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Conservation of cultural heritage – Integrated pest management (IPM) for protection of cultural heritage

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EUROPEAN STANDARD

EN 16790

NORME EUROPÉENNE

EUROPÄISCHE NORM

June 2016

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English Version

Conservation of cultural heritage - Integrated pest management (IPM) for protection of cultural heritage

Conservation du patrimoine culturel - Gestion intégrée des nuisibles (IPM) pour la protection du patrimoine culturel

Erhaltung des kulturellen Erbes - Integrierte Schädlingsbekämpfung (IPM) zum Schutz des kulturellen Erbes

This European Standard was approved by CEN on 5 May 2016.

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European foreword

This document (EN 16790:2016) 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of an identical text or by endorsement, at the latest by December 2016, and conflicting national standards shall be withdrawn at the latest by December 2016.

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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Introduction

Protecting cultural heritage from pests including insects and rodents, and microorganisms such as fungi, is a serious concern for many cultural heritage institutions. This is part of preventive conservation. The challenge of controlling these pests is increasing as several effective biocidal products have been banned by European legislation because of risks to health and environment. International trade, tourism, and global climate changes, with a rising mean temperature, may cause increased activity of microorganisms and an influx of insect pests not formerly known in many European countries. In addition, loans between museums or other cultural heritage institutions are increasing, thereby raising the risk of spreading pests. Previously, there has not been consensus in regard to quarantine and other preventive measures to tackle these problems. For this reason, there is a need for integrated pest management (IPM), a long-term, ongoing and holistic strategy, minimizing risks of damage to cultural heritage and its environment and reducing use of biocidal products. The aim of this standard is to be a management tool, describing IPM policies and procedures.

IPM for cultural heritage follows clear principles including:

- an organization defining roles and responsibilities of staff at all levels;
- comprehensive risk assessment;
- continuous inspection and monitoring;
- preventive measures that aim to physically block pest presence and development;
- remedial measures, prioritising non-toxic methods.

As part of a preventive conservation programme, IPM is as an effective way to reduce damage and cost and to minimize intervention.

In all pest management operations, European regulations and national legislation with regard to protected species and movable/immovable cultural heritage is applicable.

In all pest management operations, European regulations and national legislation on health and safety regarding treatments apply.

If biocidal products are considered for pest control, use should comply with European regulations and national legislation on health and safety regulations.

1 Scope

This European Standard defines Integrated Pest Management (IPM) and describes a comprehensive methodology for managing pest problems for protection of cultural heritage.

This European Standard applies to objects and buildings, housing collections, such as museums, archives, libraries, historic houses and buildings, places of worship, art dealers and auction rooms, art transport and storage companies.

This European Standard does not apply to caves, gardens, and parks.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 15898, *Conservation of cultural property - Main general terms and definitions*

3 Terms and definitions

For the purposes of this document, the terms contamination and infestation are defined in separate terms to distinguish between different pests. In addition to general terms and definitions given in EN 15898, the following apply.

3.1 contamination

presence of fungi, photosynthetic organisms and bacteria on/in materials posing risk to cultural heritage

3.2 eradication

action to eliminate pests

3.3 frass

waste and excrements from insects

3.4 housekeeping

general procedures to reduce the accumulation of dust, dead insects and other organic and inorganic materials

EXAMPLE Cleaning.

3.5 infestation

presence of animal pest organisms on/in materials posing risk to cultural heritage

3.6 integrated pest management IPM

holistic strategy combining various approaches to reduce and deal with pest problems

Note 1 to entry: The building, the climate in the building, collection management, cleaning, monitoring, documentation, training, and education are all included in the concept.

3.7

isolation

action of keeping cultural heritage items apart in order to prevent the spread of a possible infestation or contamination

Note 1 to entry: If the object is regularly checked for a set period of time, this action is referred to as quarantine, see quarantine.

3.8

monitoring

process of measuring, surveying and assessing the material properties of an object or collection and/or factors of the environment over time

[SOURCE: EN 15898, definition 3.4.4, modified – “or collection” has been added]

3.9

pest

living organism that is able to disfigure, damage, and destroy cultural heritage

EXAMPLE Insects, rodents, fungi, bacteria.

3.10

pheromone

chemical compound that attracts insects

3.11

plotting chart

template to plot the activity and location of pests found by observation or monitoring

3.12

quarantine

period during which isolated objects are monitored for signs of infestation or contamination

Note 1 to entry: Quarantine is also used as a noun, referring to a specific area as quarantine.

3.13

risk zones

classification of areas based on assessing the potential of pest infestation/contamination for prioritising preventive or remedial actions

3.14

staff

persons working on the premises such as employees within the organisation/company, external company employees or volunteers

3.15

trap

catching device for rodents and insects

Note 1 to entry: Can be used in combination with attractants, for example pheromone, light and baits.