



ENV1.2

Local environmental impact



Objective

Our goal is to reduce, avoid or substitute all hazardous or harmful materials, (construction) products and substances and mixtures that may affect humans, flora and fauna or cause short, medium and/or long-term damage.

Benefits

The use of particularly environmentally compatible materials is not only an important contribution to improving indoor air quality, but also helps to limit the building's risk of renovation with regard to pollutants. Only a complete material-ecological building components catalogue can provide the building owner with information regarding the building products used and where in the building they were used. This information is important for quality assurance in construction, for the clarification of defects and their proper elimination and for cost-optimised maintenance. This makes an important contribution to the value stability of a building.

Contribution to overarching sustainability goals



Prospect

The handling of environmentally harmful materials and their use are increasingly subject to regulatory requirements. The classifications will therefore change in the future. In addition, a further quality level (QL0) is planned, which will include an exclusion criterion for certain materials.

Share of total score

	SHARE	IMPORTANCE FACTOR
Office Education Commercial building	5.2%	5
Assembly buildings Healthcare buildings		
Residential Hotel Consumer market	5.0%	5
Shopping centre		
Logistics Production	4.8%	5



EVALUATION

The quality levels (QL) named in the criteria matrix build on each other. The quality level achieved results from the individual aspect that must be rated lowest and the form of verification. The verification in the form of a building components catalogue supplemented with ecological materials is evaluated positively. The simplified trade-by-trade documentation can be used in quality level 1 or 2. The requirements of the respective higher quality level presuppose the successful implementation of all mentioned requirements of the lower levels. A maximum of 100 points without bonuses and a maximum of 135 points with bonuses can be achieved in the criterion.

MINIMUM REQUIREMENT

FOR ALL BUILDINGS:-

FOR PLATINUM CERTIFIED BUILDINGS: Compliance with quality level 3 (QL3)

NO.	INDICATOR	POINTS
1	Environmentally friendly materials	
1.1	<p>Office Education Hotel Consumer market Logistics Production Assembly buildings</p> <p>Healthcare buildings</p> <p>Fulfilment of all requirements of the criteria matrix:</p> <ul style="list-style-type: none"> ■ QL 1 (simplified documentation) 10 ■ QL 2 (simplified documentation) 30 ■ QL 2 (material-ecological building components catalogue or comparable) 50 ■ QL 3 (material-ecological building components catalogue or comparable) 75 <p><u>Minimum requirements for Platinum</u></p> <ul style="list-style-type: none"> ■ QL 4 (material-ecological building components catalogue or comparable) 100 <p>Residential Commercial building</p> <p>Fulfilment of all requirements of the criteria matrix: The evaluation of the common areas, the building envelope and the living areas/rentable areas 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)</p> <ul style="list-style-type: none"> ■ QL 1 (simplified documentation) 5 ■ QL 2 (simplified documentation) 15 ■ QL 2 (material-ecological building components catalogue or comparable) 25 ■ QL 3 (material-ecological building components catalogue or comparable) 35 <p><u>Minimum requirements for Platinum</u></p> <ul style="list-style-type: none"> ■ QL 4 (material-ecological building components catalogue or comparable) 50 <p>Shopping centre</p> <p>Fulfilment of all requirements of the criteria matrix: Evaluation of the common areas, the building envelope.</p> <ul style="list-style-type: none"> ■ QL 1 (simplified documentation) 5 ■ QL 2 (simplified documentation) 15 ■ QL 2 (material-ecological building components catalogue or comparable) 25 ■ QL 3 (material-ecological building components catalogue or comparable) 40 <p><u>Minimum requirements for Platinum</u></p>	<p>max. 100</p> <p>max. 50</p> <p>max. 60</p>



- QL 4 (material-ecological building components catalogue or comparable) 60

1.2 Residential Commercial building

Fulfilment of all requirements of the criteria matrix for at least 50% of the rental spaces (flats): **max. 50**

- QL 1 (simplified documentation) 5
- QL 2 (simplified documentation) 15
- QL 2 (material-ecological building components catalogue or comparable) 25
- QL 3 (material-ecological building components catalogue or comparable) 40
- Minimum requirements for Platinum
- QL 4 (material-ecological building components catalogue or comparable) 50

Shopping centre

Compliance with all requirements of the criteria matrix for at least 50% of the rental space (for further information, see IV. Scheme-specific description): **max. 40**

- QL 1 (simplified documentation) 5
- QL 2 (simplified documentation) 15
- QL 2 (material-ecological building components catalogue or comparable) 25
- QL 3 (material-ecological building components catalogue or comparable) 35
- Minimum requirements for Platinum
- QL 4 (material-ecological building components catalogue or comparable) 40

AGENDA 2030 BONUS



- **Bonus 1:** Avoidance of deletion criterion upon achievement of QL3 **+ 2.5**
- **Bonus 2:** Avoidance of deletion criterion upon achievement of QL4 **+ 5**
- **Bonus 3:** For lines of the criteria matrix, special measures were taken to achieve a "material-appropriate building construction" **+ max 5** (+2 per line)
- **Bonus 4:** For rows of the criteria matrix, reversible connections were omitted **+ max 5** (+2 per line)
- **Bonus 5:** For all lines of the criteria matrix only products with SVHC ≤ 0.1% were used **+ 2.5**

1.3 Office Education Hotel Shopping Centre Consumer market Logistics Production Residential Commercial building Assembly buildings Healthcare buildings

Additional points in quality level 1, 2 and 3: **max. +10**

Realisation of cooling without halogenated/partially halogenated refrigerants in quality levels 1, 2 and 3. **+10**



SUSTAINABILITY REPORTING

NO.	KEY METRICS/KPI	UNIT
KPI 1*	Compliance with quality level QL 1 to QL 4 according to DGNB criterion ENV1.2	[QL]
KPI 2*	No use of halogenated and partially halogenated refrigerants that are themselves persistent or have persistent degradation products	[yes/no]
KPI 3	Only products with SVHC \leq 0.1 % used	[yes/no]



APPENDIX A – DETAILED DESCRIPTION

I. Relevance

Certain substances, construction products and preparations pose a risk to soil, air, groundwater and surface water as well as to humans, flora and fauna. This concerns their entire life cycle – from production and processing on the construction site to use in the (building) stock and their disposal (deconstruction, recycling, landfilling). The local risks are evaluated in terms of substances and products, as environmental and human toxicological impact categories are not yet included in the LCA due to a lack of recording and evaluation procedures.

II. Further explanation

In the DGNB certification system, high-risk material and substance groups are queried and assessed individually and in relation to the product. Among others, the following substance groups are currently taken into account (as products or as components of formulations):

- Halogenated and partially halogenated refrigerants
- Halogenated and partially halogenated propellants
- Heavy metals
- Substances covered by the Biocides Regulation (528/2012/EC)
- Substances covered by the POPs Regulation (850/2004/EC)
- Hazardous substances according to CLP Regulation (1272/2008/EC)
- Organic solvents and plasticisers
- Substances of very high concern (SVHC according to REACH (1907/2006/EC))

Chemicals/substances are classified as being of very high concern if they are particularly hazardous in terms of the following toxic endpoints:

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

According to REACH (= European Chemicals Regulation), suppliers must inform their customers if an article (e.g. a building services insulation hose) contains a substance on the candidate list in a concentration of more than 0.1% (w/w). This obligation is described in Article 33 of the REACH Regulation and applies as soon as a substance is included in the candidate list.

The substances and components to be considered are specified and explained in the criteria matrix (Annex 1).

With regard to the requirement for limiting emissions of volatile organic compounds from products or their risk potentials during use, there is an overlap with regard to the VOC content in the product and the resulting release of VOCs by the product. In criterion ENV 1.2 Local environmental impact, the VOC content in the product is predominantly assessed and the release of the VOC content (e.g. sealants) is only assessed where there are no industry regulations on VOC content. The quantitative emissions of volatile substances into the indoor space are considered in criterion SOC1.2 Indoor air quality.



The CE marking symbolises the conformity of the product with the applicable requirements imposed on the manufacturer by the European Community.

By affixing the CE marking, the responsible person declares that the product complies with all applicable EU regulations and that an appropriate conformity assessment procedure has been carried out.

The Construction Products Regulation (EU Regulation No. 305/2011) regulates the awarding of the CE marking. CE marking is only mandatory for products that are subject to a harmonised standard. The client of a DGNB certification commits to using only compliant products.

Procedure in planning:

Certain materials and components are to be considered at an early stage with regard to critical substances (see Annex 1) and, if necessary, constructive alternatives are to be examined. Through a conscious choice of building materials, the hazardous substances and products listed in the criteria matrix can usually be dispensed with, without restricting the design and functional planning.

III. Method

Criterion ENV1.2 contains specific requirements for a wide range of construction materials. The requirements set out in Annex 1 shall be considered for all materials and components specifically listed in the table. These are to be tested according to all requirements listed in Annex 1, whereby several lines may also be relevant for individual materials and components.

A complete layered structure of all components shall be indicated on the basis of a building components catalogue (see design example Annex 2a and Annex 2b). Auxiliary materials such as adhesives, primers, etc. must be added. For all requirements to be verified, verifiable evidence must be provided at the desired quality level in accordance with the criteria matrix (see Annex 1, column: Type of documentation; requirement for evidence of individual aspects).

As a result, the following areas are to be considered:

- Floor structures incl. foundations
- External wall structures
- Internal wall structures
- Ceiling structures
- Roof structures
- Underground garages (considered separately)

The following requirements of this criterion shall be considered, verified and complied with for materials/products/materials listed below that are delivered ready for use to the construction site:

- Factory coatings of components according to the criteria matrix (Annex1): Either products are used in the coating process that comply with the VOC requirements of the criteria matrix, or the plant from which the product is manufactured/coated must be operated in accordance with or (for smaller companies) in accordance with the 31st Ordinance to the Federal Immission Control Act or by the Europe-wide regulation by VO 2010/75/EU - Industrial Emissions Directive (IED), formerly VO 1999/13/EU.

It should be noted that, in principle, for all product groups – substances and mixtures – the matrix only specifies requirements that go beyond the legal material standard owed by the manufacturer anyway under REACH and other relevant legislation.



The qualitative evaluation is carried out on the basis of quality levels. These are based on the one hand on the effort and the degree of difficulty of the practical implementation and on the other hand on the ecological significance of the substitution of a substance. All substances or aspects considered in the criteria matrix must be tested with regard to the targeted quality level. Only proven qualities can be taken into account and assessed in the conformity check. The quality level achieved results from the individual aspect that has to be rated lowest. The requirements of a respective higher quality level include the successful implementation of all mentioned requirements of the lower levels.

In addition, the form of evidence is decisive. The verification is to be implemented in the form of a building components catalogue supplemented with ecological materials. The **simplified trade-by-trade documentation** can be used in **quality level 1** or **2**.

According to many years of experience of the DGNB, the material qualities required for the fulfilment of **quality level 3** or **4** can only be successfully guaranteed if the materials required for the fulfilment of the quality level have been tested and approved on the construction site before their use. **Quality level 3** or **4** can therefore only be claimed if the corresponding **material inspection protocols** are submitted. The material inspection and the preparation of the protocols can be transferred to competent third parties (auditor, building ecologist).

Material inspections on the construction site

A release list must be regularly updated by the competent institution responsible for testing and release and made available to the construction manager/project supervisor for material inspection on the construction site. The construction manager/project supervisor must monitor the material fidelity of the companies carrying out the construction in the form of a regular target/actual comparison and draw up protocols for this purpose. Instructions on how to deal with misapplications are described in Annex 5. Specific requirements for material inspections on the construction site are included in the chapter "Required documentation".

Proof of inspection at the construction site is not required for the achievement of **quality levels 1** or **2**. The use of compliant products is an essential prerequisite for meeting the limits of criterion SOC1.2 Indoor air hygiene.

Agenda 2030 Bonus:

The aim is to promote solutions that particularly reduce the input of pollutants into the environment and support the circularity of building products.

Bonus 1 or **2** "Avoidance of deletion criterion" is intended to positively evaluate the use of products that consistently minimise pollution. The bonus cannot be credited with another bonus.

Bonus 3 "Material-appropriate building construction" is intended to promote the circularity of building products by avoiding the use of certain product groups (see note on "avoidance" below) or choosing constructions or building products that do not require the use of harmful substances or substance groups. The bonus can only be applied to rows in the criteria matrix that are explicitly released for this bonus.

Bonus 4 "Avoidance of irreversible connections" is intended to promote the circularity of construction products by avoiding the use of product groups (see note on "avoidance" below) that create a irreversible connection to adjacent components/component layers, or by choosing products that are reversibly installed instead.

Joints are to be classified as reversible if joining techniques are used that allow separation of a building material or building product by type without foreign adhesions from the building. Such reversible joining techniques can be taken from DIN 8580 and DIN 8593, for example. In the case of mono-material systems – i.e. when the fastener and the components to be joined are made of the same material – solubility is irrelevant. For fasteners in mono-material



systems, this bonus can therefore also be claimed. The bonus can only be applied to rows in the criteria matrix that are explicitly released for this bonus.

Bonus 5 "Products with SVHC \leq 0.1%" can only be awarded if all installed products within the scope of the criteria matrix demonstrably comply with the requirement SVHC \leq 0.1%.

Note on "Avoidance":

An avoidance can only be credited if it can be proven that the use of a product was explicitly dispensed with in planning.



IV. Scheme-specific description

Notes on Indicator 1.1:

In the following usage profiles, a separate evaluation of the rental spaces is possible via indicator 1.2. This corresponds to the methodology of indicator 1.1, which is used to assess the building envelope and any common areas.

Residential Commercial building

A separate evaluation of the rental spaces is possible via indicator 1.2. This corresponds to the methodology of indicator 1.1, through which the building envelope and common areas are to be assessed.

If the fit-out standard achieved for the living spaces/rental spaces deviates from the standardised fit-out description, this must be evaluated via indicator 1.2 Letters of commitment and binding fit-out descriptions by the tenants as well as confirmations of implementation of the quality level in accordance with the DGNB criteria matrix must be provided. For commercial buildings with one tenant (such as department stores), no separate evaluation is to be made.

If no separate consideration is made, the points for indicators 1.1 and 1.2 can be credited accordingly. A separate statement is then not required.

The quality level of the rental areas can in principle only be rated higher than the quality level achieved for the general areas if the documentation for the rental/living areas are available in accordance with the verification requirements specified in the criterion and they have been implemented.

Shopping centre

Common areas and building envelope are assessed via indicator 1.1, rental areas via indicator 1.2.

General areas and building envelope:

The general areas include all non-rented areas. This includes, for example, escape routes, parking areas, general toilet areas, office areas and general social rooms. All non-sales areas, such as storage areas, which are developed by the landlord shall be added to the common areas. In addition, the building envelope is considered.

Notes on indicator 1.2:

Rental areas:

A positive evaluation is given if it is proven that in at least 50% of the rental space the respective tenants have committed themselves to implementing the quality levels of the criteria matrix. This can be done, for example, by means of an obligation on the part of the tenants in the rental agreement.

The quality level of the rental areas can in principle only be rated higher than the quality level achieved for the general areas if the documentation for the rental/living areas are available in accordance with the verification requirements specified in the criterion and they have been implemented.

Notes on indicator 1.3:

To create an additional market incentive, the realisation 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 credited. In quality level 4, the requirements are to be implemented according to Annex 1 (criteria matrix). In particular, the aim is to avoid halogenated refrigerants or propellants unless it has been proven that they or their degradation products do not accumulate in the environment or have persistent degradation products that pollute natural sinks (= accumulation) or cause damage there.

Assembly buildings

If the assembly building is a building where the development is the responsibility of different parties (owner: common areas and building envelope/tenant: rental areas), the procedure according to the usage profile **shopping centre** can be applied. Common areas and building envelope are then assessed via indicator 1.1, rental areas via indicator 1.2.



APPENDIX B – EVIDENCE

I. Required documentation

The documentation below represents a selection of the types of evidence that can be provided. The selected evaluation of the individual indicators must be documented comprehensively and plausibly on the basis of the submitted documents. The components/building materials and surfaces listed in the criteria matrix (Annex 1) are to be considered:

- Complete declaration and verification of the components/materials (e.g. sealants) used in points/lines through the documentation required in the criteria matrix. In principle, all sequential numbers of the criteria matrix are to be processed in the verification. Aspects of the criteria matrix that are not relevant should be explicitly identified as not relevant, technical exceptions should be explicitly marked as exceptions and justified.
- Declaration and verification of the widely used and relevant components/materials used in the form of a building components catalogue supplemented with ecological materials in accordance with Annex 2a or Annex 2b, mandatory in quality level 3 (QL) and QL4. In QL1 and QL2, documentation can be simplified on a trade-by-trade basis. In QL2, a verification via a building components catalogue supplemented with ecological material is positively evaluated. As an alternative to the building components catalogue, the verification can also be submitted in another form, provided that this clearly shows the installation location of all materials considered in "Annex 1 – Criteria Matrix", including their function and, if applicable, their (layer) allocation in the component.
- The materials, products and elements listed in the documentation of criterion ENV1.2 shall contain at least the following information:
 - Construction product
 - Manufacturing company/production company
 - Area data (for materials used over a wide area)
 - Description of the individual layers (see design example Annex 2a or Annex 2b) in QL3 and QL4
- Rental fit-out obligations (if required in the usage profile)
- Construction site material inspection protocols (mandatory for quality level 3 and 4)
- Target/actual comparison together with release list (mandatory for quality levels 3 and 4)
- Notification of defects/notification of being free of defects according to Annex 5 (in case of misuses)

Exceptions to the provision of evidence:

- **Quality level 3:**

When demonstrating quality level 3, one requirement (requirement of one row of the criteria matrix) can be disregarded without reducing the maximum score. The disregarded requirement of the criteria matrix must at least fulfil the next lower requirement.
- **Quality level 4:**

When demonstrating quality level 4, a total of two of the requirements (requirement of one line of the criteria matrix) can be disregarded without reducing the maximum score. The disregarded requirements of the criteria matrix must at least fulfil the next lower requirements of the row.



■ **Cut-off criteria:**

Only if explicitly listed in the criteria matrix in the column "Scope and verification" can the verification for max. 5% of the GFA(R) according to DIN 277 be disregarded, irrespective of the building surfaces on which the product/material is used (see criteria matrix Annex 1: "Scope and verification").

■ **Example of how to proceed:**

- Buildings with 50,000 m² GFA(R) (incl. areas below ground level, e.g. underground garages)

- Result example:

5% GFA(R) = 2,500 m²

Application: The verification of the criteria marked with this exemption in the criteria matrix may exempt an area of up to 2,500 m² from documentation. The installation location (walls, ceilings, floors, etc.) of the materials/products is not decisive here.

■ **Technical and functional exceptions:**

If, for technical or functional reasons (i.e. in the absence of a functionally equivalent product or an alternative design that fulfils the requirements), one of the above product requirements cannot be implemented, exceptions to the requirements are permitted. The deviation from the requirements must be documented and justified, stating the product, the technical application and the quantity used. Product exemptions for purely aesthetic reasons are not covered by the exemption. Evidence options include, for example, up-to-date confirmation from at least three market-relevant manufacturing companies that a product suitable for the targeted quality level is not available (see Annex 3), or proof that for reasons of "force majeure" (weather, natural conditions such as pressing water in the subsoil) the use of the suitable product was technically not possible. Evidence of a technical exemption can only relate to a single quality level and cannot relate to requirements that may exist in the lower quality levels. If the requirement of a lower quality level cannot be fulfilled for technical reasons, this must be shown consistently by the three confirmations of technical exemption submitted by the manufacturing companies.

■ **Data basis:**

In principle, data can be used as a basis:

- Technical information
- Safety Data Sheets (SDS)
- Environmental product declarations of types I and III and manufacturer's declarations on ingredients and formulation components
- Declaration of the manufacturing companies
- SVHC declaration of the manufacturing companies regarding substances (cf. Annex 4)

For the material properties to be queried within the framework of criterion ENV1.2, the most suitable sources are normally as follows:

- VOC content of paints/lacquers: technical information, safety data sheets, labels (declaration of VOC content according to Directive 2004/42/EC); information in g/l
- VOC content of other products: Declaration of the manufacturing companies
- GHS CODE (information system code for hazardous substance)/Product code: Safety data sheet, technical information, www.wingis-online.de
- SVHC substances in preparations: Safety data sheet



- SVHC substances in products: technical information, manufacturing data sheets (obligation of the manufacturing company)
- Individual substances (heavy metals etc.): Declaration of the manufacturing companies (see criteria matrix in Annex 1; column: "Type of documentation/requirement for the verification of the individual aspects")

■ **Timeliness of the data basis for the verification:**

The following are required as proof:

- EC safety data sheets according to EC 1907/2006
- Declarations of SVHC substances in products according to Annex XIV EC1907/2006 in the respective valid edition at the date of publication of this version of the DGNB criteria catalogue
- Declarations of substances on the SVHC candidate list in products according to the respective valid edition at the date of publication of this version of the DGNB criteria catalogue

This means that the evidence provided shall be based on the data basis or substance lists (e.g. SVHC substances) available at the time of publication of this version. This is only ensured if safety data sheets, technical data sheets and declarations of the manufacturing companies are used that are up-to-date in terms of chemical law. Evidence published at a later date may be used for verification purposes.

■ **Evidence of construction site control monitoring:**

Regular site inspections to be carried out at reasonable intervals. An inspection could, for example, take place as a trade begins to be implemented.

At least the following trades are to be checked: **Formwork oil, painting work, waterproofing work on roof and perimeter, tiling work, flooring work.**

Accordingly, several site reports shall also be submitted, but at least one report on the aforementioned works.

A log of the material inspection contains the following information:

- Release list must be confirmed and signed by the trades/subcontractors.
- Date of the inspection with signature of the person who carried out the inspection
- Designation of the time of the inspection (e.g. execution of trade xyz).
- Name all products that have been tested, stating the product name, production company, place of use, trade (= spot check). Note: Not all installed products are expected to be tested.
- Result of the inspection: "compliant product" or "non-compliant product"
- Explanation, in case of a "non-conforming product": e.g. handling of misapplications (Annex 5 of the criterion)



APPENDIX C – LITERATURE

I. Version

Change log based on 2023 version

PAGE	EXPLANATION	DATE
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II. Literature

Grundlagen der verfügbaren Stofflisten und Materialinformationen:

- CLP-Verordnung 1272/2008/EG einschließlich Anpassungsverordnungen*
- Gefahrstoffverordnung (GefStoffV) und Technische Regeln für Gefahrstoffe (TRGS)*
- REACH-Verordnung (EG 1907/2006)*
- Biozid-Richtlinie 98/8/EG*
- Stoffdatenbank GESTIS (Institut für Arbeitsschutz der Deutschen Gesetzlichen Unfallversicherung (IFA))
- Informationen der Berufsgenossenschaften GISCODE
- Unabhängig verifizierte Deklarationen, z. B. Umwelt-Produktdeklarationen (Environmental Product Declaration – EPD)
- Branchenbezogene Regelwerke, z. B. DE-UZ, VdL-Richtlinie
- Brancheneigene Zertifizierungen
- EC (2010): Konsolidierte Liste der Wirkstoffe, die nicht mehr vermarktet werden dürfen, veröffentlicht und ständig aktualisiert durch die Europäische Kommission
- UBA (2009): Leitfaden zur Anwendung der GHS-Verordnung – Das neue Einstufungs- und Kennzeichnungssystem für Chemikalien nach GHS – kurz erklärt, Umweltbundesamt Dessau 2009 und Anwendungshilfen
- SVHC – Substances of Very High Concern auch als REACH-Kandidatenliste: (<http://echa.europa.eu/web/guest/candidate-list-table>)
- Sustainable Development Goals Icons, United Nations/globalgoals.org

* For all legal lists and material information, the status at the time of the building application is decisive. In the case of statutory regulations, the respective transitional periods for placing on the market and use apply.



APPENDIX 1 – Criteria matrix

For ease of use, the large table is available online at:
www.dgnb.de/Neubau-ENV1.2-Kriterienmatrix



ANNEX 2a – Example of complete material ecological building components catalogue (applicable for QL1-QL4)

Cost group (CG)

Component designation: Upper storeys above basement

Presentation:



NOTE:

All component layers per component shall be named. Construction materials that are not considered in the DGNB evaluation are to be marked as "not relevant". All components/assemblies of the following cost groups are to be listed:

- 320 - Foundation
 - 330 - Exterior walls
 - 340 - Internal walls
 - 350 - Ceilings
 - 360 - Roofs
 - 370 - Structural fixtures
 - 410 - Sewage, water, gas installations
 - 420 - Heat supply systems*
 - 430 - Ventilation systems*
 - 440 - Power installations*
 - 450 - Transport*
- *only relevant assemblies

INTERIOR

No	Designation	Construction	Manufacturer	Product description	Considered substances / aspects, serial no. of	Quality level of the DGNB criteria matrix	Brief description	Total area of the building unit (component) (s-description method in criterion)	Component	Area	Annex reference
								(m ²)	(m ²)	(%)	AL - Annex SDS - Safety data sheet TL - Technical leaflet GIS - Information sheet GISBAU (Information system for hazardous substance) EPD - Environmental product declarations
1	Linoleum										
2	Adhesive										
3	Primer										
4	Cement screed										
5	Insulation										
6	Reinforced										
7	Prime coat										
8	Top coat	Silicate-based interior paint	Sample AG	Sytol Organic Interior Paint	VOC serial no. 2	4		The product is solvent-free, plasticiser-free, free from fogging-active substances			see AL 1.1 SDS p.14

OUTSID

8 Example line



APPENDIX 2b – Example of simplified material ecological building components catalogue (applicable for QL1-QL4)

The documentation tool provided by the DGNB can also be used for verifying quality levels 3 and 4. The prerequisite is that the installation location including the function and, if necessary, the (shift) assignment are documented.

Component				Selection by DD
Trade or component	Optional: CG	Optional: No.	Product designation and/or product type and/or function with, if applicable. (Layer) allocation in the component	Component according to guide (the prefix Cxxx refers to the chapter of the guide)
Instructions	DGNB_material declaration	Overview	Guide_Components	KM Dropdowns +

APPENDIX 3

Sample letter "Confirmation of manufacturing companies"

Dear Sir/Madam,

The following coating materials/coating systems are to be used in the construction project:

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

Please complete the VOC data in the units g/l, mass % and g/m² of coated surface at the specified dry film thickness (DFT) based on the theoretical coverage.

Many thanks.
Yours sincerely



APPENDIX 4

Sample letter “SVHC request”

Regulation (EC) No 1907/2006 (REACH Regulation), information requirements according to Art. 33

Dear Sir/Madam,

The European Chemicals Agency (ECHA) has published on its website a list of substances of very high concern (SVHC) that meet the criteria of Article 57 of the above-mentioned REACH Regulation and have been identified in accordance with the procedure laid down in Article 59 of the Regulation (http://echa.europa.eu/chem_data/candidate_list_table_en.asp).

With reference to Art. 33(2) of the above-mentioned Regulation, I kindly ask you to inform me/us whether any of these substances of very high concern are present in the product "XXXX" distributed by you in proportions above 0.1% and to provide me/us with the information necessary for the safe use of the product "XXXX".

According to Art. 33 of the above-mentioned Regulation, you as the supplier of "XXXX" are obliged to provide me as a consumer with this information within 45 days.

Many thanks.
Yours sincerely



APPENDIX 5

Dealing with misapplications (during material checks on the construction site)

If, in the course of these site inspections, it is determined that individual materials are being used that do not conform to the targeted quality level 3 or 4, their use must be prohibited in writing by the construction manager/property supervisor. This notice of defect specifies the material, the affected component, the work carried out, the reason for the deviation and the areas carried out with non-conforming material.

These deviations shall not prevent the objectives from being achieved according to quality level 3 or 4 if this is documented as follows:

- Details of suitable material released before commencement of the work in question (release list with date)
- Written notice of defects from the construction manager/property supervisor and the notice of absence of defects from the company carrying out the construction work
- Details of the area processed with the non-conforming material; proof must be provided that this < amounts to 5% of the component area (example: flat roof as warm roof, misapplication of undercoat, area < 5% of the warm roof area) for which the relevant material type is intended in the executing trade (proof per building components catalogue)
- The builder/owner does not suffer any disadvantages due to pollutants permanently remaining in the material, e.g. heavy metals, plasticisers or depot-forming solvents on absorbent substrates (solvent sealant on parquet) – evidence per technical data and safety data sheet or SVHC proof or declaration of the manufacturing company.
- The misapplication does not put the fulfilment of the project in jeopardy according to SOC1.2 indicator 1 Indoor hygiene (flue gas behaviour, ventilation programme for compensation, etc.)
- Protocols for proper and regular material inspection (see above) on the construction site (cf. PRO2.1) are presented
- The construction manager/property supervisor or, alternatively, the company carrying out the construction, shall confirm in a legally valid manner (ppa) that – apart from the one-time misuse – the services were carried out exclusively with approved materials in accordance with the intended quality level of this criterion.

Note: The DGNB explicitly points out that the DGNB documentation must correspond to the constructed building. Discrepancies between the technical and the DGNB documentation with regard to the materials used can therefore lead to financial losses for the subsequent owner even years later. For example, the building structures are tested for pollutants for a DGNB as-built certification or in the course of DD inspections in order to avoid financial losses due to renovation costs.

It is therefore recommended that the construction manager/property supervisor has the exclusive use of approved materials legally confirmed by the companies carrying out the construction (e.g. signature of the release list).