BS 8895-2:2015

BSI Standards Publication

Designing for material efficiency in building projects –

Part 2: Code of practice for concept design and developed design

bsi.

...making excellence a habit.™

Publishing and copyright information

The BSI copyright notice displayed in this document indicates when the document was last issued.

Published by BSI Standards Limited 2015

ISBN 978 0 580 85618 1

ICS 91.040.01

The following BSI references relate to the work on this document:
Committee reference B/209
Draft for comment 15/30296207 DC

Publication history

First published July 2015

Amendments issued since publication

Date	Text affected

Contents

Summary of pages

This document comprises a front cover, an inside front cover, pages i to ii, pages 1 to 30, an inside back cover and a back cover.

Foreword

Publishing information

This document is published by BSI Standards Limited, under license from The British Standards Institution, and came into effect on 31 July 2015. It was prepared by Technical Committee B/209, *General Building Codes*. A list of organizations represented on this committee can be obtained on request to its secretary.

Information about this document

The initial drafting of this British Standard was produced in association with BIS as part of their on-going programme of support for standardization.

This document gives recommendations for designing for material efficiency that are accepted as good practice by industry leaders and practitioners, and brings together the results of practical experience and acquired knowledge for ease of access and use of the information.

This code of practice sets out the process for the integration of designing for material efficiency into the concept design and developed design stages of the RIBA plan of work [N1]. It is the second part in a projected suite of British Standards that address specific and interrelated issues and processes of material efficiency in building projects in line with the RIBA plan of work [N1].

BS 8895, *Designing for materials efficiency in building projects*, comprises the following parts:

- Part 1 (published 2013): *Code of practice for strategic definition and preparation and brief*;
- Part 2 (this part): *Code of practice for concept and developed design*;
- Part 3: *Code of practice for technical design* [1)]; and
- Part 4: *Code of practice for operation, refurbishment and end of life* [1)].

Use of this document

As a code of practice, this British Standard takes the form of guidance and recommendations. It should not be quoted as if it was a specification and particular care should be taken to ensure that claims of compliance are not misleading.

Any user claiming compliance with this British Standard is expected to be able to justify any course of action that deviates from its recommendations.

Presentational conventions

The provisions in 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.

Contractual and legal considerations

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application. Compliance with a British Standard cannot confer immunity from legal obligations.

1) Planned for development.

Introduction

Material efficiency is a key part in achieving higher levels of resource efficiency in a building project. Material efficiency encompasses the efficient use of materials throughout the lifecycle of a building, waste prevention and reduction, minimizing damage to the environment and minimizing depletion of natural resources. The case for material efficiency is made in the Part 1 of this multi-part standard, BS 8895-1:2013, which covers 'Stage 0 Strategic Definition' and 'Stage 1 Preparation and Brief' of the RIBA plan of work [N1]. This includes clear drivers such as cost savings and reduced environmental impact through reduced resource use, corporate social responsibility commitments and meeting requirements for material efficiency performance. BS 8895-1:2013, Figure 3 illustrates the need to design for material efficiency at the earliest possible point within the design process – where the opportunities are the greatest and the cost of making the decisions the least.

Material efficiency in a building project involves the implementation of a hierarchy, (see BS 8895-1:2013, Figure 1) to optimize material usage and avoid the production of waste. It also encompasses design solutions to reduce material usage wherever possible, reuse materials and increase the use of materials which are reclaimed that can also be reused at the end of life, and specify materials with a high level of recycled content and that can be recycled.

Opportunities and solutions for material efficiency arise during the planning, design, procurement, construction, in use (including refurbishment) and end of life stages of a project. However, the most effective way to implement material efficiency is to comprehensively consider the use of materials during the planning and design stages. This is when maximum impact can be made. This British Standard covers 'Stage 2 Concept Design' and 'Stage 3 Developed Design' of the RIBA plan of work [N1] where there is much potential to implement material efficiency by taking forward the initial project brief and considering opportunities that arise from the work undertaken to develop the outline designs and specifications.

Opportunities also exist when the design is already formulated and construction is under way, particularly in contractual procedures where the contractor has the opportunity to put forward alternative design, procurement and construction methods that can achieve significant reduction in waste and improvement in material efficiency during the construction period.

1 Scope

This part of BS 8895 gives recommendations for the processes, information exchanges and responsibilities for design teams to incorporate into projects at the concept design and developed design stages of a building project. It provides recommendations on how to implement material efficiency after receiving the initial project brief at the end of stage 1 of the RIBA plan of work [N1] (preparation and brief).

NOTE 1 This British Standard follows the RIBA plan of work [N1] stages and requirements, focusing on 'Stage 2 Concept Design' and 'Stage 3 Developed Design'. 'Stage 0 Strategic Definition' and 'Stage 1 Preparation and Brief' are covered in BS 8895-1.