International Standard

ISO 12460-2

Wood-based panels — Determination of formaldehyde release —

Part 2: Small-scale chamber method

Panneaux à base de bois — Détermination du dégagement de formaldéhyde —

Partie 2: Méthode à la petite chambre

Second edition
2024-02

Reference number
ISO 12460-2:2024(en)

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Published in Switzerland

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Foreword

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This document was prepared by Technical Committee ISO/TC 89, *Wood-based panels*.

This second edition cancels and replaces the first edition (ISO 12460-2:2018), which has been technically revised.

The main changes are as follows:

— implementation of different chamber sizes, analytical procedures, re-calculation of results to other standard parameters and establish a correlation between reference chamber method and the method used for factory production control.

A list of all parts in the ISO 12460 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

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Wood-based panels — Determination of formaldehyde release —

Part 2: Small-scale chamber method

1 Scope

This document specifies a procedure for a chamber test with different options of chamber sizes to measure the formaldehyde concentrations in air from wood products under defined test conditions of temperature, relative humidity, loading and air exchange rate.

Results obtained from this small-scale chamber test method can be used for quality control (factory production control – 'FPC') based on correlation established by reference chamber test methods according to ISO, EN or ASTM standards. The establishment of a correlation is described in Annex D.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology 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
air exchange rate
N
quotient of air volume Q passing through the chamber per hour (m^3/h) and the chamber volume (m^3) expressed in (h^{-1})

3.2
loading ratio
L
total exposed surface area, excluding panel edges, of the product being tested divided by the test chamber's volume (m^2/m^3)

3.3
make-up airflow
Q
quantity of conditioned and filtered air fed into the chamber per unit time, in m^3/h

3.4
***Q/A* ratio**
ratio of air flow through the chamber (Q) to sample surface area (A), in $m^3/h\ m^2$

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