



## Green Energy

# Solar Panel System with Stainless Steel Mounts

Location	Japan
Environment	Outdoor
Grade/surface	SUS443J1/2B
Manufacturer	Kohnanyoko Co.,Ltd.
Material supplier	JFE Steel
Source of information	JSSA

The Premium SUS Solar System, is a solar panel installation that does not require holes to be made in the roof, thus avoiding problems associated with leaks. It can be quickly and easily installed using stainless steel mounts. The principle behind this system is supporting the weight of the solar panels not on particular points but on the entire face of the mount so as to spread the load burden across the surface of the roof. Furthermore, the system allows for power generation even from the underside of the panels, using the reflection of scattering light. With a number of features which optimise the advantages of stainless steel as a construction material, significant cost reductions have been achieved. To extend the life of the system, the mounts are made entirely from stainless steel, thus eliminating deterioration associated with corrosion, particularly in aggressive coastal environments. A ferritic grade was selected in order to manage the distortion problems commonly linked to long spans and a 2B finish was specified to raise the reflection efficiency of the underside of the panels. Enhanced strength at lighter weights was achieved through corrugating the stainless sheets and welding was omitted in favour of the use of stainless steel fasteners. With the increasing demand for solar power generation, this stainless steel unit brings advantages in the form of sustainable resources and a longer, maintenance-free service life.

