



Verification Form
Environmental Product Declaration No
for produced by



Instytut Techniki Budowlanej

Verification statement:

I hereby confirm that, following detailed examination, I have not been able to trace any relevant deviations by the Environmental Product Declaration, issued for produced byand by its project report from the requirements outlined in the corresponding product category regulations based on EN 15804 and ECO-PLATFORM guideline.

The company-specific data has been examined as regards plausibility and consistency; the declaration owner is responsible for its factual integrity.

The project report on the Life Cycle Assessment are filed at *ITB*.

Warsaw ...

Part A: Calculation rules for the Life Cycle Assessment and requirements on the project report:

The check consists of checking if the issue is described in the LCA project report and if it is line with the requirements and guidelines in the applicable reference (EN15804 or other).

1	General information - availability	Mandatory / optional	Reference	Deviations from requirements	Done
1.1	Commissioner of LCA study, LCA practitioner	M	EN15804 ch.8.2		
1.2	Date of issue of LCA report	M	EN15804 ch.8.2		
1.3	Statement that the Life Cycle Assessment study has been performed in accordance with the requirements of EN 15804 and . applicable PCRs	M	EN15804 ch.8.2 + applicable PCR		
1.4	Any other independent verification of the data given in the LCI/LCA documentation?	O			
2	Study goal – availability of info	Mandatory / optional	Reference	Deviations from requirements	Done
2.1	Reasons for performing the Life Cycle Assessment	M	EN15804 ch.8.2		
2.2	Intended application – (e.g. for EPD, databases, publication etc.) Is the LCA designed in such a way that it allows B2B communication for environmental assessments of buildings?	M	EN15804 ch.8.2		
2.3	Target group (B2B, B2C, ...)	M	EN15804 ch.8.2		
3	Functional unit / Declared unit – availability of info	Mandatory / optional	Reference	Deviations from requirements	Done
3.1	Functional / Declared unit, including relevant technical specification	M	EN15804 ch.6.3.1/6.3.2 and/or applicable PCR or additional specific requirements for certain product groups		
3.2	If product groups (similar products from one manufacturer and/or from different production plants) are formed as averages: <ul style="list-style-type: none"> • Calculation rules for the formation of averages 	M	EN15804 ch.8.2		

	<ul style="list-style-type: none"> Representativeness of averages 				
4	Product description – availability of info	Mandatory / optional	Reference	Deviations from requirements	Done
4.1	Composition of the product	M	ISO 14025	It should be settled before the verification how confidential information is dealt with (acc. to provisions ISO 14025)	
4.2	Description of technical and functional characteristics and area of intended application in the building	M	Applicable PCR		
4.3	Flow diagram of main production processes and visualization of system boundaries	M	ISO 14025	It should be settled before the verification how confidential information is dealt with (acc. to provisions ISO 14025)	
5	System boundaries in accordance with the modular design of the EN 15804	Mandatory / optional	Reference	Deviations from requirements	Done
5.1	Comprehensive declaration of modules A1 to A3 as a minimum requirement, if necessary as an aggregated module A1-A3	M	EN15804 ch. 6.3.4		
5.2	A1 to A3: System boundary <ul style="list-style-type: none"> Clear description of what the modules cover System boundary to nature (eg forest in wood production) Use of secondary materials and secondary fuels and waste produced (check end-of-waste state) If applicable: Reference to the certificate of the offsetting of CO2 	M CO2 certificates optional	EN15804 ch. 6.3.4.2 and applicable PCR		
5.3	A1 to A3: Allocation of co-products: <ul style="list-style-type: none"> Specification of the “end-of-waste state” Selection of the allocation 	M	EN15804 ch. 6.4.3.2 + annex B.1		

	<p>factors for co-product allocation</p> <ul style="list-style-type: none"> • Justification of specific allocation processes (e.g. if data are not available to allocate according to the EN15804 rules) • Presentation of the energy and material flows as a result of deviating allocation processes • No declaration of loads and benefits in Module D from allocation in A1-A3 				
5.4	A4 to A5 (optional module): Clear description and content of modules	M	EN15804 ch. 6.3.4.3 and applicable PCR	optional	
5.5	Accounting losses in the modules in which they arise (e.g. A4, transport to construction site)	M	EN15804 ch. 6.3.4.1	optional	
5.6	B1 to B5 (optional module): Delineation and content of modules	M	EN15804 ch. 6.3.4.4 and applicable PCR	optional	
5.7	B6 and B7 (optional module): Delineation and content of modules	M	EN15804 ch. 6.3.4.4 and applicable PCR	optional	
5.8	C1 to C4 (optional module): Delineation and content of modules	M	EN15804 ch. 6.3.4.5 and applicable PCR	optional	
5.9	<p>C3 (optional module): Justification of the “end-of-waste state”</p> <ul style="list-style-type: none"> • Existing purpose • Existing market or demand • Compliance with technical requirements and legal guidelines • Fulfils limit values for Substances of Very High Concern (SVHC) • 	M	EN15804 ch. 6.3.4.5 + annex B.1 and applicable PCR	optional	
5.10	C4 (optional module): Carefully check the correct allocation	M	EN15804 ch. 6.3.4.5 and ch.6.3.4.6	optional	
5.11	D (optional module): System boundary and contents of Module justified	M	EN15804 ch. 6.3.4.6	optional	
5.12	D (optional module): Check if the net flow calculation is done correctly taking into consideration relevant factors, e.g.:	M	EN15804 ch. 6.3.4.6 and 6.4.3.3	optional	

	<ul style="list-style-type: none"> Processing losses Inputs in Modules A1 to A3 (and A4 to B5 if necessary) 				
5.13	D (optional module): No benefits or loads of allocated co-products	M	EN15804 ch.6.4.3.3	optional	
6	Power mix (e.g. electricity)	Mandatory / optional	Reference	Deviations from requirements	Done
6.1	Selection of the power mix in accordance with the location of the production site(s)	M	CEN TR15941 and applicable PCR		
6.2	If applicable: Validity of the certificates for green power	O	Applicable PCR	optional	
7	CO₂ certificates	Mandatory / optional	Reference	Deviations from requirements	Done
7.1	If applicable: Selecting allowable certificates in accordance with the PCR	O	Applicable PCR	optional	
7.2	If applicable: Offsetting in accordance with the requirements from the individual program operators	O	Applicable PCR	optional	
8	Description of the system boundaries	Mandatory / optional	Reference	Deviations from requirements	Done
8.1	<p>Transparent description of the system boundaries:</p> <ul style="list-style-type: none"> Representativeness (temporal, geographical, technological) Assessment period for each module considered in the Life Cycle Assessment (eg one year average, etc) Omissions of life cycle stages, processes and data requests Assumptions with regard to energy and electricity production incl. year of reference. It should also be transparent which electricity/energy model is applied as avoided product if energy recovery is included in the optional Module D. Assumptions concerning other relevant background data where relevant for the system boundary 	M	ISO 14040 EN15804 ch. 8.2		
9	Criteria for excluding inputs and outputs	Mandatory / optional	Reference	Deviations from requirements	Done

9.1	Selection of the cut-off criteria, description of application of the criteria and assumptions	M	EN15804 ch.6.3.5 and ch. 8.2 and applicable PCR		
9.2	List of excluded processes available		EN15804 ch. 8.2		
10	Data collection	Mandatory / optional	Reference	Deviations from requirements	Done
10.1	Data collection, including data quality issues, according to LCA rules	M	ISO 14044:2006, section 4.3.2; Documentation ISO 14040 EN15804 6.3.6		
11	Development of scenarios at product level in modules A4-A5-B-C-D	Mandatory / optional	Reference	Deviations from requirements	Done
11.1	Statement that the scenarios included are currently in use and are representative for one of the most likely scenario alternatives. Check the PCR / program rules if average scenarios are allowed. (preferably no average scenarios for various alternatives)	M	EN15804 ch. 6.3.8 Applicable PCR	Not relevant for A1-A3	
11.2	Documentation of the relevant technical information, e.g. recycling or reuse rates, with reference to the literature source	M			
12	Selecting data / background data	Mandatory / optional	Reference	Deviations from requirements	Done
12.1	Selection and use of generic data and background data justified and validity demonstrated (Commonly used and publicly available databases in Europe are: GaBi database, EcoInvent, Okobau.dat, ILCD, ... [to be extended by Program Operators])	M	EN15804 ch.6.3.6 EN 15941 and applicable PCR	If verified EPD to the same PCR are available, where applicable, they should be used instead of generic data from background databases	
12.2	<ul style="list-style-type: none"> • < 10 years for background data • < 5 years for manufacturer's data • Data manufacturer based on 1 year average • Time period of 100 years in 	M	EN15804 ch. 6.3.7 EN15941 and applicable PCR		

	<p>case of a landfill scenario, longer if relevant</p> <ul style="list-style-type: none"> • Technical background complies with physical reality • Integrity of generic data records, system limit and cut-off criteria for generic data records validity demonstrated 				
12.3	<p>Documentation on data / background data:</p> <ul style="list-style-type: none"> • Name of the (background) data record, its source (data base, literary source etc.), year of data collection and its representativeness • Handling missing data • Assessing data quality 	M	EN15941 and applicable PCR		
12.4	<p>Manufacturing data should be reproducible, e.g. by available data management systems Random checks could be carried out, or based on importance; some data could be checked in the verification.</p>	O			
13	Allocations	Mandatory / optional	Reference	Deviations from requirements	Done
13.1	<p>General allocation principles applied (avoidance of allocation, no double counting / omissions, uniform application of the allocation rules etc.)</p>	M	ISO14044:2006 4.3.4		
13.2	<p>Presentation and justification of allocations in the use of secondary materials or secondary fuels as raw materials</p>	M	EN15804 ch.6.4.3 and 8.2 and applicable PCR		
13.3	<p>Presentation and justification of allocations in the plant (delineation from other products in a plant)</p>	M			
13.4	<p>If applicable: Presentation and justification of allocation of multi-input processes (e.g. landfilling or incineration)</p>	M			
13.5	<p>Co-product allocation correctly applied, see also 5.3</p>	M	EN15804 ch. 6.4.3.2		
13.6	<p>Documentation of allocation factors used and their (independent) sources</p>	M			
13.7	<p>Allocation process for reuse, recycling and recovery, check specifically:</p> <ul style="list-style-type: none"> • Consistency with other scenarios of waste management • Conventional average 	M	EN15804 ch.6.4.3.3 and applicable PCR		

	<p>technologies and practices</p> <ul style="list-style-type: none"> • Specification and justification of end-of-waste state where applicable • If applicable (module D): Selecting substituted processes in accordance with the PCR or (if no PCR is available) representative actual processes • If applicable (substitution in Module D): Calculation of net flows • Conservative approach, i.e. choice of those scenarios and calculation rules that reflect the highest environmental impacts in comparison to other choices 				
13.8	Is there any presentation or expert guess of data sets which do not comply with the allocation principles and description of consequences for the LCA results?	M	Applicable PCR		
14	Life cycle modeling information	Mandatory / optional	Reference	Deviations from requirements	Done
14.1	Transparent presentation of Life Cycle Assessment modeling (for example by tables, screenshots from Life Cycle Assessment software programs etc.)	M	EN 15804 ch.8.4		
14.2	Clear description how company data are used in which data records in Life Cycle Assessment software programs	M	EN15804 ch.8.4		
14.3	Assignment of process data to the Life Cycle Assessment modules	M	EN15804 ch.8.4		
14.4	For several locations/products: Presentation of modeling of all locations and products as well as weighting thereof	M		Not relevant	
14.5	Plausibility and consistency of data (mass balance, energy balance) Balances on company level and in the life cycle. e.g. Mass balance between reference flow and wastes for cradle to grave data / Mass of non-energetic resources used coherent with the reference flow / CO and CO2 emissions coherent with the mass of fossil energetic resources / check of the sum of non-renewable and renewable parts or between feedstock and fuel parts / Is the energy indicators coherent with the energetic resources used?	M	EN15804 ch.8.4		

15	Parameters of the Life Cycle Inventory Analysis and Life Cycle Impact Assessment	Mandatory / optional	Reference	Deviations from requirements	Done
15.1	Presentation of the parameters in tabular form for all modules A1 to D Marking unassessed modules as "MNA" (= module not assessed)	M	EN15804 ch..7.2.2 EN15978 ch.12.5		
15.2	Presentation of the parameters describing environmental impact (7 parameters), the parameters for describing the use of resources (10 parameters), parameters for describing the waste categories (3 parameters) and parameters concerning output material flows (4 parameters)	M	EN15804 ch. 6.5, 7.2.3 – 7.2.5		
15.3	Selection of correct characterisation factors and elimination of long-term emissions (> 100 years)	M	EN15804 ch.8.2 and annex (amendment) and applicable PCR		
15.4	Justification of characterisation factors applied in case of input/output flows that are not on the list of characterisation factors of the EN15804 and applicable PCR	M			
15.5	Information on the environmental impacts in the project report: <ul style="list-style-type: none"> • Reference to characterisation models and factors • Statement that the estimated impact results are only relative statements which do not indicate the end points of the impact categories, exceeding threshold values, safety margins or risks 	M	EN15804 ch.8.2		
16	Interpretation	Mandatory / optional	Reference	Deviations from requirements	Done
16.1	Interpretation of the results based on a dominance/contribution analysis of selected indicators	O		optional	
16.2	Relationship between the results of the Life Cycle Inventory Assessment and the results of the Life Cycle Impact Assessment (LCIA)	M	EN15804 ch.8.2		
16.3	Assumptions and restrictions as regards the interpretation of results in the EPD, in terms of both methods and data	M	EN15804 ch.8.2		
16.4	Variance from the means of LCIA results must be presented if generic data is provided from several sources or [the results] refer to a number of similar products.	M	EN15804 ch.8.2		
16.5	Data quality assessment	M	EN15804 ch.8.2		

			ISO 14040 CEN TR15941 Applicable PCR		
16.6	Comprehensive transparency as regards value decisions, justifications and expert opinions	M	EN15804 ch.8.2		
17	Documentation of additional information	Mandatory / optional	Reference	Deviations from requirements	Done
17.1	Where relevant to check the documentation: <ul style="list-style-type: none"> • Laboratory results/measurements listed in the content declaration • Laboratory results/measurements listed in the functional/technical performance • Documentation on the declared technical information on individual life cycle stages not taken into consideration in the construction product's Life Cycle Assessment and applied for evaluation of the building (e.g. transport routes, energy consumption during the usage stage, cleaning cycles etc.) • Laboratory results/measurements pertaining to the declared emissions in indoor air, soil or water during the use stage 	M	EN15804 ch.8.3		
18	Documentation for calculating the reference service life (RSL)	Mandatory / optional	Reference	Deviations from requirements	Done
18.1	Necessary if the entire life cycle A1-C4 is declared: Documentation for calculating the reference service life (RSL), should be representative for the declared product	M	EN15804 ch.6.3.3	Not relevant	

Part B: Requirements on the EPD

The rules for the EPD format can be found in the EN15804 ch.7 and the EN15942: everything that is included in the master ITM (information transfer matrix), should somewhere be documented in the EPD.

1	Formal requirements	Reference	Deviations from requirements	Done
1.1	General, EPD includes: <ul style="list-style-type: none"> • text “Environmental Product Declaration in accordance with ISO 14025 and EN 15804” • Statement that “EPD of construction products may not be comparable if they do not comply with EN15804” • Publisher / program operator, name, address • Name of declared product • Declaration owner / Name and address of manufacturer/association Representativeness of geographical area • Representativeness with regard to which manufacturer(s) • Program logo • Date of issue + validity (5 years) • Variability for average declaration • Product composition • Stages omitted, if not full LCA 	EN15804 ch. 7.1		
1.2	PCR name	Applicable PCR	PCR UN CPC 375	
1.3	Demonstration of verification: external ¹ independent verification, name of third party verifier	EN15804 ch.7.1 Table 2		
1.4	Information on the validity corresponds with the specifications in the project report			
2.	Product	Reference	Deviations from requirements	Done
2.1	The product description is in line with the project report and the product studied, and clear enough described in the EPD to understand what product is declared			
2.2	If applicable: Explanations on calculations of averages within a product group	EN15804 ch. 7.1		
2.3	Specification / identification (picture, name, model)	EN15804 ch.7.1		
2.4	Indication of the intended use	EN15804		

¹ EN15804 ch.7.2 Table 2 mentions the possibility of internal or external verification. In the ECO Platform external verification is preferred and advised

		ch.7.1		
2.5	Relevant technical data (additional information is possible) including RSL if applicable			
2.6	The test standards to which the technical data are referred to.			
2.7	A description of the main product components and or materials is provided in accordance with the specifications of the PCR (if available) and LCA project report. As a minimum substances that are listed in the latest “Candidate List of Substances of Very High Concern for authorisation” if their content exceeds the limits for registration	EN15804 ch.7.1		
2.8	Description of the manufacturing process / all manufacturing processes if several locations are involved	EN15804 ch. 7.1		
3	LCA rules	Reference	Deviations from requirements	Done
3.1	Information on the declared / functional unit corresponds with the specifications of the PCR (if available)	Applicable PCR		
3.2	Indication of the EPD type (cradle-to-gate, cradle-to-gate with options, cradle-to-grave)	EN15804 ch. 7.2.2		
3.3	EPD contains a (simple) flow diagram in accordance with the modular approach	EN15804 ch. 7.2.1		
3.4	Description of the system boundary (can be simplified, as a picture or in wording) Presentation of assignment of the analysed processes to the life cycle modules			
3.5	Indication of the key assumptions and estimates for interpretation which are not depicted elsewhere in the EPD			
3.6	Presentation of the application of cut-off criteria in accordance with the project report			
3.7	Source of background data used			
3.8	Indication of the age of background data used			
3.9	Information on the data collection period and resulting averages			
3.10	Presentation of the allocations of relevance for calculation in accordance with the minimum requirements of the PCR			
4	LCA: Scenarios and additional technical information	Reference	Deviations from requirements	Done
4.1	Mandatory for all declared modules > A3: Presentation of the assumptions pertaining to the scenarios of the declared modules in accordance with the project report. Information on undeclared modules is optional.	EN15804 ch. 7.3	Not relevant	
4.2	If a reference service life is declared in the EPD, presentation of the scenario on which the RSL is based, in accordance with the project report	EN15804 ch.7.3.3.2	Not relevant	
5	LCA: Results	Reference	Deviations from requirements	Done
5.1	Description of the declared / functional unit			
5.2	Identification of the declared/undeclared modules MNA = module not assessed			
5.3	Full declaration of all indicators required according to the modular approach INA = indicator not assessed	EN15804 ch.7.2.3, 7.2.4, 7.2.5		

		and ch.7.5		
5.4	Compliance of the declared values with the information in the project report			
5.5	In case of product averages: description of the range / variability of the LCIA results	EN15804 ch.7		
5.6	Deletion of module columns which are not declared (permissible for the <i>Results part</i>) if program allows	Program operator rules	Not relevant	
5.7	Formatting the table framework and parameter addressed in accordance with the specifications of the PCR or the Program Operator rules			
6	Evidence for tests or certificates	Reference	Deviations from requirements	Done
6.1	Additional information is provided to indoor air or soil/water, if applicable	EN15804 ch.7.4	Not relevant	
6.2	Declaration of the relevant evidence. Information where to find this evidence	EN15804 ch.7.2 and applicable PCR, existing program rules	Not relevant	
7	References	Reference	Deviations from requirements	Done
7.1	Full indication of all referenced sources (excluding standards already quoted in full and standards concerning evidence)			

ITB's Environmental Declaration scheme produces EPDs and provides verification of those EPDs if LCA was made by external LCA expert or external third party verifies EPDs made by ITB if LCA was made by independent ITB expert. According to ITB this approach conforms to the requirements of 3rd party verification under the terms of the standard ISO 14025 due to the following points:

- Independence of the EPD verifier is guaranteed by using a verifier who has not been involved in the LCA project.
- Producer data quality is verified by certified auditor
- The program instructions include a procedure for the declaration of conflict of interest.
- The EPD process actions are a part of company quality process and under supervision of Technical Board
- The verification is undertaken at a fixed fee.
- The EPD program is open to all products within the scope of the program. All industry customers are treated in the same way.
- ITB activities are conducted in accordance with the general requirements of assurance standards: PN-EN ISO 9001, PN-ISO/IEC 27001, PN-EN ISO/IEC 17025, PN-EN 45011 PN-EN ISO/IEC 17021.
- The Polish Accreditation Board accredits the ITB procedures and this assures the independence and impartiality of the verifiers.