

Notification of change to criterion 6. Emissions of VOC to the indoor environment

Date from which changes apply: 2023-11-01

Date of notification: 2023-05-25

Byggvarubedömningen has decided to introduce changes in criterion 6. Emissions of VOC to the indoor environment. Assessments that are affected by the criterion change and that have been published before the change comes into force will be re-assessed on the current criterion in connection with the update.

Background

Emissions of hazardous substances from building materials to indoor air can affect our health. Therefore, it is important to control goods/products' emissions of these so-called volatile organic compounds.




Today, we have an emission criterion divided into two sub-criteria with a focus on certificates, reports, and their content limits. We have chosen to develop a new criterion which is based on content limits for the total amount of organic compounds emitted from a product/material. Emissions of volatile organic compounds are measured for individual substances and/or for the total amount of these. Health-related target values for emissions are established within the EU on which we base the new criterion.

Criterion 6. Emissions of VOC to the indoor environment

When does the criterion apply?

The criterion includes goods/products that contain organic material/organic substances, and which are on the inside of the vapor barrier and thus are in contact with the indoor air, for example: wallboards, floor coverings, sealing layers, paints, wallpaper, glue, and putty. Permanently installed furnishings such as cupboards and doors are also subject to emissions requirements.

Criterion 6.

 Recommended	 Accepted	 To be avoided
<p>The following applies¹:</p> <ul style="list-style-type: none"> • TVOC² ≤ 300 µg/m³, • EU-LCI-values are not exceeded³, • R ≤ 1⁴ • Formaldehyde < 0,06 mg/m³ (60 µg/m³) air⁵ • Carcinogenic volatile organic compounds, category 1A and 1B < 0,001 mg/m³ air (1 µg/m³)⁵ <p>Goods made entirely of stone, brick, tile, clinker, cement mosaic, glass, metal, including industrially powder-coated metal hardened at high temperature, 100% untreated wood, meets the level of Recommended without analytical data.</p>	<p>The following applies¹:</p> <ul style="list-style-type: none"> • TVOC² ≤ 1000 µg/m³ • EU-LCI- values are not exceeded³ • Formaldehyde < 0,06 mg/m³ (60 µg/m³) air⁵ • Carcinogenic volatile organic compounds, category 1A and 1B < 0,001 mg/m³ air (1 µg/m³)⁵ 	<p>One or more of the following applies¹:</p> <ul style="list-style-type: none"> • TVOC² > 1000 µg/m³ or, • EU-LCI-values are exceeded³ • Formaldehyde ≥ 0,06 mg/m³ air (60 µg/m³)⁵ • Carcinogenic volatile organic compounds, category 1A and 1B ≥ 0,001 mg/m³ air (1 µg/m³)⁵ <p>Or:</p> <ul style="list-style-type: none"> • Valid documentation is missing

1. Approved documentation is an analysis report showing that the requested Total Volatile Organic Compounds (TVOC) content is not exceeded, or a certificate that meets the requirement for TVOC content. EU-LCI values must be stated. The attached document must show emissions of TVOC measured after 28 days. Testing must have been carried out in accordance with standard EN 16516, alternatively according to standard method ISO 16000-9 in combination with standard methods ISO 16000-6 and ISO 16000-3. A certificate must be valid at the time of application. A certificate without an end date or a report must not be older than 8 years at the time of application. It must be stated that the certificate or alternatively the report applies to the assessed item/product, i.e., a clear connection between the document and the goods/product is required.
2. TVOC = Total Volatile Organic Compounds.
3. EU-LCI- values are health-related guidelines for emissions from construction products that are developed jointly within the EU. (LCI=Lowest Concentration of Interest)
4. R-value is the sum of values (measured emission/EU-LCI value) for individual substances.
5. The assessment levels Accepted and Recommended meets The EU Taxonomy's requirements for analysis of building materials, the level To be avoided does not.

Examples of certificates that can be used

Recommended	Accepted
EMICODE EC 1 PLUS Indoor Air Comfort Gold GUT (textile rugs)	Indoor Air Comfort M1 / M2 (In order to comply with the EU Taxonomy's requirements regarding the content of formaldehyde, a complete emissions report is needed.) Danish Indoor Climate Label (class 1) Danish Indoor Climate Label (class 2)

Referenses

EU Taxonomy:

<https://eur-lex.europa.eu/legal-content/SV/TXT/PDF/?uri=CELEX:32020R0852&from=SV>

ISO-standards:

ISO 16000-3: <https://www.sis.se/produkter/miljo-och-halsoskydd-sakerhet/luftkvalitet/omgivningsluft/SS-ISO-16000-3>

2022/ISO 16000-6: <https://www.sis.se/en/produkter/environment-health-protection-safety/air-quality/ambient-atmospheres/ss-iso-16000-62021/>

ISO 16000-9: <https://www.sis.se/en/produkter/environment-health-protection-safety/air-quality/ambient-atmospheres/sseniso1600092006ac2008/>

EN-standards:

EN 16516: <https://www.sis.se/en/produkter/environment-health-protection-safety/air-quality/ambient-atmospheres/ss-en-165162017a12020/>

EU-LCI-values:

https://single-market-economy.ec.europa.eu/sectors/construction/eu-lci-subgroup/eu-lci-values_en