

STN	Železnice Pevná jazdná dráha Časť 4: Špeciálne pevné jazdné dráhy na tlmenie vibrácií	STN EN 16432-4 73 6325
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Railway applications - Ballastless track systems - Part 4: Special ballastless track systems for attenuation of vibration

Táto norma obsahuje anglickú verziu európskej normy.

This standard includes the English version of the European Standard.

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English Version

**Railway applications - Ballastless track systems - Part 4:
Special ballastless track systems for attenuation of
vibration**

Applications ferroviaires - Systèmes de voie sans
ballast - Partie 4: Système spécial de voie sans ballast
pour l'atténuation des vibrations

Bahnwendungen - Feste Fahrbahnssysteme - Teil 4:
Spezielle Feste Fahrbahnssysteme zur
Vibrationsdämpfung

This European Standard was approved by CEN on 13 April 2026.

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European foreword

This document (EN 16432-4:2026) has been prepared by Technical Committee CEN/TC 256 “Railway Applications”, the secretariat of which is held by DIN.

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of an identical text or by endorsement, at the latest by November 2026, and conflicting national standards shall be withdrawn at the latest by November 2026.

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EN 16432-4:2026 (E)**Introduction**

Ballastless track systems can be affected by acoustic requirements for the protection of the environment against noise and vibration.

This document covers the integration of additional acoustic requirements in the ballastless track system design.

This part of the EN 16432 series is used in conjunction with the following parts:

- Part 1: General requirements;
- Part 2: System design, subsystems and components;
- Part 3: Acceptance.

1 Scope

This document specifies how to integrate the particular aspects of ballastless track systems for attenuation of vibration into the system and subsystem design and component configuration according to EN 16432-2:2017.

The general system and subsystem design requirements are assigned from EN 16432-1:2017.

Additional noise and vibration requirements can be project specific and are not provided by this document. Acoustic requirements are considered as input for the track design from the acoustic design. The acoustic design and the track design affect each other and may require an iterative overall design process.

The range of applicability covers all kind of rail systems including Urban Rail systems.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 1991 (all parts), *Eurocode 1 — Actions on structures*

EN 1992 (all parts), *Eurocode 2 — Design of concrete structures*

EN 16432-1:2017, *Railway applications - Ballastless track systems - Part 1: General requirements*

EN 16432-2:2017, *Railway applications - Ballastless track systems - Part 2: System design, subsystems and components*

EN 16432-3:2021, *Railway applications - Ballastless track systems - Part 3: Acceptance*

EN 17495:2022, *Railway Applications - Acoustics - Determination of the dynamic stiffness of elastic track components related to noise and vibration: Rail pads and rail fastening assemblies*

EN 17682, *Railway applications - Infrastructure - Resilient element for floating slab system*

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