



# SLOVENSKI STANDARD

## SIST EN 17543:2021

01-oktober-2021

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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

EN 17543

NORME EUROPÉENNE

EUROPÄISCHE NORM

August 2021

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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 European Standard was approved by CEN on 28 June 2021.

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

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<b>Contents</b>	<b>Page</b>
European foreword.....	3
Introduction .....	4
1 Scope.....	5
2 Normative references.....	5
3 Terms and definitions .....	5
4 Overview of the investigation process .....	8
5 Preparation .....	9
5.1 Project brief .....	9
5.2 Commissioning.....	10
6 Execution.....	10
6.1 General.....	10
6.2 Archival investigation .....	11
6.3 Period chart.....	11
6.4 On-site investigation.....	11
6.4.1 Initial survey.....	11
6.4.2 Exposures of finishes .....	11
6.4.3 Sampling.....	12
6.5 Laboratory investigation.....	12
6.5.1 Microscopic examination of cross-sections.....	12
6.5.2 Advanced material analysis .....	13
6.6 Colour evaluation.....	13
6.7 Synthesis of results and conclusion.....	13
7 Reporting .....	14
7.1 General.....	14
7.2 Contents of the report.....	14
7.3 Further agreements .....	15
Annex A (informative) Example of period chart.....	16
Annex B (informative) Interpretation of cross-sections.....	17
Bibliography.....	18

## European foreword

This document (EN 17543:2021) has been prepared by Technical Committee CEN/TC 346 “Conservation of Cultural Heritage”, the secretariat of which is held by UNI.

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 February 2022, and conflicting national standards shall be withdrawn at the latest by February 2022.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

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**EN 17543:2021 (E)****Introduction**

Throughout its existence, built heritage is subject to continuous change and alteration. The most frequent changes have been the repeated refurbishment and redecoration of interiors and exterior architectural surfaces, 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 on 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 purpose of the investigation can be to locate, identify, interpret and, if possible, date current and previous 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 an integral part of the documentation and investigation process on built heritage.

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 an investigation and interpretation. The presence of wall paintings will be recorded, although the investigation and documentation of wall paintings themselves is beyond the scope of this standard.

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

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, architecture, 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 investigation on built heritage finishes.

## 1 Scope

This document defines best practice when investigating finishes on built heritage, with the aim of establishing existing schemes by collecting data and processing findings. It applies to finishes that can be decorative or protective, on buildings and their interiors, as well as other built heritage, but explicitly excludes the category of wall paintings.

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 16085:2012, *Conservation of Cultural property - Methodology for sampling from materials of cultural property - General rules*

EN 16853:2017, *Conservation of cultural heritage - Conservation process - Decision making, planning and implementation*

EN 17429:2020, *Conservation of cultural heritage - Procurement of conservation services and works*

## 3 Terms and definitions (standards.iteh.ai)

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**

designed part of a building

Note 1 entry: “**architectural element**” has a wider meaning, but in this standard refers to a elements of a building, such as skirting, panel, door, column, pillar, etc.

### 3.2

#### **built heritage**

immovable and movable standing structures which have an architectural, cultural or historic value

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

**EN 17543:2021 (E)**

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

Note 1 to entry: **Conservation** includes preventive **conservation**, remedial **conservation** and restoration.

Note 2 to entry: The term “preservation” is also used, e.g. in libraries and archives.

Note 3 to entry: All conservation actions are based on documentary and/or material evidence.

[SOURCE: EN 15898:2019, 3.3.1]

**3.4 cross-section**  
sample material cut perpendicularly to the surface of the last layer

**3.5 cultural heritage**  
tangible and intangible entities of significance to present and future generations

[SOURCE: EN 15898:2019, 3.1.1]

**3.6 documentation**  
recorded information created, collected, held and maintained for the purpose of present and future **conservation** and for reference

EXAMPLES: drawings, photographs, written reports, scientific data

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

Note 2 to entry: Documentation of all stages of **conservation** is an essential part of the overall process of **conservation** planning.

[SOURCE: EN 15898:2019, 3.6.8, modified]

**3.7 exposure**  
removal of 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 surface obtained as a result of an **exposure**.



**3.8****finish**

treatment or result of a treatment of a surface

EXAMPLES: paint, varnishes, gilding, glazes, stencilling, marbling, wood graining, textiles and/or wallpapers, plasters, renders, stucco, veneers, leather, tiles, ceramics

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.

Note 2 to entry: When the objective of the investigation is about **conservation** purposes, the definition given in EN 15898:2019 becomes relevant.

[SOURCE: EN 15898:2019, 3.6.3 modified]

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**3.10****investigator**

professional performing an **investigation**

<https://standards.iteh.ai/catalog/standards/sist/0a787e0e-b271-4fa2-ac4e-7b2b19ca13ad/sist-en-17543-2021>

Note 1 to entry: Professions include, but are not limited to, **conservation**, science, art history, architecture, building engineering, building archaeology, and painting and decorating crafts.

**3.11****method statement**

detailed description of the way a service, work, task or process is to be completed

Note 1 to entry: The costed **method statement** is the equivalent of a tender offer (EN 17429:2020, 3.2.9).

(SOURCE: EN 17429:2020, 3.2.10, note added)

**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

**EN 17543:2021 (E)****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 removing 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**

expression that determines the value of a heritage asset because of its heritage interest; such interest may be archaeological, architectural, artistic or historic

Note 1 to entry: When it exists, legal protection status of the studied object needs to be taken into account.

**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 can inform future conservation management and presentation. Documentation of the findings shall follow the steps of this process and shall be defined and initiated before any alteration works. The commissioner shall obtain any permissions required by national legislation.

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 an exposure or a reconstruction of a specific scheme;
- clarify structural development and alteration;
- assess the significance of an existing finish;
- clarify the type, cause(s) and effect of alteration processes in the existing finishes;
- inform conservation-restoration options.

The investigation and documentation is composed of three main parts, according to Figure 1.

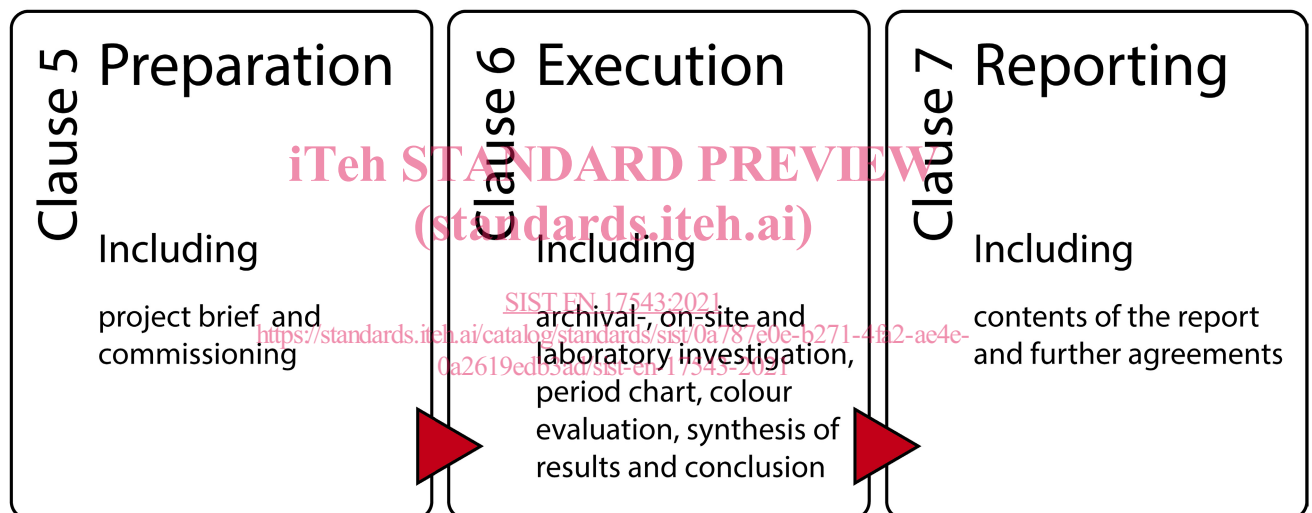


Figure 1 — Flow-chart of the investigation process

## 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 their representatives. When suitable and/or stated by demands in accordance with law, this will be done in dialogue with cultural heritage authorities.

The development of the project brief shall be in accordance with EN 17429:2020, Clause 5.

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);