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Library objects for architecture, engineering and construction

Part 6: Product and facility declarations – Code of practice

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Foreword

Publishing Information

This part of BS 8541 is published by BSI Standards Limited, under licence from The British Standards Institution, and came into effect on 31 March 2015. It was prepared by Technical Committee B/555, *Construction design, modelling and data exchange*. A list of organizations represented on this committee can be obtained on request to the committee secretary.

Supersession

BS 8541-6:2015+A1:2023 supersedes BS 8541-6:2015, which is withdrawn.

Relationship with other publications

BS 8541 comprises six parts as follows:

- Part 1, Identification and classification;
- Part 2, Recommended 2D symbols of building elements for use in building information modelling;
- Part 3, Shape and measurement;
- Part 4, Attributes for specification and assessment;
- Part 5, Assemblies;
- Part 6 (this part), Product and facility declarations.

BS 8541-1, BS 8541-3 and BS 8541-4 document best practice for the development and application of construction library objects to support Building Information Modelling (BIM) based design, standardization, specification and construction processes. See BS 8541-1 〚A1〛 Text deleted 〚/A1〛.

BS 8541-2 documents best practice for the use of 2D symbols for construction objects. BS 8541-5 and BS 8541-6 document best practice for the transmission of assemblies of construction objects and for the transmission of formal performance declarations of products and facilities.

〚A1〛 The IFC standard (BS EN ISO 16739-1) includes recommendations for the association of base quantities and geometry for objects. The use of the IFC standard can be supplemented by using UK specific recommendations, such as are published by buildingSMART UK&I[1)] 〚/A1〛.

Figure 1 — *Core maturity model – deleted*

〚A1〛 Figure deleted 〚/A1〛
〚A1〛 Note and footnote deleted 〚/A1〛

Information about this document

Text introduced or altered by Amendment No. 1 is indicated in the text by tags 〚A1〛 〚/A1〛. Minor editorial changes are not tagged.

Amendment A1 removes conflict with BS EN ISO 22057:2022.

This publication can be withdrawn, revised, partially superseded or superseded. Information regarding the status of this publication can be found in the Standards Catalogue on the BSI website at bsigroup.com/standards, or by contacting the Customer Services team.

1) 〚A1〛 This can be viewed at https://wearenima.im/. 〚/A1〛

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Presentational conventions

The provisions of this standard are presented in roman (i.e. upright) type. Its recommendations are expressed in sentences in which the principal auxiliary verb is "should".

Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element.

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1 Scope

This part of BS 8541 gives recommendations on the transmission of product declarations relating to construction library objects and facility declarations (including buildings, infrastructure and built assets). It applies primarily to manufacturers' specific products, but the principles and some examples are also applicable to facility declarations.

NOTE 1 Independent declarations are an increasingly important aspect of product and facility data, covering environmental and other performance.

This part of BS 8541 gives recommendations on conveying declarations as part of a standard product data set (supplementary to printed labels, annexes and document lodgement) and integrates product and facility declarations into information-driven design, construction and operational processes.

This part of BS 8541 is applicable to any independent declaration scheme and establishes principles for the identification of declarations and their origin.

It defines the level of information appropriate for specific uses including confirmation, reporting, and analysis. The intent is to allow any declaration to be communicated with indications as to the degree of attestation offered. The specific values declared are given in the context of a specific declaration scheme and supported with details of the relevant life cycle stage and details of its scenario.

A1 This part of BS 8541 covers third-party declarations other than Environmental Product Declarations (EPDs) which are now covered by BS EN ISO 22057. A1

NOTE 2 Construction products regulations and CEN standards for buildings and products provide the primary examples.A1 This part of BS 8541 covers the communication of other product declarations such as wastage rates developed with the UK Government WRAP programme and UK government display energy certificate (DEC) declaration scheme. A1

NOTE 3 COBie, A1 BS EN ISO 16739-1 A1 IFC and IFCXML are used as example formats with reference to BS ISO 10303-21 and ISO/TS 10303-28. These formats can be mapped to standard printed forms if required.

NOTE 4 In situations where the adoption of data-driven design is partial or incomplete, this part of BS 8541 gives further recommendations. If a particular project is formally committed to integrated working then this standard may be adopted as a requirement.

NOTE 5 Self-declared environmental claims (such as described as Type II environmental labels in BS EN ISO 14021) have the lowest degree of attestation but are also covered by this standard.

2 Normative references

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

BS 8541-1, *Library objects for architecture, engineering and construction – Part 1: Identification and classification – Code of practice*

BS 8541-2, *Library objects for architecture, engineering and construction – Part 2: Recommended 2D symbols of building elements for use in building information modelling*

BS 8541-3, *Library objects for architecture, engineering and construction – Part 3: Shape and measurement – Code of practice*

BS 8541-4, *Library objects for architecture, engineering and construction – Part 4: Attributes for specification and assessment – Code of practice*

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