

HP-PUR STS

PANELWALL



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INSULATING PANEL OF HIGH PRESETS FOR FAÇADES



Rigid insulating core with a high thermal performance (conductivity as low as 0.0195 W/mK). Light enclosure with the possibility of mounting vertically or horizontally such. Also suitable for ceilings and partitions inner sions.

Structural steel sheets with slightly profiled finish with different coating options high durability cough.

It does not absorb water, maintaining its performance throughout its entire life. Shelf life, and is not affected by biological agents. Quality and safety, guaranteed and certified.

Data Sheet Insulating Panel HP-STS | Date: 02/02/17 | Rev: 1.0



DESCRIPTION AND APPLICATIONS



Sandwich panel with metal faces and core rigid insulation.

Panel with hidden tongue-and-groove joints and Reduced fret height on both sides.

PUR foam can be used as insulating core Available in various thicknesses, coatings and colors.

Insulating facades, residential, commercial and sports facilities, as well as for ceilings and internal divisions.

DIMENSIONS, WEIGHT AND THERMAL PERFORMANCES

| Useful width | | 1000 | n | | | |
|---------------------------------|-------------------|------------|--------|----------|-----------|-------------------------------|
| Manufacturing length | standar: 2 a 16 m | | | | | |
| Thermal conductivity | 0,0195W/mK | | | | | |
| Declared thermal conductivity°1 | | 0,021 | .7W/mK | (conside | ring aged | l core) |
| Density of the insulating core | | 40 ± 5 | kg/m³ | | | |
| Thickness(A | | 40 | 50 | 75 | 100 | (mm) |
| Weigh | | 10,13 | 10,53 | 11,73 | 12,53 | (kg/m²) |
| Thermal transmittance1 (PUR) | | 0,54 | 0,43 | 0,27 | 0,21 | (W/m²K) |
| Thermal resistance2 (PUR) | | 1,80 | 2,26 | 3,64 | 4,56 | (m ² K/W) |
| FactorR | | 11,40 | 14,25 | 21,37 | 28,5 | (BTU hora pulg ²) |

NOTES: (1) Thermal transmittance determined according to the UNE-EN 14509 standard, considering the effect of aging. (2) For 0.5/0.5mm sheets (int/ext).

Pág.1



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HUURRE PANAMÁ

HIDDEN JOINT

Tongue-and-groove joint that hides the fixing of the panel to the load-bearing structure, which protects the screw head and increases its durability.



INSULATING PLATE

Material specifications

RIGID POLYURETHANE FOAM (PUR)(Core):

PHYSICAL PROPERTIES

Average density: 38Kgs/ M3 with a structure of at least 90% closed cells, with conform to standards ASTM-D 1622 and ASTM-D - 2856 self-extinguishing: This is how this cellular plastic is considered because it does not require additives fire retardants to meet US building specifications from America.

Thermal conductivity: K= 0.14 BTU Inch. / (Hr.) (Foot2) (°F) at a temperature of 75° F (24°C) according to the Standard ASTM-C-518

Chemical products: Excellent resistance to water, seawater, acid vapors, most solvents, hydrocarbons and mineral oils.

Operating temperature:

Minimum: -40° C (Depending on the thickness of the panel and the coating on the plate) Maximum: $+120^{\circ}$ C

Mechanical properties Compression stress: 1.42 Kg. / Cm2 (20 Lbs./Inch3) ASTM-D-1621



TABLES OF USE (daN/m²)

| | THICKNESS | Burden (Kg/ m2) | | | | | | |
|--------------|-----------|-----------------|------|------|------|------|------|------|
| | (mm) | 50 | 75 | 100 | 125 | 150 | 175 | 200 |
| TWO SUPPORTS | 40 | 3.60 | 3.15 | 2.85 | 2.65 | 2.50 | 2.40 | 2.25 |
| | 50 | 3.90 | 3.40 | 3.10 | 2.85 | 2.70 | 2.55 | 2.45 |
| | 75 | 4.27 | 3.75 | 3.38 | 3.14 | 2.95 | 2.86 | 2.67 |
| | 100 | 6.00 | 5.40 | 4.70 | 4.20 | 3.85 | 3.55 | 2.85 |

| | THICKNESS | Burden (Kg/m2) | | | | | | |
|----------------|-----------|----------------|------|------|------|------|------|-------|
| | (mm) | 40 | 75 | 100 | 125 | 150 | 175 | 200 |
| THREE SUPPORTS | 40 | 4.20 | 3.65 | 3.30 | 3.10 | 2.90 | 2.75 | 2.65 |
| | 50 | 4.50 | 3.95 | 3.60 | 3.30 | 3.10 | 2.95 | 2 .85 |
| | 75 | 5.25 | 4.60 | 4.20 | 3.90 | 3.65 | 3.75 | 3.30 |
| | 100 | 6.50 | 6.00 | 5.50 | 4.90 | 4.50 | 4.15 | 3.85 |

Pág.3



OTHER FEATURES

Resistance to biological agents:

HUURRE panels, thanks to the structure closed of the insulating core, they are immune to attack fungi, molds and other biological agents deteriorating.

Water absorption:

The insulating core of the panel does not absorb water, thus maintaining its thermal performance throughout its entire useful life. Therefore, you can be installed in weather conditions adverse.

Tightness:

The careful tongue-and-groove design of the joints hidden from the panel guarantees an absolute queity against rainwater, determines the sandwich panels with metal faces are considered they were watertight, airtight and steam-tight.

these parameters being relevant only in the joints and fixings depending on the installation relevant only in joints and fixings depending on of the installation.

Sustainability:

Both steel and its metallic coatings and organic are free of SVHC ("Substances extremely worrying"), in accordance with the requirements of the European regulation REACH. The insulating core of the panel is injected by a process that does not release HCFC-type gases.

IT-GC-103| Insulating PanelHP-STS|

HUURRE PANAMÁ



Prepainted -PP

GENERAL DESCRIPTION

HUURRE PANAMÁ®manufacturer products using prepainted steel, specifically designed by Huurre Panamá S.A. to provide a high durability, premier cladding and roofing material for general use.

TYPICAL USES

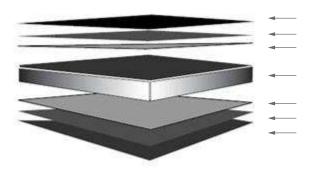
Roofing and accessories, wall cladding, rain water goods. For material selection advice, please contact Huurre Panamá technical department

U.S.A STANDARDS

Substrate -ASTM A 792-G50 Paint Coating -ASTM D 4214

PREFERRED SUBSTRATES

Steel Sheet, 55% Aluminum–ZincAlloy–Coated by the HotDip Process



AVAILABLE STEEL SHEET THICKNESS

Gauge -28

Gauge -26

Gauge -24

ATTRIBUTES TESTED DURING MANUFACTURE

| Property | Test & Evaluation Method(s) | Results | | |
|-----------------|-----------------------------|-------------------|--|--|
| Adhesion | | | | |
| Reverse Impact | ASTM D 2794 | ≥10joules | | |
| T-bend | ASTM D 4145 | Maximum 6T | | |
| Hardness | | | | |
| Pencil | ASTM D 3363 | HB or harder | | |
| S pecular gloss | | | | |
| 60° meter | ASTM D523 | Nominal ±10 units | | |

Pág.5



HUURRE PANAMÁ



PRODUCT ATTRIBUTES

| Property | Test & Evaluation Method(s) | Results |
|---------------------------------------|---|---|
| Flexibility | | |
| T-bend | ASTM D4145 | Maximum 10T(no cracking). |
| Resiistance to abrasion | | |
| Scratch | ASTM G171-03 | Typically 2000g |
| Adhesion | | |
| Natural well washed exposure (10 yrs) | ASTM D 3330; D 3359-97 | No flaking or peeling. |
| Resiistance to humidity | | |
| Cleveland (500 hours) | ASTM D4545 | Blister density: \leq 3.Blister size: \leq S2.No loss of adhesion or corrosion. |
| Resilstance to corrosion | | |
| Salt spray (1000hours) | ASTM B117 | Blister density: ≤2.Blister size: ≤S3. Undercut from score: ≤2mm.No loss of adhesion or corrosion. |
| Kesternich (SO2) (50 cycles) | DIN 50018 | Edge creep: <4mm. |
| Resiistance to colour change | | |
| Natural well washed exposure (10 yrs) | ASTM D2244(Colour) | ∆E cielab 2000:Light colour: ≤4units; Intermediate colour: ≤6units; Dark colour: ≤10units. |
| QUV (2000 hours) | ASTM G154 & ASTM D2244 (Colour) | ΔE cielab 2000:Intermediate colour : ≤ 5 units |
| Resiistance to chalking | | |
| Natural well washed exposure (10 yrs) | ASTM D4214 | Chalk rating: ≤ 4 . |
| QUV (2000 hours) | ASTM G154 | Chalk rating: ≤4 |
| Resilstance to Solvents | | |
| Exposure | ASTM D1308 (3.1.1) & ASTM D2244 (Colour); ASTM D714 (Blisters) | No discolouration or blistering. |
| Resiistance to acids | | |
| Exposure | ASTM D1308 (3.1.1) & ASTM D2244 (Colour); ASTM D714 (Blisters) | No discolouration or blistering. |
| Resiistance to alkalis | | |
| Exposure | ASTM D1308 (3.1.1) & ASTM D2244 (Colour); ASTM D714 (Blisters) | No discolouration or blistering. |
| Resistance to fire | | |
| Exposure | ASTM E108 | Ignitability index: 0 rating in scale of 0-20 |
| | | Spread of Flame index: 0 rating in scale of 0–20 10 Heat evolved index: 0 rating in scale of 0– 10 Smoke evolved index: 0–1rating in scale of 0–10 |
| Resilstance to heat | | |
| Exposure 100°C continuous (500 hrs) | ASTM D2244(Colour) | Colour change ΔE cielab 2000: \leq 3units |





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