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Testing method for transmittance, reflectance and emissivity of flat glass and calculation of total solar energy transmittance of glazing

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In the event of any doubts arising as to the contents,
the original JIS is to be the final authority.

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Foreword

This Japanese Industrial Standard has been revised by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee as the result of proposal for revision of Japanese Industrial Standard submitted by Flat Glass Manufactures Association of Japan (FGMAJ)/Japanese Standards Association (JSA) with the draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law applicable to the case of revision by the provision of Article 14.

Consequently **JIS R 3106**:1998 is replaced with this Standard.

Attention is drawn to the possibility that some parts of this Standard may conflict with patent rights, applications for a patent after opening to the public or utility model rights. The relevant Minister and the Japanese Industrial Standards Committee are not responsible for identifying any of such patent rights, applications for a patent after opening to the public or utility model rights.

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Introduction

This Japanese Industrial Standard has been prepared based on **ISO 9050**:2003, Edition 2, with some modifications of the technical contents.

The vertical lines on both sides and dotted underlines indicate changes from the corresponding International Standard. A list of modifications with the explanations is given in Annex JC. The comparison table between previous and current editions of this Standard on technically significant revisions is given in Annex JD.

1 Scope

This Standard specifies methods of determining the transmittance/reflectance of visible light and the transmittance/reflectance/absorptance of solar radiation as well as the emissivity of thermal radiation at ambient temperature for glazing[1)], using a spectrophotometer. Also, this Standard specifies the method to calculate the total solar energy transmittance when glazing is used as building apertures. These characteristic data can serve as a basis for light, heating/cooling and ventilation calculations of rooms and can permit comparison between different types of glazing.

This Standard also specifies the appropriate calculation formulae for single, double and triple glazing, which are applicable to more glazing.

NOTE The International Standard corresponding to this Standard and the symbol of degree of correspondence are as follows.

ISO 9050:2003 *Glass in building—Determination of light transmittance, solar direct transmittance, total solar energy transmittance, ultraviolet transmittance and related glazing factors* (MOD)

In addition, symbols which denote the degree of correspondence in the contents between the relevant International Standard and **JIS** are IDT (identical), MOD (modified), and NEQ (not equivalent) according to **ISO/IEC Guide 21-1**.

Note 1) Glazing is as follows, except that having diffuse transmissivity such as figured glazing.

a) Glazing mainly manufactured from soda lime silicate glass by continuous moulding process

b) Glazing in **a**) of which the surface is processed with optical coating of wavelength-selective reflection such as a heat reflecting glass in wavelength region of solar radiation, and a low emitting glass (Low-E glass) in wavelength region of thermal radiation at ambient temperature such as a low radiation glass