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AMENDMENT 1
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Acoustics — Measurement of sound insulation in buildings and of building elements —

Part 3:

Laboratory measurements of airborne sound insulation of building elements

AMENDMENT 1: Installation guidelines for lightweight twin leaf partitions

*Acoustique — Mesurage de l'isolement acoustique des immeubles et
des éléments de construction —*

*Partie 3: Mesurage en laboratoire de l'affaiblissement des bruits aériens
par les éléments de construction*

*AMENDEMENT 1: Conditions particulières de montage des cloisons à
doubles parements légers*



Reference number
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Foreword

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Amendment 1 to ISO 140-3:1995 was prepared by the European Committee for Standardization (CEN) in collaboration with Technical Committee ISO/TC 43, *Acoustics*, Subcommittee SC 2, *Building acoustics*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

Foreword

This document (EN ISO 140-3:1995/A1:2004) has been prepared by Technical Committee CEN/TC 126 “Acoustic properties of building elements and of buildings”, the secretariat of which is held by AFNOR, in collaboration with Technical Committee ISO/TC 43 “Acoustics”.

This Amendment to the European Standard EN ISO 140-3:1995 shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by June 2005, and conflicting national standards shall be withdrawn at the latest by June 2005.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.

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Introduction

Evaluation of the results of a European Inter Laboratory Test in 1998 showed that the requirements given in ISO 140-1 are inadequate for lightweight twin partitions therefore the following annex is added.

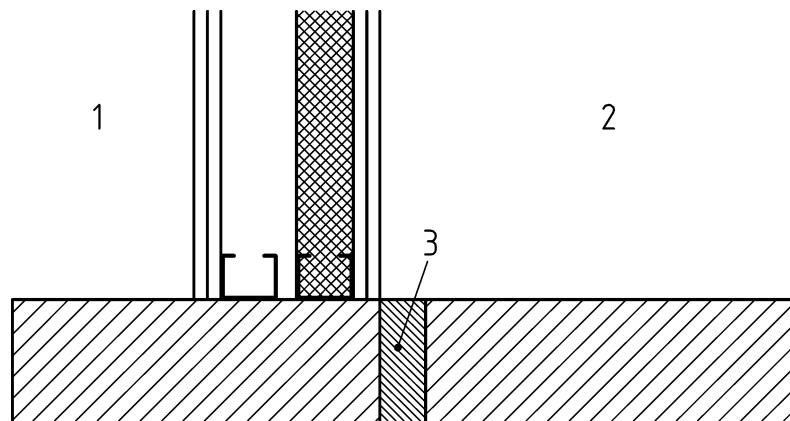
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ISO 9001:2015

Annex H (normative)

Installation guidelines for lightweight twin leaf partitions

The sound reduction index of lightweight twin leaf partitions is influenced by the mounting conditions in the test opening of the laboratory. The important installation parameters are the aperture (niche effect) depth and the position of the partition in relation to the acoustic break in the test aperture.



Key

- 1 source room
- 2 receiving room
- 3 acoustic break of the laboratory

Figure H.1 — Example for the position of the specimen relative to the acoustic break of the laboratory

To improve the reproducibility between laboratories and to facilitate comparison of sound reduction indices from different lightweight double wall products, the light weight twin leaf partition shall not be mounted across the acoustical break of the laboratory (Figure H.1). The aperture depth should meet the requirement in 5.2.1, as far as practical.

Other mounting conditions may be used but shall be fully described in the test report.

NOTE Mounting the lightweight partition with one leaf on one side and the other leaf on the other side of the acoustic break may result in higher values for the sound reduction index.

Other mounting conditions may be appropriate for some twin leaf partitions e.g. in semidetached houses where the leaves may be vibrationally decoupled. In such cases the leaves should be mounted on either side of the acoustic break.

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