

# **Byggvarubedömningen's criteria regarding content and life-cycle aspects**

Version 4.0

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Valid from 1 July 2016

## Amendments from the previous version relate to:

- Updated life-cycle criteria, sections 1-6.
- Requirements of declaring product content in accordance with Building Product Declaration eBVD2015. Applies to both articles and chemical products.
- Updated weighting of the impact of life-cycle criteria on the overall assessment (described on page 21).
- Changed concentration limit for criterion 0.3 a) Reproduction toxic. From 0.1% to 0.3% in accordance with CLP.
- Criterion 0.17 d) Environmentally hazardous. Concerning substances classified as environmentally hazardous category 3, H412 is introduced with a concentration limit for the level Recommended (this was touched upon previously only in connection with aggregations).
- Criterion 0.16 Volatile organic substances. Substances with classification H304 are not to be aggregated together with substances with other classifications/characteristics that this criterion could relate to.

## General Information

*Byggvarubedömningen (Building Material Assessment, BVB) is a business association consisting of Sweden's major property owners and building contractors. The association assesses articles and chemical products based on environmental and health aspects. By using a common assessment standard and an easy-to-use web-based system to search for environmentally assessed products, our ambition is to see all future building structures being constructed and managed using only environmentally assessed products. BVB considers the assessment to be a way of taking responsibility for what is built and used in our buildings and left for future generations.*

BVB's web-based system contains environmental assessments of the most commonly used products in the real estate sector. These assessments are mainly based on the chemical content of products, but also on a number of life-cycle criteria. More information can be found under each assessment category.

BVB bases its assessments on documentation submitted by product suppliers, but also by users (customers). The documentation required for an assessment includes the following:

- Building Product Declaration (or equivalent, in which the declaration of content is specified in accordance with eBVD2015 regulations, obligatory for both products and chemical products)
- Environmental Product Declaration (EPD) (affects ability to achieve the level "recommended")
- Material Safety Data Sheet (only obligatory for chemical products)
- Producer certificate of substance content and concentrations (obligatory only for products that strive to achieve the level - "Recommended")
- Certificates involving sustainable forestry (affecting assessments towards the level Recommended for products containing wood raw material)
- Documentation on CE marking/certificates of survival of the RoHS directive (2011/65/EU) (obligatory only for electronic products)
- Emission report/certificates concerning emissions to the indoor environment (only relevant for products and materials intended for indoor use)
- Other product-specific information is encouraged both for the assessment's sake and for the benefit of customers, for example:
  - Product datasheet
  - Declaration of performance (DoP)
  - Installation instructions
  - Operating and maintenance instructions

More information can be found later in this document and at [www.byggvarubedomningen.se](http://www.byggvarubedomningen.se).

## Byggvarubedömningen's assessment criteria

### 0. Declaration of content

The assessment criteria are mainly based on classification limits for substances according to the REACH (chemical legislation) and the CLP regulation, plus possible additions that are specified more thoroughly under the respective criterion.

#### **Overall information:**

Product content is assessed in terms of its chemical properties, not its potential classification in mixtures.

Concentration limits specified under each criterion refer to the individual substance. Aggregation of substances only occurs if it is specified that this is to be done.

If a substance is covered by the specific concentration limits under the CLP Regulation, Annex VI, these have to be achieved to reach the “accepted” level and a factor of 10 lower is required for the “recommended” level.

Recommended	Accepted	To be Avoided	Information/Reference
<b>0.0 a) Documentation</b>			
In addition to the documentation required level accepted: Producer Certificate of product content and levels according to Byggvarubedömningen template.	Building Product Declaration or equivalent is submitted with properly filled information about the content of the product. Accounting must correspond to requirements in accordance with the instructions for e-BVD2015.  Also: Safety data sheet for chemical products.	Information about the content of the product is incomplete.	

Recommended	Accepted	To be Avoided	Information/Reference
<b>0.0 b) Documentation for the products covered by the RoHS directive</b>			Applies only to products covered by the RoHS directive.
CE Marking EU/EC declaration of conformity is submitted.	CE Marking EU/EC declaration of conformity is submitted.	Marking or declaration is missing.	
<b>0.1 a) Carcinogens</b> Substances with properties according for carcinogenicity category 1A or 1B (H350)			
$\leq 0.01 \%$	$< 0.1 \%$	$\geq 0.1 \%$	
<b>0.1 b) Carcinogens</b> Substances with properties according for carcinogenicity category 2 (H351)			
$\leq 0.1 \%$	$< 1 \%$	$\geq 1 \%$	
<b>0.2 a) Mutagen</b> Substances with properties according the germ cell mutagenicity category 1A or 1B (H340)			
$\leq 0.01 \%$	$< 0.1 \%$	$\geq 0.1 \%$	
<b>0.2 b) Mutagen</b> Substances with properties according the germ cell mutagenicity category 2 (H341)			
$\leq 0.1 \%$	$< 1 \%$	$\geq 1 \%$	
<b>0.3 a) Reproductive toxins</b> Substances with properties according the Reproductive toxicity, category 1A or 1B (H360)			
$\leq 0.03 \%$	$< 0.3 \%$	$\geq 0.3 \%$	

Recommended	Accepted	To be Avoided	Information/Reference
<b>0.3 b) Reproductive toxins</b> Substances with properties according the Reproductive toxicity, category 2 (H361)			
≤ 0.3 %	< 3 %	≥ 3 %	
<b>0.4 May cause harm to breast-fed babies</b> Substances with properties according the Reproductive toxicity, category Effects on or via lactation (H362).			
≤ 0.03 %	< 0.3 %	≥ 0.3 %	
<b>0.5 Endocrine disruptors</b>			
≤ 0.01% of individual substance Substances included in CAT 1, CAT 2 or CAT 3 according to the EU EDC Database or EDC substances in SIN-list from Chemsec2.	< 0.1% of individual substance Substances included in CAT 1 or CAT 2 according to the EU EDC Database.	≥ 0.1% of individual substance Substances included in CAT 1 or CAT 2 according to the EU EDC Database1.	1. <a href="http://ec.europa.eu/environment/chemicals/endocrine/strategy/being_en.htm">http://ec.europa.eu/environment/chemicals/endocrine/strategy/being_en.htm</a> 2. <a href="http://www.chemsec.org/">http://www.chemsec.org/</a>

Recommended	Accepted	To be Avoided	Information/Reference
<b>0.6 Persistent, bioaccumulating and toxic organic substances (PBT)</b>			Substances with a half-life of one of the following: <ul style="list-style-type: none"> <li>• &gt; 60 days into marine waters</li> <li>• &gt; 40 days in freshwater</li> <li>• &gt; 180 days in marine sediments</li> <li>• &gt; 120 days in freshwater sediment</li> <li>• &gt; 120 days in soil</li> </ul> AND BCF (Bio Concentration Factor) > 2000 AND Chronic NOEC (No Effect Concentration) with any of the following: <ul style="list-style-type: none"> <li>• &lt; 0.01 mg / l</li> <li>• &lt; 30 mg / kg diet</li> <li>• CMR</li> <li>• classified as H372, H373 or H362</li> </ul> Criteria in acc. with PRIO ( <a href="http://www.kemi.se">www.kemi.se</a> )
$\leq 0.01$ %	$< 0.1$ %	$\geq 0.1$ %	
<b>0.7 Very persistent and very bioaccumulating organic substances (vPvB)</b>			Substances with a half-life <ul style="list-style-type: none"> <li>&gt; 60 days in seawater, or</li> <li>&gt; 60 days in freshwater, or</li> <li>&gt; 180 days in marine sediments, or</li> <li>&gt; 180 days in freshwater sediment, or</li> <li>&gt; 180 days in soil, and</li> </ul> BCF (Bio Concentration Factor) > 5000 Criteria in acc. with PRIO ( <a href="http://www.kemi.se">www.kemi.se</a> )
$\leq 0.01$ %	$< 0.1$ %	$\geq 0.1$ %	
<b>0.8 Pure substance or compound of lead</b>			
Chemical products: Pure lead (Pb) or it's compounds must not be present irrespective of concentration (zero tolerance) Other products: $\leq 0.01$ %	$< 0.1$ %	$\geq 0.1$ %	

Recommended	Accepted	To be Avoided	Information/Reference
<b>0.9 Pure substance or compound of mercury</b>			* In accordance with Swedish legislation SFS 1998:944 there is a total ban against mercury. The ban applies to products where mercury <i>has been used or added intentionally</i> . Low concentrations of mercury that are not intentionally added in any stage thus fall outside the prohibition. By low concentrations BVB means a presence of <2.5 mg/kg. The concentration limit is set in accordance with regulatory requirements for soil quality so that accepted products will not add to background levels when used or deposited (e.g.: sewage sludge according to SFS 1998:944 §20). The same concentration limit is also found in the general guidelines for less sensitive land use (MKM) from The Swedish Environmental Protection Agency.
Prohibited Mercury (or compound of mercury) or it's compounds must not be present irrespective of concentration (zero tolerance). OR Contamination $\leq 0.25$ mg/kg*.	Prohibited Mercury (or compound of mercury) has not been used in, or added to, the product. OR Contamination < 2.5 mg/kg*.	Present Mercury (or compound of mercury) has been used in, or added to, the product. OR Contamination $\geq 2.5$ mg/kg*.	
<b>0.10 Pure substance or compound of cadmium</b>			
Chemical products: Pure cadmium or its compounds must not be present irrespective of concentration (zero tolerance) Other products: $\leq 0.001$ %	< 0.01 %	$\geq 0.01$ %	
<b>0.11 Harmful to the ozone layer</b>			
Substances with properties according to the classification category Hazardous to the ozone layer (EUH 059, H420)			
$\leq 0.01$ %	< 0.1 %	$\geq 0.1$ %	
<b>0.12 a) Allergenic</b>			
Substances with properties according to the hazard classes Respiratory sensitization (H334)			
$\leq 0.02$ %	< 0.2 %	$\geq 0.2$ %	

Recommended	Accepted	To be Avoided	Information/Reference
<b>0.12 b) Allergenic</b> Substances with properties according to the hazard classes Skin sensitizer (H317)			
$\leq 0.1 \%$	$< 1 \%$	$\geq 1 \%$	
<b>0.13 Acute toxicity</b> Substances with properties according to the hazard class acute toxicity category 1, 2 or 3 (H300, H310, H330, H301, H311 or H331)			* Each relevant route should be considered. ATE <sub>mix</sub> calculated according to the CLP Regulation (EC) No 1272/2008, Annex 1, Section 3.
conc $\leq 0.01\%$ of substances in Category 1 conc $\leq 0.1\%$ of substances in Category 2 conc $\leq 1\%$ of substances in Category 3	Starts from ATE value of the mixture: * ATE <sub>mix</sub> > 300 (oral exposure) ATE <sub>mix</sub> > 1000 (dermal) ATE <sub>mix</sub> > 2500 (inhalation gases) ATE <sub>mix</sub> > 10 (inhalation, vapors) ATE <sub>mix</sub> > 1.0 (inhalation of dust / mist)	Starts from ATE value of the mixture: * ATE <sub>mix</sub> $\leq 300$ (oral exposure) ATE <sub>mix</sub> $\leq 1000$ (dermal) ATE <sub>mix</sub> $\leq 2500$ (inhalation gases) ATE <sub>mix</sub> $\leq 10$ (inhalation, vapors) ATE <sub>mix</sub> $\leq 1.0$ (inhalation of dust / mist)	
<b>0.14 a) Toxicity after single exposure</b> Substances with properties according to the hazard class of causes damage to organs after single exposure (Specific target organ toxicant single exposure, STOT-SE) category 1 (H370)			
$\leq 0.1 \%$	$< 1 \%$	$\geq 1 \%$	
<b>0.14 b) Toxicity after single exposure</b> Substances with properties according to the hazard class of causes damage to organs after single exposure (Specific target organ toxicant single exposure, STOT-SE) category 2 (H371)			
$\leq 1 \%$	$< 10 \%$	$\geq 10 \%$	
<b>0.15 a) Toxicity after repeated exposure</b> Substances with properties according to the hazard class of causes damage to organs after repeated exposure (Specific target organ toxicant repeated exposure, STOT-RE) category 1 (H372)			
$\leq 0.1 \%$	$< 1 \%$	$\geq 1 \%$	

Recommended	Accepted	To be Avoided	Information/Reference
<b>0.15 b) Toxicity after repeated exposure</b> Substances with properties according to the hazard class of causes damage to organs after repeated exposure (Specific target organ toxicant repeated exposure, STOT-RE) category 2 (H373)			
$\leq 1 \%$	$< 10 \%$	$\geq 10 \%$	
<b>0.16 Volatile organic compounds</b> Substances which have an initial boiling point $< 250^{\circ}\text{C}$ measured at a standard pressure of 101.3 kPa, and which meet the criteria for any of the indications of danger:  Deadly, poisonous or harmful if inhaled (H330, H331, H332), May be fatal if swallowed and enters airways (H304), May cause drowsiness or dizziness (H336), May cause damage to organs (H371), May cause damage to organs through prolonged or repeated exposure (H373).			The initial boiling point is set based on Directive 2004/42 / EC. Concentration limits are set on the basis of industry agreement with the paint, varnishes and adhesives.
$\leq 1 \%$	$< 10 \%$	$\geq 10 \%$	
<b>0.17 a) Environmentally hazardous</b> Substances with properties according to the hazard class Hazardous to the aquatic environment, Acute, category 1 (H400)			* Concentration Limit depends on the M value (Annex VI of the CLP Regulation (EC) No 1272/2008).
$\leq 2.5\%$ of individual substance, only if $M = 1$ *	$< 25\%$ , only if $M = 1$ **	$\geq 25\%$ , only if $M = 1$ **	** Concentration Limit depends on the M value (Annex VI of the CLP Regulation (EC) No 1272/2008). Aggregation of the substances occurs when several substances with classification are present according to the CLP Regulation (EC) No 1272/2008, Annex 1, Section 4.
<b>0.17 b) Environmentally hazardous</b> Substances with properties according to the hazard class Hazardous to the aquatic environment, Chronic, category 1 (H410)			* Concentration Limit depends on the M value (Annex VI of the CLP Regulation (EC) No 1272/2008).
$\leq 0.25\%$ of individual substance. only if $M = 1$ *	$< 2.5 \%$ . only if $M = 1$ **	$\geq 2.5 \%$ . only if $M = 1$ **	** Concentration Limit depends on the M value (Annex VI of the CLP Regulation (EC) No 1272/2008). Aggregation of the substances occurs when several substances with classification are present according to the CLP Regulation, which also includes Chronic 2, H411.

Recommended	Accepted	To be Avoided	Information/Reference
<b>0.17 c) Environmentally hazardous</b> Substances with properties according to the hazard class Hazardous to the aquatic environment, Chronic, category 2 (H411)			* Aggregation of the substances occurs when several substances with classification are present according to the CLP Regulation (EC). Which also includes H412 and H413.
≤ 2,5 %	< 25 %*	≥ 25 %*	
<b>0.17 d) Environmentally hazardous</b> Substances with properties according to the hazard class Hazardous to the aquatic environment, Chronic, category 3 (H412)			
≤ 2.5 % of individual substance	No concentration limit	No concentration limit	
<b>0.17 e) Environmentally hazardous</b> Substances with properties according to the hazard class Hazardous to the aquatic environment, Chronic, category 4 (H413)			
≤ 2.5 % of individual substance	< 25%	≥ 25 %	
<b>0.18 Potential PBT / vPvB</b>			Substances that fulfill the PRIO guide's criteria for potential PBT / vPvB substances. ( <a href="http://www.kemi.se">www.kemi.se</a> ).
< 0.1 %	No concentration limit	No concentration limit	
<b>0.19 Substances and substance groups of particular concern, according to Table 1 (see page 25)</b>			Includes arsenic compounds, halogenated organic compounds, organic tin compounds and biocides added to the products (surface treatment) in order to achieve an antibacterial effect.
Prohibited	No concentration limit	No concentration limit	

**1. Constituent materials and raw materials**

Recommended	Accepted	To be avoided	Information/Reference
<b>1.1 Renewable raw materials</b>			A renewable raw material is defined as a raw material that can be rapidly reproduced as new. A tree or sugar cane are examples of renewable raw materials; i.e. they are renewed in the foreseeable future.  The proportion of renewable raw materials is stated in the list of contents or is supplemented with information of a voluntary nature in the building product declaration.
≥ 50% renewable raw materials.	< 50% renewable raw materials  <b>OR</b>  Lack of data on renewable raw materials.		
<b>1.2 Proportion of recycled material</b>			The proportion of recycled material (also designated secondary material in the EPD) refers to material that has fulfilled the criteria for when waste ceases to be waste according to The Waste Framework Directive (2008/98/EC) and that has passed the consumer level. Accordingly, the criterion does not apply to recycled material from proprietary production.
Recycled materials ≥50%.	Recycled materials <50%  <b>OR</b>  Lack of data on recycled materials.		
<b>1.3 Sustainable wood raw material</b>			The criterion is relevant for products containing >2% wood raw material
Product made of a wood species from documented sustainable forestry.  FSC certificate or PEFC certificate for the product is available.	Product made of a wood species from forestry that lacks a sustainability certificate.	Wood species or origin in CITES appendix of endangered species.  Certificates cannot be provided (on request) for verifying legal felling.	

2. Manufacture of the product

Recommended	Accepted	To be avoided	Information/Reference
2.1 Emissions to air, water or land			Information is to be based on a verified Environmental Product Declaration (EPD). Information is to be provided during the production phase, refers to modules A1 to A3
<p>Data is reported about emissions (type of emission and amount per declared or functional unit) for environmental impact categories during the production phase.</p> <p>The data is to be based on a verified Environmental Product Declaration (EPD) according to EN 15804.</p>	<p>One of the below applies:</p> <ul style="list-style-type: none"> <li>• The data is based on a verified EPD that has not been prepared in accordance with EN 15804.</li> <li>• Data about emissions is partly reported.</li> <li>• The reported Data that is not based on a verified EPD.</li> <li>• Lacking Data on emissions.</li> </ul>		
2.2 Primary energy usage during the production phase			<p>The information for this criterion is to be based on a verified Environmental Product Declaration (EPD) according to EN 15804. The information pertains to the production phase, meaning modules A1 to A3 (sum total of the modules).</p> <p>* Definition in the Directive 2009/28/EC i.e. energy from renewable, non-fossil energy sources, namely wind energy, solar energy, aerothermal energy (heat from air), geothermal energy, hydrothermal energy (heat from water) and marine energy, hydropower, biomass (the biologically degradable part of products, waste and residual products with a biological origin), landfill gas, gas from sewage treatment plants and biogas.</p> <p>The biofuel may not include palm oil.</p> <p>** Valid documentation for the criterion is a certificate according to the Gold Standard. The climate-impacting emissions from the production phase corresponding to modules A1-A3 for the supplier's annual production of the building product, or Scope 3 in the Greenhouse Gas protocol, are to form the foundation for climate compensation.</p> <p>*** CCS technology or equivalent.</p>
<p>Renewable resources account for <math>\geq 50\%</math> of the primary energy used as energy carrier/fuel*.</p> <p><b>OR</b></p> <p>&gt;50% of the primary energy comes from non-renewable resources but &gt;50% of the climate-impacting emissions from the production phase are climate compensated** or are in some other way bound/stored*** and do not contribute to the net provision of carbon equivalents to the atmosphere.</p>	<p>The proportion of renewable energy and non-renewable energy is to be listed, but without any further specification of the use of primary energy during the production phase.</p> <p><b>OR</b></p> <p>Lack of information.</p>		

Recommended	Accepted	To be avoided	Information/Reference
<b>2.3 Electricity usage during production</b>			
≥50% of electricity usage comes from renewable energy sources*.	<50% of electricity usage comes from renewable energy sources*  <b>OR</b>  Lack of information.		Electricity certificates/value certificates from electricity suppliers can constitute vouchers as an alternative to information provided in EPD which in accordance with EN 15804.  * Definition in the Directive 2009/28/EC i.e. energy from renewable, non-fossil energy sources, namely wind energy, solar energy, aerothermal energy (heat from air), geothermal energy, hydrothermal energy (heat from water) and marine energy, hydropower, biomass (the biologically degradable part of products, waste and residual products with a biological origin), landfill gas, gas from sewage treatment plants and biogas.  The biofuel may not comprise palm oil.

3. Packaging

Recommended	Accepted	To be avoided	Information/Reference
<p>3.1 Packaging for distribution</p>			
<p>The product is delivered in bulk or completely without packaging.</p> <p><b>OR</b></p> <p>A returnable system for the packaging is provided. By returnable system is meant the reuse of the packaging. And that the packaging material is specified.</p>	<p>Packaging can be recycled or can be energy recovered.</p> <p><b>OR</b></p> <p>Lack of information about packaging.</p>		

4. The user phase			
Recommended	Accepted	To be avoided	Information/Reference
4.1 Leaching of substances with a potential impact on water quality			
<p>No contact with water in connection with the intended function, in respect of the surface layer there is/are a substance/substances or materials that could result in risks for leaching of substances with characteristics encompassed by BVB’s content criteria, or that are defined as particularly polluting substances or prioritized substances in accordance with the EU’s framework directive for water and 2013:19.*</p>	<p>Outdoor products such as posts, fences and grating with lesser contact with water whereby leaching can occur of substances with characteristics encompassed by BVB’s content criteria, or that are defined as particularly polluting substances or prioritized substances in accordance with the EU’s framework directive for water and HVMFS 2013:19*</p> <p>HVAC products such as tap water fittings, joints, valves, pipe bends and mixing valves that fulfill the 4MS requirements and alloys that come into contact with drinking water are included in the “MS positive list”. **</p> <p>There is documentation showing that the product meets Boverket’s proposed requirements for permissible leaching of lead.***</p>	<p>Roof, facade and dewatering systems, as well as water pipes, tanks and boilers, which come into contact with considerable amounts of water whereby leaching can occur of substances with characteristics encompassed by BVB’s content criteria, or that are defined as particularly polluting substances or prioritized substances in accordance with the EU’s framework directive for water and 2013:19.*</p> <p>HVAC products such as tap water fittings, joints, valves, pipe bends and mixing valves that do <u>not</u> fulfill the 4MS requirements. **</p> <p>The product does not meet Boverket’s proposed requirements for permissible leaching of lead.***</p>	<p>*Relevant for products in which copper and zinc can be leached, such as roofing and facade systems (could have an impact locally, so a location-specific risk assessment may be required), as can copper piping, heat exchangers and water boilers used in open systems (affect levels in sewage sludge).</p> <p>**For information concerning 4MS, see: <a href="https://www.umweltbundesamt.de/en/node/13888">https://www.umweltbundesamt.de/en/node/13888</a></p> <p>***The requirements pertain to HVAC products subject to Boverket’s Building Regulations (section 6:62), which are proposed to become legally binding on 1 Jan 2017.</p>

Recommended	Accepted	To be avoided	Information/Reference
<b>4.2. Energy usage</b>			The criterion is only relevant for products for which an energy-marking system exists. Applicable for light sources and light fittings, for example. Separate verification may be required. *For basic/advanced requirements, see <a href="http://www.upphandlingsmyndigheten.se">http://www.upphandlingsmyndigheten.se</a>
The product meets the procurement authority's requirement level "advanced requirements" in cases where such have been formulated for the product group*.	The product meets the procurement authority's requirement level "basic requirements" in cases where such have been formulated for the product group*.	The product does not meet the requirements for being accepted or marking is lacking for the relevant product types, for which energy marking is a requirement according to EU regulations.	

**5. Waste and demolition**

Recommended	Accepted	To be avoided	Information/Reference
<b>5.1 Reuse</b>			
Reuse is possible for $\geq 70\%$ of the product.*	One of the below applies: <ul style="list-style-type: none"> <li>• Reuse is possible for <math>\geq 70\%</math> of the product*</li> <li>• Information is lacking and cannot be derived from knowledge of the material</li> </ul>		* The assessment is based on the criteria for when waste ceases to be waste in the Waste Directive (2008/98/EC) and on the basis of what is practically feasible with current technology.
<b>5.2. Recycling</b>			
Materials recycling is possible for $\geq 70\%$ of the product*.	One of the below applies: <ul style="list-style-type: none"> <li>• Material recycling is only possible as filler for <math>\geq 70\%</math> of the product*</li> <li>• Energy recycling is possible for <math>\geq 70\%</math> of the product*</li> <li>• Materials recycling is not possible in connection with demolition but systems exist for recycling <math>\geq 70\%</math> of installation waste</li> </ul>	One of the below applies: <ul style="list-style-type: none"> <li>• The product cannot be material or energy recycled to <math>\geq 70\%</math>*</li> <li>• Information is lacking and cannot be derived from knowledge of the material</li> </ul>	*The assessment is based on the criteria for when waste ceases to be waste in the Waste Regulation (2011:927) and on the basis of what is practically feasible with current technology according to the Swedish Construction Federation's "Resource and waste management in construction and demolition". <a href="https://publikationer.sverigesbyggindustrier.se/sv/energi--miljo/resurs--och-avfallshantering-vid-byggand_860">https://publikationer.sverigesbyggindustrier.se/sv/energi--miljo/resurs--och-avfallshantering-vid-byggand_860</a>

Recommended	Accepted	To be avoided	Information/Reference
<b>5.3 Hazardous waste in use/building production</b>			
The product does not give rise to hazardous waste	The product gives rise to hazardous waste and information is available regarding special measures for protecting health and the environment.	One of the below applies: <ul style="list-style-type: none"> <li>• The product gives rise to hazardous waste but information is lacking regarding special measures for protecting health and the environment</li> <li>• Lack of or insufficient information about hazardous waste.</li> </ul>	
<b>5.4 Hazardous waste in demolition/dismantling</b>			
Product is not classed as hazardous waste at end-of-life.	Product or part of product is to be treated as electronic waste at end-of-life.	One of the below applies: <ul style="list-style-type: none"> <li>• Product is classed as hazardous waste at end-of-life.</li> <li>• Lack of or insufficient information about hazardous waste.</li> </ul>	

## 6. Emissions to indoor environment

The assessment regarding emissions applies only to relevant products for indoor use in the form of surface materials or applications that through emissions can reach the indoor air: wall boards, floor covering, sealing layers, paints, wallpapers, glue, filler, etc.

Recommended	Accepted	To be avoided	Information/Reference
<b>6.1 Documentation about emissions</b>			Emissions are to be measured according to a standard method such as ISO 16000-9 or ISO 16000-10 in combination with a standard testing method ISO-16000-11.
One of the below applies: <ul style="list-style-type: none"> <li>• Information is available about the emission rates of the five highest VOC peaks.</li> <li>• Goods made of stone, tiles, clinker, cement mosaic, glass or metal.</li> </ul>	Information about VOC is available.	Information about VOC is lacking.	
<b>6.2 Assessment of emissions</b>			*If it is apparent from the documentation that equivalent requirements are being met, other certificates or reports are also acceptable.
Requirements according to one of the following systems are being met*: <ul style="list-style-type: none"> <li>• EMICODE EC1 and EC1<sup>PLUS</sup></li> <li>• Blue Angel</li> <li>• M1 (RTS)</li> <li>• GUT</li> </ul>	Requirements according to one of the following systems are being met*: <ul style="list-style-type: none"> <li>• EMICODE EC2</li> <li>• AgBB</li> <li>• M2 (RTS)</li> </ul>	Does not meet requirements according to criteria for stated system.	

## BVB's weighting of criteria

Recommended	Accepted	To be avoided
<p>All of the following factors stated below must be met for the total assessment of <i>recommended</i>:</p> <ul style="list-style-type: none"> <li>• All content criteria are assessed as <i>recommended</i>.</li> <li>• No life-cycle criteria are assessed as <i>avoided</i>.</li> <li>• At least 50% of the life-cycle criteria relevant for the product are assessed as <i>recommended</i>.</li> </ul>	<p>All of the following factors stated below must be met for the total assessment as <i>accepted</i>:</p> <ul style="list-style-type: none"> <li>• No content criteria are assessed as <i>avoided</i>.</li> <li>• No life-cycle criteria are assessed as <i>avoided</i>.</li> </ul>	<p>If any of the factors stated below is/are met, the total assessment will be <i>avoided</i>.</p> <ul style="list-style-type: none"> <li>• One or more of the content criteria are assessed as <i>avoided</i>.</li> <li>• One or more of the life-cycle criteria are assessed as <i>avoided</i>.</li> </ul>

**Table 1 – Specially indicated substances and groups of substances**

To achieve an assessment of Recommended, none of the substances and groups of substances listed in the table may exist in the product. This is to be certified with a “Producer certificate of content of substances and concentrations”.

Substance Group / Substance	Example of properties
1. Arsenic and its compounds <sup>1</sup>	Tox, Harmful to the environment
2. Brominated flame retardants	Pot. PBT/vPvB, PBT/vPvB
3. PFOA (perfluorooctaneacids)	Persistent, Bioaccumulating, probable Repr
4. PFOS (perfluorooctane sulfonate)	Pot. PBT/vPvB, PBT/vPvB
5. Organotin compounds	Pot. PBT/vPvB, PBT/vPvB, Tox, Harmful to the environment
6. Biocides added to the products (surface treatment) in order to achieve a disinfectant or antibacterial effect	Tox, Harmful to the environment

<sup>1</sup> Arsenic, or arsenic compounds, should not have been added to the product. Such substances present as pollution in used raw material may not exceed 10 mg/kg. The concentration is set in accordance with regulatory requirements for soil quality so that accepted products will not add to background levels when used or deposited (e.g. sewage sludge according to SFS 1998:944 §20). The same concentration limit is also found in the overall guidelines for less sensitive land use (MKM) from the Swedish Environmental Protection Agency.