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Transport Infrastructure Ireland

# TII Publications

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## Specification for Works Series 000 - Introduction

**CC-SPW-00010**  
October 2023

## About TII

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

## About TII Publications

TII maintains an online suite of technical publications, which is managed through the TII Publications website. The contents of TII Publications is clearly split into 'Standards' and 'Technical' documentation. All documentation for implementation on TII schemes is collectively referred to as TII Publications (Standards), and all other documentation within the system is collectively referred to as TII Publications (Technical).

## Document Attributes

Each document within TII Publications has a range of attributes associated with it, which allows for efficient access and retrieval of the document from the website. These attributes are also contained on the inside cover of each current document, for reference.

<b>TII Publication Title</b>	<i>Specification for Works Series 000 - Introduction</i>
<b>TII Publication Number</b>	<i>CC-SPW-00010</i>

<b>Activity</b>	<i>Construction &amp; Commissioning (CC)</i>	<b>Document Set</b>	<i>Standards</i>
<b>Stream</b>	<i>Specification for Works (SPW)</i>	<b>Publication Date</b>	<i>October 2023</i>
<b>Document Number</b>	<i>00010</i>	<b>Historical Reference</b>	<b>Series 000</b>

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## TII Publications



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<b>Set:</b>	Standards

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## Contents

1. Introduction .....	1
2. Terms and Abbreviations .....	2
3. Appendices .....	3
4. Standards and Other Reference Documents .....	4
5. Thickness of Material and Tolerances.....	5
6. Construction Products .....	6

**Updates to TII Publications resulting in changes to  
Specification for Works Series 000 - Introduction CC-SPW-00010**

**Date:** October 2023

**Page No:**

**Section No:**

**Amendment Details:**

Clause 6.11 Environmental Product Declarations

- a) A new clause added providing clarification on the application of CC-SPW-00900 requirement for Environmental Product Declarations for bituminous mixtures.

# Contents Table

<b>1. Introduction</b> .....	<b>1</b>
1.1 Introduction .....	1
1.2 Use of the Specification for Works (SPW) .....	1
<b>2. Terms and Abbreviations</b> .....	<b>2</b>
<b>3. Appendices</b> .....	<b>3</b>
<b>4. Standards and Other Reference Documents</b> .....	<b>4</b>
<b>5. Thickness of Material and Tolerances</b> .....	<b>5</b>
<b>6. Construction Products</b> .....	<b>6</b>
6.1 General .....	6
6.2 Harmonised Technical Specifications .....	6
6.3 Harmonised European Standards (hEN) .....	6
6.4 European Assessment Documents (EAD) .....	6
6.5 Assessment and Verification of Constancy of Performance (AVCP) .....	6
6.6 Factory Production Control (FPC) .....	7
6.7 Declaration of Performance (DoP) .....	7
6.8 CE Marking .....	7
6.9 Market Surveillance .....	7
6.10 Competent National Authority .....	7
6.11 Environmental Product Declarations .....	8

# 1. Introduction

## 1.1 Introduction

The Specification for Works (SPW) in TII Publications (Standards) is published as a collective group of documents under the Construction and Commissioning activity within the TII Publications system, and in addition to this CC-SPW-00010 - Introduction to the Specification for Works, the collective group contains a number of parts (previously series) which refer to specific work disciplines.

## 1.2 Use of the Specification for Works (SPW)

All documents and drawings contained in the following streams within the TII Publications (Standards) system are considered mandatory, unless a document or drawing has no relevance to the design, construction or maintenance of that particular scheme;

- Specification for Works (SPW)
- Standard Construction Details (SCD)

The omission or amendment of any applicable mandatory requirement within the documents or drawings in these groups shall only be allowed under an Approved Departure from Standards, in accordance with GE-GEN-01005 – Departures from Standards and Specifications.

## **2. Terms and Abbreviations**

Unless specifically defined otherwise the definitions of terms used in the SPW and associated documents are those in BS 6100, Glossary of Building and Civil Engineering Terms.

Abbreviations are in accordance with the recommendations given in BS ISO 31. Abbreviations listed in Table 0/1 have the meanings shown therein.

### **3. Appendices**

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.

The Numbered Appendices 1/1 onwards shall only be used to extend the information in the SPW, Tables or Figures and NOT to change them. Where the Contract requires new methods or special requirements these shall only be introduced by Additional or Substitute Clauses in Appendix 0/1 or by minor alterations in Appendix 0/2.

The omission or amendment of any applicable mandatory requirement within the SPW documents or SCD drawings shall only be allowed under an Approved Departure from Standards.



## **4. Standards and Other Reference Documents**

The SPW refers to many Irish, British, European and International Standards and other reference documents.

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.

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 SPW.

Notification of this SPW has complied with the procedure outlined in Directive 98/34/EC.

## **5. Thickness of Material and Tolerances**

Unless stated to the contrary, the thickness of material described shall mean the finished or compacted thickness.

The requirements for tolerances, where necessary, are incorporated in the SPW, on the Drawings and by reference in the publications stated in the SPW.

## **6. Construction Products**

### **6.1 General**

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 Transport Infrastructure Ireland (TII) funded schemes (for the construction, maintenance and/or improvement of national roads) must comply with the CPR. This requirement applies throughout all parts of the SPW, where a hEN is applicable.

TII, 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.

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.

### **6.2 Harmonised Technical Specifications**

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.

### **6.3 Harmonised European Standards (hEN)**

Harmonised European Standards (hENs) provide assessment methods and performance requirements for construction products. The specific product requirements listed in this SPW are derived from the hENs and referenced in the particular parts of the SPW where applicable.

### **6.4 European Assessment Documents (EAD)**

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/x>.

### **6.5 Assessment and Verification of Constancy of Performance (AVCP)**

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 parts of the SPW.

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

## **6.6 Factory Production Control (FPC)**

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 SPW for further details. For products other than hot bituminous mixtures, AVCP refers to both production and installation.

## **6.7 Declaration of Performance (DoP)**

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.

## **6.8 CE Marking**

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 parts of this SPW and Appendices.

It is the responsibility of the Designer to ensure that the performance levels required for the Contract have been clearly identified in accordance with all relevant parts of the TII Publications (Standards), including this SPW.

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.

## **6.9 Market Surveillance**

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.

## **6.10 Competent National Authority**

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, trading as TII, 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.

## 6.11 Environmental Product Declarations

The requirement to provide an Environmental Product Declaration for bituminous mixtures, as specified in Clause 1.7, CC-SPW-00900 Specification for Works – Road Pavements - Bituminous Materials, shall not be applied pending revision of the CPR, as referenced in Clause 6.1 above. However, EPDs for bituminous mixtures may be voluntarily provided until the revised CPR is published.

**Table 0/1 Abbreviations**

<b>Abbreviation</b>	<b>Meaning</b>
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
TAB	Technical Assessment Bodies
EAD	European Assessment Documents
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
TII	Transport Infrastructure Ireland
TRL	Transport Research Laboratory
SCD	Standards Construction Detail in TII Publications (Standards)
GSW	Guidance on Specification for Works in TII Publications (Standards)
SPW	Specification for Works in TII Publications (Standards)

Abbreviation	Meaning
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
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 European Assessment Documents**

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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