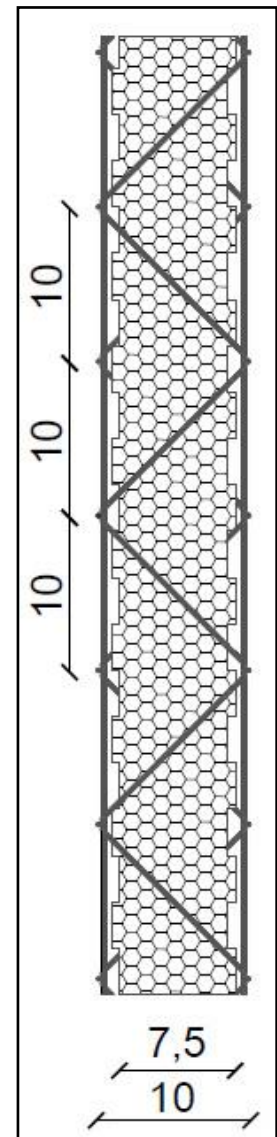
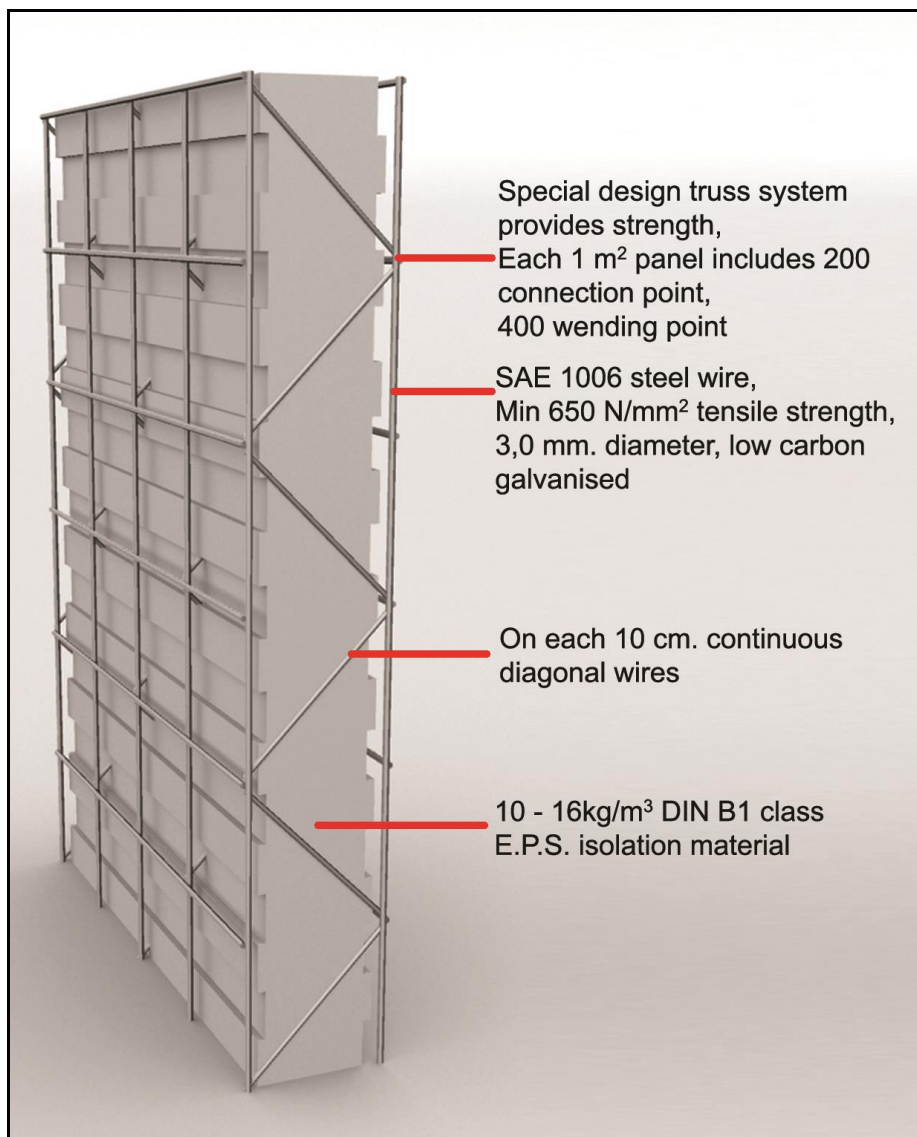
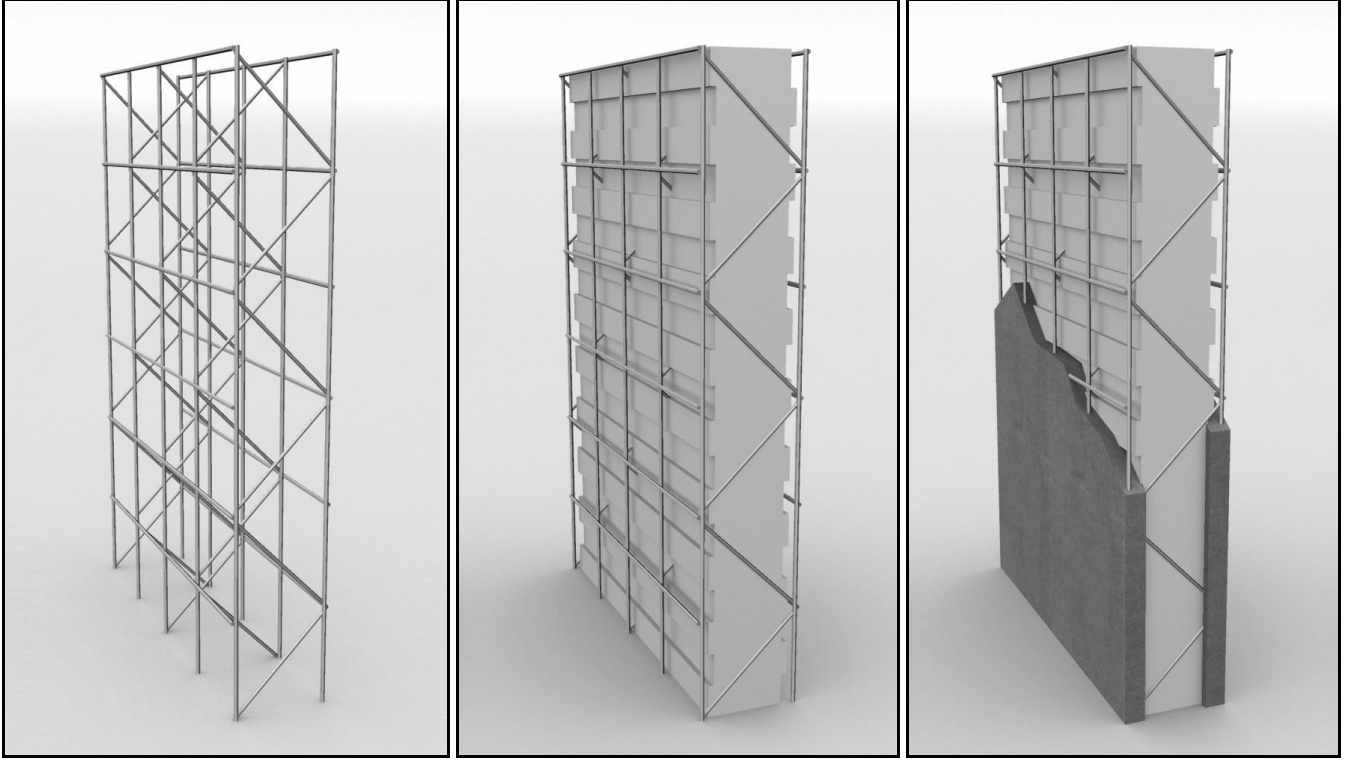


## What is Zenon Panel construction material?

Zenon Panel® system is a modern building material with the rapidly increasing use. Zenon Panel is produced with a braided steel wire mesh via inserted various thicknesses of expanded polystyrene material. In the direction of the tensile strength of the skeleton of the panel consists of 3 mm diameter, low-carbon steel. Specially designed mesh provides the rigidity and strength of the Zenon Panel system. There are 200 nodes per square meter. There is no distinction at any point, continuity poses.

## Where is Zenon Panel used?





Plastered or concrete poured on site after installation is used. Factory to the construction site of a building material until assembly is lighter than ever. (4 -4,5 kg/m<sup>2</sup>). Horizontal and vertical transport is very easy.

- One-and two-story masonry buildings as a carrier system,
- Heat and sound insulated exterior or interior walls,
- Roof and normal floor construction,
- Special-purpose projects.

Zenon Panel system can be easily used in residences, hotels, hospitals, industrial buildings, factories, offices, cold stores, coops, animal shelters, etc.. In addition, as a carrier for masonry buildings, steel buildings, prefabricated structures can be used as a divisive internal and external walls. There is no size and usage limit.

## BENEFITS OF ZENON PANEL

### Zenon Panel Wall

- **Economic.** Zenon Panel is the most suitable insulated wall system.
- **Fast.** Assembly is much faster than traditional wall materials.
- **Light-weight.** Zenon Panel is very light (4.5 kg/m<sup>2</sup>). In this way, the wall has mainly the biggest loads in buildings relief allows a large extent. Relieved of buildings increases against earthquake resistance.
- **Space and area saving:** Traditional walls covers 0.20 m<sup>2</sup> area which corresponds to 5-10% of the total usage area on the floor. Because of Zenon Panel® is installed by anchorage to the construction and floors; total usage area eases up by 5-10%.
- **Thermal insulated.** Zenon Panel® allows high thermal and sound insulation within the 7.5 cm. thick polystyrene materials (EPS). Allows saving air-conditioning costs and cool in summer, warm winter creates sanitary environments.
- **Long life.** The thermal insulation provided by Zenon Panel is equivalent to building life. The life span of the EPS polystyrene material inside Zenon Panel is the eternal life. Life of jacketing applications is not equivalent to building life, an average of 10 times sheathing should be done during the life of the building. While using Zenon Panel is solved the problem of heat insulation throughout the life of the building.
- **Provides noise insulation.** It allows a high degree (39dB) noise insulation.
- **The earthquake demolished.** It is very strong and resistant by means of the special mesh steel cage system inside of. It is quite durable against not just only the pressure also horizontal loads, tensional and shear loads.
- **Bearer supports the system.** Zenon Panel provides support to the anchored frame consisting of columns and beams. The operation of the construct as a whole by



Very light  
4,0 - 4,5 kg/m<sup>2</sup>



Even %20 cheaper



Perfect thermal and  
sound insulation



Strong



Application takes  
shorter time



Creative design  
opportunity



Easy and economic  
transportation

### Zenon Panel Slab

- **Economic.** Zenon Panel is the most suitable insulated roof system.
- **Fast.** Zenon Panel is much faster than wood, concrete and steel construction roof systems.
- **Light-weight.** Zenon Panel is very light-weight (4.5 kg/m<sup>2</sup>). The roofs made by Zenon Panel has 1/3 weight of the conventional reinforced concrete roofs.
- **Space and area saving.** Due to assembling and constructional features of Zenon Panel enables to use and evaluate the entire roof area.
- **Thermal isolation.** Zenon Panel® allows high thermal and sound insulation within the 7.5 cm. thick polystyrene materials (EPS). Allows saving air-conditioning costs and cool in summer, warm winter creates sanitary environments.
- **Long life.** The life of thermal insulation provided by Zenon Panel is equivalent to building life. The life span of the EPS polystyrene material inside Zenon Panel is the eternal life. . While using Zenon Panel solves the problem of heat insulation throughout the life of the building.
- **Wide span roof floors can be designed.** Because of the constructive structure and being a light-weight material, it is possible to construct a wide clear span roof by using Zenon Panel without using any other carrier system.
- **Acoustic isolation.** Allows acoustic insulation. It allows a high degree (39dB) acoustic insulation.
- **Earthquake resistant.** It is very strong and resistant by means of the special steel truss system inside of. It is quite durable against not just only the axial loads also horizontal loads, tensional and shear loads.
- **No wastage.** Because of Zenon panel can be cut and added to the desired location, there does not occur any wastage. Besides any losses of material cannot be seen during transport and porting.
- **Electricity and plumbing installations are**

providing a framework increases the strength of the earthquake.

- **No wastage and damage.** Because of Zenon panel can be cut and added to the desired location, there does not occur any wastage. Besides any losses of material cannot be seen during transport and porting.

- **Flooring plumbing and electricity installation is very practical.** All installations are easily applied. All tubes and pipes can be easily placed between steel mesh and EPS. As with traditional brick walls does not need actions such as break or wire fastening.

- **Allows freedom of Design.** Zenon available for endless design thanks to the panel there be given the desired diagram. Drawings, freedom, allows the architect.

- **Lintels and beams not required.** Zenon Panel walls, lintels and beams as is traditional on the walls is not required.

- **Easily coating.** All kinds of wall coating material can be applied on Zenon Panel wall, same as on the brick wall.

- **Fire resistant.** According to the results of the tests applied at accredited laboratory, Zenon Panel endures fire by 90-minutes.

- **Does not require special craftsmanship.** Zenon panel mounting is very simple. Zenon Panel can easily be installed by moulder and ironmaster.

- **Bulletproof.** It has been observed that no bullet passing using a long-barreled pistol and rifle shots made effective distance and angles by means of double-layered plaster and steel cage of Zenon Panel.



*Very safe against seismic loads*



*Bullet-proof structure*



*Does not require skilled labour*



*No waste*



*Electric and plumbing installations are easily applied*



*Does not require lintel and lattice*

**easily applied.** All installations are easily applied. All tubes and pipes can be easily placed between steel mesh and EPS. As with traditional brick walls does not need actions such as break or wire fastening.

- **Saves materials and labor costs.** Zenon Panel roof provides a significant advantage in formwork, iron, concrete, labor and material expenses.

- **Does not require maintenance.** Zenon Panel roofs does not need any maintenance because there will be no corrosion, no weathering no frays and no wear and tear over time.

- **Provides design freedom.** Zenon available for endless design thanks to the panel there be given the desired diagram. It allows freedom to architects when they draw own genuine designs.

- **Does not require lintel and lattice.** Unlike conventional walls, the walls of Zenon Panel roofs do not require lintels and girder.

- **Fire resistant.** According to the results of the tests applied at accredited laboratory, Zenon Panel endures fire by 90-minutes.

- **Does not require skilled labor.** Zenon panel mounting is very simple. Zenon Panel can easily be installed by moulder and ironmaster.

- **Bullet-proof.** It has been observed that no bullet passing using a long-barreled pistol and rifle shots made effective distance and angles by means of double-layered plaster and steel cage of Zenon Panel.



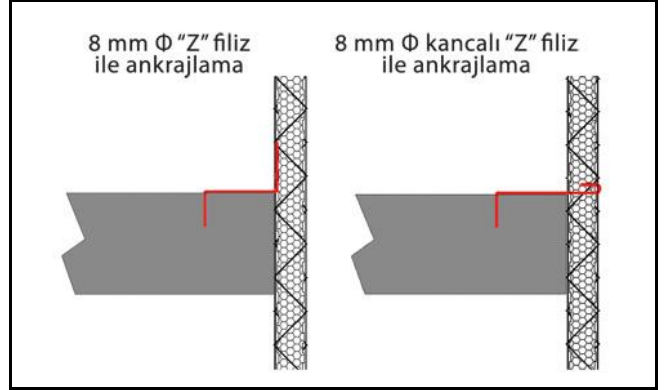
## One and two story houses





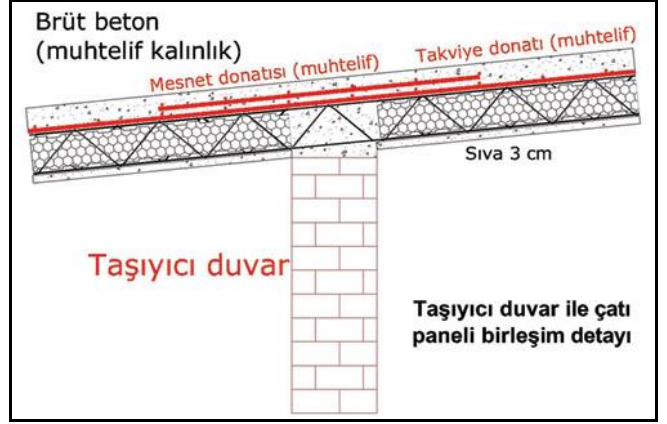


Heat and sound insulated exterior or interior walls





## Roof and normal floor construction





Special-purpose projects.



