



STANDARD PRODUCT

CUSTOM PRODUCT



PROTOTYPE

MSK

MSK Corporation

Sumitomo Bldg 19F

6-1 Nishi-Shinjuku, 2-Chome
SHINJUKU-KU, TOKYO 163-02

Japan

Tel. +81 3 33 42 38 38

Fax +81 3 33 42 65 34

Email staff@msk.ne.jp

Internet <http://www.msk.ne.jp/home>

SYSTEM DESCRIPTION

This photovoltaic building element is currently available on the Japanese market. It includes the following elements :

- photovoltaic modules with rails and screws
- connectors, cables and a connection box
- a static inverter, security elements and a control apparatus.

Because of the panels' bluish colour and size (half a tatami), this PV system is well adapted to Japanese architecture. The south facing roofs of numerous houses have been equipped with the system.



APPLICATION FIELD

Building type	Any type of pitched roof
Building elements	Direct mount photovoltaic module
Mounting technology	Screwed on special aluminum profile
PV Module	Custom sized polycrystalline module with a special dimension of half a tatami (910 x 910 mm)

AT DEMOSITE

PV Area	25 m ²
PV Module	Solarex (USA), polycrystalline
Power, voltage	82 W, 23 V
Size	910 x 910 mm
Connection	10 x 3 modules in series; connectors

MSK

To develop the PV market, the Japanese Ministry of Industry and Commerce has made available a subsidy for private grid-connected photovoltaic power plants. Anticipating this action, Misawa Homes (a large manufacturer of prefabricated houses) and MSK Corporation (a manufacturer of photovoltaic modules) have joined forces to develop a new type of photovoltaic roofing.

SYSTEM TECHNOLOGY

A primary structure of black anodised aluminium sections is mounted on the roof underlay. Photovoltaic modules with special frames are attached to these channel sections and horizontal and vertical rubber joints optically finish the roofing.

The photovoltaic panels are ventilated from the back; on the ridge of the roof, a purpose bent steel sheet guarantees water tightness and allows ventilation from above.

