

DIN EN 16272-1:2024-02 (E)

Railway applications - Infrastructure - Noise barriers and related devices acting on airborne sound propagation - Test method for determining the acoustic performance - Part 1: Intrinsic characteristics - Sound absorption under diffuse sound field conditions

Contents		Page
European foreword		3
Introduction		5
1	Scope	7
2	Normative references	7
3	Terms, definitions, symbols and abbreviations	8
3.1	Terms and definitions	8
3.2	Symbols and abbreviations	8
4	Test arrangement	10
5	Test procedure and evaluation	14
5.1	Test method	14
5.2	Measurement uncertainty	17
6	Test report	18
6.1	Expression of results	18
6.2	Further information	18
Annex A (informative) On the realization of a diffuse sound field		19
A.1	General	19
A.2	Additional information on the diffuseness of the sound field in a reverberation room	19
Annex B (normative) Measurement uncertainty		21
B.1	General	21
B.2	Measurement uncertainty based upon reproducibility data	21
B.3	Standard deviation of repeatability and reproducibility of the sound absorption coefficient	21
Annex C (normative) Test report template		23
C.1	Overview	23
C.2	Test object (example)	24
C.3	Test situation (example)	26
C.3.1	Test room and test arrangement	26
C.3.2	Test equipment and test procedures	27
C.3.3	Test conditions	27
C.4	Test results (example)	27
C.5	Measurement uncertainty (example)	28
Bibliography		29