

Madaster introduction

Create sustainable value by taking full
material responsibility



It starts with
registration,
it ends with
value



Architect Thomas Rau

- Every building is a material depot
- Write down instead of write off
- Waste is material without an identity
- Our planet is a closed system
- Materials are 'limited editions'



driven by vision

facilitate circular economy

OUR PLANET
IS A CLOSED SYSTEM



OUR RESOURCES
ARE LIMITED EDITIONS



WASTE
IS MATERIAL WITHOUT IDENTITY



ELIMINATE WASTE
GIVE MATERIALS AN IDENTITY





The global online register for materials and products





For infrastructure & real estate

Madaster – “What’s in it for the asset owner ?”

To make things simple, its a combination of these three aspects

1

Environmental

Current issue:

The climate crisis, resource crisis and energy crisis require an adjustment of our economic system where we take, make and waste resources towards a circular economy for the reuse and optimal use of our resources.

Our solution:

By offering data insight tools and shared data, Madaster enables the asset owner and construction service providers to take better decisions towards realizing environmental and climate targets and to avoid stranded assets.

2

Financial

Current issue:

The real estate and infrastructure sector needs adaptation of environmental performance and circularity standards to prevent stranded assets and needs to mitigate cost increase due to scarcity of materials and environmental costs.

Our solution:

Through digitization of materials, products and assets, Madaster facilitates regulatory and certification compliancy that lead to value preservation & potentially value increase of the objects of real estate and infrastructure objects.

3

Compliance

Current issue:

Data necessary to provide transparency in environmental performance on material, product and construction object level is not available, leading to a risk of non-compliance with current and future regulation and certification standards.

Our solution:

Madaster provides detailed insight enabling asset owners to adhere to current and future national and international ESG / SDG driven regulations and certification standards (BREEAM et cetera).

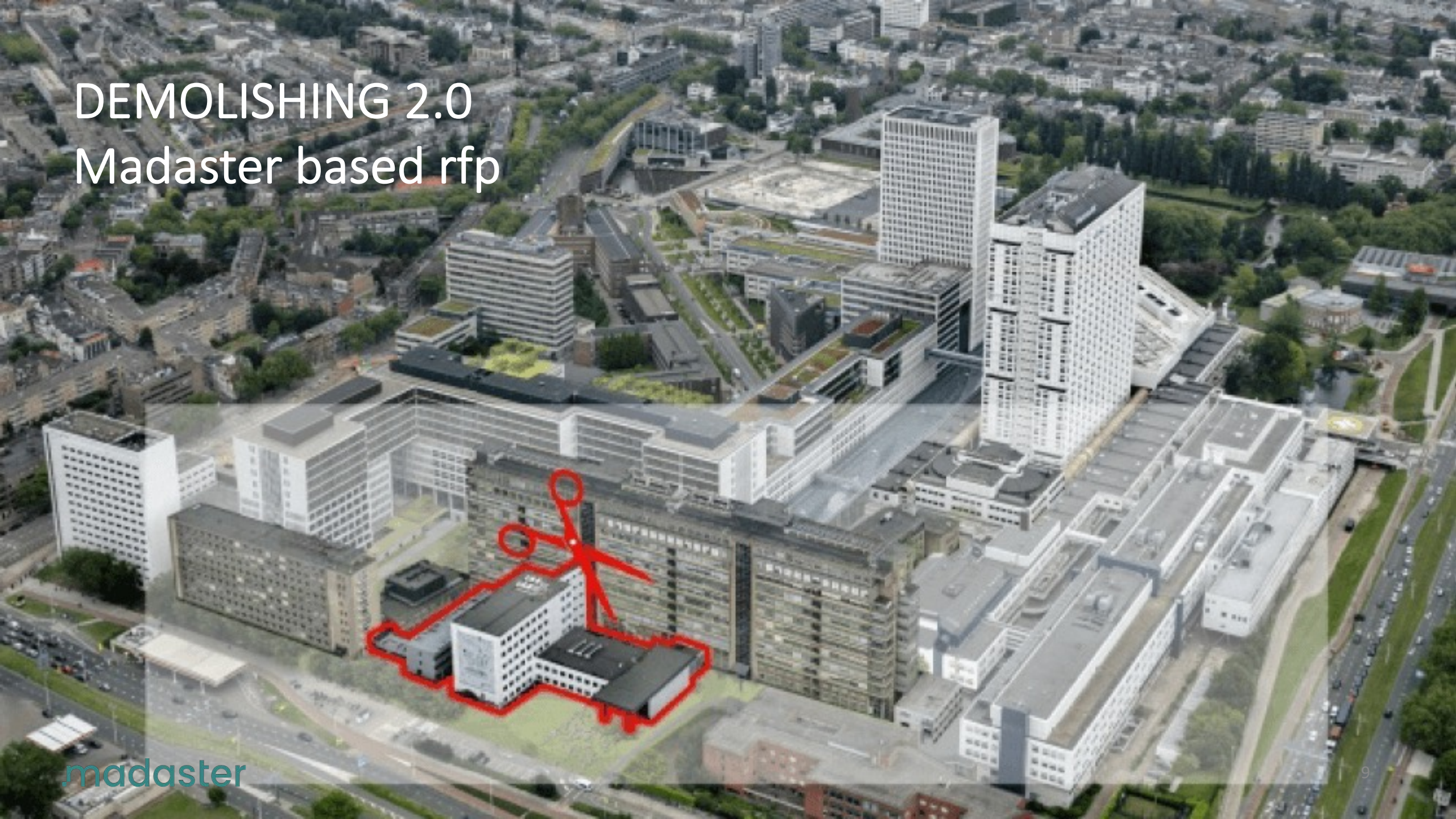


An international proven concept



DEMOLISHING 2.0

Madaster based rfp



DEVELOPMENT 2.0

passport for every house

The screenshot displays a digital interface for a house passport. It includes the following fields:

- GEDUWENAAM:** Wijkgebied Rotterdam West, I.L.
- NAAM VAN UITGEVER:** BPD Regio BPD
- EIGENAAR:** Richard van der
- PUBLICATIEDATUM:** 06-11-2020
- BEDRIJFSNAAM:** BPD Wijkgebied B.V.

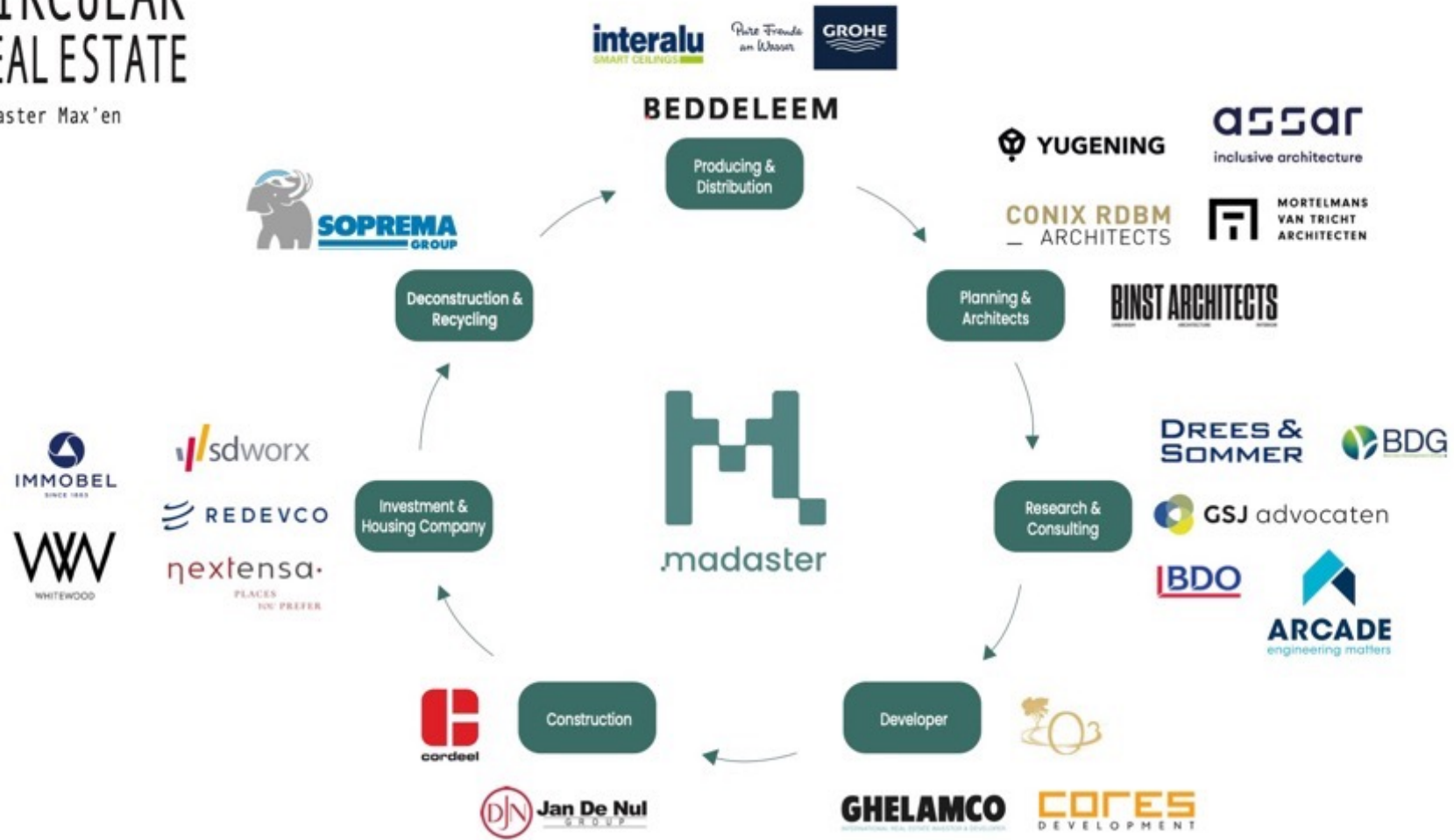
Below the text, there is a map showing the location of the house and a small image of the house itself. The interface also features a grid of circular icons representing different data points or services.

madaster



CIRCULAR REAL ESTATE

Madaster Max'en



Legende:
Madaster Max'en per cluster

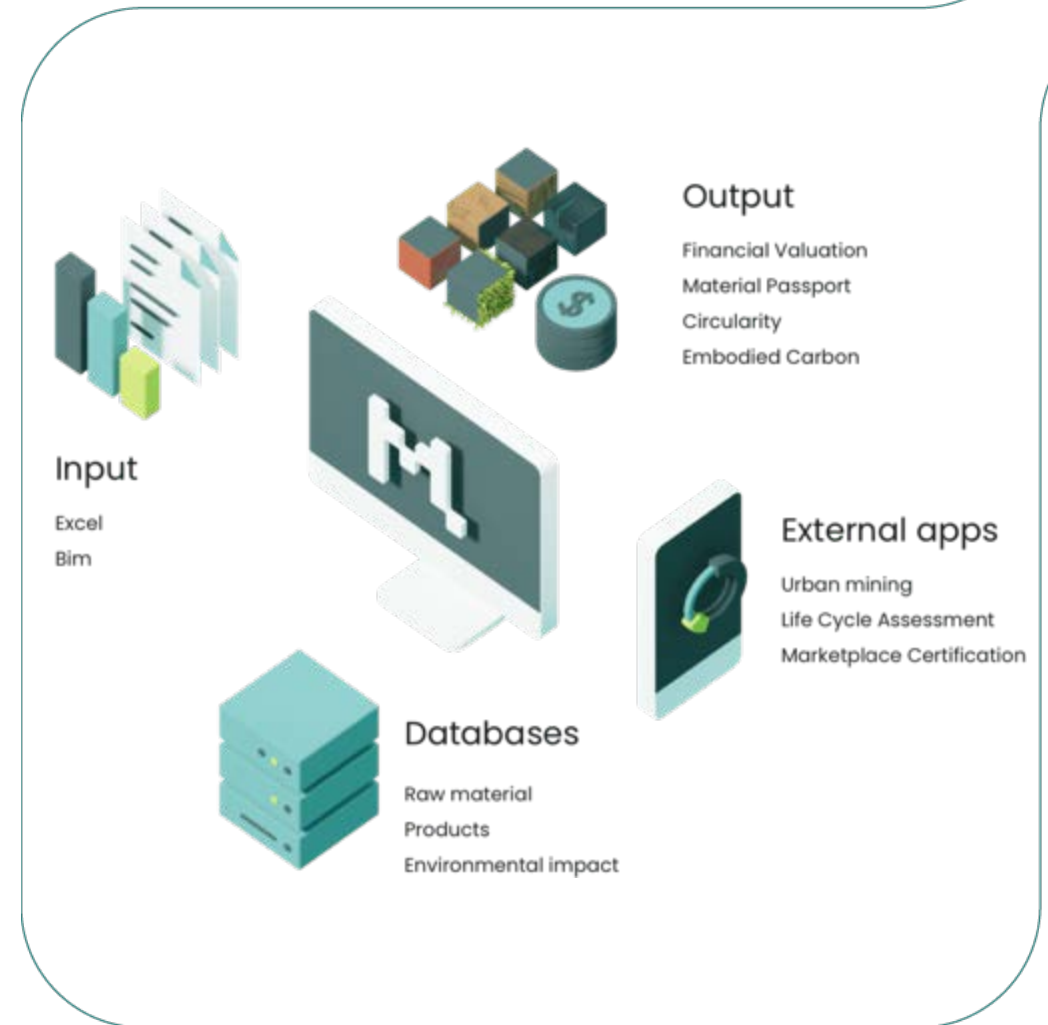


How it works



We love to connect to the (local) ecosystem

- 100% BIM integration
- Extensive data sources
- 100% API functionality
- Support wide range of standards & methodologies



Address

Moerbeil 10
3941px Doorn
Netherlands

Madaster information

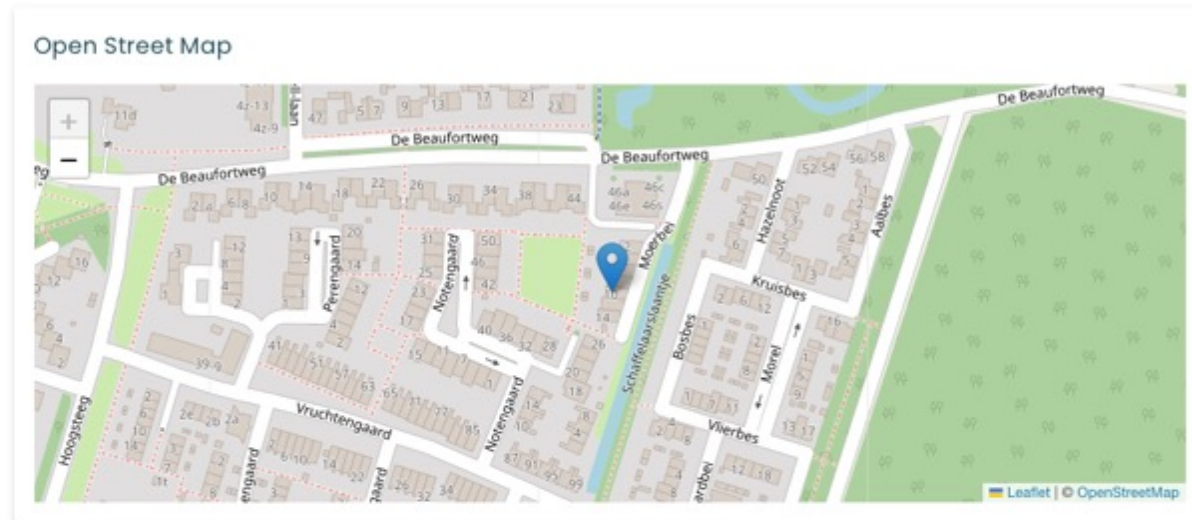
Material Classification:	Madaster V2
Usage:	Community (Conference complex/small complex < 2000 m2)
Gross Surface Area:	300 m ²
Building phase:	New building
Delivery date:	22-09-2022
Last renovation date:	-

Cadaster information

Cadastral designation:	Doorn K 7860
Cadastral surface area:	672 m ²
Lot number:	-
Restriction of public law:	-

Labels

BREEAM:	-
Indicative MPG score ⓘ:	0.87 €/m ²
LEED:	-
GPR Score Energy:	0
GPR score Environment:	0
GPR score Health:	0



Filter on

Keyword

Consumer dossier

- Contractuele afspraken
- Gebruik, Onderhoud & Verbouw
- Paspoorten

Tags

Source file (BIM or Excel)

Name	Size	Classification method	Date exported	Tags	Owner	Active
220729_DM2 - Installaties.ifc IFC file generated by GRAPHISOFT ARCHICAD 25.0.0 NED FULL Macintosh version (IFC add-on version: 4017 NED FULL); IFC2X3	108.26 MB	Omniclass	01-08-2022 18:11		Michiel Lankamp	<input checked="" type="checkbox"/>
220729_DM2 - Bouwkundig.ifc IFC file generated by GRAPHISOFT ARCHICAD 25.0.0 NED FULL Macintosh version (IFC add-on version: 4017 NED FULL); IFC2X3	19.85 MB	Omniclass	01-08-2022 19:14		Michiel Lankamp	<input checked="" type="checkbox"/>
220729_DM2 - Interieur.ifc IFC file generated by GRAPHISOFT ARCHICAD 25.0.0 NED FULL Macintosh version (IFC add-on version: 4017 NED FULL); IFC2X3	14.84 MB	Omniclass	01-08-2022 17:50		Michiel Lankamp	<input checked="" type="checkbox"/>
220729_DM2 - Constructie.ifc IFC file generated by GRAPHISOFT ARCHICAD 25.0.0 NED FULL Macintosh version (IFC add-on version: 4017 NED FULL); IFC2X3	6.91 MB	NL-SfB	01-08-2022 19:15		Michiel Lankamp	<input checked="" type="checkbox"/>

General document

Name	Size	Last modified	Tags	Owner
Performance demo, 2022-11-23 NL.pdf	985.63 kB	23-11-2022 20:38		Michiel Lankamp
Performance demo, 2022-11-23 NL.xlsx	16.00 kB	23-11-2022 20:38		Michiel Lankamp
Performance demo, 2022/11/25 EN.pdf	955.37 kB	25-11-2022 09:25		Michiel Lankamp
Performance demo, 2022/11/25 EN.xlsx	15.88 kB	25-11-2022 09:25		Michiel Lankamp
Performance demo, 2022/11/30 EN.pdf	955.47 kB	30-11-2022 11:32		David Parker
Performance demo, 2022/11/30 EN.xlsx	15.88 kB	30-11-2022 11:32		David Parker



t
/ Testomgeving / Aquatreat /
Dossier Mass
Source file (BIM
General docu
No

Add file

File type *

Source file (BIM or Excel)

Classification method *

Select file(s) *

Only .ifc, .ifczip, .ifcxml or .xlsx files are allowed!

Select folder *

Bronbestanden

Tags (Press enter or tab to add)

Data sources and priority
Languages for enrichment *

English

Indicate to which sources in the Madaster platform the elements in the file to be uploaded should automatically be linked and in which order this should be done per element. To add or remove a source, select the '+' or 'x' sign at the end of a source name.

Available sources		Selected sources	
Madaster	+	Madaster Belgium	x
ÖKOBAUDAT-ÖBD_2021_II	+	EPEA Generic	x
IBU DATA	+		

Cancel

Save



Quality of source file

The accuracy and reliability of data in the Madaster platform starts with the source file. If the quality of the source file is lower and/or data is not complete, this will ensure that the Madaster platform is also less accurate and complete. It is therefore important to get the quality of the source file, the completeness of the information, as high as possible before it is read into the platform.

The overview below shows the quality of the uploaded source file, broken down into categories on the basis of which the Madaster platform will continue to process the file. This shows how many percent of the elements from the source file have a coding of a classification method. You also see the completeness of material allocation in the source file and the percentage of elements with geometric dimensions in the source file.

Make sure that these percentages are as high as possible before you use the file in the Madaster platform. Minimum guideline is 80%.

Percentage Classification methods



Percentage material assignment



Percentage geometric dimensions



Quality of matching process

The Madaster platform automatically links the elements that are present in the imported file to the existing materials and products in the platform. The result is shown in the overview below, divided into linked materials on the basis of number of elements and on the basis of volume. It also indicates from how many elements the mass is available. Here too, you can increase the percentage of automatically linked elements by increasing the quality of the imported file.

In the next step, Enrichment, you can manually link the non-automatically linked elements from the imported file to materials and products in the Madaster platform in order to increase the quality of the matching process.

Percentage Elements linked



Percentage Mass



Search

Progress enrichment

100%

Filter on

Element status ^

Linked 296

Unlinked 0

Building number v

Element calculation v

IFC-type v

Floors v

Building phase v

Classification methods v

Shearing Layer v

Unit dimension v

Element	Materials	Product / material	Quantity
*** Gevelkolom	Staalprofiel	*** Steel - Profile	1/1
*** Gevelkolom	Staalprofiel	*** Steel - Profile	1/1
*** Staalbalk dak	Staalprofiel	*** Steel - Profile	1/1
*** Staalbalk dak	Staalprofiel	*** Steel - Profile	1/1
*** 17 Paalfunderingen_Kolom_Kolom fundering	Gewapend beton C25/30 (2% wapening)	*** Reinforced concrete C25/30 (2% Reinforcement)	1/1
*** 17 Paalfunderingen_Kolom_Kolom fundering	Gewapend beton C25/30 (2% wapening)	*** Reinforced concrete C25/30 (2% Reinforcement)	1/1
*** Staalbalk dak	Staalprofiel	*** Steel - Profile	1/1
*** Gevelkolom	Staalprofiel	*** Steel - Profile	1/1
*** Gevelkolom	Staalprofiel	*** Steel - Profile	1/1
*** 17 Paalfunderingen_Kolom_Kolom fundering	Gewapend beton C25/30 (2% wapening)	*** Reinforced concrete C25/30 (2% Reinforcement)	1/1
*** 32_Deur_Glazen binnendeur			2/2
*** Staalbalk dak	Staalprofiel	*** Steel - Profile	1/1
*** Staalbalk dak	Staalprofiel	*** Steel - Profile	1/1
*** Staalbalk dak	Staalprofiel	*** Steel - Profile	1/1
*** Gevelkolom	Staalprofiel	*** Steel - Profile	1/1
*** Gevelkolom	Staalprofiel	*** Steel - Profile	1/1
*** Gevelkolom	Staalprofiel	*** Steel - Profile	1/1
*** 17 Paalfunderingen_Kolom_Kolom fundering	Gewapend beton C25/30 (2% wapening)	*** Reinforced concrete C25/30 (2% Reinforcement)	1/1
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*** 17 Paalfunderingen_Kolom_Kolom fundering	Gewapend beton C25/30 (2% wapening)	*** Reinforced concrete C25/30 (2% Reinforcement)	1/1
*** Staalbalk dak	Staalprofiel	*** Steel - Profile	1/1



Explorer display mode Storeys

- 220729 DM2 - Constructie.ifc
 - ▶ Begane grond
 - ▶ Fundering
- 220729 DM2 - Bouwkundig.ifc
 - ▶ 1e verdieping
 - ▶ Begane grond
 - ▶ Fundering
- 220729 DM2 - Interieur.ifc
 - ▶ Begane grond
- 220729 DM2 - Installaties.ifc
 - ▶ 1e verdieping
 - ▶ Begane grond
 - ▶ Fundering

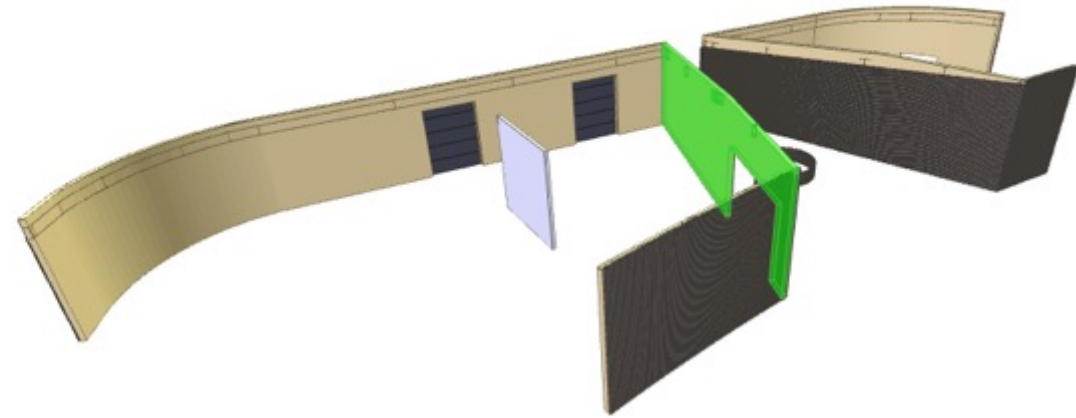


Bitumen

ID:	IJnc9R_ljGepp3kyXRwbp
Class:	IfcRoof
Type:	-
Name:	
Materials:	Bitumenfolie
Volume:	3.92 m³
Area:	561.68 m²
Height:	0.007 m
Width:	0 m
Length:	0 m
Building phase:	New materials
Shearing:	Skin
Layer:	
GTIN:	-
Product code:	-
Building number:	
Excluded:	
Product / material:	Bituminous sheeting



- ▶ IfcBeam
- ▶ IfcBuildingElementPart
- ▶ IfcBuildingElementProxy
- ▶ IfcColumn
- ▶ IfcSlab
- ▶ IfcWall
- ▼ 220729 DM2 - Bouwkundig.ifc
 - ▶ IfcBuildingElementPart
 - ▶ IfcBuildingElementProxy
 - ▶ IfcMember
 - ▶ IfcPlate
 - ▶ IfcRoof
 - ▶ IfcSlab
 - ▶ IfcWall
- ▼ 220729 DM2 - Interieur.ifc

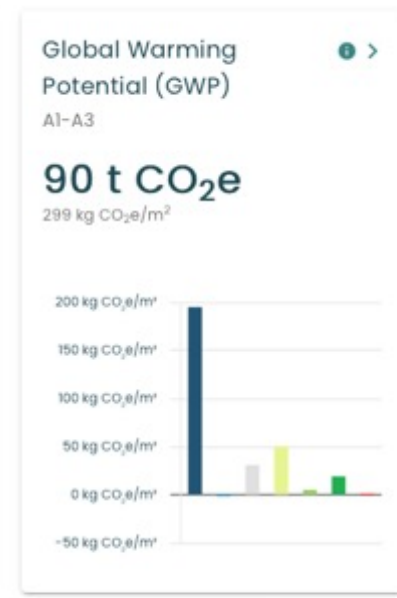
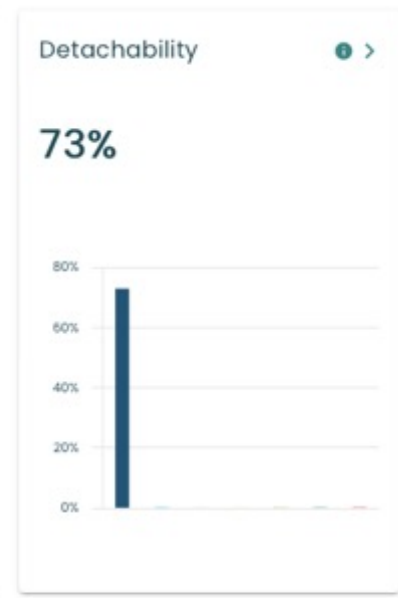
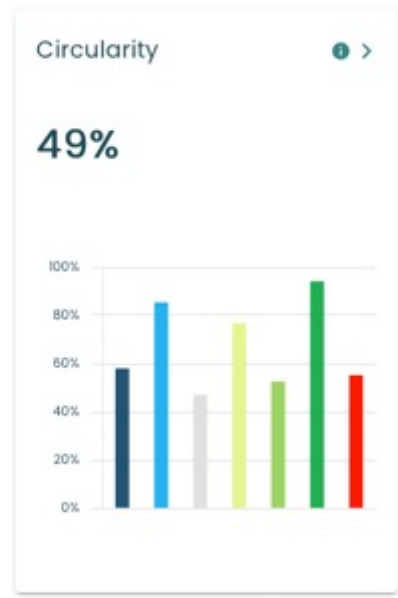


Minerale wol

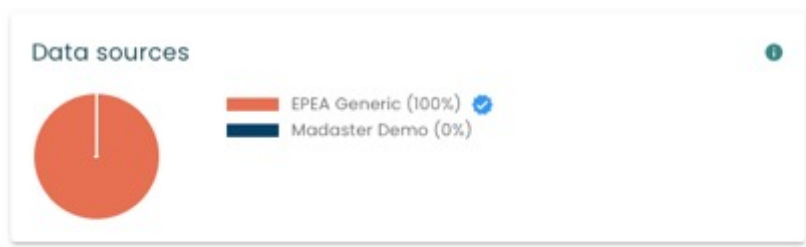
ID:	liuK\$HuJ7pigCrPWmv0lcO
Class:	IfcWall
Type:	Minerale wol (dakisolatie)
Name:	140
Materials:	Minerale wol (dakisolatie)
Volume:	5 m³
Area:	35.72 m²
Height:	3.849 m
Width:	0 m
Length:	11.977 m
Building phase:	Preserved
Shearing Layer:	Skin
GTIN:	-
Product code:	-
Building number:	
Excluded:	



Adjust your benchmark 🗑️



■ Structure
 ■ Skin
 ■ Services
 ■ Space plan
 ■ Stuff
 ■ Surroundings
 ■ Unknown



Mass 📌



651.61
t of materials

Material Intensity 📌



2.17
t/m²

Unknown 📌

0 (0%)
Elements unlinked

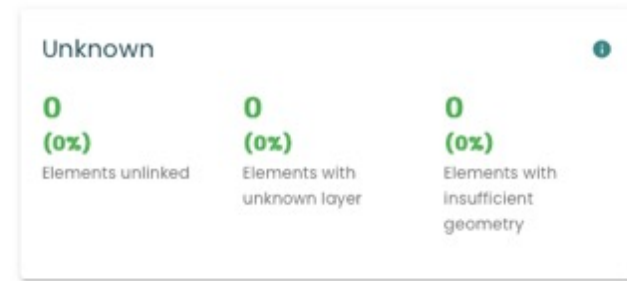
0 (0%)
Elements with unknown layer

0 (0%)
Elements with insufficient geometry

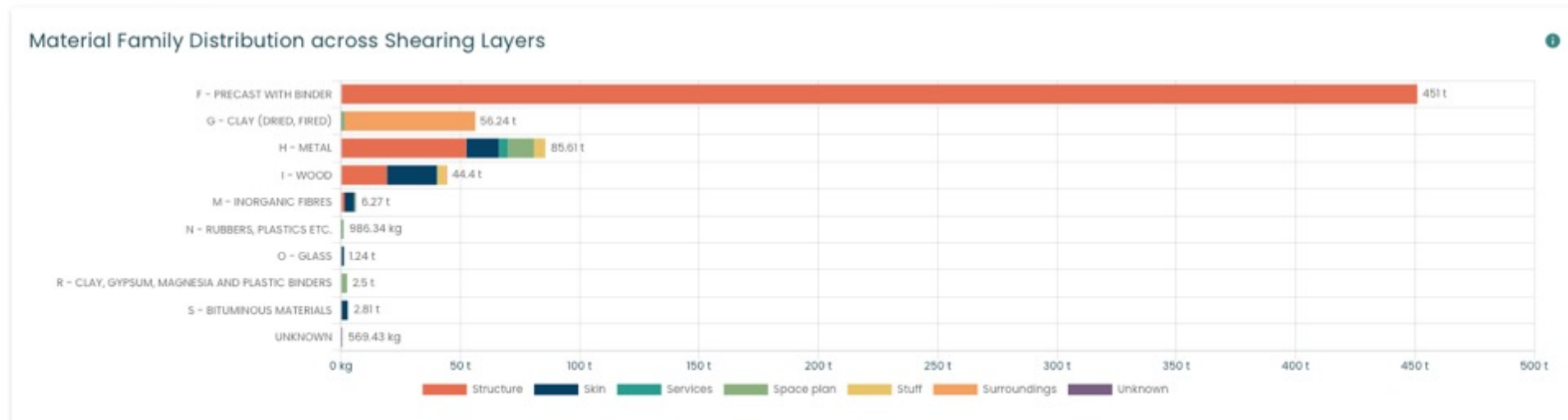
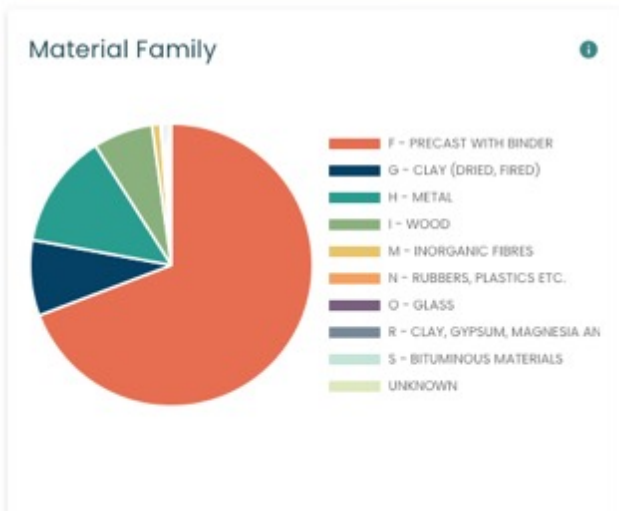
Matrix ▾

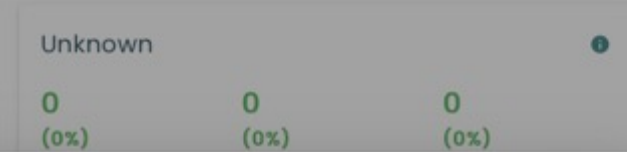
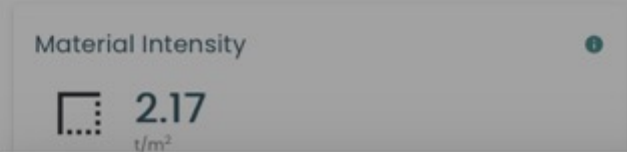
	Totals	Structure	Skin	Services	Space plan	Stuff	Surroundings	Unknown
Totals Products	651.61 t 3283	524.13 t 267	42.58 t 996	3.86 t 236	16.93 t 57	7.91 t 1969	55.63 t 157	569.43 kg 1
F - PRECAST WITH BINDER	69% 451 t 83 #	86% 451 t 82 #	0% 0 kg 0 #	0% 0 kg 0 #	0% 0 kg 0 #	0% 1.57 kg 1 #	0% 0 kg 0 #	0% 0 kg 0 #
G - CLAY (DRIED, FIRED)	9% 56.24 t 82 #	0% 0 kg 0 #	0% 0 kg 0 #	1% 55.24 kg 76 #	8% 1.42 t 5 #	0% 0 kg 0 #	98% 54.76 t 1 #	0% 0 kg 0 #



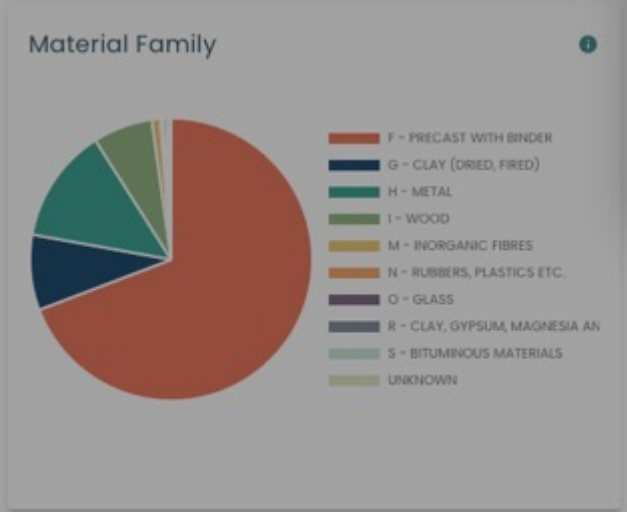


Material Family ▾





Material Family

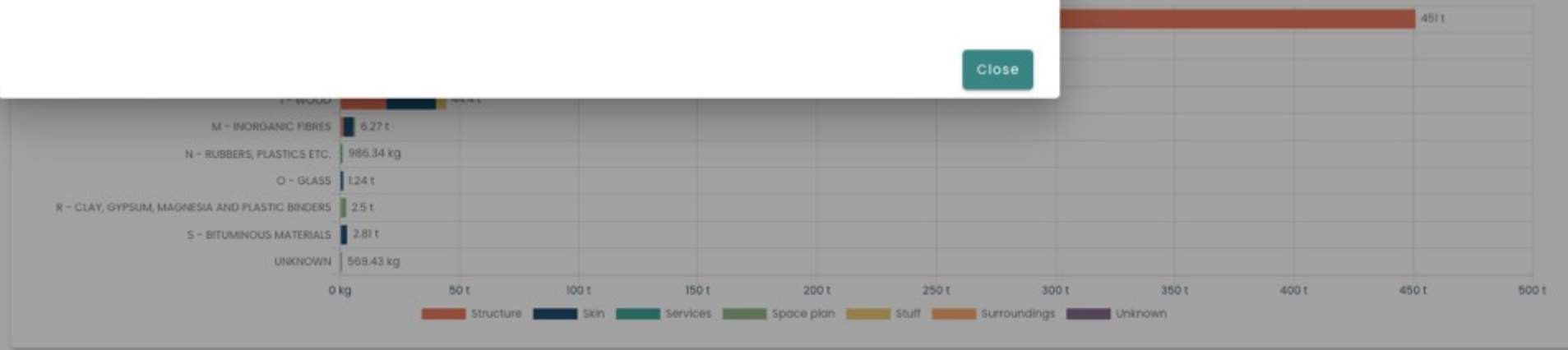


X Structure | F - PRECAST WITH BINDER

Products

Porous Concrete	👁 10 pieces		
Porous Concrete		4.33 m ³	1.65 t
Reinforced concrete C25/30 (2% Reinforcement)	👁 72 pieces		
Concrete C25/30		187.23 m ³	449.35 t

[Close](#)



Madaster Circularity Indicator (MCI) ⓘ >



Detachability ⓘ >

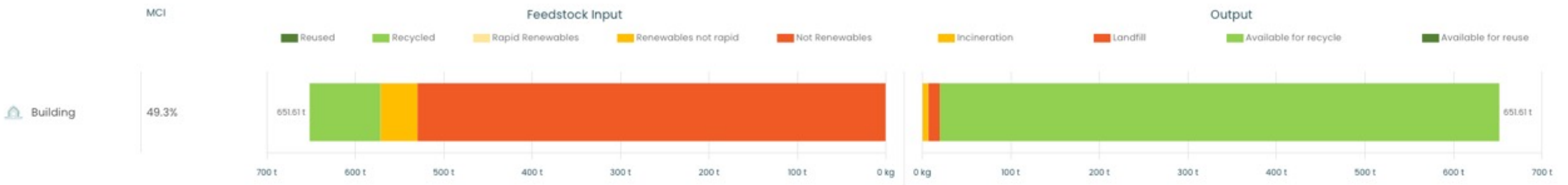


Unknown ⓘ



Total ▾

Material Flows ⓘ >



EN 15804:2012-04+A1 2013

Global Warming Potential (GWP)

Global Warming Potential (GWP)
A1-A3

89.75
t CO₂e
Lifetime (years): 50

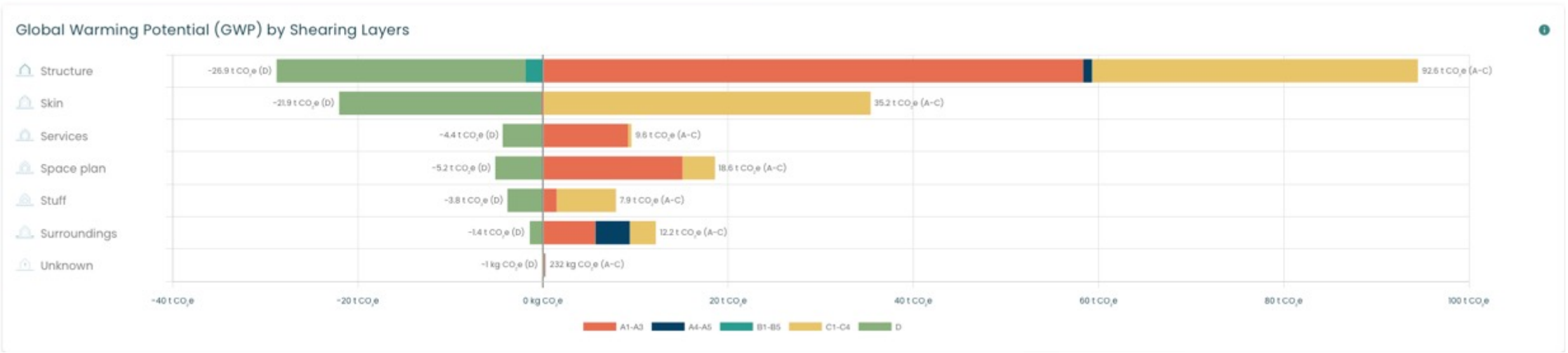
Global Warming Potential (GWP) per m²
A1-A3

299
kg CO₂e/m²

Unknown

0 (0%) Elements unlinked	1 (0%) Elements with unknown layer	762 (23.2%) Elements with insufficient geometry
---------------------------------------	---	--

Shearing Layer



EN 15804:2012-04+A1 2013

Global Warming Potential (GWP)

Global Warming Potential (GWP)
A1-A3

89.75
t CO₂e

Lifetime (years): 50

Global Warming Potential (GWP) per m²
A1-A3

299
kg CO₂e/m²

Unknown

0 (0%)
Elements unlinked

1 (0%)
Elements with unknown layer

762 (23.2%)
Elements with insufficient geometry

Material/Product

During the product stage (A1-A3), these materials emit the largest amount of Global Warming Potential (GWP).

A1-A3

A4-A5

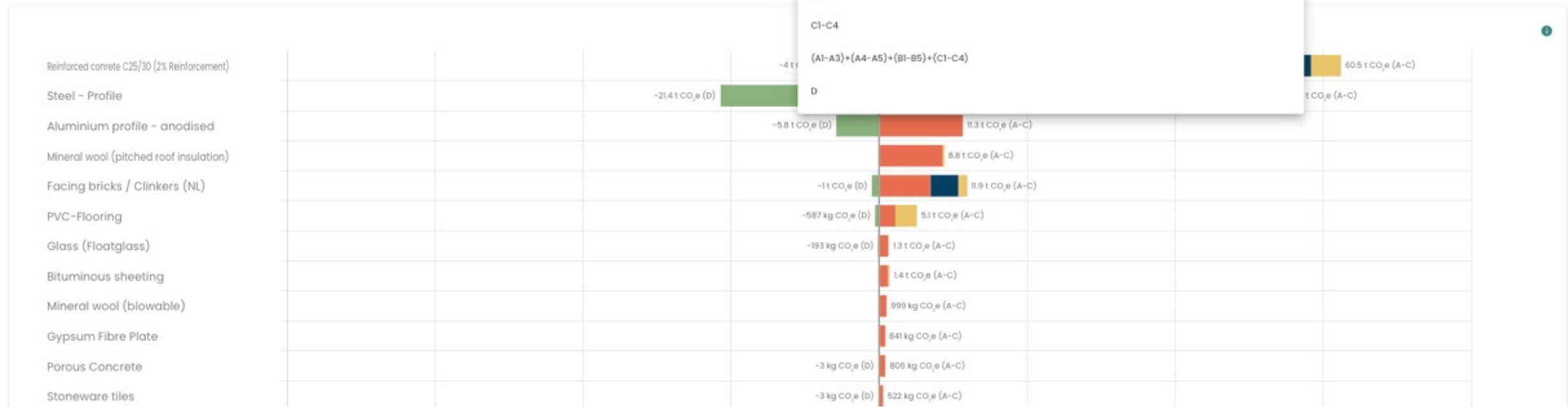
B1-B5

C1-C4

(A1-A3)+(A4-A5)+(B1-B5)+(C1-C4)

D

View in 3D



H - METAL, Aluminium profile - anodised



Detail overview

	Material type	Quantity	Last known value	Corrected nominal value	Value Mutation						
<input type="checkbox"/>	Total	85.61 t	-	€31K	7.79%						
<input checked="" type="checkbox"/>	Aluminium profile - anodised	1.05 t	€0.32/kg	€378	7.79%						
FC 1:	Demolition costs	€18	FC 2:	Transport costs	€82 (€ 0.08/kg)	FC 3:	Handling feedstock	€0 (€ 0/kg)	FC 4:	Correction feedstock	0%
<input type="checkbox"/>	Steel - Profile	54.56 t	€0.32/kg	€20K	7.79%						



Material Passport



Triodos Bank Zeist

This building is part of a circular future

New construction | Office | 40,000 m² | Amsterdam, Netherlands
Design phase: construction documents

Building Owner: **Triodos Bank**  Passport prepared by: **RAU Architects** 



Certifications: **BREEAM Excellent**  **WELL Silver** 



Madaster Belgium
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+32 473 53.20.59



Are you ready to take full material responsibility?

Meld je aan voor een gratis online demo op 9/12 om 10u (1,5u).

Mail naar info@madaster.be en ontvang de Teams-link.

Snelle beslissers profiteren tot 31/12 van een lanceerkorting van 10% op het eerste jaar.

madaster.be