Project Details Designed drawing of the project,
- -3 D Max Modeling System and installation details
- -Static and concrete calculations,
- -Discovery, cost calculations and analysis,
- -Preparation of technical specifications design,
- -Material selection and technical support

- -تفاصيل مشروع الرسومات المصممة للمشروع ،
- -الاكتشاف وتحليل التكلفة والحسابات ،
- - التصميم واختيار المواد والدعم الفني.
- - دراسات الجدوى والخدمات.
- - خدمات المشروع.
- - البحث و التنمية.
- خدمات استشارية (خدمات استشارية).
- -التفتيش ، إدارة التطبيقات.
- - راحة المشروع.
- -الاكتشاف والمواصفات وخدمات تحرير وثائق العطاء.
- - خدمات الحساب التقدومي والنهائي
- - التصميم الأولي والأولي للعمارة ،
- - مشاريع هندسة التطبيقات ،
- -تفاصيل المشروع الرسم التصميمي للمشروع ،
- -تفاصيل التثبيت 3-D Max نظام النمذجة
- - حسابات ثابتة ومحددة ،
- -الاكتشاف وحسابات التكلفة والتحليل ،
- - اعداد تصميم المواصفات الفنية.
- -اختيار المواد والدعم الفني

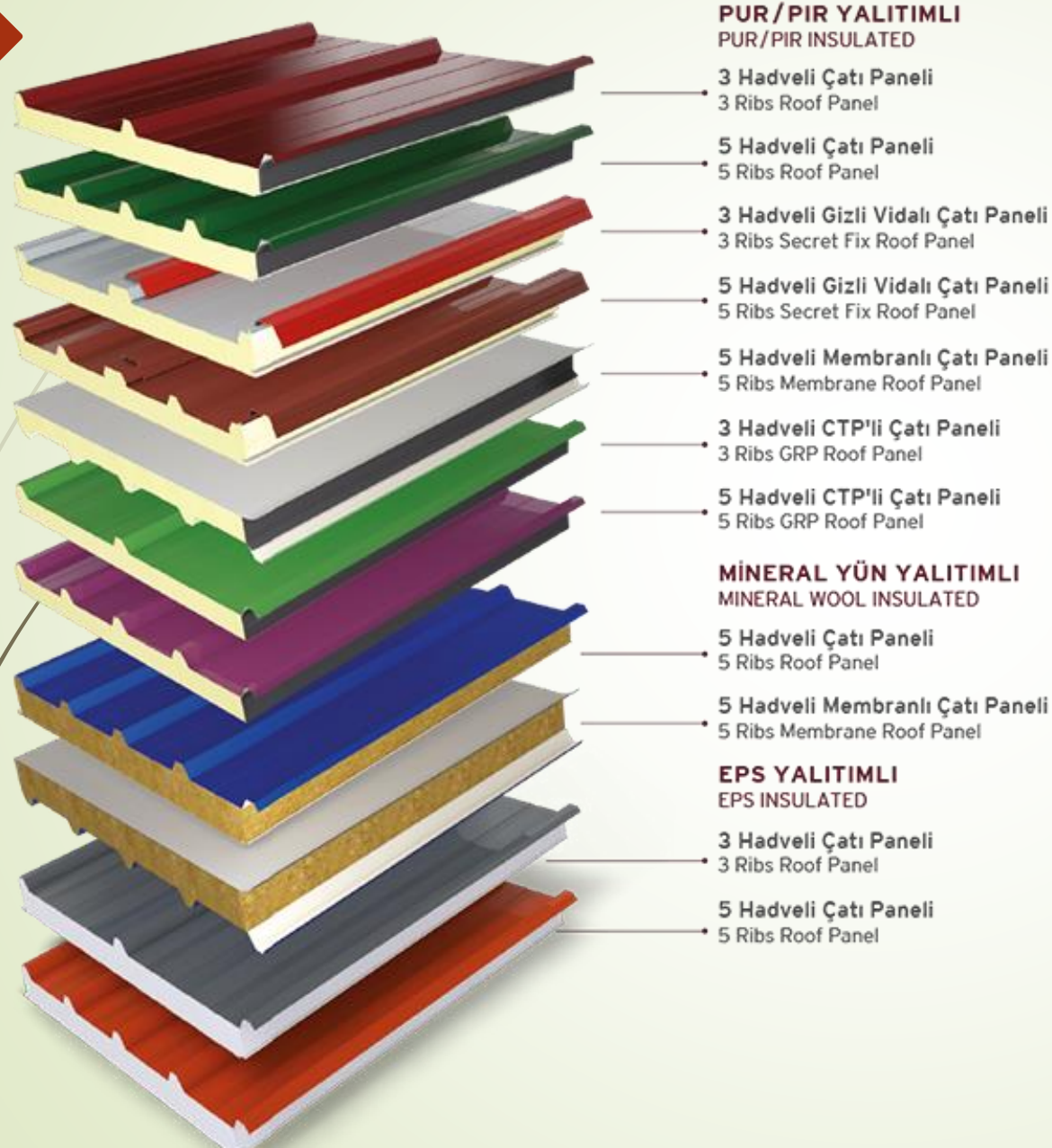


# PRODUCTS - منتجات

- -ROOF PANELS
- -FACADE PANELS
- -COLD ROOM PANELS
- -COLD ROOM DOORS
- -TRAPEZE PANEL
- -SINUS PANEL
- -SANDWICH PANELS
- -ACCESSORY
- -CONNECTORS
- -POLYCARBONATE and GRP ILLUMINATED FACADE PANELS
- -HIDDEN SCREW FACADE PANELS

- - الألواح العازلة ألواح الوجه
  - ألواح غرف التبريد
  - أبواب غرف التبريد
  - أرجوحة- التجويف
  - ساندويتش
  - الكمالية
  - موصلات
  - بوليكربونات و
- ألواح الواجهات المضيئة من GRP البولي كربونات و
- ألواح الواجهات ذات البراغي المخفية

# SANDWICH ROOF PANEL - لوح سقف ساندویتش

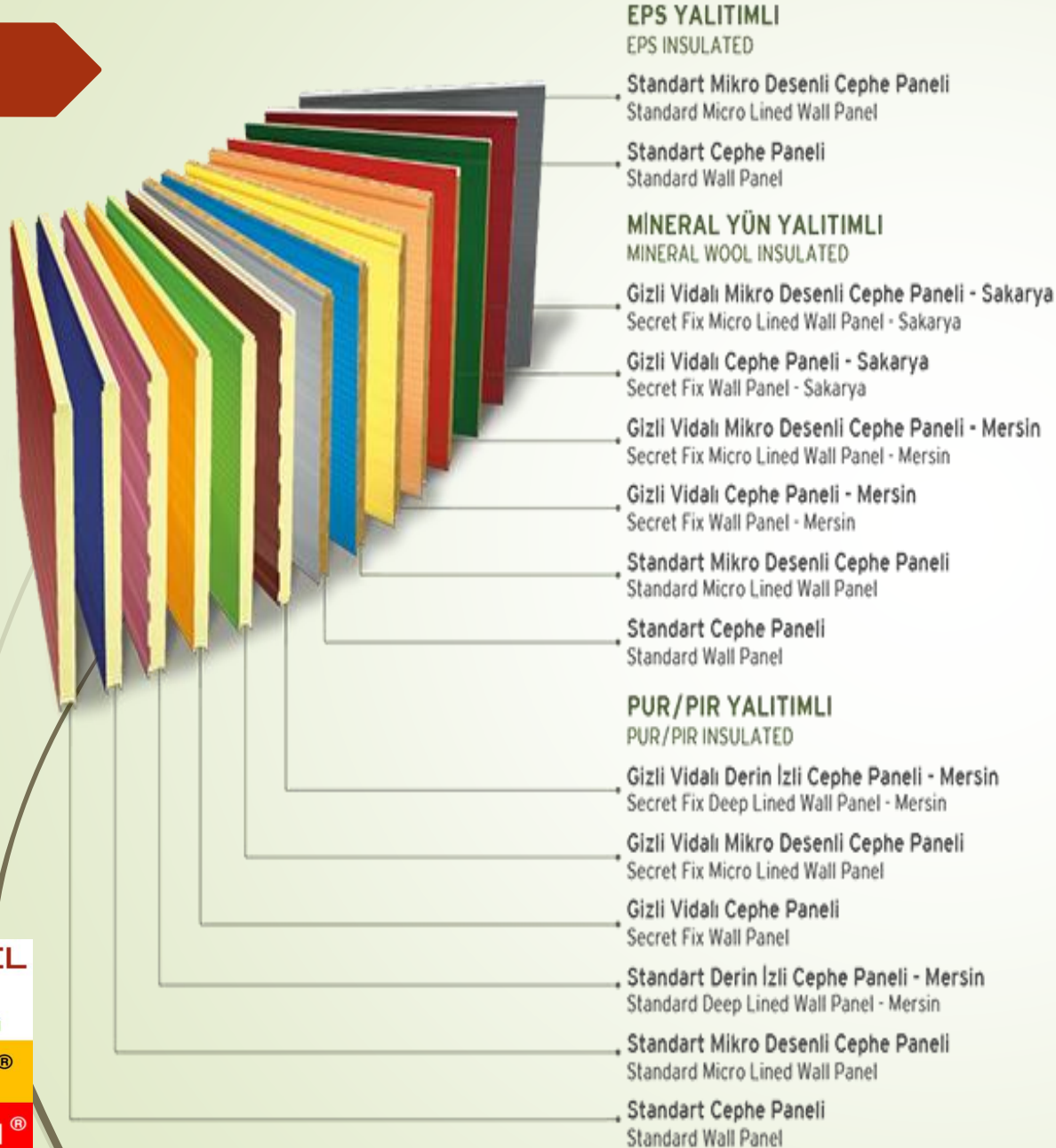


The roof of a building is one of the most important parts of the architecture of the building, while being the part that is affected the most from natural conditions such as snow, rain, and storm.

Thanks to IRDEN BUILD's sandwich roof panels, you can ensure thermal, humidity, water, sound insulation and fire resistance especially on the roof claddings of industrial buildings. Therefore, you make your building stronger against tough natural conditions.

According to the needs investors and designers feel for the buildings, IRDEN BUILD LTD produces PUR, PIR, Mineral Wool and EPS insulated roof panels in 3 and 5 rib forms, and with standard and hidden screwed options. In its product range, it offers membraned roof panels for low-slope terrace roofs, and GRP roof panels for modern animal and poultry husbandry facilities.

# SANDWICH WALL PANEL - لوح حائط ساندويش



- Suitable for every need and architecture, Our company sandwich wall panels offer reliable and aesthetic solutions for both investors and designers. IRDEN BUILD LTD produces wall panels of various insulation, function, and color alternatives while putting its signature under many national and international projects with its products and services. Sandwich wall panels are used in many areas – from malls to factories, from industrial facilities to storages.
- According to the thermal, humidity, sound insulation and fire resistance requirements, IRDEN BUILD LTD has PUR, PIR, Mineral Wool and EPS insulated sandwich wall panels. Implemented vertically or horizontally for the external appearance of your building, the sandwich wall panels can be used indoors as partition wall and ceiling. With its sandwich wall panels with external or secret fixing joint detail, IRDEN BUILD LTD offers both reliable and aesthetic wall solutions for your building with various surface types and profiles to choose from.

# المواصفات الفنية - Technical Specifications

- Panel thicknesses: 50 - 60 - 80 - 100 - 120 - 150 and 200 mm.
- Rockwool Density: 100 and 110 kg/m<sup>3</sup>
- Rockwool Class: A1 (TS 14501-1)
- Net Covering width (area): 1000 mm
- Maximum length: 14 m
- Top Metal Thicknesses: 0.50 – 0.60 – 0.70 mm
- Bottom Metal Thicknesses: 0.40 – 0.50 – 0.60 – 0.70 mm
- Thermal conductivity Coefficient:  $\lambda=0.035$  W/mK
- Color: Ral options
- Surface Paint Options: POLYESTER, PVC, PVDF, PLASTISOL

|                             | Isı Yalıtımı<br>Thermal Insulation | Su Yalıtımı<br>Water Insulation | Ses Yalıtımı<br>Acoustic Insulation | Yangına Dayanım<br>Fire Resistance | Mekanik Dayanım<br>Mechanical Strength |
|-----------------------------|------------------------------------|---------------------------------|-------------------------------------|------------------------------------|----------------------------------------|
| PUR                         | ★★★★                               | ★★★★                            | ★★                                  | ★★                                 | ★★★★                                   |
| PIR                         | ★★★★                               | ★★★★                            | ★★                                  | ★★★                                | ★★★★                                   |
| Mineral Yün<br>Mineral Wool | ★★★                                | ★★★                             | ★★★★                                | ★★★★                               | ★★★                                    |
| EPS                         | ★★★                                | ★★★                             | ★★                                  | ★                                  | ★★                                     |

**Zayıf** ★  
Poor

**Orta** ★★  
Medium

**İyi** ★★★  
Good

**Çok İyi** ★★★★  
Very Good

ENG STEEL



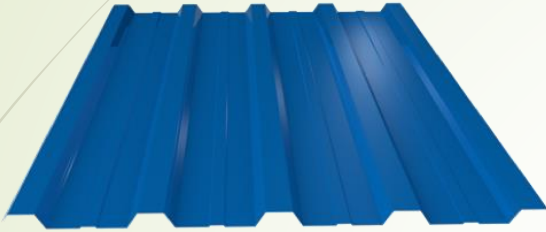
SinüsPanel®

TrapezPanel®

# PAINTED GALVANIZED TRAPEZE SHEET PANEL

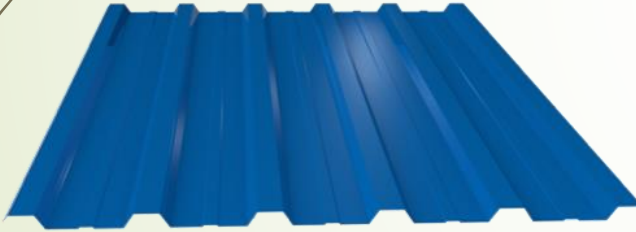
## لوحة ورقة تراپيز مجلفنة مطلية

### 27/200 Form Painted & Galvanized Trapezoidal Sheet 5 Ribbed



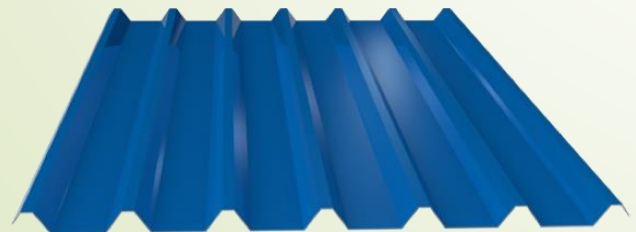
- Technical details Useful Width: 1000 mm
- Length Min. : 1000mm- Max.12.000mmmm.
- Usage Area: Roof and Facade Metal
- Properties: Galvanized Sheet, Painted Galvanized Sheet (top coat polyester paint over the primer)
- Metal Thickness: Min.0.35 mm.-Max.0.70 mm.
- Painted Galvanized Sheet/Galvanized Sheet Min.0.50 mm.-Max.0.70 mm

### 27/200 Form Painted & Galvanized Trapezoidal Sheet 6 Ribbed



- Technical details
- Useful Width: 800 mm. (Tolerance:  $\pm 3$  mm.)
- Length Min. : 1000mm- Max.12.000mmmm.
- Usage Area: Roof and Facade
- Metal Properties: Galvanized Sheet, Painted Galvanized Sheet (top coat polyester paint over the primer)
- Metal Thickness: Min.0.35 mm.-Max.0.70 mm. Painted Galvanized Sheet/Galvanized Sheet Min.0.50 mm.-Max.0.70 mm

### 27/200 Form Painted & Galvanized Trapezoidal Sheet 7 Ribbed



- Technical details
- Useful Width: 906 mm. (Tolerance:  $\pm 3$  mm.)
- Length Min. : 1000mm- Max.12.000mmmm.
- Usage Area: Roof and Facade
- Metal Properties: Galvanized Sheet, Painted Galvanized Sheet (top coat polyester paint over the primer)
- Metal Thickness: Min.0.35 mm.-Max.0.70 mm. Painted Galvanized Sheet/Galvanized Sheet Min.0.50 mm.-Max.0.70 mm

ENG STEEL



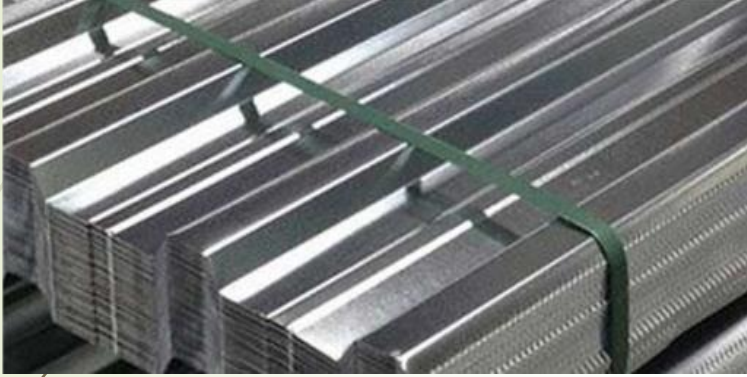
SinüsPanel®

TrapezPanel®

# ALUMINUM TRAPEZE SHEET PANEL

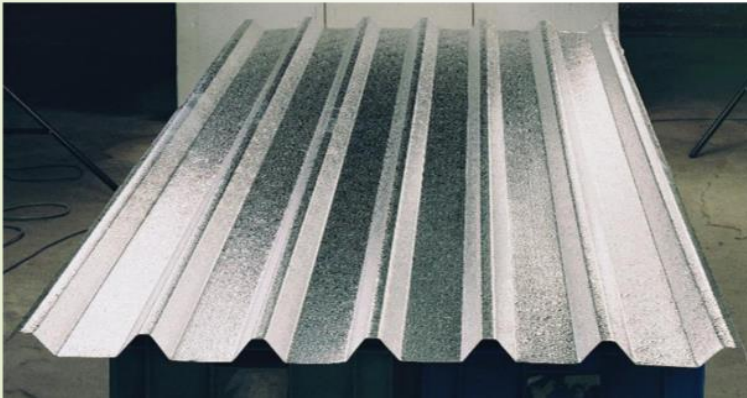
## لوح ألومنيوم ثلاثي الأبعاد

### ▶ Aluminum Trapeze Sheet Panel in 27/200 Form



- Technical details
- Useful Width: 800mm-1000mm
- Length : Min. 1000mm- Max.12.000mmmm.
- Usage Area: Roof and Facade
- Metal Properties : High Condition AW 3000 series aluminum
- Metal Thickness: Min.0.50 mm.-Max.0.70 mm.

### ▶ Aluminum Trapeze Sheet Panel in 38/151 Form



- Technical details
- Useful Width : 900 mm
- Length : Min. 1000mm- Max.12.000mmmm.
- Usage Area: Roof and Facade
- Metal Properties : High Condition AW 3000 series aluminum
- Metal Thickness: Min.0.50 mm.-Max.0.70 mm.

ENG STEEL



SinüsPanel®

TrapezPanel®

# COLD STORAGE PANELS AND DOORS

## ألواح وأبواب التخزين البارد

Cold stores, which are produced for the purpose of storing products in a healthy way at temperatures up to -40°C, cause high energy consumption in order to stay at low temperatures. Polyurethane(PUR)/Polyisocyanurate(PIR) insulated Cold Storage Panels are the most ideal building materials to achieve thermal insulation in cold room applications.

Determining the thickness of Cold Room Panels depends on many factors;

- Temperature difference between Building Indoor and Outdoor
- Type of Sandwich Panel filling material
- Energy prices
- construction cost
- Design of the Cooling System

### Technical Specifications



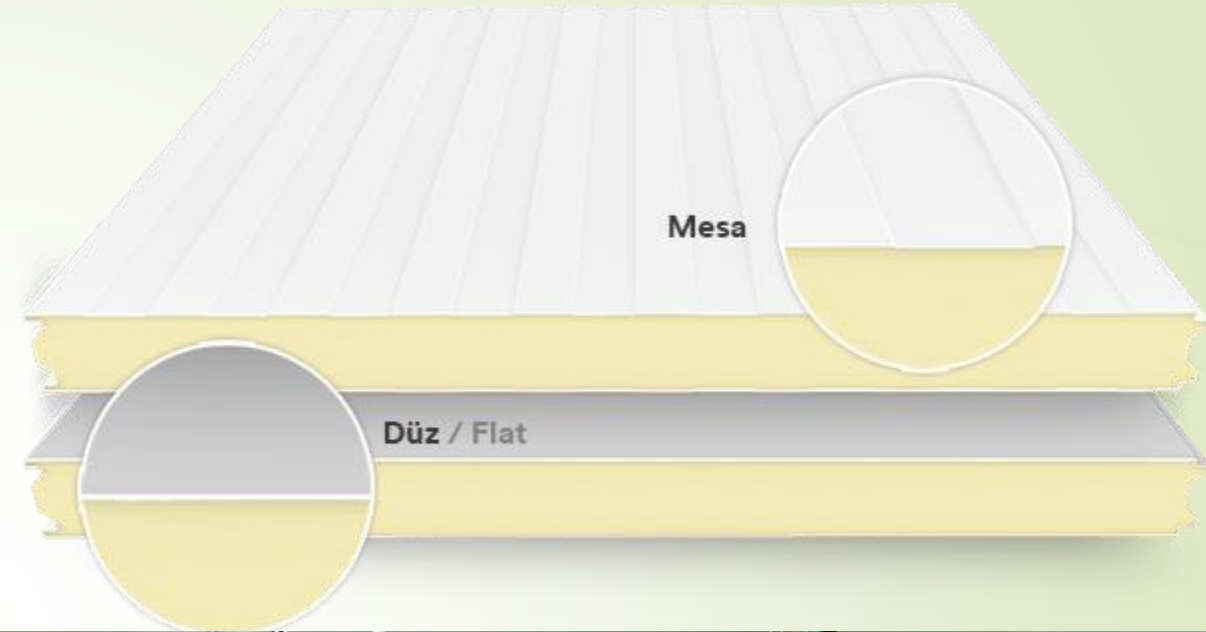
| Insulation Material | Fire Class                                                    | Density      | Insulation Thickness (mm) | Thermal Conductivity (λ) | U Value | R Value        |
|---------------------|---------------------------------------------------------------|--------------|---------------------------|--------------------------|---------|----------------|
|                     |                                                               |              |                           |                          | (W/m²K) | (h·ft²·°F/Btu) |
| Polyurethane (PUR)  | B s2 d0 (TS EN 13501-1)                                       | 40 (±2)kg/m³ | 80                        | 0,022 W/mK               | 0,27    | 21             |
|                     |                                                               |              | 100                       |                          | 0,22    | 26             |
|                     |                                                               |              | 120                       |                          | 0,18    | 31             |
|                     |                                                               |              | 150                       |                          | 0,15    | 39             |
|                     |                                                               |              | 180                       |                          | 0,12    | 47             |
|                     |                                                               |              | 200                       |                          | 0,11    | 52             |
| External Sheet      | Prepainted Galvanized Steel/Stainless Steel 0,50-0,60-0,70 mm |              |                           |                          |         |                |
| Internal Sheet      | Prepainted Galvanized Steel/Stainless Steel 0,50-0,60-0,70 mm |              |                           |                          |         |                |

ENG STEEL

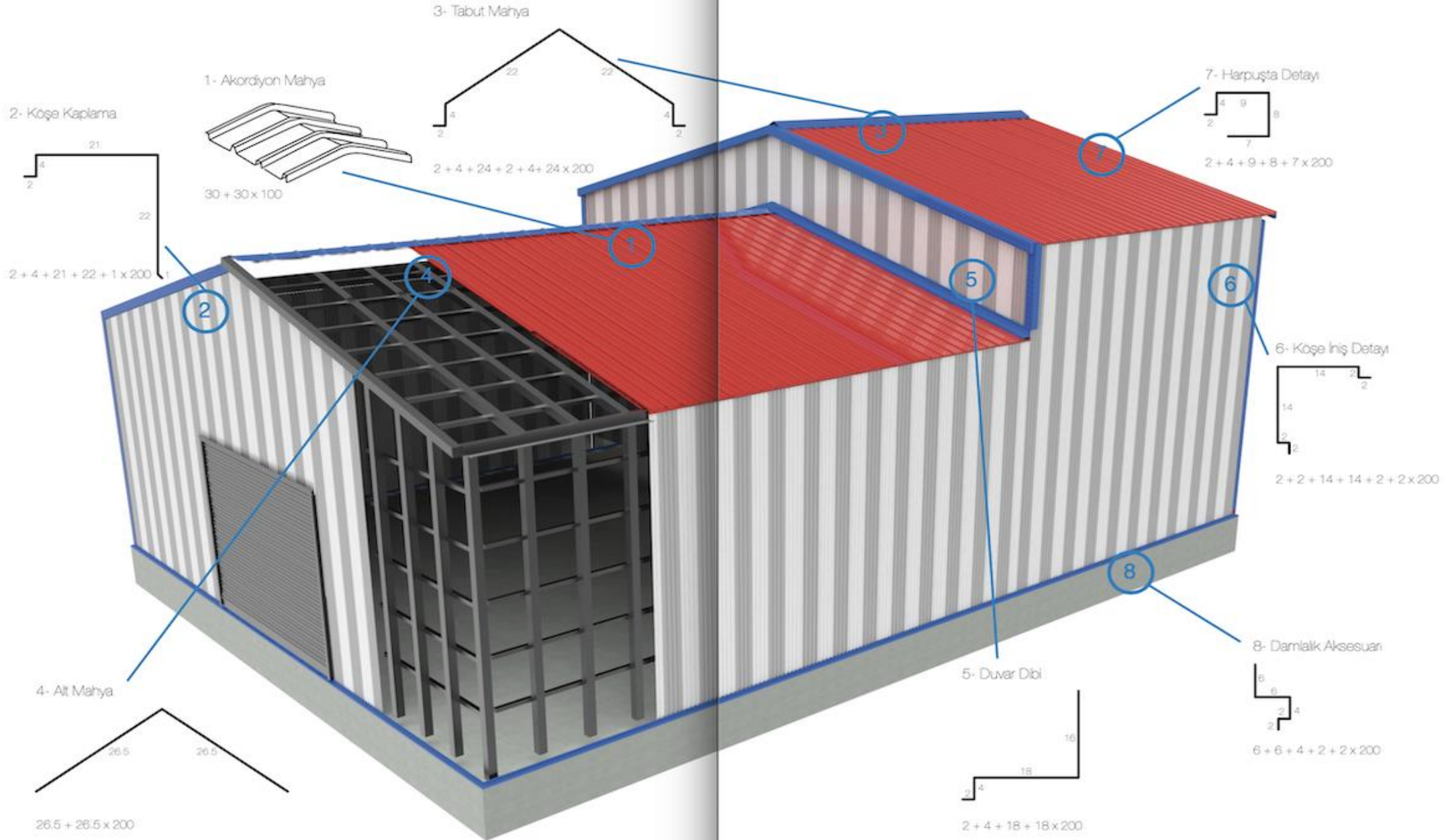


SinüsPanel®

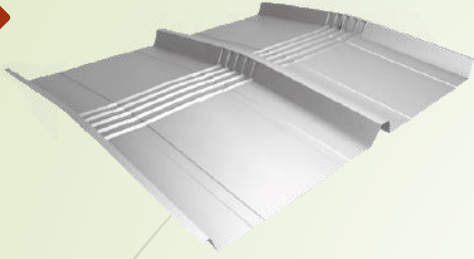
TrapezPanel®



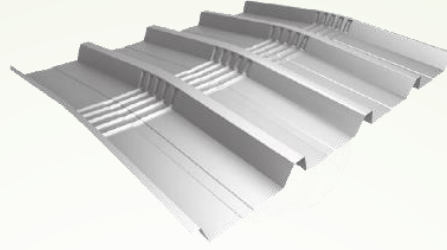
# ACCESSORY - ملحق



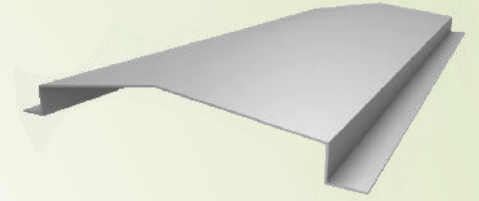
# ACCESSORY PRODUCTS - منتجات الإكسسوارات



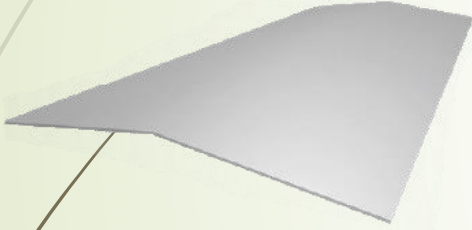
RADIUS MAHYA 3 HARVES



RADIUS MAHYA 5 HARVES



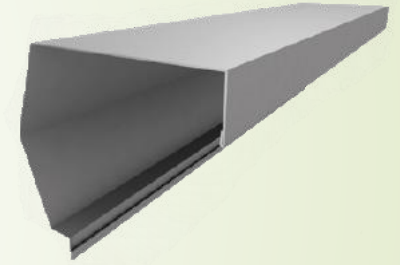
UPPER MAHYA



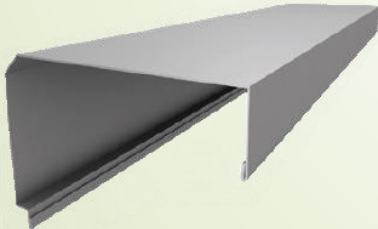
LOWER MAHYA



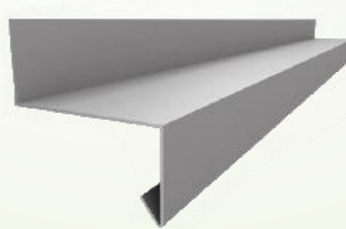
ROOF SKIRT



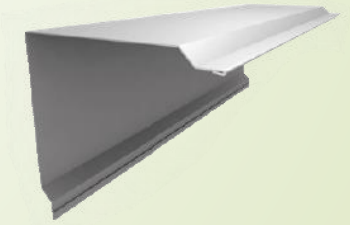
SHIELD WALL



HARPHUSH

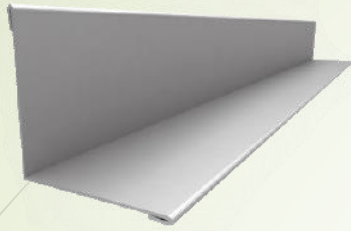


DROPPER

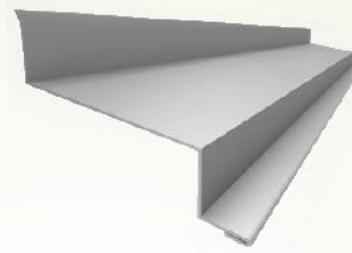


OUTER CORNER

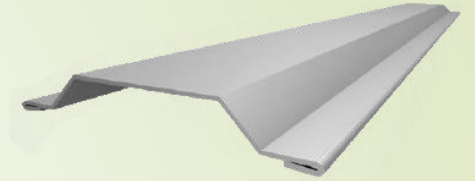
# ACCESSORY PRODUCTS - منتجات الإكسسوارات



INNER CORNER



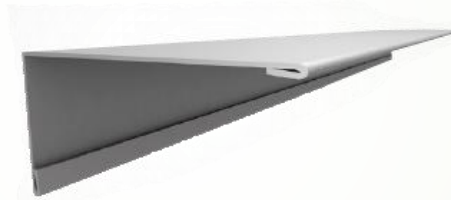
PLASTER BOTTOM



HORIZONTAL FACADE JOINT



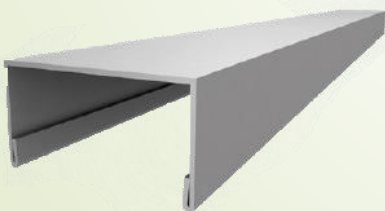
CORNER PANEL



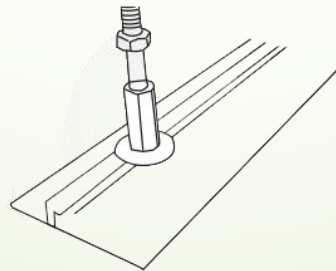
COLD ROOM OUTER CORNER



COLD ROOM INNER CORNER



COLD ROOM FLOOR U



COLD ROOM CEILING HANGER



PANEL AND TRAPEZE SCREWS

ENG STEEL



SinüsPanel®

TrapezPanel®

# REFERENCES - المراجع



# REFERENCES - المراجع



# REFERENCES - المراجع



# REFERENCES - المراجع



HANGAR

SCHOOL



# REFERENCES - المراجع



# REFERENCES - المراجع



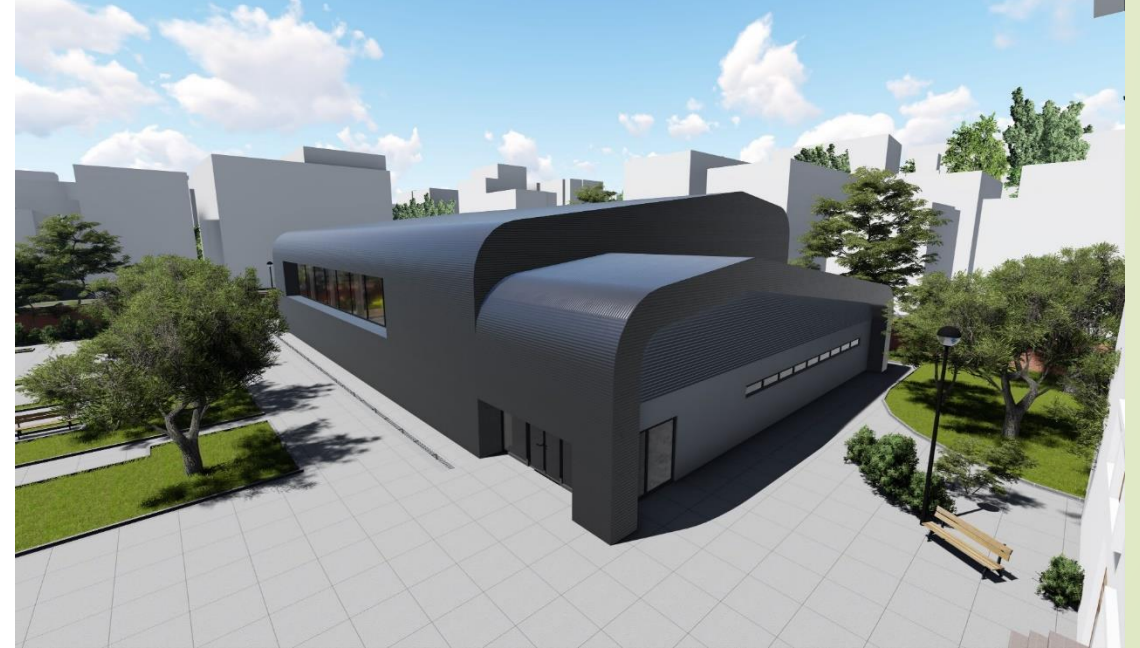
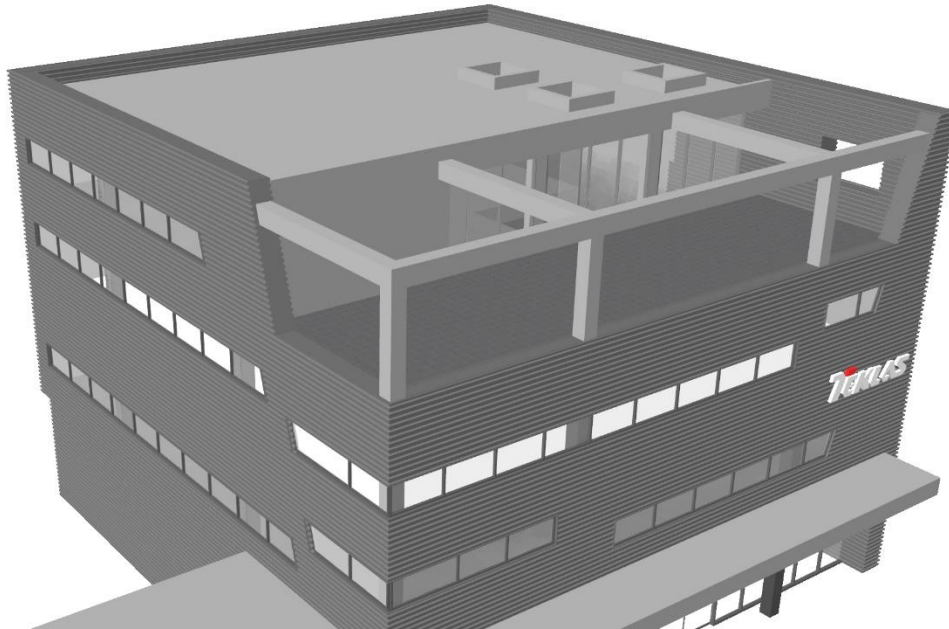
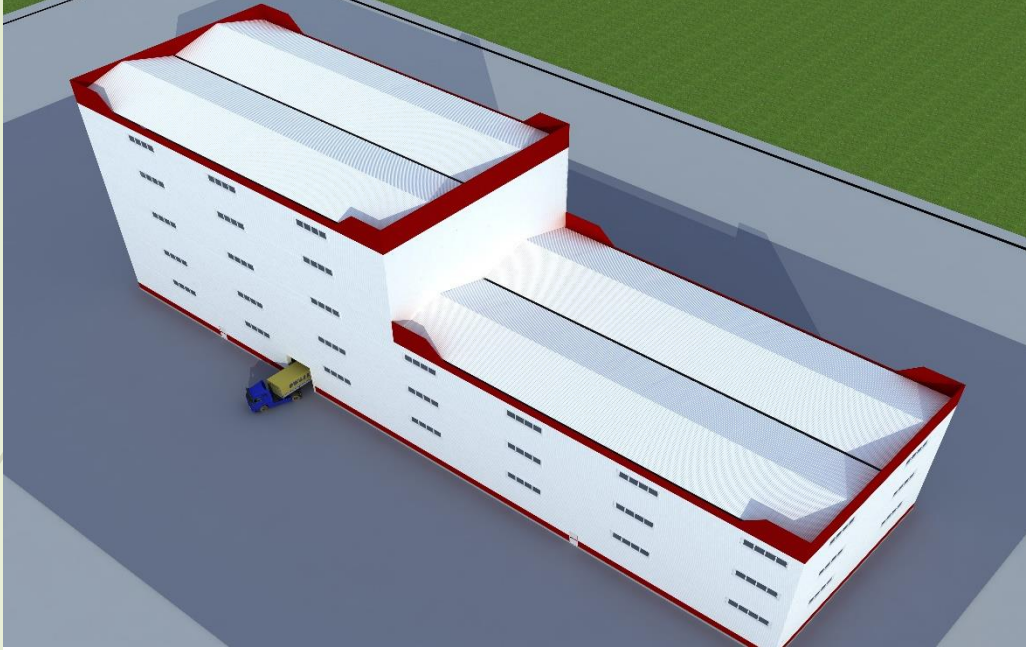
ENG STEEL



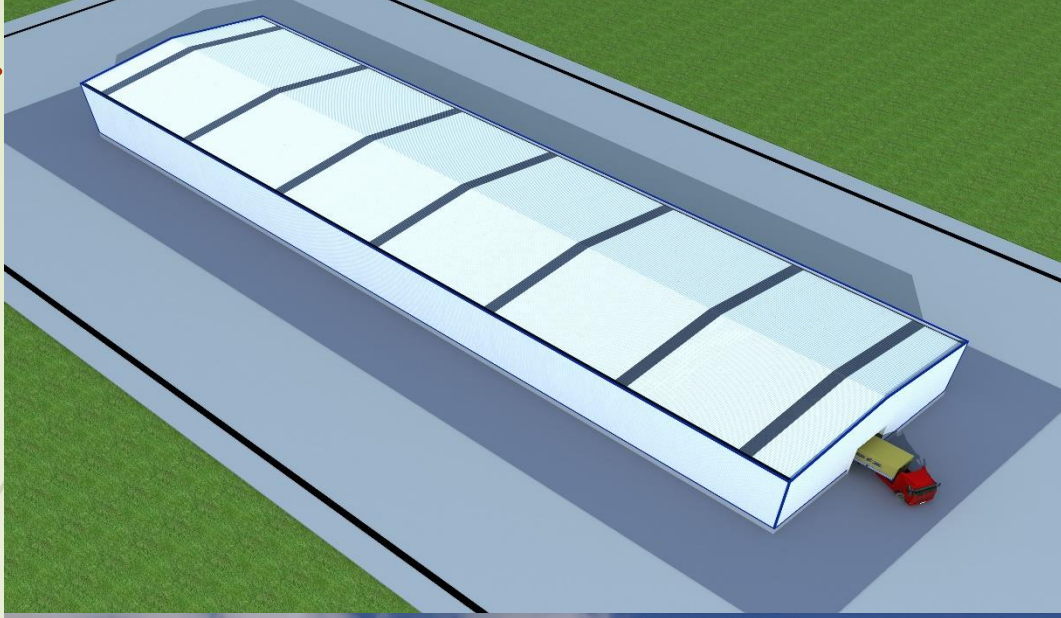
SinüsPanel®

TrapezPanel®

# المراجع - REFERENCES



# REFERENCES - المراجع



# شكرا لك - THANK YOU

***IF YOU WANT US TO MAKE YOUR PROJECTS THE FASTEST AND  
HIGHEST QUALITY, PLEASE CONTACT US***

***إذا كنت تريد منا أن نجعل مشاريعك أسرع وأعلى جودة ،  
فيرجى الاتصال بنا***