

Verification protocol for MRPI LCA project report & EPD

16th of April 2026

V. 5.3

Requirements and instructions for the verification of LCA background reports & MRPI EPDs

Including verification documents for the verification of LCA background reports & MRPI EPDs

Verification Protocol for MRPI LCA project report & EPD

Version 5.3

16th of April 2026



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Stichting MRPI
Kingsfordweg 151
1043 GR Amsterdam
The Netherlands

info@mrpi.nl

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Version history

Version number	Date	Summary of changes
V.5.1	07-04-2025	First version
V.5.2	21-05-2025	Second version, small text update
v.5.3	16-04-2026	Update w/ NMD review protocol 2.0, small updates

1 Introduction

1.1 History Stichting MRPI and ECO Platform

In the context of a sustainable built environment, the need for quantitative information on the environmental performance of construction products is becoming increasingly important. To fulfil this demand, the Dutch organization for the suppliers to the construction industry (NVTB) established the Stichting Milieu Relevante Product Informatie (MRPI) in 1997. Since that year, the organization worked on the MRPI system with support from the former Dutch government. Its goal has been to use MRPI as a means to communicate unambiguous and reliable environmental information on building materials and building products. Manufacturers communicate the information with an Environmental Product Declaration (EPD) for building products, in fact an MRPI certificate. The MRPI certificate is the common Dutch standard of an EPD type III.

The objective of the ECO Platform is the development of verified environmental information of construction products, in particular type III declarations. The ECO Platform coordinates the development of consistent EPD programs in Europe and stimulates the use of a common EPD methodology for the European market which will lead to mutual recognition between EPD programs. MRPI is the Dutch program operator and member of the ECO Platform. A company interested in using the EPD across national borders may - for better recognition and acceptance – use the ECO EPD verified logo on the MRPI certificate.

1.2 EN 15804 amendment +A2

In November 2019 Amendment +A2 for EN 15804 was officially published. This new version differs significantly from the EN 15804 with Amendment +A1. One of the major updates is the introduction of a new methodology for the impact assessment. Particularly the use of fundamentally different indicators for some impact categories cause that Environmental Product Declarations (EPDs) under the new standard cannot be compared to those developed using the old standard.

In order to harmonize their approach and facilitate the transition to EN 15804 + A2, the EPD Program Operators (POs) organized in the ECO Platform have agreed that POs can continue to verify and publish EPDs following EN 15804 + A1 as long as the market requires it (and the standard is in force). POs will constantly observe the market and coordinate sunset clauses for EN 15804 + A1.

Currently, the A2 standard has been widely adopted. The Dutch Environmental Database (NMD), for the moment, still accepts results of environmental impact categories in accordance with the A1 impact assessment, supplemented with four additional toxicity indicators, in addition to the A2

impact indicators. Specifically for the Dutch market and the NMD, Stichting MRPI continues to offer the possibility to publish results according to both EN15804 + A1 and EN 15804 + A2.

1.3 Types of MRPI certificates and applicable guidelines

There are three types of MRPI certificates:

- MRPI EPD certificate;
- MRPI EPD+ certificate;
- MRPI customized certificate.

All EPDs will be published on ECO Platform. MRPI can publish a certificate for the European market in accordance with ECO Platform guidelines ([MRPI EPD certificate](#)) and a certificate for the Dutch market in accordance with the Nationale Milieudatabase (NMD) PCR, which also complies with ECO Platform guidelines ([MRPI EPD+ certificate](#)). Lastly, other types of standards (PCR, c-PCR, PSR) can be included ([MRPI customized certificate](#)), as long as the EPD is compliant with ECO Platform guidelines as well. This constitutes the creation of a tailor-made EPD, for which the reviewer bears responsibility that any additional standard is adhered to in both the project report and layout and content of the EPD certificate.

The main attributes of the MRPI EPD+ certificate are:

- the data of the MRPI EPD+ certificate can be included in the Dutch Environmental Database, although this is not required;
- the MRPI EPD+ certificate can only be verified by a reviewer that is also an appointed reviewer at Stichting NMD;
- the MRPI EPD+ certificate must be in alignment with the currently applicable version of the Environmental Performance Assessment Method for Construction Works (Assessment Method), the Dutch PCR published by the Nationale Milieudatabase (NMD), including any valid amendments, in addition to alignment with the currently applicable version of the NMD review protocol;
- with the A1 environmental impact assessment indicators being phased out (1st of July 2026), it is now optional for the MRPI EPD+ certificate to contain the A1 environmental impact assessment, indicators including the four additional toxicity indicators (HTP, FAETP, MAETP, TETP). The A2 environmental impact assessment indicators are mandatory to include in the MRPI EPD+ certificate;
- the MRPI EPD+ certificate includes a table declaring the environmental impacts per functional or declared unit, which must also show the Environmental Cost Indicator based on the A1 indicators and the indicator ADPF (= Abiotic Depletion Potential for fossil resources) expressed in kg Sb-eq.

The following verification guidelines apply to each type of project report and EPD:

- MRPI EPD certificate: ECO Platform verification guidelines, accessible on the ECO Platform website¹;
- MRPI EPD+ certificate: MRPI Verification Checklists for the MRPI EPD+ project report and EPD (see also Annex A of this document);
- MRPI customized certificate: ECO Platform verification guidelines, accessible on the ECO Platform website and additional standards selected by the applicant and accepted by the reviewer. Any additional information on the EPD shall be information required by the respective PCR or judged as relevant by the program operator and shall be in accordance with ECO Platform verification guidelines before being included in the EPD.

If there is a newer version of the abovementioned guidelines from either ECO Platform or Stichting NMD published and if that guideline has been entered into force, it applies to the MRPI EPD certificate and/or MRPI EPD+ certificate, respectively. It is the responsibility of the reviewer to be aware of the newest guidelines. Stichting MRPI will update the checklists for the MRPI EPD+ certificate as soon as possible in to comply with both guidelines. If there is any discrepancy in rules due to a delay in updating the MRPI protocol, the new NMD and/or ECO Platform standards prevail.

Although the checklist for the MRPI EPD+ project report combines both the ECO Platform and NMD guidelines, it is not allowed to be used for verification of the project report of the MRPI EPD certificate. This ensures that the MRPI EPD certificate (and underlying LCA) is always compliant with the most recent ECO Platform protocol.

The MRPI Verification Protocol and checklists for the project report and EPD, will be updated in accordance with updates of the ECO Platform verification guidelines and NMD assessment method. Stichting MRPI will communicate to its recognized reviewers and EPD certificate applicants about updates to all guidelines, including transition periods for implementation.

For any EPD type, clients may request additional content, e.g. an informative appendix describing the sensitivity analysis of the results under different end-of-life scenarios, or results with respect to scaling (e.g. in MRPI EPD+). The reviewer bears responsibility for the correctness of the content of the appendices. For any customization, an additional fee may apply.

1.4 Structure verification protocol

The verification protocol consists of:

- Requirements for the MRPI certificate (chapter 2);
- Instructions for the verification by the recognized verifier (chapter 3);
- References (chapter 4).

¹ Latest version accessible at: <https://www.eco-platform.org/our-documents.html>.

Annex A – Verification documents MRPI certificate includes the required documents for the verification dossier, notably the checklists which the recognized verifier can use to assess the LCA background report and EPD for MRPI EPD+ certificates (this EPD complies with both the ECO Platform verification guidelines and NMD review protocol). Furthermore, Annex A lists the minimum requirements for the dossier of any type of MRPI certificate.

2 Requirements for the MRPI certificate

2.1 Documentation and project dossier storage

The applying organization, manufacturer or delegated LCA practitioner delivers a project dossier to a MRPI recognized verifier. The project dossier consists of:

- an LCA project report;
- the completed MRPI spreadsheet or completed input of the online MRPI platform.

The applicant must store the project dossier (or only the LCA project report in case the online platform is used) at least 1 year after the validity of the MRPI certificate has ended. The MRPI certificate is valid for 5 years, therefore the project dossier must be stored for at least 6 years. The project dossier remains with the manufacturer and must be available for review by an independent third party appointed by Stichting MRPI. This is done in case a verification of the applied protocols is needed or in the case of an appeal procedure.

2.2 LCA project report

The LCA and accompanying project report must be done in accordance with the applicable protocols of the NMD and/or ECO Platform. A MRPI EPD+ must adhere to the verification checklist published by MRPI. The language of the LCA report can be English or Dutch, the LCA report and any background information will be made available to the recognized verifier.

2.3 Input spreadsheet for the MRPI certificates

The standard types MRPI EPD and MRPI+ EPD certificates are generated by a tool that uses the MRPI spreadsheet or the online MRPI platform as input. The online platform will in the future replace the MRPI spreadsheet. The spreadsheet or platform is filled in by the applicant or LCA practitioner. All required information must be filled in, as far as also required by the corresponding EPD contents checklist and/or is available in the LCA dossier (e.g. for an MRPI EPD according to ECO Platform some inputs specific for the NMD PCR may be left blank). The spreadsheet or online platform offers guidance on the expected content. The reviewer verifies that the descriptions and data provided are in accordance with the project report and applicable standards, only afterwards the spreadsheet or application in the new platform is sent in to MRPI. When using the MRPI spreadsheet, its latest version must always be used and can be downloaded from the MRPI website.

2.4 Layout of the MRPI certificate

The contents of the MRPI certificate is dependent on the applicable protocol, its specific layout is determined by Stichting MRPI, applicable platform and/or PO logo's will be included.

The applicant is required to supply the following with regard to the EPD contents:

- Company logo, at least 300 dpi;
- A picture of the product in its application;
- A picture of the product itself (optional);
- A process diagram, in accordance with the applicable standard(s) or at least in accordance with section 7.2.1 of EN 15804.

2.5 Assessment by the recognized verifier

The verification is done by a recognized verifier of the Stichting MRPI. The criteria that the recognized verifier must satisfy are laid down in the document *Recognition scheme verifiers MRPI* and an up-to-date list of recognized verifiers is published on the MRPI website. The verification must be done according to the instructions of this document.

The verifier checks the LCA report and MRPI spreadsheet or input in the online platform and sends the full verification dossier to Stichting MRPI. The dossier for a verification that is sent in shall contain:

- The verification statement:
 - This is a signed letter where the MRPI recognized verifier states the LCA is done correctly and conforms to the appropriate guidelines;
- Verification checklist project report:
 - This constitutes a checklist to verify the LCA project report;
- Verification checklist EPD:
 - This checklist is used to verify the EPD contents of any of the four types of MRPI certificates, i.e. to verify the contents of the MRPI spreadsheet or information in the online platform;
- Dialogue file:
 - The dialogue shows discussions/questions raised between verifier and LCA specialist in the review of the project report and EPD checklist and how the questions are answered.

In addition to the required items for the EPD document contents (see 2.4) are sent in by the applicant or LCA practitioner. Only after all the information is supplied, the draft version of the EPD document is created for a final review.

Annex A includes both checklists and templates for the statement and dialogue file.

3 Instructions for the verification by the recognized verifier

3.1 Documents to be verified

The verifier assesses the following documents:

- The LCA project report from the LCA practitioner based on the applicable standard(s);
- The MRPI spreadsheet or the input on the online MRPI platform, which forms the input for the EPD;
- The MRPI certificate (final check).

After the project report and input for the EPD is approved by the verifier, Stichting MRPI will generate the EPD certificate, which will then be given a final check by the LCA practitioner (verifier). When no irregularities remain, the document can be signed, finalized and published by Stichting MRPI.

3.2 Procedure of the assessment

The applicant for the EPD or delegated LCA consultant selects a MRPI recognized third party verifier that is certified by the Stichting MRPI. An up-to-date list of MRPI recognized verifiers is shown on the MRPI website. The verifier must act independently and impartially and cannot maintain a commercial or professional relationship with the LCA practitioner or manufacturer. The manufacturer makes agreements with the MRPI recognized verifier on the planning and costs of the verification.

The verifier shall by principle not make any recommendations. They shall be impartial and not try to influence the EPD according to their own opinion.

The verification shall ensure that the EPD/Type III environmental declaration complies with applicable standards and verification protocols. Next to that, the verification procedure shall confirm whether the information given in the declaration is in line with the LCA report underlying the declaration and whether this information is valid and scientifically sound. Therefore, the verifier must use two checklists to assess the LCA report and the MRPI EPD input (spreadsheet or online platform), respectively.

As specified out in section 1.3, there are four types of MRPI certificates that conform to different LCA standards or guidelines. Consequently, different verification checklists for the LCA project report and EPD must be used. The following verification checklists apply to each type of EPD:

- MRPI EPD certificate: the *Verification Checklist for the Life Cycle Assessment and Requirements on the Project Report*, as published in the latest version of the ECO Platform Verification Guidelines, accessible on the ECO Platform website²;
- MRPI EPD+ certificate: the checklists provided on the MRPI website;
- MPRI customized certificate: the *Verification Checklist for the Life Cycle Assessment and Requirements on the Project Report*, as published in the latest version of the ECO Platform Verification Guidelines, accessible on the ECO Platform website and any applicable checklist of the additional standard or guideline (PCR, c-PCR or PSR) that is used.

In general, each checklist presents the items that have to be verified as a minimum. It is presented as a 'tick-box' and can be used as such, but it should be clear from the verification dossier that discussions have taken place and (if applicable) improvements have been made following the MRPI recognized verifier's comments and recommendations. This must be done with a separate dialogue file, or as part of the checklist (this must be explicitly stated in the dossier). The core checklist is limited to information presented in the MRPI EPD+ certificate.

Any checklist, regardless of the type of MRPI certificate, must contain the following:

- A description of the verification topic or subject;
- A specification whether the topic is mandatory or optional;
- A reference to EN, ISO and/or PCR standards or additional guidelines (such as the Eco Platform calculation rules);
- An indication by the MRPI recognized verifier to state if the topic is approved;
- *Optional*: The checklist may be expanded with additional columns to serve as dialogue document (this must be clearly stated in the document).

Below, an example is given from the ECO Platform verification protocol.

Table 1: Example of the verification checklist.

1	General information	Mandatory/optional	Reference	Checked and approved
1.1	Commissioner of LCA study, LCA practitioner	M	EN 15804+A2, ch.8.2	

The assessment can only be completed when all subjects in the table/chapter are answered with "yes", otherwise the LCA dossier must be adapted. The dossier of the MRPI recognized verifier consists of the checklists for report and EPD and dialogue document, in addition to the verification statement. When the verification is complete and all topics are checked and approved for both the report and EPD, the spreadsheet (or MRPI platform input), checklists, dialogue document and verification statement are sent to Stichting MRPI.

2 ² Latest version accessible at: <https://www.eco-platform.org/our-documents.html>.

3.3 Complaints or issues during the review

If any ambiguities arise during the review, Stichting MRPI will assist in resolving them if necessary. When the applicant does not agree with the final judgement of the MRPI recognized verifier or has other complaints on the verification it can be reported to Stichting MRPI. They will be dealt with according MRPI Complaint Procedure, published on the MRPI website (see also 3.6).

When the MRPI recognized verifier has any issues with procedures or verification protocols, it can be reported to Stichting MRPI. MRPI recognized verifiers have the right, in case of an unresolvable issue, to address the complaint at the regular recognized verifier meetings of Stichting MRPI. The complaint shall be discussed without making reference to the specific product or manufacturer unless the manufacturer states that there are no objections.

3.4 Finalization and publication of the EPD by Stichting MRPI

Stichting MRPI checks the completeness of the dossier (see sections 2.4 and 2.5). After the draft EPD document has been checked, approved and finalized, Stichting MRPI assigns a number to the MRPI certificate.

MRPI publishes the certificate on its website, this is the location where the EPD can be found for the coming 5 years. Additionally, the MRPI certificate is published on the ECO Platform website (www.eco-platform.org) and/or is included in the Dutch National Environmental Database (NMD). Stichting MRPI allows the applicant to publish the MRPI certificate through any desired channel (e.g. company website).

See also MRPI General Program Instructions (GPI).

3.5 Validity of MRPI certificate

The MRPI certificates are valid for a period of 5 years.

3.6 Procedure for comments, questions, complaints and appeals of published EPDs

Stakeholders with any comments or questions about published EPD certificates can contact Stichting MRPI, who then will first assist in trying to resolve any issues. If any complaints or irregularities about EPDs remain, a formal notion can be given to Stichting MRPI, which will then be handled in accordance with the MRPI complaint handling process, part of the MRPI General Program Instructions (GPI).

4 References

1. Verification Guidelines for ECO EPD Programme Operators, Version 8.0, ECO Platform, December 2024.
2. LCA Calculation Rules and Specifications for EPDs, Version 2.0, ECO Platform, December 2024.
3. ISO 14025:2006, Environmental labels and declarations - Type III environmental declarations - Principles and procedures, ISO, 2006.
4. ISO 14040:2006, Environmental management – Life cycle assessments – Principles and framework, ISO, 2006.
5. ISO 14044:2006, Environmental management - Life cycle assessment - Requirements and guidelines, ISO, 2006.
6. NEN-EN 15804:2012 + A1, Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products, NEN, November 2013.
7. NEN-EN15804+A2, Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products, NEN, November 2019.
8. NEN-EN 15941:2024, Sustainability of construction works - Data quality for environmental assessment of products and construction work - Selection and use of data, NEN, March 2024.
9. Recognition scheme verifiers MRPI, version 5.0, Stichting MRPI, January 2026.
10. General Program Instructions MRPI, version 5.1, Stichting MRPI, March 2026.
11. Bepalingsmethode Milieuprestatie Bouwwerken, Versie 1.2, January 2025, including amendments 1 & 2.
12. NMD-Toetsingsprotocol Opname data in de Nationale Milieudatabase, Versie 2.0, July 2025.

Annex A – Verification documents MRPI EPD

This annex includes the verification documents for the verification of a MRPI EPD+ certificate. A recognized verifier must use these to assess the LCA background report for specifically MRPI EPD+ certificates (that EPD complies with both the ECO Platform verification guidelines and NMD review protocol) and similar documents for any type of MRPI EPD. A recognized verifier is allowed to add the necessary information to the documents, such as personal info, information about the product(s) and company, applied standards and the verifiers own company logo and layout, but the main contents is not allowed be changed.

The latest version of the verification statement and dialogue file is posted on the MRPI website in Microsoft Word format; the verification checklists are also available in Microsoft Excel.

The dossier for a verification shall contain:

- The verification statement;
 - o This is a signed letter where the MRPI recognized verifier states the LCA is done correctly and conforms to the appropriate guidelines. This template is also posted in Word format on the MRPI website.
- Verification checklist project report:
 - o This constitutes a checklist to verify the LCA project report. For the *MRPI+ certificate*, the checklist in this annex applies, which is also posted in Excel format on the MRPI website. For the *MRPI EPD* certificate, the appropriate checklist from ECO Platform applies. The MRPI customized certificate should follow the ECO Platform checklist first, and any format prescribed by the additionally used standard.
- Verification checklist EPD:
 - o This constitutes a checklist to verify the EPD contents. For the *MRPI+ certificate*, the checklist in this annex applies, which is also posted in Excel format on the MRPI website. For the *MRPI EPD* certificate, the appropriate checklist from ECO Platform applies. The MRPI customized certificate should follow the ECO Platform checklist first, and any format prescribed by the additionally used standard.
- Dialogue file:
 - o The dialogue shows discussions/questions raised between verifier and LCA specialist in the review of the project report and EPD checklist and how the questions are answered. This template is also posted in Word format on the MRPI website. This dialogue may be part of the checklist using additional comments, but this must be explicitly stated in the file itself (in the header and title of document).

The checklists present the items that must be verified as a minimum. It is presented as a 'tick-box' and can be used as such, but it should be clear from the dialogue file that discussions have taken place and (if applicable) improvements have been made following the MRPI recognized verifier's comments. It is also possible to include the dialogue in the verification checklist; this should be clearly indicated when delivering the dossier to MRPI.

The applicant is required to supply the following with regard to the EPD contents:

- Company logo, at least 300 dpi;
- A picture of the product in its application;
- A picture of the product itself (optional);
- A process diagram, in accordance with the applicable standard(s) or at least in accordance with section 7.2.1 of EN 15804.

Verification Statement

The MRPI recognized verifier shall give a statement about his work and the result, clarifying at minimum:

- Which EPD is addressed;
- That the work concerned is a verification;
- That the verification has been done by an independent third-party;
- That the EPD and project report was verified according to EN 15804+A2 and (if applicable) ECO Platform Standards or other applicable guidelines;
- The PCR and, if relevant, c-PCR, which were applied for the EPD.

Verification Statement *[template]*

As a verifier, I hereby declare that I act independently and impartially, and that I maintain no commercial or professional relationship with the LCA practitioner other than that which is strictly required for the performance of the verification.

I hereby confirm that, following detailed examination as independent 3rd party verifier, I have not been able to trace any unjustified deviations.

Issued for the Environmental Product Declaration(s):

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

By: *[company name(s) + address]*

Project report from the requirements outlined in the corresponding product category regulations based on:

- EN 15804+ A1
- EN 15804+ A2
- [relevant PCR, e.g. NMD Assessment Method]
-

The company-specific data have been examined as regards plausibility and consistency; the manufacturer(s) or group of manufacturers are responsible for its factual integrity.

The project report on the Life Cycle Assessment Assessment and the report(s) on features of environmental relevance are filed at *[company name]* The verification dossier is available at Stichting Milieu Relevante Product Informatie.

Name and signature of
3th party external recognized verifier:

Place and date:

Verification checklist MRPI EPD+ LCA project report

Below, the verification checklist for MRPI EPD+ LCA project reports is presented, for verification of an MRPI certificate that complies with both the ECO Platform and Stichting NMD Guidelines. All subjects mentioned in the list below must be checked and approved. The checklist follows the order of the original ECO Platform checklist for verification, with additional guidance when specific NMD PCR requirements apply.

The verification checklist is based on the following guidelines/standards and versions:

- Verification Guidelines for ECO EPD Programme Operators, Version 8.0, ECO Platform, December 2024.
- LCA Calculation Rules and Specifications for EPDs, Version 2.0, ECO Platform, December 2024.
- Bepalingsmethode Milieuprestatie Bouwwerken, Versie 1.2, January 2025, including amendments 1 & 2.
- NMD-Toetsingsprotocol Opname data in de Nationale Milieudatabase, Versie 2.0, July 2025.

The table contains the following columns:

- Reference (number) of the verification topic or subject;
- The verification topic or subject, following the order of the ECO Platform verification guidelines;
- Additional requirements from the NMD PCR, adopted from the NMD review protocol;
- Specification whether the topic is mandatory or optional;
- A reference to EN, ISO and/or PCR standards;
- An indication to be used by the MRPI recognized verifier to state if the topic is approved;
- *Optional*: The checklist may be expanded with additional columns to serve as dialogue document.

When the corresponding subjects in the LCA project report comply with the requirements and guidelines in the applicable references, the box "C & A" (check and approved) can be ticked. Most issues are mandatory to fulfil, some are optional. When all mandatory boxes can be checked, the report can be approved.

Any deviations from the requirements should be reported by the MRPI recognized verifier and the dialogue between MRPI recognized verifier and LCA consultant or applicant should be made transparent as well as improvements made following the verification process. This can be done as part of the checklist, or separately from the checklist in the dialogue document (an example is provided in the last part of this annex). If the dialogue is part of the checklist(s), this should be clearly indicated in the verification dossier.

1	General information	NMD PCR addition	Mandatory/ optional	Reference	Checked and approved
1.1	Commissioner of LCA study, LCA practitioner		M	EN15804+A2 ch.8.2	
1.2	Date of issue of LCA report		M	EN15804+A2 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 PCR (date and version) and JRC characterization factors (newest version)	Add to the statement that the LCA is in compliance with ISO 14040, ISO 14044 and the most recent version of the NMD assessment method including applicable amendments. Also state that any EPD derived from the analysis complies with ISO 14025.	M	EN15804+A2 ch.8.1/8.2 + applicable PCR, Joint Research Center: https://eplca.jrc.ec.europa.eu/LCDN/EN15804.xhtml ; NMD PCR	
1.4	Statement of the version of EN15804+A2:2019 used for the study and EPD		M	EN15804+A2 ch.8.2	
1.5	Any other independent verification of the data given in the LCI/LCA documentation?		O		
2	Study goal	NMD PCR addition	Mandatory/ optional	Reference	Checked and approved
2.1	Reasons for performing the Life Cycle Assessment		M	EN15804+A2 ch.8.2	
2.2	Intended application – (e.g. for EPD, databases, publication etc.)		M	EN15804+A2 ch.8.2	
2.3	Target group (B2B, B2C,)		M	EN15804+A2 ch.8.2	
3	Functional unit / Declared unit	NMD PCR addition	Mandatory/ optional	Reference	Checked and approved

3.1	<p>Functional / Declared unit, including relevant technical specification as required in ECO Platform LCA Calculation Rules.</p> <p><i>Calculation Rules chapter 2.1: The functional unit of a construction product shall comply with EN 15804+A2, ch. 6.3.2.1 and any requirements in the relevant cPCR.</i></p>	<p>The functional unit complies with the "functionele beschrijvingen" (functional descriptions) of Stichting NMD, the most recent list is accessible on www.milieudatabase.nl. The correct reference to the functional description is included. It is clear whether it concerns a "totaalproduct" (complete product), in which case it has been checked that all mandatory components have actually been included in the study. If it concerns a "deelproduct" (partial product), it is clearly described within which complete products and which component (CUAS categorization) the partial product is included.</p>	M	<p>EN 15804+A2, ch. 6.3.1-6.3.3; Applicable c-PCR; LCA Calculation Rules V2.0, ch. 2.1; NMD PCR</p>	
3.2	<p>Indication of a factor for the conversion into kg, if applicable</p>		M	<p>EN15804+A2: ch.6.3.2.1 and ch.6.3.3</p>	
3.3	<p>If product groups (similar products from one manufacturer and/or from different production plants) are declared:</p> <p>a. Description of the type of the EPD (e.g., average, representative product or worst-case product);</p> <p>b. Rules for the calculation of the declared results and content.</p> <p>c. Representativeness of the declared results and content.</p>		M	<p>EN15804+A2: ch.8.2</p>	
4	Product description	NMD PCR addition	Mandatory/ optional	Reference	Checked and approved

4.1	<p>Composition of the product</p> <p><i>Calculation Rules chapter 2.2:</i> <i>The level of detail that is required is the following:</i> <ul style="list-style-type: none"> •the main components necessary to understand what type of product is concerned (detailed mass description is not necessary if confidential). •In case of average EPD: at minimum qualitative description of averages and qualitative description of ranges. </p>		M	ISO 14025; LCA Calculation Rules V2.0, ch. 2.2	
4.2	<p>Description of technical and functional characteristics and area of intended application in the building. In case of EPD of product group: at minimum qualitative description of the products included and qualitative description of ranges of functions.</p>		M	Applicable European product standard or c-PCR	
4.3	<p>Flow diagram of the product system, divided into the life-cycle stages, showing the main processes included and the system boundary of the LCA. The stages may be further divided into modules.</p>	<p>The life cycle of the construction product must be modelled in the form of a flow diagram (<i>stroomdiagram / procesboom</i>). The flow diagram includes all economic flows (both goods (materials, products) and services), both qualitative (names of the processes) and quantitative (quantities), that are required for the product unit or to fulfil the function(s) from the functional unit.</p> <p>If the flow diagram becomes unclear because it consists of too many components, a diagram with the most important components may suffice. The other matters can be included in table form per information module.</p> <p>Incidents, such as unforeseeable damage, are not included in the process tree.</p>	M	EN 15804+A2: ch.7.2.1; NMD PCR	

5	System boundaries in accordance with the modular design of the EN 15804+A2	NMD PCR addition	Mandatory/ optional	Reference	Checked and approved
5.1	Description of Life Cycle stages/modules declared. Omissions of the life cycle stages declared. Visualization of system boundaries. Level of detail: see LCA calculation rules and specifications for EPDs		M	EN15804+A2 ch. 5.2 (incl. Figure 1)	
5.2	Comprehensive declaration of modules A1-A3, C and D as a minimum requirement, unless conditions for excluding C and D in EN 15804+A2 ch. 5.2 are met. If necessary, A1-A3 can be reported. separately or as an aggregated module. Recommendation: A1-A3 must, if declared separately, also be reported in an aggregated column to facilitate comparison	<u>Restriction on declarations that only include modules A1-A3 (basisprofiel):</u> only allowed if conditions for excluding C and D in EN 15804+A2 ch. 5.2 are met.	M	EN 15804+A2, ch. 6.3.5; EN 15804+A2, ch. 5.2; LCA Calculation Rules V2.0, ch. 2.3; NMD PCR	
5.3	A1 to A3: System boundary <ul style="list-style-type: none"> • Clear description of what the modules cover; • System boundary to nature (e.g. in the case of forests between nature and technosphere); • Use of secondary materials and secondary fuels and waste produced (check end-of-waste state); • Fulfilment of requirements regarding offsetting 		M	EN 15804+A2, ch. 6.3.5.2; applicable c-PCR	

5.4	A4 to A5 optional module, thus if covered: Clear description of system boundaries	Not optional. The transport phase (A4) starts when the construction product or element is ready for transport to the customer at the manufacturer and ends when it is delivered to the construction site and is unloaded from the means of transport. Installation (A5) is taken into account by using one or more scenarios, in addition to 'losses in the form of construction waste' for which standard values are included in paragraph 2.6.3.6 of the NMD assessment method.	M	EN15804+A2 ch. 6.3.5.3; NMD PCR
5.5	Accounting impact of losses in the modules in which they arise		M	EN15804+A2 ch. 6.2.1 and 6.3.5.1 and 6.3.5.3
5.6	<p>B1 and B7 (optional modules except for EEE-construction products, thus if covered): Clear description of system boundaries</p> <p><i>LCA calculation rules 2.3 on B modules:</i></p> <ul style="list-style-type: none"> ▪ B6 (energy consumption) shall be added in the calculation of EPD of final products which are consuming energy, directly or indirectly¹. B6 shall be presented separately to let users of the EPD accommodate the calculation when appropriate. ▪ If there is no c-PCR available the programme operator may provide a justified use scenario to apply for each family of products (or product category) that it covers within its programme, together with the related calculation formula when appropriate. Usually this will be done through a PCR publication. ▪ When an existing regulation applies to the calculation of B6 at the geographical scope that the EPD states it covers, the "justified use scenario" to calculate B6 shall be the more demanding 	<p>Check the system boundaries of the use phase modules:</p> <ul style="list-style-type: none"> - B1 - The use of the construction product (life cycle phase B1) concerns its application in the Netherlands. - B2 - Maintenance (life cycle phase B2) concerns only material related maintenance, and not building related or location related maintenance. Cleaning maintenance only if functionally important. - B3 - Repair (life cycle phase B3) - B4 – Replacement of the entire product is recorded in the calculation rules at building level by means of a multiplication of the environmental declarations. Replacement of the entire product is therefore not reported separately in the usage phase. Replacement of components that do not last the lifespan of the entire product is included here 	M	EN15804+A2 ch. 6.3.5.4; NMD PCR

	<i>regulation applying to the entire scope (see also calculation rules ch. 2.10.1).</i>	- B5 – Renovation (life cycle phase B5) is not part of the assessment method (declared as 0 impact)			
5.7	In addition, for Products using energy in module B6 of the use stage and permanently installed into building or infrastructure (defined by the manufacturer): B6 is mandatory for EPDs of products using energy in the use stage. Any maintenance [B2], repair [B3] and replacement [B4] processes which are required to achieve the stated service life of the products using energy in the use stage and emissions in use [B1] shall also be described as technical scenarios in the EPD.		M	LCA Calculation Rules V2.0, ch. 2.10	
5.8	C1 to C4: Clear description of system boundaries	C1 - The demolition phase, which starts when the building is decommissioned and ends when the building is demolished or dismantled. This phase therefore includes the work on the demolition site. C2 - Standard values for the transport distances to sorting locations, landfill sites and waste incineration plants (AVIs) are included in paragraph 2.6.3.6 of the NMD assessment method.	M	EN15804+A2 ch. 6.3.5.5; NMD PCR	

5.9	<p>C3 Clear description of the declared scenarios, like:</p> <ul style="list-style-type: none"> • Waste treatment • Materials for recycling • Impacts of recycling processes to achieve end of waste • Justification of the “end-of-waste state” <ul style="list-style-type: none"> a. Existing purpose b. Existing market or demand c. Compliance with technical requirements and legal guidelines d. Fulfils limit values for Substances of Very High Concern (SVHC) 	<p>C3, C4 and D - The environmental effects are calculated using the ‘verwerkings-scenario’s einde leven’ as published on www.milieudatabase.nl. In module D all deducted environmental interventions are included.</p>	M	<p>EN15804+A2 ch. 6.3.5.5 + table 8 + ch. 7.2.4.4 + annex B.1; NMD PCR</p>	
5.10	<p>C4: Is the complete waste disposal process included in this module? Is its inclusion described transparently and is it plausible?</p> <p>Carefully check the correct allocation for deposition of biogenic material.</p> <p><i>LCA calculation rules ch. 2.3 on C modules: C4: The degradation of a product’s biogenic carbon content in a solid waste disposal site, declared as GWP biogenic, shall be calculated without time limit. Any remaining biogenic carbon is treated as an emission of biogenic CO2 from the technosphere to nature.</i></p>	<p>For landfill processes, a period of 100 years after landfill is assumed as the end point (see also 2.6.3.6 under generic data in the NMD assessment method).</p>	M	<p>EN 15804+A2, ch. 6.3.5.5 and ch. 6.3.5.6; LCA Calculation Rules V2.0, ch. 2.3; NMD PCR</p>	

5.11	<p>D: System boundary and loads and benefits of all relevant modules shall be clearly described and justified</p> <p>Assumptions with regard to substituted processes in D incl. year of reference (e.g. assumptions with regard to substitution of energy production).</p>	<p>Raw material equivalents are clearly described in accordance with the requirements of the NMD Assessment Method (2.6.3.4) and plausible.</p>	M	EN15804+A2 ch. 6.3.5.6; NMD PCR	
5.12	<p>D: Check if the net flow calculation is done correctly taking into consideration relevant factors, e.g.:</p> <ul style="list-style-type: none"> • <i>Processing losses over the whole life cycle (including collection and pre-processing);</i> • <i>Inputs in Modules A1 to A3 (and A4 to B5 if necessary);</i> • <i>The reaching of end-of-waste-state by all waste flows considered in module D.</i> 	<p>Paragraph 2.6.4.3 and appendix V of the NMD Assessment Method describe how the net impact of module D should be calculated. The calculation is clearly documented and plausible. The following aspects are substantiated in this:</p> <ul style="list-style-type: none"> -A mass balance that includes all individual input flows of secondary raw materials and all output flows of materials for recycling. - The quality and quantity must be determined of materials intended for recycling and reuse that are used as secondary materials. - Impacts are calculated for the processes required to make the material suitable for the same application as the primary raw material equivalent. - The quality factor for recycling and reuse is determined and substantiated in accordance with the Assessment Method. - Any waste streams from the recycling process are included. - Module D is calculated on the basis of 	M	EN15804+A2 ch. 6.3.5.6 and 6.4.3.3; NMD PCR	

		<p>the sum of the net output of the individual flows of secondary raw materials. - For energy recovery, the standard values from the Assessment Method are used. The LHV used must also be substantiated.</p> <p>For the end-of-waste phase, the system boundary is determined according to Annex IV of the NMD Assessment Method. If a material, product or element remains without fulfilling a further function ('laten zitten zonder functie'), it is treated as landfill.</p>			
5.13	D: No benefits or loads of allocated co-products		M	EN15804+A2 ch. 6.3.6.5 and ch.6.4.3.3	
6	Power mix	NMD PCR addition	Mandatory/ optional	Reference	Checked and approved
Info	<p>Terms & Definitions Definitions for the terms "market-based approach", "location-based approach", "Contractual Instrument", "reliable and transparent book and claim registry", "Guarantee of Origin (GO)", "Consumption Mix" and "Residual Mix" are provided in EN 15941, ISO 14067 and/or the LCA Calculation Rules ch. 2.5.</p>			<p>EN 15941; ISO 14067; LCA Calculation Rules V2.0, ch. 2.5.</p>	n/a
6.1	MRPI allows contractual instruments, i.e. the market-based approach must be followed. Do the main LCA results in the EPD follow the choice of the market-based approach and not the Location-based approach [contractual instruments not allowed] for electricity?		M	<p>LCA Calculation Rules V2.0, ch. 2.5; EN 15941; applicable PCR</p>	

6.2	Electricity rules for use of the market-based approach (rules in addition to ISO 14067 and EN 15941)				
6.2.1	<p>If Contractual instruments (e.g. GO) have been used: Is there a registry for the Contractual instrument and is the registry a "reliable and transparent book and claim registry"?</p> <p>Validity period of the certificates for contractual instruments (date of purchase must relate to period of production and primary data collection on site) in accordance with the PCR?</p> <p>If these requirements have not been met for contractual instruments, has the residual mix been used?</p>		M	Applicable PCR; LCA Calculation Rules V2.0, ch. 2.5	
6.2.2	For an entity producing more than one product, electricity with contractual instruments shall not be virtually allocated to specific products unless a separate energy supply and contract is in place.		M	LCA Calculation Rules V2.0, ch. 2.5	

6.2.3	<p>Foreground data in the control of the manufacturer</p> <p>Case 1: Manufacturer produces energy on site or is directly linked to plants nearby:</p> <p>Check on electricity amounts from accounts. Check if any contractual instruments have been generated and supplied into the market for the electricity used on site. If yes, then has residual mix been used?</p> <p>In case of any export, contractual instruments can only cover the exported electricity Has the generated mix been modelled correctly?</p> <p>Note 1: Attention: LCA-models for CO2 figures (or other indicators in the contractual instrument documentation and/or on energy bills may be different from LCA models needed to fulfil EN 15804+A2/ISO 21930 and construction related</p>		M	ISO 14067; EN 15941; LCA Calculation Rules V2.0, ch. 2.5, table 2	
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PCRs/this guidance paper on hand. The figures cannot replace each other.

Case 2: Electricity provider chosen from national state with legislation for electricity labelling*, e.g. Austria:

Energy mix is found in detail on contracts/bills, registry for proof of origin existing, no residual mix necessary, everything is marked.

Check on documentation as required in ECO Platform LCA calculation rules and specifications for EPDs

Has the provider energy mix been used?

Case 3: Electricity provider chosen from national state with a “reliable and transparent book and claim registry” [e.g. covered by AIB registry in EU]

If compliant contractual instruments (see 6.2.2) have been provided, has the supplier mix been used?

If no compliant contractual instruments have been provided, has grid electricity been modelled with the residual mix using the published mix if provided [case 3a)], or calculated correctly based on the calculation rules ch. 2.5 if not published [case 3b)]?

Case 4a: EU/EAA national states (or federal states) with no registry – all EU/EAA states are covered by the AIB registry, see Case 3a).

Case 4b: Energy provider from national states (or federal states) with no registry (outside EU and EEA). Check the ECO Platform List to ensure that

	<p>no registry exists for the state or region. Only if there have been no compliant Contractual Instruments and registry can consumption mix be used, otherwise consider as per the ECO Platform list (case 2/3a/3b/4c as appropriate).</p> <p>Case 4c: Energy provider from national state with one or more registry but no “single reliable and transparent book and claim registry”, outside EU, e.g. Turkey, US. If valid contractual instruments been provided, has the contractual mix been modelled? If not, has grid electricity been modelled on the residual mix, calculated according to the calculation rules?</p>			
6.2.4	<p>Background data: have the recommendations of Table 3 in the LCA Calculation rules been applied?</p> <p>Has justification been provided if they have not been followed?</p>		O	LCA Calculation Rules V2.0, ch. 2.5
6.2.5	<p>If location-based modelling is used to provide results as additional information, have the requirements from LCA Calculation Rules 2.5.1 and Table 2 been implemented?</p> <p>Has the national consumption mix been used (except for Australia, Brazil, Canada, China, India, and USA subnational consumption mix shall be used)?</p>		M	Applicable PCR LCA Calculation Rules V2.0, ch. 2.5.1, Table 2

6.2.6	<p>Reporting and communication done as required in EN 15941:2024 and the LCA Calculation Rules. The report clearly states which approach [marketbased or location-based] has been used for electricity for any modelling and results.</p> <p>The required documentation is provided, and meets the requirements of the Calculation Rules, for:</p> <ul style="list-style-type: none"> - Any on-site generated electricity - Any directly connected electricity - Any electricity supplied for Case 2 - Any use of contractual instruments - The calculation of the residual mix <p>The modelling of electricity [datasets used, reference year, GWP/kWh] in the foreground system has been described and meets the requirements of the calculation rules.</p>		M	EN 15941; LCA Calculation Rules V2.0, ch. 2.5	
6.3	Biogas		M	EN 15941, Annex E2.3	
6.3.1	<p>MRPI allows contractual instruments for Biogas, therefore the market-based approach must be used.</p> <p>Are the LCA Calculation rules for any on-site generated biogas or directly connected biogas met?</p> <p>Is the supplier able to guarantee that any contractual instrument meets the requirements for tracking and traceability, see EN 15941 E.2.1.</p>		M	EN 15941, Annex E2.1 and E2.33; LCA Calculation Rules V2.0, ch. 2.5.2	

	For gas purchased without contractual instruments, has the residual mix been applied?			
6.3.2	<p>MRPI does not allow the location- based approach for biogas, but this approach may be used to provide results as additional information.</p> <p>Has the consumption mix been used for gas from the gas network, and any biogas from a directly connected supplier and/or internally generated biogas been modelled based on the supplied gas?</p>		M	LCA Calculation Rules V2.0, ch. 2.5.2

6.3.3	<p>Additional information for transparency given as stated in the ECO Platform LCA Calculation Rules</p> <p>The report clearly states that the market-based approach [or location-based as additional, informative results] has been used for biogas for any modelling and results.</p> <p>The required documentation is provided, and meets the requirements of the Calculation Rules, for:</p> <ul style="list-style-type: none"> - Any on-site generated biogas - Any directly connected biogas - Any use of contractual instruments - The calculation of the residual mix <p>If gas accounts for more than 30 % of the total energy use in stage A1-A3, provide in the Project Report, the GWP-total of the applied gas mix in kg CO₂e/MJ, e.g. of any gas purchased with contractual instruments or biogas used in the foreground manufacturing processes, and any other processes which the manufacturer has direct control over</p>		M	LCA Calculation Rules V2.0, ch. 2.5.2; EN 15941, Annex E 2.8.1	
7	Criteria for excluding inputs and outputs	NMD PCR addition	Mandatory/ optional	Reference	Checked and approved

7.1	Selection of the cut-off criteria, description of application of the criteria and assumptions in line with standard and PCR? (Note: A complete mass balance is normally not possible without high effort. This is why cut-off decisions are often based on assumptions about the effect of the flow that has been cut off).	<p>All inputs and outputs for which data is available are included in the calculation.</p> <ul style="list-style-type: none"> • Estimates for missing data have been made conservatively ('worst case'). • Process data include infrastructure and capital goods (such as the generic Ecoinvent data). <p>The evaluation of the environmental effects for ignoring inputs and outputs must be based on the environmental effects from set 2 and the environmental effects from set 1. Within set 2, only the result of the indicator 'Climate change – total' is considered for the contribution of the environmental effects to climate change.</p>	M	EN15804+A2: ch. 6.3.6 and ch. 8.2; NMD PCR	
7.2	List of excluded processes declared?	Any deviations from the above have been substantiated / reported.	M	EN15804+A2 ch. 8.2; NMD PCR	
8	Data collection, electing background data	NMD PCR addition	Mandatory/ optional	Reference	Checked and approved
8.1	Selection and use of background data (specific and/or generic) justified and validity demonstrated?	The background database as prescribed in the NMD assessment method must be applied.	M	EN 15804+A2, ch. 6.3.7; EN 15941; NMD PCR	

8.2	<p>Data collection, including data quality issues, according to LCA rules:</p> <ul style="list-style-type: none"> • Assessment period for each module considered in the Life Cycle Assessment (e. g. one year average, etc.) • Appropriateness of background data (temporal, geographical, technological) • Other assumptions concerning background data, e.g. about data gaps • Assumptions regarding 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	<p>ISO 14044:2006, section 4.3.2; ISO 14040 section 5 (and 6); EN 15804+A2, ch. 6.3.7 + ch. 6.3.8; EN 15941, ch. 7.3.2</p>	
8.2.1		<p>The order of preference for determining emissions is:</p> <ol style="list-style-type: none"> 1. Methods designated in laws, decrees or ministerial regulations; 2. Methods from industry standards; 3. Methods described in (possibly sector-specific) private law agreements 	M	NMD PCR	

8.2.2		<p>All environmental interventions from the most recent CML-NMD method available via www.milieudatabase.nl for set 1 and that of the International Reference Life Cycle Data System (ILCD) Handbook ("identified by the name EN 15804+A2") must be considered. The following interventions must have a value as a minimum:</p> <ul style="list-style-type: none"> — emissions to air when using thermal energy of CO₂, CO, NO_x (NO₂ and N₂O), SO₂, C_xH_y and particulate matter (PM₁₀: particles < 10 µm); — emissions to water of COD, BOD, P-total, N-total and solid matter (PM₁₀: particles < 10 µm); — emissions to soil of PAHs and heavy metals; — other emissions for which requirements are imposed on the producer of the construction product under environmental legislation. 	M	NMD PCR	
8.2.3		<p>The CML-NMD environmental interventions are assigned a value, unless the value is unknown. Three options are possible:</p> <ol style="list-style-type: none"> 1) A positive or negative value; 2) The value 0 (for all interventions whose value is below the detection limit); 3) A question mark (if it is unknown whether the intervention is taking place). 	M	NMD PCR	

8.2.4		<p>Where available, sum parameters (such as NO_x, C_xH_y, COD, BOD, P-total, N-total, PAH10 and heavy metals) must be broken down into their individual components in order to obtain an accurate characterisation. The standard list contains a number of sum parameters for which characterisation factors are also available.</p> <p>The intervention value of the sum parameters can be entered in two ways:</p> <p>a) The intervention value of the sum parameter is known. This is entered.</p> <p>b) One or more individual substances are known, but only a characterisation factor is available for the sum parameter. A sum parameter can be a representative characterisation value for the sum of a group of substances for a specific environmental effect, for example PAHs. In that case, the values for the substances underlying the sum parameter are then entered using the som parameters' intervention value, in accordance with the mass contribution for each substance to get an accurate total.</p> <p>c) If characterisation factors are available for a limited number of substances underlying the sum parameter, the sum parameter is calculated for each, after which the results are averaged and used for the missing substances.</p>	M	NMD PCR	
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8.2.5		Data collection of biogenic carbon: Both biogenic carbon uptakes and emissions are modelled in the modules in which they occur. See also NMD guideline / roadmap on dealing with Biogenic Carbon Storage.	M	NMD PCR	
8.2.6		Data collection of waste: is for all outgoing flows considered whether it is waste? Has the end-of-waste status been checked? Has any waste been determined to be hazardous waste?	M	NMD PCR	
8.2.7		If a supplier uses industry average data (cat. 2), it must be demonstrated that the supplier is part of this particular industry average.	M	NMD PCR	
8.2.8		If (background) processes or standard values from different regions are available, the following order of priority is used: 1) the country in question; 2) a comparable neighbouring country; 3) the region in question (e.g. North-West Europe); 4) the (part of) continent in question; 5) the world.	M	NMD PCR	
9	Validity of data	NMD PCR addition	Mandatory/ optional	Reference	Checked and approved

9.1	<p>Represent a reference year within 10 years for generic data</p> <ul style="list-style-type: none"> • Represent a reference year within 5 years for specific data • Specific data based on 1 year average, unless an exception is justified • Time period of 100 years over which inputs and outputs from the product system shall be accounted for. In case of landfill scenario: longer, if relevant • Technical coverage of data complies with physical reality • Integrity of generic data records, system boundary and cut-off criteria for generic data records validity demonstrated 	<p>The processes in the product system must provide a representative or typical picture of the current geographical and technological situation. The area of application to which this standard relates is the Netherlands. 'Representative' means that the data accurately reflect the real population. 'Typical' means that the data describe a specific, frequently occurring situation.</p>	M	EN15804+A2 ch. 6.3.8; EN15941; NMD PCR	
9.1.1		<p>In case of an average product, the average composition is based on: annual or multi-year figures of the entire production, weighted by production; or on a composition covering more than 80% of the production quantity in that year of study.</p>	M	NMD PCR	
9.1.2		<p>If all production locations for a specific product provide data in the case of horizontal aggregation, the result is automatically representative for the group in question. If not all production locations in the group provide data, a representative cross-section must be made from the group of production locations, insofar as they produce for the Dutch market, with regard to geographical and technical differences that can lead to differences in environmental impact.</p>	M	NMD PCR	

9.1.3		The value of an environmental intervention must be an average of measurements or calculations over a period of time, within which fluctuations due to seasonal influences, measurement methods, etc. are averaged out.	M	NMD PCR	
9.2	<p>Documentation on background data (specific and/or generic):</p> <ul style="list-style-type: none"> • name of the data record, • its source (database, bibliographic source, etc.), • year of data collection and its representativeness <p>Handling missing data Assessing data quality (time, geographical and technological representativeness). Documentation of data quality for all datasets with a major contribution, together contributing to at least 80% of the results of the core environmental impact indicators.</p> <p>Check on plausibility, comparison of indicators with others from datasets verified EN 15804+A2 and applicable c-PCR or comparison of flows and/or indicators of other significant sources of information.</p>	The documentation format and datasets for the life cycle inventory data used in the LCA modelling use the current ILCD format and nomenclature as defined in the document "International Reference Life Cycle Data System (ILCD) Handbook - Nomenclature and other conventions", available from the central website of the European Commission.	M	EN 15941 ; NMD PCR ; EN 15804+A2, Annex E	

9.2.1		<p>The data quality is based on the principle that the data quality of the data of the processes that take place at the manufacturer of the construction product must be higher than that of the other processes. Furthermore, the principle is used that the economic flows must approximate reality as closely as possible within practically feasible limits for the executor of the LCA. If the aforementioned ILCD format has not (yet) been followed, the data quality must be assessed with a data quality system according to Annex D of the NMD review protocol and any additional instructions laid down by the NMD.</p>	M	NMD PCR	
9.2.2		<p>Suppliers and customers (if applicable) of the relevant production locations of the construction product must be asked to provide data on the production process in accordance with the same requirements that this standard sets for manufacturer data.</p>	M	NMD PCR	

9.2.3		<p>If a supplier or customer (if applicable) does not provide any or insufficient data, public sources, industry figures and literature data will be used. In that case, it will be checked whether there are any deviations from the NMD regulations. Any deviations must be stated in the assessment report (see also NMD assessment method 2.6.3.7).</p> <p>The reviewer must also indicate whether the deviation is so significant that the deviation must be stated in the report, review statement and EPD.</p>	M	NMD PCR	
10	Development of scenarios at product level in modules A4-A5-B-C-D	NMD PCR addition	Mandatory/ optional	Reference	Checked and approved
10.1	<p>Statement that the scenarios included are currently in use and are representative for one of the most likely scenario alternatives.</p> <p>Declaration of additional representative scenarios for the relevant region(s) is permissible.</p>	<p>C3, C4 and D - The environmental effects are calculated using the 'verwerkings-scenario's einde leven' as published on www.milieudatabase.nl. In module D all deducted environmental interventions are included.</p> <p>As an exception to the rule of actuality, a future scenario may be assumed for the disposal scenario if the condition is met for a plausible working (return) system at the time of disposal. If there is a deviation from the actuality requirement, this must be transparent. The plausibility of this has been explicitly tested. A more elaborate instruction is provided in the NMD assessment method, section 2.6.3.9.</p>	M	EN 15804+A2, ch. 6.3.9; applicable PCR	

10.1.1		<p>The following obligatory rules apply for transport distances:</p> <ul style="list-style-type: none"> - transport distance one way to the construction site if the construction product is produced in the Netherlands: for bulk material 50 km, for other materials, products and elements 150 km; for civil engineering works, the - transport distance per project is calculated in the calculation tool. - location to determine transport distance of materials from abroad to and from the construction site or customer in NL: Utrecht (only if actual transport distance is unknown); - end-of-life processing scenarios as published on https://milieudatabase.nl; - transport distance one way from demolition site to sorting and/or crushing plant, or storage location for reuse: 50 km; - transport distance one way soil removal: 50 km; - transport distance one way from demolition or sorting site to landfill site: 100 km; - transport distance one way for combustible material from demolition site to waste incineration plant (AVI): 150 km; - transport distance for products that remain at disposal site ('laten zitten'): 0 km. 	M	NMD PCR	
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10.1.2		<p>For the loss product during installation (waste at construction site), the following standard values from the NMD Assessment Method apply:</p> <ul style="list-style-type: none"> - Prefab products; It has been assumed that 3% of the materials are lost (on the construction site or during transport). - In-situ products: It has been assumed that 5% of the materials are lost. - Auxiliary and finishing materials: It has been assumed that 15% of the materials are lost. <p>If a deviation from these standard values is desired, this is possible provided that this is substantiated quantitatively with research results.</p>	M	NMD PCR	
10.1.3		<p>In the case of combustion in a waste incineration plant (AVI), the avoided energy production can be offset in module D from the amount of net exported energy (MJ per energy carrier). See more on the assumptions for AVI in NMD Assessment method section 2.6.3.7.</p>	M	NMD PCR	

10.1.4		If there are multiple installation options for a product (or functional unit) that have an impact on the end-of-life phase and/or the options for reuse, recovery or recycling, multiple environmental profiles (C1-C4, D) can be created. The following conditions apply: — the product is actually supplied suitable for the application; — additional (auxiliary) resources and/or substances are declared in the relevant module D; — specific design conditions for application are clearly described; — disposal scenarios are current, the same exception as described above applies.	M	NMD PCR	
10.2	Documentation of the relevant technical information, e.g. recycling or reuse rates, with references?		M	EN 15804+A2 table 8	
10.3	Default values in CEN TC c-PCR shall be checked on applicability for the product. Deviations from these values must be justified.		M	Applicable c-PCR	
11	Allocation	NMD PCR addition	Mandatory/ optional	Reference	Checked and approved
11.1	General allocation principles applied (avoidance of allocation, no double counting (unless due to a conservative assumption) or omissions, uniform application of the allocation rules, sum of inputs and outputs of a unit process after allocation must be equivalent to sum of inputs and outputs before allocation etc.)		M	ISO14044:2006 4.3.4	
11.2	Presentation and justification of allocations in the use of secondary materials or secondary fuels as raw materials		M	EN15804+A2. 6.4.3 + 8.2; applicable PCR	

11.3	Presentation and justification of allocations in the plant (allocation between different products/production lines in a plant)		M	EN15804+A2. 6.4.3 + 8.2; applicable PCR	
11.4	If applicable: Presentation and justification of allocation of multi-input processes (e.g. landfilling or incineration)		M	applicable PCR	
11.5	Allocation of co-products: <ul style="list-style-type: none"> • Selection of the allocation factors for co-product allocation and justification of allocation method; • Justification of allocation method (e.g. if data are not available to allocate according to the EN 15804+A2 rules); • Presentation of the energy and material flows in case of deviating allocation method; • No declaration of loads and benefits in Module D of flows undergone co-product allocation. 		M	EN15804+A2 ch. 6.4.3.2; applicable PCR	
11.5.1	Economic allocation for processes producing co-products used in cement and concrete, e.g. blast furnace slag, crystallised basic oxygen furnace slag, fly ash, artificial gypsum, silica fume, aluminium-oxide-containing co-products <ul style="list-style-type: none"> • Economic allocation has been used to assign impact to these low value co-products. • Even where the co-product's contribution to the overall revenue of the co-production process is less than 1%, economic allocation has been used to assess the impact, even if small, for low value co-products. • When assessing steel, coal-fired electricity, and other processes producing these co-products, physical partitioning and other forms of allocation have not been used to assign impact to low value co-products. See also LCA Calculation Rules section 2.6	Check any c-PCR underlying the NMD PCR: must comply with ECO Platform	M	EN 15804+A2; EN 16908; ECO Platform decision	

11.6	Documentation of allocation factors used and their (independent) sources		M		
11.7	<p>Allocation process for reuse, recycling and recovery, check specifically:</p> <ul style="list-style-type: none"> • End-of-waste state, Consistency with other scenarios of waste management • technology representativeness for the region / country • 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 <p>NOTE: Application of the “polluter pays” principle to the use of waste as substitute for primary fuels or materials is left to the programme operator.</p> <ul style="list-style-type: none"> • 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 		M	EN15804+A2 ch.6.4.3.3; applicable PCR	
11.8	<p>Justification if generic data is applied which does not comply with the allocation principles, or where this compliance is not known and there are reasons to doubt it. Expert guess of how this influences the indicator results should be provided.</p> <p>If the allocation principles are not followed, or it is unknown whether or not they are followed, conservative assumptions should be done, for example by modifying the generic data.</p>		M	Applicable PCR	

11.9	If applicable: transparent documentation of the calculations of biogenic carbon content of product and packaging in CO2-eq. The conversion factor shall be stated		M	EN 15804+A2: ch.7.2.5 (table 9)	
11.10	If packaging contains biogenic carbon, has this been balanced out in A1-A3 if A5 is not reported? If balanced out in A5, have other relevant impacts for A5 been reported?		M	LCA Calculation Rules V2.0, ch. 2.11	
12	Life cycle modelling information	NMD PCR addition	Mandatory/ optional	Reference	Checked and approved
12.1	Transparent presentation of LCA modelling (for example by tables, screenshots from LCA software programmes etc.)		M	EN15804+A2 ch.8.4	
12.2	Clear description how specific (company) data are used. Is the assignment of company data to the datasets provided by the LCA software, described transparently and is it plausible?		M	EN15804+A2 ch.8.4	
12.3	Assignment of process data to the life cycle modules plausible?		M	EN15804+A2 ch.8.4	
12.4	For several locations/products: Presentation of modelling of all manufacturing sites (name and address to at least the country and city level: this applies for manufacturers and organizations providing products for sale/resellers) and products as well as any weighting thereof		M	EN 15804+A2, ch 7.1 a); LCA Calculation Rules V2.0, ch. 2.12	

12.5	Plausibility and consistency of data (mass balance, energy balance) This can only be fulfilled with random checks if the effort for a verification shall be reasonable, e. g.: <ul style="list-style-type: none"> • Check on equations and total sums: Mass balance of inputs and outputs, e.g. mass balance of (renewable and non-renewable) material resource (feedstock) inputs and outputs (products/waste/emissions/secondary materials) • CO and CO2 emissions coherent with the mass input of fossil energetic resources • Are the energy indicators coherent with the energy resources used? 		M	EN15804+A2 ch.8.4	
12.5.1		For the processes taking place at the manufacturer of the construction product, the energy balance at company level must be determined and deviations must be corrected to an accuracy of $\geq 95\%$.	M	NMD PCR	
12.5.2		For the processes that take place at the manufacturer of the construction product (if deviating from the data at company level), the mass balance must be determined per process used (if deviating from the data at company level) and deviations must be corrected to an accuracy of $\geq 95\%$.	M	NMD PCR	
12.5.3		The validity of the other processes must be checked by determining the mass balance per process and correcting deviations to an accuracy of $\geq 95\%$.	M	NMD PCR	

12.6	BMB (biomass balance) and/or recycled content allocation (attribution) approaches like “mass balance credit method” and/or “book and claim” methods as per ISO 22095 has not been used. Biogas used for energy purposes is exempt from this rule, if allowed by the PO, see 6.1.		M	LCA Calculation Rules V2.0, ch. 2.4 based on ECO Platform position paper from January 2023	
13	Indicators of the Life Cycle Inventory (LCI) and Life Cycle Impact Assessment (LCIA)	NMD PCR addition	Mandatory/ optional	Reference	Checked and approved
13.1	Presentation of the parameters in tabular form for all modules A1 to D.		M	EN15804+A2 ch. 7.2.2	
13.2	<p>Presentation of the indicators describing: EN15804+A2:</p> <ul style="list-style-type: none"> • Core environmental impacts (13 indicators), • Additional environmental impacts (6 indicators) and coherent disclaimers. Table 4 shall be included in the EPD for the declared additional environmental indicators. If additional indicators are not declared, they shall be mentioned in the EPD, e.g. as an entry of "ND" to Table 4 or as text. • the use of resources (10 indicators), • the waste categories (3 indicators) • output material flows (4 indicators) <p>And other environmental performance indicators required by the PCR.</p> <p>Note: The sum of GWP fossil + GWP biogenic + GWP Land use and land use change shall be equivalent to GWP Total</p>	<p>The environmental profile of set 1 (EN 15804+A2/A1:2013, characterisation factors taken from the 'NMD assessment method') consists of the eleven environmental impact indicators mentioned in paragraph 2.6.5 of the NMD assessment method.</p> <p>The environmental profile of set 2 (EN 15804+A2/A2:2019) consists of the 19 core and additional environmental impact indicators mentioned in paragraph 2.6.5 of the assessment method.</p>	M	EN15804+A2 ch. 6.5, 7.2.3 – 7.2.5, Table 4; NMD PCR	

13.2.1		The values of the environmental impact categories are calculated by: 1) Assigning the environmental interventions from the inventory to the environmental impact indicators; 2) Multiplying the interventions per environmental impact indicator by the characterization factors from the CML-NMD method "NMD assessment method"; 3) Summing the values obtained per environmental impact indicator.	M	NMD PCR	
13.2.2		The emissions of substance groups are included in accordance with the NMD assessment method.	M	NMD PCR	
13.2.3		If not all environmental interventions have been characterised: - If the cause concerns a different naming: correction of the naming, so that the substance is still characterised; - If the cause is a missing characterisation factor: characterisation according to a chemically and physically similar substance. If this is not present, then inclusion in a list of non-characterised interventions, with an indication of whether a(n) (significant) environmental impact can be expected.	M	NMD PCR	
13.2.4		Aggregation of environmental profiles results in an 'average' environmental profile of a process. The average environmental profiles are calculated on the basis of a production quantity (or volume, if applicable) weighted average of the selected production locations. The production quantities may be estimated in terms of order of magnitude.	M	NMD PCR	

13.3	Has the packaging been included in the declaration of the LCI related indicators, e.g. in the quantification of the content of primary energy?		M	EN 15804+A2 ch.6.3.5.2 + ch. 7.2.5 (Table 9), also some other chapters regarding modules B and C
13.4	<p>Selection of correct characterisation factors and elimination of long-term emissions (> 100 years). ECO EPD shall use the latest version of characterisation factors released by JRC for use in EPD to EN 15804+A2.</p> <p>If earlier versions of characterisation factors are identical or conservative, then EPD based on earlier versions can be used. On this basis, an EPD based on JRC EF 3.0 can be used as an input to an EPD based on JRC EF 3.1. However, EF3.0 results based for the optional indicators for eco-toxicity (freshwater), human toxicity, cancer and human toxicity, non-cancer effects, cannot be justified to be identical or conservative in relation to EF 3.1, and therefore EF3.0 results for these indicators shall not be declared in an EPD based on EF 3.1 (but they may be included in the project report)</p> <p>The version of CF Factors used must be stated to facilitate comparison</p>	Check whether the most recent complete set of characterization factors for environmental indicators and environmental impact indicators has been used. Information on last version can be found on: www.milieudatabase.nl .	M	<p>EN15804+A2 ch.8.2 and annex C; applicable PCR</p> <p>LCA Calculation Rules V2.0</p> <p>Note: some CEN TC product c-PCR documents contain additional and/or more appropriate CF Factors missing in the JRC tables.</p>
13.5	Justification of indicators and characterisation methods applied in case they are not among the mandatory indicators/methods of the EN15804 and applicable PCR		M	NMD PCR
13.6	<p>Information on the environmental impacts in the project report:</p> <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 		M	EN15804+A2 ch.8.2

	end points of the impact categories, exceeding threshold values, safety margins or risks				
14	Interpretation	NMD PCR addition	Mandatory/ optional	Reference	Checked and approved
14.1	Interpretation of the results based on a dominance/contribution analysis of elected indicators?	The contribution analysis must follow the instructions of section 2.6.6.1 of the NMD assessment method.	M	NMD PCR	
14.2	Is the relationship between the results of the LCI and the results of the LCIA plausible? Examples: • Relationships are checked, e.g. wood-mass balance, input-material, compare with order of scale/order of magnitude. • Insight into the model is important, where does the link between life cycle inventory and impact happen in the model. The link happens in the software... • Check orders of scale/magnitude, especially for indicators that are changed manually. • Currently, the following results shall be the same: Coherence of primary energy (n.e.) with ADPF values. • Check allocations, consistency with physical flows		M	EN15804+A2 ch.8.2	
14.3	Assumptions and restrictions as regard the interpretation of results in the EPD, in terms of both methods and data	The sensitivity analysis includes the assessment of the most important choices and assumptions made in de LCA, see also below and section 2.6.6.2 of the NMD assessment method.	M	EN15804+A2 ch.8.2	

14.3.1		Includes assessment of the influence of geographic and technological distribution within a group of production locations. Use the highest and lowest values in terms of environmental impact in the sensitivity analysis.	M	NMD PCR	
14.3.2		Includes assessment of the spread of results within an average composition. Use the highest and lowest values in terms of environmental impact in the sensitivity analysis.	M	NMD PCR	
14.3.3		Includes assessment of the spread of results due to averaging when establishing a group average. Use the highest and lowest values in terms of environmental impact in the sensitivity analysis.	M	NMD PCR	
14.3.4		Includes assessment of the spread of results due to uncertainty in assumptions within the allocation for recycling. If method 1) or 2) from section 2.6.4.3 of the NMD assessment method is applied, use method 3) in a sensitivity analysis. If method 3) is applied, perform a sensitivity analysis for the spread in values.	M	NMD PCR	

14.3.5		<p>The differences that are calculated in the sensitivity analyses do not exceed 20% for any of the environmental impact categories compared to the average value. If the sensitivity analysis shows that the differences exceed 20%, separate Environmental Product Declarations must be drawn up in order to remain within the 20% limit. A deviation greater than 20% may be accepted if all the conditions in paragraph 2.6.6.2 of the NMD assessment method are met. The result of individual environmental impact indicators may not be altered to fall within the allowed limit.</p> <p>It may also be decided to report the worst-case environmental profiles. This will allow dealing with variations in environmental impacts with very low values.</p> <p>The requested interpretation and sensitivity analyses in paragraph 2.6.6.2 of the NMD assessment method must be based on the environmental impacts from set 2, and also on the environmental impacts from set 1 (in case those are reported). Within set 2, only the summed result 'Climate change – total' is considered for the contribution of the environmental impacts to climate change.</p>	M	NMD PCR	
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14.3.6		<p>The ECI results of the LCA were compared with comparable category 3 data for the following modules: A1-A3, A4-A5, B, C and D. The service life of the LCA was also compared with this category 3 data. The reasons for choosing the relevant category 3 Environmental Product Declaration have been substantiated. The differences are substantiated by completing the table in Appendix F of the NMD review protocol (this includes a completed example). Differences smaller than 10% (per phase) do not require substantiation.</p> <p>If no representative category 3 data is available, this comparison is not required. It is for the reviewer to determine whether this is the case.</p> <p>If inaccuracies are found in category 3 data, this must be discussed with the reviewer and reported to Stichting NMD via info@milieudatabase.nl, stating the name and ID number of the category 3 Environmental Product Declaration.</p>	M	NMD PCR	
14.4	In the case where an EPD is for a product group a statement to that effect shall be included in the declaration together with a description of the range/ variability of the LCIA results if significant; The description of the range can be qualitative or quantitative		M	EN 15804+A2, ch. 7.1 + 8.2; EN 15941, ch. 7.3.2	

14.5	Interpretation of the influence of data quality. An assessment of data quality should be provided if the data quality differs for significant data.		O	EN 15804+A2, ch. 6.3.8 + 8.2 + Annex E; ISO 14040 and EN15941	
14.6	Comprehensive transparency as regards value decisions, justifications and expert judgements, i.e. transparency to avoid misinterpretation.		M	EN15804+A2 ch.8.2	
15	Additional information / requirements to LCA report and dossier	NMD PCR addition	Mandatory/ optional	Reference	Checked and approved
15.1	If additional information is given, 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 LCA (but applicable building assessment (e.g. transport routes, energy consumption during the use stage, cleaning cycles etc.) • Laboratory results/measurements pertaining to the declared emissions in indoor air, oil or water during the use stage • All declared information is in line with requirements in the PCR 		O	EN15804+A2 ch.8.3; Applicable PCR	
15.2	Where relevant: ensure that information additional to EN 15804+A2 is either verified or has been verified/ certified by others e.g. by reference to standards or other publicly accepted test requirements.		M	LCA Calculation Rules, V2.0, ch. 2.13	

15.2.1		A project report includes the issues as described in paragraph 2.8 of the NMD assessment method.	M	NMD PCR	
15.2.2		A project dossier includes the issues as described in paragraph 2.8 of the NMD assessment method.	M	NMD PCR	
15.2.3		If applicable, the scaling of the environmental declaration complies with the requirements of paragraph 2.8.2.2. of the NMD assessment method.	M	NMD PCR	
15.2.4		For reproducibility purposes, the information as included in paragraph 2.8.4 of the NMD assessment method is available to the reviewer.	M	NMD PCR	
15.2.5		Reference is made to all data sources, both primary and public sources and literature is recorded. This includes at least: title, author/composer and year.	M	NMD PCR	
16	Lifespan and reference service life (RSL)	NMD PCR addition	Mandatory/ optional	Reference	Checked and approved
16.1	<p>The RSL shall be declared, if applicable (i.e., if defined as part of the functional unit). The lifespan of the product shall be declared, if applicable (e.g., if module B is declared). The lifespan may or may not be identical to the RSL</p> <p>Note: The lifespan shall be representative for the declared product and the calculation of the lifespan shall be documented and, if relevant, follow the PCR.</p>		M	EN15804+A2 ch. 6.3.4 and normative Annex A	

16.1.1		<p>If the entire life cycle A-D is declared, the reference life span (RSL) is based on the reference life span per type of construction product from the SBR publication "Levensduur van bouwproducten" (Life span of construction products) [SBR, 2011], which can be downloaded from the ISSO Knowledge Bank. This can be deviated from if substantiated. Documentation is then required for the calculation of the RSL.</p> <p>The RSL must be representative for the specified product in the specified application(s).</p>	M	NMD PCR	
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Verification checklist for the MRPI+ EPD contents

Below, the verification checklist for MRPI EPD contents, specifically for EPD+ certificates is presented, for verification of an MRPI certificate that complies with both the ECO Platform and Stichting NMD Guidelines. The checklist is used to verify the contents of the MRPI Spreadsheet.

All subjects mentioned in the list below must be checked and approved. The checklist follows the order of the original ECO Platform checklist for verification, with additional guidance when specific NMD PCR requirements apply.

The verification checklist is based on the following guidelines/standards and versions:

- Verification Guidelines for ECO EPD Programme Operators, Version 8.0, ECO Platform, December 2024.
- LCA Calculation Rules and Specifications for EPDs, Version 2.0, ECO Platform, December 2024.
- Bepalingsmethode Milieuprestatie Bouwwerken, Versie 1.2, January 2025, including amendments 1 & 2.
- NMD-Toetsingsprotocol Opname data in de Nationale Milieudatabase, Versie 2.0, July 2025.

The table contains the following columns:

- Reference (number) of the verification topic or subject
- The verification topic or subject, following the order of the ECO Platform verification guidelines;
- Additional requirements from the NMD PCR, adopted from the NMD review protocol;
- A reference to EN, ISO and/or PCR standards;
- An indication to be used by the MRPI recognized verifier to state if the topic is approved;
- *Optional*: The checklist may be expanded with additional columns to serve as dialogue document.

There is no specification whether the topic is mandatory or optional, all topics are mandatory.

When the corresponding subjects in the MRPI Spreadsheet comply with the requirements and guidelines in the applicable references, the box "C & A" (check and approved) can be ticked. When all boxes can be checked, the input is approved. Any deviations from the requirements should be reported by the MRPI recognized verifier and the dialogue between MRPI recognized verifier and LCA consultant or applicant should be made transparent as well as improvements made following the verification process. This can be done as part of the checklist, or separately from the checklist in the dialogue document (an example is provided in the last part of this annex). If the dialogue is part of the checklist(s), this should be clearly indicated in the verification dossier.

1	Requirements	NMD PCR addition	Reference	Checked and approved
1.1	<p>EPD include as general information:</p> <p>On the frontpage / titlepage / cover page:</p> <ul style="list-style-type: none"> • Text “Environmental Product Declaration in accordance with ISO 14025 and EN 15804+A2”, prominently visible in the EPD • Name of declared product • Programme Operator (Name) • Name and address of manufacturer/association • Date of issue + validity (5 years)/date of expiry + date of update if relevant • EPD identification (registration number of the EPD on programme operator level). • Logo of ECO Platform <p>In other chapters of the EPD:</p> <ul style="list-style-type: none"> • Programme Operator / publisher, and name, address, logo, website as relevant • Name of declared product • Electricity mix (market-based approach or locationbased approach used for main results as per the PCR) • Statement that “EPD of construction products may not be comparable if they do not comply with EN 15804+A2” 	<p>Include a statement that EPDs of construction products cannot be comparable if they do not comply with the NMD assessment method;</p> <p>In case an EPD describes an average of a number of products, include a statement that this does not result in a deviation of more than 20% from the average per environmental impact indicator.</p>	<p>EN 15804+A2 ch. 7.1</p> <p>List of content to declare in an ECO EPD (see also MRPI EPD Spreadsheet and chapter 2.4 of the ECO Platform Verification Guidelines); NMD PCR</p>	

	<ul style="list-style-type: none"> • Geographical area, i.e. market range, where the product is produced, where it may be applied and where the end-of-life is assumed • For EPDs of product group: a statement that the EPD covers a product group and a description of the type of such EPD (e.g., average, representative product or worst-case product); • Names of manufacturer(s) when the EPD declares an average of several manufacturers. • A statement of the applied background database(s) and software, and both its versions • A statement, if ecoinvent is used, of the LCA-method Cut-off by classification or Cut-off, EN 15804+A2 • A statement which version of Characterisation factors was used 			
1.2	PCR name PCR version (MM YYYY) If applicable: c-PCR (complementary PCR from product TC)	Reference to applicable NMD Assessment Method including amendments, any c-PCR when applicable.	Applicable PCR from European product TCs and or PCR from PO; NMD PCR	

1.3	Demonstration of verification: external independent verification, name of third-party verifier	The examiner declares to be a recognized expert and verifier with the Stichting NMD (NMD Foundation)	EN 15804+A2, ch.7.1 Table 2; NMD PCR	
1.4	Information on the validity: Does it corresponds with the specifications in the project report?			
1.5	Appropriateness of logos of the company, programme operator and ECO Platform. Appropriateness of pictures.		List of content to declare in an ECO EPD (chapter 2.4 of the ECO Platform Verification Guidelines)	
1.6	Products using energy in module B6 of the use stage and permanently installed into building or infrastructure (defined by the manufacturer): Statement that this EPD follows additional requirements for such products.		LCA Calculation Rules V2.0, ch. 2.10	
2	Product	NMD PCR addition	Reference	Checked and approved
2.1	The product description is in line with the project report, and clearly enough described to identify the declared product unambiguously. Name and location of production site(s).		List of content to declare in an ECO EPD (chapter 2.4 of the ECO Platform Verification Guidelines)	

2.2	<p>If applicable: Explanations on calculations of averages within a product group, and representativeness; Information on restrictions to the use of the EPD; Required information in the EPD for the representativity and data quality of the average and collective EPD according to EN 15941: A technical description of the average product group (such as density or a property like U-value); The number of manufacturing plants included in the EPD; and/ or The names of manufacturing companies or brands or associations; Sampling process if only representative companies/sites are chosen; Geographical coverage; The range of products for which the EPD is relevant, even if data from some products has not been used directly in producing the EPD For collective EPD (commonly called "sector EPD) the following are additionally required:</p> <ul style="list-style-type: none"> • The number of products and/or sites included in the EPD <p>Recommendation: description of the relative production volume covered by the EPD.</p>		<p>EN 15804+A2, ch.7.1; EN 15941, ch. 7.3.3 List of content to declare in an ECO EPD (chapter 2.4 of the ECO Platform Verification Guidelines)</p>	
2.3	<p>Specification / identification (picture, name, model) Unambiguous identification of the product(s), by standards, concessions or other means</p>		<p>EN 15804+A2, ch.7.1; List of content to declare in an ECO EPD (chapter 2.4 of the ECO Platform Verification Guidelines)</p>	
2.4	<p>Indication of the intended use Application and technical functions of the product</p>		<p>EN 15804+A2, ch.7.1; List of content to declare in an ECO EPD (chapter 2.4 of the ECO Platform Verification Guidelines)</p>	

2.5	Relevant technical data (additional information is possible) including RSL if applicable (Average values or range in case of product groups)		Applicable PCR	
2.6	The test standards to which the technical data refers			
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 substance that are listed in the latest "Candidate List of Substances of Very High Concern for authorisation" if their content exceeds the limits for registration		EN 15804+A2, ch.7.1; applicable PCR	
2.8	Description of the manufacturing processes / all processes if several locations are involved		EN 15804+A2, ch.7.1; applicable PCR	
3	LCA rules	NMD PCR addition	Reference	Checked and approved
3.1	Information on the declared / functional unit corresponds with the specifications of the PCR (if available) and project report?		Applicable PCR	
3.2	Indication of the EPD type and declared/undeclared modules through a table of modules (ND=Module not declared) EPD types applicable in EN 15804+A2: <ul style="list-style-type: none"> • cradle-to-gate with modules C1-C4 and module D • cradle-to-gate with options, modules C1-C4 and module D • cradle-to-grave and module D • cradle-to-gate (exemption requirements apply) • cradle-to-gate with options (exemption requirements apply) 		EN 15804+A2, ch. 7.2.2	

3.3	EPD contains a (simple) flow diagram in accordance with the modular approach		ISO 14044, ch. 4.3.2.2	
3.4	Description of the system boundary (can be simplified, as a picture or in wording), including the assignment of the analysed processes to the life cycle modules		List of content to declare in an ECO EPD (chapter 2.4 of the ECO Platform Verification Guidelines), best follow ISO 14044, ch. 4.3.2.2	
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, name and dated version. Description of what upstream and/or downstream data has been applied is optional.		List of content to declare in an ECO EPD (chapter 2.4 of the ECO Platform Verification Guidelines)	
3.8	Indication of the age of background data used (e.g. last update or version of the database)		List of content to declare in an ECO EPD (chapter 2.4 of the ECO Platform Verification Guidelines)	
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.			

3.11	BMB (biomass balance) and/or recycled content allocation (attribution) approaches like “Mass balance credit method” and/or “Book and Claim” methods as per ISO 22095 <u>cannot be used in connection with ECO EPDs.</u>		LCA Calculation Rules V2.0, ch.2.4 based on ECO Platform position paper from January 2023	
4	LCA: Scenarios and additional technical information	NMD PCR addition	Reference	Checked and approved
4.1	Mandatory for all declared modules beyond A3: declaration of the assumptions pertaining to the scenarios of the declared modules in accordance with the project report. Information on undeclared modules is optional.		EN 15804+A2, ch. 7.3	
4.2	If a reference service life (RSL) or lifespan is declared in the EPD, declaration of the scenario on which the RSL is based, in accordance with the project report		EN 15804+A2, ch. 7.3.3.2 + Annex A ; applicable PCR	
5	LCA: Results	NMD PCR addition	Reference	Checked and approved
5.1	Description of the declared / functional unit			
5.2	Identification of the declared/undeclared modules: Table of Modules/indicators, illustrating the type of EPD ND = module not declared Full declaration of all indicators of EN 15804+A2 required according to the modular approach Result Table contains: No blank cells, hyphens, or other symbols. The value 0 only for parameters that have been calculated to be 0, or below a limit value (former MNR/MNA etc). Footnotes shall be used to explain any limitation to the result value. Additional indicators included or marked as Not Declared (“ND”) in table or as text passages, justifications for not declaring indicators as per EN 15804+A2?		List of content to declare in an ECO EPD (chapter 2.4 of the ECO Platform Verification Guidelines); EN 15804+A2, ch.7.2.3, 7.2.4, 7.2.5 and ch.7.5	

5.3	Biogenic carbon content (in product and packaging) in kg C		EN 15804+A2, ch. 7.2.5	
5.4	Programme operators may allow optional additional impact indicators and LCI indicators. These shall be identified as "additional" to the indicator basket of EN 15804+A2, either in the EPD itself or in an annex	The environmental impacts from set 2 and the environmental impacts from set 1 (optional; see also NMD assessment method 2.8.2.2), the use of raw materials (table 3), waste categories (table 4) and output flows (table 5) have been presented.	List of content to declare in an ECO EPD (chapter 2.4 of the ECO Platform Verification Guidelines); NMD PCR	
5.5	The declared indicator and other quantitative results shall be identical with the respective values in the project report			
5.6	In case of product averages: description of the range / variability of the LCIA results. This may be qualitative information.		EN 15804+A2, ch.7	
5.7	Deletion of module columns which are not declared (permissible for the Results part)		List of content to declare in an ECO EPD (chapter 2.4 of the ECO Platform Verification Guidelines)	
5.8	Formatting the table framework and parameter addressed in accordance with the specifications of the PCR or the programme operator rules			
6	Data quality information in EPD according to EN 15941	NMD PCR addition	Reference	Checked and approved
6.1	Data quality information shall be provided in a prominent section of the EPD reporting data quality according to EN 15941. This text shall be in line with the information on data quality reported in the Project Report and shall be a reasonable summary of it		EN 15804+A2, ch. 6.3.8.3; EN 15941, ch. 7.3.3	

6.2	<p>Any use of relevant data assessed for either time, geography or technology according to 7.1 and EN 15804+A2, 6.3.8.3 to be:</p> <ul style="list-style-type: none"> - poor or very poor data - fair data that has more than 30 % for any core indicator <p>has been noted in the EPD.</p> <p><i>If any specific EPD are used in modelling, this should be mentioned.</i></p>		EN 15941, ch. 7.1 + 7.3.3	
6.3	Any text describing data quality shall use the terminology provided for quality level in EN 15804+A2, Table E.1 and Table E.2 to describe data quality in relation to time, geography and technology (see Annex C for examples).			
6.4	EPD shall not declare any misleading or exaggerated claims with respect to data quality.			
6.5	The EPD specifies which table from EN 15804+A2, Annex E has been used to assess the data quality of relevant data.			
7	Evidence for tests or certificates, depending on requirements in PCR	NMD PCR addition	Reference	Checked and approved
7.1	Additional information is provided to indoor air or oil/water, if applicable	Information on the emission of hazardous substances to indoor air, soil and water during the use phase has been provided.	EN 15804+A2, ch.7.4; NMD PCR	
7.2	Other additional environmental information if relevant for a country.		List of content to declare in an ECO EPD (chapter 2.4 of the ECO Platform Verification Guidelines)	

7.3	Declaration of the relevant evidence. Information where to find this evidence		EN 15804+A2, ch.7.2; applicable PCR; existing programme rules	
7.4	Approach Power Mix: Reporting done as required in EN 15941. MRPI allows contractual instruments, so Market-based approach needs to be followed and specified. For an additional set of results (informative), the location-based approach may be used and specified as such.		EN 15941	

7.5	<p>Additional rules for transparency on Power Mix in the EPD:</p> <p>Obligatory information for transparency for energy</p> <ul style="list-style-type: none"> • The use of the market-based approach must be reported for the main results in the EPD, location-based based approach for additional, informative results if applicable; • To clarify EN 15941, if electricity accounts for more than 30 % of the total energy use in stage A1-A3, provide in the EPD the GWP-total of the electricity in kg CO2e/kWh used in foreground processes and any other processes in the direct control of the manufacturer; • The market-based approach must be used. For foreground manufacturing processes and any other processes which the manufacturer has direct control over, the EPD shall declare how the electricity or biogas used has been modelled, e.g. using a residual mix, electricity backed up by a contractual instrument, onsite generation, direct connection etc. Any mix of energy carriers should be described. • Any use of contractual instruments for modelling biogas or electricity shall be reported in the EPD. <p>Provide justification if any background data does not follow the recommendations of Table 3 of the LCA Calculation Rules 2.0 of ECO Platform.</p>		<p>ECO Platform LCA Calculation Rules V2.0, ch. 2.5 List of content to declare in an ECO EPD (chapter 2.4 of the ECO Platform Verification Guidelines), EN 15941</p>	
8	Additional Information in the EPD or Annexes	NMD PCR addition	Reference	Checked and approved

8.1	Where relevant: ensure that information additional to EN 15804+A2 is either verified or has been verified/certified by others e.g. by reference to standards or other publicly accepted test requirements.		LCA Calculation Rules V2.0, ch. 2.13	
8.2	Any additional information in the EPD or annexes meets the requirements of the LCA Calculation Rules V2.0. No use of non-compliant methodological approaches. Additional indicators to EN 15804+A2 calculated using compliant methodology may be provided.		LCA Calculation Rules V2.0, ch. 2.13	
9	References	NMD PCR addition	Reference	Checked and approved
9.1	Full indication of all referenced sources (excluding standards already quoted in full and standards concerning evidence)		List of content to declare in an ECO EPD (chapter 2.4 of the ECO Platform Verification Guidelines)	
10	Annex	NMD PCR addition	Reference	Checked and approved
10.1	An Annex may contain all additional information required for specific national use in different countries.		List of content to declare in an ECO EPD (chapter 2.4 of the ECO Platform Verification Guidelines)	

Example of dialogue between verifier and LCA practitioner during the verification process

The verifier shall report any deviations from the requirements in the verification report. The dialogue between verifier and LCA practitioner shall be made transparent. This can be done in or separately from the checklist. The format to do so is free to choose. Examples are given below:

Example:

Verification issue number	Description of non-conformity / comment	Response

Example (partly based on XP TS14071)

Comment N°	Chapter Article Paragraph	Alinea Table	Type of comment (Ed, Te, Ge)*	Ref. to an Eco check list (or programme rules) section	Verifier comment and recommendation	Manufacturer / LCA practitioner answer	Final verifier statement

*Ed = Editorial; Te = Technical; Ge = General