



BSI Standards Publication

Ergonomics — Accessible design — Guidelines for designing tactile symbols and characters

National foreword

This British Standard is the UK implementation of [ISO 24508:2019](#).

The UK participation in its preparation was entrusted to Technical Committee PH/9, Applied ergonomics.

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 2019
Published by BSI Standards Limited 2019

ISBN 978 0 580 93254 0

ICS 11.180.30; 13.180

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 March 2019.

Amendments/corrigenda issued since publication

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

INTERNATIONAL STANDARD

ISO
24508

First edition
2019-03-26

Ergonomics — Accessible design — Guidelines for designing tactile symbols and characters

*Ergonomie — Conception accessible — Lignes directrices pour la
conception des symboles et caractères tactiles*



Reference number
ISO 24508:2019(E)
Documents
Document Sharing Hub
© ISO 2019



COPYRIGHT PROTECTED DOCUMENT

© ISO 2019, Published in Switzerland

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
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

Contents

Page

Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Design guidelines for tactile symbols and characters	3
4.1 Selection of tactile symbols.....	3
4.2 Selection of tactile characters.....	3
4.3 Size of tactile patterns.....	4
4.4 Line width of tactile patterns.....	4
4.5 Height of tactile patterns above the base plane.....	4
4.6 Cross-sectional figurations of tactile lines and filled symbols.....	5
4.7 Others.....	5
5 Other factors to consider	5
5.1 General.....	5
5.2 Information associated with tactile symbols and characters.....	5
5.3 Easy to find and touch.....	6
5.4 Materials on which tactile symbols and characters are mounted.....	6
Annex A (informative) Examples of tactile symbols and their meanings	7
Annex B (informative) Legibility data of tactile symbols and characters for young people, older people and blind people	8
Annex C (informative) Textual descriptions for figures used in this document	12
Bibliography	13

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 (see 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 (see 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.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 159, *Ergonomics*, Subcommittee SC 4, *Ergonomics of human-system interaction*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

Providing tactile information such as raised symbols or characters is one method for making products or environments more accessible to users who need to access information using a modality that depends on neither vision nor hearing. The use of tactile information has become an increasingly important method for supporting accessible design of products services and environments.

The use of tactile information in a design requires proper consideration to best support human tactile senses so that the information is easily and correctly understandable. Guidelines for designing tactile symbols and characters based on ergonomic knowledge of human tactile abilities are therefore necessary for such design.

This document adopts the guidance of accessibility given in [ISO/IEC Guide 71](#)^[1] and also design guidelines given in [ISO/TR 22411](#)^[2].