Emission Classification of Building Materials

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EMISSION CLASS FOR BUILDING MATERIAL

M1

The aim of the emission classification

The aim of the classification is to enhance the development and use of low-emitting building materials.

The emission classification of building materials is part of the Classification of Indoor Climate 2000, which serves the design and construction of healthier and more comfortable buildings. The classification presents requirements for materials used in ordinary workspaces and residences.

Criteria for emission class M1

The emission classification of building materials has three emission classes M1, M2 and M3.

M1-labelled materials have to fulfil the following criteria at the age of 4 weeks:

Emissions

TVOC	<0,2	mg/m²h *
Formaldehyde	<0,05	mg/m²h
Ammonia	<0,03	mg/m²h
Carcinogenic compounds	<0,005	mg/m²h **

Sensory evaluation
   The material is not odorous.
   Dissatisfaction with odour shall be below 15 %.***

Furthermore, plasters and tiling products, leveling agents, putty, mastics, fillers, screeds and renders shall not contain casein.

   * A minimum of 70% of the compounds shall be identified.
   ** Carcinogenic compounds belonging to category 1 of the IARC monographs (IARC 1987)
   *** The result of sensory evaluation shall be $\geq$ + 0,1.

Materials that have not been tested shall not be granted a classification label. However, design guidance provided in the Classification of Indoor Climate 2000 places no restrictions on the use of uncoated brick, stone, ceramic tile, glass and metal surfaces as well as board and log surfaces made of wood (Finnish wood). The VOC emissions of fresh wood may nevertheless exceed the limit value of emission class M1.

M1-labels are granted by the Building Information Foundation RTS

The classification has been developed by the Building Information Foundation RTS and the Finnish Society of Indoor Air Quality and Climate.

The first M1-label was granted in 1996 and in November 2003 there were over 700 M1-labelled products from over 90 companies. The largest product groups are plastic sheet flooring, paints and varnishes, plasters and leveling agents, mineral wools, gypsum boards and adhesives.

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