

DESCRIPTION

Panel Simple Estructural is a single structural panel, a constructive element of the MKS system, made up of an expanded polystyrene (EPS) sheet, with 1 cm deep corrugations that form micro-columns, which are vertically reinforced by the galvanized steel meshes on each side of it, meshes that are joined by electro-welded connectors.

USE

This Panel Simple Estructural, along with our sprayable micro-concrete Microconcreto Pegasus Proyectable MCE 225, is used in the MKS construction system to produce earthquake-resistant load-bearing walls in works of varied nature, whether in new buildings or in remodeling intended for housing, industrial, commercial or banking. In addition, they can be used as mezzanines or deck slabs with a maximum span between supports up to 5 m.

The structural use of this panel considers a minimum polystyrene thickness of 6 cm with a layer of Pegasus Proyectable MCE 225 averaging 3.5 cm. on each face (approx. 3 cm over the mesh) with a compressive strength of at least 280 kg/cm².

PROPERTIES

PHYSICAL PROPERTIES	DATA
Steel Grid	7.5 X 8 cm
Mesh steel diameter (12 Gauge) 2.4 mm	2.4 mm
Steel connector diameter (11 Gauge) 3.0 mm	3.0 mm
Fluence Effort	Fy> 7600 kg/cm ²
Breaking strength	Fy> 7600 kg/cm ²
Density of polystyrene board	15 kg/m ³
Polystyrene type	Class III, Type F
Polystyrene sheet thickness	6 cm to 15 cm
Recommended Wall Thickness	13 cm to 22 cm
Thermal resistance (R Factor) (*)	2.38 W/m ² °C
Fire resistance REI (*)	120 minutes
Sound insulation index (*)	41 dB

These technical data were calculated under controlled laboratory conditions, but SUR QUÍMICA has no control over conditions, tools, applicator skills, selection, preparation, or compatibility of products used; therefore, can only guarantee this product quality, its features and qualities' suitability, but is not responsible for the results obtained in conditions impossible to check once the job has been done. SUR QUÍMICA has made reasonable efforts to ensure the accuracy of the information provided herein, but assumes no liability for any errors, omissions or inaccuracies thereof. If there is any inconsistency between different language issues of this document, Spanish version will prevail.

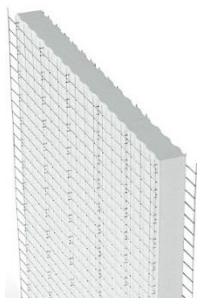
TECHNICAL INFORMATION

PANEL SIMPLE ESTRUCTURAL

530-57200-060



Expanded Polystyrene sheets do not have chlorofluorocarbon (CFC) or hydrofluorocarbon (HCFC) compounds, so they do not damage the ozone layer.



SIZING

AVAILABLE SIZING

Panels 120 cm wide and variable length according to architectural or structural requirements. The available thicknesses of the Panel Simple Estructural Panel are:

Panel Simple Estructural 50 = 5 cm of polyester board (recommended final thickness 12 cm)

Panel Simple Estructural 60 = 6 cm of polyester board (recommended final thickness 13 cm)

Panel Simple Estructural 80 = 8 cm of polyester board (recommended final thickness 15 cm)

Panel Simple Estructural 100 = 10 cm of polyester board (recommended final thickness 17 cm)

Panel Simple Estructural 120 = 12 cm of polyester board (recommended final thickness 19 cm)

Panel Simple Estructural 140 = 14 cm of polyester board (recommended final thickness 21 cm)

Panel Simple Estructural 150 = 15 cm of polyester board (recommended final thickness 22 cm)

Upon special request, the panel can be bent with Emmedue's patented machinery, to adapt to architectural requirements in varied curved conformations and a minimum radius of 2 m.

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PRODUCT APPLICATION

Application instructions

1. Panel Installation: The panel is placed by tying it to the rebar that protrude from the foundation or from the floating slab. Window openings can be cut prior to installation or once the wall is lifted. Verification of the plumb line in the walls is necessary.

Subsequently, the reinforcement meshes are placed; the Malla Esquinera (Corner Mesh) at the intersection of the panels. The U mesh on the entire perimeter of the doors and windows and the Flat mesh when it is required to give continuity to the steel in panel joints and in the corners of the doors and windows opening at a 45° angle. The panels and meshes are tied together with the help of galvanized staples placed with manual or pneumatic staplers.

2. Electromechanical Piping: Using a torch or heat gun, the polystyrene on the panel is spot melt to position the electromechanical piping. In case of having to cut portions of mesh, it is necessary to place Flat Mesh reinforcement to ensure the continuity of the steel of the MKS system.

3. First layer of Pegasur Projectable MCE 225: A first spray of the Projectable Pegasur MCE 225 is made with automatic spraying equipment. This first layer should completely cover the panel mesh.

4. Second layer of Pegasur Projectable MCE 225: the second layer of plaster is applied in the same way until it reaches the recommended thickness.

5. Finishing of the walls: for the final coating of the walls, the use of MPR 140M Repello Manual Fino is recommended, in conjunction with the wide range of Sur products that includes, among others, varied textured plasters, decorative wall coatings, smooth plaster and paints.

NOTICE:

- ✓ Installing contractors must follow the constructive recommendations described in the installation and use manuals of these panels, in all the related technical data sheets, as well as in the safety data sheets of the equipment and those of the products associated with the MKS system.
- ✓ If you need other information for safe handling of this product, you can visit our website <https://www.gruposur.com/asistencia/>

HEALTH

- ✓ The personnel in charge of the installation of the MKS system must use all the appropriate personal protective equipment, as detailed in the respective Safety Data Sheets (MSDS) of this product, which is available at our website <https://www.gruposur.com>

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