



Bonneagar Iompair Éireann
Transport Infrastructure Ireland

TII Publications



Specification for Road Works Series 000 - Introduction

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Transport Infrastructure Ireland (TII) is responsible for managing and improving the country's national road and light rail networks.

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For all documents that existed within the NRA DMRB or the NRA MCDRW prior to the launch of TII Publications, the NRA document reference used previously is listed above under 'historical reference'. The TII Publication Number also shown above now supersedes this historical reference. All historical references within this document are deemed to be replaced by the TII Publication Number. For the equivalent TII Publication Number for all other historical references contained within this document, please refer to the TII Publications website.

INTRODUCTION

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INTRODUCTION

000 Introduction

- 1 The Specification for Road Works is published as one document and in addition to the Introduction the Specification contains numbered Series which refer to specific work disciplines.

001 Not Used

002 Terms and Abbreviations

- 1 Unless specifically defined otherwise the definitions of terms used in the Specification and associated documents are those in BS 6100, Glossary of Building and Civil Engineering Terms.
- 2 Abbreviations are in accordance with the recommendations given in BS ISO 31. Abbreviations listed in Table 0/1 have the meanings shown therein.

003 Appendices

- 1 Numbered Appendices (identified by digits, e.g. 17/2) contain Contract-specific information and requirements. The Numbered Appendices incorporated in the Contract are listed in Appendix 0/3.

004 Standards and Other Reference Documents

- 1 The Specification refers to many Irish, British, European and International Standards and other reference documents.
- 2 Standards or other reference documents incorporated in the Contract by a reference which does not include a date shall be the respective editions current on the date 10 working days prior to the tender returns date or, if applicable, the extended tender returns date and incorporating all amendments current on that date. Standards or other reference documents incorporated in the Contract by a reference that includes a date shall be deemed to exclude amendments issued after that date except any such amendments shown in brackets immediately following the stated date.
- 3 Where an Irish Standard or British Standard incorporated in the Contract has been superseded by a Harmonised European Standard, or a European Standard, issued prior to the date of invitation to tender then such Harmonised European Standard or European Standard shall be substituted for the Irish Standard or British Standard and any amendments thereto contained in the Specification.
- 4 Notification of this Specification has complied with the procedure outlined in Directive 98/34/EC.

005 Thickness of Material and Tolerances

- 1 Unless stated to the contrary, the thickness of material described shall mean the finished or compacted thickness.
- 2 The requirements for tolerances, where necessary, are incorporated in the Specification, on the Drawings and by reference in the publications stated in the Specification.

006 Construction Products

General

- 1** In compliance with the Construction Products Regulation (EU) No 395/2011 (CPR), as from 1 July 2013, all construction products covered by a harmonized European product standard (hEN) must have a Declaration of Performance (DoP) and a CE mark in order for them to be placed on an EU market. From 1 July 2013, all parties working on NRA funded schemes (for the construction, maintenance and/or improvement of national roads) must comply with the CPR. This requirement applies throughout all series of the 'Specification for Road Works' published as Volume 1 of the NRA Manual of Contract Documents for Road Works, where a hEN is applicable.
- 2** The NRA in consideration of the basic requirements for construction works has herein set out the regulations for products incorporated into National Roads in Ireland for both harmonised and non-harmonised product standards.
- 3** Definitions, Symbols and Abbreviations relevant to this Clause are listed in Table 0/2. Equivalent terms between CPR and CPD are listed in Table 0/3.

Harmonised Technical Specifications

- 4** Harmonised technical specifications are either harmonised European product standards (hENs) or European Assessment Documents (EADs). The harmonised technical specification for a product defines the methods of assessing and declaring the essential characteristics required by regulations in any Member State which affect the ability of construction products to meet Basic Requirements for Construction Works as contained in Annex 1 of the CPR.

Harmonised European Standards (hEN)

- 5** Harmonised European Standards (hENs) provide assessment methods and performance requirements for construction products. The specific product requirements listed in this Specification are derived from the hENs and referenced in the particular Series of the NRA Specification for Road Works where applicable.

European Assessment Documents (EAD)

- 6** European Assessment Documents (EAD) are documents adopted by the organisation of Technical Assessment Bodies (TAB) for the purposes of issuing European Technical Assessments (ETA); where a product is not covered or fully covered by a hEN, a European Technical Assessment (ETA) provides a way for a manufacturer to CE-mark a product. Further information on EADs and ETAs can be found at <http://www.eota.eu/en-GB/content/how-an-ead-is-developed/40/>

Assessment and Verification of Constancy of Performance (AVCP)

- 7** The AVCP is the method for assessing the conformity of construction products to the harmonised technical specifications including the amount of involvement from a notified body. The relevant systems for the respective products are detailed in the respective Series of the Specification.

- 8 The system in place for a particular product is given in Annex ZA.2 of the respective hEN.

Factory Production Control (FPC)

- 9 For both systems the manufacturer is required to have a factory production control (FPC) system that is a fully documented, internal control of production in accordance with the relevant harmonised technical specification, refer to relevant Series of the Specification for further details. For products other than hot bituminous mixtures, AVCP refers to both production and installation.

Declaration of Performance (DoP)

- 10 A DoP provides information about the intended use and performance of the product. The manufacturer assumes legal responsibility for the conformity of the product with its declared performance. The DoP is kept with the technical file concerning the product. The application of the CE mark by the manufacturer follows the DoP and effectively certifies that the manufacturer has strictly followed the applicable procedures in drawing up his DoP and that it is accurate and reliable.

CE Marking

- 11 Each product covered by a harmonised technical specification shall be CE marked as a requirement of the Construction Products Regulation (CPR). Demonstration that the product meets the requirements of the Contract shall be contained within the Type Test report accompanying the Declaration of Performance for the product. The required performance levels for use on National Roads in Ireland are set out in the applicable Clauses of this Specification and Appendices.
- 12 It is the responsibility of the Designer to ensure that the performance levels required for the Contract have been clearly identified in accordance with the NRA Design Manual for Roads and Bridges (NRA DMRB) and this Specification.
- 13 It is the responsibility of the Contractor to ensure that the information contained within the CE Marking, DoP and accompanying Product Type Test report meets the requirements of the Contract.

Market Surveillance

- 14 Market surveillance is the activity and measures taken by public authorities to ensure that products comply with the requirements as set out in the CPR. The market surveillance authorities, as defined in S.I. 225 of 2013, are the Local Authority Building Control departments. Product compliance may be referred to the Market Surveillance Authority where appropriate.

Competent National Authority

- 15 When requested, manufacturers are required to provide all information and documentation necessary to demonstrate the conformity of the construction product with the declaration of

performance to the Competent National Authority. The National Roads Authority has been appointed as the competent national authority, as defined in S.I. 225 of 2013, in respect of road construction products in Ireland subject to the exclusions set out in S.I. No. 225 of 2013, European Union (Construction Products) Regulations 2013.

Table 0/1: Abbreviations

Abbreviation	Meaning
AMD	Amendment to British Standard
BS	British Standard
CP	British Standard Code of Practice
EN	European Standard
IS	Irish Standard
NSAI	National Standards Authority of Ireland
ISO	International Organization for Standardization
SI	Statutory Instrument
AASHTO	American Association of State Highway and Transportation Officials
AISI	American Iron and Steel Institute
ASTM	American Society for Testing and Materials
BBA	British Board of Agrément
BRE	Building Research Establishment
BSI	British Standards Institute
HSA	Health and Safety Authority
HMSO/TSO	Her Majesty's Stationery Office/The Stationary Office
ILAB	Irish Laboratory Accreditation Board
NAMAS	National Measurement Accreditation Service
NRA	National Roads Authority
RPII	Radiological Protection Institute of Ireland
TRL	Transport Research Laboratory
RCD	Road Construction Detail
NG	Notes for Guidance on the Specification for Road Works
SRW	Specification for Road Works
AAV	Aggregate Abrasion Value
ASR	Alkali Silica Reaction
CBM	Cement Bound Material
CBR	California Bearing Ratio
FTD	Flat Traffic Delineator
MCV	Moisture Condition Value
PC	Portland Cement
PFA	Pulverised-fuel Ash
PRD	Percentage Refusal Density
PSV	Polished Stone Value
PVC	Polyvinyl Chloride
MDP	Medium Density Polyethylene
RHS	Rectangular Hollow Section
CHS	Circular Hollow Section
SMC	Saturation Moisture Content
UPVC	Unplasticised Polyvinyl Chloride

Abbreviation	Meaning
XLPE	Cross-Linked Polyethylene
ggbs	ground granulated blast furnace slag
mc	moisture content
omc	optimum moisture content
mdft	minimum dry film thickness (of paint)
dft	dry film thickness
DC	Direct Current

Table 0/2: Definitions, Symbols and Abbreviations specific to Clause 006

Abbreviation	Meaning
AVCP	Assessment and Verification of Constancy of Performance. The method for assessing the conformity of construction products to harmonised technical specifications including the amount of involvement from a notified body.
CPR	Construction Products Regulation
CPD	Construction Products Directive
DoP	Declaration of Performance Information about the performance of the construction product in relation to the essential characteristics contained in harmonised technical specifications.
FPC	Factory production control. The documented, permanent and internal control of production in a factory, in accordance with the relevant harmonised technical specification.
hEN	Harmonised European Standard

Table 0/3: Equivalent terms between CPR and CPD

CPR	CPD
System of Assessment and Verification of Constancy of Performance (AVCP)	System of attestation of conformity
Declaration of Performance (DoP)	Declaration of Conformity
Basic Requirements for Construction Works (BRCW)	Essential Requirements
Essential characteristics	Characteristics
Determination of product type	Initial type-testing

Symbols and abbreviations not covered above shall be as per the applicable European Standard



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