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Design guide on structures for
photovoltaic array

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Foreword

This translation has been made based on the original Japanese Industrial Standard established by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee in accordance with the Industrial Standardization Law.

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Design guide on structures for photovoltaic array

Introduction This Japanese Industrial Standard has been prepared based on **TR C 0006** *Design guide on structures for photovoltaic array* published in 1997 by reviewing it with reference to the domestic related laws and regulations.

1 Scope This Standard specifies the design guide on the structures with the height from the lower end to the upper end of 4 m or less for a photovoltaic array (hereafter referred to as “array”).

Remarks : In this Standard, the following arrays are excluded.

- a) The array having the function as building materials such as roofing materials and window materials.
- b) When the array is used at an altitude of exceeding 1 000 m.
- c) When the array is installed at a height from the ground of exceeding 60 m.

2 Normative references The following standards contain provisions which, through reference in this Standard, constitute provisions of this Standard. The most recent editions of the standards (including amendments) indicated below shall be applied.

JIS C 8951 *General rules for photovoltaic array*

JIS C 8960 *Glossary of terms for photovoltaic power generation*

JIS G 3101 *Rolled steels for general structure*

JIS G 3106 *Rolled steels for welded structure*

JIS G 3114 *Hot-rolled atmospheric corrosion resisting steels for welded structure*

JIS G 3302 *Hot-dip zinc-coated steel sheets and coils*

JIS G 3350 *Light gauge steels for general structure*

JIS G 3444 *Carbon steel tubes for general structural purposes*

JIS G 3466 *Carbon steel square pipes for general structural purposes*

JIS H 4100 *Aluminium and aluminium alloy extruded shape*

JIS H 664 *Zinc hot dip galvanizings*

3 Definitions For the purposes of this Standard, the definitions given in **JIS C 8951** and **JIS C 8960**, and the following definitions apply.

- a) **structures** a generic term of a single pole, a support structure, etc. which is a work piece aiming at supporting a photovoltaic module (hereafter referred to as “module”)
- b) **fixed load** the load permanently added including mass of modules, structures, etc.