

Unilin Flooring BV
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BELGIEN

Dresden, 15 December 2011
70-em/pe

Test report Order No. 271325

Customer: Unilin Flooring BV
Ooigemstraat 3
8710 WIELSBEKE
BELGIEN

Date of order: 22 September 2011

Order: Testing of 3-layer parquet for CE-labelling

Institution: EPH – Laboratory Surface Testing

Engineer in charge: Dipl.-Ing. (FH) M. Peter



Dr.-Ing. R. Emmler
Head of Laboratory Surface Testing

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1 Task

The Development and Examination Laboratory for Wood Technology Ltd. (EPH) was instructed by Unilin Flooring / Belgium to carry out selected tests of 3-layer parquet for CE-labelling according to EN 14342.

2 Test material

The customer has sent one variant of 3-layer parquet (arrival at the EPH-laboratory: 13 October 2011).

3-layer parquet, oak one strip taupe grey oak top layer, HDF middle layer and spruce substrate

Dimension: 1151 mm x 142 mm x 13 mm

3 Test performance

3.1 Determination of the formaldehyde emission according to the test chamber method

The determination of the formaldehyde emission was carried out according to the test chamber method DIN EN 717-1 during the period from 15.11.2011 until 12.12.2011.

Four pieces of the parquet with the dimension 280 mm x 200 mm x thickness were jointed back to back and the edges were sealed. In each case, 2 of those samples with a total surface of 0,225 m² were put into the 0,225 m³ test chamber.

The formaldehyde emission was determined at the following conditions:

- Test start: 17.11.2011
- Temperature: 23 °C ± 0,5 K
- Relative air humidity (45 ± 3) % rH
- Air flow velocity 0,3 m/s

The detection limit of the applied method is 0,01 ppm formaldehyde (1 ppm = 1,24 mg HCHO/m³).

3.2 Determination of the PCP content

The determination of the PCP content was carried out according to CEN/TR 14823 in connection with the institute's standard IHD-W-409 by gas chromatography and ECD-detection subsequent to extraction of the material.

Quantification was made using external standards.

The detection limit of the analysis method is 0,1 mg/kg.

3.3 Determination of the anti-skid properties

The determination of the anti-skid properties was carried out according to CEN/TS 15676 with a Portable Skid Resistance Tester SRT 5800.

3.4 Determination of the thermal resistance according to EN 12664

The determination of thermal resistance was carried out according to EN 12664.

The tested parquet was categorised as an material, which is rectangular layered to the heat flow. The determination of the thermal resistance was carried out according to this categorisation. For determination of the thermal resistance a two-plate-device "TLP 900-H" was used.

The samples were stored in a climate of 23 °C and 50 % rH, until mass stability.

Directly after the storage, the specimens were tested.

4 Results

4.1 Formaldehyde emission according to the test chamber method

Formaldehyde emission in:	
mg/m ³	ppm
0,04 (648 h)	0,03

4.2 PCP-content

PCP content in mg / kg [ppm]
n. d. (< d. l.)

n. d. = not detectable

d. l. = detection limit

4.3 Anti-skid properties

Estimated sliding pendular value according to CEN/TS 15676 (USRV)
40

4.4 Determination of the thermal performance

Thermal conductivity in W/(m ² K)	Thermal resistance R in (m ² K)/W
0,110	0,121*


* The requirement of $R \leq 0.15 \text{ (m}^2\text{K)/W}$ for floor heating suitability of materials, which was fixed by the German Federal Association Radiant Panel Heating, was fulfilled by the tested variant.

5 Evaluation

The tested variant of parquet can be classified regarding to several properties according to the CE-labelling (EN 14342) as follows:

Property	Result	Declaration according to EN 14342
Formaldehyde emission according to EN 717-1	0,03 ppm	class E1
PCP content	undetectable	not to declare
Anti-skid properties according to CEN/TS 15676*	USRV 40	USRV 40*
Thermal conductivity according to EN 12664	0,110 W/(m*K)	0,11 W/(m*K)

* If this sliding pendular value declared, shall be specified explicitly as a conformance document
EN 14342: 2005 + A1: 2008


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Engineer in charge