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Photovoltaics in buildings

Part 2: BIPV systems



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National foreword

This British Standard is the UK implementation of EN 50583-2:2016.

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A list of organizations represented on this committee can be obtained on request to its secretary.

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European foreword

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1 Scope

This document applies to photovoltaic systems that are integrated into buildings with the photovoltaic modules used as construction products. It focuses on the properties of these photovoltaic systems relevant to essential building requirements as specified in the European Construction Product Regulation CPR 89/106/EEC, 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 works may apply in individual countries, which are not explicitly referenced here.

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 systems. ¹

This document addresses requirements on the BIPV systems in the specific ways they are intended to be mounted but not the BIPV modules as construction products, which is the topic of EN 50583-1.

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 1027, Windows and doors — Watertightness — Test method

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 1995 (all parts), Eurocode 5: Design of timber 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

EN 13022 (all parts), Glass in building — Structural sealant glazing

EN 13116, Curtain walling — Resistance to wind load — Performance requirements

EN 13119, Curtain walling —Terminology

EN 13363-1, Solar protection devices combined with glazing — Calculation of solar and light transmittance — Part 1: Simplified method

¹ For the definition building-attached photovoltaic systems refer to 3.2