



ENV1.2

# Local environmental impact



## Objective

Our objective is to reduce, avoid or substitute all dangerous or damaging materials, (construction) products or preparations that can adversely affect or cause short, medium or long-term damage to people, flora and fauna.

## Benefits

The use of particularly environmentally friendly materials not only makes an important contribution to improving indoor air quality, but also helps limit the contamination risk of a building with regard to pollutants. Only a building elements catalogue, that is complete in terms of the environmental qualities of materials, can provide building owners with an extensive information about construction products used in various parts of the building. This information plays decisive importance for the quality assurance in the building construction, for clarifying deficiencies and finding appropriate ways for eliminating them, simultaneously optimising the costs of maintenance. This provides an important contribution to the value stability of a building.

## Contribution to overriding sustainability goals



CONTRIBUTION TO THE SUSTAINABLE DEVELOPMENT GOALS (SDGS) OF THE UNITED NATIONS (UN)

CONTRIBUTION TO THE GERMAN SUSTAINABILITY STRATEGY

	CONTRIBUTION TO THE SUSTAINABLE DEVELOPMENT GOALS (SDGS) OF THE UNITED NATIONS (UN)	CONTRIBUTION TO THE GERMAN SUSTAINABILITY STRATEGY
 <b>Significant</b>		12.1.a Sustainable consumption
		12.2 Sustainable production
 <b>Moderate</b>	3.4 Reduction of premature death, promotion of good health/well-being	3.2.a Air pollution
	3.9 Effects of chemicals, air, water and soil contamination	13.1.a Climate protection
	12.4 Environmentally friendly handling of chemicals and waste	
	13.2 Climate protection measures in guidelines, strategies and planning	



## Outlook

The handling and use of environmentally friendly materials is subject to increasingly strict regulatory specifications. Categorisation into quality levels is subject to changes in the long term. In addition, another quality level (QL0) is planned, which will constitute an exclusion criterion.

## Share of total score

	SHARE	WEIGHTING FACTOR
Office   Education   Residential   Hotel	4.7%	4
Consumer market   Business premises		
Logistics   Production		
Shopping centre	4.5%	4

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## EVALUATION

The quality levels (QL) named in the criteria matrix build upon each other. The quality level achieved is derived from the individual aspect that needs to be given the lowest evaluation and the form of verification used. Verification in the form of a building elements catalogue that includes the environmental qualities of materials is evaluated positively, while the simplified conventional documentation can be applied in quality level 1 or 2. The requirements of a higher quality level in each case incorporate all requirements listed for the lower levels. A maximum of 100 points can be awarded for this criterion.

NO.	INDICATOR	POINTS
<b>1</b>	<b>Environmentally friendly materials</b>	
1.1	<b>Office</b> <b>Education</b> <b>Hotel</b> <b>Consumer market</b> <b>Logistics</b> <b>Production</b> <ul style="list-style-type: none"> <li>■ Fulfilment of all requirements in the criteria matrix: <b>Max. 100</b> <ul style="list-style-type: none"> <li>QL 1 (building elements catalogue or conventional documentation) 10</li> <li>QL 2 (conventional documentation) 30</li> <li>QL 2 (building elements catalogue) 50</li> <li>QL 3 (building elements catalogue) 75</li> <li>QL 4 (building elements catalogue) 100</li> </ul> </li> </ul>	
	<b>Residential</b> <b>Business premises</b> <ul style="list-style-type: none"> <li>■ Fulfilment of all requirements in the criteria matrix: Evaluation of the communal areas, building envelope and the living spaces/rental spaces is carried out via 1.1 and 1.2. If the fit-out standard achieved for the living spaces/rental spaces deviates from the standardised fit-out description, this must be evaluated separately via indicator 1.2 (for more information, see IV. Usage-specific description). <b>Max. 50</b> <ul style="list-style-type: none"> <li>QL 1 (building elements catalogue or conventional documentation) 5</li> <li>QL 2 (conventional documentation) 15</li> <li>QL 2 (building elements catalogue) 25</li> <li>QL 3 (building elements catalogue) 35</li> <li>QL 4 (building elements catalogue) 50</li> </ul> </li> </ul>	
	<b>Shopping centre</b> <ul style="list-style-type: none"> <li>■ Fulfilment of all requirements in the criteria matrix: Evaluation of the communal areas and the building envelope. <b>Max. 60</b> <ul style="list-style-type: none"> <li>QL 1 (building elements catalogue or conventional documentation) 5</li> <li>QL 2 (conventional documentation) 15</li> <li>QL 2 (building elements catalogue) 25</li> <li>QL 3 (building elements catalogue) 40</li> <li>QL 4 (building elements catalogue) 60</li> </ul> </li> </ul>	
1.2	<b>Residential</b> <b>Business premises</b> <ul style="list-style-type: none"> <li>■ Fulfilment of all requirements in the criteria matrix in at least 50% of the rental spaces (apartments) in: <b>Max. 50</b> <ul style="list-style-type: none"> <li>QL 1 (building elements catalogue or conventional documentation) 5</li> <li>QL 2 (conventional documentation) 15</li> <li>QL 2 (building elements catalogue) 25</li> <li>QL 3 (building elements catalogue) 40</li> <li>QL 4 (building elements catalogue) 50</li> </ul> </li> </ul>	



NO.	INDICATOR	POINTS
	<b>Shopping centre</b>	
	<ul style="list-style-type: none"> <li>■ Fulfilment of all requirements in the criteria matrix in at least 50% of the rental spaces in (for more information see IV. Usage-specific description):</li> </ul>	<b>Max. 40</b>
	QL 1 (building elements catalogue or conventional documentation)	5
	QL 2 (conventional documentation)	15
	QL 2 (building elements catalogue)	25
	QL 3 (building elements catalogue)	35
	QL 4 (building elements catalogue)	40
1.3	<b>Office</b> <b>Education</b> <b>Hotel</b> <b>Shopping centre</b> <b>Consumer market</b> <b>Logistics</b> <b>Production</b> <b>Residential</b> <b>Business premises</b>	
	<b>Additional points in quality level 1, 2 and 3:</b>	<b>+10</b>
	Cooling is provided without halogenated/partially halogenated refrigerants in quality levels 1, 2 and 3	10



## SUSTAINABILITY REPORTING AND SYNERGIES

### Sustainability reporting

Appropriate key performance indicators (KPIs) include, in the case of positive evaluation of indicator 2, not using certain refrigerants for the communication or communicating selected relevant emission parameters for construction products used.

NO.	KEY PERFORMANCE INDICATORS (KPIs)	UNIT
KPI 1	No use of halogenated and partially halogenated refrigerants that are persistent by themselves or have persistent degradation products	[yes]
KPI 2	Emission profiles for construction products used, stating carcinogenic volatile organic compounds, formaldehyde and substances with LCI values (tested in accordance with CEN/TS 16516); corresponds to Level(s) indicator 4.1.2	[µg/m <sup>3</sup> ], [-]

### Synergies with DGNB system applications

- **DGNB OPERATION:** The application of the criteria matrix can be proven in a procurement guideline for the ongoing maintenance in the buildings in use (BIU) criterion ENV9.2 "Procurement".
- **DGNB RENOVATED BUILDINGS:** High synergies with criterion ENV1.2 in the REN system application.
- **DGNB INTERIORS:** High synergies with criterion ENV1.2 in the IR system application.



## APPENDIX A – DETAILED DESCRIPTION

### I. Relevance

Certain substances, construction products and preparations are dangerous to the soil, air, groundwater and surface water and to people, flora and fauna. This concerns their entire life cycle – from manufacturing, processing on the construction site and use in the existing building to their disposal (dismantling, recycling, disposal in landfill). The local risks are evaluated on the basis of substances and products, as the toxicological impact categories for the environment and humans have not yet been recorded in the life cycle assessment due to lack of recording and evaluation processes.

### II. Additional explanation

In the DGNB certification system, high-risk material and substance groups are investigated and evaluated individually and on the basis of products. The following material groups, among others, are currently taken into account (as products or as ingredients in compositions):

- Halogenated and partially halogenated refrigerants
- Halogenated and partially halogenated propellants
- Heavy metals
- Substances that fall under the Biocidal Products Directive (528/2012/EC)
- Substances that fall under the Persistent Organic Pollutants Regulation (850/2004/EC)
- Hazardous substances in accordance with the CLP Regulation (1272/2008/EC)
- Organic solvents and plasticisers
- Substances of very high concern (SVHC in accordance with the European Chemicals Regulation (REACH) (1907/2006/EC))

Chemicals/substances that are particularly dangerous in terms of the following toxic end points are classified as being of very high concern:

- Carcinogenic, mutagenic and toxic to reproduction (CMR),
- Persistent, bioaccumulating and toxic (PBT),
- Very persistent and very bioaccumulating (vPvB) or
- Of similar concern (e.g. endocrine disruptors).

In accordance with the European Chemicals Regulation (REACH), suppliers must inform their customers if a product (e.g. an insulation tube for building technology) contains a substance listed in the candidate list in a concentration of more than 0.1% (w/w). This obligation is described in Article 33 of the European Chemicals Regulation (REACH) and applies once a substance is included in the candidate list.

The substances and components that must be considered are specified and explained in the criteria matrix (Appendix 1).

For the requirement for limiting emissions of volatile organic compounds from products or their risk potentials during use, overlaps with regard to the VOC content of the product and the resulting release of VOCs by the product are derived. In criterion ENV 1.2 "Local environmental impact", the VOC content of the product is primarily evaluated, and the release of VOCs is only evaluated where there are no industry regulations regarding the VOC content (e.g. sealants). The quantitative emissions of volatile substance into the interior are considered in criterion SOC1.2 "Indoor air quality".



### Planning procedure:

From an early planning phase onwards, certain materials and components must be considered in terms of critical substances (see Appendix 1) and, where appropriate, suitable alternative designs must be assessed. By making informed choices when selecting construction materials, it is possible to mostly avoid using the hazardous substances and products specified in the criteria matrix without restricting the creative and functional planning process.

### III. Method

Criterion ENV1.2 contains specific requirements for a wide range of construction materials. The requirements stated in Appendix 1 must be observed for all materials and components specifically listed in the table. These must be assessed with regard to all requirements listed in Appendix 1, and it may be the case that multiple rows are relevant to individual materials and components. The complete layer structure of all components must be specified on the basis of a building elements catalogue (see implementation example, Appendix 2). Auxiliary materials such as adhesive, primers, etc. must be added. Verifiable proof must be produced in accordance with the criteria matrix for all requirements that are to be verified at the target quality level (see Appendix 1, column: Type of documentation; requirement for verification of the individual aspects).

As a result of this, the following surfaces must be considered:

- Ground structures including foundations
- External wall structures
- Internal wall structures
- Floor and ceiling structures
- Roof structures
- Underground garages (are considered separately)

The following requirements for this criterion must be considered, verified and complied for the prefabricated construction materials/products listed below:

- Coatings applied at the factory for windows, façade components, doors, frames, radiators, partitions, ceiling systems, cooling pipes, etc.: In accordance with the objective (prevention of VOC emissions into the environment), compliance with the product limit values in the criteria matrix is considered to be a valid form of proof. Alternatively, compliance with the objective can also be ensured by the coater/operator of exhaust air post-treatment systems by proving compliance with statutory limit values in accordance with Directive 1999/13/EU on the basis of current, officially accepted monitoring logs.
- Coating applied on the construction site: In accordance with the objective (prevention of VOC emissions into the environment), only compliance with the product limit values in the criteria matrix is considered to be a valid form of proof.
- Synthetic insulating materials with regard to halogenated propellants
- Aluminium and stainless steel components with regard to treatment with Cr(VI) compounds
- Refrigerants in cooling systems
- Plastic windows, floor coverings and wall coverings with regard to lead, cadmium and tin stabilisers
- Plastics, insulating materials, functional coatings, sealants, rubber products etc. with regard to substances of very high concern (SVHC in accordance with the European Chemicals Regulation (REACH))
- Floor coverings with regard to hazardous substances and emissions
- Load-bearing components made of wood such as laminated timber trusses, pillars/cross bars in support structures and window frames with regard to biocidal substances (chemical wood preservatives in accordance with DIN 68 800).



- Coatings applied in the factory to load-bearing and non-load-bearing structural elements of the wooden structure such as lacquers, varnishes, oils and waxes with regard to VOC.
- Coatings applied in the factory to wood and wooden materials such as façade and acoustic elements, doors, coverings on ceilings, floors and walls, parquet, staircases and windowsills, etc. with regard to VOC. Alternatively, compliance with the objective can also be ensured by the coater/operator of exhaust air post-treatment systems by proving compliance with statutory limit values in accordance with Directive 1999/13/EU on the basis of current, officially accepted monitoring logs.

It should be noted here that only requirements that go beyond the statutory material standard that the manufacturer is subject to anyway in accordance with the European Chemicals Regulation (REACH) and other applicable laws are specified in principle for all product groups – products and mixtures – in the matrix.

The qualitative evaluation is carried out based on quality levels. These are based on both the cost and level of difficulty of practical implementation and the environmental significance of substituting a material. All materials and aspects considered in the criteria matrix must be verified with regard to the target quality level. Only verified qualities can be taken into account and evaluated in the conformity check. The quality level achieved is derived from the individual aspect that needs to be given the lowest evaluation. The requirements of a higher quality level in each case incorporate all requirements listed for the lower levels.

The form of verification used is also crucial for determining the quality level. The verification must be implemented in the form of a building elements catalogue that includes the environmental qualities of materials. In **quality level 1** or **2**, the **simplified conventional documentation** can be applied.

The DGNB has learned over many years of experience that the material qualities required to fulfil **quality level 3** or **4** can only be successfully ensured if the materials relevant for fulfilling the quality level are tested and approved on the construction site prior to their use. **Quality level 3** or **4** can therefore only be achieved if the corresponding **material monitoring logs** are presented. Material inspection and creation of the logs can be delegated to qualified third parties (auditors, construction ecologists).

#### **Material inspections on the construction site**

An approval list must be regularly updated by the qualified institution responsible for review and approval and must be made available to the construction managers/property monitoring specialists for material inspection on the construction site. The construction managers/property monitoring specialists must monitor the correctness of the materials used by the companies involved in the construction by means of regular target/achieved comparisons and create logs of the results. An appropriate and regular frequency is considered to be one that ensures

- that the work of all contractors involved in all parts of the construction process involving relevant materials is checked soon after it begins (i.e. before 5% of the work that is critical for meeting objectives is completed), and
- that the intervals between inspections are reduced once fit-out work is started.

Information regarding dealing with incorrect use is provided in Appendix 5.

Certification of the construction site inspections is not required in order to achieve quality level 1 or 2. It can therefore be assumed that it is not necessary to carry out construction site inspections for **quality level 1** or **2** if it is only necessary to comply with the limit value in criterion SOC1.2 Indoor air quality.





## IV. Usage-specific description

### Information regarding indicator 1.1:

In the following schemes, separate evaluation of the rental spaces is possible via indicator 1.2. This corresponds to the methodology for indicator 1.1, which is to be used to evaluate the building envelope and any existing communal areas.

#### **Residential** **Business premises** :

Separate evaluation of the rental spaces is possible via indicator 1.2. This corresponds to the methodology for indicator 1.1, which is to be used to evaluate the building envelope and communal areas.

If the fit-out standard that has been implemented for the rental/living spaces deviates from the standardised fit-out description, these must be considered via indicator 1.2. Declarations of obligation and binding fit-out descriptions from tenants and confirmations of implementation of the quality level in accordance with the DGNB criteria matrix must be verified.

For business premises with a tenant (such as department stores), a separate evaluation does not have to be carried out.

If no separate analysis is carried out, the points for indicators 1.1 and 1.2 can be awarded accordingly. In this case, a separate list is not required.

The quality level of the rental spaces can in principle only be assessed higher than the quality level that has been achieved for the communal areas if documentation for the rental/living spaces in accordance with the requirements specified for verification in the criterion and Appendix 2 is available and has been implemented successfully.

#### **Shopping centre**

Communal spaces and building envelopes are evaluated via indicator 1.1, while rental spaces are evaluated via indicator 1.2.

#### **Communal areas and building envelope:**

Communal areas include all non-rental spaces. These include spaces such as escape routes, parking areas, communal WC areas, office spaces and communal social areas. All non-retail spaces such as storage spaces that are fitted out by the landlord must be included in the communal spaces. The building envelope is also included.

### Information regarding indicator 1.2:

#### **Rental spaces:**

If it can be verified that the relevant tenants have undertaken to implement the quality levels of the criteria matrix in at least 50% of the rental space, this is positively evaluated. This can be achieved, for example, via an obligation on the part of the tenants in the rental contract.

The quality level of the rental spaces can in principle only be assessed higher than the quality level that has been achieved for the communal areas if documentation for the rental/living spaces in accordance with the requirements specified for verification in the criterion and Appendix 2 is available and has been implemented successfully.

### Information regarding indicator 1.3:

In order to provide an additional market incentive, implementation of cooling without halogenated/partially halogenated refrigerants is rewarded with additional checklist points in quality levels 1, 2 and 3. If no refrigerants are used, no additional checklist points can be awarded. In quality level 4, the requirements in accordance with APPENDIX 1 (criteria matrix) must be implemented. The objective, in particular, is preventing the use of halogenated refrigerants or propellants, unless it has been proven that they and their degradation products do not accumulate in the environment and do not have persistent degradation products that can pollute (accumulate in) natural basins or have harmful effects there.



## APPENDIX B – DOCUMENTATION

### I. Required documentation

A range of different forms of documentation is listed below. The documentation submitted must comprehensively and clearly demonstrate compliance with the requirements for the target evaluation of the individual indicators. The components/construction materials and areas listed in the criteria matrix (Appendix 1) must be considered:

- Complete declaration and verification of relevant components/construction materials applied in points or lines (e.g. sealant) using the documentation required in the criteria matrix. In principle, the verification process should deal with all consecutive numbers in the criteria matrix. Irrelevant aspects of the criteria matrix should be explicitly identified as irrelevant, and technical exceptions should be explicitly marked as exceptions and justified.
- Declaration and verification of relevant components/construction materials applied across surfaces in the form of a building elements catalogue that includes the environmental qualities of materials in accordance with Appendix 2 is obligatory in quality level (QL) 3 or QL4. In QL1 and QL2, conventional simplified documentation can be used. In QL2, verification via a building elements catalogue that includes the environmental qualities of materials is evaluated positively. As an alternative to the building elements catalogue for the life cycle assessment, verification can also be submitted in a different form, as long as this clearly demonstrates the installation site (location/component/layer structure) of all materials considered in "Appendix 1 – Criteria matrix" to an equivalent extent as a building elements catalogue (in accordance with Appendix 2) and covers all components in the life cycle assessment with identical component designation and area assignment (due to traceability via the conformity check).
- The materials, products and elements listed in the documentation of criterion ENV1.2 must contain the following information as a minimum:
  - Construction product
  - Manufacturer
  - Area information (for materials applied across surfaces)
  - Description of the individual layers (see implementation example in Appendix 2: Building elements catalogue) in QL3 and QL4
- Tenant fit out obligations (if required in the scheme)
- Construction site logs for the material inspections (obligatory for quality level 3 and 4)
- Target/achieved comparison in addition to the approval list (obligatory for quality level 3 and 4)
- Notification of defects/notification that the building is free from defects in accordance with Appendix 5 (in the event of incorrect use)

#### Exceptions for the verification process:

- **Quality level 3:**

For verification of quality level 3, one of the criteria (row of the criteria matrix) can be ignored without impacting the maximum evaluation points. The ignored criterion in the criteria matrix must fulfil the requirements of the next level down as a minimum.
- **Quality level 4:**

For verification of quality level 4, a total of two of the criteria (rows of the criteria matrix) can be ignored without impacting the maximum evaluation points. The ignored criteria in the criteria matrix must each fulfil the requirements of the next level down as a minimum.
- **Cut-off criteria:**

The verification can be ignored for max. 5% of the GFA(RV) in accordance with DIN 277, but only if explicitly



listed in the criteria matrix in the column "Scope of application and verification"; this applies regardless of which building areas the product/material is used on (see criteria matrix Appendix 1: "Scope of application and verification").

■ **Example of the process:**

- Building with a GFA(RV) of 50,000 m<sup>2</sup> (incl. areas below the ground floor, such as underground garages)
- Example result:  
5% GFA(RV) = 2500 m<sup>2</sup>
- Application: The verification of the criteria marked in the criteria matrix with this exception may exclude up to 2,500 m<sup>2</sup> area from the documentation. The location (walls, ceilings, floors, etc.) of the materials/products is not relevant here.

■ **Technical and functional exceptions:**

If one of the specified product requirements cannot be implemented for technical or functional reasons (i.e. due to the absence of a functionally equivalent product or a construction alternative that meets the requirements), exceptions from the requirements are permitted. Any deviation from the requirements must be documented and justified, specifying the product, the technical application and the quantity used. Product exceptions for purely aesthetic reasons are not covered by the exemption. Possible forms of documentation include, for example, a current confirmation from at least three market-relevant manufacturers that no product that is suitable for the intended quality level is available (see Appendix 3), or proof that use of a suitable product was not technically possible for reasons attributable to "force majeure" (weather conditions, natural circumstances such as water under pressure in the construction site subsoil). Verification for a technical exception can only pertain to a single quality level and does not constitute an exemption from the requirements that may apply in the quality levels below it. If the requirement of a lower quality level cannot be met for technical reasons, this must be consistently justified on the basis of the three manufacturer confirmations presented for the technical exception.

■ **Data basis:**

In principle, the following can be used as a data basis:

- Technical information
- Safety data sheets (SDS)
- Environmental Product Declarations of types I and III and manufacturer declarations regarding ingredients and recipe components
- Manufacturer declaration
- SVHC declaration by manufacturers of products (cf. Appendix 4)

The most suitable sources for the material qualities that are to be queried within the scope of criterion ENV1.2 are normally:

- VOC content of paints/lacquers: Technical information, safety data sheets, labels (declaration of the VOC content in accordance with Directive 2004/42/EC); specified in g/l
- VOC content of other products: Manufacturer declaration
- Information system code for hazardous substance (GHS CODE)/product code: Safety data sheets, technical information, [www.wingis-online.de](http://www.wingis-online.de)
- SVHC in preparations: Safety data sheet
- SVHC in products: Technical information, manufacturer data sheets (obligation on the part of the manufacturer)



- Individual substances (heavy metals, etc.): Manufacturer declaration (see criteria matrix in Appendix 1; column: "Type of documentation/requirement for verification of individual aspects")

- **Validity of the data basis for verification:**

The following are required for verification:

- EC safety data sheets in accordance with EC 1907/2006.
- Declarations of SVHC in products in accordance with Annex XIV EC 1907/2006 in the most recent applicable version at the publication date of this DGNB version.
- Declarations of substances in the SVHC candidate list in products in accordance with the most recent applicable version at the publication date of this DGNB version.

This means that the documentation that is produced must be created on the basis of the data basis or substance lists (e.g. SVHC) available at the time of publication of this version. This is only ensured if currently valid safety data sheets, technical data sheets and manufacturer declarations that comply with legislation regarding chemicals are used. Documentation published at a later date can be used for verification.



## APPENDIX C – LITERATURE

### I. Version

#### Change log based on version 2018

PAGE	EXPLANATION	DATE
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### II. Literature

Fundamental sources chosen from the available lists of substances and material data:

- CLP Regulation 1272/2008/EC including alignment regulations\*
- German Ordinance on Hazardous Substances (GefStoffV) and Technical Rules for Hazardous Substances (TRGS) \*
- European Chemicals Regulation (REACH) (EC 1907/2006) \*
- Biocidal Products Directive 98/8/EC \*
- GESTIS Substance Database (Institut für Arbeitsschutz der Deutschen Unfallversicherung [Institute for Occupational Safety and Health of the German Social Accident Insurance] (IFA))
- GISCODE information from German employer's liability insurance associations
- Independently verified declarations, such as Environmental Product Declarations (EPD)
- Industry-specific policies such as colour matching system (RAL) or the VdL guideline
- Certifications developed within industries
- EC (2010): Consolidated list of substances that are no longer allowed to be sold, published and continuously updated by the European Commission
- Umweltbundesamt (UBA) (2009): Guideline for application of the GHS Regulation – The new classification and labeling system for chemicals in accordance with GHS – briefly explained – Umweltbundesamt (German Environment Agency), Dessau 2009, and application guides
- SVHC – Substances of Very High Concern, also known as the REACH candidate list: (<http://echa.europa.eu/web/guest/candidate-list-table>)
- Sustainable Development Goals icons, United Nations/globalgoals.org

\*For all statutory lists and material information, the currently valid version at the time the building application is submitted must be referred to. For statutory provisions, the transitional periods for placing on the market and use apply in each case.



APPENDIX 1 – Criteria matrix

No.	RELEVANT COMPONENTS/ CONSTRUCTION MATERIALS/ SURFACES	SCOPE	SUBSTANCES/ASPECTS CONSIDERED	REFERENCE STANDARD	QUALITY LEVEL 1	QUALITY LEVEL 2	QUALITY LEVEL 3	QUALITY LEVEL 4	TYPE OF DOCUMENTATION	SCOPE OF APPLICATION AND VERIFICATION	NOTES REGARDING DEFINITIONS/EXPLANATIONS/ FOOTNOTES	FOCUS OF IMPACT OF THE SUBSTANCES/ASPECTS CONSIDERED OVER THE INDIVIDUAL STAGES IN THE LIFE OF A BUILDING (MODULES IN ACCORDANCE WITH DIN EN 15978)					APPLICATION			
	Where specifically does this apply?	Product type	Explanation	Definition	Limit value 10 points	Reference 50 points (verification via building elements catalogue; conventional verification is possible as an alternative)	Sub-target 75 points (verification via building elements catalogue)	Target value 100 points (verification via building elements catalogue)	Requirement for verification of the individual aspects (only documentation containing values that are to be verified should be submitted)	The requirement applies to the following components		Raw materials extraction (A1)	Production of the product (A3)	Construction of the building (A5)	Operation/use of the building (B1)	Dismantling of the building (C1-C4 and D)	Typical HOAI phase of implementation (German fee structure for architects and engineers)			
<p><b>General information:</b></p> <p>1) For all standards, references, test seals, etc. listed below, legally valid proof of equivalence with regard to the substance or aspect considered (see column 4) will be accepted. This legally valid proof can be provided by the manufacturer or the authority responsible for awarding the test seal.</p> <p>2) The requirements of the specified "reference standards" (see column 5) generally apply to the statutory requirements that are predominantly shown in quality level 1. Requirements outside of this do not always refer to the reference standard. The requirements of a higher quality level in each case incorporate all requirements listed for the lower levels; higher quality levels (QL) may require additional requirements and quality standards.</p>											Reference to the DGNB criterion					Legally valid proof	ENV 1.3 "Sustainable resource extraction"	SOC 1.2 "Indoor air quality"	TEC 1.6 "Ease of recovery and recycling"	
1	Coatings on non-mineral substrates: Metals, wood, plastics (Factory and building site)	This refers to decorative liquid coating materials: Paints/varnishes with primer coats. Effect coatings (such as metallic paints) are an exception to this	VOC	VOC definition in accordance with Directive 2004/42/EC	< 300 g/l – Category D in accordance with Directive 2004/42/EC	In accordance with the requirements for water-borne (WB) products from the currently valid Decopaint Directive (Appendix II) (Cat. D in accordance with Directive 1004/42/EC) < 130 g/l	< 100 g/l or RAL-UZ 12a	RAL-UZ 12a	Technical data sheet and/or SDS and/or manufacturer declaration and/or test certificate	All relevant components and construction products	Please note: Coatings applied at the factory	Risk minimisation in solvent manufacturing			Indoor air hygiene	Work stage 5–9				
2	Coatings on predominantly mineral interior substrates as well as on wallpaper, non-woven materials, plasterboard, etc. Floor areas with special resistance requirements (such as OS (surface protection) systems) and traffic routes such as underground garages and access roads are not taken into account	This refers to decorative paints, primers, decorative fillers (incl. Q-filler) and deep primer, floor coatings with no special resistance requirements, concrete glazes	VOC/SVOC	VOC definition in accordance with Directive 2004/42/EC	In accordance with the requirements for water-borne (WB) products in accordance with the current Decopaint Directive (Appendix II)	< 30 g/l	- Solvent-free and - plasticiser-free in accordance with VdL guideline 01 or RAL-UZ 102 (SVOC)	- Solvent-free and - plasticiser-free in accordance with VdL guideline 01 or RAL-UZ 102 (SVOC)	Technical data sheet and/or SDS and/or manufacturer declaration and/or test certificate	All relevant components and construction products. For max. 5% of the GFA(RV) in accordance with DIN 277, no documentation is required.				Indoor air hygiene	Work stage 5–9					
3	Coatings on predominantly mineral interior substrates such as concrete, masonry, mortar and filler (e.g. concrete filler). Floor areas with special resistance requirements (such as OS (surface protection) systems) and traffic routes such as underground garages and access roads, as well as floor screed intended for use without additional coverings and decorative screeds are not taken into account.	This refers to dust-binding coatings and primer coats such as the Betonkontakt or Aufbrennsperre products	VOC	VOC definition in accordance with Directive 2004/42/EC	< 30 g/l	< 30 g/l	< 10 g/l	< 5 g/l	Technical data sheet and/or SDS and/or manufacturer declaration and/or test certificate	All relevant components and construction products. For max. 5% of the GFA(RV) in accordance with DIN 277, no documentation is required.				Interior air hygiene	Work stage 5–9					
4	Wall and ceiling linings	Wallpaper paste	VOC	VdL guideline 01	- Powder products or - solvent-free dispersion adhesives	- Powder products or - solvent-free dispersion adhesives	- Powder products or - solvent-free dispersion adhesives	- Powder products or - solvent-free and plasticiser-free in accordance with VdL guideline 01	Technical data sheet and/or SDS	All relevant components and construction products				Indoor air hygiene	Work stage 5–9					
5	Coating materials for exterior mineral surfaces such as concrete, masonry, mineral mortar and filler, plaster, ETICS, wallpaper (façade wallpaper), plasterboard, etc.	Currently, decorative paints and dispersion insulation adhesive are taken into account	VOC	VOC definition in accordance with Directive 2004/42/EC	< 40 g/l	< 40 g/l	< 40 g/l	< 40 g/l	Technical data sheet and/or SDS and/or manufacturer declaration and/or test certificate	All relevant components and construction products					Work stage 5–9					



6	Floor coverings (Factory)	Textile floor coverings	VOC/hazardous substances	GUT, RAL-UZ 128	- GUT quality label or - RAL-UZ 128	- GUT quality label or - RAL-UZ 128	- GUT quality label or - RAL-UZ 128	- GUT quality label or - RAL-UZ 128	Technical data sheet and/or environment label (Blue Angel)	All floor coverings					Indoor air hygiene	Prevention of risk materials and impurities in recycling	Work stage 5–9
7	Floor coverings (Factory)	Resilient floor coverings	VOC/SVOC/hazardous substances	National technical approvals – Committee for health related evaluation of building products (Ausschuss zur gesundheitlichen Bewertung von Bauprodukten (AgBB)) or equivalent documentation of emissions (for chlorinated paraffins, see note)	Documentation of emissions	Documentation of emissions and < 0.1% chlorinated paraffins	Documentation of emissions and < 0.1% chlorinated paraffins and ≤ 0,1 % phthalates that are toxic to reproduction (= SVHC)	Emissions in accordance with 28. Tg ≤ RAL-UZ 120 and < 0.1% chlorinated paraffins and ≤ 0,1 % phthalates that are toxic to reproduction (= SVHC)	Technical data sheet and/or manufacturer declaration and additionally, for QL 4: Documentation of emissions according to EN ISO 16000-9/ EN 16516	All floor coverings	Documentation of emissions Chlorinated paraffins				Indoor air hygiene	Prevention of risk materials and impurities in recycling	Work stage 5–9
8	Primers, precoats, fillers and adhesives under wall and floor coverings (e.g. tiles, carpets, parquet, resilient floor coverings – with the exception of wallpaper)	All installation materials, auxiliary materials for installing surfaces (wall and floor)	VOC	GEV-EMICODE, GISCODE and RAL-UZ	GISCODE D1, RU 0.5, RU 1 RE1 or RS10	- GISCODE D1, RU 0.5, RU 1 RE1 or RS10 and - EMICODE EC1, EC1 <sup>PLUS</sup> , EC1-R or EC1 <sup>PLUS</sup> -R	- GISCODE D1, RU 0.5, RU 1 RE1 or RS10 and - EMICODE EC1, EC1 <sup>PLUS</sup> , EC1-R or EC1 <sup>PLUS</sup> -R	- GISCODE D1, RU 0.5, RU 1 RE1 or RS10 and - EMICODE EC1, EC1 <sup>PLUS</sup> , EC1-R or EC1 <sup>PLUS</sup> -R	Technical data sheet and/or SDS and/or GISBAU information system for hazardous substances classification and/or manufacturer declaration and/or test certificate	All relevant components and construction products					Indoor air hygiene		Work stage 5–9
9	Barrier coatings, resin screeds, seals under tiles	Auxiliary materials for installation	VOC	GEV-EMICODE, GISCODE	GISCODE D1, ZP1, RE0, RE1, RU 0.5 or RU 1	GISCODE D1, ZP1, RE0, RE1, RU 0.5 or RU 1	- GISCODE D1, ZP1, RE0, RE1, RU 0.5 or RU 1 and - EMICODE EC1, EC1 <sup>PLUS</sup> , EC1-R or EC1 <sup>PLUS</sup> -R	- GISCODE D1, ZP1, RE0, RE1, RU 0.5 or RU 1 and - EMICODE EC1, EC1 <sup>PLUS</sup> , EC1-R or EC1 <sup>PLUS</sup> -R	Technical data sheet and/or SDS and/or GISBAU information system for hazardous substances classification and/or manufacturer declaration and/or test certificate	All relevant components and construction products. For max. 5% of the GFA(RV) in accordance with DIN 277, no documentation is required.					Indoor air hygiene		Work stage 5–9
10	Natural stone floorings	Impregnations in the interior that do not form films (e.g. natural stone impregnations, sandstone strengthener)	VOC	VOC definition in accordance with Directive 2004/42/EC	Free of aromatic substances (GH10)	Free of aromatic substances (GH10)	Free of aromatic substances (GH10)	Solvent content < 5%, not subject to labelling requirements	Technical data sheet and/or SDS and/or GISBAU classification and/or manufacturer declaration – in special cases (type of natural stone), a technical exception may be justifiable	All relevant components and construction products					Risk minimisation in solvent manufacturing		Work stage 5–9
11	Skirting boards, door rails, support adhesive (raised or hollow floors); The areas of glass construction, façade and fire safety are not taken into account here	Sealing compounds, sealants and adhesives for attaching components in points and lines in the interior. This refers to PU adhesive and silane modified polymers (SMP)	VOC	GISCODE (PU, RS)	GISCODE PU20 or RS10	GISCODE PU20 or RS10	- GISCODE PU20 or RS10 and - EMICODE, EC1, EC1 <sup>PLUS</sup> , EC1-R or EC1 <sup>PLUS</sup> -R	- GISCODE PU20 or RS10 and - EMICODE, EC1, EC1 <sup>PLUS</sup> , EC1-R or EC1 <sup>PLUS</sup> -R	Technical data sheet and/or SDS and/or GISBAU classification and/or manufacturer declaration and/or test certificate	All relevant components and construction products	GISCODE PU10 GISCODE RS10				Indoor air hygiene	Risk minimisation in solvent manufacturing	Work stage 5–9



12	Adhesive bonds on small joints under mechanical stress; the areas of glass construction, façade and fire safety are not taken into account here	Sealing compounds, sealants and adhesives for attaching components in points and lines in the interior and attaching ventilation ducts inside the building. This refers to Acrylic sealants/adhesives, silicone sealants and SMP (hybrid sealants)	Chlorinated paraffins, solvents, HC	Chlorinated paraffins/solvents (in accordance with TRGS 610), hydrocarbon plasticisers	Chlorinated paraffins < 0.1%	Chlorinated paraffins < 0.1%	Chlorinated paraffins < 0.1%	Chlorinated paraffins < 0.1% Solvent < 1% and HC plasticisers < 0.1%	Technical data sheet and/or SDS and/or manufacturer declaration and/or test certificate	All relevant components and construction products in the standard applications of sealing joints (tiles, natural stone), connection joints (drywall construction, paintwork, doors) and sealants for indoor air ventilation installations (RLT)	Chlorinated paraffins	Risk minimisation in solvent manufacturing			Interior air hygiene and prevention of hazardous substances	Work stage 5–9
13	Installation adhesives and sealants on the façade, windows and external doors (applied on the construction site)	Adhesive for establishing airtightness on the internal and external façade: e.g. PU, PU hybrid, MS polymer, SMP, etc.	Halogenated propellants, chlorinated paraffins and emissions	Chlorinated paraffins/EMICODE	< 0.1% halogenated propellants	< 0.1% halogenated propellants	- Chlorinated paraffins < 0,1 % and halogenated propellants < 0.1% and - EMICODE, EC1, EC1 <sup>PLUS</sup> , EC1-R or EC1 <sup>PLUS</sup> -R or - VOC < 1 %	- Chlorinated paraffins < 0,1 % and halogenated propellants < 0.1% and - EMICODE, EC1, EC1 <sup>PLUS</sup> , EC1-R or EC1 <sup>PLUS</sup> -R or - VOC < 1 %	Technical data sheet and/or SDS and/or manufacturer declaration and/or test certificate	All relevant components and construction products	Chlorinated paraffins	Risk minimisation in solvent manufacturing	Prevention of refrigerants or propellants that are persistent by themselves or have degradation products that are persistent.*		Interior air hygiene and prevention of hazardous substances Prevention of refrigerants or propellants that are persistent by themselves or have degradation products that are persistent.*	Work stage 5–9
14	Concrete release agents	Mould oils and release agents for concreting	VOC	GISCODE	GISCODE BTM 5, BTM10, BTM15 or BTM20	GISCODE BTM 5, BTM10 or BTM15	GISCODE BTM 5, or BTM10	GISCODE BTM 5,	Technical data sheet and/or SDS and/or GISBAU classification	All relevant components and construction products		Risk minimisation in solvent manufacturing	Soil and groundwater protection			Work stage 5–9
15	Load-bearing and non-load-bearing metal components for indoor applications with > 50 m <sup>2</sup> coated surface (Factory and building site)	Fire safety coating for metal components with CE marking as part of a technical approval or on the basis of a European Technical Assessment.	VOC, emissions and halogens	VOC definition in accordance with Directive 2004/42/EC (VOC content) ISO 11890-2 and German Centre of Competence for Construction (DIBt) "Principles for the health assessment of construction products used in interiors" (VOC emissions)	Construction product evaluated for emissions in accordance with the DIBt principles for "Reactive fire protection systems on steel components" or national technical approvals (allgemeine bauaufsichtliche Zulassung (abZ))	Halogen-free product and VOC < 50 g/l	Halogen-free product and VOC < 25 g/l	Halogen-free product and VOC < 1 g/l	National technical approval (abZ)/technical data sheet/SDS/test certificate/AgBB certification	Plant and construction site	DIBt principles		Explanation: In the event of optional use of top coats in accordance with national technical approval (abZ) VOC < 60 g/l	Minimisation of solvent emissions into the environment		Work stage 5–9
16	Load-bearing metal components (wall thickness > 3 mm) with > 500 m <sup>2</sup> coated surface in the building such as atrium construction, bridges, etc. (Factory and building site)	Corrosion protection coatings for internal components (max. corrosiveness category C2 high)	VOC	VOC definition in accordance with Directive 2004/42/EC	< 300 g/l	Water-borne product <140 g/l (cat. A/i or A/j in accordance with the Decopaint Directive)	Water-borne product <140 g/l (cat. A/i or A/j in accordance with the Decopaint Directive)	Water-borne product < 100 g/l or use of a C3 coating system of quality level 4 (see next row)	Manufacturer declaration	Plant and construction site			Minimisation of solvent emissions into the environment			Work stage 5–9
17	Load-bearing metal components (wall thickness > 3 mm) with > 500 m <sup>2</sup> coated surface such as atrium construction, bridges, etc. (Factory and building site)	Corrosion protection coatings for components (max. corrosiveness category C3 high)	VOC	VOC definition in accordance with Directive 2004/42/EC	Coating system with VOC < 120 g/m <sup>2</sup>	Coating system with VOC < 90 g/m <sup>2</sup>	Coating system with VOC < 60 g/m <sup>2</sup>	Coating system with VOC < 30 g/m <sup>2</sup> or use of a coating system of C4 or higher, (see next row)	Note: The requirements in terms of corrosion protection for load-bearing components must be collectively considered to be a single criterion with regard to exemptions (for quality levels 3 and 4).	Plant and construction site			Minimisation of solvent emissions into the environment			Work stage 5–9
18	Load-bearing metal components (wall thickness > 3 mm) with > 500 m <sup>2</sup> coated surface such as atrium construction, bridges, etc. (Factory and building site)	Corrosion protection coatings for components (corrosiveness category higher than C3)	VOC	VOC definition in accordance with Directive 2004/42/EC	Coating system with VOC < 150 g/m <sup>2</sup>	Coating system with VOC < 120 g/m <sup>2</sup>	Coating system with VOC < 90 g/m <sup>2</sup>	Coating system with VOC < 60 g/m <sup>2</sup>		Plant and construction site			Minimisation of solvent emissions into the environment			Work stage 5–9





19	Non-load-bearing metal components such as banners, metal substructures, frames, steel doors, façade elements and heat and cold transfer surfaces (Factory and building site)	Corrosion protection coatings and effect coatings (e.g. metallic effect paints)	VOC	VOC definition in accordance with Directive 2004/42/EC	< 300 g/l Category A/d in accordance with Directive 2004/42/EC	< 300 g/l Category A/d in accordance with Directive 2004/42/EC	Water-borne products < 140 g/l Exception: For metallic effect paints < 300 g/l – Category A/d in accordance with Directive 2004/42/EC (Decopaint Directive)	Water-borne products < 140 g/l Exception: For metallic effect paints < 300 g/l – Category A/d in accordance with Directive 2004/42/EC (Decopaint Directive)	Technical data sheet and/or SDS	Plant and construction site		Minimisation of solvent emissions into the environment					Work stage 5–9
20	Reactive PU products for coating mineral floor, ceiling and wall surfaces – including in system structures with no special requirements	Seals, 2K PU paints, PU floor coatings - with the exception of OS (surface protection) systems for car parks, etc.	VOC, hazardous substances	GISCODE	GISCODE PU40	GISCODE PU40	- GISCODE PU40 and - documentation of emissions in accordance with the AgBB process as an individual product or in the system	- GISCODE PU40 and - documentation of emissions in accordance with the AgBB process as an individual product or in the system	Technical data sheet and/or SDS and/or GISBAU classification and/or manufacturer declaration and/or test certificate	All relevant components and construction products. For max. 5% of the GFA(RV) in accordance with DIN 277, no documentation is required.	GISCODE PU10 Documentation of emissions as an individual product or in the system AgBB test certificate	Risk minimisation in solvent manufacturing	Minimisation of solvent emissions into the environment	Indoor air hygiene			Work stage 5–9
21	Coatings for wood surfaces such as parquet, staircases and panelling	Products for surface coating	VOC	GISCODE	GISCODE W1, W2+, W3, W3+, W1/DD, W2/DD+, W3/DD or W3/DD+	GISCODE W1, W2+, W3, W3+, W1/DD, W2/DD+, W3/DD or W3/DD+	GISCODE W1, W2+, W1/DD or W2/DD+	GISCODE W1, W2+, W1/DD or W2/DD+	Technical data sheet and/or SDS and/or GISBAU information system for hazardous substances classification and/or manufacturer declaration and/or test certificate	All relevant components and construction products		Minimisation of solvent emissions into the environment	Indoor air hygiene			Work stage 5–9	
22	PMMA and PMMA/epoxy coatings for floor and wall surfaces (e.g. skirting boards) with special requirements and liquid plastic	Industrial floorings, parking areas and underground garages, with the exception of markings (not regulated) and liquid plastics for sealing rising components or kitchens	VOC	GISCODE			RMA10 or RMA15	RMA10 or RMA15	Technical data sheet and/or SDS	All relevant components and construction products		Risk minimisation in solvent manufacturing	Minimisation of solvent emissions into the environment			Work stage 5–9	
23	"EP-products for coating mineral surfaces: "floors, ceilings and walls – including in system structures with no special requirements	Seals, 2K EP paints, EP floor coatings – with the exception of OS (surface protection) systems for car parks, etc.	VOC, hazardous substances	GISCODE	GISCODE RE0, RE1 or RE2	GISCODE RE0 or RE1	- GISCODE RE0 or RE1 and - documentation of emissions in accordance with the AgBB process as an individual product or in the system	- Nonylphenol ≤ 0.1% Dodecylphenol ≤ 0.1% Bisphenol A ≤ 0.1% and p-tert-butylphenol ≤ 0.1% and - GISCODE RE0 or RE1 and - documentation of emissions in accordance with the AgBB process as an individual product or in the system	Technical data sheet and/or SDS and/or GISBAU information system for hazardous substances classification and/or manufacturer declaration and/or test certificate	All relevant components and construction products For max. 5% of the GFA(RV) in accordance with DIN 277, no documentation is required	Documentation of emissions as an individual product or in the system AgBB test certificate	Risk minimisation in solvent manufacturing	Minimisation of solvent emissions into the environment	Indoor air hygiene		Work stage 5–9	
24	EP/PU primers (including asphalt screeds) and coatings for floor and wall surfaces (e.g. skirting boards) with special requirements	Industrial floorings, parking areas and underground garages (OS (surface protection) 8, 10, 11 u.a.) with the exception of markings (not regulated)	Polyurethane and epoxy resins	GISCODE	GISCODE PU10, PU20, PU40, PU60, RE0, RE1 or RE2	GISCODE PU10, PU20, PU40, PU60, RE0, RE1 or RE2	GISCODE PU10, PU40, PU60, RE0 or RE1	GISCODE PU10, PU40, PU60, RE0 or RE1	Technical data sheet and/or SDS and/or GISBAU information system for hazardous substances classification and/or manufacturer declaration and/or test certificate	All relevant components and construction products	GISCODE PU10	Risk minimisation in solvent manufacturing	Minimisation of solvent emissions into the environment			Work stage 5–9	
25	Roof sealing, sealing of buildings against soil/water/moisture, thick bitumen coating and insulating material installation	Coating products that can be processed cold (e.g. precoats) and auxiliary materials for installation (e.g. adhesive, sealants)	Bitumen	Solvent: Boiling point 135–250 °C GISCODE	GISCODE BBP10 or BBP20	GISCODE BBP10 or BBP20	GISCODE BBP10	GISCODE BBP10	Technical data sheet and/or SDS and/or GISBAU information system for hazardous substances classification and/or manufacturer declaration and/or test certificate	All relevant components and construction products		Risk minimisation in solvent manufacturing	Minimisation of solvent emissions into the environment	Indoor air hygiene		Work stage 5–9	



26	Bituminous compound sealants for inverted roofs	Bitumen primer	Bitumen	GISCODE	GISCODE BBP10, BBP20 or BBP30	GISCODE BBP10, BBP20 or BBP30	GISCODE BBP10, BBP20 or BBP30	GISCODE BBP10, BBP20 or BBP30	Technical data sheet and/or SDS and/or GISBAU information system for hazardous substances classification and/or manufacturer declaration and/or test certificate	All relevant components and construction products				Prevention of aromatic solvents			Work stage 5–9
27	Coatings for wood surfaces such as parquet, staircases and panelling	Products for coating wood	Oils and waxes	GISCODE	GISCODE Ö10, Ö20 or Ö40	GISCODE Ö10 or Ö20	GISCODE Ö10	GISCODE Ö10	Technical data sheet and/or SDS and/or GISBAU information system for hazardous substances classification and/or manufacturer declaration and/or test certificate	All relevant components and construction products			Risk minimisation in solvent manufacturing	Minimisation of solvent emissions into the environment	Indoor air hygiene		Work stage 5–9
28	Load-bearing internal wood components together with outward-facing overhangs (Factory and building site)	Chemical wood protection in accordance with DIN 68800-3 – GK = Use class (previously hazard class)	Wood preservative (product type 8 in accordance with 528/2012/EC)	528/2012/EC	GK 0: Wood preservative for construction purposes only in accordance with 68800-2  GK 1–3: Marketable biocidal products in accordance with 528/2012/EC	GK 0 and 1: Wood preservative for construction purposes only in accordance with 68800-2  GK 2–3: Marketable biocidal products in accordance with 528/2012/EC	Wood preservative for construction purposes only in accordance with 68800-2 or natural durability in accordance with DIN EN 350-2	Wood preservative for construction purposes only in accordance with 68800-2 or natural durability in accordance with DIN EN 350-2	Planning, technical data sheet and/or SDS and/or manufacturer declaration and/or test certificate	All relevant components and construction products	Wood preservative in accordance with 68800-2 or natural durability in accordance with DIN EN 350-2					Prevention of risk materials and impurities in recycling	Work stage 3–9
29	External load-bearing wood components (Factory and building site)	Chemical wood protection in accordance with DIN 68800-3 – GK = use class (previously hazard class)	Wood preservative (product type 8 in accordance with 528/2012/EC)	528/2012/EC	GK 2–4: Marketable biocidal products in accordance with 528/2012/EC	GK 2: Wood preservative for construction purposes only in accordance with 68800-2  GK 3 and 4: Marketable biocidal products in accordance with 528/2012/EC	GK 2: Wood preservative for construction purposes only in accordance with 68800-2  GK 3 and 4: Marketable biocidal products in accordance with 528/2012/EC	Wood preservative for construction purposes only in accordance with 68800-2 or natural durability in accordance with DIN EN 350-2	Planning and/or technical data sheet and/or SDS and/or manufacturer declaration and/or test certificate	All relevant components and construction products	Wood preservative in accordance with 68800-2 or natural durability in accordance with DIN EN 350-2					Prevention of risk materials and impurities in recycling	Work stage 3–9
30	Wooden windows and internal and external non-load-bearing wood components (e.g. façade and patio) (Factory and building site)	Chemical impregnation of non-load-bearing components	Wood preservative (product type 8 in accordance with 528/2012/EC)	528/2012/EC	Internal: No chemical wood preservative  External and windows: Marketable biocidal products in accordance with 528/2012/EC	Internal: No chemical wood preservative  External and windows: Marketable biocidal products in accordance with 528/2012/EC	No chemical wood preservative in the interior and exterior  Exception: Windows only with marketable biocidal products in accordance with 528/2012/EC	No chemical wood preservative in the interior and exterior  Exception: Windows only with marketable biocidal products in accordance with 528/2012/EC	Technical data sheet and/or SDS and/or manufacturer declaration	Internal: All relevant components  External: All relevant components and construction products. For max. 5% of the GFA(RV) in accordance with DIN 277, no documentation is required.						Prevention of risk materials and impurities in recycling	Work stage 3–9
31	Products with film preservation and goods treated with biocides	Exterior plasters, façade coatings, floor coverings made of wool/natural fibres, wood glazes with film preservation	Biocides (product type 7 and 9 in accordance with 528/2012/EC: Preservatives for construction materials) e.g. algicides, fungicides, moth repellents	528/2012/EC	Marketable goods and/or approved substance in accordance with 528/2012/EC	Marketable goods and/or approved substance in accordance with 528/2012/EC	Marketable goods and/or approved substance in accordance with 528/2012/EC	Marketable goods and/or approved substance in accordance with 528/2012/EC  The following applies to NWO15: No internal use of biocidal substances with the exception of in-can preservation	Manufacturer declaration	All relevant components and construction products	Approved substance in accordance with 528/2012/EC  Biocidal Products Directive					Prevention of risk materials and impurities in recycling	Work stage 3–9
32	All aluminium and stainless steel components in the building envelope with a total area as a component of > 5 m <sup>2</sup> . Sun protection slats, roller shutter boxes and stainless steel railings are not taken into account. (Factory)	Products for passivation of aluminium and stainless steel	Chromium (VI)				Chromium (VI)-free passivating agents	Chromium (VI)-free passivating agents	Manufacturer declaration	All relevant building envelope components such as façade profiles, coverings and parapet plates					Soil and groundwater protection		Work stage 3–9
33	Coated metal components: Façade elements, doors, radiators and heating/cooling ceilings. Hot-dip galvanising is not considered to be a coating for the purposes of this criterion. (Factory and building site)	Primers and final coatings (e.g. paints, lacquers, powder coatings)	Lead, cadmium and chromium (VI)		No use of lead, cadmium and chromium (VI) compounds	No use of lead, cadmium and chromium (VI) compounds	No use of lead, cadmium and chromium (VI) compounds	No use of lead, cadmium and chromium (VI) compounds	SDS and/or manufacturer declaration	Components with coating applied at the factory with a coated area > 100 m <sup>2</sup> per component type (e.g. steel door) in the building			Prevention of hazardous waste (Cr(VI) baths)				Work stage 3–9



34	Roof covering, guttering, downpipes	Components conveying water on the roof and rainwater drainage	Lead, copper and zinc				Heavy metal filters, if area > 10% of the projected roof area viewed from above	Heavy metal filters, if area > 10% of the projected roof area viewed from above	Planning and/or manufacturer declaration and/or documentation in accordance with Umweltbundesamt (UBA) guideline 17/05	All relevant components and construction products				Soil and groundwater protection	Work stage 3–9
35	Plastics for installing surfaces (floor and wall) as well as components on the building envelope (Factory)	Resilient floor coverings (e.g. PVC, rubber), wall coverings, skylights, plastic windows, sound insulation inserts (e.g. façade brace)	Organolead and organostannic compounds		Lead content < 0.1% and tin content < 0.1%	Lead content < 0.1% and tin content < 0.1%	Lead content < 0.1% and tin content < 0.1%	Lead content < 0.1% and tin content < 0.1%	Manufacturer declaration	All relevant components > 100 m <sup>2</sup> per product group / component type in the building; relevant is the merged area	Please note: Use of recycled materials			Prevention of risk materials and impurities in recycling	Work stage 5–9
36	Plastic films on roof and foundations (Factory)	Plastic films for sealing on roof and basement level external walls are taken into account	Organolead and organostannic compounds		Lead content < 0.1% and tin content < 0.1%	Lead content < 0.1% and tin content < 0.1%	Lead content < 0.1% and tin content < 0.1%	Lead content < 0.1% and tin content < 0.1%	Manufacturer declaration	All relevant components > 100 m <sup>2</sup>	Please note: Use of recycled materials			Prevention of risk materials and impurities in recycling	Work stage 5–9
37	Cooling systems/ building technology/ split devices (Factory)	Refrigerants	Halogenated refrigerants		Additional evaluation point: Does not contain halogenated/ partially halogenated refrigerants	Additional evaluation point: Does not contain halogenated/ partially halogenated refrigerants	Additional evaluation point: Does not contain halogenated/ partially halogenated refrigerants	Does not contain halogenated/ partially halogenated refrigerants	Building technology planning and/or manufacturer declaration	All relevant components and construction products		Prevention of refrigerants or propellants that are persistent by themselves or have degradation products that are persistent.*		Prevention of refrigerants or propellants that are persistent by themselves or have degradation products that are persistent.*	Work stage 3–9
38	Assembly foams B2 or E with insulating and attaching function (except for adhesive bonds of insulating materials)	In-situ and assembly foams for installing external doors and windows and for fittings, e.g. door frames	Halogenated and other propellants, solvents, plasticisers and flame retardants	REACH, SVHC	- EMICODE EC1 <sup>Plus</sup> and - no use of halogenated propellants, chlorinated paraffins and TCEP	- EMICODE EC1 <sup>Plus</sup> and - no use of halogenated propellants, chlorinated paraffins and TCEP	- EMICODE EC1 <sup>Plus</sup> and - no use of halogenated propellants, chlorinated paraffins, TCEP, plasticisers and halogenated flame retardants	- EMICODE EC1 <sup>Plus</sup> and - no use of halogenated propellants, chlorinated paraffins, TCEP, plasticisers and halogenated flame retardants	Technical data sheet and/or SDS and/or manufacturer declaration and/or EC1 <sup>Plus</sup> documentation (certificate or technical data sheet)	All relevant components and construction products	Propellants REACH candidate list	Prevention of refrigerants or propellants that are persistent by themselves or have degradation products that are persistent.*		Prevention of refrigerants or propellants that are persistent by themselves or have degradation products that are persistent.*	Work stage 5–9
39	Assembly foams for insulating materials	Assembly foams e.g. for attaching ETICS, perimeter insulation, cellar ceiling insulation and flat roof insulation	Halogenated and other propellants	REACH, SVHC	No use of assembly foams (except for joints in accordance with national technical approval (abZ))	No use of assembly foams (except for joints in accordance with national technical approval (abZ))	No use of assembly foams (except for joints in accordance with national technical approval (abZ))	No use of assembly foams (except for joints in accordance with national technical approval (abZ))	National technical approval (Allgemeine bauaufsichtliche Zulassung (abZ)) and documentation of the mineral adhesive, joint foam with no halogenated propellants (technical data sheet and/or SDS)	All relevant components and construction products		Prevention of refrigerants or propellants that are persistent by themselves or have degradation products that are persistent.*		Prevention of refrigerants or propellants that are persistent by themselves or have degradation products that are persistent.* Durability of the adhesive bond	Work stage 5–9
40	Synthetic insulating materials for buildings and building services	PS/XPS/PUR insulating products, flexible building technology insulation (rubber and PE)	Halogenated propellants	REACH	No use of halogenated propellants	No use of halogenated propellants	No use of halogenated propellants	No use of halogenated propellants	Technical data sheet and/or manufacturer declaration	All components and construction products relevant for the EnEV and the main parts of the building technology		Prevention of potent greenhouse gases			Work stage 5–9
41	Synthetic insulating materials (building and building services incl. heating and cooling surfaces)	PS/XPS, PUR/PIR, Resol panels	Flame retardant hexabromocyclododecane (HBCD)	HBCD ban	HBCD-free	HBCD-free	HBCD-free	HBCD-free	SDS and/or manufacturer declaration					Prevention of risk materials and impurities in recycling	Work stage 5–9



42	Construction products equipped with flame retardant (mixtures)	Technical fire protection, adhesive bonds or seals in interior spaces, PU installation adhesives: Firewall filler, fire protection coatings for cables, fire protection silicones, PU installation adhesives for insulating materials (EPS, XPS, PUR)	Chlorinated paraffins (cf. definition) and SVHC	Restriction in accordance with POP Regulation and SVHC from the REACH candidate list as well as long-chain chlorinated paraffins			CPS < 0.1% and SVHC ≤ 0.1%	CPS < 0.1% and SVHC ≤ 0.1%	Technical data sheet and/or current SDS in accordance with 1907/2006/EC (substances that require declaration in SDS) and manufacturer declaration "No chlorinated paraffins and no SVHC > 0.1%"	All relevant components and construction products	Chlorinated paraffins POP Regulation REACH candidate list				Prevention of hazardous substances		Work stage 5–9	
43	Construction products equipped with flame retardant (products)	Insulating materials for building services and wall coverings (fibre-glass wallpapers, non-woven paint substrates, non-woven decorative fabrics, etc.)	Chlorinated paraffins (cf. definition), polybrominated biphenyls (PBB) and diphenyl ethers (PBDE) and SVHC	Restriction in accordance with POP Regulation and SVHC from the REACH candidate list as well as long-chain chlorinated paraffins			CPS < 0.1% PBB < 0.1%, PBDE < 0.1%, and SVHC ≤ 0.1% Exemption: For construction material class B1, insulating materials with long-chain CP (LCCP) are tolerated	CPS ≤ 0.1% PBB < 0.1%, PBDE < 0.1%, and SVHC ≤ 0.1%	Technical data sheet and/or manufacturer declaration "No chlorinated paraffins, no polybrominated biphenyls, no polybrominated biphenyl ethers and no SVHC > 0.1%"	All relevant components and construction products	Chlorinated paraffins POP Regulation REACH candidate list				Prevention of hazardous substances	Prevention of hazardous substances	Work stage 5–9	
44	Products made of Plastics (Factory)	External wall and roof sealing, wall coverings, windows, electrical cables: Plastic films, wall coverings, wallpaper, plastic windows, cable sheathing	SVHC phthalates (plasticisers)	SVHC in the REACH candidate list (all); partially included in REACH Annex XIV			SVHC ≤ 0.1%	SVHC ≤ 0.1%	Technical data sheet and/or manufacturer declaration "No SVHC > 0.1%"	All relevant components and construction products	REACH candidate list				Prevention of hazardous substances	Prevention of hazardous substances	Work stage 5–9	
45	Construction products (products) equipped with biocides and flame retardants: Wood preservatives, wood materials, insulating materials (Factory and building site)	Load-bearing wood structures, soft fibreboard, insulation incl. blown-in products and fills: Wood preservative preparations, wood materials, organic insulating materials (cellulose, fibreboard, wood shavings, sheep's wool, etc.)	Boron compounds as recipe components	SVHC in the REACH candidate list (all); partially included in REACH Annex XIV			Boron compounds ≤ 0.1%	Boron compounds ≤ 0.1%	Technical data sheet and/or manufacturer declaration "No boron compounds > 0.1%"	All relevant components and construction products					Prevention of hazardous substances		Work stage 5–9	
46	PU system adhesive	PU construction adhesive for dry screed, hollow floors, dry construction boards	Solvents	REACH		GISCODE RU1 (solvent-free)	GISCODE RU1 (solvent-free)	GISCODE RU1 (solvent-free)	Technical data sheet and SDS	All relevant components and construction products							Work stage 5–9	
47 a	Industrially manufactured products Serial products / finished products made of wood-based materials in interiors, such as: As chipboard, OSB boards, MDF boards (Factory)	Interior doors made of wood-based material, room acoustic elements, room-in-room systems, panelling on walls and ceilings, multi-layer parquet, multi-layer laminates, etc.	Formaldehyde	German Prohibited Chemicals Regulation (ChemVerbotsV), emission values in accordance with DIN EN 717-1/ EN ISO 16000-9/EN 16516		Formaldehyde < 0.1 ppm (= 0.120 mg/m³) in the test chamber	Formaldehyde < 0.1 ppm (= 0.120 mg/m³) in the test chamber	Formaldehyde < 0.065 ppm (= 0.080 mg/m³) in the test chamber	RAL-UZ 76 or formaldehyde < 0.05 ppm (= 0.062 mg/m³) in the test chamber	Technical data sheet and RAL-UZ certificate or test certificate in accordance with EN 717-1/ DIN EN ISO 12460-5	All relevant components and construction products					For measurements in accordance with EN ISO 16000-9 or EN 16516, the values must be converted in accordance with the WKI calculation model		



47 b	Coated and uncoated wood materials: chipboard, block board, veneer boards, fibreboard (Factory and building site)	Joiner's products for artisanal installations: panelling on walls and ceilings, washbasins	Formaldehyde	perforator values in accordance with DIN EN ISO 12460-5	panel ≤ 8 mg formaldehyde (HCHO)/100 g	panel ≤ 8 mg formaldehyde (HCHO)/100 g	panel < 4 mg formaldehyde (HCHO)/100 g	panel ≤ 3 mg formaldehyde (HCHO)/100 g									
48	Wood construction: Wood materials for construction such as chipboard, OSB panels, etc. (Factory and building site)	Bracing wood panels on walls, floors and ceilings in wooden houses/wooden structures	Formaldehyde	German Prohibited Chemicals Regulation (ChemVerbotsV), emission values in accordance with DIN EN 717-1/EN ISO 16000-9/EN 16516 or perforator values in accordance with DIN EN ISO 12460-5	Formaldehyde < 0.1 ppm (= 0.120 mg/m <sup>3</sup> ) in the test chamber or panel ≤ 8 mg formaldehyde (HCHO)/100 g	Formaldehyde < 0.1 ppm (= 0.120 mg/m <sup>3</sup> ) in the test chamber or panel ≤ 8 mg formaldehyde (HCHO)/100 g	Formaldehyde < 0.05 ppm (= 0.062 mg/m <sup>3</sup> ) in the test chamber or panel ≤ 4 mg formaldehyde (HCHO)/100 g	RAL-UZ 76 or formaldehyde < 0.03 ppm (= 0.036 mg/m <sup>3</sup> ) in the test chamber or panel ≤ 3 mg formaldehyde (HCHO)/100 g	Technical data sheet and RAL-UZ certificate or test certificate in accordance with DIN EN 717-1/ DIN EN ISO 12460-5 or equivalent documentation of emissions in accordance with explanation (WKI calculation model)	All relevant components and construction products	For measurements in accordance with EN ISO 16000-9 or EN 16516, the values must be converted in accordance with the WKI calculation model	Perforator testing only for uncoated chipboard, MDF, OSB					

Note: Color-coded rows (column "No."): In addition, the explanations in Chapter III Method have to be considered ("The following requirements of this criterion are listed below  
View, demonstrate and comply with materials / products / materials delivered to the site. ")



## Explanations and information regarding APPENDIX 1 (criteria matrix):

**Legally valid proof** (see General information: 1): Legally valid proof is considered to include a document signed ppa. or a clear statement in the manufacturer declaration that this was legally issued by a person with knowledge of the recipe.

### **Chlorinated paraffins:**

The term "chlorinated paraffins" refers to substance mixtures that contain chlorinated alkanes with a chain lengths of 10-30 carbon atoms and a chlorination degree of 10% to 70% by mass (= SCCP (short-chain CP), MCCP (medium-chain CP) and LCCP (long-chain CP)).

### **POP Regulation and REACH candidate list:**

Both the POP Regulation and the REACH candidate list currently regulate short-chain chlorinated paraffins. As a precaution, however, medium-chain and long-chain chlorinated paraffins are also relevant for consideration.

### **AgBB test certificate:**

The AgBB test certificate can only be attained with low-VOC formulations << 100 g/l emissions

### **GISCODE PU10 or PU20:**

Due to tougher classification of all isocyanates as sensitising substances, products that were previously classified as falling under GISCODES PU10 or PU20 have been reclassified as falling under GISCODES PU40 and PU50. Pending amendment of the GISCODES, substances with GISCODES PU40 (in place of PU10) and PU50 (in place of PU20) will be accepted.

### **GISCODE RS10:**

GISCODE RS10 does not apply to sealants

**Wood preservative in accordance with 68800-2 or natural durability in accordance with DIN EN 350-2:** Previously, classification was carried out in accordance with DIN 68364 (11-1979). The new DIN 68800, published in 2011, no longer refers to type-specific resistance; its explanations instead refer to natural durability as defined by DIN EN 350-2.

### **Approved substance in accordance with 528/2012/EC:**

For products manufactured in the EU, it can be assumed that this requirement has been complied with due to the statutory regulations in place (no additional documentation is required here).

### **Biocidal Products Directive:**

More information regarding the substances permitted within the Biocidal Products Directive can be found at: <http://www.reach-clp-biozid-helpdesk.de/de/Biozide/Wirkstoffe/Genehmigte-Wirkstoffe/Genehmigte-Wirkstoffe.html>

### **Documentation of emissions:**

Certification (no more than 5 years old) by a laboratory accredited in accordance with ISO 17025 that the product or system complies with the AgBB criteria (except for sensory characteristics) on the basis of emissions testing in accordance with ISO 16000-9, prEN 16516 or EN 16402.

### **Documentation of emissions as an individual product or in the system:**

A certificate of compliance with DIN V 18026: 2006-6 together with documentation of compliance with the emissions requirements in accordance with AgBB by a test body approved for this purpose by the German Centre of Competence for Construction (DIBt) will also be accepted in place of the documentation of emissions.



**Hydrocarbon plasticiser (HC):**

Hydrocarbon plasticisers are aliphatic hydrocarbons within a boiling point range of 200–400 degrees Celsius

**Note – coatings applied at the factory:**

The VOC requirements in row 1 in the highest quality level (QL) can be fulfilled in the factory with coating materials of QL3 (<100 g VOC/l).

**Note – use of recycled materials:**

For products made from recycled plastics, proof that they do not contain organolead, organocadmium or organostannic compounds must be provided via a manufacturer declaration.

**Note – DIBt principles:**

DIBt principles for health evaluation of construction products in interior spaces: Incl. information regarding the work area of "Reactive fire protection systems on steel components" (DIBt Section II4 and III4, published: April 2014).

**Information, explanations and footnotes** for "Focus of impact of the substances/aspects considered over the individual stages in the life of a building":

- \* "Halogenated refrigerants or propellants" in rows 13, 37, 38 and 39:  
Prevention of halogenated refrigerants or propellants, unless it has been proven that they and their degradation products do not accumulate in the environment or have persistent degradation products that can pollute (accumulate in) natural basins or have harmful effects there.



## APPENDIX 2

Kostengruppe (KG): 350  
Bauteilbezeichnung: Geschossdecke über Keller

Darstellung:



### HINWEIS:

Es sind alle Bauteilschichten pro Bauteil zu benennen. Baustoffe, die in der DGNB-Bewertung nicht berücksichtigt werden, sind als „nicht relevant“ zu kennzeichnen. Es sind alle Bauteile / Baugruppen der folgenden Kostengruppen aufzuführen:

- 320 – Gründung
  - 330 – Außenwände
  - 340 – Innenwände
  - 350 – Decken
  - 360 – Dächer
  - 370 – Baukonstruktive Einbauten
  - 410 – Abwasser-, Wasser-, Gasanlagen
  - 420 – Wärmeversorgungsanlagen\*
  - 430 – Lüfttechnische Anlagen\*
  - 440 – Starkstromanlagen\*
  - 450 – Förderanlagen\*
- \*nur relevante Baugruppen

INNEN

Nr	Bezeichnung	Baustoff	Hersteller	Produktbezeichnung	Betrachtete Stoffe / Aspekte: Ifd. Nr. der Kriterienmatrix	Qualitätsstufe der Kriterienmatrix der DGNB	Kurzbezeichnung	Gesamtfläche der Baueinheit (Bauteil) (s-Beschreibung Methode im Kriterium)	Flächenanteil		Anlagenverweis AL – Anlage SDB – Sicherheitsdatenblatt TM – Technisches Merkblatt GIS – Informationsblatt GISBAU EPD – Environmental Product Declarations
									(m²)	(%)	
1	Linoleum										
2	Klebstoff										
3	Grundierung										
4	Zementestrich										
5	Dämmung										
6	Stahlbeton										
7	Grundanstrich										
8	Deckanstrich	Innenfarbe auf Silikatbasis	Muster AG	Sytitol Bio-Innenfarbe	VOC Ifd. Nr.2	4		Das Produkt ist lösemittelfrei, weichmachertfrei, frei von foggungsgänglichen Substanzen			siehe AL 1.1 SDB S.14

AUSSEN

8 Beispielzeile





### APPENDIX 3

#### Example letter "Confirmation by manufacturing companies"

"Dear Sir or Madam,

For the project:

The following coating materials/coating systems should be used:

NO.	PRODUCT	DFT μM	VOC G/L	VOC MASS%	VOC G/M <sup>2</sup>
1					
2					
3					
Total					

Please supplement the VOC data in the units g/l, mass% and g/m<sup>2</sup> of coated surface with the specified dry film thickness (DFT) on the basis of the theoretical yield.

Thank you, and  
kind regards



## APPENDIX 4

### Example letter "SVHC enquiry"

#### **Regulation (EC) No. 1907/2006 (REACH Regulation), obligation to provide information in accordance with Art. 33**

Dear Sir or Madam,

The European Chemicals Agency (ECHA) has published a list of substances of very high concern that meet the criteria of Art. 57 of the REACH Regulation mentioned above and that have been determined in accordance with the process described in Art. 59 of the regulation on its website ([http://echa.europa.eu/chem\\_data/candidate\\_list\\_table\\_en.asp](http://echa.europa.eu/chem_data/candidate_list_table_en.asp)).

I request that you inform me/us, with reference to Art. 33(2) of the regulation mentioned above, of whether the product "XXXX" sold by you contains any of these substances of very high concern in proportions of more than 0.1%, and that you provide me/us with the information required for safe use of the product "XXXX".

In accordance with Art. 33 of the regulation mentioned above, you, as a supplier of "XXXX", are obligated to provide me, as a user, with this information within 45 days.

Thank you, and  
kind regards



## APPENDIX 5

### Dealing with incorrect use (during material inspections on the construction site)

If, as part of these construction site inspections, it is determined that individual materials have been installed that are not in conformity with the intended quality level 3 or 4, their use must be prohibited in writing by the construction managers/property monitoring specialists. This notification of defects specifies the material, the affected component, the work that has been carried out, the reason for deviation and the areas constructed using the material that is not in conformity.

These deviations must be documented as follows in order to ensure that they do not prevent the achievement of objectives in accordance with quality level 3 or 4:

- Specification of the suitable material approved for use prior to commencement of the work in question (approval list with date),
- Written notification of defects by the construction managers/property monitoring specialists and notification that the work is free from defects by the company responsible for carrying out construction,
- Specification of the area where work was carried out using the material that is not in conformity; here, it must be proven that this amounts to < 5% of the area of the component (example: Flat roof as a warm roof, incorrect use of undercoat, area < 5% of the warm roof area) for which the material type in question is intended in the trade involved in carrying out the work (proof via building elements catalogue),
- The building owner is not subject to any penalties arising from harmful substances that permanently remain within the material such as heavy metals, plasticisers or solvents that form deposits on absorbent substrates (solvent seal on parquet) – proof via technical data and safety data sheet or SVHC documentation or manufacturer declaration, e.g. plasticisers
- The incorrect use does not prevent the achievement of objectives intended for the project in accordance with SOC1.2 indicator 1, Indoor air quality (degassing behaviour, ventilation programme for compensation, etc.)
- Logs of properly executed and regular material inspections (see above) on the construction site (cf. PRO2.1) are presented
- Construction managers/property monitoring specialists or, alternatively, the company responsible for carrying out construction provide legally valid confirmation (ppa.) that – with the exception of the single instance of incorrect use – work has been carried out exclusively with approved materials in accordance with the target quality level of this criterion

Please note: The DGNB expressly states that the DGNB documentation must correspond to the building constructed. Any discrepancies between the technical documentation and the DGNB documentation with regards to the materials used may therefore result in pecuniary losses, even for future owners of the buildings years later. As such, the constructions are tested for harmful substances, e.g. for DGNB inventory certification or as part of DD reviews, in order to prevent pecuniary losses as a result of refurbishment costs.

It is therefore recommended that the construction managers/property monitoring specialists obtain legally valid confirmation of the exclusive use of approved materials by the companies responsible for carrying out construction (e.g. via signature of the approval list).