

# ENVIRONMENTAL PRODUCT DECLARATION

*In accordance with NF EN 15804+A2  
and NF EN 15804+A2/CN*



## **PRODUCT : CNP PM NF**

COMMERCIAL REFERENCE : PROMPT CNP PM NF

MANUFACTURING SITE : LA PERELLE

**DECLARED UNIT : 1 TON OF CEMENT READY FOR BULK DELIVERY**

EDITION OF THE CONFIGURED EPD : 27/05/2024 18:48

**PROMPT** <sup>UP</sup>

CIMENT NATUREL PROMPT  
EXCLUSIVITÉ VICAT

MAÇONNERIE RAPIDE: RESTAURATION & DÉCORATION



# INTRODUCTION

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## 1. FOREWORD

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This document is a translation of the French Environmental Product Declaration. The information contained in the declaration is provided under the responsibility of the declarant, as per NF EN 15804+A2 and NF EN 15804+A2/CN.

Any use, in whole or in part, must at least be accompanied by the full reference of the original French declaration: "Producer, Full title, Date of publication". For any further information concerning the establishment of the EPD or the products covered by it, please contact the declarant.

The NF EN 15804+A2 standard is used as PCR, along with its French complementary standard NF EN 15804+A2/CN.

*Note: The literal translation into French of the EN 15804 normative term "EPD" (Environmental Product Declaration) is "DEP" (Déclaration Environnementale de Produit). However, in France, environmental declarations for construction products are supplemented by health information on the products covered, and the term "FDES" (Fiche de Déclaration Environnementale et Sanitaire) is used. The FDES is therefore an EPD supplemented by health information.*

## 2. READING GUIDE

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The results of the LCIA are displayed in scientific form with three significant figures.

Example: 1.65E+02 is read as 1.65x10<sup>2</sup>

The following rules apply:

- Zero values are represented by a zero
- Abbreviations : "N/A" Not Applicable, "FU" Functional Unit, "LCA" Life Cycle Analysis, "AFNOR" Agence Française de Normalisation, "VOC" Volatile Organic Compound, "EPD" Environmental Product Declaration, "DTU" Document Technique Unifié, "LCIA" Life Cycle Impact Assessment, "FDES" Fiche de Déclaration Environnementale et Sanitaire, "PCR" Product Category Rule
- Units: kilogram "kg", gram "g", kilowatt-hour "kWh", megajoule "MJ", square meter "m<sup>2</sup>", kelvin "K", watt "W", kilometre "km", millimetre "mm", meter "m", cubic meter "m<sup>3</sup>"

## 3. PRECAUTION IN USING THE FDES FOR PRODUCT COMPARISON

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EPD of construction products may not be comparable if they do not comply with NF EN 15804+A2.

NF EN 15804+A2 paragraph § 5.3 *Comparability of EPD for construction products* defines conditions for comparison of construction products based on the information provided in the EPD:

*"Consequently, comparison of the environmental performance of construction products using the EPD information shall be based on the product's use in and its impacts on the building, and shall consider the complete life cycle (all information modules)"*

*Note 1: EPD that are not in a building context are not tools to compare construction products and construction services.*

*Note 2: For the sustainability assessment of buildings comparisons of the environmental aspects and impacts need to be undertaken in conjunction with the social and economic aspects and impacts related to the building.*

*Note 3: For the interpretation of a comparison, benchmarks or reference values are needed. This standard does not set benchmarks or reference values.*

## 1. GENERAL INFORMATION

**Declaration Owner  
name and adress** VICAT CIMENT  
4, rue Aristide Bergès  
38080 L'Isle d'Abeau - France

**Configurator Author** Apsivi  
26 rue Mège  
83220 Le Pradet - France

**Covered production site** La Perelle

**EPD type** « Cradle to gate »  
Individuelle

**Covered products** The product covered by this EPD is the cement CNP PM NF produced on the site of La Perelle according to the parameters entered by the editor of the configured EPD. These parameters are presented in the section "Traceability of the calculated configuration" on the next page.

### EDITION OF THE CONFIGURED EPD

Edition of the configured EPD	Bruno FRERY (bruno.frery@vicat.fr)
Date and hour of edition	27/05/2024 18:48
EPD unique ID	6654b96017654b00115aed47
Configurator version	2.0

### DEMONSTRATION OF VERIFICATION OF CONFIGURATOR AND REFERENCE MODEL

#### Independent external third-party review according to INIES program (environmental declaration program according to ISO 14025:2010)

NF EN 15804+A2 serves as the core PCR	
Independent third-party review of the declaration and data, according to EN ISO 14025:2010 <input type="checkbox"/> internal <input checked="" type="checkbox"/> external	
Third party reviewer:	Sylvain Cléder, EVEA, 11 rue Voltaire, 44000 Nantes - France
Date of 1 <sup>st</sup> issue:	July 2023 (reference model)
Date of last update:	July 2023 (reference model)
Third-party review date:	July 2023 (reference model)
Expiry date:	31/12/2028 (reference model)

TRACEABILITY OF THE CALCULATED CONFIGURATION

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The following table presents the input parameters used to produce this configured EPD :

Sensitive parameter	Value for this configured FDES
Cement production site	La Perelle
Référence du ciment	CNP PM NF
Type de livraison	Vrac
Brand	PROMPT

## 2. DESCRIPTION OF THE DECLARED UNIT AND THE PRODUCT

<b>Declared Unit</b>	1 ton of cement CNP PM NF ready for bulk delivery
<b>Unit</b>	t (ton)
<b>Description of product</b>	The covered cement type is: CNP : Prompt Natural cement compliant with NF P15-314 and NF P15-317 standards
<b>Description of use</b>	The cement CNP PM NFis used as a binder in the production of concrete and mortar.
<b>Content statement</b>	The product does not contain more than 0.1% (mass/mass) of a substance of very high concern (SVHC), as per the candidate list given in Annex XIV of the REACH regulation.
<b>Distribution circuit</b>	BtoB

### DETAILS FOR MAIN CONSTITUENTS

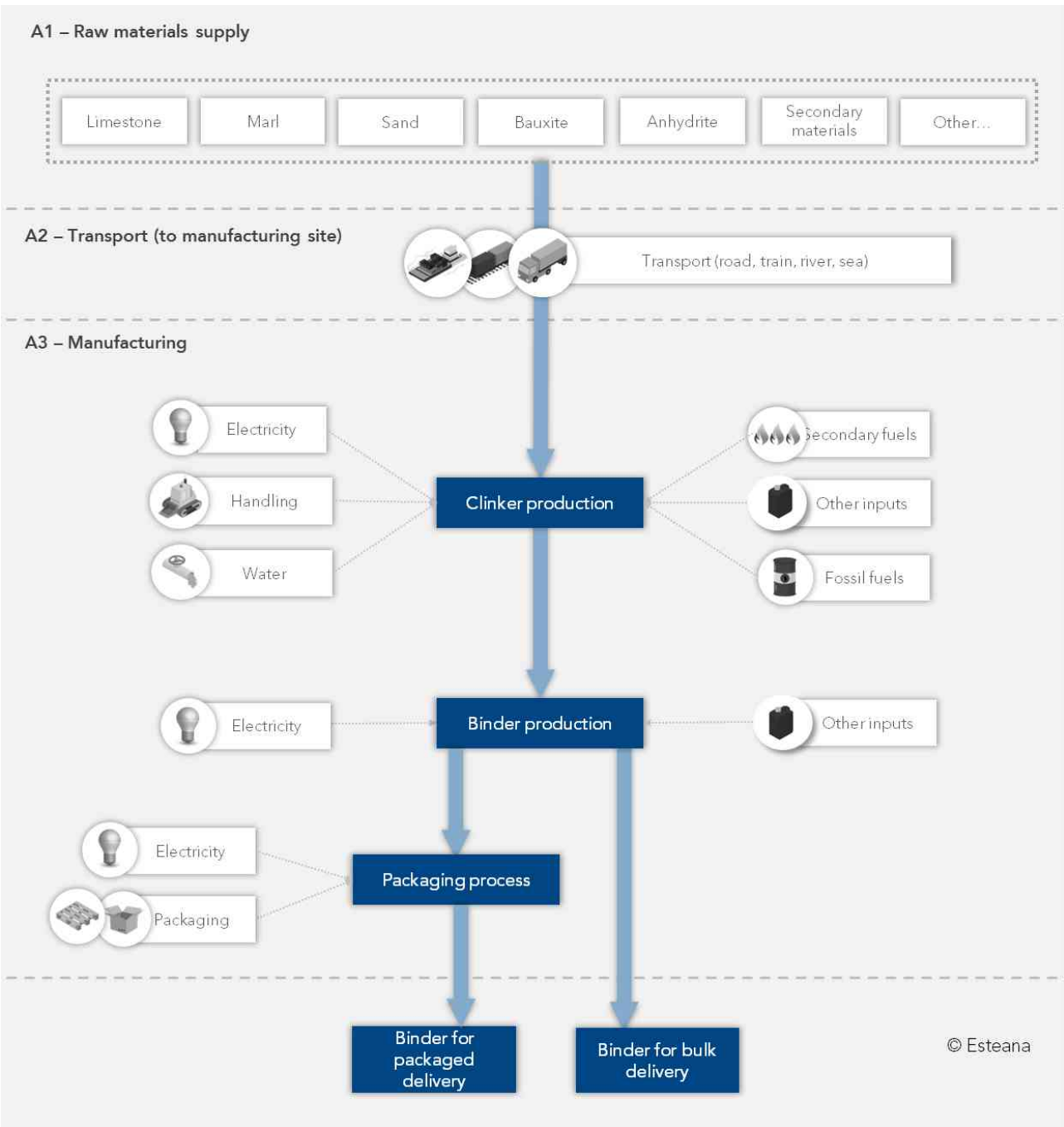
Main constituents	Mass per declared unit (in kg)
Cement (Declared product)	1 000
Pallet (Packaging)	0
Plastic bag (Packaging)	0
Plastic strip (Packaging)	0
Kraft paper (Packaging)	0

### INFORMATION ON STORED BIOGENIC CARBONE AT THE GATE

Stored biogenic carbon (at the factory gate)	Value (per declared unit)
Stored biogenic carbon in the product	0kg C /DU
Stored biogenic carbon in the product's packaging	0kg C /DU
<i>Note: 1 kg of biogenic carbon implies 44/12 kg of CO<sub>2</sub></i>	



### 3. LIFE STAGES, SCENARIOS AND ADDITIONAL INFORMATION



*Note: this diagram is generic, report to product description and main constituents for specific details.*

DESCRIPTION OF THE SYSTEM BOUNDARY (X = INCLUDED IN LCA; MND = MODULE OR INDICATOR NOT DECLARED; MNR = MODULE NOT RELEVANT)																
Product stage			Construction process stage		Use stage							End of life stage				Benefits and loads beyond the system boundaries
Raw material supply	Transport	Manufacturing	Transport	Construction-installation process	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction, demolition	Transport	Waste processing	Disposal	Reuse-Recovery-Recycling-potential
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
X	X	X	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND

## PRODUCT STAGE, A1-A3

### A1 – RAW MATERIAL SUPPLY

#### To produce clinker:

- Extraction and transformation of raw materials, processing of secondary material, up to the production of the components supplied to the manufacturer of the final product (Limestone, marl, bauxite, fly ashes, sand...).

#### To produce cement:

- Extraction and transformation of raw materials, processing of secondary material, up to the production of the components supplied to the manufacturer of the final product (Clinker (production on site), gypsum, anhydrite, blast furnace slag...).

### A2 – TRANSPORT (TO THE PRODUCTION SITE)

- Transport of all materials and components to the manufacturing site

### A3 – MANUFACTURING

#### To produce clinker:

- Supply and use of diesel
- Supply and use of electricity
- Supply and use of explosives, NOx reducer and refractory bricks or concrete
- End-of-life of refractory bricks or concrete
- Supply and use of oil or grease
- Supply and use of water (tap water, recycled or pumped)
- Supply and use of fossil fuels (Coke, petroleum coke...)
- Supply and use of secondary fuels (Tire, Refuse-derived fuel, wood chips...)
- Supply, use and end-of-life of steel grinding ball

#### To produce cement:

- Supply and use of electricity
- Supply, use and end-of-life of steel grinding ball
- Supply and use of packaging

## 4. INFORMATION FOR THE LIFE CYCLE ASSESSMENT

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<b>PCR used</b>	<p>NF EN 15804+A2 standard “Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products”, and its French national complement NF EN 15804+A2/CN.</p> <p>NF EN 16908 standard “Cement and building lime - Environmental product declarations - Product category rules complementary to EN 15804”</p>
<b>System boundaries</b>	<p>System boundaries were determined in compliance with NF EN 15804+A2 and NF EN 15804+A2/CN, especially regarding modularity aspects (processes are affected to the stage in which they occur) and regarding the “polluter pays” principle (waste treatment processes are affected to the processes that generate waste).</p> <p>Included processes for each stage of the life cycle are presented in the life cycle diagram and paragraphs of section 3.</p> <p>By convention, the following processes were considered being beyond the system boundaries:</p> <ul style="list-style-type: none"><li>▪ For stage A3: Lighting of the manufacturing sites, transportation of employees.</li><li>▪ For all the stages: Manufacturing and maintenance of heavy production tools, and of transportation systems (trucks, roads, electricity pylons, buildings, and heavy equipment on the manufacturing site, etc.). However, some secondary data used in this study may include impacts related to infrastructure.</li></ul> <p>Cut-off criteria were implemented in compliance with standards NF EN 15804+A2 and NF EN 15804+A2/CN (1% per elementary process, 5% per stage, in mass and use of primary energy).</p>
<b>Allocations</b>	<p>Allocation principles of standards NF EN 15804+A2 and NF EN 15804+A2/CN were respected:</p> <ul style="list-style-type: none"><li>▪ Allocation avoided where possible;</li><li>▪ When the difference in revenue from the co-products is low, allocations are based on physical properties (mass, volume, etc.);</li><li>▪ In every other case, allocations are based on economic value;</li><li>▪ Material flows carrying specific inherent properties (e.g. energy content, elementary composition such as carbon content, etc.) are always allocated reflecting the physical flows, irrespective of the allocation chosen for the process.</li></ul>
<b>Representativeness</b>	<p>LCI secondary data used in this study originate mostly from the Ecoinvent database version 3.8 dated of 2021. These datasets correspond to processes located in France, Europe, or worldwide. The most relevant data was used in each case, and modifications were made if necessary.</p> <p>LCI primary data were collected from Vicat. Their relevance is described below:</p> <ul style="list-style-type: none"><li>▪ Geographical coverage: products made in France for the international market</li><li>▪ Temporal coverage: production in 2019</li><li>▪ Technological coverage: see “Description of the product” in section 2</li></ul>
<b>Variability of results</b>	<p>Not relevant for a single reference and a single production site EPD</p>



## 5. LIFE CYCLE IMPACT ASSESSMENT RESULTS

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The following tables present the LCIA results.

Because of rounding, lines totals may differ from the sum of rounded numbers.













*Note 1: Regarding “use of renewable energy as raw materials” and “use of non-renewable energy as raw materials”, a negative value can occur when materials switch from raw materials to energy carriers (Annex I of NF EN 15804+A2/CN).*


*Note 2: Additional environmental indicators are not declared (as per Table 4 of NF EN 15804+A2).*

*Note 3: For the indicators “abiotic depletion potential for non-fossil resources”, “abiotic depletion potential for fossil resources”, “water (user) deprivation potential, deprivation-weighted water consumption”, the results of these environmental impacts shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.*

*Note 4: Alternatives fuels used by Vicat Cement plants are considered as waste when co-incinerated. The impact of elimination is therefore charged to the system generating the waste. In compliance with NF EN 16908 “Cement and building lime - Environmental product declarations - Product category rules complementary to EN 15804”, the import of energy is mapped with the indicator “Use of secondary fuels” because there is no indicator more appropriate.*











# REFERENCE ENVIRONMENTAL IMPACT INDICATORS

	A1-A3 – Product stage			A4-A5 – Construction		B – Use stage							C – End of life stage				D – Benefits and loads beyond the system boundaries
	A1 - Raw material supply	A2 - Transport	A3 - Manufacturing	A4 - Transport	A5 - Construction-installation process	B1 - Use	B2 - Maintenance	B3 - Repair	B4 - Replacement	B5 - Refurbishment	B6 - Operational energy use	B7 - Operational water use	C1 - De-construction demolition	C2 - Transport	C3 - Waste processing	C4 - Disposal	
 <b>Climate change - total</b> kg CO <sub>2</sub> eq./DU		6,29E+02		MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND
 <b>Climate change - fossil</b> kg CO <sub>2</sub> eq./DU		6,29E+02		MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND
 <b>Climate change - biogenic</b> kg CO <sub>2</sub> eq./DU		5,78E-01		MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND
 <b>Climate change – land use and land use change</b> kg CO <sub>2</sub> eq./DU		2,10E-02		MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND
 <b>Ozone depletion</b> kg CFC 11 eq./DU		1,00E-05		MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND
 <b>Acidification</b> mol H <sup>+</sup> eq./DU		3,80E+00		MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND
 <b>Eutrophication aquatic freshwater</b> kg P eq./DU		5,79E-02		MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND
 <b>Eutrophication aquatic marine</b> kg N eq./DU		1,83E-01		MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND
 <b>Eutrophication terrestrial</b> mol N eq./DU		1,87E+00		MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND
 <b>Photochemical ozone formation</b> kg NMVOC eq./DU		6,97E-01		MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND
 <b>Depletion of abiotic resources - minerals and metals</b> kg Sb eq./DU		2,39E-04		MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND
 <b>Depletion of abiotic resources - fossil fuels</b> MJ/DU		3,85E+03		MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND




 <b>Water use</b> m³ world eq. deprived/DU	3,02E+01	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND
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Additionnal information : With the incineration of alternatives fuels (without biomass) taken into account, the Climate Change indicator (total) rises up to 629 kg eq.CO<sub>2</sub>/DU.







## RESOURCE USE INDICATORS

	A1-A3 – Product stage			A4-A5 – Construction		B – Use stage							C – End of life stage				D – Benefits and loads beyond the system boundaries
	A1 - Raw material supply	A2 - Transport	A3 - Manufacturing	A4 - Transport	A5 - Construction-installation process	B1 - Use	B2 - Maintenance	B3 - Repair	B4 - Replacement	B5 - Refurbishment	B6 - Operational energy use	B7 - Operational water use	C1 - De-construction demolition	C2 - Transport	C3 - Waste processing	C4 - Disposal	
 <b>Use of renewable primary energy excluding renewable primary energy resources used as raw materials</b> MJ /DU	1,65E+02			MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND
 <b>Use of renewable primary energy resources used as raw materials</b> MJ /DU	0,00E+00			MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND
 <b>Total use of renewable primary energy resources (primary energy and primary energy resources used as raw materials)</b> MJ /DU	1,65E+02			MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND
 <b>Use of non-renewable primary energy excluding renewable primary energy resources used as raw materials</b> MJ /DU	3,85E+03			MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND
 <b>Use of non-renewable primary energy resources used as raw materials</b> MJ /DU	0,00E+00			MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND
 <b>Total use of non-renewable primary energy resources (primary energy and primary energy resources used as raw materials)</b> MJ /DU	3,85E+03			MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND
 <b>Use of secondary material</b> kg /DU	2,26E-01			MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND
 <b>Use of renewable secondary fuels</b> MJ /DU	4,38E-03			MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND
 <b>Use of non-renewable secondary fuels</b> MJ /DU	0,00E+00			MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND
 <b>Net use of freshwater</b> m³ /DU	7,36E-01			MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND

WASTE CATEGORIES INDICATORS

	A1-A3 – Product stage			A4-A5 – Construction		B – Use stage							C – End of life stage				D – Benefits and loads beyond the system boundaries
	A1 - Raw material supply	A2 - Transport	A3 - Manufacturing	A4 - Transport	A5 - Construction-installation process	B1 - Use	B2 - Maintenance	B3 - Repair	B4 - Replacement	B5 - Refurbishment	B6 - Operational energy use	B7 - Operational water use	C1 - De-construction demolition	C2 - Transport	C3 - Waste processing	C4 - Disposal	
 <b>Hazardous waste disposed</b> kg /DU	1,50E+01			MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND
 <b>Non-hazardous waste disposed</b> kg /DU	2,72E+02			MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND
 <b>Radioactive waste disposed</b> kg /DU	3,10E-02			MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND

## OUTPUTS FLOWS INDICATORS

	A1-A3 – Product stage			A4-A5 – Construction		B – Use stage							C – End of life stage				D – Benefits and loads beyond the system boundaries
	A1 - Raw material supply	A2 - Transport	A3 - Manufacturing	A4 - Transport	A5 - Construction-installation process	B1 - Use	B2 - Maintenance	B3 - Repair	B4 - Replacement	B5 - Refurbishment	B6 - Operational energy use	B7 - Operational water use	C1 - De-construction demolition	C2 - Transport	C3 - Waste processing	C4 - Disposal	
 <b>Components for re-use</b> kg /DU	0,00E+00			MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND
 <b>Materials for recycling</b> kg /DU	3,51E-02			MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND
 <b>Materials for energy recovery</b> kg /DU	5,21E-05			MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND
 <b>Exported energy</b> MJ /DU	2,73E+00			MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND
 <b>Exported energy - Steam</b> en MJ /DU	2,19E+00			MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND
 <b>Exported energy - Electricity</b> en MJ /DU	5,36E-01			MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND
 <b>Exported energy - Gas</b> en MJ /DU	0,00E+00			MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND



## SUMMARY OF ALL INDICATORS

Impacts/flows	Unit	TOTAL Product stage	TOTAL Construction stage	TOTAL Use stage	TOTAL End-of-life stage	TOTAL Life cycle (without D)	Module D
<b>■ Reference environmental indicators</b>							
Climate change - total	kg CO <sub>2</sub> eq./DU	6,29E+02	MND	MND	MND	MND	MND
Climate change - fossil	kg CO <sub>2</sub> eq./DU	6,29E+02	MND	MND	MND	MND	MND
Climate change - biogenic	kg CO <sub>2</sub> eq./DU	5,78E-01	MND	MND	MND	MND	MND
Climate change – land use and land use change	kg CO <sub>2</sub> eq./DU	2,10E-02	MND	MND	MND	MND	MND
Ozone depletion	kg CFC 11 eq./DU	1,00E-05	MND	MND	MND	MND	MND
Acidification	mol H+ eq./DU	3,80E+00	MND	MND	MND	MND	MND
Eutrophication aquatic freshwater	kg P eq./DU	5,79E-02	MND	MND	MND	MND	MND
Eutrophication aquatic marine	kg N eq./DU	1,83E-01	MND	MND	MND	MND	MND
Eutrophication terrestrial	mol N eq./DU	1,87E+00	MND	MND	MND	MND	MND
Photochemical ozone formation	kg NMVOC eq./DU	6,97E-01	MND	MND	MND	MND	MND
Depletion of abiotic resources - minerals and metals	kg Sb eq./DU	2,39E-04	MND	MND	MND	MND	MND
Depletion of abiotic resources - fossil fuels	MJ/DU	3,85E+03	MND	MND	MND	MND	MND
Water use	m <sup>3</sup> world eq. deprived /DU	3,02E+01	MND	MND	MND	MND	MND
<b>■ Resource use indicators</b>							
Use of renewable primary energy excluding renewable primary energy resources used as raw materials	MJ/DU	1,65E+02	MND	MND	MND	MND	MND
Use of renewable primary energy resources used as raw materials	MJ/DU	0,00E+00	MND	MND	MND	MND	MND
Total use of renewable primary energy resources (primary energy and primary energy resources used as raw materials)	MJ/DU	1,65E+02	MND	MND	MND	MND	MND
Use of non-renewable primary energy excluding renewable primary energy resources used as raw materials	MJ/DU	3,85E+03	MND	MND	MND	MND	MND
Use of non-renewable primary energy resources used as raw materials	MJ/DU	0,00E+00	MND	MND	MND	MND	MND
Total use of non-renewable primary energy resources (primary energy and primary energy resources used as raw materials)	MJ/DU	3,85E+03	MND	MND	MND	MND	MND
Use of secondary material	kg/DU	2,26E-01	MND	MND	MND	MND	MND
Use of renewable secondary fuels	MJ/DU	4,38E-03	MND	MND	MND	MND	MND
Use of non-renewable secondary fuels	MJ/DU	0,00E+00	MND	MND	MND	MND	MND
Net use of freshwater	m <sup>3</sup> /DU	7,36E-01	MND	MND	MND	MND	MND
<b>■ Waste categories indicators</b>							
Hazardous waste disposed	kg/DU	1,50E+01	MND	MND	MND	MND	MND
Non-hazardous waste disposed	kg/DU	2,72E+02	MND	MND	MND	MND	MND
Radioactive waste disposed	kg/DU	3,10E-02	MND	MND	MND	MND	MND
<b>■ Output flows indicators</b>							
Components for re-use	kg/DU	0,00E+00	MND	MND	MND	MND	MND
Materials for recycling	kg/DU	3,51E-02	MND	MND	MND	MND	MND
Materials for energy recovery	kg/DU	5,21E-05	MND	MND	MND	MND	MND
Exported energy	MJ/DU	2,73E+00	MND	MND	MND	MND	MND
Exported energy - steam	MJ/DU	2,19E+00	MND	MND	MND	MND	MND
Exported energy - Electricity	MJ/DU	5,36E-01	MND	MND	MND	MND	MND
Exported energy - Gas	MJ/DU	0,00E+00	MND	MND	MND	MND	MND

Additional information : With the incineration of alternative fuels (without biomass) taken into account, the Climate Change indicator (total) rises up to 629 kg eq.CO<sub>2</sub>/DU.

## 6. ADDITIONAL INFORMATION ABOUT THE REALEASE OF DANGEROUS SUBSTANCES TO INDOOR AIR, SOIL AND WATER DURING THE USE STAGE

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### EMISSIONS TO INDOOR AIR

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Cement is not in direct contact with the atmosphere. Only concrete and mortars (made of cement) are.

### RADON AND GAMMA RADIOACTIVITY

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In compliance with the French Public Health code article R 1333-41, an index number of concentration activity is mentioned in the technical specifications sheet of cements containing materials mentioned in the article R1333-40.

### EMISSIONS TO SOIL AND WATER

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Cement is not in direct contact with soil and water. Only concrete and mortars (made of cement) are.

## 7. CONTRIBUTION OF THE PRODUCT TO THE ASSESSMENT OF HEALTH RISKS AND QUALITY OF LIFE INSIDE BULIDINGS

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### CHARACTERISTICS OF PRODUCT INVOLVED IN CREATING HYGROTHERMAL COMFORT IN THE BUILDING

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Not applicable.

### CHARACTERISTICS OF PRODUCT INVOLVED IN CREATING ACOUSTIC COMFORT IN THE BUILDING

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Not applicable.

### CHARACTERISTICS OF PRODUCT INVOLVED IN CREATING VISUAL COMFORT IN THE BUILDING

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Not applicable.

### CHARACTERISTICS OF PRODUCT INVOLVED IN CREATING OLFACTORY COMFORT IN THE BUILDING

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Not applicable.