



**NSAI**  
Standards

Standard Recommendation  
S.R. CEN/TS 16526:2013

Sandwich boards for furniture (SWB-F) -  
Factory made products - Definition,  
classification and test methods for  
determination of performance  
characteristics

## S.R. CEN/TS 16526:2013

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard – national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation - recommendation based on the consensus of an expert panel and subject to public consultation.

SWIFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

*This document replaces:*

*This document is based on:*  
CEN/TS 16526:2013

*Published:*  
21 November, 2013

This document was published under the authority of the NSAI and comes into effect on:  
21 November, 2013

**ICS number:**

79.060.01

**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  
W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

---

ICS 79.060.01

English Version

**Sandwich boards for furniture (SWB-F) - Factory made products  
- Definition, classification and test methods for determination of  
performance characteristics**

Panneaux sandwichés pour meubles (SWB-F) - Produits  
manufacturés - Définition, classification et méthodes d'essai  
pour la détermination des propriétés fonctionnelles

Sandwichplatten für Möbel (SWB-F) - Werkmäßig  
hergestellte Produkte - Definition, Klassifizierung und  
Prüfverfahren zur Bestimmung der Leistungseigenschaften

This Technical Specification (CEN/TS) was approved by CEN on 15 June 2013 for provisional application.

The period of validity of this CEN/TS is limited initially to three years. After two years the members of CEN will be requested to submit their comments, particularly on the question whether the CEN/TS can be converted into a European Standard.

CEN members are required to announce the existence of this CEN/TS in the same way as for an EN and to make the CEN/TS available promptly at national level in an appropriate form. It is permissible to keep conflicting national standards in force (in parallel to the CEN/TS) until the final decision about the possible conversion of the CEN/TS into an EN is reached.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

<b>Contents</b>	<b>Page</b>
Foreword.....	4
<b>1</b> <b>Scope</b> .....	<b>5</b>
<b>2</b> <b>Normative references</b> .....	<b>5</b>
<b>3</b> <b>Terms and definitions</b> .....	<b>6</b>
<b>4</b> <b>Classification</b> .....	<b>9</b>
4.1 <b>General</b> .....	<b>9</b>
4.2 <b>Classification according to board lay-up</b> .....	<b>9</b>
4.3 <b>Classification according to surface appearance</b> .....	<b>9</b>
4.4 <b>Classification according to conditions of use</b> .....	<b>9</b>
4.5 <b>Classification according to application purposes</b> .....	<b>9</b>
<b>5</b> <b>Symbols</b> .....	<b>10</b>
5.1 <b>General</b> .....	<b>10</b>
5.2 <b>Symbols related to conditions of use</b> .....	<b>10</b>
5.3 <b>Symbols related to specific applications</b> .....	<b>10</b>
5.4 <b>Combination of symbols for identification of sandwich boards</b> .....	<b>10</b>
<b>6</b> <b>Conditioning and test conditions</b> .....	<b>10</b>
<b>7</b> <b>Sampling, preparation and handling of test pieces and expression of test results</b> .....	<b>11</b>
7.1 <b>General requirements</b> .....	<b>11</b>
7.2 <b>Testing of SWB-F in combination with auxiliary material(s) or after execution of additional processing steps</b> .....	<b>12</b>
7.3 <b>Test piece size</b> .....	<b>12</b>
7.4 <b>Determination of dimensions of test pieces</b> .....	<b>12</b>
7.5 <b>Expression of test results</b> .....	<b>13</b>
<b>8</b> <b>Test methods</b> .....	<b>13</b>
8.1 <b>General guideline on the description and use of test methods</b> .....	<b>13</b>
8.2 <b>Physical properties</b> .....	<b>13</b>
8.2.1 <b>Determination of board dimensions</b> .....	<b>13</b>
8.2.2 <b>Moisture content</b> .....	<b>13</b>
8.2.3 <b>Apparent density and mass per unit area</b> .....	<b>14</b>
8.2.4 <b>Linear expansion due to changes in relative humidity</b> .....	<b>14</b>
8.2.5 <b>Behaviour under humidity variations in successive uniform climates</b> .....	<b>14</b>
8.2.6 <b>Moisture resistance</b> .....	<b>14</b>
8.3 <b>Mechanical properties</b> .....	<b>16</b>
8.3.1 <b>Flexural properties</b> .....	<b>16</b>
8.3.2 <b>Surface soundness</b> .....	<b>18</b>
8.3.3 <b>Compressive properties perpendicular to the plane of the board</b> .....	<b>18</b>
8.3.4 <b>Impact resistance</b> .....	<b>21</b>
8.3.5 <b>Shear strength</b> .....	<b>22</b>
8.4 <b>Properties relevant to processing and to performance in use</b> .....	<b>23</b>
8.4.1 <b>General</b> .....	<b>23</b>
8.4.2 <b>Integrity of board edges</b> .....	<b>24</b>
8.4.3 <b>Quality of edge banding</b> .....	<b>24</b>
8.4.4 <b>Load bearing capacity of fasteners</b> .....	<b>30</b>
8.4.5 <b>Shear resistance of a grooved board</b> .....	<b>33</b>
8.5 <b>Formaldehyde emission</b> .....	<b>34</b>
<b>9</b> <b>Marking</b> .....	<b>34</b>

<b>10</b>	<b>Test report</b> .....	<b>34</b>
	<b>Annex A</b> (normative) <b>Test methods</b> .....	<b>36</b>
	<b>Annex B</b> (informative) <b>Characterization of sandwich boards for different applications in furniture manufacturing</b> .....	<b>48</b>
	<b>Bibliography</b> .....	<b>51</b>

## **Foreword**

This document (CEN/TS 16526:2013) has been prepared by Technical Committee CEN/TC 112 “Wood-based panels”, the secretariat of which is held by DIN.

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.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to announce this Technical Specification: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

**SAFETY STATEMENT** — Persons using this document should be familiar with the normal laboratory practice, if applicable. This document does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user to establish appropriate safety and health practices and to ensure compliance with any regulatory conditions.

**ENVIRONMENTAL SAFETY**— It is understood that some of the material permitted in this standard may have negative environmental impact. As technological advantages lead to better alternatives for these materials, they will be eliminated from this standard to the extent possible. At the end of the test, it is recommended that the user of the standard takes care to carry out an appropriate disposal of the wastes, according to local regulation.

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

- 
- [Looking for additional Standards? Visit Intertek Inform Infostore](#)
  - [Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation](#)
-