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Analysis of Emission of VOC and Formaldehyde from Laminated Suspended Ceiling Panels

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lwf/twi/hbs

1. Summary

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Assignment: Analysis of emission of Volatile Organic Compounds (VOCs) and Formaldehyde from Laminated Suspended Ceiling Panels according to République Française, Ministére de l'écologie du développement durable, des transports et du lodgement: DECREE no 2011-321 of 23rd March 2011.

The test material was received 2011.12.08 packed in cardboard.

Testing: From the material samples two test specimens were cut, placed back to back and all edges sealed with aluminium tape. The chamber testing was initiated 2011.12.14 and completed 2012.01.11.

Test Method ISO 16000-9: Indoor Air – Part 9: Determination of the emission of volatile organic compounds from building products and furnishing - Emission test chamber method.

Test Result: The concentration of VOCs and aldehydes measured after 28 days and calculated as ceiling in a model room of 30 m^3 with an air change rate of 0.5 h^{-1} and with a material load of 12 m^2

Laminated Suspended Ceiling Panels µg/m³		**Requirements fulfilled**
Formaldehyde	2	A+ (<10)
Acetaldehyde	2	A+ (<200)
Toluene	Not detected	A+ (<300)
Tetrachloroethylene	Not detected	A+ (<250)
Xylene	Not detected	A+ (<200)
1,2,4-Trimethylbenzene	Not detected	A+ (<1000)
1,4-Dichlorobenzene	Not detected	A+ (<60)
Ethylbenzene	Not detected	A+ (<750)
2-Butoxyethanol	Not detected	A+ (<1000)
Styrene	Not detected	A+ (<250)
TVOC	8	A+ (<1000)

The results of the individual VOCs are shown on page 6.

The result fulfils the requirements according to criteria A+.

Results from the testing and statement of the applied methods are stated on pages 4-7 and concern the tested specimens only. Extracts from the report may only be published, if the laboratory has approved the extract.

Date/place: 2012.01.24, Danish Technological Institute, Indoor Environment, Taastrup
Revised 2012.04.11. This report replaces all previous for this sample

Lis Winther Funch
Test responsible

Thomas Witterseh
Co-reader