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NSAI Standards

Irish Standard
I.S. EN 16704-2-2:2016

Railway applications - Track - Safety protection on the track during work - Part 2-2: Common solutions and technology - Requirements for barriers

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National Foreword

I.S. EN 16704-2-2:2016 is the adopted Irish version of the European Document EN 16704-2-2:2016, Railway applications - Track - Safety protection on the track during work - Part 2-2: Common solutions and technology - Requirements for barriers

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 16704-2-2

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English Version

Railway applications - Track - Safety protection on the track during work - Part 2-2: Common solutions and technology - Requirements for barriers

Applications ferroviaires - Voie - Protection et sécurité durant des travaux sur la voie - Partie 2-2: Solutions communes et technologie - Exigences relatives aux barrières

Bahnanwendungen - Oberbau - Sicherungsmaßnahmen während Gleisbauarbeiten - Teil 2-2: Allgemeine Lösungen und Technologie - Anforderungen an Absperrungen

This European Standard was approved by CEN on 6 August 2016.

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European foreword

This document (EN 16704-2-2:2016) 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of an identical text or by endorsement, at the latest by May 2017, and conflicting national standards shall be withdrawn at the latest by May 2017.

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 has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

This European Standard is one of the series EN 16704 "*Railway applications – Track – Safety protection on the track during work*" as listed below:

— *Part 1: Railway risks and common principles for protection of fixed and mobile work sites*

— *Part 2-1: Common solutions and technology – Technical requirements for Track Warning Systems (TWS)*

— *Part 2-2: Common solutions and technology – Technical requirements for barriers*

— *Part 3: Competences of personnel related to work on or near tracks*

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Introduction

The purpose of this standard is to define and harmonize requirements for barriers to separate working zone and danger zone and to prevent workers from entering the danger zone unintentionally.

The purpose of this standard is not to define requirements:

— for structural separation to provide safe train operation in the area of a work site(1);

— for structural separation to provide safety on a work site during train operation(2).

NOTE Examples for exclusions:

(1) In case of crane operation on a work site the crane arm could hit or even intrude into the gauge of an open track and endanger the safety of train operation.

(2) A barrier does not protect workers from items falling from passing trains.

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1 Scope

This European Standard deals with requirements for barriers to give users the possibility to prevent workers from entering the danger zone unintentionally by the use of such barriers.

This standard defines minimum requirements and test procedures for these barriers concerning the dimensions, the stability and electrical properties.

This standard also gives recommendations for the marking (visual demarcation line) where a person would enter the danger zone.

For combinations of barriers and TWS see also EN 16704-2-1:2016.

This standard contains references to electrical hazards from third rail systems.

NOTE Urban rail systems do have the same situations but may have other individual track gauges. EN 16704–1 does not cover Urban rail systems. The use of barriers as a safety measure has the same intention independently of the kind of railway system.

This standard in particular does not deal with:

— risk assessment for safety protection on the track during work;

— hierarchy of safety measure for safety protection on the track during work;

— safety measure to provide safe working and safe train operation in the area of a work site;

— national safety regulations to plan and operate barriers in track;

— safety regulations and additional requirements e.g. due to national or operational rules or negotiation between the user and the manufacturer;

— electrical hazards by different potential of different electrified circuits.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 364:1992, *Personal protective equipment against falls from a height - Test methods*

EN 1263-1, *Temporary works equipment - Safety nets - Part 1: Safety requirements, test methods*

EN 12811-2, *Temporary works equipment - Part 2: Information on materials*

EN 12811-3:2002, *Temporary works equipment - Part 3: Load testing*

EN 13374:2013, *Temporary edge protection systems - Product specification - Test methods*

EN 14067-4, *Railway applications - Aerodynamics - Part 4: Requirements and test procedures for aerodynamics on open track*

EN 50110-1, *Operation of electrical installations - Part 1: General requirements*

EN 50110-2, *Operation of electrical installations - Part 2: National annexes*

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