

BS 8298-4:2020



BSI Standards Publication

# Design and installation of natural stone cladding and lining

Part 4: Stone cladding on rainscreen support systems —  
Code of practice

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Published by BSI Standards Limited 2020

ISBN 978 0 580 52097 6

ICS 91.060.10

The following BSI references relate to the work on this document:

Committee reference B/545

Draft for comment 20/30369535 DC

**Amendments/corrigenda issued since publication**

Date

Text affected

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### Summary of pages

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# Foreword

## Publishing information

This part of BS 8298 is published by BSI Standards Limited, under licence from The British Standards Institution, and came into effect on 31 December 2020. It was prepared by Technical Committee B/545, *Natural stone*. A list of organizations represented on this committee can be obtained on request to the committee manager.

## Supersession

This part of BS 8298 supersedes BS 8298-4:2010, which is withdrawn. Together with [BS 8298-2:2020](#) and [BS 8298-3:2020](#) this part supersedes BS 8298-1:2010, which is withdrawn.

## Relationship with other publications

BS 8298, *Design and installation of natural stone cladding and lining*, will eventually be issued in four parts:

- *Part 2: Traditional handset external cladding – Code of practice;*
- *Part 3: Stone-faced precast concrete cladding systems – Code of practice;*
- *Part 4: Stone cladding on rainscreen support systems – Code of practice;* and
- *Part 5: Natural stone lining – Code of practice.*<sup>1)</sup>

The recommendations for production control testing that were previously given in Part 1: *General* have or will be incorporated into Parts 2 to 5, so that Part 1 is withdrawn.

## Information about this document

This is a full revision of BS 8298-4, and introduces the following principal changes:

- the incorporation of the recommendations for factory production control from BS 8298-1:2010;
- the addition of several figures to illustrate key details; and
- the structural design of the stone has been updated to follow the principles of limit state design.

To provide more consistency with other material design standards, it is the long-term goal for the partial safety factors presented in the British Standard to be derived from a reliability-based analysis in accordance with the principles of BS EN 1990:2002+A1, Annex D. The values presented in this edition are derived from industry experience and a historical precedent of conformity and not a reliability-based analysis.

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](http://bsigroup.com/standards), or by contacting the Customer Services team.

Where websites and webpages have been cited, they are provided for ease of reference and are correct at the time of publication. The location of a webpage or website, or its contents, cannot be guaranteed.

**Assessed capability.** Users of this British Standard are advised to consider the desirability of quality system assessment and registration against the appropriate standard in the BS EN ISO 9000 series by an accredited third-party certification body.

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<sup>1)</sup> In preparation.

### **Use of this document**

As a code of practice, this part of BS 8298 takes the form of guidance and recommendations. It should not be quoted as if it were a specification and particular care should be taken to ensure that claims of compliance are not misleading.

Any user claiming compliance with this part of BS 8298 is expected to be able to justify any course of action that deviates from its recommendations.

### **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.*

The word “should” is used to express recommendations of this standard. The word “may” is used in the text to express permissibility, e.g. as an alternative to the primary recommendation of the clause. The word “can” is used to express possibility, e.g. a consequence of an action or an event.

Notes and commentaries are provided throughout the text of this standard. Notes give references and additional information that are important but do not form part of the recommendations. Commentaries give background information.

Where words have alternative spellings, the preferred spelling of the Shorter Oxford English Dictionary is used (e.g. “organization” rather than “organisation”).

### **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 Scope

This part of BS 8298 gives recommendations for the design and fixing of individually-supported panels of natural stone, with or without an intermediate metal framing system, as part of a rainscreen cladding system, including vertical elements and sloping elements (i.e. soffits) of the facade, as well as soffit and coping units.

It covers:

- a) the provisions necessary for the stone cladding to perform its function satisfactorily; and
- b) the methods most frequently used for assessing the suitability of the stone.

It does not cover aggregate/agglomerated stone, stone veneer composite (e.g. stone on honeycomb, stone on ceramic, stone on a lightweight concrete) or terracotta panels used as external cladding.

It does not cover thermal insulation or the intermediate metal framing system.

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes provisions of this document<sup>2)</sup>. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

### Standards publications

[BS 5606](#), *Guide to accuracy in building*

[BS 5642-1](#), *Sills, copings and cappings – Part 1: Specification for window sills of precast concrete, cast stone, clayware, slate and natural stone*

[BS 5642-2](#), *Sills, copings and cappings – Part 2: Specification for copings and cappings of precast concrete, cast stone, clayware, slate and natural stone*

[BS 6093](#), *Design of joints and jointing in building construction – Guide*

[BS 6180](#), *Barriers in and about buildings – Code of practice*

[BS 8221-1](#), *Code of practice for cleaning and surface repair of buildings – Part 1: Cleaning of natural stone, brick, terracotta and concrete*

[BS 8221-2](#), *Code of practice for cleaning and surface repair of buildings – Part 2: Surface repair of natural stones, brick and terracotta*

[BS 8539](#), *Code of practice for the selection and installation of post-installed anchors in concrete and masonry*

BS EN 1469, *Natural stone products – Slabs for cladding – Requirements*

BS EN 1926, *Natural stone test methods – Determination of uniaxial compressive strength*

BS EN 1936, *Natural stone test methods – Determination of real density and apparent density, and of total and open porosity*

BS EN 1990:2002+A1:2005, *Eurocode – Basis of structural design*

BS EN 1991-1-1, *Eurocode 1: Actions on structures – Part 1-1: General actions – Densities, self-weight, imposed loads for buildings*

BS EN 1991-1-3, *Eurocode 1: Actions on structures – Part 1-3: General actions – Snow loads*

<sup>2)</sup> Documents that are referred to solely in an informative manner are listed in the Bibliography.