

# BYGGVARUBEDÖMNINGEN™

## Building Material Assessment Assessment Criteria

Approved by the Board of Directors

Date 2010-11-09

Building Material Assessment Criteria

Recommended	Accepted	To be Avoided – alternative must be explored	Information/Reference
<b>0 Declaration of content</b>			
<b>0.0 BASTA</b> --	<b>BASTA</b> Product that is registered in BASTA	<b>BASTA</b> --	<a href="http://www.bastaonline.se">www.bastaonline.se</a> Information about product being registered in BASTA and BASTA Beta is given but does not affect the assessment.
<b>0.1 Documentation</b> Certificate of substance content and levels exists <i>See Appendix 1 for criteria and list of specially focused substances.</i>	<b>Documentation</b> Certificate of substance content and levels does not exist.	<b>Documentation</b> Substance content information is incomplete.	
<b>0.2 Category 1 or 2 carcinogens (R45, R49)</b> ≤ 0.01 % of individual substance.	<b>Category 1 or 2 carcinogens (R45, R49)</b> 0.01 % < conc. < 0.1% of individual substance	<b>Category 1 or 2 carcinogens (R45, R49)</b> ≥ 0.1 % of individual substance	
<b>0.3 Category 3 carcinogen (R40)</b> ≤ 0.1 % of individual substance	<b>Category 3 carcinogen (R40)</b> 0.1 % < conc. < 1 % of individual substance	<b>Category 3 carcinogen (R40)</b> ≥ 1 % of individual substance	
<b>0.4 Category 1 or 2 mutagen (R46)</b> ≤ 0.01 % of individual substance	<b>Category 1 or 2 mutagen (R46)</b> 0.01 % < conc. < 0.1 % of individual substance	<b>Category 1 or 2 mutagen (R46)</b> ≥ 0.1 % of individual substance	
<b>0.5 Category 3 mutagen (R68)</b> ≤ 0.1 % of individual substance	<b>Category 3 mutagen (R68)</b> 0.1 % < conc. < 1 % of individual substance	<b>Category 3 mutagen (R68)</b> ≥ 1 % of individual substance	

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<p><b>0.6 Category 1 or 2 reproductive toxins</b> (R60 and/or R61)</p> <p>≤ 0.01 % of individual substance Specially focused substances according to Appendix 1: 2, 3, 4, 5</p>	<p><b>Category 1 or 2 reproductive toxins</b> (R60 and/or R63)</p> <p>0.01 % &lt; conc. &lt; 0.5 % of individual substance</p>	<p><b>Category 1 or 2 reproductive toxins</b> (R60 and/or R63)</p> <p>≥ 0.5 % of individual substance</p>	
<p><b>0.7 Category 3 reproductive toxins</b> (R62 and/or R63)</p> <p>≤ 0.1 % of individual substance</p>	<p><b>Category 3 reproductive toxins</b> (R62 and/or R63)</p> <p>0.1% &lt; conc. &lt; 5 % of individual substance</p>	<p><b>Category 3 reproductive toxins</b> (R62 and/or R63)</p> <p>≥ 5 % of individual substance</p>	
<p><b>0.8 May cause harm to breastfed babies</b>(R64)</p> <p>≤ 0.1 % of individual substance</p>	<p><b>May cause harm to breastfed babies</b> (R64)</p> <p>0.1 % &lt; conc. &lt; 1 % of individual substance</p>	<p><b>May cause harm to breastfed babies</b> (R64)</p> <p>≥ 1 % of individual substance</p>	
<p><b>0.9 Allergenic</b> with inhalation or skin contact (R42, R43)</p> <p>≤ 0.01 % of individual substance</p>	<p><b>Allergenic</b> with inhalation or skin contact (R42, R43)</p> <p>0.01 % &lt; conc. &lt; 1 % of individual substance</p>	<p><b>Allergenic</b> with inhalation or skin contact (R42, R43)</p> <p>≥ 1 % of individual substance</p>	
<p><b>0.10 Very high acute toxicity</b> by inhalation, skin contact and/or swallowing (R26, R27, R28)</p> <p>≤ 0.01 % Specially focused substances according to Appendix 1: 1, 5</p>	<p><b>Very high acute toxicity</b> by inhalation, skin contact and/or swallowing (R26, R27, R28)</p> <p>0.01 % &lt; conc. &lt; 1 %</p>	<p><b>Very high acute toxicity</b> by inhalation, skin contact and/or swallowing (R26, R27, R28)</p> <p>≥ 1 %</p>	

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<p><b>0.11 Very high acute toxicity;</b> danger of very serious irreversible effects through inhalation, skin contact or swallowing (R39 combined with R26, R27 and/or R28)</p> <p>≤ 0.01 % of individual substance Specially focused substances according to Appendix 1: 1, 5</p>	<p><b>Very high acute toxicity;</b> danger of very serious irreversible effects through inhalation, skin contact or swallowing (R39 combined with R26, R27 and/or R28)</p> <p>0.01 % &lt; conc. &lt; 1 % of individual substance</p>	<p><b>Very high acute toxicity;</b> danger of very serious irreversible effects through inhalation, skin contact or swallowing (R39 combined with R26, R27 and/or R28)</p> <p>≥ 1 % of individual substance</p>	
<p><b>0.12 Toxic</b> by inhalation, skin contact and/or swallowing (R23, R24, R25)</p> <p>≤ 0.01 % Specially focused substances according to Appendix 1: 1, 5</p>	<p><b>Toxic</b> by inhalation, skin contact and/or swallowing (R23, R24, R25)</p> <p>0.01 % &lt; conc. &lt; 25 %</p>	<p><b>Toxic</b> by inhalation, skin contact and/or swallowing (R23, R24, R25)</p> <p>≥ 25 %</p>	
<p><b>0.13 Toxic;</b> danger of very serious irreversible effects through inhalation, skin contact or swallowing (R39 combined with R23, R24 and/or R25)</p> <p>≤ 0.01 % of individual substance Specially focused substances according to Appendix 1: 1, 5</p>	<p><b>Toxic;</b> danger of very serious irreversible effects through inhalation, skin contact or swallowing (R39 combined with R23, R24 and/or R25)</p> <p>0.01 % &lt; conc. &lt; 10 % of individual substance</p>	<p><b>Toxic;</b> danger of very serious irreversible effects through inhalation, skin contact or swallowing (R39 combined with R23, R24 and/or R25)</p> <p>≥ 10 % of individual substance</p>	
<p><b>0.14 High chronic toxicity;</b> danger of serious damage to health by prolonged exposure through inhalation, skin contact or swallowing (R48 combined with R23, R24 and/or R25)</p> <p>≤ 0.01 % of individual substance Specially focused substances according to Appendix 1: 1, 5</p>	<p><b>High chronic toxicity;</b> danger of serious damage to health by prolonged exposure through inhalation, skin contact or swallowing (R48 combined with R23, R24 and/or R25)</p> <p>0.01 % &lt; conc. &lt; 10 % of individual substance</p>	<p><b>High chronic toxicity;</b> danger of serious damage to health by prolonged exposure through inhalation, skin contact or swallowing (R48 combined with R23, R24 and/or R25)</p> <p>≥ 10 % of individual substance</p>	

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<p><b>0.15 Volatile organic chemical substances;</b> Initial boiling point less than or equal to 250 °C measured at a standard pressure of 101.3 kPa as well as properties in accordance with the criteria for risk phrase R48 combined with R20 (Harmful: Danger of serious damage to health by prolonged exposure in contact with skin) or R20 (Harmful by inhalation) or R23 (Toxic by inhalation) or R65 (harmful: may cause lung damage if swallowed) or R67 (vapors may cause drowsiness and dizziness).</p> <p>≤ 1 %</p>	<p><b>Volatile organic chemical substances;</b> Initial boiling point less than or equal to 250 °C measured at a standard pressure of 101.3 kPa as well as properties in accordance with the criteria for risk phrase R48 combined with R20 (Harmful: Danger of serious damage to health by prolonged exposure in contact with skin) or R20 (Harmful by inhalation) or R23 (Toxic by inhalation) or R65 (harmful: may cause lung damage if swallowed) or R67 (vapors may cause drowsiness and dizziness).</p> <p>1 % &lt; conc. &lt; 10 %</p>	<p><b>Volatile organic chemical substances;</b> Initial boiling point less than or equal to 250 °C measured at a standard pressure of 101.3 kPa as well as properties in accordance with the criteria for risk phrase R48 combined with R20 (Harmful: Danger of serious damage to health by prolonged exposure in contact with skin) or R20 (Harmful by inhalation) or R23 (Toxic by inhalation) or R65 (harmful: may cause lung damage if swallowed) or R67 (vapors may cause drowsiness and dizziness).</p> <p>≥ 10 %</p>	<p>Concentration limits have been set based on industry agreements for paint, varnish and adhesives.</p>
<p><b>0.16 Very persistent and very bioaccumulating organic substances</b></p> <p>≤ 0.001 %</p> <p><i>Specially focused substances according to Appendix 1: 2, 3, 4, 5</i></p>	<p><b>Very persistent and very bioaccumulating organic substances</b></p> <p>0.001 % &lt; conc. &lt; 0,1 %</p>	<p><b>Very persistent and very bioaccumulating organic substances</b></p> <p>≥ 0.1 %</p>	<p>Substances with</p> <ol style="list-style-type: none"> <li>1) half-life &gt;60 days in marine water or freshwater or &gt;180 days in marine- or freshwater sediment or &gt;180 days in soil</li> </ol> <p><b>and</b></p> <ol style="list-style-type: none"> <li>2) BCF (Bio Concentration Factor) &gt;5000</li> </ol>
<p><b>0.17 Persistent, bioaccumulating and toxic organic substances</b></p> <p>≤ 0.001 %</p> <p><i>Specially focused substances according to Appendix 1: 2, 3, 4, 5</i></p>	<p><b>Persistent, bioaccumulating and toxic organic substances</b></p> <p>0.001 % &lt; conc. &lt; 0,1 %</p>	<p><b>Persistent, bioaccumulating and toxic organic substances</b></p> <p>≥ 0.1 %</p>	<p>Substances with</p> <ol style="list-style-type: none"> <li>1) Half-life &gt;60 days in marine water or &gt;40 days in freshwater or &gt;180 days in marine sediment or &gt;120 days in freshwater sediment</li> </ol> <p><b>and</b></p> <ol style="list-style-type: none"> <li>2) BCF (Bio Concentration Factor) &gt;2000</li> </ol> <p><b>and</b></p> <ol style="list-style-type: none"> <li>3) Chronic NOEC (No Effect Concentration) &lt;0,01 mg/l or 30 mg/kg food or classification T; R48 or X<sub>n</sub>; R48 or R64</li> </ol>

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<p><b>0.18 Pure substance or compound of cadmium in homogeneous material</b></p> <p><b>Chemical products:</b> <i>Pure cadmium or its compounds must not be present irrespective of concentration (zero tolerance)</i></p> <p><b>Other products:</b> ≤ 0.001 %</p>	<p><b>Pure substance or compound of cadmium in homogeneous material</b></p> <p>0.001 % &lt; conc. &lt; 0.01 %</p>	<p><b>Pure substance or compound of cadmium in homogeneous material</b></p> <p>≥ 0.01 %</p>	
<p><b>0.19 Pure substance or compound of lead in homogeneous material</b></p> <p><b>Chemical products:</b> <i>Pure lead (Pb) or it's compounds must not be present irrespective of concentration (zero tolerance)</i></p> <p><b>Other products:</b> ≤ 0.001 %</p>	<p><b>Pure substance or compound of lead in homogeneous material</b></p> <p>0.001 % &lt; conc. &lt; 0,1 %</p>	<p><b>Pure substance or compound of lead in homogeneous material</b></p> <p>≥ 0.1 %</p>	
<p><b>0.20 Pure substance or compound of mercury in homogeneous material</b></p> <p>Prohibited</p> <p>Mercury ( or compound of mercury) has not been used in, or added to, the product. Contamination ≤ 2,5 mg/kg*.</p>	<p><b>Pure substance or compound of mercury in homogeneous material</b></p> <p>Prohibited</p> <p>Mercury ( or compound of mercury) has not been used in, or added to, the product. Contamination 0,25 &lt; conc. &lt; 2,5 mg/kg*.</p>	<p><b>Pure substance or compound of mercury in homogeneous material</b></p> <p>Presence</p> <p>Mercury ( or compound of mercury) has not been used in, or added to, the product. Contamination ≥ 2,5 mg/kg*.</p>	
<p>* 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 &lt;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.</p>			

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<p><b>0.21 Harmful to the ozone layer;</b> Ozone Depletion Potential (ODP) &gt;0 (R59) ≤ 0.01 % of individual substance</p>	<p><b>Harmful to the ozone layer;</b> Ozone Depletion Potential (ODP) &gt;0 (R59) 0.01 % &lt; conc. &lt; 0.1 % of individual substance</p>	<p><b>Harmful to the ozone layer;</b> Ozone Depletion Potential (ODP) &gt;0 (R59) ≥ 0.1 % of individual substance</p>	
<p><b>0.22 Very toxic to aquatic organisms (R50)</b> ≤ 0,1 x “Concentration limit specified in Classification list**” Individual substance**. Specially focused substances according to Appendix 1: 1, 5</p>	<p><b>Very toxic to aquatic organisms (R50)</b> 0,1 x “Concentration limit specified in Classification list**” &lt; conc. &lt; “Concentration limit specified in Classification list**” Individual substance**.</p>	<p><b>Very toxic to aquatic organisms (R50)</b> ≥ “Concentration limit specified in Classification list**”. Individual substance**.</p>	<p>Concentration limits are set so that no products assessed as Recommended or Accepted are labeled with the danger symbols toxic or dangerous for the environment.</p>
<p>* Appendix VI, part 3, table 3.2 in Regulation (EC) No 1272/2008 of the European Parliament and of the Council **If the substance is not specified in the Classification list with concentration limit the content limit 25%, according to KIFS 2005:7, is applicable.</p>			
<p><b>0.23 Toxic to aquatic organisms;</b> toxic to aquatic organisms and may cause long-term adverse effects in the aquatic environment (R51/53) ≤ 0.1 % Specially focused substances according to Appendix 1: 1, 5</p>	<p><b>Toxic to aquatic organisms;</b> toxic to aquatic organisms and may cause long-term adverse effects in the aquatic environment (R51/53) 0.1 % &lt; conc. &lt; 25 %</p>	<p><b>Toxic to aquatic organisms;</b> toxic to aquatic organisms and may cause long-term adverse effects in the aquatic environment (R51/53) ≥ 25 %</p>	<p>Concentration limits are set so that no products assessed as Recommended or Accepted are labeled with the danger symbols toxic or dangerous for the environment</p>
<p><b>0.24 Environmentally hazardous,/long-term effects;</b> very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment (R50/53) ≤ 0,1 x “Concentration limit specified in Classification list**” Individual substance**. Specially focused substances according to Appendix 1: 1, 5</p>	<p><b>Environmentally hazardous,/long-term effects;</b> very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment (R50/53) 0,1 x “Concentration limit specified in Classification list**” &lt; conc. &lt; “Concentration limit specified in Classification list**” Individual substance**.</p>	<p><b>Environmentally hazardous,/long-term effects;</b> very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment (R50/53) ≥ “Concentration limit specified in Classification list**”. Individual substance**.</p>	<p>Concentration limits are set so that no products assessed as Recommended or Accepted are labeled with the danger symbols toxic or dangerous for the environment.</p>
<p>* Appendix VI, part 3, table 3.2 in Regulation (EC) No 1272/2008 of the European Parliament and of the Council **If the substance is not specified in the Classification list with concentration limit the content limit 2,5%, according to KIFS 2005:7, is applicable.</p>			

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<p><b>0.25 Environmentally hazardous/long-term effects;</b> may cause long-term adverse effects in the aquatic environment (R53)</p> <p>≤ 1 % Specially focused substances according to Appendix 1: 1, 5</p>	<p><b>Environmentally hazardous/long-term effects;</b> may cause long-term adverse effects in the aquatic environment (R53)</p> <p>1 % &lt; conc. &lt; 25 %</p>	<p><b>Environmentally hazardous/long-term effects;</b> may cause long-term adverse effects in the aquatic environment (R53)</p> <p>≥ 25 %</p>	<p>Concentration limits are set so that no products assessed as Recommended or Accepted are labeled with the danger symbols toxic or dangerous for the environment</p>
<p><b>0.26 Potential PBT / vPvB</b></p> <p>≤ 0.01 % of individual substance <i>Specially focused substances according to Appendix 1: 2, 3, 4, 5.</i></p>	<p><b>Potential PBT / vPvB</b></p> <p>--</p>	<p><b>Potential PBT / vPvB</b></p> <p>--</p>	<p>Criteria for potential PBT / vPvB according to PRIO (<a href="http://www.kemi.se">www.kemi.se</a>),</p>
<p><b>0.27 Endocrine disruptors</b></p> <p>≤ 0.01% of individual substance <i>Specially focused substances according to Appendix 1: 2, 3, 4, 5.</i></p>	<p><b>Endocrine disruptors</b></p> <p>0.01% &lt; conc. &lt; 0,1% of individual substance</p>	<p><b>Endocrine disruptors</b></p> <p>≥ 0,1% of individual substance</p>	<p>Group 1 according to EU “Candidate list of substances” Annex 1 of report “Towards the establishment of a priority list of substances for further evaluation of their role in endocrine disruption” European Commission DG ENV.</p>
<p><b>1. Used materials and raw materials (BPD 3: Chapter 5. Production phase)</b></p>			
<p><b>1.1 Documentation on used materials</b></p> <p>All raw materials and other inputs used for production are accounted for “cradle to gate” as required in BVD3</p> <p><b>or</b></p> <p>Information on raw materials completely filled in (in accordance with older version of BVD (EPD))</p>	<p><b>Documentation on used materials</b></p> <p>All raw materials and other inputs used for production are accounted for “gate to gate” as required in BVD3</p> <p><b>or</b></p> <p>Information on raw materials partially filled in</p>	<p><b>Documentation on used materials</b></p> <p>Information on raw materials is missing and cannot be obtained from declaration of content.</p>	<p><b>Mandatory information in BPD3</b></p> <p><b>Comment:</b> Documentation about content is a classification criteria for chemical content in the Swedish classification scheme “Miljöklassad Byggnad”</p>

Recommended	Accepted	To be Avoided – alternative must be explored	Information/Reference
<p><b>1.2 Renewable raw materials</b> ≥ 50% renewable raw materials</p>	<p><b>Renewable raw materials</b> ≥ 50% non-renewable raw materials with good access (sustainability ratio &lt; 1) <b>or</b> ≥ 50% non-renewable raw materials with <b>near</b> good access (sustainability ratio ≤ 2) <b>or</b> Non-renewable raw materials where data about sustainable use is missing but there is no data to indicate limited access.</p>	<p><b>Renewable raw materials</b> &gt;50% non-renewable raw materials with limited access (sustainability ratio &lt; 2)</p>	<p><b>Criteria in line with:</b></p> <ul style="list-style-type: none"> <li>National environment target “God bebyggd miljö (reduced use of non renewable resources)</li> </ul> <p><b>Criteria based on:</b> Azar (1996) – basis for definition of sustainable use. Guinée (2002) – basis for definition of renewable raw materials. In case data on re-newable raw materials are missing in BPD3, but can be obtained from declaration of content, the assessment will be based on data in declaration of content</p>
<p><b>1.3 Percentage recovered material</b> Recovered material &gt; 50%</p>	<p><b>Percentage recovered material</b> Recovered material &lt;50% <b>or</b> Criteria cannot be assessed since there is no information available about percentage recovered material</p>	<p><b>Percentage recovered material</b> --</p>	<p><b>Criteria in line with:</b></p> <ul style="list-style-type: none"> <li>Considerable environment impact, Kretsloppsrådet (2000)</li> <li>Priority area. Kretsloppsrådet (Environment program 2010)</li> <li>National environment target “Good built environment” (reduced use of non renewable resources)</li> </ul> <p><b>Comment</b> Information is not mandatory in BPD3, therefore the assessment <i>To be Avoided</i> cannot be given.</p>
<p><b>1.4 Sustainable wood</b> Item made from woods with documented sustainable forestry</p>	<p><b>Sustainable wood</b> Item made from woods where sustainability information is missing</p>	<p><b>Sustainable wood</b> --</p>	<p><b>Criteria in line with and based on:</b> Recommendations from World Wide Fund for Nature (WWF)</p> <p><b>Comment</b> Information is not mandatory in BPD3, therefore the assessment <i>To be Avoided</i> cannot be given.</p>
<p><b>2. Production (BPD3: Chapter 5 Production phase)</b></p>			

Recommended	Accepted	To be Avoided – alternative must be explored	Information/Reference
<p><b>2.1 Discharge to ground, water or air</b></p> <p>Information presented about discharge (type and amount)</p>	<p><b>Discharge to ground, water or air</b></p> <p>Information presented in part about discharge <b>or</b> No information about discharge</p>	<p><b>Discharge to ground, water or air</b></p> <p>--</p>	<p><b>Criteria in line with:</b></p> <ul style="list-style-type: none"> <li>• Considerable environment impact, Boverket (2009)</li> <li>• National environment target “Reduced climate impact”</li> </ul> <p><b>Comment</b> Information is not mandatory in BPD3, therefore the assessment <i>To be Avoided</i> cannot be given.</p>
<p><b>2.2 Energy consumption for production</b></p> <p>Complete information presented about energy consumption (type and amount)</p>	<p><b>Energy consumption for production</b></p> <p>Information presented in part about energy consumption <b>or</b> No information available about energy consumption</p>	<p><b>Energy consumption for production</b></p> <p>--</p>	<p><b>Criteria in line with:</b></p> <ul style="list-style-type: none"> <li>• Considerable environment impact, Boverket (2009)</li> <li>• National environment target “Reduced climate impact”</li> </ul> <p><b>Comment</b> Information is not mandatory in BPD3, therefore the assessment <i>To be Avoided</i> cannot be given.</p>
<p><b>2.3 Recovery of waste products</b></p> <p>Information presented about waste products (waste code, amount and proportion of material recovery and energy recovery)</p>	<p><b>Recovery of waste products</b></p> <p>Information presented in part about waste products <b>or</b> No information available about waste products</p>	<p><b>Recovery of waste products</b></p> <p>--</p>	<p><b>Criteria in line with:</b></p> <ul style="list-style-type: none"> <li>• Considerable environment impact, Boverket (2009)</li> </ul> <p><b>Comment</b> Information is not mandatory in BPD3, therefore the assessment <i>To be Avoided</i> cannot be given.</p>
<p><b>3. Distribution and packaging (BPD 3: Chapter 3. Product information and Chapter 6. Distribution of finished product)</b></p>			
<p><b>3.1 Transport in manufacturing</b></p> <p>Information presented about transports (types and proportions)</p>	<p><b>Transport in manufacturing</b></p> <p>Information presented in part about transports <b>or</b> No information available about transports</p>	<p><b>Transport in manufacturing</b></p> <p>--</p>	<p><b>Criteria in line with:</b></p> <ul style="list-style-type: none"> <li>• National environment target “Reduced climate impact”</li> <li>• Considerable environment impact, Boverket (2009)</li> </ul> <p><b>Comment</b> Information is not mandatory in BPD3, therefore the assessment <i>To be Avoided</i> cannot be given.</p>

Recommended	Accepted	To be Avoided – alternative must be explored	Information/Reference
<b>3.2 Country of final production</b> Information presented about country of final production	<b>Country of final production</b> No information available about country of final production.	<b>Country of final production</b> --	<b>Mandatory information in BPD3</b> <b>Criteria in line with:</b> <ul style="list-style-type: none"> <li>National environment target “Reduced climate impact”</li> <li>Considerable environment impact, Boverket (2009)</li> </ul> <b>Comment</b> Information enables consumers prioritizing of locally produced products.
<b>3.3 Packaging for distribution</b> Information presented about packaging <b>or</b> Transport in bulk and no packaging material is used	<b>Packaging for distribution</b> Information presented in part about packaging <b>or</b> No information available on packaging	<b>Packaging for distribution</b> --	<b>Criteria in line with:</b> <ul style="list-style-type: none"> <li>Priority area. Kretsloppsrådet (Environment program 2010)</li> </ul> <b>Comment</b> Information is not mandatory in BPD3, therefore the assessment <i>To be Avoided</i> cannot be given.
<i>(Former chapter 4. Building phase, PBD 3: Chapter 7 Building phase is not assessed since it deals with handling requirements)</i>			
<b>5. Usage phase (BPD 3: Chapter 8 Usage phase)</b>			
<b>5.2 Discharge to ground, water or air</b> --	<b>Discharge to ground, water or air</b> --	<b>Discharge to ground, water or air</b> Risk of leaching of copper, zinc or silver.	<b>Criteria in line with:</b> <ul style="list-style-type: none"> <li>Considerable environment impact, Kretsloppsrådet (2000)</li> <li>Priority area. Kretsloppsrådet (Environment program 2010)</li> <li>National environment target “Nontoxic environment”</li> </ul> <b>Comment:</b> Criteria deals with copper, zinc I contact with water, and silver. Information is not mandatory in BPD3 but can be given as “Other information”.
<b>5.3 Lifetime for product in use</b> Lifetime of item is approximately 25 years or longer	<b>Lifetime for product in use</b> Lifetime of item is less than 25 years	<b>Lifetime for product in use</b> No information available about lifetime	<b>Mandatory information in BPD3</b> <b>Criteria in line with:</b> <ul style="list-style-type: none"> <li>Priority area. Kretsloppsrådet (Environment program 2010)</li> </ul>

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<p><b>5.4 Energy use</b></p> <p>Item needs energy for use. Information presented about Energy Labeling class A or better</p>	<p><b>Energy use</b></p> <p>Item needs energy for use. Information presented about Energy Labeling class B or lower</p>	<p><b>Energy use</b></p> <p>--</p>	<p><b>Mandatory information in BPD3</b></p> <p><b>Criteria in line with:</b></p> <ul style="list-style-type: none"> <li>• Considerable environment impact, Kretsloppsrådet (2000)</li> <li>• Priority area. Kretsloppsrådet (Environment program 2010)</li> <li>• Swedish system “Environment classification of buildings”</li> <li>• National environment target “Good built environment”</li> <li>• “Ecodesign –directive” (2005/32/EG)</li> <li>• Directive on energy performance in buildings (2002/91/EG)</li> <li>• The Commission’s plan for energy efficiency (2007-2012)</li> </ul> <p><b>Comment:</b> Applicable only for items where Energy Labeling exists.</p>
<p><b>6. Waste and Demolition (BPD 3: Chapter 9. Demolition and Chapter 10 Waste management)</b></p>			
<p><b>6.1 Information about dismantling</b></p> <p>Item prepared for dismantling</p>	<p><b>Information about dismantling</b></p> <p>Item is not prepared for dismantling <b>or</b> No information available about dismantling</p>	<p><b>Information about dismantling</b></p> <p>---</p>	<p><b>Criteria in line with:</b></p> <ul style="list-style-type: none"> <li>• Considerable environment impact, Kretsloppsrådet (2000)</li> <li>• Priority area. Kretsloppsrådet (Environment program 2010)</li> </ul> <p><b>Comment</b> Information is not mandatory in BPD3, therefore the assessment <i>To be Avoided</i> cannot be given.</p>

Recommended	Accepted	To be Avoided – alternative must be explored	Information/Reference
<p><b>6.2 Reuse</b> The item* can be <math>\geq 50\%</math> reused</p>	<p><b>Reuse</b> The item cannot be <math>\geq 50\%</math> reused <b>or</b> No information is available and it cannot be found from knowledge of the material</p>	<p><b>Reuse</b> --</p>	<p><b>Mandatory information in BPD3</b> <b>Criteria in line with:</b></p> <ul style="list-style-type: none"> <li>• Considerable environment impact, Kretsloppsrådet (2000)</li> <li>• Priority area. Kretsloppsrådet (Environment program 2010)</li> <li>• National environment target “Good built environment”</li> <li>• Waste directive, Waste hierarchy (2008/98/EG)</li> </ul> <p><b>Comment:</b> *Assessment of possible reuse based on current technology.</p>
<p><b>6.3 Material recovery</b> Item* can be <math>\geq 50\%</math> material recovered</p>	<p><b>Material recovery</b> Item* can be <math>\geq 50\%</math> reused only as aggregates <b>or</b> Item* can be <math>\geq 50\%</math> energy recovered</p>	<p><b>Material recovery</b> Item* cannot be <math>\geq 50\%</math> material- or energy recovered <b>or</b> No information is available and it cannot be found from knowledge of the material</p>	<p><b>Mandatory information in BPD3</b> <b>Criteria in line with:</b></p> <ul style="list-style-type: none"> <li>• Considerable environment impact, Kretsloppsrådet (2000)</li> <li>• Priority area. Kretsloppsrådet (Environment program 2010)</li> <li>• National environment target “Good built environment”</li> <li>• Waste directive, Waste hierarchy (2008/98/EG)</li> </ul> <p><b>Comment:</b> *Assessment of possible reuse based on current technology.</p>
<p><b>6.4 Hazardous waste from use or construction phase</b> Hazardous waste does not arise due to the product</p>	<p><b>Hazardous waste from use or construction phase</b> Hazardous waste arises due to the product and information about handling is given in accordance with current legislation</p>	<p><b>Hazardous waste from use or construction phase</b> Hazardous waste arises due to the product and information about hazardous waste is missing <b>or</b> Information about hazardous waste is missing or incomplete.</p>	<p><b>Mandatory information in BPD3</b> <b>Criteria in line with:</b></p> <ul style="list-style-type: none"> <li>• National environment target “Nontoxic environment”</li> <li>• Swedish EPA (2006) Summary of waste in Sweden.</li> </ul>

Recommended	Accepted	To be Avoided – alternative must be explored	Information/Reference
<p><b>6.5 Hazardous waste from demolition</b></p> <p>Item at end of life not classified as hazardous waste</p>	<p><b>Hazardous waste from demolition</b></p> <p>Item at end of life classified as hazardous waste and information about handling is given in accordance with current legislation</p> <p><b>or</b></p> <p>Item at end of life classified as hazardous waste and shall be handled as electronic waste</p>	<p><b>Hazardous waste from demolition</b></p> <p>Item at end of life classified as hazardous waste and information about handling is missing</p> <p><b>or</b></p> <p>Information about hazardous waste is missing or incomplete</p>	<p><b>Mandatory information in BPD3</b></p> <p><b>Criteria in line with:</b></p> <ul style="list-style-type: none"> <li>National environment target “Nontoxic environment”</li> <li>Swedish EPA (2006) Summary of waste in Sweden.</li> </ul>
<p><b>8. Indoor environment (BPD 3: Chapter 11 Indoor environment)</b></p> <p><b>Indoor environmental assessment only applies to relevant goods for indoor use</b> e.g., coating materials or applications which through emissions can reach inside air, referred products wallboard, floor covering, sealing, paint, wallpaper, caulking, adhesive, putty).</p> <p>The actual materials stone, brick, wall tile, floor tile, mosaic tile, glass and metal on interior surfaces are not assessed. However, necessary surface layer and base treatment must be assessed according to the criteria below.</p>			
<p><b>8.2 Documentation about emissions</b></p> <p>Information about emission rate is available and for the five highest peaks of VOC</p> <p><b>or</b></p> <p>The surface material is stone, brick, wall tile, floor tile, mosaic, glass or metal</p>	<p><b>Documentation about emissions</b></p> <p>Information about VOC is available</p>	<p><b>Documentation about emissions</b></p> <p>No information about VOC</p>	<p><b>Mandatory information in BPD3</b></p> <p><b>Criteria in line with:</b></p> <ul style="list-style-type: none"> <li>National environment targets “Nontoxic environment” and “Good Built Environment”</li> </ul> <p><b>Comment:</b></p> <p>Emissions measured according to standard method e.g. ISO 16000-9 or 16000-10 combined with standard method for sample extraction ISO 16000-11</p>
<p><b>8.3 Formaldehyde</b></p> <p>Emission rate for formaldehyde &lt;0.05 mg/m<sup>2</sup> h</p> <p><b>or</b></p> <p>Formaldehyde concentration &lt;0.05 mg/m<sup>3</sup></p>	<p><b>Formaldehyde</b></p> <p>Emission rate for formaldehyde 0.05-0.124 mg/m<sup>2</sup> h</p> <p><b>or</b></p> <p>Formaldehyde concentration 0.05-0.124 mg/m<sup>3</sup></p>	<p><b>Formaldehyde</b></p> <p>Emission rate for formaldehyde &gt;0.124 mg/m<sup>2</sup> h</p> <p><b>or</b></p> <p>Formaldehyde concentration &gt;0.124 mg/m<sup>3</sup></p>	<p><b>Criteria in line with:</b></p> <ul style="list-style-type: none"> <li>National environment targets “Nontoxic environment” and “Good Built Environment”</li> </ul> <p><b>Comment:</b></p> <p>Emission rate for formaldehyde measured according to standard method SS-EN-717-1:2004 or equivalent. Levels in accordance with Finnish material classification M1 and KIFS 2008:2 §§19-25</p>

Recommended	Accepted	To be Avoided – alternative must be explored	Information/Reference
<p><b>8.4 Assessment of emissions</b></p> <p>Emission rate for TVOC &lt;200 <math>\mu\text{g}/\text{m}^2,\text{h}</math>  <b>or</b>  TVOC concentration &lt;200 <math>\mu\text{g}/\text{m}^2,\text{h}</math></p>	<p><b>Assessment of emissions</b></p> <p>Emission rate for TVOC 200 - 400 <math>\mu\text{g}/\text{m}^2,\text{h}</math>  <b>or</b>  TVOC concentration 200 - 400 <math>\mu\text{g}/\text{m}^2,\text{h}</math></p>	<p><b>Assessment of emissions</b></p> <p>Emission rate for TVOC &gt;400 <math>\mu\text{g}/\text{m}^2,\text{h}</math>  <b>or</b>  TVOC concentration &lt;400 <math>\mu\text{g}/\text{m}^2,\text{h}</math></p>	<p><b>Criteria in line with:</b></p> <ul style="list-style-type: none"> <li>National environment targets “Nontoxic environment” and “Good Built Environment”</li> </ul> <p><b>Comment:</b>  Measured according to chamber method SS-EN 13419-1/-2 and analysis ISO 1600-6. Levels in accordance with Finnish material classification M1 and M2 or CESAT. Measurements made within 26 weeks</p>
<p><b>8.7 Electric fields</b></p> <p>Electric field levels stated  <b>or</b>  Product cannot generate electric field  <b>or</b>  Electrical field in facility &lt;10V/m</p>	<p><b>Electric fields</b></p> <p>No information available about electric fields</p>	<p><b>Electric fields</b></p> <p>No information available about electric fields, even though the product obviously generates substantial field.</p>	<p><b>Criteria in line with:</b></p> <ul style="list-style-type: none"> <li>National environment targets “Good Built Environment”</li> </ul> <p><b>Comment:</b>  Information is not mandatory in BPD3, therefore the assessment <i>To be Avoided</i> cannot be given.</p>
<p><b>8.8 Magnetic fields</b></p> <p>Magnetic field levels stated  <b>or</b>  Product cannot generate magnetic fields  <b>or</b>  Magnetic flux density in facility is &lt;0.2 <math>\mu\text{T}</math></p>	<p><b>Magnetic fields</b></p> <p>No information available about magnetic fields</p>	<p><b>Magnetic fields</b></p> <p>--</p>	<p><b>Criteria in line with:</b></p> <ul style="list-style-type: none"> <li>National environment targets “Good Built Environment”</li> </ul> <p><b>Comment:</b>  Information is not mandatory in BPD3, therefore the assessment <i>To be Avoided</i> cannot be given.</p>
<p><b>8.9 Noise</b></p> <p>Information about noise stated</p>	<p><b>Noise</b></p> <p>No information available about noise</p>	<p><b>Noise</b></p> <p>--</p>	<p><b>Criteria in line with:</b></p> <ul style="list-style-type: none"> <li>National environment targets “Good Built Environment”</li> </ul> <p><b>Comment:</b>  Applies only to items that generate noise e.g. fans, pumps, refrigerators, fridges etc but not to items that indirectly cause noise e.g. ventilators etc.  Information is not mandatory in BPD3, therefore the assessment <i>To be Avoided</i> cannot be given.</p>




## Byggvarubedömningen - weighting of criteria

Assessment of individual criteria according to Byggvarubedömningen are weighted together into a total assessment. To be assessed *Recommended* three terms must be fulfilled and for *Accepted* two terms applies. The terms are shown in the table below and thus state the conditions that must be met for a product to achieve the corresponding total assessment. If both terms for *Accepted* are not met the total assessment will be *To be avoided*.

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

The content criteria of Byggvarubedömningen are unconditional. This means that neither content assessment nor total assessment can be better than the assessment of the worst content criteria

Assessment is shown as a green, yellow or red symbol with an arrow pointing up, sideways or down. On the product sheet total assessment is shown with a large symbol and assessment of content with a small symbol.

 <i>Recommended</i>
 <i>Accepted</i>
 <i>To be avoided</i>

## Appendix 1

Substances that may not be found<sup>1</sup> in products with the assessment *Recommended*.

Substance Group / Substance	Example of properties
1. Arsenic and its compounds	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

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<sup>1</sup> These substances should not have been added to the product at any time during production and shall not be formed through reaction between substances in the product.