



Élite Cementos

ENVIRONMENTAL PRODUCT DECLARATION  
CEM II / A-P 52,5 R Cement

DAPcons<sup>®</sup>.N.Te.205

DECLARACIÓN AMBIENTAL DE PRODUCTO  
ENVIRONMENTAL PRODUCT DECLARATION

According to the standards:

ISO 14025 and UNE-EN 15804:2012+A2:2020/AC:2021



# DECLARACIÓN AMBIENTAL DE PRODUCTO ENVIRONMENTAL PRODUCT DECLARATION

DAPcons®.NTe.205

According to the standards:

ISO 14025 and UNE-EN 15804:2012+A2:2020/AC:2021



## GENERAL INFORMATION

### Product

**CEM II/A-P 52,5 R cement**

### Company



### Product description

The CEM II/A-P 52.5 R product is a Portland cement with pozzolan of resistance class 52.5 MPa and high initial strength.

### Reference RCP

UNE-EN 16908:2019+A1:2022 Product category rules for cement and building lime.

### Production plant

Elite Cements, S. L.  
South Dock, Port of Castellón  
12100 Grao de Castellón (Castellón) Spain

### Validity

From: 29/05/2025      Until: 29/05/2030

The validity of DAPcons®.NTe.205 is subject to the conditions of the regulation DAPcons®. The current edition of this DAPcons® is the one that appears in the registry maintained by Cateb; for informational purposes, it is included on the Program website [www.dapcons.com](http://www.dapcons.com)

## EXECUTIVE SUMMARY

### CEM II/A-P 52,5 R cement



#### DAPconstruction® Programme Operator

Environmental Product Declarations in the Construction sector  
[www.dapcons.com](http://www.dapcons.com)



#### Programme Manager

Colegio de la Arquitectura Tècnica de Barcelona (Cateb)  
 Bon Pastor, 5 · 08021 Barcelona [www.cateb.cat](http://www.cateb.cat)



#### Owner of the declaration

ELITE CEMENTS SL  
 Darsena Sur, s/n, Grao de Castellon 12100 - CASTELLON DE LA PLANA (España)  
[www.elitecementos.com](http://www.elitecementos.com)



#### Author of the Life cycle assessment:

ReMa-INGENIERÍA, S.L.  
 Calle Crevillente, 1, entlo., 12005 - Castelló, España

### Declared product

CEM II/A-P 52,5 R cement

### Geographic representation

This declaration has been prepared with production data from the Élite Cementos plant located in Grao de Castellón – Castellón (Spain).

### Variability between different products

The results of each of the products are declared individually in this document.

#### Declaration number

DAPcons®.NTe.205

#### Issue date

18/05/2025

### Validity

This verified declaration authorizes its holder to carry the logo of the operator of the ecolabelling program DAPconstruction®. The declaration is applicable exclusively to the mentioned product and for five years from the date of registration. The information contained in this statement was provided under the responsibility of: **ELITE CEMENTS SL**

#### Programme Administrator Signature

Celestí Ventura Cisternas. President of Cateb

#### Verifier Signature

Ferran Pérez Ibáñez. Institut de Tecnologia de la Construcció de Catalunya - ITeC. Verifier accredited by the administrator of the DAPcons® Programme

## ENVIRONMENTAL PRODUCT DECLARATION

### 1. PRODUCT DESCRIPTION AND USE

Portland cement with pozzolan of 52.5 MPa strength class and high initial strength.

Cement appropriately dosed and mixed with aggregates and water is primarily used to produce concrete or mortar with suitable characteristics. This CEM II type cement is a (low carbon) alternative to CEM I 52.5R and can be used for the applications established in the Cement Reception Instruction (RC16) and in the Structural Code approved on June 29, 2021, in accordance with the specifications of the UNE-EN 197-1 standard.

#### 1.1 Content information

##### Product components

CLINKER 80-94%

NATURAL POZZOLANA 6-20%

MINOR COMPONENTS ≤ 5%

##### Packaging materials

The product is served in bulk.

#### CHEMICAL CHARACTERISTICS

	Specifications according to UNE-EN 197-1
Sulfate content (%)	≤ 4%
Chloride content (%)	≤ 0.1%
Cr VI content (%)	≤ 0.0002%

#### PHYSICAL CHARACTERISTICS

	Specifications according to UNE-EN 197-1
Start of setting (min)	≥ 45 min
End of setting (min)	≤ 12 h
Volume stability (mm)	≤ 10 mm

#### MECHANICAL CHARACTERISTICS

	Specifications according to UNE-EN 197-1
Compressive strength at 2 days (MPa)	≥ 30 MPa
Compressive strength at 28 days (MPa)	≥ 52.5 Mpa

#### CEMENT COMPOSITION

	Specifications according to UNE-EN 197-1
Clinker (5)	80 - 94 %
Natural puzzolana(5)	6 - 20 %
Minor components (%)	≤ 5%



## 2. DESCRIPTION OF THE STAGES OF THE LIFE CYCLE

### 2.1. Manufacturing (A1, A2 y A3)

#### Raw Materials and transport (A1 y A2)

The raw materials used in the production process for this cement are clinker, pozzolan, gypsum and minor components.

The clinker from Holcim Spain's Sagunto plant is transported in dump trucks and unloaded at the Elite Cementos plant, first into hoppers and finally into two closed stockpiles (Domo silos). The gypsum and pozzolan are received in tanker trucks fitted with a top cover and are stored separately in covered and closed storage bins. The ferrous sulphate is received in tanker trucks and unloaded into two silos prepared for this purpose.

#### Manufacturing (A3)

The cement is manufactured using a double-chamber ball mill in a closed circuit. The raw material dosed to the mill is ground and kept within the closed circuit made up of the mill, the dynamic separator and the main filter. The extraction of the production is carried out by means of the depression generated by the main filter, forcing the material to pass through the dynamic separator, which gives it the particle size that the cement quality standards set. The production circuit is subject at all times to the vacuum generated by a series of filters that guarantee the non-emission of dust to the outside.

ELITE CEMENTS has five cement storage silos (two double-chamber silos with a total capacity of up to 20,000 tons and a 500-ton metal silo), which allows it to perfectly manage its cement stock.

The production process is completed with the dispatch of bulk cement. The cement manufacturing and dispatch process is controlled by a sophisticated PLC system that manages the entire installation in a fully automated manner.

### 2.2. Construction process stage (A4 y A5)

#### Transport to the building site (A4)

Undeclared

#### Product installation process and construction (A5)

Undeclared

### 2.3. Product use (B1-B7)

#### Use (B1)

Undeclared

#### Maintenance (B2)

Undeclared

#### Repair (B3)

Undeclared

#### Replacement (B4)

Undeclared

### **Refurbishment (B5)**

Undeclared

### **Operational energy use (B6)**

Undeclared

### **Operational water use (B7)**

Undeclared

## **2.4. End of life (C1-C4)**

### **Deconstruction and demolition (C1)**

Undeclared

### **Transport to waste processing (C2)**

Undeclared

### **Waste processing for reuse, recovery and/or recycling (C3)**

Undeclared

### **Disposal (C4)**

Undeclared

## **2.5. Reuse/recovery/recycling potential (D)**

Undeclared

## **3. LIFE CYCLE ASSESSMENT**

The life cycle assessment on which this declaration is based has been carried out following the ISO 14040, ISO 14044 and UNE-EN 15804 standards and the document UNE-EN 16908:2019 “Cement and building lime - Environmental product declarations - Product category rules complementary to EN 15804”. This study has been carried out using the SimaPro 9.5.0.2 LCA tool, whose development is based on the UNE-EN ISO 14040-14044 standards, and the Ecoinvent v3.9.1 database (2022). This LCA is of the “cradle-to-gate” type, that is, it covers the manufacturing stage of the product, leaving out the construction, use and end-of-life stages. Specific data from the ELITE CEMENTS plant (Grao de Castellón) for the year 2021 have been used to inventory the manufacturing stage.

In accordance with the polluter pays principle, the system that generates the waste is responsible for declaring the impacts of waste processing until the end of the waste stage is reached. Therefore, the results reported below do not include emissions from the incineration of waste used as secondary fuels (net value).

### 3.1. Declared Unit

The declared unit is “1 tonne of CEM II/A-P 52.5 R cement”

### Additional comments

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### 3.2. Scope and modules that are declared

**Table 2. Declared modules**

Product stage			Construction Process Stage		Use stage							End of life stage				Benefits and loads beyond the system boundaries
Raw materials supply	Transport	Manufacturing	Transport	Construction - Installation process	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction	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

X = Declared module      MND = Undeclared module

### 3.3. LCA results of potential environmental impact referred to the declared unit (ACV)

**Table 3. Parameters of environmental impact**

Parameter	Unit	Life cycle stage														Module D
		Product stage	Construction Process Stage		Use stage							End of life stage				
		A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	
Climate change - total (GWP-total)	kg CO2 eq	6,21E+02	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND
Climate change - fossil (GWP-fossil)	kg CO2 eq	6,18E+02	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND
Climate change - biogenic (GWP-biogenic)	kg CO2 eq	1,87E+00	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND
Climate change - land use and changes in land use (GWP-luluc)	kg CO2 eq	5,17E-01	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND
Ozone layer depletion (ODP)	kg CFC 11 eq	1,42E-05	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND
Acidification (AP)	mol H+ eq	1,46E+00	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND
Eutrophication of fresh water (EP-freshwater)	kg P eq	2,97E-03	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND
Eutrophication of sea water (EP-marine)	kg N eq.	6,39E-01	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND
Terrestrial eutrophication (EP-terrestrial)	mol N eq.	7,43E+00	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND
Photochemical ozone formation (POCP)	kg NMVOC eq	1,71E+00	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND
Depletion of abiotic resources - minerals and metals (ADP-minerals&metals)	kg Sb eq	1,36E-04	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND
Depletion of abiotic resources - fossil fuels (ADP-fossil)	MJ, net calorific value	1,40E+03	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND
Water consumption (WDP)	m3 worldwide eq. private	4,20E+01	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND
Eco-toxicity - freshwater (ETP-fw)	CTUe	3,35E+02	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND
Human toxicity, cancer effect (HTP-c)	CTUh	7,08E-08	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND
Human toxicity, non-cancer effects (HTP-nc)	CTUh	5,59E-07	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND
The Indicator includes all greenhouse gases included in GWP-total but excludes biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. This Indicator is thus equal to the GWP Indicator originally defined in EN 15804:2012+A1:2013. Can be obtained from IPCC characterization factors.																
Global Warming Potential (GWP)	kg CO2 eq	6,18E+02	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND

A1 Supply of raw materials. A2 Transport to waste processing. A3 Manufacturing. A4 Transport to waste processing. A5 Installation and construction processes. B1 Use. B2 Maintenance. B3 Repair. B4 Replacement. B5 Refurbishment. B6 Operational energy use. B7 Operational water use. C1 Deconstruction and demolition. C2 Transport to waste processing. C3 Waste management for reuse, recovery and recycling. C4 Fine removal. D Environmental benefits and burdens beyond the system boundary. MND Undeclared module.

**Table 4. Parameters for the use of resources, waste and output material flows**

Parameter	Unit	Life cycle stage														Module D	
		Product stage	Construction Process Stage			Use stage							End of life stage				
		A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4		
Use of renewable primary energy excluding renewable primary energy resources used as feedstock	MJ, net calorific value	3,23E+02	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	
Use of renewable primary energy used as raw material	MJ, net calorific value	0,00E+00	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	
Total use of renewable primary energy (primary energy and renewable primary energy resources used as feedstock)	MJ, net calorific value	3,23E+02	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	
Non-renewable primary energy use, excluding non-renewable primary energy resources used as feedstock	MJ, net calorific value	1,43E+03	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	
Use of non-renewable primary energy used as raw material	MJ, net calorific value	0,00E+00	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	
Total use of non-renewable primary energy (primary energy and renewable primary energy resources used as feedstock)	MJ, net calorific value	1,43E+03	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	
Use of secondary materials	kg	2,52E+01	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	
Use of renewable secondary fuels	MJ, net calorific value	3,51E+02	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	
Use of non-renewable secondary fuels	MJ, net calorific value	2,09E+03	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	
Net use of freshwater resources	m3	7,26E-01	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	
Hazardous waste removed	kg	7,34E-01	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	
Non-hazardous waste eliminated	kg	1,47E+01	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	
Radioactive waste disposed of	kg	8,33E-03	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	
Components for reuse	kg	0,00E+00	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	
Materials for recycling	kg	4,92E-02	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	
Materials for energy recovery (energy recovery)	kg	0,00E+00	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	
Exported energy	MJ by energy vector	0,00E+00	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	
Exported electrical energy (AEE)	MJ	0,00E+00	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	
Exported thermal energy (EET)	MJ	0,00E+00	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	

A1 Supply of raw materials. A2 Transport to waste processing. A3 Manufacturing. A4 Transport to waste processing. A5 Installation and construction processes. B1 Use. B2 Maintenance. B3 Repair. B4 Replacement. B5 Refurbishment. B6 Operational energy use. B7 Operational water use. C1 Deconstruction and demolition. C2 Transport to waste processing. C3 Waste management for reuse, recovery and recycling. C4 Fine removal. D Environmental benefits and burdens beyond the system boundary. MND Undeclared module.

**Table 5. Kg of biogenic carbon**

Carbon content (biogenic) - packaging	0,00E+00
Carbon content (biogenic) - product	0,00E+00

### 3.4. Recommendations of this EPD

The comparison of construction products must be made by applying the same functional unit and at building level, i.e. including the performance of the product throughout its entire life cycle.

The environmental product declarations of different Type III Ecolabelling Programmes are not directly comparable, since the calculation rules may be different.

This declaration represents the performance of the product Cement CEM II/A-P 52.5 R manufactured by ELITE CEMENTS.

### 3.5. Cut-off rules

More than 95% of all mass and energy inputs and outputs of the system have been included, excluding, among others, diffuse emissions in factories and the production of machinery and industrial equipment.

### 3.6. Additional environmental information

Cement is a product classified as irritating and harmful. Once set, cement is not dangerous for the environment, becoming an inert product that does not release hazardous substances.

On Global Warming Potential (GWP):

Net values are declared for all GWP indicators in A1 –A3. The waste status of the (waste-based) fuels has been verified. Gross emissions (i.e. including CO<sub>2</sub> from incineration of waste) are 687 kg CO<sub>2</sub>-eq. / t (GWP-total), 685 kg CO<sub>2</sub>-eq. / t (GWP fossil), 1.87 kg CO<sub>2</sub> eq. / t (GWP-biogenic).

### 3.7. Other data

ELITE CEMENTS cement industry waste is included as non-hazardous waste in the European waste list with code LoW 10 13 06 “Particles and dust”.

## 4. ADDITIONAL TECHNICAL INFORMATION AND SCENARIOS

### 4.1. Transport to the building site (A4)

Undeclared

### 4.2. Installation processes (A5)

Undeclared

### 4.3. Reference life (B1)

Undeclared

### 4.4. Maintenance (B2), Repair (B3), Replacement (B4), or Refurbishment (B5)

#### Maintenance (B2)

Undeclared

#### Repair (B3)

Undeclared

#### Replacement (B4)

Undeclared

#### Refurbishment (B5)

Undeclared

### 4.6. Operational energy use (B6) and operational water use (B7)

Undeclared

### 4.7. End of life (C1-C4)

Undeclared

## 5. ADDITIONAL INFORMATION

Certificates and declarations:

- Certificate of Proof of Performance (Certificate 1170/CPR/CT.04981)
- Declaration of Product Performance (DP 1170/CPR/CT.04981)
- Quality Management System Certificate UNE-EN ISO 9001:2015 (Cert No. 00639)
- Environmental Management System Certification UNE-EN ISO 14001:2015 (Cert No. 01562)
- Energy Management System Certification ISO 50001:2018 GE-2021/0045

- Occupational Health and Safety Certification ISO 45001:2018 ES132994-I-1
- Social Responsibility Management System Certification IQNet SR:2015 SR-0112-ES

## 6. PCR AND VERIFICATION

### This statement is based on Document

UNE-EN 16908:2019+A1:2022 Product category rules for cement and building lime. Cement and building lime.

### Independent verification of the declaration and data, in accordance with ISO 14025 and IN UNE-EN 16908:2019+A1:2022

External

#### Third party Verifier

Ferran Pérez Ibáñez

Accredited by the administrator of the DAPcons®  
Programme



#### Verification date:

18/07/2025

#### References

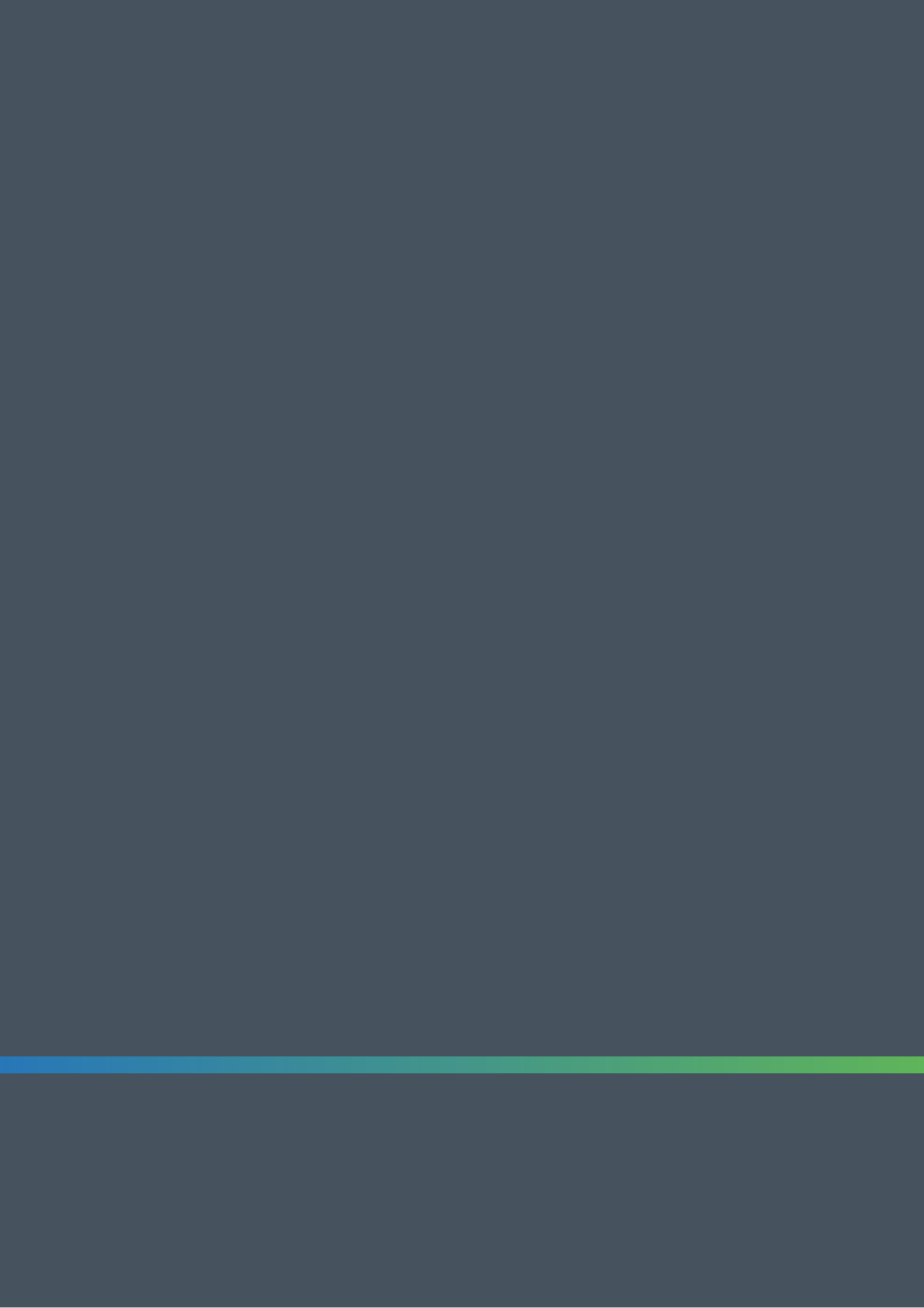
- LIFE CYCLE ASSESSMENT: CEM II/A-P 52.5 R PRODUCT by ELITE CEMENTOS, S.L. ReMa-INGENIERÍA, S.L. 2024 (unpublished)
- EPD Production of Clinker at Sagunto plant, Bulk. Holcim Spain. IBU. Declaration number: IBU-CEI-HOL-2203120-ES2025001248-ISUO002-EN
- HBEFA. Handbook of Emission Factors for Road Transport, version 4.2 published in 2022.  
<http://www.hbefa.net/>
- SPHERA. Documentation for Duty Vehicle Processes in GaBi. February 2022.
- GHG Inventories Report 1990-2020. Annex 7. Spain. 2021.

#### Programme Manager

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## ANEXO / ANNEX

### Declaración del suplemento nacional NF EN 15804/CN / *Declaration of the National Supplement NF EN 15804/CN*

#### Información adicional sobre la liberación de sustancias peligrosas al aire interior, suelo y agua durante la etapa de uso / *Additional information on the release of hazardous substances into indoor air, soil, and water during the use stage*

##### Aire interior / *Indoor air*

El cemento no está en contacto directo con la atmósfera. Son los productos/materiales de aplicación a base de cemento (hormigones, morteros) los que sí lo están. Los cementos no se encuentran en la lista de productos afectados en la “lista indicativa de productos incluidos en el ámbito de aplicación del decreto n.º 2011-321, de 23 de marzo de 2011, relativo al etiquetado de productos de construcción o revestimientos de paredes o suelos, pinturas y barnices sobre sus emisiones de contaminantes volátiles”.

*Cement is not in direct contact with the atmosphere. It is the application products/materials based on cement (concretes, mortars) that are. Cements are not included in the list of affected products in the “indicative list of products included in the scope of application of decree no. 2011-321 of March 23, 2011, relating to the labeling of construction products or wall or floor coverings, paints, and varnishes regarding their emissions of volatile pollutants.”*

##### Suelo y agua / *Soil and water*

El cemento no está en contacto directo con el suelo o el agua. Son los productos/materiales de aplicación a base de cemento (hormigones, morteros) los que sí lo están.

*Cement is not in direct contact with the soil or water. It is the application products/materials based on cement (concretes, mortars) that are.*

#### Contribución del producto a la calidad de vida en el interior de los edificios / *Product contribution to indoor life quality in buildings*

##### Características del producto que participa en la creación de condiciones de confort higrotérmico en el edificio / *Product characteristics that contribute to the creation of hygrothermal comfort conditions in the building*

no aplicable - Ver normas de producto de aplicación

*not applicable – See applicable product standards*

##### Características del producto que contribuyen a la creación de condiciones de confort acústico en el edificio / *Product characteristics that contribute to the creation of acoustic comfort conditions in the building*

no aplicable - Ver normas de producto de aplicación / *not applicable – See applicable product standards*

##### Características del producto que contribuyen a la creación de condiciones de confort visual en el edificio / *Product characteristics that contribute to the creation of visual comfort conditions in the building*

no aplicable - Ver normas de producto de aplicación / *not applicable – See applicable product standards*

##### Características del producto que participa en la creación de condiciones de confort olfativo en la Edificación / *Product characteristics that contribute to the creation of olfactory comfort conditions in the building*

no aplicable - Ver normas de producto de aplicación / *not applicable – See applicable product standards*

##### Contribución medioambiental positiva / *Positive environmental contribution*

Por ejemplo, detalle el canal de reciclaje o el cálculo de ahorro de energía.

*For example, detail the recycling channel or the calculation of energy savings.*

no aplicable - Consulte las normas de producto aplicables. / *not applicable – See applicable product standards*