
**Ceramic tiling systems —
Sustainability for ceramic tiles and
installation materials —**

**Part 1:
Specification for ceramic tiles**



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Contents

Page

Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
3.1 Sustainability	2
3.2 Environment	2
3.3 Materials input	3
3.4 Sustainability management	3
3.5 Products and production	4
3.6 Waste materials	5
3.7 Health and safety	5
4 Symbols and abbreviated terms	6
4.1 Symbols	6
4.2 Abbreviated terms	7
5 Principle criteria for sustainable products	7
5.1 General	7
5.2 Environmental criteria	8
5.3 Economic and functional criteria	8
5.4 Social criteria	8
6 Assessment	9
6.1 General	9
6.2 Environmental criteria	9
6.2.1 General	9
6.2.2 Raw materials	9
6.2.3 Manufacture	11
6.2.4 Distribution and installation	18
6.2.5 Use	19
6.2.6 End of life	20
6.2.7 Product environmental mark/labelling	20
6.3 Economic and functional criteria	21
6.3.1 General	21
6.3.2 Product quality, performance level, fitness for use	21
6.4 Social criteria	22
6.4.1 General	22
6.4.2 Occupational health and safety in manufacture	22
6.4.3 Health and safety prior and during installation	24
6.4.4 Health and safety in use	25
6.4.5 Labour agreement	25
7 Classification and designation	26
7.1 Approach	26
7.2 Final rating calculation	27
7.3 Classification	27
7.4 Final report	28
Annex A (normative) Criteria for sustainable products	29
Bibliography	40

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 189, *Ceramic tile*.

A list of all parts in the ISO 17889 series can be found on the ISO website.

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

This document outlines the requirements for sustainable tiles and installation materials including environmental, economic and social criteria, in order to:

- promote the development and use of sustainable ceramic tiles and installation materials;
- guide all stakeholders in environmental responsibility throughout the supply chain for tiles and installation materials;
- provide a verifiable resource for tile product specification and for design professionals, contractors and consumers to identify sustainable tiles and installation materials;
- increase the value of sustainable tiles and installation materials throughout the supply chain by creating greater market awareness and demand.

This document provides a system for sustainability assessment of products throughout their life cycle using qualitative and quantitative indicators for environmental performance and for social and economic responsibility pertaining to the design, manufacture, installation, and use of ceramic tiling systems. This document is focused on ceramic tiles, as part of the tiling system.

This document can be used to assess the sustainability performance of the product of interest.

Evaluation schemes, taking into account the materials mentioned in the product standards, to enable comparability of the results of assessment, are part of this document.

Ceramic tiling systems — Sustainability for ceramic tiles and installation materials —

Part 1: Specification for ceramic tiles

1 Scope

This document specifies sustainability requirements together with assessment methods and evaluation schemes for ceramic tiles.

This document includes relevant criteria across product life cycle from raw material through manufacturing, use and end-of-life management.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

ISO 13006, *Ceramic tiles — Definitions, classification, characteristics and marking*

ISO 14024, *Environmental labels and declarations — Type I environmental labelling — Principles and procedures*

ISO 14025, *Environmental labels and declarations — Type III environmental declarations — Principles and procedures*

ISO 16000-3, *Indoor air — Part 3: Determination of formaldehyde and other carbonyl compounds in indoor air and test chamber air — Active sampling method*

ISO 16000-6, *Determination of volatile organic compounds in indoor and test chamber air by active sampling on Tenax TA sorbent, thermal desorption and gas chromatography using MS or MS-FID*

ISO 16000-9, *Indoor air — Part 9: Determination of the emission of volatile organic compounds from building products and furnishing — Emission test chamber method*

ISO 16000-11, *Indoor air — Part 11: Determination of the emission of volatile organic compounds from building products and furnishing — Sampling, storage of samples and preparation of test specimens*

ISO 21930, *Sustainability in buildings and civil engineering works — Core rules for environmental product declarations of construction products and services*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>