

Description

FANOSA® Steelfoam is a system of prefabricated panels cut according to project requirements. It consists of a self-extinguishing expanded polystyrene board with a 20 kg/m³ density, reinforced with 20 gauge G-60 galvanized steel profiles, separated 40.6 cm.

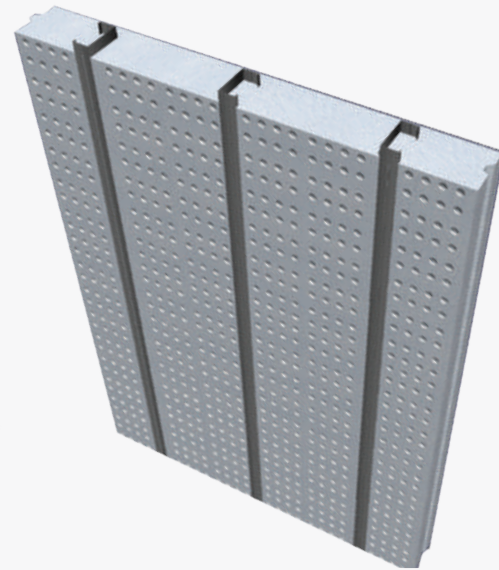
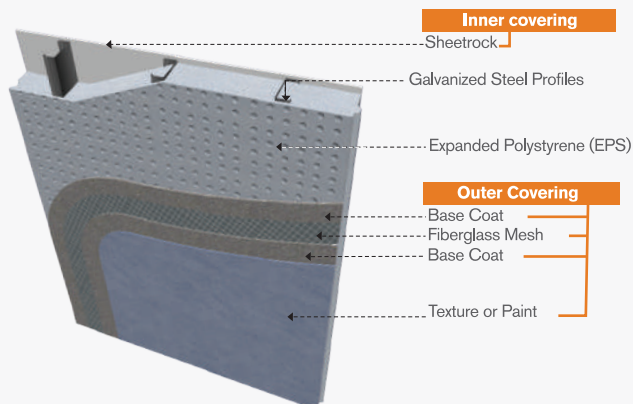
Steelfoam is an ideal system for covering large areas during any type of construction. This system is quick, durable, affordable, lightweight, and provides high thermal insulation. It is widely used in plug and/or curtain-wall type façades, in partition walls, parapets, large spaces and architectural forms.

Product presentation

Each piece is 1.22 m wide and is supplied with the height required by the project (maximum 12 meters high). The panel comes in a wide variety of thicknesses, ranging from 12 to 20 cm, and each panel has three 4" galvanized steel profiles.

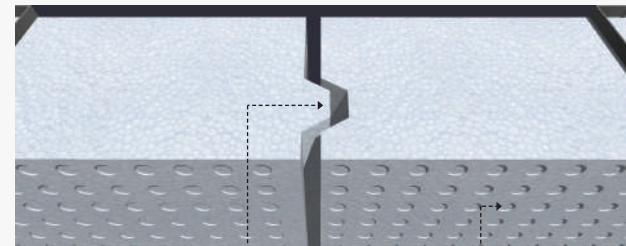
Presentation STEELFOAM	
Profile	Thickness (cm)
4"	12, 13, 14, 15, 16, 17, 18, 19, 20

Finishes



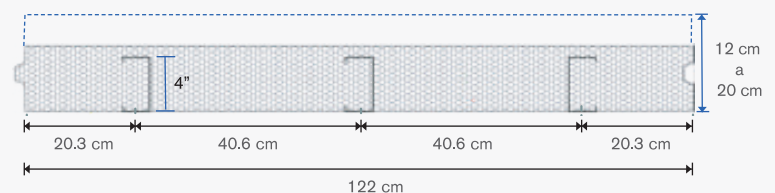
Joints

Robust tongue and groove joints reinforce the joints between panels. This design promotes the joining of panels of different thicknesses in a practical way.



- Note: This engraving promotes adherence of coatings.

Top view



Thermal resistance and weight

Panel thickness (cm)	Thermal resistance		Theoretical weight panel gauge 20 (kg/m ²)
	m ² -K/W	°F-h-ft ² /BTU	
12	3.4	19.87	6.15
13	3.7	21.53	6.35
14	4.0	23.18	6.55
15	4.3	24.84	6.75
16	4.6	26.50	6.95
17	4.8	28.15	7.15
18	5.1	29.81	7.35
19	5.4	31.46	7.55
20	5.7	33.12	7.75

* The thermal resistance corresponds only to the thickness of the plate

Daily performance of installation per crew *	
SteelFoam	+ de 150 m ² /Workday
Sheetrock wall	35 m ² /Workday
Concrete block wall	11.13 m ² /Workday
Brick wall	9.8 m ² /Workday

* Crew of four workers
Note: Installation without surface finishes

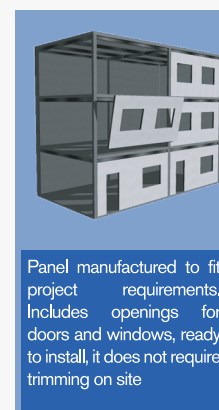
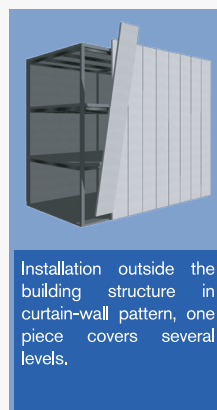
Technical specifications

Specifications	
Density	20 kg/m ³
Thermal conductivity	0.036 W/m · K ^[1]
Moisture absorption (volume)	% mass 0.1655% volume 0.0035
Steel gauge	20 *
Steel profile width (in)	4"
Galvanized	G-60

* 22 gauge under special order

[1] ASHRAE Fundamentals Handbook (SI), Ch. 25, Thermal and Water Vapor Transmission Data, p. 25.6

Installation types



Structural capacity

Inside Walls			
Zone	Regional wind speed Tr50(km/h)	Separation maxim between supports horizontal	Maximum distributed wind loads (kg/m ²)
1	90-119	3.69	78.54
2	120-133	3.51	96.51
3	134-146	3.36	114.85
4	147-161	3.21	138.00
5	162-232	2.67	276.39

Outside Walls		
Height (m)	Maximum axial service loads on each steel profile (kg)	Maximum distributed service loads on wall surface (kg/m ²)
2.50	603.40	520.96
3.00	474.85	341.65
3.50	349.03	215.25
4.00	279.24	150.68
4.50	230.34	110.48

Panel manufactured with three 4"x 2" steel profiles, gauge 20, with orifices @ 2"

Information based on the Manual of Civil Works, Wind Design, Comisión Federal de Electricidad, 2008. External Walls: A combination of a 0.9 dead service load and 1.0 wind load was used for single support, 2 or 3 continuous spans. For inside walls a combination of 1.4 dead service loads was used. ASCE7 2010. For the calculations, a coating of 25 kg/m was considered.

For extraordinary conditions refer to the Technical Department.

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