



MSK Solar Design Line™  
**Just Roof™**  
Building Integrated Roofing System



Just Roof is a building integrated PV system designed to form the complete roof, replacing tiles or other roof coverings. The Just Roof BIPV system has been installed on more than 4000 homes since its introduction in 1994. Due to Just Roof's built-in reliability, there has not been a single instance of water leakage. This wealth of experience in the field combined with 14 years of continuous kaizen improvement means that Just Roof is the world's most proven, practical BIPV system, giving you complete peace of mind.

## Four reasons to choose Just Roof:

### Superior Aesthetics

- Non-reflective tempered glass
- Black anodized aluminium frame
- Black backsheet
- Black anodized aluminium cover rails in between modules

### Proven Reliability

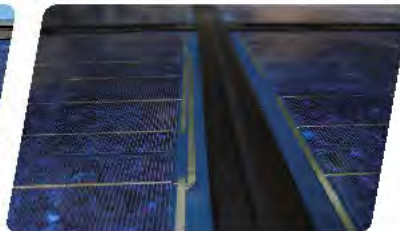
- Multiple weatherproofing features provide excellent protection from the elements
- Multiple water channels for drainage
- Excellent moisture, wind, impact, earthquake resistance

### High Efficiency

- Just Roof features high efficiency monocrystalline cells to give up to 132Wp/m<sup>2</sup>

### Quick, Easy installation

- Just Roof can easily be installed within one working day. Pre-installation of roof battens is not required
- UL/ IEC approved plug-n-play Tyco connectors make wiring of the system simple and safe
- Just Roof can be installed as the entire roofing structure or in combination with other roofing materials such as concrete tiles, shingles, or metal roofing



Photos shown in this catalog differ from current Just Roof model – contact a Suntech representative for more details.

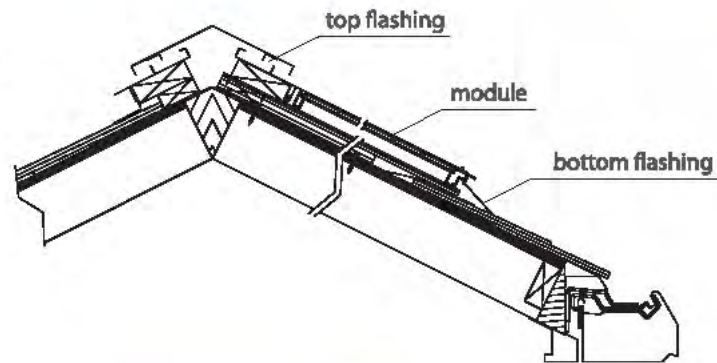
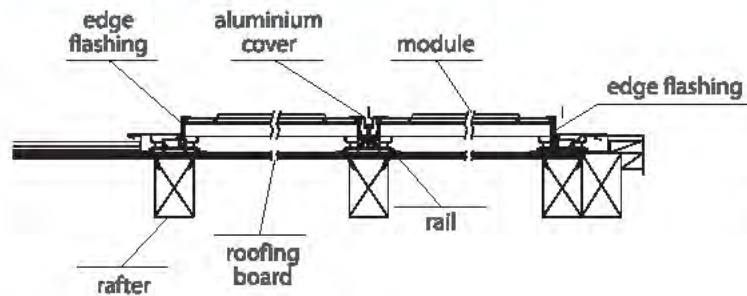


An amazing fact: homes receive more energy from the Sun than they use. A 30m<sup>2</sup> South facing roof in London receives 33,400kWh of energy per year! With Just Roof you can harvest part of this energy and power your home directly from the sunlight that falls on it.

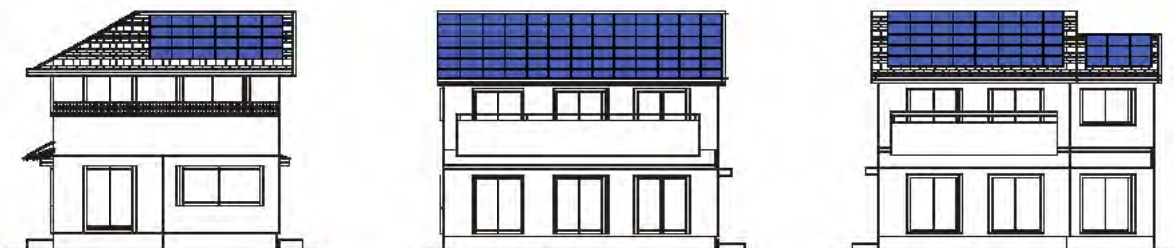
## Just Roof: Proven Reliability in 4000 Homes







Examples of Just Roof configurations



### Just Quicker, Just Easier: Installation of Just Roof is a snap

Just Roof is suitable for both new build and retrofit roofing installations on practically any roof configuration. Each Just Roof module measures 1621x841mm when installed and is rated at 140-180Wp. Please refer to the back cover for the full specifications.

### Four Easy Installation Steps

- Aluminum rails are screwed directly into the roof deck.
- Modules are mounted on the rails as connectors are joined in series.
- Black aluminium cover is secured between modules for added waterproofing and aesthetics.
- Standard flashing is used to complete the system, array is connected to DC-AC inverter.







## Power and Roofing in One

**BIPV roofing** represents an innovative paradigm shift in power generation. Energy is generated on site reducing losses in transmission and the modules form the waterproof roof itself, reducing material costs.





## CASE STUDY 1: 503 HOMES IN HOKKAIDO

This housing community of 503 homes was built in Hokkaido, Northern Japan in 2005-06. Every home features a Just Roof system. The houses were sold at no additional cost to a standard home.

Location: Hokkaido, Japan  
Installation Size: 503x30m<sup>2</sup>  
Power Output: 503x3kW=1.5MW

## CASE STUDY 2: HOUSE IN WATERLOO

This historic Canadian home is an example of how Just Roof can be installed as a retrofit on an existing roof. It is designed with vents at the roof cap for passive solar heat capture, maximizing energy efficiency.

Location: Waterloo, Canada  
Installation Size: 80m<sup>2</sup>  
Power Output: 6kW





## CASE STUDY 3: HYBRID-Z

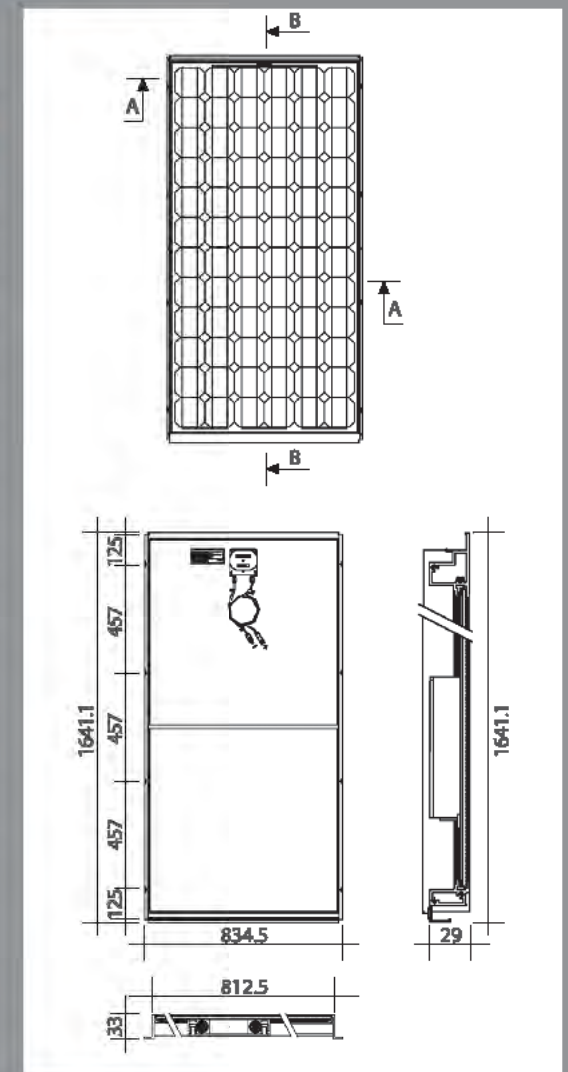
This Misawa Home design, dubbed Hybrid-Z, had its debut in 1998. In addition to the roof integrated PV system, the home has improved insulation, lighting, air conditioning and a more efficient hot water heating system.

Installation Size: 60m<sup>2</sup>  
Power Output: 6kW



# Technical specifications

	MSZ-180B-C	MSZ-175B-C	MSZ-170B-C	MSZ-165B-C	MSZ-160B-C	MSZ-150B-C	MSZ-140B-C	MSZ-180D-C	MSZ-175D-C	MSZ-170D-C	MSZ-165D-C	MSZ-160D-C	MSZ-150D-C	MSZ-140D-C
P <sub>max</sub> [Wp] (±5%)	180	175	170	165	160	150	140	180	175	170	165	160	150	140
V <sub>mp</sub> [V] (±10%)	35.6	35.2	35.2	34.8	34.4	34.4	34.0	35.6	35.2	35.2	34.8	34.4	34.4	34.0
I <sub>mp</sub> [A] (±10%)	5.05	4.95	4.83	4.74	4.65	4.36	4.12	5.05	4.95	4.83	4.74	4.65	4.36	4.12
V <sub>oc</sub> [V] (±10%)	44.4	44.2	43.8	43.6	43.2	43.2	42.6	44.4	44.2	43.8	43.6	43.2	43.2	42.6
I <sub>sc</sub> [A] (±10%)	5.29	5.23	5.15	5.05	4.95	4.72	4.49	5.29	5.23	5.15	5.05	4.95	4.72	4.49
Weight [kg]	15													
Length [mm]	1641mm (Mounting length 1621mm)													
Width [mm]	834.5mm (Mounting width 841mm)													
Depth [mm]	33mm													
Cells [mm]	72 x monocrystalline 125x125mm							72 x polycrystalline 125x125mm						
No of diodes	3													
Frame	Anodized black aluminium													
Backsheet	Black PVF-PET-PVF													
Junction box, Cable, Connectors	Tyco													
Current Temperature Coefficient [%/°C]	0.017							0.045						
Voltage Temperature Coefficient [%/°C]	0.34													
Power Temperature Coefficient [%/°C]	0.48													
NOCT [°C]	48±2							45±2						
Max system voltage [V]	1000													
Warranty	Two-year warranty for malfunctions or defects in materials and manufacturing Power warranty: minimum 90% after 12 years, 80% after 25 years													
Certification	IEC, CSTB Pending													



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