Technical Specification

ISO/TS 9124

Paints and varnishes — Thermal performance of paint films — Determination of solar irradiation penetration ratio with heat flow meter

Peintures et vernis — Performances thermiques des feuils de peinture— Détermination du taux de pénétration de l'irradiation solaire au moyen d'un fluxmètre thermique

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Foreword

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Introduction

An optical method called the solar reflectance of paint film has been standardized to evaluate the heat-shielding performance of paint film. Meanwhile, various paint heat-shielding techniques other than solar reflectance have recently been proposed.

This document evaluates the thermal barrier performance according to the solar radiation absorption rate by measuring the amount of heat transmitted through the coating film due to solar radiation using a heat flux meter. This measurement method allows the thermal barrier performance of a coating film to be assessed irrespective of the thermal barrier technology of the coating film. Examples are given in Annex C and Annex D. The measurement provides values directly in units of heat value, which are easy to understand and can be applied to the calculation of the thermal energy balance of building structures.