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Construction products: Assessment of release of dangerous substances - Concept of horizontal testing procedures in support of requirements under the CPD

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NSAI
1 Swift Square,
Northwood, Santry
Dublin 9

T +353 1 807 3800
F +353 1 807 3838
E standards@nsai.ie

W **NSAI.ie**

Sales:
T +353 1 857 6730
F +353 1 857 6729
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TECHNICAL REPORT

RAPPORT TECHNIQUE

TECHNISCHER BERICHT

CEN/TR 16098

November 2010

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English Version

Construction products: Assessment of release of dangerous substances - Concept of horizontal testing procedures in support of requirements under the CPD

Produits de construction - Evaluation de l'émission de substances dangereuses - Concept des méthodes d'essai horizontales à l'appui des exigences de la DPC

Bewertung der Freisetzung von gefährlichen Substanzen aus Bauprodukten - Evaluierung von horizontalen Ansätzen zur Bewertung der möglichen Freisetzung von gefährlichen Substanzen aus Bauprodukten im Rahmen von Anforderungen aus der Bauproduktenrichtlinie

This Technical Report was approved by CEN on 7 September 2010. It has been drawn up by the Technical Committee CEN/TC 351.

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Foreword

This document (CEN/TR 16098:2010) has been prepared by Technical Committee CEN/TC 351 “Construction products: Assessment of release of dangerous substances”, the secretariat of which is held by NEN.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

The European Construction Products Directive (CPD) [1] enables the free trade of construction products that are fit for their intended use on the Single European Market. In addition to the requirements traditionally embedded in construction law, such as stability, fire protection and safety in use, it specifically refers to hygiene, health and the environment (Essential Requirement No. 3, "ER 3"). To implement ER 3, at the beginning of the year 2005 the European Commission issued Mandate M/366 "Development of horizontal standardised approaches relating to dangerous substances under the Construction Products Directive – emissions to indoor air, soil, surface water and groundwater". The mandate envisages the development of horizontal test and assessment methods by the European Committee for Standardisation (CEN), while the specific requirements for construction products will still be defined nationally by the individual Member States.

This report has been drafted under the work item ´Technical Report 2 (TR 2) of the Business plan[1] of CEN/TC 351 in response to Mandate M/366[2]. This report describes a horizontal approach, which can be applied to testing any substances and construction products covered by the Construction Products Directive (CPD). It is anticipated that the methods and procedures described in the report will also fit into the requirements of the future Construction Products Regulation [2], although this issue is outside the scope of this report[3].

To assess the feasibility of a common horizontal approach for testing emissions from construction products, the report investigates in general terms the range of construction products covered by the CPD, their intended uses, the state of the art of the relevant test procedures, and the report also makes proposals on how to fit this knowledge into a testing structure. This report addresses release of regulated dangerous substances to soil, surface water and groundwater (excluding drinking water as it is addressed elsewhere) and emission of regulated dangerous substances into indoor air. It takes into account relevant information that had become available by the end of 2009 through the activities in the working groups and task groups of CEN/TC 351 as well as the guidance provided by the European Commission.

This document is intended to present to a wider public, including the product TCs, the EC and the SCC, a general overview of the results achieved so far in CEN/TC 351 concerning horizontal testing for ER3 and the context of this work under M/366. The document describes broadly, how ER3 can be implemented under the CPD in future. Background information to this Technical Report is given in a reference [4]. Another Technical Report (TR 4, WI 00351004) commissioned under M/366 will give more detailed guidance for the selection and integration of the recommended horizontal product testing protocols on dangerous substances into hEN and ETAs. At the moment not all details of the implementation concept have yet been addressed in CEN/TC 351. The remaining questions can only be successfully addressed after the validation stage.

In cases where in the text reference is made to "Product TCs", also EOTA WG’s are meant where appropriate.

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1 See CEN/TC 351 N 0026 and N 0022 (available in Internet under: http://www2.nen.nl/cmsprod/groups/public/documents/bestand/223307.pdf).

2 See CEN/TC 351 N 004.

3 See RESOLUTION 73 taken by CEN/TC 351 (CEN/TC 351 N 0151^{rev}).
Subject: Scope of CEN/TC 351 work in relation to CPD.
CEN/TC 351 thanks the European Commission for confirmation that the scope of the CEN/TC 351 work programme should only cover the existing CPD and the in-use phase of construction products.
The decision was taken by unanimity.

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1 Scope

This Technical Report (TR), taking into account the state of the art in the Member States, identifies the role of testing in the assessment of construction products in view of possible emissions and makes recommendations on the testing procedures. This Technical Report reviews in accordance with the experience already gained, the basis for deciding whether the use of horizontal test method standards for construction products is practicable and/or necessary in order to implement obligations arising from the Construction Products Directive (CPD).

The time limit for all information CEN/TC 351/TG 2 has been able to consider is set to be 31 December 2009.

This Technical Report provides recommendations for complete testing procedures in the overall framework of the CPD according to the methods for the Attestation of Conformity (AoC).

2 List of abbreviations

In addition to the terms and definitions listed in CEN/TC 351 N 0218 (under development), in this document the following abbreviations are used.

AoC	Attestation of Conformity
CEN	Comité Européen de Normalisation (European Committee for Standardization)
CEN/TC	CEN Technical Committee
CGLT	Compacted Granular Leach test
CPD	Construction Products Directive
DNPH	2,4-dinitrophenylhydrazine
DOM	Dissolved Organic Matter
ER 3	Essential Requirement 3 "Hygiene, health and the Environment" of the CPD
ETA	European Technical Approval
ETAG	European Technical Approval Guideline
FPC	Factory Production Control
hEN	harmonized European Standard
ID	Interpretative Document
ITT	Initial Type Testing
L/A	Liquid (volume) to Area (surface) Ratio
L/S	Liquid (volume) to Solid (mass) Ratio
NPD	No Performance Determined
MS	Member States

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