

BS ISO 13007-4:2013



BSI Standards Publication

# Ceramic tiles — Grouts and adhesives

Part 4: Test methods for grouts

**bsi.**

...making excellence a habit.™

**National foreword**

This British Standard is the UK implementation of ISO 13007-4:2013. It supersedes BS ISO 13007-4:2010 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee B/539, Ceramic tiles and other rigid tiling.

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

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

© The British Standards Institution 2013. Published by BSI Standards Limited 2013

ISBN 978 0 580 79578 7

ICS 91.100.10; 91.100.23

**Compliance with a British Standard cannot confer immunity from legal obligations.**

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 October 2013.

**Amendments issued since publication**

Date	Text affected
------	---------------

---

# INTERNATIONAL STANDARD

**ISO**  
**13007-4**

Third edition  
2013-10-15

---

---

## **Ceramic tiles — Grouts and adhesives —**

### **Part 4: Test methods for grouts**

*Carreaux céramiques — Mortiers de joints et colles —  
Partie 4: Méthodes d'essai pour les mortiers de joints*



Reference number  
ISO 13007-4:2013(E)

© ISO 2013



## **COPYRIGHT PROTECTED DOCUMENT**

© ISO 2013

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office  
Case postale 56 • CH-1211 Geneva 20  
Tel. + 41 22 749 01 11  
Fax + 41 22 749 09 47  
E-mail [copyright@iso.org](mailto:copyright@iso.org)  
Web [www.iso.org](http://www.iso.org)

Published in Switzerland

# Contents

Page

<b>Foreword</b> .....	<b>iv</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 General test conditions and procedures</b> .....	<b>1</b>
3.1 Sampling.....	1
3.2 Test conditions.....	1
3.3 Test materials.....	2
3.4 Mixing procedures.....	2
3.5 Test report.....	2
<b>4 Test methods</b> .....	<b>3</b>
4.1 Determination of flexural and compressive strength.....	3
4.2 Determination of water absorption.....	5
4.3 Determination of shrinkage.....	6
4.4 Determination of resistance to abrasion.....	7
4.5 Determination of transverse deformation.....	8
4.6 Determination of chemical resistance.....	8
<b>Annex A (informative) Test apparatus</b> .....	<b>9</b>
<b>Bibliography</b> .....	<b>22</b>

## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2. [www.iso.org/directives](http://www.iso.org/directives)

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received. [www.iso.org/patents](http://www.iso.org/patents)

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

The committee responsible for this document is ISO/TC 189, *Ceramic tile*.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [http://www.iso.org/iso/home/standards\\_development/resources-for-technical-work/foreword.htm](http://www.iso.org/iso/home/standards_development/resources-for-technical-work/foreword.htm)

This third edition cancels and replaces the second edition (ISO 13007-4:2010), of which it constitutes a minor revision.

ISO 13007 consists of the following parts, under the general title *Ceramic tiles — Grouts and adhesives*:

- *Part 1: Terms, definitions and specifications for adhesives*
- *Part 2: Test methods for adhesives*
- *Part 3: Terms, definitions and specifications for grouts*
- *Part 4: Test methods for grouts*

# Ceramic tiles — Grouts and adhesives —

## Part 4: Test methods for grouts

### 1 Scope

This part of ISO 13007 describes methods for determining characteristics for grouts used in the installation of ceramic tiles. The following test methods are described:

- determination of flexural and compressive strength ([4.1](#));
- determination of water absorption ([4.2](#));
- determination of shrinkage ([4.3](#));
- determination of resistance to abrasion ([4.4](#));
- determination of transverse deformation ([4.5](#));
- determination of chemical resistance ([4.6](#)).

### 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.

ISO 10545-6, *Ceramic tiles — Part 6: Determination of resistance to deep abrasion for unglazed tiles*

ISO 13007-2, *Ceramic tiles — Grouts and adhesives — Part 2: Test methods for adhesives*

### 3 General test conditions and procedures

#### 3.1 Sampling

A representative sample of at least 2 kg shall be used.

#### 3.2 Test conditions

Standard conditions shall be  $(23 \pm 2)$  °C and  $(50 \pm 5)$  % relative humidity (RH) and a circulation of air in the testing area less than 0,2 m/s. Other test conditions may be specified in [Clause 4](#). The tolerance in the time of conditioning for all test specimens shall be as follows in [Table 1](#).