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Photovoltaics in buildings

Part 1: BIPV modules



...making excellence a habit."

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léments photovoltaïques dans la construction - Partie 1: Modules photovoltaïques incorporés au bâti Photovoltaik im Bauwesen - Teil 1: BIPV-Module

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European foreword

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1 Scope

This document applies to photovoltaic modules used as construction products. It focuses on the properties of these photovoltaic modules relevant to essential building requirements as specified in the European Construction Product Regulation CPR 305/2011, and the applicable electro-technical requirements as stated in the Low Voltage Directive 2006/95/EC / or CENELEC standards. This document references international standards, technical reports and guidelines. For some applications in addition national standards (or regulations) for building products may apply in individual countries, which are not explicitly referenced here and for which harmonized European Standards are not yet available.

The document is addressed to manufacturers, planners, system designers, installers, testing institutes and building authorities.

This document does not apply to concentrating or building-attached photovoltaic modules.¹

This document addresses requirements on the PV modules in the specific ways they are intended to be mounted but not the mounting structure itself, which is within the scope of EN 50583-2.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 410, Glass in building — Determination of luminous and solar characteristics of glazing

EN 673, Glass in building — Determination of thermal transmittance (U value) — Calculation method

EN 674, Glass in building — Determination of thermal transmittance (U value) — Guarded hot plate method

EN 675, Glass in building — Determination of thermal transmittance (U value) — Heat flow meter method

prEN 1279-5, Glass in building — Insulating glass units — Part 5: Evaluation of conformity

EN 1990, Eurocode: Basis of structural design

EN 1991 (all parts), Eurocode 1: Actions on structures

EN 1993 (all parts), Eurocode 3: Design of steel structures

EN 1999 (all parts), Eurocode 9: Design of aluminium structures

EN 12179, Curtain walling — Resistance to wind load — Test method

prEN 12488, Glass in buildings — Glazing recommendations — Assembly principles for vertical and sloping glazing

EN 12519, Windows and pedestrian doors - Terminology

EN 12600, Glass in building — Pendulum test — Impact test method and classification for flat glass

EN 12758, Glass in building — Glazing and airborne sound insulation — Product descriptions and determination of properties

¹ For the definition of building-attached photovoltaic modules refer to 3.2