

# Madaster Release notes

2023

Made for  
Madaster users

Date  
16 February 2023

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## 1 Releases

Release	Build number	Release date
2023.1	19298	16 February 2023

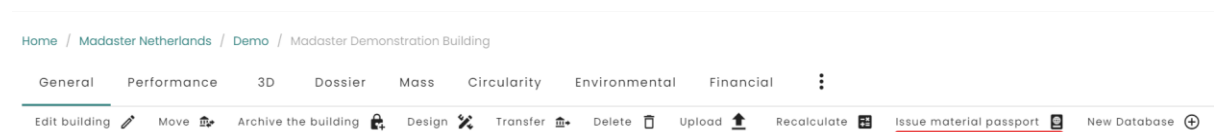
## 2 New or changed functionalities

### 2.1 New material passport options and design

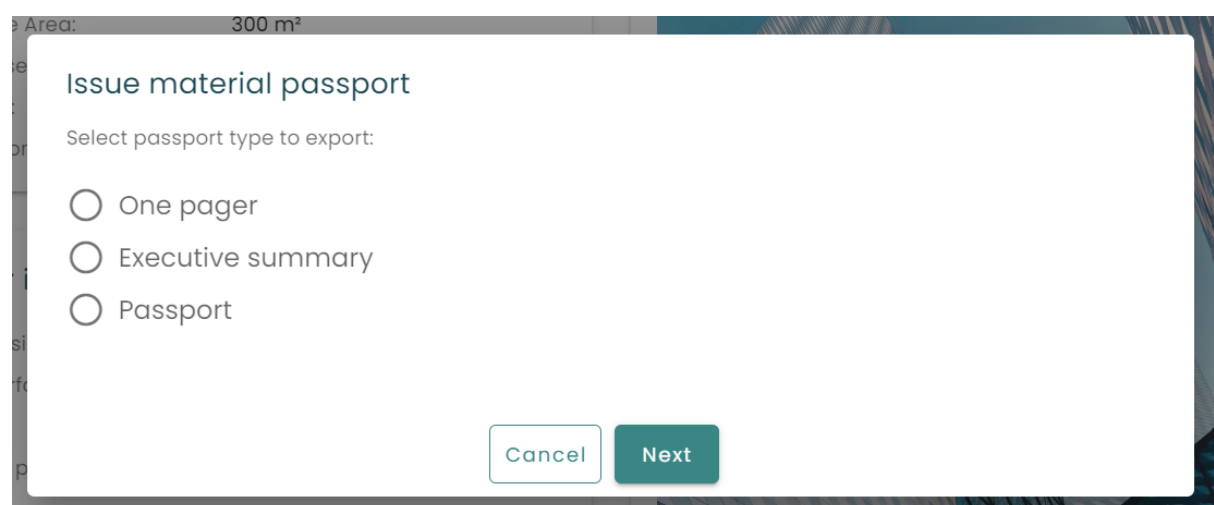
In this release, the material passports have been redesigned. They have a different look and feel as well as new options. There are different types of passports now: the one-pager, an executive summary and a (full) passport that can include a technical annex with the base data in an excel file. Apart from that it is now possible to preset what data can be included in the passport, such as the Madaster Circularity Index or any of the environmental KPI's.

#### 2.1.1 Issuing and generating a passport

The option to generate passports from a folder has been removed; this can now only be done from the building.



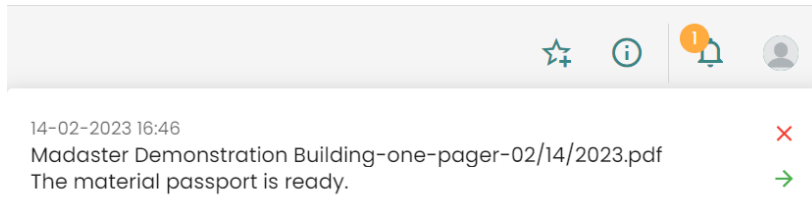
Once selected, this will open a pop-up from which it is possible to choose the type of passport to be generated for this building.



Regardless of the type, once the passport setup has been chosen a message is shown that the passport is being generated.

The material passport is being created. A notification will appear when the process is ready.

And as soon as it is ready a user notification is shown.



1: the notification which will appear on the top right when a passport is ready. Clicking the 'x' will remove the notification, clicking the arrow will open the dossier where the passport is located.


Which means it is available in the dossier of the building. Note that if data is unavailable for a chosen KPI or for a default field it will not appear in the passport.

### 2.1.2 One pager


The one pager passport is meant to give a concise overview of the building without too much additional insights. It can include only few items, since it needs to fit on one page. Therefore only a maximum of 5 KPI's can be included. Mass will always be included, which leaves 4 more options for configuration.


2: the one pager screen with too many KPI's selected

The one pager has the following design:



Material passport  
**Madaster Demonstration Building**





OWNER  
Circular Holdings

PREPARED BY  
Circular Architects

ADDRESS  
Circularity Street 123  
12345 Amsterdam  
Netherlands

GROSS SURFACE AREA  
300 m<sup>2</sup>


Material Intensity	2.17 t / m <sup>2</sup>	Material intensity measures the amount of materials used per m <sup>2</sup> .
Circularity	49%	Circularity measures the degree of secondary materials used during construction, and potential for reuse & recycling at their end of use.
Detachability	73%	Detachability measures the degree to which materials and products can be disassembled without being damaged.
Current value per m <sup>2</sup>	48 €/m <sup>2</sup>	Current value measures the monetary value of the raw materials at this moment in time, accounting for the costs of disassembly, transportation and processing for re-sale.
Embodied Carbon (GWP)	299 kg CO <sub>2</sub> e/m <sup>2</sup>	The total environmental impact for A1-A3 (EN 15804).

**Madaster**


This Passport was created using Madaster - the online register for materials and products in the built environment. In Madaster, data is recorded on all materials and products used in a real estate or infrastructure object, providing insight into an object's material composition, circularity, detachability, environmental impact, and material value at end of life. Documenting materials in such a manner enables a better future with more material reuse, less impact on natural ecosystems, and less CO<sub>2</sub> emissions.

**Disclaimer**

This Material Passport was realized without any intervention by (personnel and/or employees of) Madaster Services B.V. (hereinafter referred to as: 'Madaster') and/or the Madaster Foundation and is the sole and exclusive result of data imported by, or on behalf of the user, from the user's source files. Consequently, Madaster cannot be held accountable in any way for the incorrect, and/or incomplete and/or injudicious entry by the user of the required information.



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3: an example of the one pager passport. Only known data is shown. Elements like the building picture or the owner are included by default, the KPI's be chosen apart from mass – which is mandatory.

### 2.1.3 Executive summary passport

The executive summary is meant to give a lot more information than the one pager. It does not have a set maximum for the KPI's to be included.

Issue material passport

Default

Select preferences

☒ Mass

☒ Circularity ☒ MCI ☒ Material Flows

☒ Detachability

<input checked="" type="checkbox"/> Environmental	Compliance EN 15804:2012-04...	Phase A1-A3	Key Performance Indicator Embodied Carbon (GWP)	=
<input checked="" type="checkbox"/> Environmental	Compliance EN 15804:2012-04...	Phase B1-B5	Key Performance Indicator Use of renewable primary energy resources used as raw ..	=
<input checked="" type="checkbox"/> Environmental	Compliance EN 15804:2012-04...	Phase A-C	Key Performance Indicator Abiotic Depletion Non Fossil (ADPE)	=
<input type="checkbox"/> Environmental	Compliance	Phase	Key Performance Indicator	+

☒ Financial ☒ Net Present Value (NPV) ☒ Current value

Language  
English

Back OK

But also in general it contains more detailed information.

**Material passport**  
**Madaster Demonstration Building**

ADDRESS  
Circularity Street 123  
12345 Amsterdam  
Netherlands

OWNER  
Circular Holdings

PREPARED BY  
Circular Architects

PUBLISHED ON  
2/14/2023

**Material passport**  
**Madaster Demonstration Building**  
**General information**

<b>Building</b> NAME Madaster Demonstration Building ADDRESS Circularity Street 123 12345 Amsterdam Netherlands DELIVERY DATE 9/22/2022 GROSS SURFACE AREA 300 m <sup>2</sup> BUILDING PHASE New building LOCAL Community (Conference complex/small complex + 2000 m <sup>2</sup> )	<b>Building owner</b> NAME Circular Holdings ADDRESS Reuse Street 123 12345 Amsterdam Netherlands	<b>Cadaster information</b> CADASTRAL DEPARTMENT Amsterdam 1234 CADASTRAL SURFACE AREA 700 m <sup>2</sup> LOT NUMBER 1234
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**Labels**  
BREEAM  
Excellent  
MAXIMAL APO SCORE  
12 k(m<sup>2</sup>/y)

**Energy**  
ENERGY LABEL  
A+++

**Lifespan**  
EXPECTED LIFESPAN BUILDING (YEARS)  
60  
EXPECTED LIFESPAN STRUCTURE (YEARS)  
100  
EXPECTED LIFESPAN SKIN (YEARS)  
20  
EXPECTED LIFESPAN SERVICES (YEARS)  
15  
EXPECTED LIFESPAN SPACE PLANS (YEARS)  
10  
EXPECTED LIFESPAN STAFF (YEARS)  
5  
EXPECTED LIFESPAN SUBSIDIARIES (YEARS)  
20

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4: In the executive summary a lot more general information from the building is shown - if available

## Material passport Madaster Demonstration Building Source Information

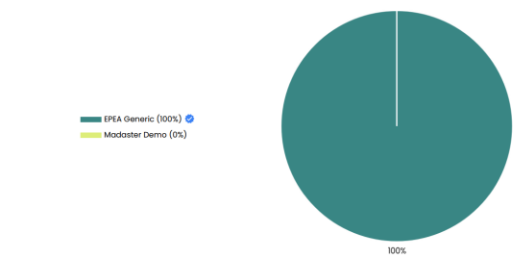
### Sources

Madaster primarily uses IFC building files to calculate the material quantities. To do this, you must include the "base quantities" of the objects in the export. The objects must be assigned a material property, as well as a classification code. Madaster does not calculate quantities: all geometric information and all quantities are imported directly from the IFC model. On the Madaster Platform, the quality of the source files is displayed under "Source file quality". All calculations on the Madaster Platform are made within these frameworks. Consequently, any missing and/or incomplete and/or incorrect information in the source files immediately results in inaccurate results. Therefore, Madaster cannot warrant the quality of these results. As a secondary source of information, a Microsoft Excel file (based on a Madaster Excel template) can be imported containing geometric information about the building, information on the building parts and/or components, materials, as well as classification codes.

### Active Source files

Name	Classification method	Date exported
220729 DM2 - Installatie.ifc	Omniclass	8/1/2022
220729 DM2 - Bouwkundig.ifc	Omniclass	8/1/2022
220729 DM2 - Interieur.ifc	Omniclass	8/1/2022
220729 DM2 - Constructie.ifc	NL-SB	8/1/2022

### Applied Material and Product Databases



### Completeness of Source Information

0 (0%) Elements unlinked	0 (0%) Elements with unknown layer	762 (23.2%) Elements with insufficient geometry
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## Material passport Madaster Demonstration Building Mass

Total mass and mass/m<sup>2</sup> demonstrate the quantity and intensity of materials temporarily stored within the building. While mass cannot be eliminated, the goal is to use less materials to achieve the same goal.

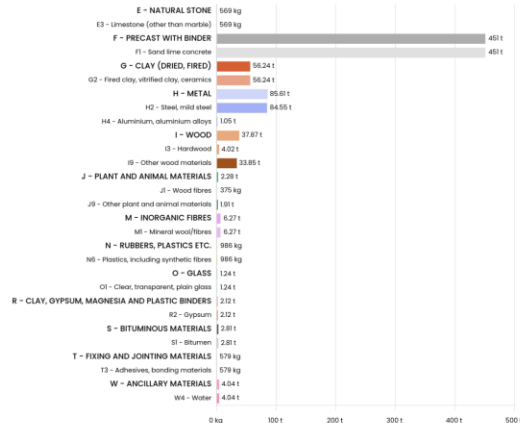
651.61 t

2.17 t/m<sup>2</sup>

### Construction Materials

The building is comprised of material subfamilies, grouped into the following material families.

### Material families



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5: Source information like the classification method for the source files or the used databases is summarized. Each KPI, in this case the mass, is provided with insightful charts.

## 2.1.4 Full passport and the technical annex

The (full) passport is the most extensive passport option. It shows a lot more of the underlying data and it also has the option to include a technical annex, which is a separate excel export of the products and/or materials per shearing layer.

Issue material passport
Default

Select preferences

☒ What is a Material Passport?

☒ Mass

☒ Circularity
☒ MCI
☒ Material Flows
☒ Scarcity

☒ Detachability

☒ Environmental
Compliance: EN 15804:2...
Phase: At-A1
Key Performance Indicator: Embodied Carbon (GWP)

☐ Environmental
Compliance:
Phase:
Key Performance Indicator:

☒ Financial
☒ Net Present Value (NPV)
☒ Current value

☒ Technical Annex

Language: English

Back
Save

6: the configuration options for the full passport. It is possible to exclude the explanation about a material passport and to also generate the technical annex. Scarcity is also an additional option for the full passport, but is only available together with material flows.



**Material mass breakdown**

**Total mass and mass/m²:** 651.61 t, 2.17 t/m²

**Construction Materials**

The building is comprised of material subfamilies, grouped into the following material families.

**Material families**

Material Family	Mass (kg)
<b>E - NATURAL STONE</b>	569 kg
E1 - Limestone (other than marble)	569 kg
<b>F - PRECAST WITH BINDER</b>	451 t
F1 - Sand lime concrete	451 t
<b>G - CLAY (DRIED, FIRED)</b>	56.24 t
G2 - Fired clay, vitrified clay, ceramics	56.24 t
<b>H - METAL</b>	85.61 t
H2 - Steel, mild steel	84.55 t
H4 - Aluminium, aluminium alloys	1.05 t
I - WOOD	17.81 t
I3 - Hardwood	4.02 t
I8 - Other wood materials	33.85 t
<b>J - PLANT AND ANIMAL MATERIALS</b>	375 kg
J1 - Wood fibres	375 kg
J8 - Other plant and animal materials	1.81 t
<b>M - INORGANIC FIBRES</b>	6.27 t
M1 - Mineral wool/fibres	6.27 t
<b>N - RUBBERS, PLASTICS ETC.</b>	886 kg
N8 - Plastics, including synthetic fibres	886 kg
<b>O - GLASS</b>	124 t
O1 - Clear, transparent, plain glass	124 t
<b>R - CLAY, GYPSUM, MAGNESIA AND PLASTIC BINDERS</b>	2.02 t
R1 - Gypsum	2.02 t
<b>S - BITUMINOUS MATERIALS</b>	2.81 t
S1 - Bitumen	2.81 t
<b>T - FIXING AND JOINTING MATERIALS</b>	579 kg
T3 - Adhesives, bonding materials	579 kg
<b>W - ANCILLARY MATERIALS</b>	4.04 t
W4 - VULNER	4.04 t

**Material passport**

## Madaster Demonstration Building

### Mass by Shearing Layer

**Shearing Layers**

Madaster uses the "Shearing Layers" model [Duffy, Brand, 1994] to divide a building into 6 layers: Site, Structure, Skin, Services, Space Plan, and Stuff.

**Material families**

The 3283 unique materials comprising the building have been grouped into 28 material families.

Layer	Material Families	Mass (t)
Structure	Structure	80%
Skin	Skin	7%
Services	Services	3%
Space plan	Space plan	9%
Stuff	Stuff	3%
Surroundings	Unknown	0%

**Layer Composition**

Layer	Material Families	Mass (t)
Structure	Structure	569 kg
Skin	Skin	42,58 t
Services	Services	3,85 t
Space plan	Space plan	15,93 t
Stuff	Stuff	7,91 t
Surroundings	Unknown	93,83 t

**Material Families**

- E - NATURAL STONE
- F - PRECAST WITH BINDER
- O - CLAY (DRIED, FIRED)
- H - METAL
- I - WOOD
- J - PLANT AND ANIMAL MATERIALS
- M - INORGANIC FIBRES
- N - RUBBERS, PLASTICS ETC.
- G - GLASS
- B - CLAY, GYPSUM, MAGNESIA AND PLASTIC BINDERS
- S - BITUMINOUS MATERIALS
- T - FIXING AND JOINTING MATERIALS
- W - ANCILLARY MATERIALS

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### Material passport

## Madaster Demonstration Building

# Mass by Material Families

**Material families**

Material Family	Percentage
E - NATURAL STONE	69%
F - PRECAST WITH BINDER	13%
G - CLAY (DRIED, FIRED)	9%
H - METAL	1%
I - WOOD	1%
J - PLANT AND ANIMAL MATERIALS	1%
K - INORGANIC FIBRES	1%
L - RUBBERS, PLASTICS ETC.	1%
O - GLASS	1%
R - CLAY, GYPSUM, MAGNESIA AND PLASTIC BINDERS	1%
S - BITUMINOUS MATERIALS	1%
T - FINING AND JOINTING MATERIALS	1%
W - ANCILLARY MATERIALS	1%

**Material Family Allocation Across Building Shearing Layers**

Material Family	Mass (kg)
E - NATURAL STONE	569
F - PRECAST WITH BINDER	461
G - CLAY (DRIED, FIRED)	56,241
H - METAL	45,811
I - WOOD	17,871
J - PLANT AND ANIMAL MATERIALS	2,201
K - INORGANIC FIBRES	6,271
L - RUBBERS, PLASTICS ETC.	985
O - GLASS	1,241
R - CLAY, GYPSUM, MAGNESIA AND PLASTIC BINDERS	2,101
S - BITUMINOUS MATERIALS	2,011
T - FINING AND JOINTING MATERIALS	5,79
W - ANCILLARY MATERIALS	4,541

**Legend:**

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

Material family		Total	Structure	Skin	Services	Space plan	Stuff	Surroundings	Unseen
E - NATURAL STONE	0.1%	0%	0%	0%	0%	0%	0%	0%	0.1%
	569 kg	0 kg	0 kg	0 kg	0 kg	0 kg	0 kg	0 kg	569 kg
E3 - Limestone (other than marbles)	0.1%	0%	0%	0%	0%	0%	0%	0%	0.1%
	569 kg	0 kg	0 kg	0 kg	0 kg	0 kg	0 kg	0 kg	569 kg
F - PRECAST WITH BINDER	69.2%	69.2%	0%	0%	0%	0%	0%	0%	0%
	451 t	451 t	0 kg	0 kg	0 kg	2 kg	0 kg	0 kg	0 kg
F1 - Sand lime concrete	69.2%	69.2%	0%	0%	0%	0%	0%	0%	0%
	451 t	451 t	0 kg	0 kg	0 kg	2 kg	0 kg	0 kg	0 kg
O - CLAY (BRED, FIRED)	8.6%	0%	0%	0%	0.2%	0%	8.4%	0%	0%
	56,34 t	0 kg	0 kg	55 kg	1,42 t	0 kg	54,76 t	0 kg	0 kg
O2 - fired clay, vitrified clay, ceramics	8.6%	0%	0%	0%	0.2%	0%	8.4%	0%	0%
	56,34 t	0 kg	0 kg	55 kg	1,42 t	0 kg	54,76 t	0 kg	0 kg
H - METAL	13.7%	0%	2.3%	6.6%	1.7%	0.7%	0%	0%	0%
	85,61 t	52,43 t	11,01 t	3,7 t	11,01 t	4,79 t	0 kg	0 kg	0 kg
H2 - Steel, mild steel	13.7%	0%	2.3%	6.6%	1.7%	0.7%	0%	0%	0%
	84,55 t	52,43 t	12,1 t	3,5 t	12,1 t	4,79 t	0 kg	0 kg	0 kg
H4 - Aluminum, aluminum alloys	0.2%	0%	0%	0%	0%	0%	0%	0%	0%
	125 t	0 kg	595 kg	535 kg	0 kg	0 kg	0 kg	0 kg	0 kg
I - WOOD	5.6%	2.8%	2.8%	0%	0%	0.2%	0%	0%	0%
	37,87 t	18,91 t	18,91 t	0 kg	0 kg	264 kg	121 t	871 kg	0 kg
I2 - Hardwood	0.6%	0%	0.2%	0%	0%	0.2%	0%	0%	0%
	4,02 t	18 kg	1,82 t	0 kg	0 kg	121 t	871 kg	0 kg	0 kg
I5 - Other wood materials	5.2%	2.6%	2.6%	0%	0%	0%	0%	0%	0%
	33,85 t	16,91 t	16,89 t	0 kg	0 kg	264 kg	0 kg	0 kg	0 kg
J - PLANT AND ANIMAL MATERIALS	0.4%	0%	0%	0%	0%	0.3%	0%	0%	0%
	2,38 t	0 kg	0 kg	0 kg	0 kg	375 kg	1,81 t	0 kg	0 kg
J1 - Wood fibres	0.1%	0%	0%	0%	0%	0.1%	0%	0%	0%
	375 kg	0 kg	0 kg	0 kg	0 kg	375 kg	0 kg	0 kg	0 kg
J8 - Other plant and animal materials	0.3%	0%	0%	0%	0%	0%	0.3%	0%	0%
	1,81 t	0 kg	0 kg	0 kg	0 kg	1,81 t	0 kg	0 kg	0 kg
M - INORGANIC FIBRES	1%	0.2%	0.8%	0%	0%	0%	0%	0%	0%
	6,21 t	1,48 t	4,03 t	0 kg	755 kg	0 kg	0 kg	0 kg	0 kg
M1 - Mineral wool/fibres	1%	0.2%	0.8%	0%	0%	0%	0%	0%	0%
	4,57 t	1,48 t	4,53 t	0 kg	755 kg	0 kg	0 kg	0 kg	0 kg
N - RUBBERS, PLASTIC ETC.	0.2%	0%	0%	0%	0%	0%	0%	0%	0%
	985 kg	0 kg	0 kg	107 kg	880 kg	0 kg	0 kg	0 kg	0 kg
N5 - Plastics, including synthetic fibres	0.2%	0%	0%	0%	0%	0%	0%	0%	0%
	985 kg	0 kg	0 kg	107 kg	880 kg	0 kg	0 kg	0 kg	0 kg
O - GLASS	0.2%	0%	0.2%	0%	0%	0%	0%	0%	0%
	1,24 t	0 kg	1,24 t	0 kg	0 kg	0 kg	0 kg	0 kg	0 kg
O1 - Clear, transparent, plain glass	0.2%	0%	0.2%	0%	0%	0%	0%	0%	0%
	1,24 t	0 kg	1,24 t	0 kg	0 kg	0 kg	0 kg	0 kg	0 kg
O - CLAY, GLASS, MYRAGRES AND PLASTIC BINDER	0.3%	0%	0%	0%	0.3%	0%	0%	0%	0%
	2,52 t	0 kg	0 kg	0 kg	2,52 t	0 kg	0 kg	0 kg	0 kg
O2 - Styrofoam	0.3%	0%	0%	0%	0%	0%	0%	0%	0%
	2,52 t	0 kg	0 kg	0 kg	2,52 t	0 kg	0 kg	0 kg	

## Material passport

# Madaster Demonstration Building

### Madaster Circularity Indicator (MCI)

Circularity measures the degree of secondary materials used during construction, and potential for reuse & recycling at their end of use.

**Madaster Circularity Indicator (MCI)**

The Madaster Circularity Indicator (MCI) assesses the total circularity of a building based on three phases: 1) input in the construction process, 2) the utility during the use phase, and 3) the destination of the materials at the end-of-life phase. A building with a high score is constructed with reused and recycled materials and has a higher-than-average utility. A fully circular building has a score of 100%. The MCI is based on the Material Circularity Indicator that has been developed by the Ellen MacArthur Foundation. All rights reserved.

**MCI Calculation Components**

12%

Circularity Construction Phase  
Secondary materials (goal: 100%)

&

115%

Circularity Use Phase  
Utility (goal: 100%)

&

97%

Circularity End-of-Life Phase  
Recoverable content (goal: 100%)

=

64%

CI building score

64%

CI building score

x

77%

Penalty for unknown materials  
(% of elements with known materials)

=

49%

Madaster Circularity Indicator (MCI) Score

## Material passport

# Madaster Demonstration Building

### Circularity Construction Phase

	Structure	Skin	Services	Space plan	Stuff	Surroundings	Unknown
Secondary materials (goal: 100%)	9%	34%	77%	60%	53%	3%	0%
	47.12 t	14.31 t	2.98 t	10.12 t	4.81 t	1.62 t	0 kg
Mass of product (t)	524.13 t	42.58 t	3.86 t	16.93 t	7.81 t	55.63 t	569 kg
<b>Mass Composition</b>							
Applied recycled materials (% of mass)	0%	34%	77%	60%	53%	3%	0%
	47.12 t	14.31 t	2.98 t	10.12 t	4.81 t	1.62 t	0 kg
Applied rapidly renewable material (% of mass)	0%	0%	0%	0%	0%	0%	0%
	0 kg	0 kg	0 kg	0 kg	0 kg	0 kg	0 kg
Applied reused components (% of mass)	0%	0%	0%	0%	0%	0%	0%
	0 kg	0 kg	0 kg	0 kg	0 kg	0 kg	0 kg
<b>Recycling</b>							
Efficiency of recycling process for construction phase (%)	100%	100%	100%	100%	100%	100%	0%
Mass of waste generated during recycling process (t)	0 kg	0 kg	0 kg	0 kg	0 kg	0 kg	0 kg

### Circularity Use Phase

	Structure	Skin	Services	Space plan	Stuff	Surroundings	Unknown
Utility (goal: 100%)	97%	304%	334%	532%	777%	742%	83%
Actual average lifetime of materials (years)	67	61	50	53	39	148	50
Actual industry-average lifetime of materials (years)	100	20	15	10	5	20	60

### Circularity End-Of-Life Phase

	Structure	Skin	Services	Space plan	Stuff	Surroundings	Unknown
Recoverable content (goal: 100%)	99%	82%	93%	72%	58%	99%	100%
	524.12 t	34.72 t	3.57 t	12.24 t	4.55 t	55.09 t	569 kg
Mass of product (t)	524.13 t	42.58 t	3.86 t	16.93 t	7.81 t	55.63 t	569 kg
<b>Mass Composition</b>							
Materials for recycling which are going to be collected (% of mass)	99%	82%	93%	72%	58%	99%	100%
	524.12 t	34.72 t	3.57 t	12.24 t	4.55 t	55.09 t	569 kg
Components for reuse which are going to be collected (% of mass)	0%	0%	0%	0%	0%	0%	0%
	0 kg	0 kg	0 kg	0 kg	0 kg	0 kg	0 kg
Mass of potential landfill & energy incineration (t)	3 t	7.86 t	296 kg	4.69 t	3.38 t	548 kg	0 kg
<b>Recycling</b>							
Efficiency of recycling process for end of life phase (%)	100%	100%	100%	100%	100%	100%	0%
Mass of potential landfill & energy incineration of the recycling process (t)	0 kg	0 kg	0 kg	0 kg	0 kg	0 kg	0 kg

Tuesday, February 14, 2023

madaster

Tuesday, February 14, 2023

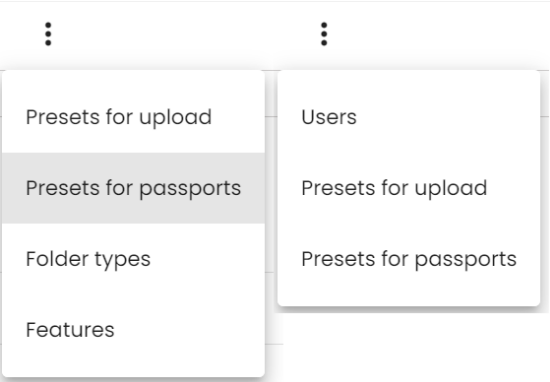
madaster

[illegible]

Page 10

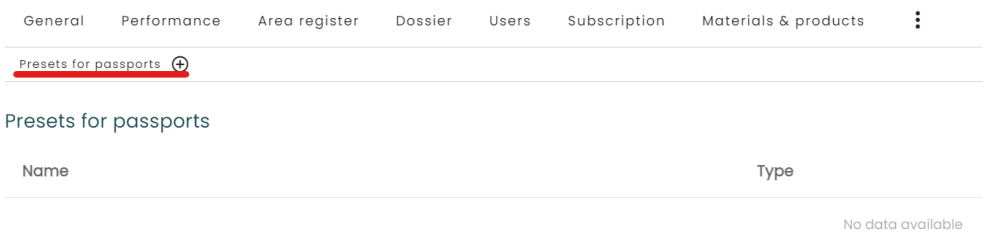
### 2.1.5 Passport presets

Since it is now possible to select the data you want to include in the passport, functionality has been added to preset your own default KPI's. This can only be done by the Madaster administrator. The presets are available on account, folder and building level. Normally only the presets at the account level are available, but it is possible to break this inheritance in case the presets at a lower level should be different.



9: presets for passports can be picked at the three vertical dots on accounts, folders or buildings

In this screen it is possible to add a new preset



Once clicked a new popup will open where it is possible to define this new preset. All the options for the KPI's you have on the regular passport screen can be filled in here as well as a name for your preset and of course for which passport type it is.

This new preset will then be an option when you generate a new passport of that type

Issue material passport

One pager Madaster

Default

Select preferences

☒ Mass

☒ Circularity

☒ MCI

☐ Detachability

☐ Environmental

Comp.▼

Phase▼

Key Performance Indicat...▼

+

☐ Financial

☐ Net Present Value (NPV)

☐ Current value

Language

English▼

Back

OK

10: Options at the top of the screen for generating a passport. “Default” is the default from the Madaster platform.

Now, to have different presets on for example the building level it is possible to break the inheritance

GeneralPerformance3DDossierMassCircularityEnvironmentalFinancial⋮

Break inheritance

Presets for passports

Name	Type
One pager Madaster	One pager

Rows per page: 101-1 of 1<>

This will make a copy of the current presets, but they can be edited or deleted

Presets for passports

Name	Type
One pager Madaster	One pager

It is also possible to restore the inheritance. This will, however, delete the presets on this level.

Presets for passports

Restore inheritance from parent level.

Presets for passports

Name	Type
One pager Madaster	One pager

## 2.1.6 Generate passport options when splitting, transferring or archiving

It is possible to generate a passport when splitting, transferring or archiving buildings

### Split the building

Prefix for building name (Will be concatenated with Building Number) \*

Split test

Choose building numbers \*


Choose passport types to generate

☐ One pager

☐ Executive summary

☐ Passport

Language

 English

CancelSplit

## 2.2 Other changes

### 2.2.1 New feature: 3D insights on circularity and environmental tabs of a building

A new feature has been added to the platform, which when bought will give 3D insights on circularity and environmental information of the materials/products of a building.

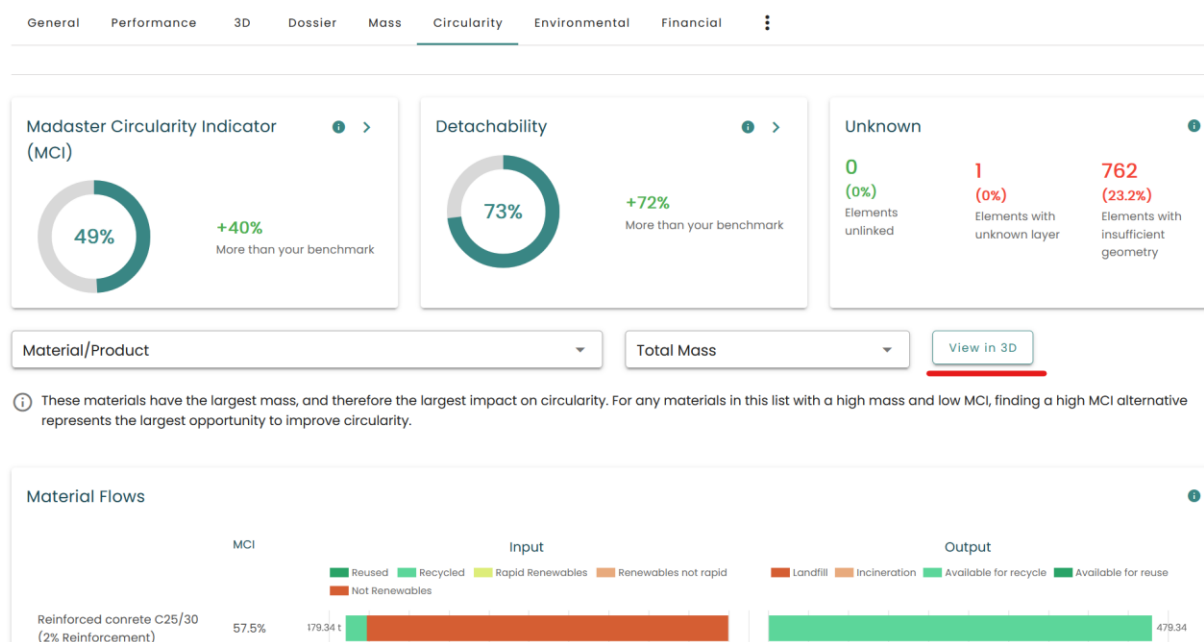


Figure 11: in the circularity and environmental tabs it is now possible to view the materials/products in the 3D model by using this button

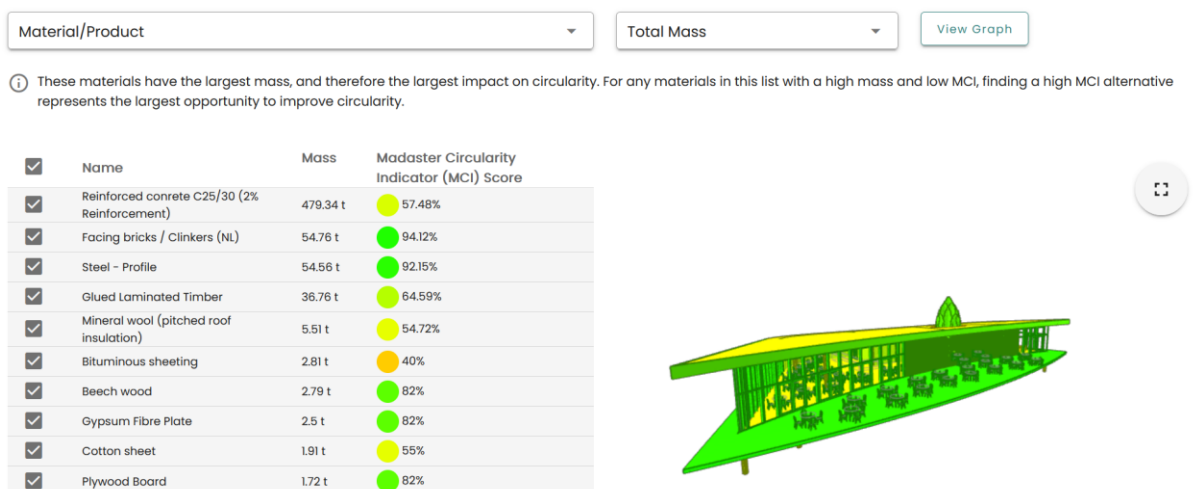
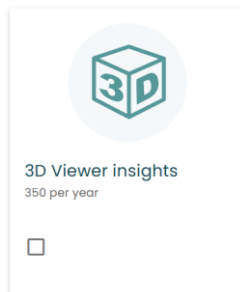


Figure 12: when using the 3D button the graph will change to the 3D model where it is also possible to select certain materials or products. With the view graph button it will switch back to the graph.

The 3D insights can be bought from the subscription tab on the account.

#### Choose Features



When the feature is not active a preview is shown when clicking the ‘view in 3D button’ in the circularity or environmental tabs.

Material/Product:  Total Mass:  [View Graph](#)

ⓘ These materials have the largest mass, and therefore the largest impact on circularity. For any materials in this list with a high mass and low MCI, finding a high MCI alternative represents the largest opportunity to improve circularity.

<input checked="" type="checkbox"/>	Name	Mass	Madaster Circularity Indicator (MCI) Score
<input checked="" type="checkbox"/>	Zyrkonite	278.36 t	0%
<input checked="" type="checkbox"/>	Plaster board	47.56 t	0%
<input checked="" type="checkbox"/>	Plywood Board	14.18 t	32.5%
<input checked="" type="checkbox"/>	Cabinet of Wonders	256 kg	73%
<input checked="" type="checkbox"/>	Buffalo Bill oM	191.71 kg	0%

Interested in 3D insights? Buy the '3D viewer' feature to enable this functionality.

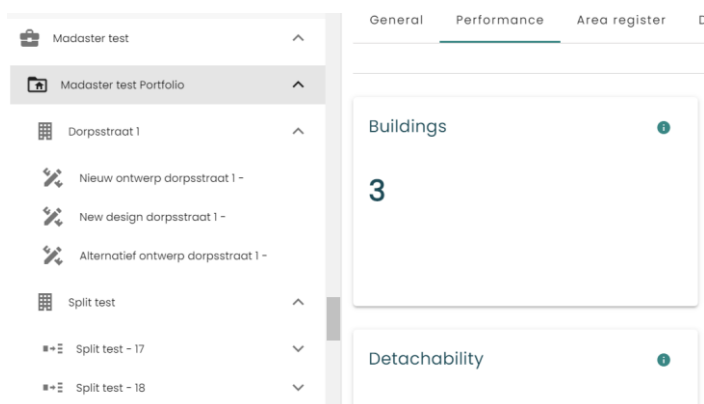
[Subscription](#)

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## 2.2.2 Designs, archived and split buildings in the performance tab and area register

For the calculations on the performance tab on folder, account level or in the area register, and also for which buildings are shown in the area register a number of objects are excluded:

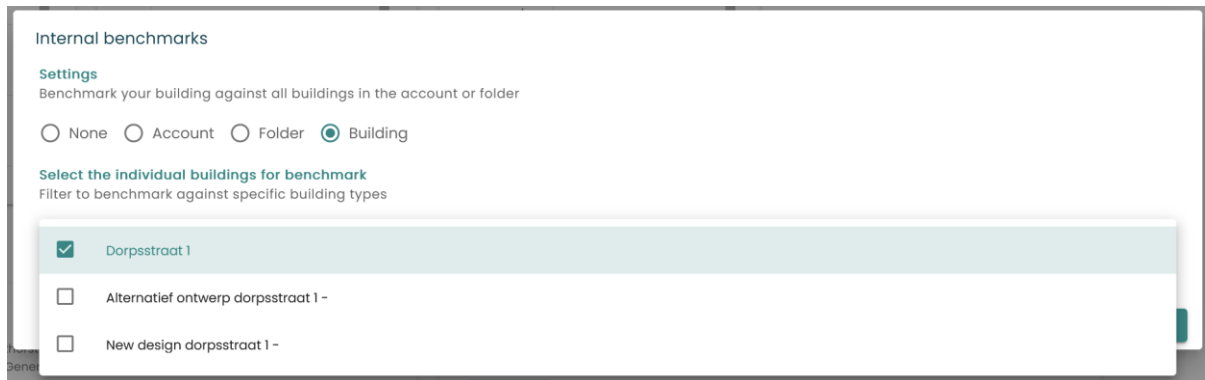
- Designs of buildings
- Archives of buildings
- If a building is split: the original



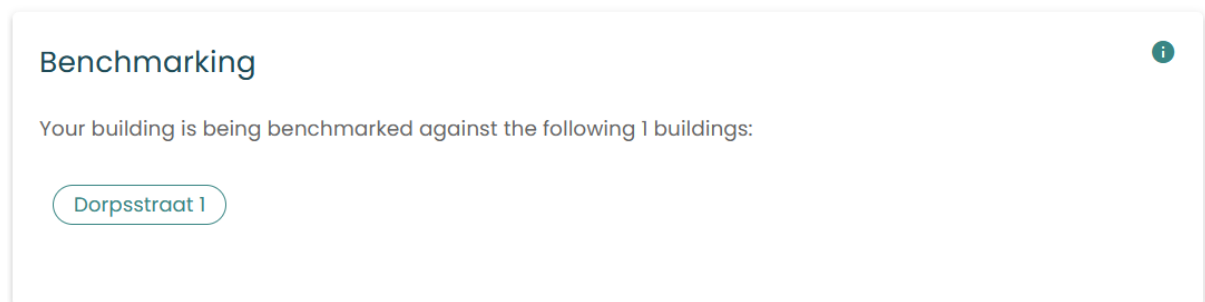
13: Two buildings, one of them is split, results in 3 buildings in the performance tab and for calculations and in the area register.

### 2.2.3 Changes to benchmarking on the performance tab of a design or archive

It is no possible to change your benchmark settings in the performance tab on a design or archived building to compare it with other specific buildings, for example other designs:



This selection is visible on the performance tab itself



### 2.2.4 Changes to the calculations for LCA stage B4 (use stage: replacement)

The lifespan of a product connected to a building is now taken into account in relation to the lifespan of the whole building. This means that if a product is expected to be replaced four times during the lifespan of the building this is taken into account for the calculations in the replacement use stage.



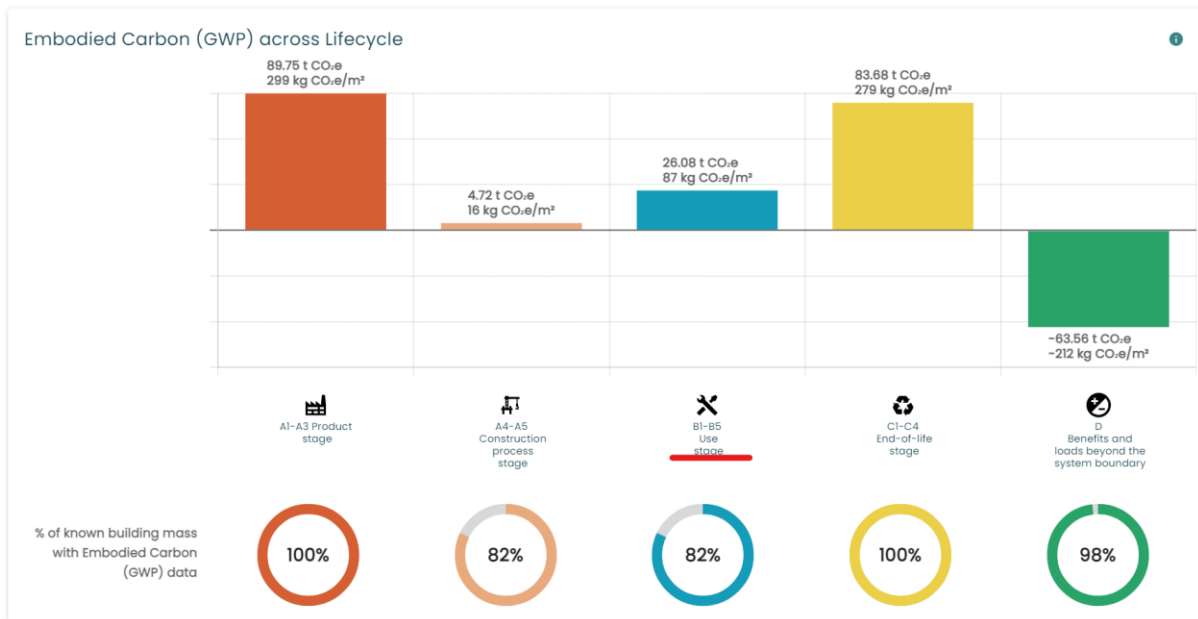


Figure 14: a building with an expected lifespan of 60 years

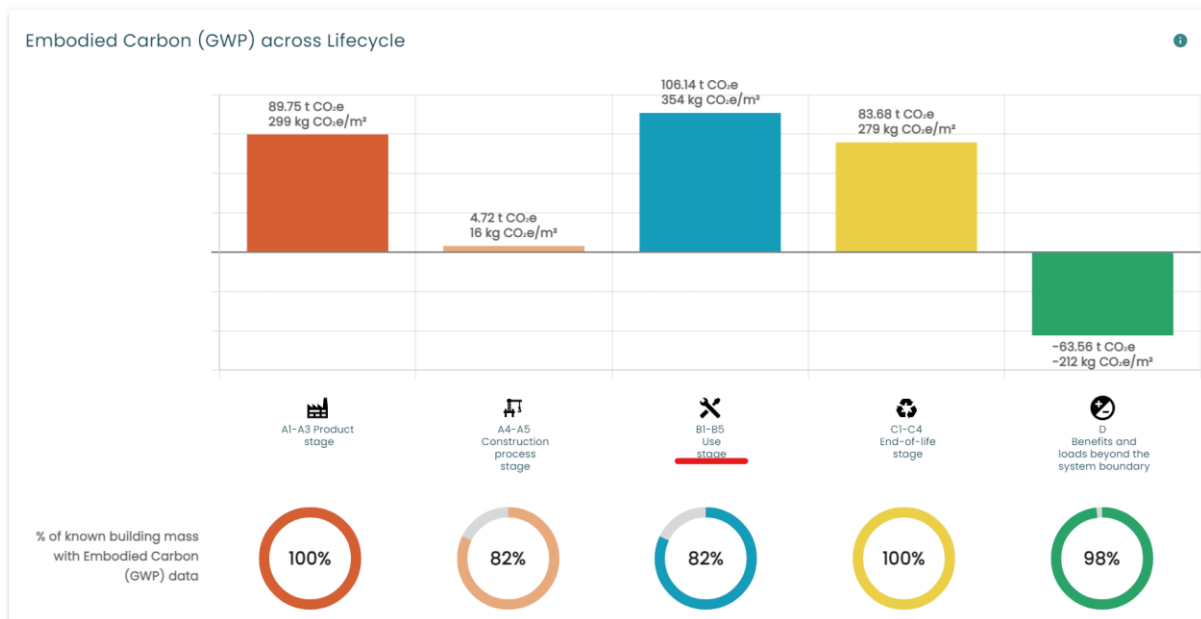


Figure 15: the same building as in figure 12; but now with an expected lifespan of 120 years

## 2.2.5 Additional information at the MCI detail view

When clicking on the MCI details two new columns have been added:

- The penalty for unknown materials
- Madaster Circularity Indicator (MCI) Score

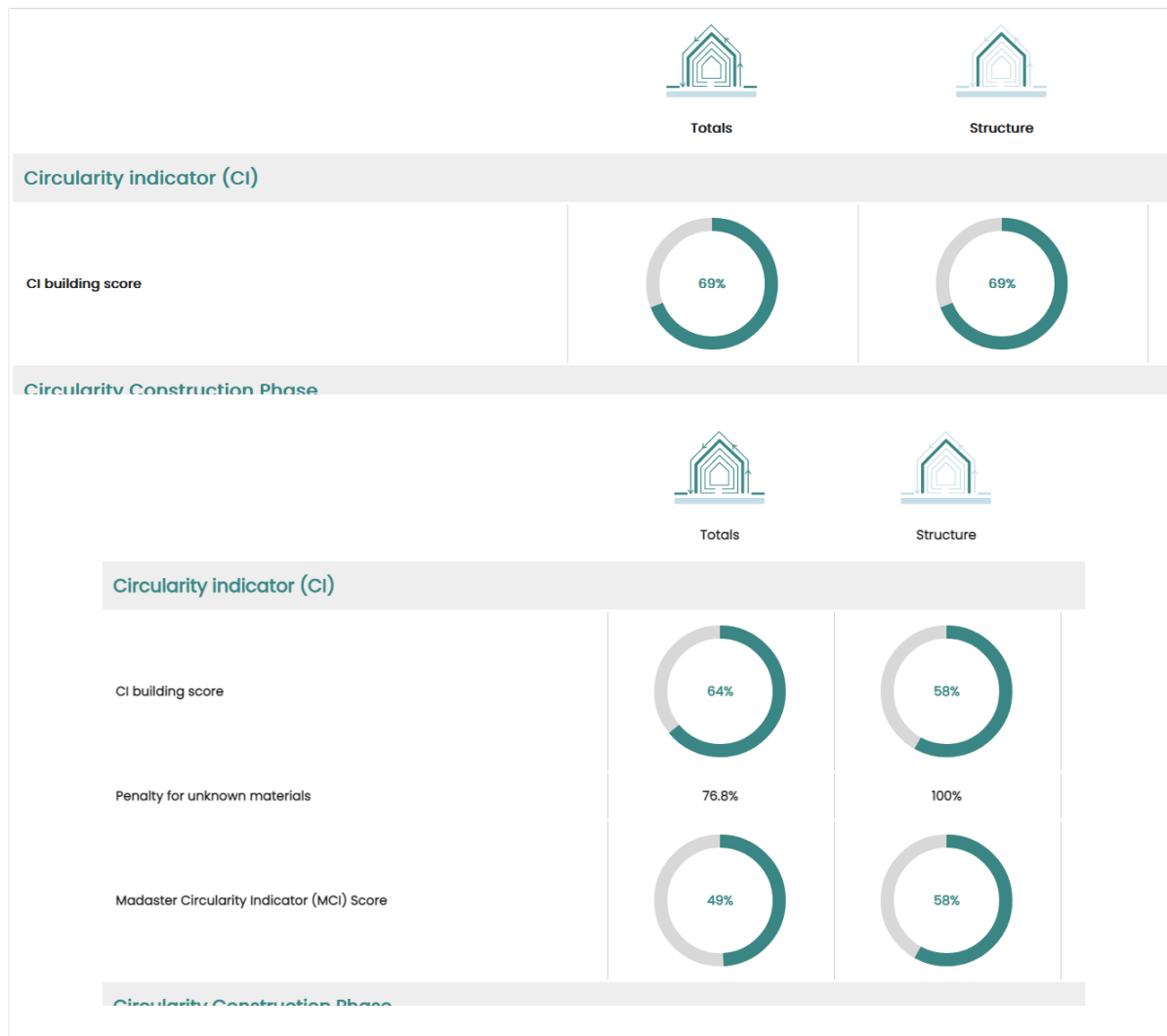


Figure 16: on top how it was, on the bottom what it is now.

## 2.2.6 Split building can now be activated

The split building feature used to be only accessible through invitation, this has been changed

## 2.2.7 “See more” at database information

To indicate that there is more text a ‘...see more’ has been added to the database information field

#### Database information



The EPEA Generic database enables country-specific, full-building calculations regarding material composition (mass), circularity, and embodied carbon (kg CO<sub>2</sub>e).  
The database, which is expert-reviewed, [see more](#)

### 2.2.8 Billing information shown when modifying a subscription

When a subscription is modified, the current known billing information is shown:

#### Billing Information

Billing email:

Company name:

att.:

Reference / PO number:

Address:

☐ I agree that the billing information is correct

If the above billing information is not correct, please [contact us](#), before proceeding with the subscription.

### 2.2.9 Database selection when uploading files for a building

The EPEA generic database is now the default when uploading a file for a building. We've removed the blue checkmark for the Madaster database.

## Add file

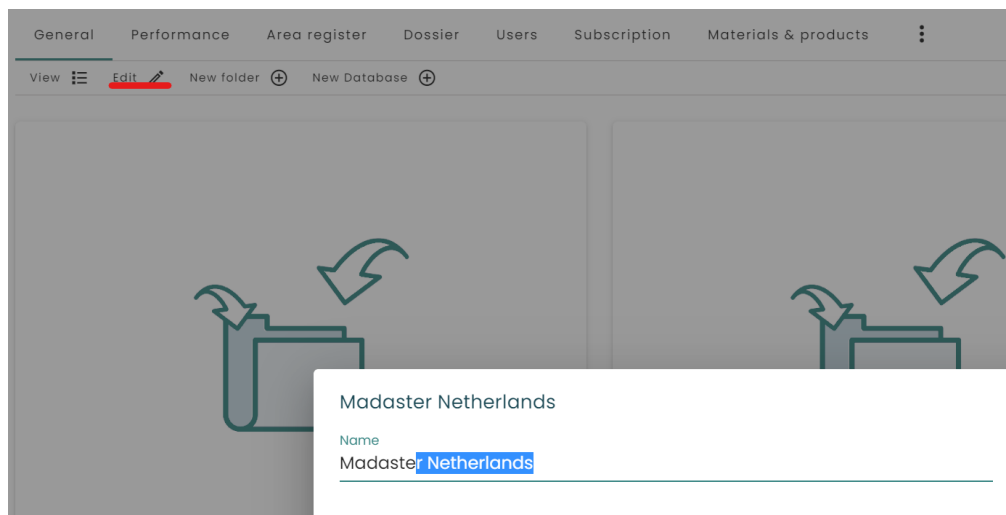
Indicate to which sources in the Madaster platform the elements in the file to be uploaded should automatically be linked and in which order this should be done per element. To add or remove a source, select the '+' or 'X' sign at the end of a source name.

Available sources		Selected sources	
NMD	+	EPEA Generic	X
Madaster	+	Lankhorst B.V.	X
2BA	+		
Hook Producer	+		
MRPI	+		
IBU DATA	+		
ECOPLATFORM	+		
ENVIRONDEC	+		
ÖKOBAUDAT 2019-	+		

CancelSave

## 2.2.10 Possibility to change the name of the account

It is now possible to change the name of an account in Madaster by using the edit button in the general tab of an account. This will only change the name in the platform, so not for billing or other purposes.



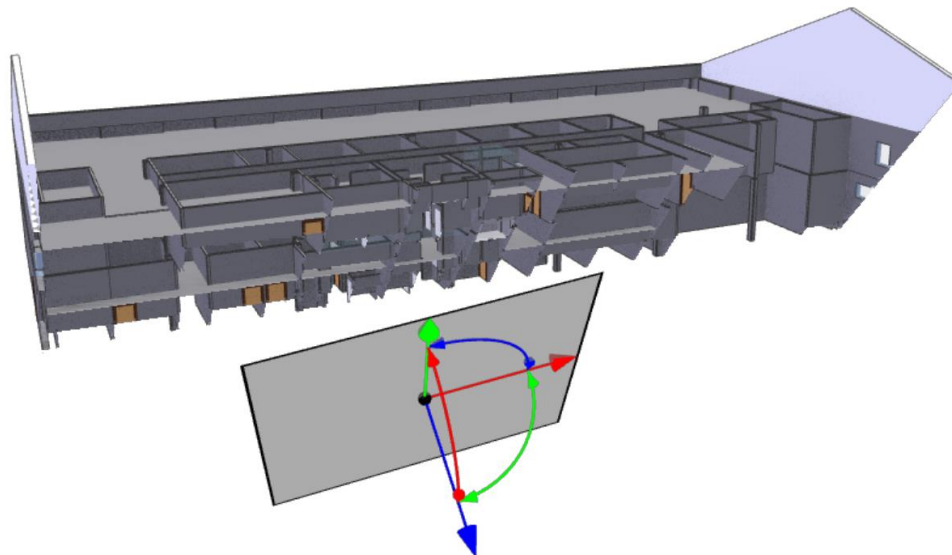
## 2.2.11 Additional Madaster V2 classification

There is now an additional option for the Madaster V2 classification when adding or editing a material in a database and when enriching.

Material information	Circularity	Environment	Search criteria	Fin
Save  Close				
Material name * <b>Kryptonite</b>				
Specific weight * <b>5,000</b> $\text{kg/m}^3$				
Madaster <b>Unknown</b> ▼				
Madaster V2 * <b><u>Z - OTHER</u></b> ▼				

## 2.2.12 Slice a 3D model



In the 3D viewer of a building it is now possible to slice it.




2.2.13 The ‘bill of materials’ for circularity is unchecked by default


If you would add a product to a database in Madaster the default was to use the bill of materials for the circularity data, this has been changed.

Product informationCircularityEnvironmentSearch cr

Save  Close 

General

Product name \* 

Type \*  
Volume 

Product code



GTIN

Functional lifespan (years)  
0 Year


☐ Do not calculate circularity values from Bill of Materials


☐ Calculate environmental values from Bill of Materials

Product informationCircularityEnvironmentSearch cri

Save  Close 

General

Product name \* 

Type \*  
Volume 


Product code

GTIN

Functional lifespan (years)  
0 Year

☐ Calculate circularity and density values from Bill of Materials

Madaster

Name	Type	
No data available		

Density \* kg/m<sup>3</sup>

☐ Calculate environmental values from Bill of Materials

Figure 17: on the left the old situation, on the right the new one

2.2.14 Color changes in the charts

A number of charts have been given different colors in line with our new design which was introduced not long ago.

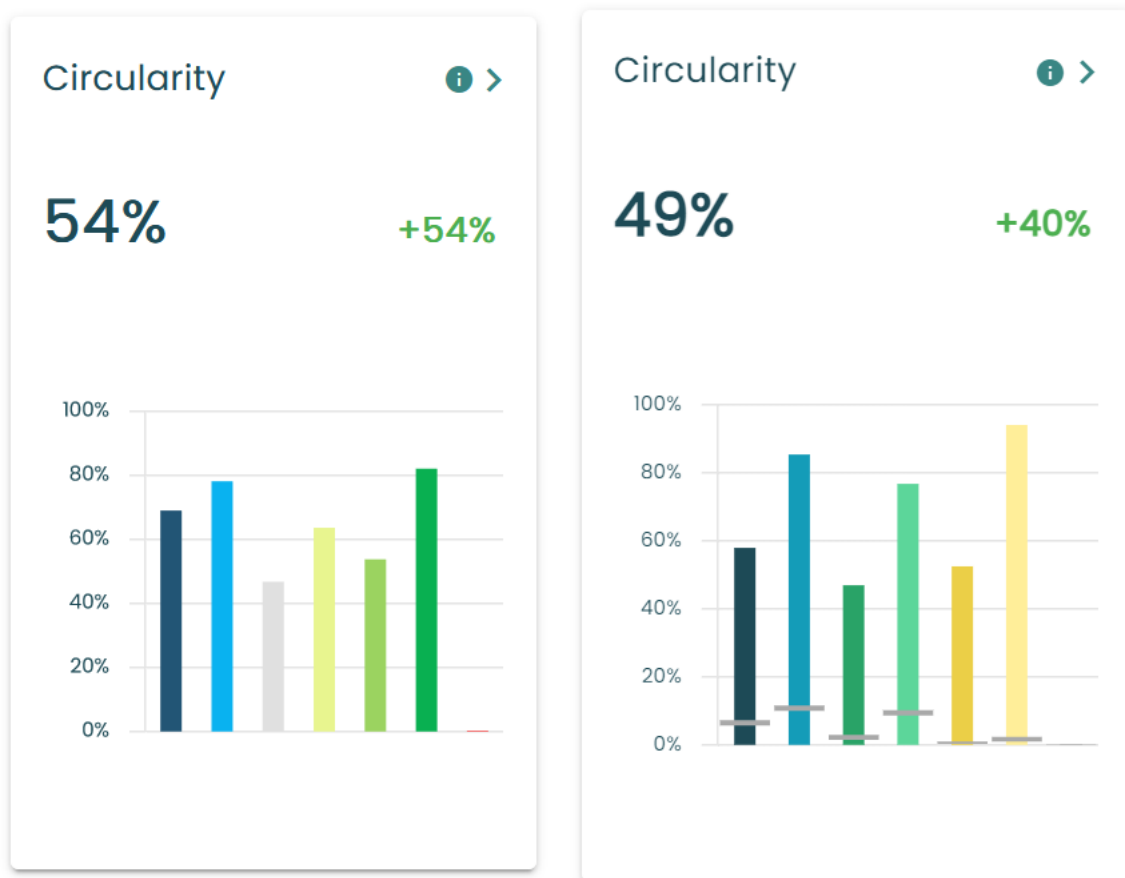


Figure 18: on the left the old color scheme and on the right the new one. One of many charts that have changed colors.

## 2.2.15 Changes on building and folder type fields

- The manual or indicative MPG score is now shown in €/m<sup>2</sup>.jr instead of €/m<sup>2</sup>

### Labels

BREEAM:

Manual MPG score:

Excellent

12 €/m<sup>2</sup>.jr

- There are new fields for the owner on a building

### Owner

Owner

Circular Holdings

---

Address line 1

Reuse Street 123

---

Address line 2

---

Postal code

12345

---

City

Amsterdam

---

Country

Netherlands

---

General
Performance
3D
Dossier
Mass
Circularity
En

Edit building
Move
Archive the building
Design
Transfer

#### Address

Circularity Street 123  
12345 Amsterdam  
Netherlands

#### Owner

Owner:	Circular Holdings
Address:	Reuse Street 123 12345 Amsterdam Netherlands

19: The new owner fields. Left how they are when editing a building, on the right what they look like in the general tab of the building

- Because of the addition of the owner field on the building the fields ‘specify owner in passport’ and ‘owner label in passport’ have been removed from folder type.

#### New Folder type

Name\*  
Portfolio

Description

Plural Name  
Portfolios

☒ Foldertype allowed directly under account? Allowed folder types in subfolders

☒ Buildings can be added in this folder type Icon mdi-folder-home-outline

☐ Does folder of this folder type requires an address? Logo

☐ Folder of this type is a region defined by spatial coordinates?

☒ Specify owner in passport

Owner label in passport

Cancel Save

- Fields for ‘prepared by’ and ‘design stage’ have been added. The design stage is filled using the level of detail (LOD).



### Madaster information

Prepared by  
Circular Architects

---

Design Stage \*  
Unknown

Design Stage \*

- Unknown
- LOD 100 - Concept Design
- LOD 200 - Schematic Design
- LOD 300 - Detailed Design
- LOD 350 - Construction Documentation
- LOD 400 - Fabrication & Assembly
- LOD 500 - As-Built

General Performance 3D Dossier Mass Circularity Envirc

Edit building Move Archive the building Design Transfer Del

#### Address

Circularity Street 123  
12345 Amsterdam  
Netherlands

#### Owner

Owner: Circular Holdings  
Address: Reuse Street 123  
12345 Amsterdam  
Netherlands

#### Madaster information

Prepared by: Circular Architects  
Design Stage: Unknown

- It is now possible to choose any country at the address for a building

## Address

☐ Use map to create a location

Street

Circularity Street

House number

123

House number suffix

Postal code

12345

City

Amsterdam

Country \*

Afghanistan

Åland Islands

Albania

Algeria

American Samoa

Andorra

Address line 2

- It is now possible to allow search criteria for a folder type:



General	Performance	3D	Dossier	Mass	Circularity	Environmental	Financial	⋮
---------	-------------	----	---------	------	-------------	---------------	-----------	---

Upload

Filter on

Keyword

Consumer dossier

Source files

Passports

Contractual agreements

Usage, Maintenance & Renov...

Tags

Name	Size	Last modified ↓	Tags	Owner	
Madaster Demonstration Building-technical-annex-02/14/2023.xlsx	26.29 kB	14-02-2023 20:15		Paul Klein Lankhorst	
Madaster Demonstration Building-passport-02/14/2023.pdf	30.86 MB	14-02-2023 20:15		Paul Klein Lankhorst	
Madaster Demonstration Building-executive-summary-02/14/2023.pdf	28.58 MB	14-02-2023 19:55		Paul Klein Lankhorst	
Madaster Demonstration Building-passport-02/14/2023.pdf	30.90 MB	14-02-2023 19:52		Paul Klein Lankhorst	
Madaster Demonstration Building-technical-annex-02/14/2023.xlsx	39.48 kB	14-02-2023 18:29		Paul Klein Lankhorst	
Madaster Demonstration Building-passport-02/14/2023.pdf	33.21 MB	14-02-2023 18:29		Paul Klein Lankhorst	
Madaster Demonstration Building-executive-summary-02/14/2023.pdf	29.05 MB	14-02-2023 17:46		Paul Klein Lankhorst	
Madaster Demonstration Building-one-pager-02/14/2023.pdf	27.24 MB	14-02-2023 16:46		Paul Klein Lankhorst	
Madaster Demonstration Building-one-pager-02/13/2023.pdf	27.24 MB	13-02-2023 17:31		Paul Klein Lankhorst	
Madaster Demonstration Building-one-pager-02/13/2023.pdf	27.24 MB	13-02-2023 16:52		David Parker	

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21: once a folder is selected only the files from that folder are shown.

- In the building tabs “Users” and “Presets for Upload” (and the newly introduced “Presets for Upload” have been placed as additional options under three vertical dots

Home / Madaster Netherlands / Demo / Madaster Demonstration Building

General	Performance	3D	Dossier	Mass	Circularity	Environmental	Financial	⋮
---------	-------------	----	---------	------	-------------	---------------	-----------	---

Edit building Move Archive the building Design Transfer Delete Upload Re...

Address

Circularity Street 123  
12345 Amsterdam  
Netherlands

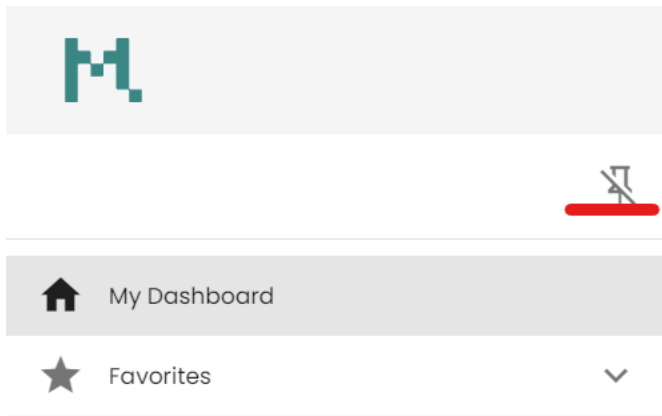
Open Street Map

Users

Presets for upload

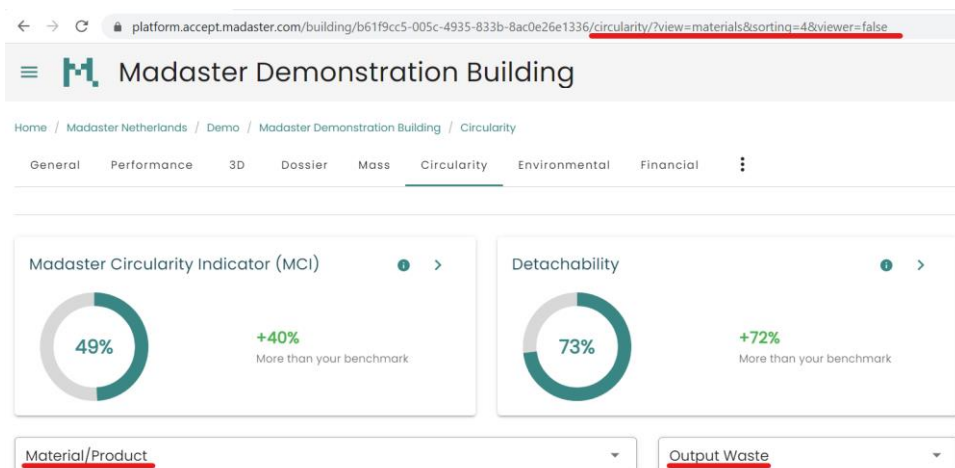
Presets for passports

- For new users the left navigation is pinned by default



- Linking to specific results on the circularity or environmental tab

It is now possible to copy an URL that contains the specific filters on the circularity or environmental tab.



- Users with regular authorizations will no longer see the user tab
- The option to create a design or archive a building have been removed for home-owners
- When a user enters the platform with no recent items on 'my dashboard' a welcome text is shown:

## Welcome to Madaster

Madaster is an innovative platform that provides an easy way to register, manage and analyze the materials used in your construction projects. We believe that to achieve a circular construction industry, materials must be centrally registered so they can again become resources in the future. Thank you for taking this important first step.

*Things look a little empty, but not for long!*

We've put together a user guide for you to create objects, enrich them with data, and view and share their performance.

[Get started](#)

## 2.3 Bug fixes

The following bugs have been resolved:

- When transferring a building the authorizations on the transferred building were set wrong, this has been adjusted so that the authorizations are set correctly on the transferred building.
- Rounding has been adjusted so that for example 2 kt of CO2e as displayed on the performance tab for GWP can now be displayed with two decimals (i.e. 1,7)
- In the mass tab of a building at 'unknown' the values would sometimes incorrectly be '0', this has been fixed.
- When creating a new design the notification when this design is ready would mention that the archive was ready. This has been fixed so that it correctly mentions design.
- Deleting a design would mention that the whole building would be deleted where it would only delete the design, this has been textually adjusted so that it mentions only deleting the design.
- We found some wrong mappings in the Omniclass classification, these have been corrected.