



Formaldehyde emission 0.225 m³ chamber test

Method	EN 717-1:2004, "Wood-based panels – Determination of formaldehyde release – Part 1: Formaldehyde emission by the chamber method"		
Chamber Size	0.225 m ³		
Temp.	23 ± 0.5°C		
R.H.	45 ± 3%		
Air Exchange Rate	1 / h		
Loading Factor	1 m ² / m ³		
Size of test specimens	Four pieces 0.280 x 0.200 x 0.013 m. In accordance with EN 14342:2005, the emission was measured only from the face. The pieces were put together back to back two and two. Total exposed area: 0.225 m ²		
Edge Sealing	All edges were sealed		
Tongue-and-Groove joint	1.12 m		
Sample			
Type and identification	3 layer parquet (13 mm) with lacquered surface. Core layer: Spruce, pine. Top layer: Oak.		
Internal reference	1		
Producer	AB Gustaf Kährs, Nybro		
Date of arrival	April 5, 2013		
Glue/hardener system	1271/2551, 100:10	Glue spread	155 g/m ²
Pressing information	94 °C, 100 sec, 1.4 MPa	Test period	May 15-28, 2013
Test Result			
Steady-state emission value	0.01 mg formaldehyde / m ³ air. See note 1.		
Test duration	333 hours		

NOTES

- In order to determine the steady state concentration 2 analyses in the beginning and end of a period of 14 days have been made. As the 2 measurements all were <0.01 mg/m³, the test was stopped and, as stated in EN 717-1, the result given as 0.01 mg/m³. No curve has been drawn.
- The measurement uncertainty is 15 % (including a coverage factor of 2).
The evaluation of the uncertainty is based on the principles given in *The Guide to the Expression of Uncertainty in Measurement*, 1993 (GUM) and has been made according to SP Rapport 2000:17 (see report 02 AA 032-rev 1).
- According to EN 14342:2005 (Wood flooring) and EN 13986:2002 (Wood based panels), the requirement for formaldehyde class E1 is ≤ 0.124 mg/m³.

This report may not be reproduced other than in full, except with the prior written approval of the issuing laboratory.

Report: 13 F3 018
Project nr: 3327-13, IFS 10756
Customer: Thomas Witten
Company: AB Gustaf Kährs, Box 805 382 28 Nybro
Distribution: Niclas Berg
Primary data: Formaldehyd 376
Samples: Unused samples are stored for one month after the date of report if nothing else is agreed.


Date: 2013-06-05

Pages: 1

Analytical Services
Casco Adhesives AB
Box 11538
SE-100 61, Stockholm,
Sweden

Street address:
Sickla Industriväg 6
SE-131 54, Nacka

Author:
Tel: +46 8 743 41 02
Fax: +46(0)8 642 83 99
Kjell.c.hellstrom@akzonobel.com


Kjell Hellström
Responsible


Olle Paulson
Approved by

Organisationsnr: 556004-5311