PEP ecopassport® PROGRAM

PSR

SPECIFIC RULES FOR ACCESS CONTROL PRODUCTS

PSR-0020-ed1-EN-2025 11 03

According to PSR-template-ed2-EN-2021 11 18

Contents

1. Introduction

This reference document complements and explains the Product Environmental Profile (PEP) Drafting Rules defined by the PEP ecopassport® Program (PEP-PCR ed4-EN-2021 09 06), available at www.pep-ecopassport.org.

It sets out the additional requirements applicable to access control products. Compliance with these requirements is necessary to:

- qualify the environmental performance of these solutions on an objective and consistent basis,
- publish PEPs compliant with the PEP ecopassport® program and international reference standards.[1]

This reference document was drawn up in compliance with the open, transparent rules of the PEP ecopassport® program with the support of manufacturers of access control products.

PEP eco PASS PORT®	www.pep-ecopassport.org
PSR reference	PSR-0020-ed1-EN-2025 11 03
Critical review	The third-party critical review was carried out by Etienne Lees-Perasso from Tide. The declaration of conformity published on 05/10/2025 is included in the appendices.
Availability	The critical review report is available on request from the PEP Association contact@pep-ecopassport.org.
Scope of validity	The critical review report and the declaration of conformity remain valid within 5 years or until the PEP Drafting Rules, or the normative reference texts to which they refer, are modified.

[1] ISO 14025, ISO 14040 and ISO 14044 standards

2. Scope

In accordance with the General Instructions of the PEP ecopassport® program (PEP-General Instructions - ed 4.1-EN-2017 10 17) and in addition to the PCR, Product Category Rules (PEP-PCR ed4-EN-2021 09 06) of the PEP ecopassport® environmental product declaration program, this document sets out the specific rules for residential access control products (collective housing and individual homes) and defines the product specifications to be adopted by manufacturers in the development of their PRODUCT ENVIRONMENTAL PROFILES (PEPs), particularly with regard to:

- the technology and its type of application,
- the reference service life taken into account for product Life Cycle Assessment (LCA),
- the conventional use scenarios to be adopted during the product use stage.

2.1. Description of the product families covered

The product families covered are designated by the following terminology: access control products. They are divided into four separate families, for which particular rules apply to the performance of Life Cycle Assessments (LCA) and the publication of PEP ecopassport® declarations.

This PSR apply to all families and sub-families of products customarily named as follows, regardless of their place of manufacture or intended market. One PEP can only cover one sub-family; it cannot cover a system comprising multiple families or sub-families (different functional units):

1. Outdoor unit:
    - Door phone
        - Audio
        - Audio and video
2. Indoor unit:
    - Video phone
    - Audio phone
3. Access control products:
    - Access control unit with power supply
        - Without access verification system
        - With access verification system
        - With access verification system and communication module
    - Access devices
    - Access system:
        - Passive
        - Active
    - Exit button
4. Villa kit:
    - Audio villa kit
    - Video villa kit

The PSR defines the specific rules for product application in collective and individual housing.

When installed in the building, the various products are interconnected.

The following diagram illustrates the installation of products in collective housing.

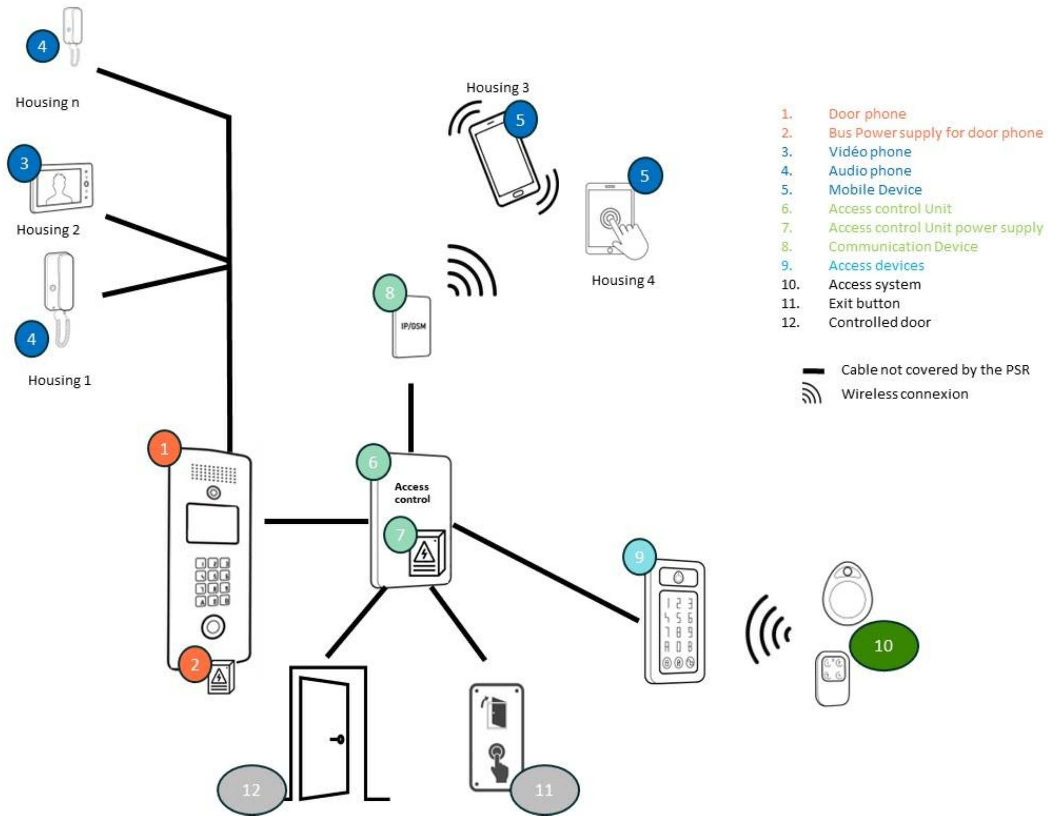

Figure 1: Installation diagram for access control products in collective housing

For individual homes, here is an example of a “villa kit”

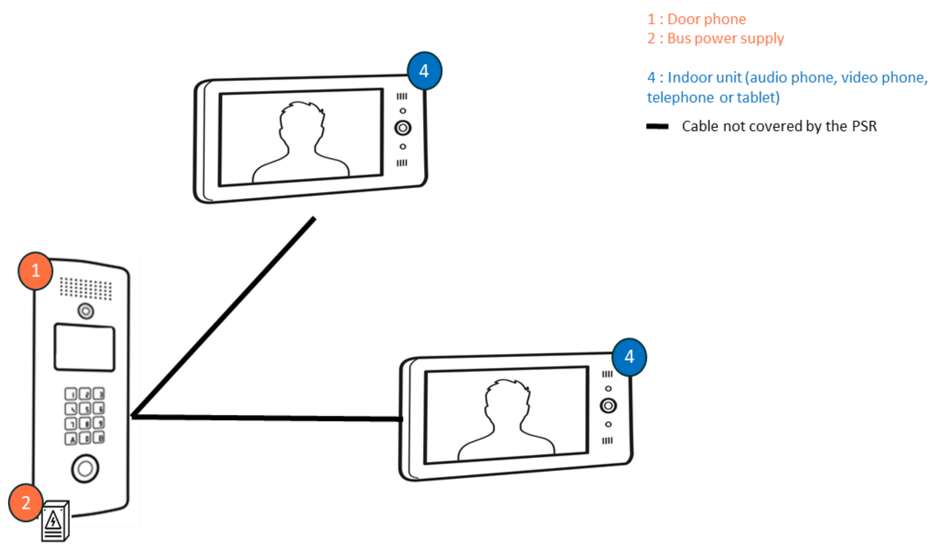

Figure 2: Installation diagram for access control products in individual homes

The LCA report and the PEP ecopassport® declaration must state the family and sub-family to which the product covered by the environmental declaration belongs.

Depending on the family and sub-family, the technical features set out in the tables below must be presented in the LCA report and the PEP ecopassport® declaration:

Family	**Outdoor unit**	
Sub-family	Audio door phone	Audio and video door phone
Features to be declared	Modular or non-modular	
Information	Cables not included	
Power supply	Bus power supply	

Family	**Indoor unit**	
Sub-family	Video phone	Audio phone
Information	Cables not included	
Power supply	Bus power supply for door phone only	

There are three types of access control unit, each with a different set of functions:

Family	**Access control products**
Sub-family	Access control unit without access verification system and power supply
Access control unit features	Works with the following access device(s): - keypad - fob reader - HF receiver - QR code reader - other (please specify) Access devices form a separate sub-family and are therefore not included in the PEP for this sub-family.
Information	Cables not included

Family	Access control products
Sub-family	Access control unit with access verification system and power supply
Access control unit features	Works with the following access device(s): - keypad - fob reader - HF receiver - QR code reader - other (please specify) Access devices form a separate sub-family and are therefore not included in the PEP for this sub-family.
Information	Cables not included

Family	Access control products
Sub-family	Access control unit with access verification system, power supply and communication module
Access control unit features	Works with the following access device(s): - keypad - fob reader - HF receiver - QR code reader - other (please specify) Access devices form a separate sub-family and are therefore not included in the PEP for this sub-family.
Communication module features	- Plain data or - Voice data
Information	Cables not included

Family	Access control products				
Sub-family	Access devices				
Access device type	Fob reader	Keypad	HF receiver	QR code reader	Other (please specify)
Information	Cables not included				

Family	Access control products
Sub-family	Passive access system
Access system	Fob
Fob features	Works with: - RFID smart card - NFC smart card - other (please specify)

Family	Access control products
Sub-family	Active access system
Access system	Remote control

Family	Access control products
Sub-family	Exit button
Information	Cables not included

Family	Villa kit	
Sub-family	Audio	Video
Information	Cables not included	
Specifications	No. of audio/video phones	
Kit features	Includes the following items: - intercom - audio/video phone - other (please specify)	

2.2. Exclusions

The “smartphone and tablet” active access system is excluded from the scope of the PSR.

3. Product Life Cycle Assessment

3.1. Functional unit and reference flow description

These specific rules are additional to section 2.1. “Functional unit and reference flow description” of the PCR in force (PEP-PCR ed4-EN-2021 09 06).

3.1.1. Functional unit

The functional unit is defined as follows for each product family and sub-family:

Family	**Outdoor unit**	
Sub-family	Audio door phone	Audio and video door phone
Functional unit	“Transfer an audio signal from the visitor to the resident, send information back to the visitor and retransmit an audio signal from the resident to the visitor via a door phone, for a reference service life of 10 years”	“Transfer an audio and video signal from the visitor to the resident, send information back to the visitor and retransmit an audio signal from the resident to the visitor via a door phone, for a reference service life of 10 years”

Family	**Indoor unit**	
Sub-family	Video phone	Audio phone
Functional unit	“Receive an audio and video signal and send an audio signal, between a resident and a visitor, and send a signal to open the door, for a reference service life of 10 years”	“Receive an audio signal and send an audio signal, between a resident and a visitor, via an audio phone and send a signal to open the door, for a reference service life of 10 years”

Family	**Access control products**
Sub-family	Access control unit with power supply but without access verification system
Functional unit	“Receive a signal from an access device and/or indoor unit and activate a series of commands, for a reference service life of 10 years”

Family	**Access control products**
Sub-family	Access control unit with access verification system and power supply
Functional unit	“Receive and verify a signal from an access device and/or indoor unit and activate a series of commands, for a reference service life of 10 years”

Family	Access control products
Sub-family	Access control unit with access verification system, power supply and communication module
Functional unit	“Receive and verify a signal from an access device and/or indoor unit and activate a series of commands, while connected to a communication module, for a reference service life of 10 years”

Family	Access control products
Sub-family	Access devices
Type	Fob reader
Functional unit	“Read a string of characters generated by a fob, send a signal to the access control unit and send a message to the user, for a reference service life of 10 years”

Family	Access control products
Sub-family	Access devices
Type	Keypad
Functional unit	“Read a string of characters entered manually by the visitor, send a signal to the access control unit and send a message to the user, for a reference service life of 10 years”

Family	Access control products
Sub-family	Access devices
Type	HF receiver
Functional unit	“Receive a signal from an active access system and send a signal to the access control unit, for a reference service life of 10 years”

Family	Access control products
Sub-family	Access devices
Type	QR code reader
Functional unit	“Read a string of characters generated by a QR code and send a signal to the access control unit, for a reference service life of 10 years”

Family	Access control products
Sub-family	Passive access system
Type	Fob
Functional unit	"Store a string of characters for a reference service life of 10 years"

Family	Access control products
Sub-family	Active access system
Type	Remote control
Functional unit	"Send a signal to an HF receiver for a reference service life of 10 years"

Family	Access control products
Sub-family	Exit button
Functional unit	"Send a signal to the access control unit and closing system for a reference service life of 10 years"

Family	Individual access control products	
Sub-family	Audio villa kit	Video villa kit
Functional unit	"Enable a visitor to indicate their presence in front of the resident's home by sending an audio signal, retransmit an audio exchange between the resident and visitor and grant authorisation for entry, for a reference service life of 10 years"	"Enable a visitor to indicate their presence in front of the resident's home by sending an audio and video signal, retransmit an audio exchange between the resident and visitor and grant authorisation for entry, for a reference service life of 10 years"

If the PEP ecopassport® declaration is made for an access control product type not listed in this PSR, the functional unit must be drawn up by the declarant party.

Based on feedback from sector manufacturers and installation professionals, the reference service life of access control products is set at 10 years[2].

[2] This life time is not related to the duration of the product guarantee or the actual life time of the installation, but it is representative of the life time of an access control product in the installation or the device being analysed.

3.1.2. Declared unit

The declared unit may provide additional information to assist future users of the PEP ecopassport® declaration.

Within the scope of these PSR, the declared unit corresponds to the functional unit.

3.1.3. Reference product and reference flow description

The PEP ecopassport® declaration must be drawn up for a quantity of 1 reference product.

The manufacturer selects the reference product within its range to be analysed in accordance with the PCR in force. The PSR sets no requirements.

The reference flow[3] of access control products shall include the following, at least:

- Access control product
- Packaging
- The items presented in the tables below

Family	**Outdoor unit**	
Sub-family	Audio door phone	Audio and video door phone
The "door phone" bus power supply must be included in the scope of the PEP. If the declarant party does not supply the bus power supply, it must allow for the manufacture of a bus power supply as described in section 3.5.1. Whether or not the declarant party supplies the bus power supply, its manufacture must be factored into the manufacturing stage.		

Family	**Indoor units**	
Sub-family	Video phones	Audio phones
If the "indoor unit" is powered by the "door phone" power supply, this power supply must not be included in the scope of the "indoor unit" PEP, as it is covered by the "door phone" PEP. If the "indoor unit" uses a different power supply to that of the "door phone", the power supply(ies) is (are) not covered by the "indoor unit" PEP. A separate PEP must be created in accordance with PSR-0005 to cover this power supply.		

[3] The reference flow lists the elements to be counted in the LCA to fulfil the function expressed by the functional unit.

Family	**Access control products**		
Sub-family	Access control units with power supply but without access verification system	Access control units with access verification system and power supply	Access control units with access verification system, power supply and communication module

The “access control product” power supply must be included in the scope of the PEP.

If the declarant party does not supply the power supply, it must allow for the manufacture of an appropriate power supply as described in section 3.5.1.

Whether or not the declarant party supplies the bus power supply, its manufacture must be factored into the manufacturing stage.

The “access control unit” “access device” must not be included in the scope of the PEP.

Family	**Access control products**			
Sub-family	Access devices	Passive access system	Active access system	Exit buttons

The “access device” power supply must not be included in the scope of the “access device” PEP, as it is covered by the “door phone” or “access control unit” PEP.

The “exit button” power supply must not be included in the scope of the “exit button” PEP, as it is covered by the “door phone” or “access control unit” PEP.

Family	**Villa kits**	
Sub-family	Audio villa kits	Video villa kits

The bus power supply must be included in the scope of the PEP.

Its manufacture must be factored into the manufacturing stage.

3.2. System boundaries

These specific rules are additional to section 2.2 “System boundaries” of the PCR in force (PEP-PCR ed4-EN-2021 09 06), which describes the boundaries for each stage of the life cycle.

As described in PEP-PCR ed4-EN-2021 09 06, the following stages shall be included:

- Manufacturing stage: the rules described in section 2.2.3 of PEP-PCR ed4-EN-2021 09 06 shall apply.
- Distribution stage: the rules described in section 2.2.4 of PEP-PCR ed4-EN-2021 09 06 shall apply.
- Installation stage: the rules described in section 2.2.5 of PEP-PCR ed4-EN-2021 09 06 shall apply.
- Use stage: the rules described in section 2.2.6 of PEP-PCR ed4-EN-2021 09 06 shall apply.

In the case of breakdown of module B as defined in section 2.2.6 of the PCR ed.4, the environmental impacts of the use stage shall be broken down as follows for all product families:

B1: Use or application of the installed product	The specific rules of this PSR do not define elements to be declared in B1.
B2: Maintenance	Maintenance applying the maintenance scenario as defined by this PSR.
B3: Repair	The specific rules of this PSR do not define elements to be declared in B3.
B4: Replacement	The specific rules of this PSR do not define elements to be declared in B4.
B5: Restoration	The specific rules of this PSR do not define elements to be declared in B5.
B6: Energy requirements during the use stage	Electricity consumption of the reference product by applying the use scenario as defined by this PSR.
B7: Water requirements during the use stage	The specific rules of this PSR do not define elements to be declared in B7.

- End-of-life stage: the rules described in section 2.2.7 of PEP-PCR ed4-EN-2021 09 06 shall apply.

In the case of breakdown of module C, the environmental impacts of the end-of-life stage shall be broken down as follows:

C1: Deinstallation
C2: Transport to waste treatment site
C3: Treatment of waste in view of its reuse, recovery and/or recycling
C4: Disposal

- Benefits and loads beyond the system boundaries: the rules described in section 2.2.8 of PEP-PCR ed4-EN-2021 09 06 shall apply.

3.3. Cut-off criteria

The rules defined in section 2.3 “Cut-off criteria” of the PCR in force (PEP-PCR ed4-EN-2021 09 06) shall apply.

3.4. Rules for allocation between co-products

The rules described in section 2.4 “Rules for allocation between co-products” of the PCR in force (PEP-PCR ed4-EN-2021 09 06) shall apply.

3.5. Development of scenarios (default scenarios)

These specific rules are additional to section 2.5 “Development of scenarios” of the PCR in force (PEP-PCR ed4-EN 2021-09 06).

***Accepted supporting documents to amend default scenarios**

If the declarant wishes to use specific data, the data shall be justified in the report. Such data, forwarded by manufacturers, is not necessarily certified but based on supporting documents on the traceability chain. These supporting documents involve the liability of the declarant or supplier or third party (example of third party: independent certification body). These supporting documents shall be available if requested.

The recycled content of raw materials may for example be justified with supplier data (data sheet or supplier declaration), but may not be justified with generic data (e.g.: system, professional associations, ADEME). The method for calculating the recycled content may be based on that proposed by the EN 45557 standard providing a general method for evaluating the recycled material content of energy-related products.

The scrap rates of raw materials may for example be justified with an internal document from the production factory (e.g.: annual report mentioning the input and output material quantity of the process).

The end-of-life waste treatment may for example be justified with a statement from the contractor tasked with the treatment of waste from the factory.

3.5.1. Manufacturing stage

Recycled content

The recycled content of raw materials shall be justified*. In the absence of justified specific information, the recycled content of the constituent materials of the product shall be considered to be nil.

Packaging of raw materials and components

The packaging of raw materials and components as well as their transport to the manufacturing site(s) shall be considered. Supplier data shall be used.

Failing justification, an average packaging scrap rate of 5% of the mass of the reference equipment (equipment + packaging) shall be considered, broken down as follows:

- Wood 50%
- Cardboard 40%
- Low-density polyethylene 10%

Packaging reused on site is not considered. The end-of-life treatment of packaging is modelled as described below, in the manufacturing waste treatment section of this PSR.

Default power supply

If the declarant party manufactures the power supply for its products, it must factor in the manufacture of its own power supply.

If the declarant party [2]does not manufacture a power supply, it must still make allowance for the manufacture of a default power supply as described below.

❖ Default power supply for access control units

Two factors need to be taken into account when modelling the default power supply for access control units:

- an ABS plastic housing weighing 0.067 kg
- a PCB weighing 0.111 kg modelled according to the following material/component breakdown:

Material/component	Mass in grams (g)
Stainless steel	15.000
Coil	5.950
Blank PCB	8.520
Integrated circuit	0.022
Film capacitor	7.575
Electrolytic capacitor	15.400
Surface mount capacitor	0.224
Connector	1.575
Surface mount diode	0.231
Electronic relay	6.4000
Surface mount resistor	0.292
Resistor	1.900
Welding	1.000
Transformer	43.146
Transistor	0.099
Varistor	3.500

Table 1: Breakdown of PCB components for a default access control unit power supply

❖ Default door phone power supply

Three factors need to be taken into account when modelling the default power supply for door phones:

- A housing comprising 44.700 grams of ABS plastic and 77.200 grams of PC plastic
- A PCB weighing 349.297 grams modelled according to the following material/component breakdown:

Material/component	Mass in grams (g)
Stainless steel	15.000
Coil	2.423
Blank PCB	24.350
Film capacitor	2.525
Electrolytic capacitor	165.125
Surface mount capacitor	0.176
Connector	1.525
Surface mount diode	0.098
Heat sink	0.050
Electronic relay	6.400
Surface mount resistor	0.167
Resistor	1.900
Welding	0.171
Transformer	128.256
Transistor	0.131
Varistor	1.000

Table 2: Breakdown of PCB components for a default door phone power supply

Scrap rate

Specific scrap rates shall be justified*. Declarants whose scrap rates are not available shall consider the default values presented in the first column of Table. The table gives an example of how the rates shall be applied

	Default scrap rate	**Mass of part after manufacture (kg)**	**Scrap mass (kg)**	**Mass to be considered with scraps (kg)**
Metals				
Machining	60%	19.20	11.52	30.72
Sheet metal cutting	60%	14.40	8,64	23,04
Coiling	10%	2.00	0.20	2.20
Injection	10%	0.90	0.09	0.99
Moulding	10%	12.60	1.26	13.86
Plastics				
Injection	10%	9.90	0.99	10.89
Packaging	10%	5.00	0.50	5.50
Other processes	30%	24.50	7.35	31.85

Table 3: Default scrap rates to be applied in the absence of specific data

Manufacturing waste treatment

By sector-based convention, the transport stage of this manufacturing waste shall be considered based on an assumption of **100 km transport by truck**.

In the absence of justified* specific data and for waste treatment in Europe**, PEP-PCR ed4-EN-2021 09 06, Appendix D, Table 6** applies.

For any other case (excluding specific data and excluding European manufacture), the declarant shall apply the following default scenario: **100% incineration without energy recovery**.

3.5.2. Distribution stage

Only for “passive access systems” and “active access systems”:

A mailing scenario must be considered: a 0.7 km one-way trip with the “car passenger” LCI data set is to be considered.

The rules defined in section 2.5 “Development of scenarios (default scenarios)” of the PCR (PEP-PCR ed4-EN-2021 09 06) shall apply to all other products covered by this PSR.

3.5.3. Installation stage

3.5.3.1. Packaging end of life

The end of life of packaging, the production of which is included in the manufacturing stage, is included in the installation stage. Packaging waste produced during the installation stage falls within the category of non-hazardous waste and is disposed of, in principle, by the installer once the equipment is installed.

In the absence of supporting documents showing a specific end of life, the treatment scenarios presented in the table below shall be applied by default. The tables presented below are representative of the year 2019. More recent consolidated Eurostat data may be used, if available, based on the information accessible at:
https://ec.europa.eu/eurostat/databrowser/view/ENV_WASPAC__custom_3801295/default/bar.
The reference year for the data used shall be stated in the PEP.

All geographic scopes:

- By sector-based convention, the transport stage of this manufacturing waste shall be considered based on an assumption of **100 km transport by truck**.
- The strapping, packaging notes and labels present on or in the packaging of the system are considered to be negligible and may be excluded from the life cycle assessment of the packaging waste.
- A pallet may be considered to be suitable for reuse up to 28 times[4].

France scope:

	Recycling rate	Incineration with energy recovery	Incineration without energy recovery	Landfill rate
Metal	83 %	1 %	0 %	16 %
Steel	88 %	0 %	0 %	12 %
Aluminium	60 %	7 %	0 %	33 %
Paper/cardboard	91 %	5 %	0 %	4 %
Wood	7 %	31 %	0 %	62 %
Plastic	27 %	43 %	0 %	30 %

Table 4: Default packaging end-of-life data for France scope

European scope:

	Recycling rate	Incineration with energy recovery	Incineration without energy recovery	Landfill rate
Metal	77 %	2 %	0 %	21 %
Paper/cardboard	82 %	9 %	0 %	9 %
Wood	31 %	31 %	0 %	38 %
Plastic	41 %	37 %	0 %	22 %

Table 5: Default packaging end-of-life data for European scope

In the absence of data in Tables 4 and 5, waste shall be treated according to the following scenario: **100% incineration without energy recovery.**

[4] Sources: https://epalia.fr/blog/conseils-dexperts/reemploi-recyclage-valorisation-de-palettes-bois

<u>Other international geographic scope (excluding France and Europe):</u> waste shall be treated according to the following scenario: **100% incineration without energy recovery.**

3.5.4. Use stage

3.5.4.1. Maintenance stage (module B2)

The rules defined in section 2.5.5 “Maintenance scenarios” of the PCR (PEP-PCR ed4-EN-2021 09 06) shall apply.

Depending on the family and sub-family to which the product covered by the declaration belongs, maintenance operations are carried out as follows:

Family	**Outdoor unit**
No maintenance	

Family	**Indoor unit**
No maintenance	

Family	**Access control products**
Sub-family	Access control unit, all types
When a plain data communication module is included	Battery change every 5 years The battery is changed by the maintenance technician; a 30 km round trip with the “car passenger” LCI data set is to be considered. No inspection visit.
When a voice data communication module is included	Battery change every 5 years The battery is changed by the maintenance technician; a 30 km round trip with the “car passenger” LCI data set is to be considered. No inspection visit.
Without communication module	Battery change every 5 years The battery is changed by the maintenance technician; a 30 km round trip with the “car passenger” LCI data set is to be considered. Inspection visit: transport of a technician over a 30 km round trip every 3 years with the “car passenger” LCI data set.

Family	**Access control products**		
Sub-family	Access devices	Passive access system	Exit button
No maintenance			

Family	Access control products
Sub-family	Active access system
Battery change every year. The battery is changed by the user, so no transport is to be taken into account. No inspection visit.	

Family	Individual access control products	
Sub-family	Audio villa kit	Video villa kit
No maintenance		

3.5.4.2. Energy consumption (module B6)

Door phone consumption:

Time in **active mode/day** (hours)	0.17
Consumption in **active mode over 10 years** (kWh)	Power consumed in **active mode** (W)*0.17*3,650/1,000

Time in **passive mode/day** (hours)	23.83
Consumption in **passive mode over 10 years** (kWh)	Power consumed in **passive mode** (W)*23.83*3,650/1,000

Total consumption over 10 years (kWh)	**Consumption in active mode (kWh) + Consumption in passive mode (kWh)**

Video and audio phone consumption:

Time in **active mode/day** (hours)	0.02
Consumption in **active mode over 10 years** (kWh)	Power consumed in **active mode** (W)*0.02*3,650/1,000

Time in **passive mode/day** (hours)	23.98
Consumption in **passive mode over 10 years** (kWh)	Power consumed in **passive mode** (W)*23.98*3,650/1,000

Total consumption over 10 years (kWh)	**Consumption in active mode (kWh) + Consumption in passive mode (kWh)**

Access control unit consumption: d

Time in **active mode/day** (hours)	0.10
Consumption in **active mode over 10 years** (kWh)	Power consumed in **active mode** (W)*0.10*3,650/1,000

Time in **passive mode/day** (hours)	23.90
Consumption in **passive mode over 10 years** (kWh)	Power consumed in **passive mode** (W)*23.90*3,650/1,000

Total consumption over 10 years (kWh)	**Consumption in active mode (kWh) + Consumption in passive mode (kWh)**

Communication module consumption **- VOICE DATA**:

Activation time per update (seconds)	To be defined by the declarant
Time in **active mode/day** (seconds)	15+(10* **Activation time per update** (seconds)/3,650) +20 *30
Time in **active mode/day** (hours)	Time in **active mode/day** (seconds)/3,600
Consumption in **active mode over 10 years** (kWh)	Power consumed in **active mode** (W)* Time in **active mode/day** (hours)*3,650/1,000

Time in **passive mode/day** (hours)	24 - Time in **active mode/day** (hours)
Consumption in **active mode over 10 years** (kWh)	Power consumed in **passive mode** (W)* Time in **passive mode per day** (hours)*3,650/1,000

Total consumption over 10 years (kWh)	**Consumption in active mode (kWh) + Consumption in passive mode (kWh)**

Communication module consumption **- PLAIN DATA**:

Activation time per update* (seconds)	To be defined by the declarant
Time in **active mode/day** (seconds)	15+(10* **Activation time per update** (seconds)/3,650)
Time in **active mode/day** (hours)	Time in **active mode/day** (seconds)/3,600
Consumption in **active mode over 10 years** (kWh)	Power consumed in **active mode** (W)* Time in **active mode/day** (hours)*3,650/1,000

Time in **passive mode/day** (hours)	24 - Time in **active mode/day** (hours)
Consumption in **active mode over 10 years** (kWh)	Power consumed in **passive mode** (W)* Time in **passive mode per day** (hours)*3,650/1,000

Total consumption over 10 years (kWh)	**Consumption in active mode (kWh) + Consumption in passive mode (kWh)**

* This update refers only to a system update and does not include updates to resident information.

Access device consumption:

No consumption to be taken into account.

Audio villa kit consumption:

Time in **active mode/day** (hours)	0.02
Consumption in **active mode over 10 years** (kWh)	Total kit power consumption (intercom + audio phone + power supply + other) in **active mode** (W)*0.02*3,650/1,000

Time in **passive mode/day** (hours)	23.98
Consumption in **passive mode over 10 years** (kWh)	Total kit power consumption (intercom + audio phone + power supply + other) in **passive mode** (W)*23.98*3,650/1,000

Total consumption over 10 years (kWh)	**Consumption in active mode (kWh) + Consumption in passive mode (kWh)**

Video villa kit consumption:

Time in **active mode/day** (hours)	0.02
Consumption in **active mode over 10 years** (kWh)	Total kit power consumption (intercom + audio phone + power supply + other) in **active mode** (W)*0.02*3,650/1,000

Time in **passive mode/day** (hours)	23.98
Consumption in **passive mode over 10 years** (kWh)	Total kit power consumption (intercom + audio phone + power supply + other) in **passive mode** (W)*23.98*3,650/1,000

Total consumption over 10 years (kWh)	**Consumption in active mode (kWh) + Consumption in passive mode (kWh)**

3.5.5. End-of-life stage

France and Europe scope:

Within the European Union, access control product waste falls into the category of WEEE (waste electrical and electronic equipment).

After presenting local requirements regarding the management of end-of-life access control products, the LCA report shall present the organisation of known processing and/or recovery sectors, the associated environmental impacts and the manner in which the manufacturer meets these requirements, where applicable. These factors will determine the actual collection and treatment rate in the treatment sector.

The use of **ecosystem** LCI data sets is valid for France and Europe.

If **ecosystem** LCI modules are used, the data must be selected in the "**Small Professional Elec. Equip. (Medical & Building & Industry & Research)**" category.

Note that the waste transport stage is already taken into account in the **ecosystem** LCI data sets.

This database does not allow computation of the following two indicators: "Materials intended for recycling" and "Materials intended for energy recovery".

To compute these indicators:

- use the generic data of the producer responsibility organisation with which the company is affiliated (specific or annual report); or
- otherwise, enter 0.

If the **ecosystem** LCI data sets are not used and in the absence of justified data (see page 16), refer to **PEP-PCR ed4-EN-2021 09 06, Appendix D, Table 6**. For all materials not included in the table, consider **100% incineration without energy recovery**.

By sector-based convention, the end-of-life collection transport stage shall be considered based on an assumption of **100 km transport by truck**.

International scope (excluding France and Europe):

In the absence of justified* specific data, the declarant shall apply the following default scenario: **100% incineration without energy recovery**.

By sector-based convention, the transport stage of this waste shall be considered based on an assumption of **100 km transport by truck**.

3.5.6. Scenario for considering net benefits and loads beyond the system boundaries

The rules defined in section 2.5.7 “Scenario for considering net benefits and loads beyond the system boundaries” of the PCR (PEP-PCR ed4-EN-2021 09 06) shall apply.

3.6. Rule(s) for extrapolation to a homogeneous environmental family

These specific rules are additional to section 2.6 “Rule(s) for extrapolation to a homogeneous environmental family” of the PCR in force (PEP-PCR ed4-EN-2021 09 06).

3.7. Rules applying to joint environmental declarations

The rules defined in section 2.7 “Rules applying to joint environmental declarations” of the PCR (PEP-PCR ed4-EN-2021 09 06) shall apply.

The PEP must specify the framework of validity of the application of extrapolation rules based on technical criteria used to check that the products belong to the same homogeneous environmental family as the standard product.

3.8. Environmental data requirements

Note: The LCI module used to model the raw material or component may contain a default scrap rate.

- If the scrap rate included in the LCI module is modifiable, the default values from Table 1 shall apply.
- If the scrap rate included in the LCI module is non-modifiable:
    - The scrap rate is lower than the Table 1 default values: this scrap rate shall be entered in the LCA report and, insofar as possible, the modelling should be adapted to account for the difference in waste generated (hazardous or non-hazardous).
    - The scrap rate is higher than the Table 1 default values: this scrap rate must be entered in the LCA report.

3.9. Environmental impact calculation

In order to meet the requirements of the PCR in force (PEP-PCR ed4-EN-2021-09 06), the results presented in the environmental impact table relate to the implementation of the functional unit.

The environmental database version must be stated in the PEP and the LCA report, including the EF (Environmental Footprint) version number.

For biogenic carbon storage, both 0/0 and -1/+1 assessment methodologies are accepted until the environmental databases are updated. The methodologies used must be stated in the PEP and the LCA report.

4. Drawing up the Product Environmental Profile

The rules specified in section 4. “Drawing up the Product Environmental Profile” of the PCR in force (PEP-PCR ed4-EN-2021 09 06) shall apply.

4.1. General information

These specific rules are additional to section 4.1 “General information” of the PCR in force (PEP-PCR ed4-EN-2021 09 06), which describe the boundaries for each stage of the life cycle..

The PEP shall state:

- the family and sub-family as defined in section 2.1;
- the technical features set out in the tables in sections 2.1 and 3.1.3;
- the use scenario considered in the use stage according to section 3.5.4;
- any change to the default scenario as defined in section 3.5.

4.2. Constituent materials

The rules specified in the “Constituent materials” section of the PCR in force (PEP-PCR ed4-EN-2021 09 06) shall apply.

4.3. Additional environmental information

These specific rules are additional to the “Additional environmental information” section of the PCR (PEP-PCR ed4-EN-2021-09 06).

Within the scope of Life Cycle Assessments in respect of a building, the environmental impacts of the equipment shall be considered in respect to the product and impacts associated with energy consumption in the use stage shall be extracted. In this way, to facilitate PEP use for the building LCA, the PEP may include the environmental impact results in the use stage according to a breakdown of module B (B1 to B7) in line with the EN 15978 and EN 15804 standards.

PEP ecopassport®	Manufacturing stage			Distribution stage	Installation stage	Use stage							End-of-life stage				Benefits and loads
EN 15978/15804	Production stage			Construction stage		Use stage							End-of-life stage				Benefits and loads
	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
	Procurement of raw materials	Transport	Manufacture	Transport	Installation processes	Use	Maintenance	Repair	Replacement	Restoration	Energy consumption during building use	Water consumption during building use	Demolition/deconstruction	Transport	Waste treatment	Disposal	Benefits beyond the system boundaries

Note: When the total for module D is negative, this represents a benefit. When the total for module D is positive, this represents a load.

5. PEP update rules

The rules defined in section 5 “PEP update rules” of the PCR in force (PEP-PCR ed4-EN-2021 09 06) shall apply.

6. Appendices

6.1. Glossary

LCA	Life Cycle Assessment
PCR	Product Category Rules
PEP	Product Environmental Profile
PSR	Product Specific Rules
ISO	International Organization for Standardization
RFID	Radio Frequency IDentification
NFC	Near Field Communication
HF	High Frequency
QR	Quick Response
ADEME	French Agency for the Environment and Energy Management
EN	European Standard (European Norm)
kg	Kilogram
km	Kilometer
WEEE	Waste Electrical and Electronic Equipment
LCI	Life Cycle Inventories
EF	Environmental Footprint

6.2. Definitions

Bus power supply: modular transformer used to power low-voltage electrical equipment. It is used to adapt this equipment to the mains voltage by transforming it to a lower value.

Audio phone: indoor device allowing the user to send an audio response to an access request from a third party.

Access control unit: the core of the access control system that activates commands according to the access devices and intercom systems.

Access device: product family that makes it possible to read and transmit (to an access control unit) the information required to authorise or refuse access. It is directly associated with the “access system” family.

Access system: product family that transmits the required information for analysis by an access device in order to authorise or refuse access.

Door phone: interface positioned outside a property to allow a visitor to request access.

Video phone: indoor device allowing the user to send an audio and video response to an access request from a third party.

6.3. References

Packaging end-of-life data references:

- Ademe - Household Packaging Report 2020 data p28 - *https://librairie.ademe.fr/dechets-economie-circulaire/28-dechets-chiffres-cles-edition-2020-9791029712135.html#:~:text=Cette%20nouvelle%20%C3%A9dition%202020%20des,de%20graphes%2C%20cartes%20et%20tableaux.*
- Ademe - Ademe - Household Waste Report 2020 key figures p15 - *https://librairie.ademe.fr/dechets-economie-circulaire/28-dechets-chiffres-cles-edition-2020-9791029712135.html#:~:text=Cette%20nouvelle%20%C3%A9dition%202020%20des,de%20graphes%2C%20cartes%20et%20tableaux.*
- Citeo - Report on key household waste sorting and recycling figures in 2020 - *https://www.citeo.com/le-mag/les-chiffres-du-recyclage-en-france#materiaux*

6.4. Declaration of conformity

Attestation de revue critique

Règles spécifiques aux produits du contrôle d'accès

Dans le cadre de la vérification des règles spécifiques

Portant le titre : REGLES SPECIFIQUES AUX PRODUITS DU CONTROLE D'ACCES
N° : PSR-0020-ed1-FR-2025 11 03
Diffusé par : IGNES, 17 rue de l'amiral Hamelin - 75116 PARIS
Etablies par : Olivia Djiriguian, LCIE Bureau Veritas
Période de revue : mai 2025 à octobre 2025

Date édition : 10/2025

M. LEES-PERASSO Etienne, TIDE, titulaire de l'habilitation de vérificateur numéro VH26 déclare :

- avoir exercé les opérations de vérification en toute indépendance.
- n'avoir aucun lien de nature à nuire à son impartialité vis-à-vis du déclarant, notamment n'être employé ni à temps plein ni à temps partiel par le déclarant
- avoir établi une déclaration des liens d'intérêts au cours des trois dernières années auprès de PEPecopassport®
- ne pas avoir participé au processus d'élaboration du PSR objet de la vérification
- que le PSR vérifié est conforme aux « Règles de rédaction : PCR du Programme PEP ecopassport » en vigueur (PCR-ed4-EN-2021 09 06) et à la « Procédure de développement et adoption des PSR – Règles Spécifiques aux Produits » (PEP-AP0017-ed2-FR-2015 02 13)

Date : 05/10/2025

Signature :