

TECHNICAL SPECIFICATIONS

Solar Tiled Roof™

90 W and 108 W Modules

Premium in-roof solar system

With Solar Tiled Roof™, 5 or 6 roof tiles get replaced by 1 solar module with a guaranteed seamless transition.

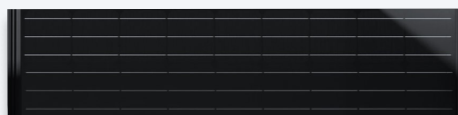


APPLICATION

- New-builds & renovation projects
- Residential and public buildings
- Facades
- Canopies and ancilliary structures
- Historic buildings where on-roof solutions are not permitted

ADVANTAGES

- Easy-to-mount
- Aesthetically attractive
- Weather-proof
- No expensive fittings required
- High static load rating
- 10-year warranty for defects
- 25-year warranty for output
- Compatibility with extensive selection of concrete/clay tiles



Ample tile compatibility

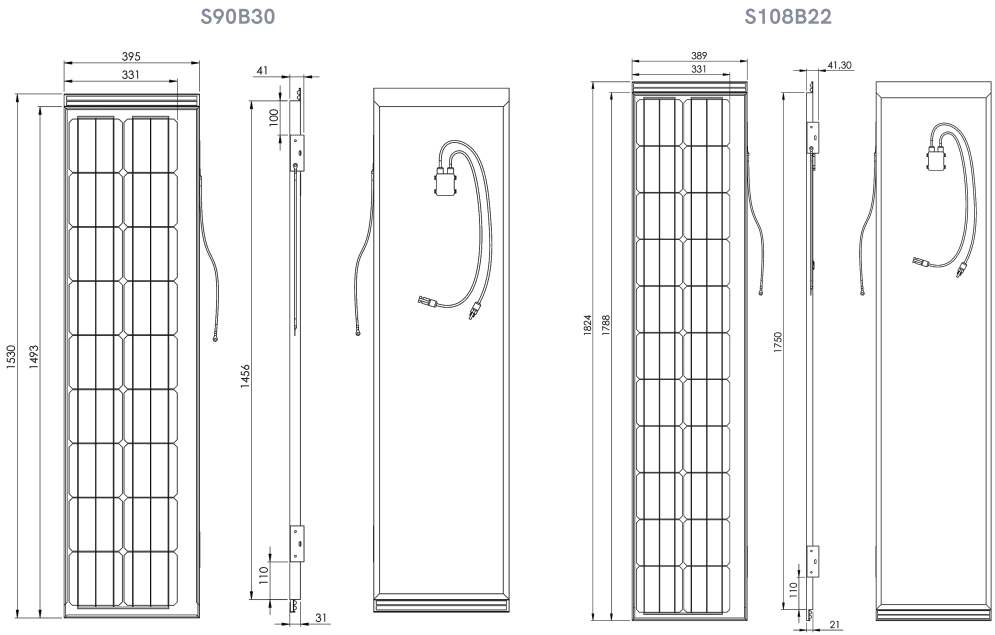


Easy installation



Aesthetics

DRAWINGS



MATERIALS & TESTS

- IEC 61215 & 61730
- $B_{roof}(t1)(t2)$
- Black aluminum frame
- Monocrystalline silicone cells
- Prismatic 3,2mm glass
- Flash testing to ensure rated level of output
- Lead-free solder protects health and the environment
- Utility-patented solution (EPO)
- Snow load 4900 Pa (500 kg/m²)
- ~100% recyclable



MECHANICAL SPECIFICATIONS

Manufacturer	Solarstone	Solarstone
Model name (main)	STR21MO90WC18	STR21MO108WC22
Model name (variation)	STR30BE90WC18	STR30TU108WC22
Cell type	Monocrystalline, 156 x 156mm	Monocrystalline, 156 x 156mm
Number of cells	18	22
Weight (kg)	7	8.2 and 8.5
Junction box	1 diode. IP65	1 diode. IP65
Dimensions (mm) - main	1530 x 395 x 21	1824 x 389 x 21
Dimensions (mm) - variation	1530 x 395 x 30	1824 x 389 x 30

SOLAR ROOF CALCULATOR

Designed for BIPV. Online tool helps automate layout generation and facilitates dimensioning of utility patented Solarstone PV systems. Ask sales representative for access.



app.solarstone.com

ELECTRICAL SPECIFICATIONS

Maximum power rating (Pmax)	90 ± 3%	108 ± 3%
Tolerance of max power rating	± 3%	± 3%
Power temperature coef. (°C)	-0.414%	-0.414%
Open circuit voltage (Voc)	11.9 ± 5%	14.1 ± 5%
Short circuit current (Isc)	9.3 ± 5%	8.7 ± 5%
Maximum power voltage (Vmp)	11.2 ± 5%	12.6 ± 5%
Maximum power current (Imp)	9.6 ± 5%	8.6 ± 5%
Maximum system voltage (V)	600	600
Fuse rating (A)	12	12
Module efficiency	19%	19%
Output terminal	MC4	MC4
Fire rating	Class C	Class C

INSTALLATION CLAMPS & ACCESSORIES

90 W installation clamps
(suitable for 30x50mm battens)
Product code: STR-402.BE3050R
Product code: STR-402.MO2150R



108 W installation clamps
(suitable for 21x50mm battens)
Product code: STR-402.MO2150R
Product code: STR-402.TU3050R

90 W installation Nordic clamps
(suitable for 30x36mm battens)
Product code: STR-402.BE3036R
Product code: STR-402.MO2136R



108 W installation Nordic clamps
(suitable for 21x36mm battens)
Product code: STR-402.MO2136R
Product code: STR-402.TU3036R

TILE COMPATIBILITY AND BATTEN SPACING

Roof tile model	Batten spacing	Module compatibility
Benders Carisma	340...350	90 W with 30 mm frame
BMI Monier Turmalin	355...380	108 W with 30 mm frame
BMI Monier Evo, Tectiva, Tegaltit	335...340	90 W & 108 W with 21 mm frame

Plastic L-profile (38 x 38 x 1 mm) or 3 x 30 polyethylene foam sealing tape
Installed on the top row to protect module glass and frame from roof tile. Read more from installation manual.

