



BSI Standards Publication

Road traffic noise reducing devices — Procedures for assessing long term performance

National foreword

This British Standard is the UK implementation of EN 14389:2023. It supersedes BS EN 14389-1:2015 and BS EN 14389-2:2015, which are withdrawn.

The UK participation in its preparation was entrusted to Technical Committee B/509/6, Fences for the attenuation of noise.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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Amendments/corrigenda issued since publication

Date	Text affected
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English Version

Road traffic noise reducing devices - Procedures for assessing long term performance

Dispositifs de réduction du bruit du trafic routier -
Méthodes d'évaluation des performances à long terme

Lärmschutzvorrichtungen an Straßen - Verfahren zur
Bewertung der Langzeitwirksamkeit

This European Standard was approved by CEN on 28 May 2023.

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European foreword

This document (EN 14389:2023) has been prepared by Technical Committee CEN/TC 226 “Road equipment”, the secretariat of which is held by AFNOR.

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of an identical text or by endorsement, at the latest by March 2024, and conflicting national standards shall be withdrawn at the latest by March 2024.

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.

This document supersedes EN 14389-1:2015 and EN 14389-2:2015.

The main change compared to the previous edition is the inclusion of the method for assessing long term performance regarding “non-acoustic” characteristics.

This document is intended to be read in conjunction with:

- EN 14388, *Road traffic noise reducing devices — Characteristics*;
- EN 1793, *Road traffic noise reducing devices — Test method for determining the acoustic performance*:
 - *Part 1: Intrinsic characteristics — Sound absorption under diffuse sound field conditions*;
 - *Part 2: Intrinsic characteristics — Airborne sound insulation under diffuse sound field conditions*;
 - *Part 5: Intrinsic characteristics — Sound absorption under direct sound field conditions*;
 - *Part 6: Intrinsic characteristics — Airborne sound insulation under direct sound field conditions*;
- EN 1794, *Road traffic noise reducing devices — Non-acoustic performance*:
 - *Part 1: Methods of determination of the mechanical and stability characteristics*;
 - *Part 2: Methods of determination of the general safety and environmental characteristics*;
- prEN 17383, *Road traffic noise reducing devices — Sustainability: Key Performance Indicators (KPIs) Declaration*.

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Introduction

Road traffic noise reducing devices alongside roads are expected to maintain their characteristics during the declared working life.

Resistance to electrolytic or/and chemical corrosion and embrittlement, dimensional stability and ageing resistance are considered by the manufacturer for different environmental conditions.

A change of acoustic characteristics can be foreseen depending on the material used and the environmental exposure conditions. Significant deterioration of the acoustic characteristics is avoided when appropriate materials for the roadside environment are used and manufacturer's recommendations for installation and maintenance are respected.