



National Standards Authority of Ireland

STANDARD

I.S. EN 14431:2004

ICS 25.220.50

**VITREOUS AND PORCELAIN ENAMELS -
CHARACTERISTICS OF THE ENAMEL
COATINGS APPLIED TO STEEL PANELS
INTENDED FOR ARCHITECTURE**

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English version

Vitreous and porcelain enamels - Characteristics of the enamel coatings applied to steel panels intended for architecture

Emaux vitrifiés - Caractéristiques des couches d'émail appliquées sur les panneaux d'acier destinés à l'architecture

Emails und Emailierungen - Merkmale von Email-Überzügen auf Architektur-Stahlpaneelen

This European Standard was approved by CEN on 9 July 2004.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

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Foreword

This document (EN 14431:2004) has been prepared by Technical Committee CEN/TC 262 "Metallic and other inorganic coatings", the secretariat of which is held by BSI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by March 2005, and conflicting national standards shall be withdrawn at the latest by March 2005.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

EN 14431:2004 (E)

1 Scope

This document specifies the requirements for enamel coated, plane, cold rolled, heavy and light gauge steel panels intended for interior and exterior architectural use.

It includes the functional and aesthetic characteristics and resistance to graffiti of these panels and the related coatings.

2 Normative references

The following referenced documents are indispensable for the application 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.

EN 101, *Ceramic tiles — Determination of scratch hardness of surface according to Mohs*

EN 10209:1996 *Cold rolled low carbon steel flat products for vitreous enamelling — Technical delivery conditions.*

EN 14430, *Vitreous and porcelain enamels — High voltage test*

EN 14483-1:2004, *Vitreous and porcelain enamels — Determination of resistance to chemical corrosion — Part 1: Determination of resistance to chemical corrosion by acids at room temperature*

EN ISO-105-J03, *Textiles — Tests for colour fastness — Part J03: Calculation of colour differences (ISO 105-J03:1995, including Technical Corrigendum 1:1996)*

EN ISO 2178, *Non magnetic coatings on magnetic substrates — Measurement of coating thickness — Magnetic method (ISO 2178:1982)*

EN ISO 2813, *Paints and varnishes — Determination of specular gloss of non-metallic paint films at 20°, 60° and 85° (ISO 2813:1994, including Technical Corrigendum 1:1997)*

EN ISO 8289, *Vitreous and porcelain enamels — Low voltage test for detecting and locating defects (ISO 8289:2000)*

EN ISO 15695, *Vitreous and porcelain enamels — Determination of the scratch resistance of enamel finishes (ISO 15695:2000, including Technical Corrigendum 1:2000)*

ISO 4532, *Vitreous and porcelain enamels — Determination of the resistance of enamelled articles to impact — Pistol test*

ISO 2742, *Vitreous and porcelain enamels — Determination of resistance to boiling citric acid*

ASTM C501, *Standard test method for relative resistance to wear of unglazed ceramic tile by the Taber Abraser*

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