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Indoor test methods for solar heating system performance

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Foreword

This Japanese Industrial Standard has been established by the Minister of Economy, Trade and Industry, through deliberations at the Japanese Industrial Standards Committee in accordance with the Industrial Standardization Act.

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Indoor test methods for solar heating system performance

1 Scope

This Japanese Industrial Standard specifies the measuring methods for indoor test of hot water supply efficiency using the hot water supply standard usage mode of the liquid heat collection type and the air heat collection type, and the space heating efficiency of air heat collection type among solar heating systems composed of a solar collector, solar storage tank, auxiliary heat source, etc. mainly used for hot water supply and space heating in general households (hereafter referred to as systems).

This Standard does not cover a system composed of a solar storage tank using a heat pump.

2 Normative references

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

JIS A 4112 *Solar collectors*

JIS A 4113 *Solar storage tanks*

JIS B 7414 *Glass thermometers*

JIS C 1602 *Thermocouples*

JIS C 1605 *Mineral insulated thermocouples*

JIS K 2203 *Kerosine*

JIS S 2075 *Measurement method of efficiency for domestic gas and oil water heater under standard usage mode*

JIS S 2093 *Test methods of gas burning appliances for domestic use*

JIS Z 8703 *Standard atmospheric conditions for testing*

ISO 9060 *Solar energy—Specification and classification of instruments for measuring hemispherical solar and direct solar radiation*

3 Terms and definitions

For the purpose of this Standard, the terms and definitions given in **JIS A 4112**, **JIS A 4113** and **JIS S 2075**, and the following apply.

However, the “modes” specified in **JIS S 2075** does not apply to this Standard.

3.1

solar heating system

equipment to consume solar heat directly, in which the heat collected by a solar collector is stored in a solar storage tank