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English version

## General rules for the design and installation of ceramic tiling

Konstruktion und Aufbringung von Belägen aus  
keramischen Fliesen und Platten – Fugenmörtel für Fliesen  
und Platten

This Technical Report was approved by CEN on 12 October 2003. It has been drawn up by the Technical Committee CEN/TC 67.

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## Foreword

This document (CEN/TR 13548:2004) has been prepared by Technical Committee CEN/TC 67 "Ceramic tiles", the secretariat of which is held by UNI.

Annex A is informative.

## Introduction

There are now current European Standards available for:

- ceramic tiles
- adhesives and grouts for tiles

For these products to give satisfactory service, it is necessary for them to be selected and installed competently, and to receive appropriate initial treatment, protection and maintenance.

Certain CEN member countries have issued standards and/or guides that define the practice for design and installation of ceramic tiling.

This Technical Report is not intended to replace these national standards or guides, neither prevent the development of national standards or guides in those member countries that do not currently have them. Its purpose is to foster good design and installation standards for ceramic tiling across Europe, especially in countries where there is no national standard or guide on this subject.

## 1 Scope

This Technical Report applies to internal and external floor and wall ceramic tiling, installed by both cement mortar and adhesive methods.

The aim of this Technical Report is to define the quality of ceramic tiling and the main general rules associated with materials selection, design, installation and use that should be followed to ensure that the required levels of quality and performance are achieved.

Note: The quality of ceramic tiling depends on compliance with the following general requirements:

- regularity
- durability
- safety

Compliance with these requirements shall be achieved with the simultaneous and indispensable contribution of all the "functions" involved in the design and installation of the tiling. These functions are:

- manufacture and distribution of the materials (ceramic tiles, adhesives, grouts, etc.);
- design of the tiling;
- installation of the tiling (tile fixing operations).

The durability of the tiling can also depend on its use and management.

## 2 Normative references

This Technical Report incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this Technical Report only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

ISO 7976-1:1989, *Tolerances for building -- Methods of measurement of buildings and building products -- Part 1: Methods and instruments*

EN 14411, *Ceramic tiles - Definitions, classification, characteristics and marking* (ISO 13006:1998, modified)

## 3 Terms and definitions

For the purposes of this Technical Report, the terms and definitions relevant to ceramic floor and wall tiles, adhesive, mortars, screeds, etc. given in the existing standards and the following apply.

### 3.1 General

#### 3.1.1

##### **ceramic tiling**

ceramic tiles installed, together with its associated bedding and jointing

#### 3.1.2

##### **design or specification (of ceramic tiling)**

selection of ceramic tiles, backgrounds, fixing methods and fixing and jointing materials as appropriate for the structure and intended use

#### 3.1.3

##### **installation (of ceramic tiling) or tile fixing**

application of ceramic tiling in accordance with the specification

### 3.2 Components of a ceramic tiling

#### 3.2.1

##### **background**

any material system used as a base over which the ceramic tile is to be fixed