



# SLOVENSKI STANDARD

## oSIST prEN 17543:2020

01-oktober-2020

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### Ohranjanje kulturne dediščine - Zidne obloge gradbene dediščine - Preiskovanje in dokumentiranje

Conservation of Cultural Heritage - Finishes of built heritage - Investigation and documentation

Erhaltung des kulturellen Erbes - Oberflächenausführungen des gebauten Erbes - Untersuchung und Dokumentation

Conservation du patrimoine culturel - Finitions du patrimoine bâti - Investigation et documentation

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#### **ICS:**

97.195	Umetniški in obrtniški izdelki. Kulturne dobrine in kulturna dediščina	Items of art and handicrafts. Cultural property and heritage
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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

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**prEN 17543**

July 2020

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English Version

## Conservation of Cultural Heritage - Finishes of built heritage - Investigation and documentation

Conservation du patrimoine culturel - Finitions du patrimoine bâti - Investigation et documentation

Erhaltung des kulturellen Erbes -  
Oberflächenausführungen des gebauten Erbes -  
Untersuchung und Dokumentation

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 346.

If this draft becomes a European Standard, 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.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

**prEN 17543:2020 (E)**

## **European foreword**

This document (prEN 17543:2020) has been prepared by Technical Committee CEN/TC 346 “Conservation of Cultural Heritage”, the secretariat of which is held by UNI.

This document is currently submitted to the CEN Enquiry.

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## Introduction

Throughout its existence, built heritage has been subject to continuous change and alteration. The most frequent changes have been the repeated refurbishment and redecoration of interiors and façades, carried out in response to a wide range of factors: developments in decorative fashions, changes in the functions of rooms, changes in the wealth of successive occupants and owners, the need to revive an old and worn painted decoration or simply maintenance. The investigation of built heritage finishes provides a systematic method of understanding these changes. It offers insights into the appearance of original and later schemes and may provide dates for the application of specific finishes.

The term “finish” is used within this document to describe all paint systems and decorative applications. Most applied finishes can be composed of a number of layers, typically primers, undercoats, top coats, glazes and varnishes. Finishes have been applied to a wide range of substrate materials. The term finish is also sometimes used to describe the self-finished surface of a building material.

The purpose of the investigation can be to locate, identify, interpret and, if possible, date current and historic finishes. Such investigations help to deepen our general knowledge of the significance of the area under investigation, its history and alterations, and also to assess its condition and to plan for future **conservation** and presentation, taking account of aesthetic considerations. These investigations should be looked upon as part of ongoing documentation and research.

The aim of each investigation may vary considerably in scope and complexity. While this document offers a framework, it should be recognized that every finish offers a different challenge to investigation and interpretation.

While the focus of this document is the investigation of finishes in and on buildings, the techniques described are commonly employed for other heritage objects which have been painted.

The expertise required to carry out such investigations should be in line with the objectives and challenges. Multidisciplinary professionals involved in this field, are drawn from a wide range of backgrounds, including **conservation**, science, art history, building archaeology, and painting and decorating crafts.

In some countries, the investigation and documentation of finishes, is known as Architectural Paint Research (APR).

It is the aim of this document to define common principles and best practice for the discipline.

## 1 Scope

This document defines best practice for collecting data and processing findings when investigating finishes on built heritage, with the aim of establishing existing schemes. It applies to decorative and protective finishes on buildings and their interiors, as well as other objects of built heritage.

This document applies to the planning and execution of such investigations with documentation throughout. It can be used as a process reference for stakeholders involved in the investigation of built heritage.

## 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.

EN 16085, *Conservation of Cultural property — Methodology for sampling from materials of cultural property — General rules*

EN 16853, *Conservation of cultural heritage — Conservation process — Decision making, planning and implementation*

FprEN 17429, *Conservation of cultural heritage — Procurement of conservation services and works*

## 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 <https://www.electropedia.org/>

### 3.1

#### **architectural element**

design element of a building

### 3.2

#### **built heritage**

standing structures which have an architectural, cultural or historic value

EXAMPLES: buildings, railings, street furniture, vehicles, industrial artefacts, ships, boats, furniture

### 3.3

#### **conservation**

measures and actions aimed at safeguarding **cultural heritage** while respecting its significance, including its accessibility to present and future generations

[SOURCE: EN 15898:2011, 3.3.1]

### 3.4

#### **cross-section**

sample material cut perpendicularly

**prEN 17543:2020 (E)****3.5****cultural heritage**

tangible and intangible entities of significance to present and future generations

[SOURCE: EN 15898:2011, 3.1.1]

**3.6****documentation**

recorded information created, collected, held and maintained

EXAMPLES: drawings, photographs, written reports, scientific data

Note 1 to entry: This term can also refer to the process itself.

[SOURCE: EN 15898:2011, 3.6.8, modified —]

**3.7****exposure**

removing overlying layers to reveal a specific **finish**

Note 1 to entry: See also 3.19 stratigraphic exposure

Note 2 to entry: This term can also refer to the process itself.

**3.8****finish**

final treatment of a surface

EXAMPLES: paint, varnishes, gilding, glazes, stenciling, marbling, wood graining, textiles and/or wallpapers, plasters, renders, stucco

Note 1 to entry: A **finish** can be a planned combination of several layers (primer, undercoat, top coat, glazes and varnishes) or an uncoated surface left as built.

Note 2 to entry: The term **finish** is also used to describe the self-finished surface of a building material such as concrete, render, stone, stucco or wood.

Note 3 to entry: Applied to protect or decorate a surface.

**3.9****investigation**

obtaining and gathering the information necessary for a **conservation** decision-making process

Note 1 to entry: This should include both qualitative and quantitative information.

[SOURCE: EN 15898:2011, 3.6.3]

**3.10****investigator**

professional performing an **investigation**

Note 1 to entry: Professions include **conservation**, science, art history, building archaeology, and painting and decorating crafts.

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**3.11****method statement**

document that details a way a work, task or process is to be completed

[SOURCE: FprEN 17429:2020, 3.2.9]

**3.12****period chart**

time-referenced table of all **schemes**

**3.13****photomicrograph**

graphic reproduction of the image of a **cross-section** captured through a microscope

**3.14****probing cut**

oblique incision from surface to **substrate**

Note 1 to entry: Made to establish the existence of layers.

Note 2 to entry: Known as cratering when circular.

**3.15****project brief**

description of the objective, background and context for the proposed **investigation**

**3.16****sampling**

process of collecting material for **investigation**

[SOURCE: EN 16085:2012, 3.3, modified — ]

**3.17****scheme**

set of **finishes** applied to different **architectural elements** at a particular period in time

**3.18****statement of significance**

recorded determination of the value, nature, character, or quality of the area of **investigation**

**3.19****stratigraphic exposure**

systematic removal of overlying layers to establish a sequence of **finishes/schemes**

Note 1 to entry: See also 3.7 exposure.

**3.20****substrate**

material upon which **finishes** are applied

**3.21****technical imaging**

all images that can be obtained using different magnification and under different lighting conditions (direct light, semi- or raking light) and different wavelengths (from ultraviolet to infrared)

## 4 Overview of the investigation process

**Investigation of finishes on built heritage** will expand the understanding of a building's history and condition. Results will inform future **conservation** management and re-presentation. **Documentation** of the findings shall follow the steps of this process.

**Investigations of finishes** shall be initiated before any alteration and the areas of interest shall be clearly defined if required by national legislation, in cooperation between the commissioning party and cultural heritage authorities.

An **investigation of finishes** may be initiated to:

- obtain a general understanding of the decorative history and use of a building;
- identify a specific **scheme**;
- establish a **scheme** sequence;
- inform **conservation**/restoration options;
- inform an **exposure** or a reconstruction of a specific **scheme**;
- clarify structural development and alteration;
- assess the significance of an existing **finish**;
- clarify the cause(s) of deterioration processes in the existing **finishes**.

The approach of the **investigation** is composed of three main parts:

- preparation (Clause 5) including **planning, project brief and commissioning**;
- execution (Clause 6) including archival-, on-site and laboratory investigation and synthesis of results;
- reporting (Clause 7).

## 5 Preparation

### 5.1 Project brief

Every **investigation of finishes** shall begin with an expression of need, which is formalized into a **project brief**. The drafting of the **project brief** will be carried out by the commissioner or agents acting on their behalf. The **project brief** shall clearly define the objective or the question to be answered by the proposed **investigation**. The development of the **project brief** shall follow FprEN 17429 Conservation of Cultural Heritage – Procurement of Conservation Services and Works.

For the purpose of this standard, the **project brief** shall include, but not be limited to:

- an expression of need, scope of research, and anticipated outcomes;
- a **statement of significance**;
- all **documentation** relevant to the proposed **investigation** (including any existing research);
- agreement on archiving, copyright and other intellectual property issues;