



RAPPORT

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REPORT issued by an Accredited Laboratory

I339
ISO/IEC 17025

FORMALDEHYDE EMISSION 40 L CHAMBER TEST

METHOD	Analyscentrum SOP-KEMI-055 equivalent to JAS MAFF, Notification No. 235, for structural glued laminated timber, February 27, 2003		
Chamber size	40 l		
Temperature	20 ± 1°C		
Loading factor	450 cm ² /40 l = 1.125 m ² /m ³		
Edge sealing	All cut edges are sealed immediately after cutting		
Conversion coefficient	1/3.75		

SAMPLE

Type and identification	Glue laminated log aihio 118x198 (MÅ)		
Producer	LAMECO LHT OY		
Received from	Helena Eerola		
Arrival date	December 22, 2004		
Glue	Cascomin 1240	Glue spread	260 g/m ²
Hardener	Cascomin 2540	Mixing ratio (G:H)	-
Manufactured	October 7-11, 2004		
Cutting of test piece	December 27, 2004		
Conditioned (sealed bag 20°C)	December 27-28, 2004		
Date of testing	December 28-29, 2004		
Sample size	7.7 x 17.3 x 11.8 cm		
Number of glue lines	1	Exposed glue line	15.4 cm

TEST RESULT

Formaldehyde emission (mg/l)	0.2 (0.17, 0.15)
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NOTES

- The average background value in an empty chamber is 0.009 mg/l. The test result given above has been corrected for this.
- The formaldehyde emission can be compared with the following emission classes for glued laminated beams in Japan:
 - F☆☆☆☆: ≤ 0.3 mg/l (average), ≤ 0.4 mg/l (maximum)
 - F☆☆☆: ≤ 0.5 mg/l (average), ≤ 0.7 mg/l (maximum)
 - F☆☆: ≤ 1.5 mg/l (average), ≤ 2.1 mg/l (maximum)
 - F☆S: ≤ 3.0 mg/l (average), ≤ 4.2 mg/l (maximum)
- The measurement uncertainty for an FIII beam is 18 % (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 030).
- The determination limit of the method is 0.07 mg/l, which corresponds to a corrected value of 0.02.

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Samples will be stored for one month after the date of report if nothing else is agreed.

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