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English Version

## Laminate floor coverings - Underlays - Specification, requirements and test methods

Revêtements de sol stratifiés - Sous-couches -  
Spécifications, exigences et méthodes d'essai

Laminatböden - Verlegeunterlagen - Spezifikationen,  
Anforderungen und Prüfverfahren

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EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

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## Foreword

This document (CEN/TS 16354:2013) has been prepared by Technical Committee CEN/TC 134 “Resilient, textile and laminate floor coverings”, the secretariat of which is held by NBN.

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## 1 Scope

This Technical Specification specifies test methods for the determination of the technical characteristics of underlays under laminate floor coverings. It includes minimum performance requirements for the underlay-flooring system to give satisfactory service and to encourage the consumer to make an informed choice. It also specifies requirements for marking and packaging.

Underlays pre-attached to the laminate flooring coverings are not covered by this Technical Specification.

Underlays for laminate floor coverings intended for use in electrostatically sensitive areas like computer rooms, etc., are not covered by this Technical Specification.

## 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 717-1, *Wood-based panels - Determination of formaldehyde release - Part 1: Formaldehyde emission by the chamber method*

EN 717-2, *Wood-based panels - Determination of formaldehyde release - Part 2: Formaldehyde release by the gas analysis method*

EN 822, *Thermal insulating products for building applications - Determination of length and width*

EN 823, *Thermal insulating products for building applications - Determination of thickness*

EN 824, *Thermal insulating products for building applications - Determination of squareness*

EN 825, *Thermal insulating products for building applications - Determination of flatness*

EN 826, *Thermal insulating products for building applications - Determination of compression behaviour*

EN 1264-3, *Water based surface embedded heating and cooling systems - Part 3: Dimensioning*

EN 1606, *Thermal insulating products for building applications - Determination of compressive creep*

EN 1815, *Resilient and textile floor coverings - Assessment of static electrical propensity*

EN 12086, *Thermal insulating products for building applications - Determination of water vapour transmission properties*

EN 12311-2, *Flexible sheets for waterproofing - Determination of tensile properties - Part 2: Plastic and rubber sheets for roof waterproofing*

EN 12664, *Thermal performance of building materials and products - Determination of thermal resistance by means of guarded hot plate and heat flow meter methods - Dry and moist products of medium and low thermal resistance*

EN 12667, *Thermal performance of building materials and products - Determination of thermal resistance by means of guarded hot plate and heat flow meter methods - Products of high and medium thermal resistance*

EN 13238, *Reaction to fire tests for building products - Conditioning procedures and general rules for selection of substrates*

EN 13329, *Laminate floor coverings - Elements with a surface layer based on aminoplastic thermosetting resins - Specifications, requirements and test methods*

EN 13501-1:2007+A1:2009, *Fire classification of construction products and building elements - Part 1: Classification using data from reaction to fire tests*

EN 13793:2003, *Thermal insulating products for building applications - Determination of behaviour under cyclic loading*

EN 14909, *Flexible sheets for waterproofing - Plastic and rubber damp proof courses - Definitions and characteristics*

EN ISO 717-1, *Acoustics - Rating of sound insulation in buildings and of building elements - Part 1: Airborne sound insulation (ISO 717-1:2013)*

EN ISO 717-2, *Acoustics - Rating of sound insulation in buildings and of building elements - Part 2: Impact sound insulation (ISO 717-2:2013)*

EN ISO 868:2003, *Plastics and ebonite - Determination of indentation hardness by means of a durometer (Shore hardness) (ISO 868:2003)*

EN ISO 1923, *Cellular plastics and rubbers - Determination of linear dimensions (ISO 1923)*

EN ISO 10140-2, *Acoustics - Laboratory measurement of sound insulation of building elements - Part 2: Measurement of airborne sound insulation (ISO 10140-2)*

EN ISO 10140-3, *Acoustics - Laboratory measurement of sound insulation of building elements - Part 3: Measurement of impact sound insulation (ISO 10140-3)*

EN ISO 10140-5:2010, *Acoustics - Laboratory measurement of sound insulation of building elements - Part 5: Requirements for test facilities and equipment (ISO 10140-5)*

EN ISO 11925-2:2010, *Reaction to fire tests - Ignitability of products subjected to direct impingement of flame - Part 2: Single-flame source test (ISO 11925-2)*

EN ISO 16000-9, *Indoor air - Part 9: Determination of the emission of volatile organic compounds from building products and furnishing - Emission test chamber method (ISO 16000-9)*

### 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

#### 3.1

##### **laminate floor covering**

floor covering with a surface layer consisting of one or more thin sheets of a decorative material (usually paper), impregnated with aminoplastic thermosetting resins (usually melamine) or impregnated and surfaced with an acrylate and/or methacrylate resin

#### 3.2

##### **underlay**

layer placed between the subfloor and the floor covering to impart specific properties

Note 1 to entry: Underlays for laminate flooring can be principally divided into four main classes:

a) synthetic underlays:

- 1) cellular (foam) (e.g. PE, PP, PO, EPS, polyurethane, etc., -based);