

Persol

Pergola

Urbidermis Team
2011



Product description

Certificates

Structure



Luminaires

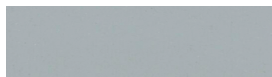


Photovoltaic panels



Finishes

Structure



Light grey

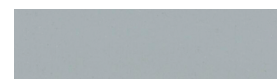
Cover



Autoclave pine wood



Photovoltaic panels



Anodised aluminium

The finishes shown are purely indicative. With **Superior** protection: high corrosion resistance for environments with demanding climate conditions. For coastal areas with severe climate conditions, check out our **Premium** protection finish. Other colours are available upon request.

Materials

25 m² cover, available in three different versions:

- **Photovoltaic model:** consisting of modules of photovoltaic plates made of 4 mm double-glazed tempered glass and high-powered PERC cells encapsulated in polymer.
- **Wooden model:** consisting of eight modules of 40 x 45 mm strips of Class 4 brown autoclave Flanders pine wood.
- **Aluminium model:** consisting of eight modules of 40 x 40 mm strips of anodised aluminium.

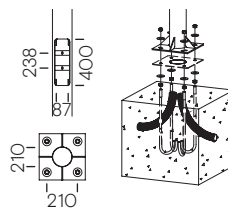
- The supporting structure consists of 150 x 50 mm perimeter profiles, 120 x 50 mm crossbeams, and Ø114.3 mm pillars, all made of hot-dip galvanized S275 JR steel and optionally finished with protection paint.
- Hardware is made of A4 stainless steel.

Regulations

- 305/2011/EU Regulation for the Marketing of Construction Products and CTE (Technical Building Code) RD 314/2006.
- EN 1090
- ISO 12944
- UNE-EN 10025
- UNE-EN 15048
- UNE-EN ISO 1461
- UNE-EN ISO 9227

Installation and maintenance

- Pillars secured with a 20 cm concrete block below pavement level, with a groove for electrical connection, produced on site using four M18 J bolts per column.
- Fully mechanical installation, with no welds, using A4 stainless steel hardware.
- A linear LED luminaire recessed in two beams is included.
- The element is supplied as four separate components: the pillars, the solid beams, the beams, the covers.
- Installation and assembly instructions, hardware and J bolts included.
- It does not require any functional maintenance, except to preserve the original colour of the wooden gratings, and for periodic cleaning of photovoltaic plates.



Element calculated for ground type II and wind speed of 29 m/s, with soil formed by loose or wet sand of medium compactness ($E_0 = 4800 \text{ kN/m}^2$), with HM-20 concrete foundations. Adaptations are available for different types of ground and more demanding climate conditions.

Technical information

System power (W)

- High efficiency optical unit
- 1 x 1.5 m Linear LED 22.5 W

Colour temperature (K)

- 3300K 80 CRI

Protocols and control

Protocols

- 1-10V protocol
- DALI protocol

Control

- Dynamic programming
- Analogue control

Functionalities

- Constant Luminous Management (CLM)
- Temperature control
- Surge protector (CE)

Energy production

- 4.8 kWp per module (310 Wp x 15 photovoltaic plates)
- STC (Standard Test Conditions): 100W/m² of irradiance, spectral distribution AM 1.5, Temperature 25±2°C

Weight kg [lb]

Photovoltaic:

- Initial module with 4 pillars: 1110 [2447.1]
- Alignment module: 1010 [2226.7]

Pine wood:

- Initial module with 3 pillars: 735 [1620.4]
- Initial module with 4 pillars: 785 [1730.6]
- Alignment module: 680 [1499.1]

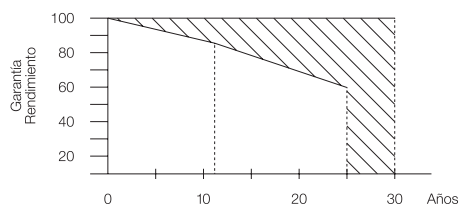
Aluminium:

- Initial module with 3 pillars: 690 [1521.2]
- Initial module with 4 pillars: 740 [1631.4]
- Alignment module: 635 [1399.9]

Approximate weight without packaging.

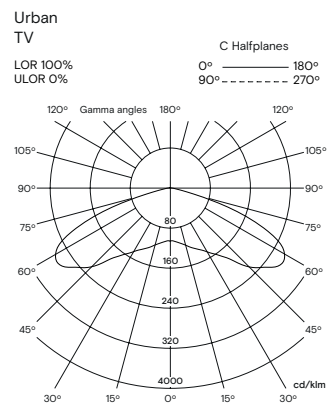
Warranty for photovoltaic plates and performance

- Up to 30 years, depending on conditions
- Minimum of 87% after 30 years



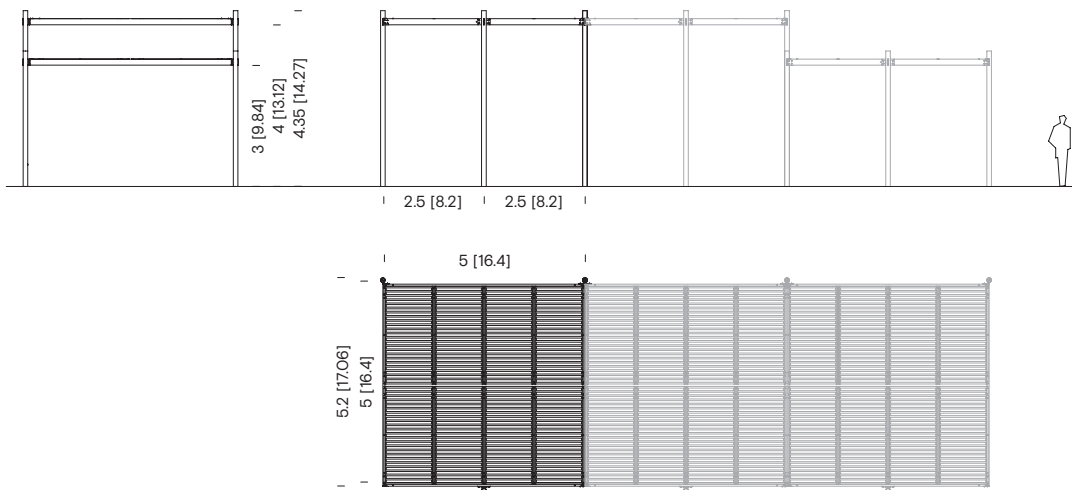
All the technical data are subject to industrial tolerances.

Lighting distribution



Dimensions m [ft]

- Pergola
- PSP11 Initial pine wood
- PSP21 Alignment pine wood
- PSP12 Initial aluminium
- PSP22 Alignment aluminium



- Pergola
- PSP13 Initial photovoltaic
- PSP23 Alignment photovoltaic

