Specifications

Fasteners	Light aluminum fasteners (Anodized aluminum)
Runners	Pre-wiring runners (Anodized aluminum)
Connectors	Made of weatherproof resin: Option
Outer wall performance	■ Wind pressure-resistant Wind pressure P=2686Pa (Wind speed=66m/sec) - Bend of the material: δ ≦ 1/150 and under 2cm - Bending stress to the material: σ ≦ fb (under permission bending stress) ■ Displacement flattery performance between layers - Displacement angle: δ =1/300 (Continuously usable without repair) - Displacement angle: δ =1/150 (No damage of the material and falling off) ■ Earthquake-resistant performance - Vertical force: Fev=1.0 (2G at the bottom) - Horizontal force: Feh=1.0 (1G) * No damage of the material and falling off ■ Fire prevention / fireproof performance - Depend on the performance of the installation wall surface

* We reserves the right to make changes to the specifications without prior notice.

KIKUKAWA Factory with surfaced mounted Sustaina System

The below picture shows our Sustaina product installed on our factory for testing and demonstration purpose; in general it is very challenging to mount such a solar module system with standard mounting system.

Please contact us about how our Sustaina products can enhance your facility in design and environmental conservation.

Sustaina's "Light through PV (Solar) system" is manufactured for function and appealing architectural design. This system allows installation in any city, building complex, or residential area without being an eyesore. Our aim is to incorporate these designs in an appealing on unobtrusive part of the landscape.

Car port with PV system
Light through PV system which is unified with the roof.

Canopy with PV system
We arranged designed punching panels to the north.

You have encountered "KIKUKAWA PRODUCTS" somewhere.

KIKUKAWA is the engineering group which has produced characteristic metal art in the building construction since the establishment in 1993. Through superior manufacturing design, we have created not only city landmarks but an environmentally friendly city.

METAL ARCHITECT KIKUKAWA
98-15 Naka, Shiroi-shi, Chiba 270-1406, Japan
Tel: +81-47-492-1331 Fax: +81-47-492-0248
mail:g_tech@kikukawa.com
www.kikukawa.com

2010. 10

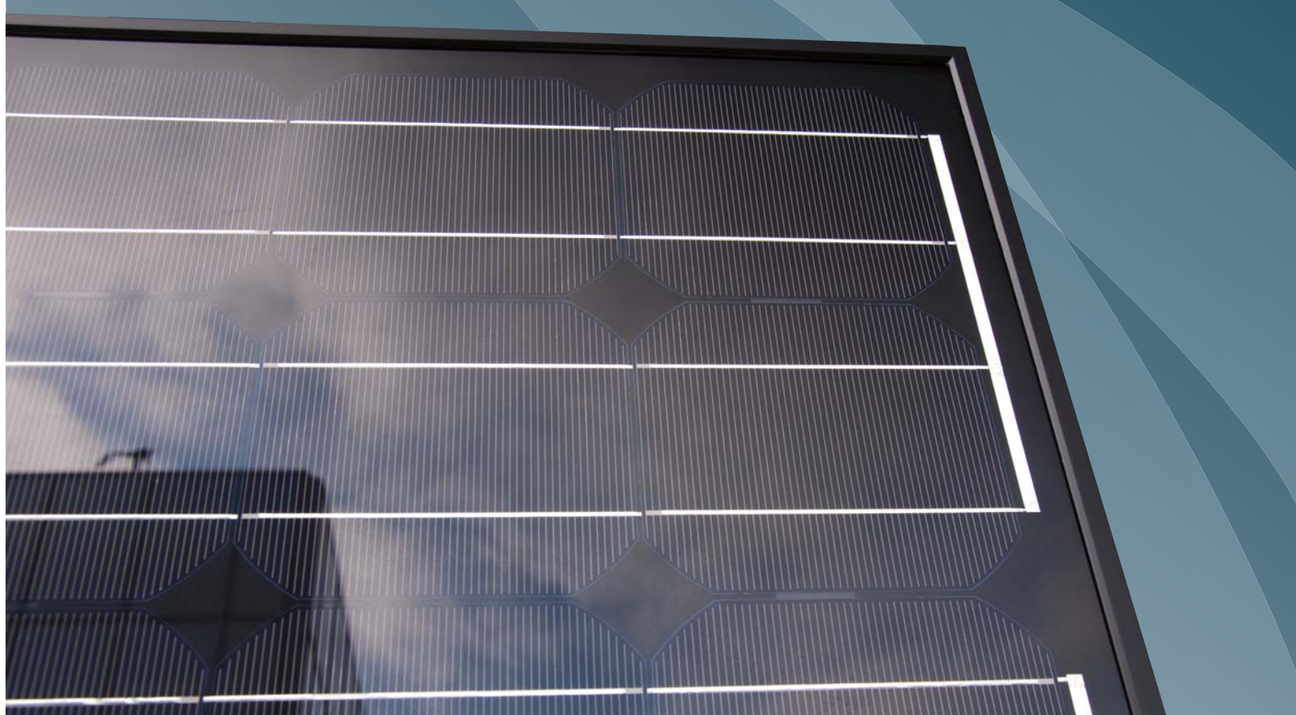
KIKUKAWA Solar Series

METAL ARCHITECT KIKUKAWA

Sustaina

BIPV(Building Integrated Photovoltaic Module)

Environmentally Friendly Architectural Design



The Time is now for environmentally friendly construcrion in our cities!

Sustaina BIPV modules will meet the demands for our low carbon society and increase property value of your assets.

Reasons to Choose Sustaina BIPV Solutions

Sustaina BIPV Solutions maximizes exterior coverage

Effectively uses design and mounting technology to achieve the maximum exterior coverage for all surfaces of the building.

Eco-Friendly constructions benefits not only the environment but Increases Property Value

The appeal of eco-friendly design will attract companies as tenants with a strong commitment to the protection of the environment.

Sustaina designs also save additional energy by our “double-skin” design

In addition to the obvious benefit of saving on electric usage through the use of solar power generation, the exterior design also provides a “double-skin” insulator. During the winter it retains heat inside the building, and in the summer months it reflects heat from the building.

Applicable to various photovoltaic (solar) modules.

Sustaina can easily install the various solar modules of any manufacturer to the surface of the building, providing a stunning architectural design.

METAL ARCHITECT KIKUKAWA

KIKUKAWA Solar Series

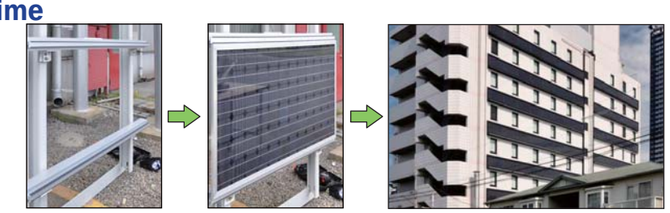
Sustaina
BIPV(Building Integrated Photovoltaic Module)

Developed New Construction Method that reduces construction duration with a simplistic design and increased safety for the installers.

■ Shortened Construction Time

Our new construction method, was developed to increase effectiveness and safety of the installer.

The benefit of this method has also reduced construction time and labor expense for both the installer and building owner.



■ Sustaina has been designed to withstand earthquakes and powerful winds.

Sustaina has been designed to withstand winds from powerful storms as well as the forces in regions that are susceptible to earthquakes.

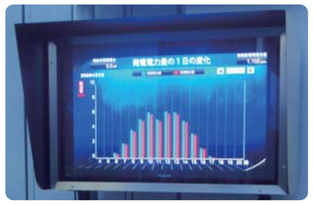
Sustaina products are certified; please contact us for this information.

Examination of Displacement flattery performance between layers

■ Public Display of Power Generation

As an added feature our system not only provides monitoring of the power generation through your facilities manager, but we can provide public display terminals to show your tenants and visitors the actual power being generated and consumed by your system.

An excellent way to demonstrate your commitment to the environment!



Example of the display system

■Easy to Maintain

By using durable components, for case of installation and replacement; maintenance of your system is easy in the event a module is damaged and needs to be exchanged in an emergency.

■Designs for any Building

Sustaina can accommodate any architectural design in shape and color. We can provide a solution that will meet your demands and be harmonious for your community as well as contribute to the preservation of the environment.

KIKUKAWA Solar Series
-promote preservation of the environment.

We can provide various BIPV solutions besides Sustaina. Effectively use design and mounting technology to achieve the maximum exterior coverage for all surfaces of the building in an appealing architectural design.

■ Image of a KIKUKAWA Solar Series application