



Madaster Release notes

2021

Made for
Madaster users

Version
10.0

Date
6 December 2021

This document and its contents have been compiled with the greatest possible care. Nevertheless, it cannot be ruled out that certain information is outdated, incomplete or otherwise incorrect. Madaster is not liable for any damage of any nature whatsoever arising from any use / consultation of this document and its contents and / or from the information obtained through this document, including but not exhaustive also information obtained through references mentioned in this document. and / or hyperlinks

Table of Contents

1	Releases	4
2	Build 10761	5
2.1	New functionalities.....	5
2.1.1	Preview Features	5
2.1.2	Additional insights on Circularity tab	6
2.1.3	Additional source data fields	9
2.1.4	Data upload settings	11
2.1.5	Expanding element adaptability.....	12
2.1.6	Product enhancements.....	15
2.1.7	Add external link in Dossier.....	18
2.2	API	18
2.3	Bug fixes.....	18
3	Build 9731	19
3.1	New functionalities.....	19
3.1.1	(NL) NAA.K.T. material naming added as search criteria	19
3.1.2	Extension matching.....	19
3.1.3	Extension Madaster Excel upload template	21
3.1.4	Extension Madaster Property set (IFC)	21
3.1.5	Extension Madaster IFC import properties.....	22
3.1.6	Expansion of Environment tab.....	23
3.1.7	Removing duplications in material naming (IFC source file).....	23
3.1.8	Extension filter 'Unit dimension' (Enrich tab)	24
3.1.9	Change of column naming in Madaster Excel upload template.....	24
3.1.10	Add product images	24
3.1.11	API	25
3.2	Bug fixes.....	25
4	Build 9044	26
4.1	New functionalities.....	26
4.1.1	Define owner label on folder type for use in materials passport.....	26
4.1.2	Multiple classification methods per building.....	26
4.1.3	New classification method: NL-SfB table 1 V201912.....	26
4.1.4	Improvements to vendor and verified database accounts.....	27

4.1.5	Material Passport enhancements	27
4.1.6	Visual adjustment Circularity tab	27
4.1.7	API	28
4.2	Bug fixes	28
5	Build 8820	29
5.1	New functionalities.....	29
5.1.1	Expansion of matching types within the search criterion material / product	29
5.1.2	Possibility to override the default (based on building usage) demolition and dismantling costs.	30
6	Build 8556	31
6.1	Bug Fixes	31
7	Build 8382	32
7.1	New features.....	32
7.1.1	UI improvements.....	32
7.1.2	New classification method “Shearing Layer”	32
7.1.3	New Button “Public Data” on building (NL only)	32
7.2	Bug Fixes	32
8	Build 8029	33
8.1	Bug Fixes	33
9	Build 8023	34
9.1	Bug Fixes	34
10	Build 8021	35
10.1	Expansion material & product fields.....	35
10.2	Addition of “Environment”-tab.....	35
10.2.1	Addition of “Circularity”-tab	36
10.2.2	New product identification fields	37
10.2.3	New fields for product origin	37
10.3	Upload new version of a source file which preserves existing mapping.....	38
10.4	Platform improvements.....	38
10.4.1	Add complete product in enrichment process.....	38
10.4.2	Financial dataset representation (material)	38
10.4.3	Other bug fixes.....	39

1 Releases

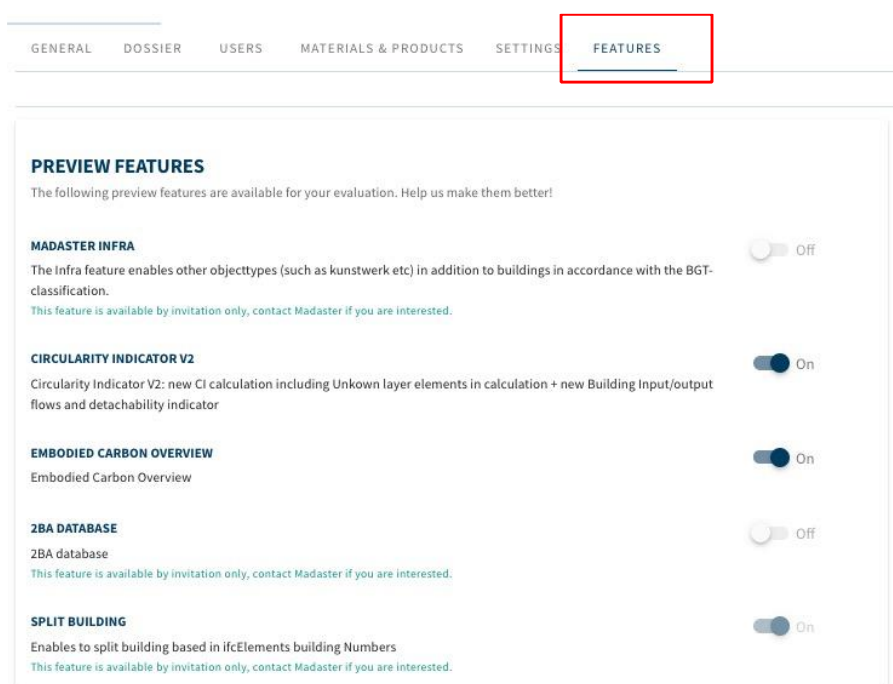
Build number	Release date
10761	15 th November 2021
9731	17 th Augustus 2021
9044	10 th May 2021
8820	1 st April 2021
8556	22 nd March 2021
8382	11 th March 2021
8029	1 st March 2021
8023	26 th February 2021
8021	25 th February 2021

2 Build 10761

2.1 New functionalities

2.1.1 Preview Features

At company account level, the Madaster user can activate, use, and evaluate new functions ('preview features'). These functions will be further developed based on user feedback. Preview features can be activated directly by the user or are available by invitation and/or under certain conditions.



2.1.1.1 Split building feature

The 'split building' feature (only available by invitation) allows Madaster users to create individual building dossiers and passports from a prepared IFC file that contains multiple buildings/homes. This makes it superfluous to split up (IFC) models per building/home prior to being uploaded into the Madaster platform.

To use this feature, each element in the IFC source file should contain an individual building number. Prior to uploading the IFC source file, both the property name and property set containing the building number must be specified at account level in Madaster (see section 2.1.4 for details).

UPLOAD PRESET

Upload preset ^{*} ☐ Is default

Classification method ▼

PropertySet for Buildingnumber Property Name for the buildingnumber

Languages for enrichment ▼

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

2.1.1.2 Circularity Indicator V2

The 'CI V2' feature (to be activated directly by the user) offers Madaster users the following additional insights:

- Adjusted circularity calculation, where elements without a classification code are no longer excluded.
- Input flow (primary vs. secondary material sources) and output flow (available for reuse and recycling) of materials in kilograms and percentages on building level and on building layer, such as: Structure, Skin, Services etc. (see section 2.1.2.1 for details).
- Degree of detachability (% detachability index) of the building, including index quality score (see section 2.1.2.2 for details).

GENERAL DOSSIER USERS MATERIALS & PRODUCTS SETTINGS **FEATURES**

PREVIEW FEATURES

The following preview features are available for your evaluation. Help us make them better!

MADASTER INFRA ☐ Off

The Infra feature enables other objecttypes (such as kunstwerk etc) in addition to buildings in accordance with the BGT-classification.
This feature is available by invitation only, contact Madaster if you are interested.

CIRCULARITY INDICATOR V2 ☒ On

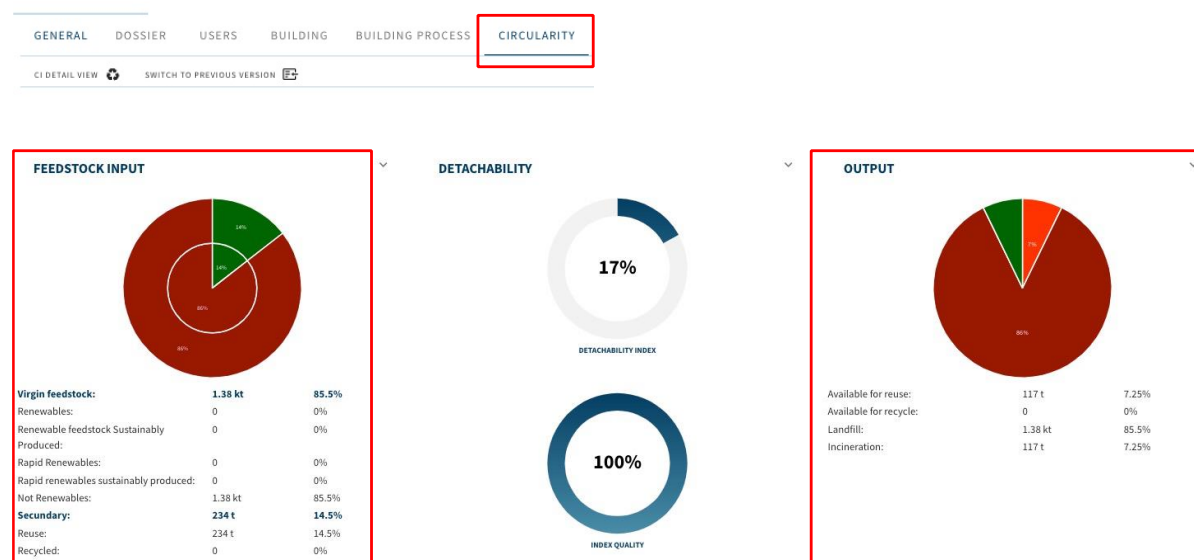
Circularity Indicator V2: new CI calculation including Unknown layer elements in calculation + new Building Input/output flows and detachability indicator

2.1.2 Additional insights on Circularity tab

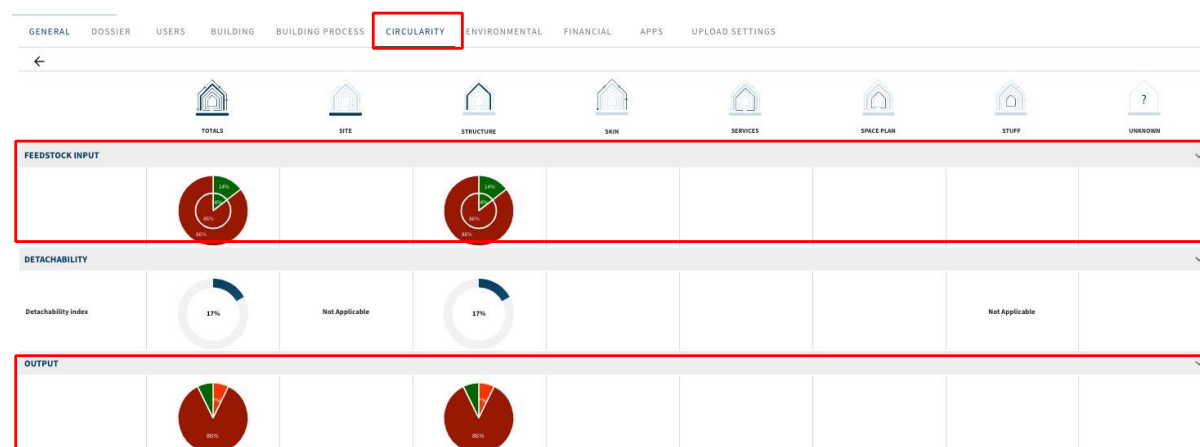
By activating the 'CI V2' preview feature (see previous section), Madaster offers its users additional insights on the buildings Circularity tab:

2.1.2.1 Feedstock input & Output

By matching elements from a source file with materials/products in a Madaster dataset, the Madaster platform can provide insight into the “feedstock input” flow and “Output” flow of materials. The feedstock input flow indicates the amount (in weight) and ratio (in %) of primary (virgin) and secondary (reused/recycled) materials used in the building’s construction phase. The output flow shows the amount (in weight) and ratio (in %) of materials released at the building’s end of life stage, categorized according to materials available for reuse, recycling, landfill and incineration.



By clicking the (feedstock input or output flow) pie chart on the building’s Circularity tab, a more detailed view is displayed, in which these indicators are visible per building layer (e.g., Structure, Skin, etc.). Even more specs are displayed when the user expands the feedstock input and/or output rows in this view (via the menu on the right-hand side).



2.1.2.2 Detachability (index & quality score)

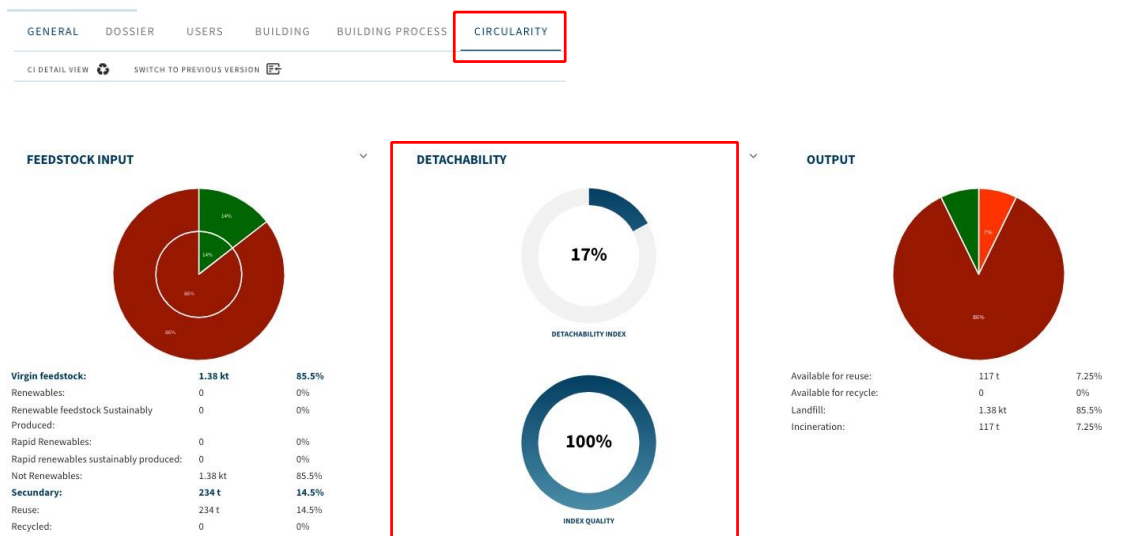
Madaster offers users the option, in addition to the building's circularity level, to also display the degree of detachability on building and building layer level. As such, it should indicate how detachable a building (shell) is and the products contained within it.

This detachability indication in Madaster is based on the revised (2.0) version of the uniform measurement method for detachability, as described in the report '[Circular Buildings](#) – a measurement method for detachability 2.0'. This methodology has been developed and tested by a consortium of Alba Concepts, Dutch Green Building Council, Netherlands Enterprise Agency and W/E Adviseurs on behalf of the Ministry of the Interior and the Transition Agenda Circular Building Economy.

The following detachability factors are considered:

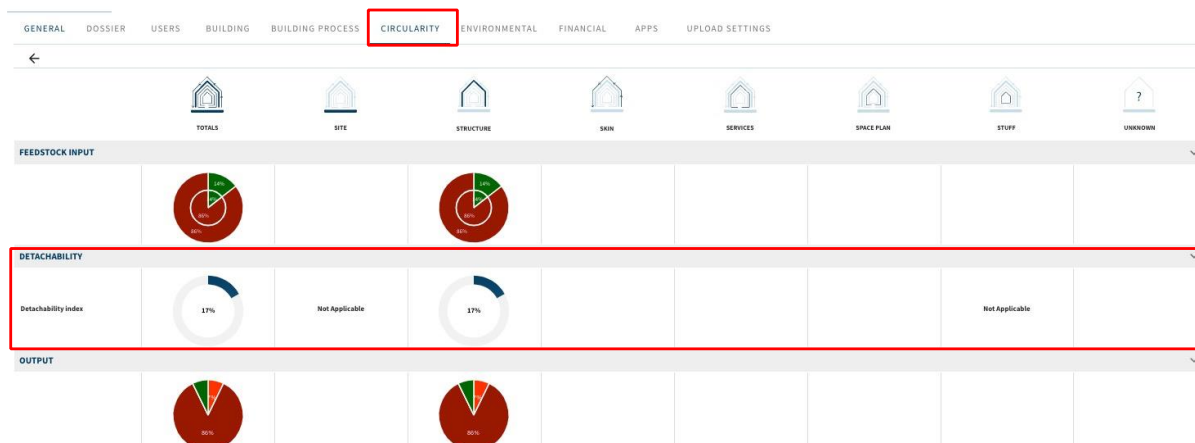
- **Connection type:** where dry connections are being preferred over connections with added elements and direct, integral connections taking precedence over soft and hard chemical ones.
- **Accessibility of the connection:** how easily you can (physically) reach the connecting elements and to what extent this causes damage to nearby objects.
- **Intersections:** indicates the extent to which products overlap or are integrated with each other. The higher the integration, the more actions required to disassemble an element at the end of its life.
- **Product edges inclusion:** assessment of how products are placed in a composition and whether it is open or closed. A 'locked up' product can only be dismantled in the reverse order of construction.

The building's detachability index (in %) is displayed on the Madaster "Circularity" tab when the 'CI V2' feature is active (see section 2.1.1.2). This index is the sum of the number of individual elements within the building, which are linked to a product in Madaster, that (1) has the above four detachability factors filled in (or taken over from the IFC element) and (2) where the shadow costs per unit of the product are available (in the product's "Environment" tab).



The index quality indicator shows the ratio (in%) of the number of products for which a releasability index has been calculated compared to the total number of elements in the building that are linked to a product in Madaster.

By clicking on the detachability pie charts, a detail view is displayed, in which these indicators are provided per building layer (excluding Site and Stuff). Even more specs are displayed when the user expands the detachability row in this view (via the menu on the right-hand side).



2.1.3 Additional source data fields

2.1.3.1 Additional fields Madaster IFC property set

The Madaster platform can read a building's data from an IFC file. To provide insight into the degree of detachability of applied products in the building, the existing Madaster Property set "Pset_Madaster" (a set of properties in which certain IFC properties are bundled), has been expanded with new data fields:

1. Data fields **DetachabilityConnectionType** and **DetachabilityConnectionTypeDetail** are used to indicate the connection type.

DetachabilityConnectionType	DetachabilityConnectionTypeDetail
DryConnection	Unknown
DryConnection	None
DryConnection	Click
DryConnection	Velcro
DryConnection	Magnetic
AddedConnectionConnection	Unknown
AddedConnectionConnection	BoltAndNut
AddedConnectionConnection	Spring
AddedConnectionConnection	Corner
AddedConnectionConnection	Screw
DirectConnection	Unknown
DirectConnection	Peg
DirectConnection	Nail
SoftChemicalConnection	Unknown
SoftChemicalConnection	Sealant
SoftChemicalConnection	Foam
HardChemicalConnection	Unknown
HardChemicalConnection	Glue
HardChemicalConnection	LandFill
HardChemicalConnection	Weld
HardChemicalConnection	Concrete
HardChemicalConnection	ChemicalAnchor

2. **DetachabilityAccessibility** data field to indicate accessibility of the connection.

Value	Explanation
Accessible	Freely accessible without additional actions
PartialNoDamage	Accessible with additional actions that do not cause damage
PartialWithRepairableDamage	Accessible with additional operations with fully repairable damage
PartialWithDamage	Accessible with additional operations with partially repairable damage

NotAccessible	Not accessible - irreparable damage to the product or surrounding products
---------------	--

3. **DetachabilityIntersection** data field to indicate the intersections.

Value	Explanation
None	No intersections - modular zoning of products or elements from different layers
Incidental	Occasional intersections of products or elements from different layers
Complete	Full integration of products or elements from different layers

4. **DetachabilityProductEdge** data field to indicate the product edges inclusion.

Value	Explanation
Open	Open, no obstacle to the (intermediate) removal of products or elements
Overlapping	Overlap, partial obstruction to (intermediate) removal of products or elements
Closed	Closed, complete obstruction to (intermediate) removal of products or elements

2.1.3.2 Additional fields Madaster Excel upload template

The Madaster platform can read a building's data also from an Excel template. To provide insight into the degree of detachability of applied products in the building, the existing Madaster Excel template has been expanded with new data fields:

- Connection type
- Accessibility of the connection
- Intersections
- Product edges inclusion

N	Q	S	U
Detachability - Connectiontype	Detachability - Accessibility of the connection	Detachability: Intersections	Detachability - Product edges inclusion

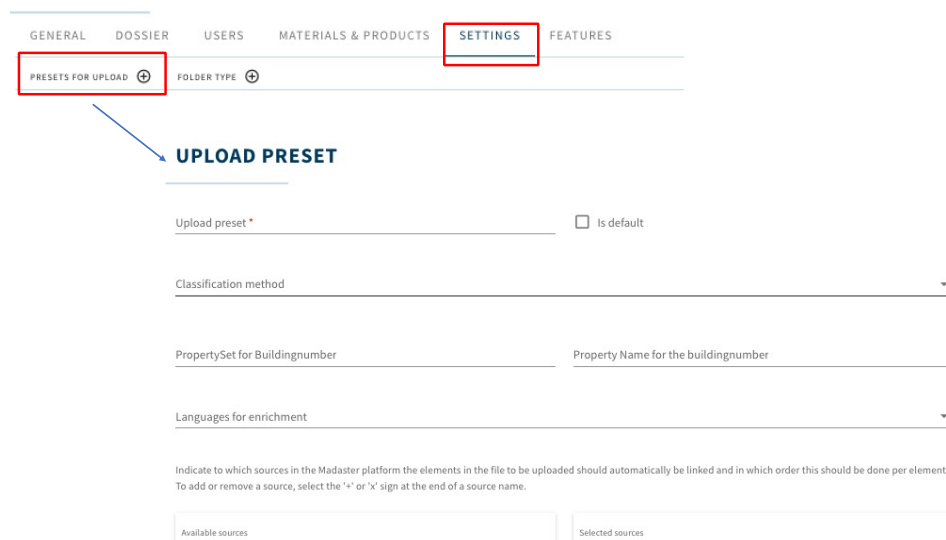
These additional data fields are read in Madaster and assigned to the Madaster element.

2.1.4 Data upload settings

On different levels (account, folder type & building) within the Madaster platform, default upload preferences can be set and selected regarding classification method, language(s) for enrichment,

selection of source files (incl. priority) and property settings for building numbers (for 'split building' feature).

Upload settings created at a higher level in the navigation tree (e.g., account, folder type, building) are made available by default at the lower levels as well, but this inheritance can also be broken at a lower level.



2.1.4.1 *Activate/Deactivate/Delete multiple source files*

In the “Dossier” tab at building level, a Madaster user can activate, deactivate, or delete multiple source files at the same time. To use this function, first select the tick boxes of the appropriate source files. Subsequently, click the activate, deactivate, or delete button in the menu that becomes available.



2.1.4.2 *Phasing out Revit & Archicad datasets*

When upload source data into Madaster (“Dossier” tab), the user can select multiple datasets in Madaster. These datasets are used during the matching process to link elements in source files based on search criteria to a material/product in one of the selected databases. In this release, both the Revit and Archicad datasets are no longer available for matching purposes (existing links to these datasets remain intact).

2.1.5 Expanding element adaptability

After the input and processing of source data in Madaster, users can adjust source data elements in the Madaster platform. This is done in the “Enrich” tab. After selecting one or more elements, the user clicks on the 'Edit' button (pen icon).



2.1.5.1 Adjust classification code per element (incl. bulk edit)

Subsequently, it's possible to adjust the classification code of one or more elements (material and product) at the same time (bulk).

×
Edit: NLRS_31_GM_WPB_SH_prefab beton raamdorpel recht_gen_KG:RD160C-GRIJS:10175090
SAVE

Phase
Casco

Classification
31.20 - buitenwandopeningen; gevuld met ramen, algemeen (verzamelniveau)

☐ Edit building numbers

Click this field and then select the desired classification code from the defined list. Finally, click on the 'Save' button to save the changes.

2.1.5.2 Adjust phasing per element (incl. bulk edit)

Subsequently, it's possible to adjust the phase (e.g., demolition, casco, new materials) of one or more elements (material and product) at the same time (bulk).

×
Edit: NLRS_31_GM_WPB_SH_prefab beton raamdorpel recht_gen_KG:RD160C-GRIJS:10175090
SAVE

Phase
Casco

Classification
31.20 - buitenwandopeningen; gevuld met ramen, algemeen (verzamelniveau)

☐ Edit building numbers

Click this field and then select the desired classification code from the defined list. Finally, click on the 'Save' button to save the changes.

2.1.5.3 Adjust building number per element (split building function)

Subsequently, it is possible to adjust the (degree of) building number allocation of one or more elements (material and product) at the same time (bulk).

×
Edit: NLRS_31_GM_WPB_SH_prefab beton raamdorpel recht_gen_KG:RD160C-GRIJS:10175090
SAVE

Phase
Casco

Classification
31.20 - buitenwandopeningen; gevuld met ramen, algemeen (verzamelniveau)

☒ Edit building numbers

Building number	Ratio (%)	
18	100%	

To do this, activate the function 'Edit building numbers' and then allocate the desired ratio (%) to the available building numbers. Finally, click on the 'Save' button to save the changes. See section 2.1.1.1 for conditions and more details.

2.1.5.4 Adjust Reuse (Feedstock input & Output)

Subsequently, it is possible to adjust the degree of reuse in the construction phase (Feedstock input) and at the end of life phase (output) of one or more elements (product only) at the same time (bulk).

SAVE

FEEDSTOCK INPUT

Reuse %

DETACHABILITY

Connection type (product default value: Connection with added elements)
Connection with added elements

Connection detail
Spring connection

Connection accessibility (product standard value: Accessible with additional operations with fully repairable damage)
Accessible with additional operations with partially repairable damage

Intersections (product default value: No intersections - modular zoning of products or elements from different layers)
No intersections - modular zoning of products or elements from different layers

Product edges (product default value: Open, no obstacle to the (intermediate) removal of products or elements)
Overlap, partial obstruction to (intermediate) removal of products or elements

OUTPUT

Available for reuse %
Product value: 0%

If desired, complete the fields 'Input flow % reuse' and 'Output flow % available for reuse'. Finally, click on the 'Save' button to save the changes.

2.1.5.5 Adjust detachability per element (incl. bulk edit)

Subsequently, it is possible to adjust the detachability parameters of one or more elements (product only) at the same time (bulk).

SAVE

FEEDSTOCK INPUT

Reuse %

DETACHABILITY
Connection type (product default value: Connection with added elements)
 Connection with added elements ▼

Connection detail
 Spring connection ▼

Connection accessibility (product standard value: Accessible with additional operations with fully repairable damage)
 Accessible with additional operations with partially repairable damage ▼

Intersections (product default value: No intersections - modular zoning of products or elements from different layers)
 No intersections - modular zoning of products or elements from different layers ▼

Product edges (product default value: Open, no obstacle to the (intermediate) removal of products or elements)
 Overlap, partial obstruction to (intermediate) removal of products or elements ▼

Adjust the desired detachability parameters. Clicking the 'Save' button will save the adjusted parameters. Detachability parameters cannot be edited when the selected building elements are matched to different products.

2.1.6 Product enhancements

In this release, several enhancements have been made on the various tabs at the product level in the Madaster platform.

2.1.6.1 Do not use Bill of Materials Calculations

If the product composition is not to be made available in Madaster, the supplier/manufacturer of the product can select the product option 'Do not use Bill of Materials calculations' in the 'Product information' tab.

PRODUCT INFORMATION
CIRCULARITY
ENVIRONMENT

SAVE CLOSE

GENERAL

Product name *

Type
 Volume

Product code

GTIN

Functional lifespan (years)
 0

☐ Do not use Bill of Materials Calculations

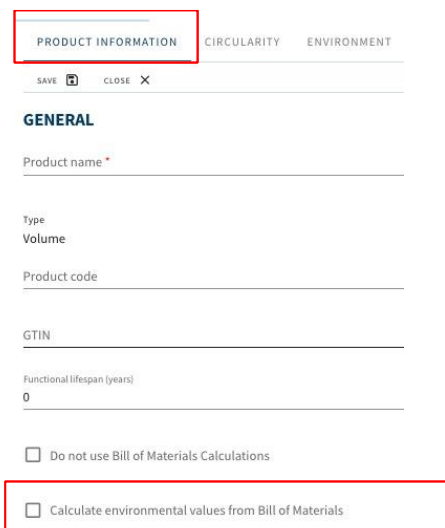
☐ Calculate environmental values from Bill of Materials

Then, in the 'Product information' tab, the 'Density' field becomes available. This can be entered according to the table below, depending on the selected product type in Madaster:

Product Type in Madaster	Density filled in as:
Volume product (m3)	Kilogram/m3
Surface product (m2)	Kilogram/m2
Length product (m)	Kilogram/m
Quantity product	Kilogram

2.1.6.2 Calculate environmental values from Bill of Materials

When adding a composite product (main product with a sub-product in the bill of materials) in Madaster, the user can select the option 'Calculate environmental values from Bill of Materials' in the 'Product information' tab. This automatically calculates the environmental values based on the environmental values in product composition.



PRODUCT INFORMATION CIRCULARITY ENVIRONMENT

SAVE CLOSE

GENERAL

Product name *

Type

Volume

Product code

GTIN

Functional lifespan (years)

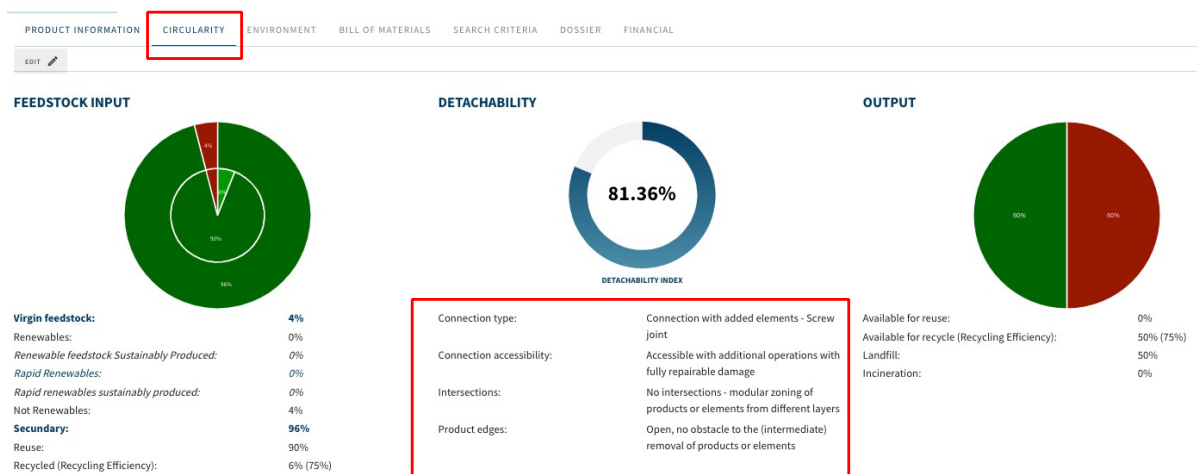
0

☐ Do not use Bill of Materials Calculations

☐ Calculate environmental values from Bill of Materials

2.1.6.3 Detachability parameters by product (Circularity tab)

In the product's 'Circularity' tab in Madaster, the user can enter several detachability parameters: connection type, accessibility of the connection, intersections and product edges inclusion).



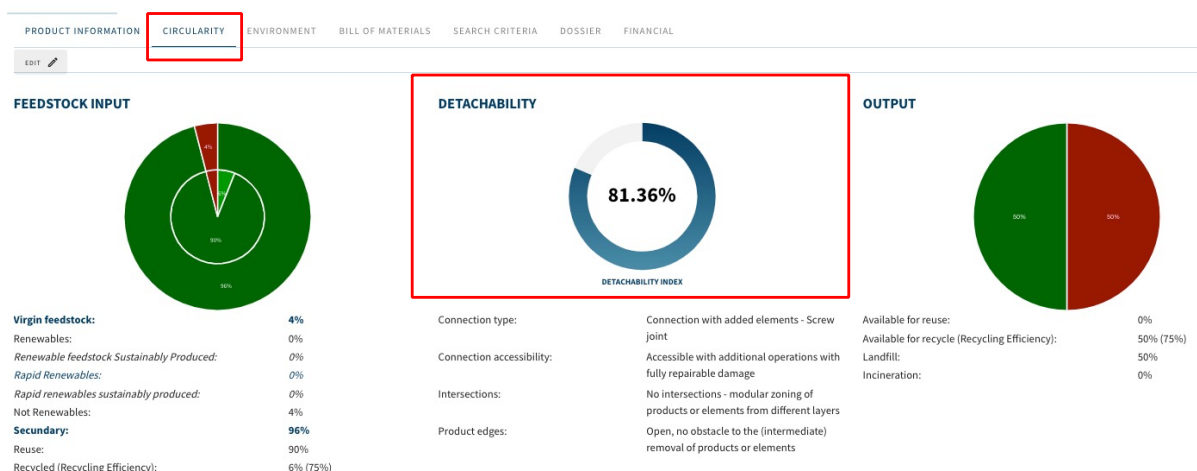
These parameters represent the way in which the product should be installed in the building, according to the manufacturer's/multiplier's guidelines.

If an element in a building source file (IFC/Excel) does not contain detachability parameters and during the matching process in Madaster is linked to a product, then the element will inherit the detachability parameters from the product in Madaster.

If an element in a source file (IFC/Excel) does contain detachability parameters and during the matching process in Madaster is linked to a product, the detachability parameters entered in the source file will be taken over.

2.1.6.4 Detachability index of product

The Madaster platform calculates and displays a detachability index (percentage) of the added product based on the detachability parameters defined at product level. This score is based on the revised uniform measurement method for detachability (see section 2.1.2.2).



The detachability index at product level can only be calculated and displayed if all four parameters have been entered.

2.1.7 Add external link in Dossier

In addition to source files and general files, it is now also possible to add an external source (URL) to the “Dossier” tab (on various levels) in Madaster. This link can be added if relevant build data is available on an externally accessible website.

ADD FILE

File type *
External link

Name *

Select folder *
Dossier

URL *

2.2 API

Three functions have been added to the public API with which images on the buildings can be managed. These APIs are:

GET	/api/v3.0/building/{id}/images	Get the buildingimages	✓	🔒
POST	/api/v3.0/building/{id}/images	Adds an image to a building	✓	🔒
DELETE	/api/v3.0/building/{id}/images/{fileName}	Deleted an image from a building	✓	🔒

2.3 Bug fixes

The following bugs have been resolved:

- Excluding 'ifcCovering' type in the import process is not supported.
- Uploading source files with # character in the naming gives an error.
- Deleting account database gives error.
- Database can be deleted even though it contains materials/products.
- Enrich again function does not match sub-elements.
- Shared database is visible in invited party navigation.
- Article code of added product in Madaster is not visible in “Building” tab.
- Elements of archived building are not visible in the Enrich tab.
- Unable to remove invited but unregistered users. Newly added folder is not immediately visible in navigation.

3 Build 9731


3.1 New functionalities

3.1.1 (NL) NAA.K.T. material naming added as search criteria

This is a further specification of the agreements in the BIM Basic IDM in the Netherlands about material descriptions in the form of unambiguous material naming and according to a fixed order: Name_Attribute_Application (in Dutch abbreviated: NAA.K.T.). In this release, the NAA.K.T material names are added as search criteria to the materials of the “Madaster” dataset. As a result, if an element in a source file (IFC/Excel) contains a NAA.K.T material name, it will be automatically recognized and linked to a corresponding material in the “Madaster” dataset.

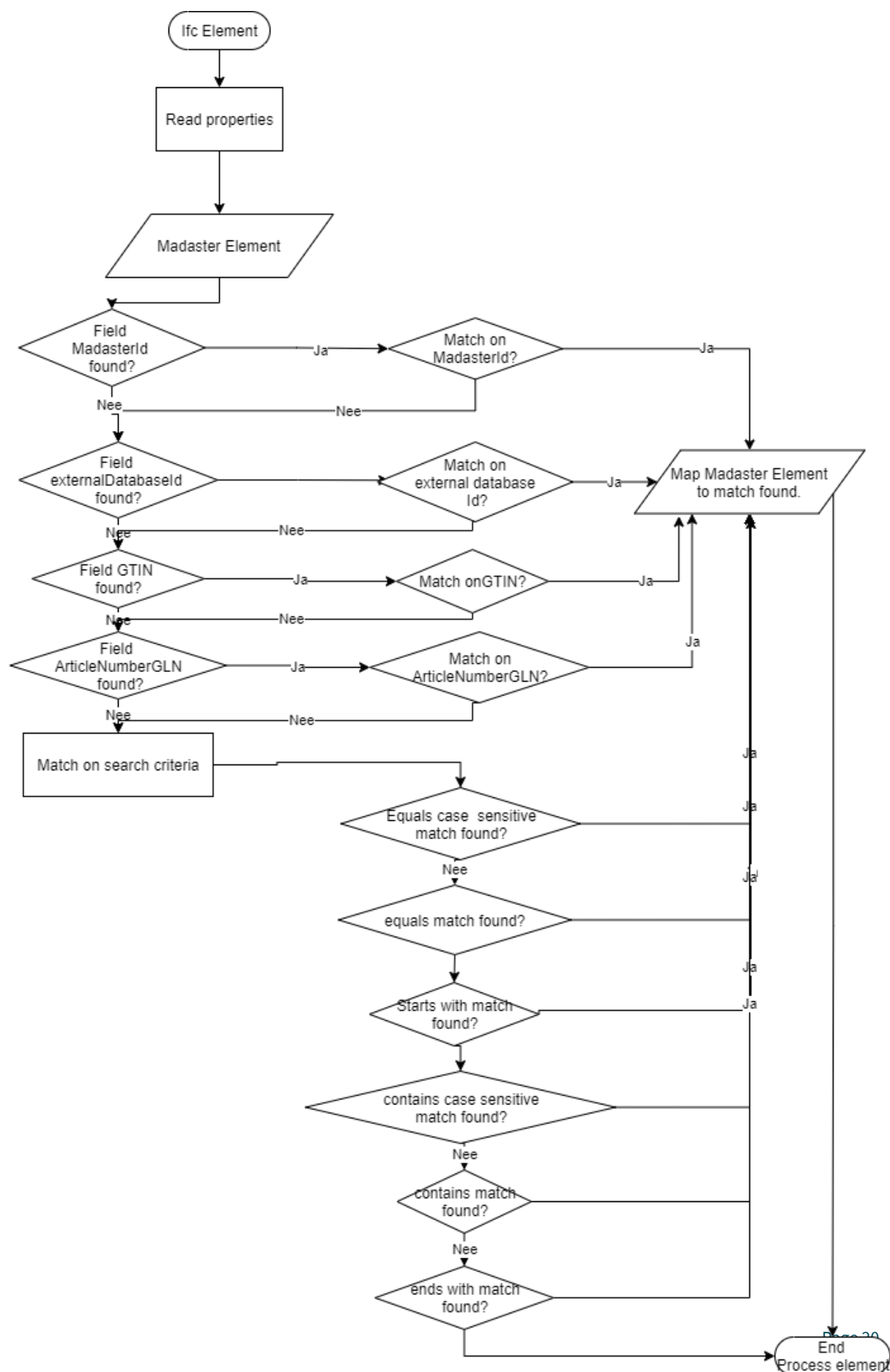
Home > Madaster > Madaster > Zoekcriteria

LOOFHOUT - ESSEN

MATERIAL INFORMATION	CIRCULARITY	ENVIRONMENT	SEARCH CRITERIA	DOSSIER	FINANCIAL
EDIT 					
Search criterium	Matching type	Language			
Ash	Contains	All languages			
Essen hout	Contains	Dutch			
Bois de frêne	Contains	French			
Legno di frassino	Contains	Italian			
Madera de fresno	Contains	Spanish			
Eschenholz	Contains	German			
Asketre	Contains	Norwegian			
hout_essen_		Dutch			

3.1.2 Extension matching

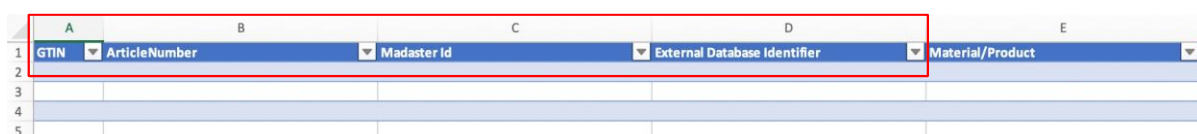
Besides search criteria, the matching mechanism in Madaster has been expanded. With this release it is possible to match on (1) External Database Ids, (2) GTIN and (3) Product Code (whether or not in combination with GLN). The process of element happens as follows:



3.1.3 Extension Madaster Excel upload template

In addition to IFC source files, the Madaster platform can also read building data from a standardized Excel upload template. The new version of the Madaster Excel upload template has been extended with the following four columns:

- (1) GTIN (EAN)
- (2) Article number
- (3) Madaster Id
- (4) External database ID.



	A	B	C	D	E
1	GTIN	ArticleNumber	Madaster Id	External Database Identifier	Material/Product
2					
3					
4					
5					

The Madaster Excel upload template can be downloaded in any building's dossier (Dossier >> Upload button).

ADD FILE

File type *

Source file (BIM or Excel) ▼

Classification method *

NL-SfB ▼

Are you using Excel? Then use [this template](#).

These additional data fields are read in Madaster as follows:

Excel	Madaster Element
GTIN	GTIN
ArticleNummer	ArticleNumberGLN
MadasterId	MadasterId
External database-Id	externalDatabaseld

3.1.4 Extension Madaster Property set (IFC)

To support the expansion of the matching options, the Madaster Property set (a set of properties in which certain IFC properties are bundled) has been extended with new data fields, being:

Propertyset	Dataveld	Madaster Element
Pset_Madaster	externaldatabaseld	externaldatabaseld
<u>Pset</u> _Madaster	GTIN	GTIN
<u>Pset</u> _Madaster	ArticleNumberGLN	ArticleNumberGLN

In case the Madaster property set is present on an IFC element, and these data fields are filled in, then these values are used within Madaster (and reading data fields from other property sets is skipped).

3.1.5 Extension Madaster IFC import properties

As a result of the expansion of matching options, the existing Madaster IFC import function has been expanded.

IFCv2.3:

Propertyset	Dataveld	Madaster Element
Pset_ManufacturerTypeInformation	ArticleNumber	ArticleNumber part of ArticleNumberGLN When ArticleNumber is 8, 13 or 14 characters long also GTIN.
Pset_ManufacturerTypeInformation	Manufacturer	Manufacturer part of ArticleNumberGLN
Pset_ManufacturerTypeInformation	ModelReference	When ArticleNumber data field is empty: ArticleNumber part of ArticleNumberGLN

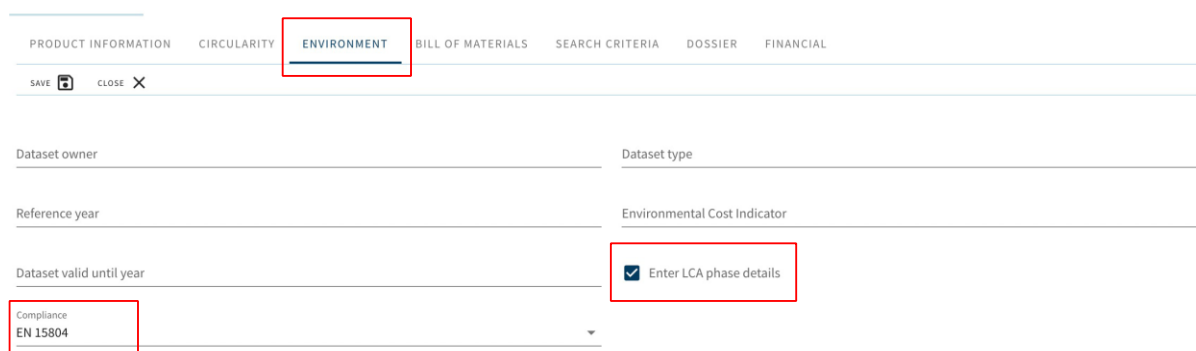
IFCv4:

Propertyset	Dataveld	Madaster Element
Pset_ManufacturerTypeInformation	GlobalTradeItem Number	GTIN
Pset_ManufacturerTypeInformation	ArticleNumber	ArticleNumber part of ArticleNumberGLN When GlobalTradeItemNumber data field is empty and ArticleNumber 8, 13 or 14 characters long also GTIN.

ManufacturerTypeInformation	Manufacturer	Manufacturer part of ArticleNumberGLN
ManufacturerTypeInformation	ModelReference	When ArticleNumber data field is empty: ArticleNumber part of ArticleNumberGLN

3.1.6 Expansion of Environment tab

The existing “Environment” tab, available at product level, has been further expanded with several new fields. In addition, users (mainly product manufacturers) have the option of entering the LCA phase details for their product(s) per compliance (for the environmental performance of construction products based on the environmental life cycle analysis).



These environmental data can now also be entered per impact category.

EN 15804:2012-04+A1 2013

IMPACT CATEGORY	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Global Warming Potential 100 years (kg CO ₂ e)															
Ozone Depletion Potential (kg CFC11e)															
Photo Chemical Oxydant Formation (kg C ₂ H ₄ e)															

3.1.7 Removing duplications in material naming (IFC source file)

While reading a source file (IFC/Excel) into Madaster, the platform attempts to link each element to a material or product in one of the selected Madaster datasets. It does this based on the material description. If an element in an IFC file contains an exact duplicate material description (e.g. 'steel_reinforced, steel_reinforced'), Madaster recognizes that it concerns one and the same material. In that case, the platform will be able to automatically link this element to a material in the selected data sources (provided that the material is available in the selected data sets).

3.1.8 Extension filter 'Unit dimension' (Enrich tab)

On the existing 'Enrich' tab, the 'Unit dimension' filter has been extended with the option "No dimensions". By choosing this option, in the Enrich screen, all top elements without geometric properties are displayed in the relevant source file (IFC/Excel).

PROGRESS ENRICHMENT

100%

FILTER ON

Element status ▼

Element calculation ▼

IFC-type ▼

Floors ▼

Building phase ▼

Classification methods ▼

Layers of brand ▼

Unit dimension ▲

☒ No dimensions 83

☐ Length 0

☐ Area 0

☐ Volume 0

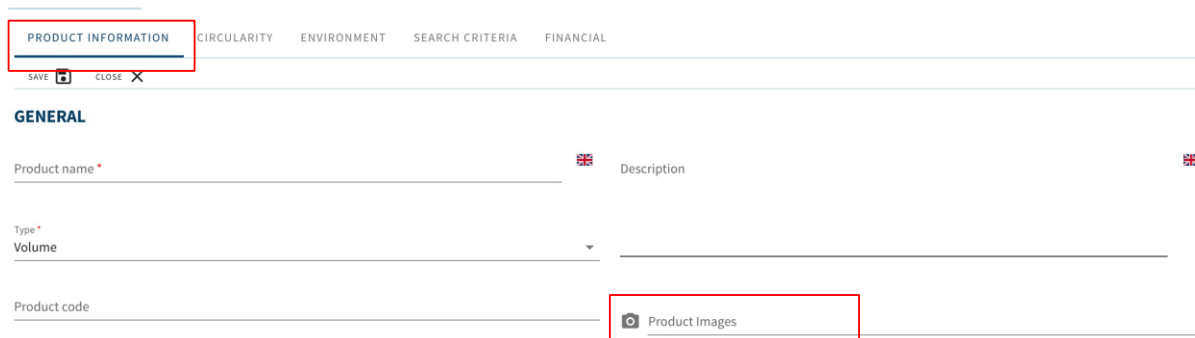
3.1.9 Change of column naming in Madaster Excel upload template

In the new version of the Madaster Excel upload template, the name of the column 'Building layer' has been replaced by 'Floor'.

E	F	G
Material/Product ▼	Classification ▼	Floor ▼

3.1.10 Add product images

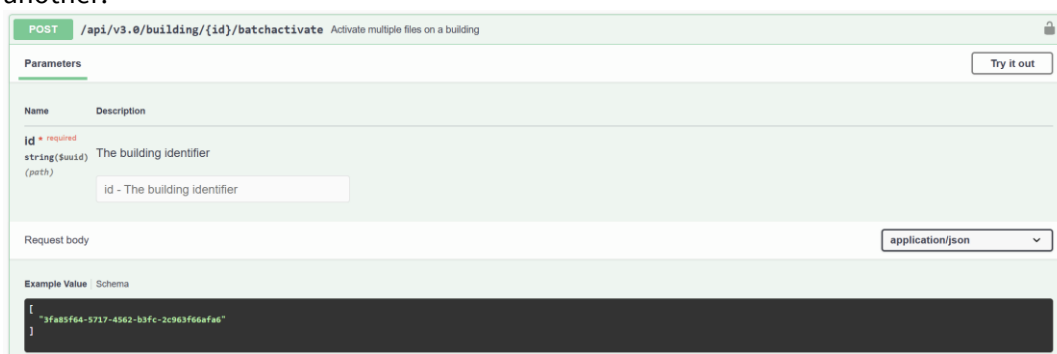
The existing 'Product Information' tab, available at product level, has been extended with the option to add one or more product images. These images (fileformat jpg and png) may be max. 5MB each.



3.1.11 API

The following adjustments have been made:

- A new API has been added to enable activating multiple building files at once. Previously you had to enable a single file and then poll until the file was activated before activating another.



3.2 Bug fixes

The following bugs have been resolved:

- Uploading and displaying images at folder type level (including portfolio, region, etc.).
- IFC matching on property “type name” in Madaster now also works for sub-elements of compound elements (and not solely for top elements).
- Select option ‘Overwrite values for the use of raw materials’ is only available on product (in tab ‘bill of materials’) when a material is added. This option is no longer shown on material.
- Tags (search terms) are also copied when uploading a new version of the IFC file.

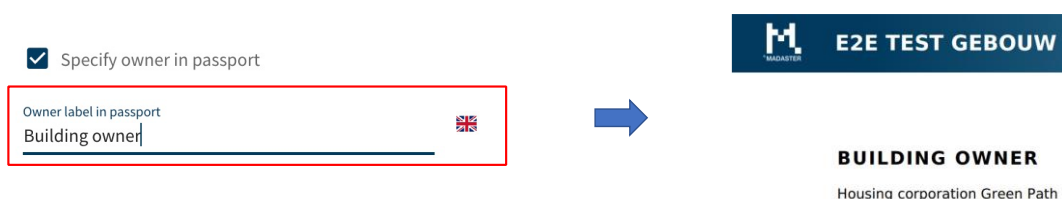
4 Build 9044

4.1 New functionalities

4.1.1 Define owner label on folder type for use in materials passport.

Admin users can activate and define a text label on a folder type (portfolio, region, etc.) representing its owner.

This label can be filled in at the folder level. Both label and entered value will be displayed on the front page and general page of the materials passport.



4.1.2 Multiple classification methods per building

Ability to upload and display source files (IFC & Excel format) with different classification methods (which are supported by the platform) on one building has been added. Previously, only one classification method could be chosen at the building level.

SOURCE FILE (BIM OR EXCEL)			
Name	Size	Classification method	
 190326 Demomodel ARC22-Bouwkundig.ifc IFC file generated by GRAPHISOFT ARCHICAD-64 22.0.0 NED FULL Macintosh version (IFC add-on version: 5009 NED FULL); IFC2X3	34MB	NL-SfB	
 MaterialImportTemplate Shearing layers TEST INFRA.xlsx Microsoft Macintosh Excel (16.0300)	28KB	Shearing layers	
 MaterialImportTemplate Omniclass TEST RG.xlsx Microsoft Excel (16.0300)	52KB	Omniclass	

4.1.3 New classification method: NL-SfB table 1 V201912

For the Netherlands, update 2019-12 of the NL_-SfB Table 1 classification has been made available on Madaster.



4.1.4 Improvements to vendor and verified database accounts

In Madaster it is possible for manufacturers to add their building materials and products in their own database including underlying sub-databases. In addition, it is now possible for admin users to invite users with read and / or management rights to these databases. Finally, the function has been added to copy materials and / or products between the own supplier databases.

4.1.5 Material Passport enhancements

The following items have been changed in the Madaster materials passport (both PDF and Excel file):

- On the cover page, the fields “Publisher” and “Owner” have been removed.
- On the “General” tab, the “Portfolio Name”, “Portfolio Owner” and “Indicative MPG” fields have been removed. Empty fields are also hidden.
- In the section “Active source files” the fields / columns “classification methods” and “export date” have been added.
- If a building layer (e.g., Structure, Skin, etc.) contains no source data, this will be indicated textually on the pages “Building - Materials” (text: “no material data found for this layer”) and “Building - Products” (text: “There are no products in this layer”) of the materials passport.

4.1.6 Visual adjustment Circularity tab

On the Madaster "Circularity" tab, the visual representation of the CI Building Score and Madaster CI Score is reversed. Logically, the CI Building score is now displayed on the top line and the corrected Madaster CI score below.



4.1.7 API

The following changes have been made:

- The POST (create) / PUT (update) method for building have changed:
 - the field classificationType has been deprecated.
 - new field buildingUsageOtherDescription is added to enable a description for the other category
- The POST (create) method for buildingfile is extended with a new field classificationTypeid. This field tells the system which classification (nl-sfb/ebkp/omniclass/etc) the file uses.

4.2 Bug fixes

The following bug has been fixed on the platform:

- Visual representation of percentages in pie charts on page “Source file quality” is not always shown correctly (page is not automatically refreshed).
- Generation of materials passport (pdf): progress indicator remains active even though materials passport is ready.
- Display of composite elements (assembly) is shown in “Enrich” screen to only 1 sub-level.
- Building archive: link to the building is missing in the breadcrumb.
- The tiles on the home page of a private account will lead to a "Page not found" message on the page.
- Lifespan of a product in the database is limited to 1000 years.

5 Build 8820

5.1 New functionalities

5.1.1 Expansion of matching types within the search criterion material / product

In Madaster it is possible to add a material and / or product in your own database, which can be used in the matching process. Search criteria can be used to automatically link this "own" material / product. Within a search criterion, two new matching types have been added, namely:

- **Contains (Case sensitive)** – extension of “Contains” matching the values that contains the exact criteria including casing (lower/upper).
- **Equals (Case sensitive)** – extension of “Equals” matching the values which are equals to the criteria including casing (lower/upper.)

ADD CRITERION

Search criterium *
NLR5_47_GM_WPB_gootklos_gen_WCE:plantenbak klos_50x200x80

Matching type *
☐ Contains
☒ Contains (Case sensitive)
☐ Equals
☒ Equals (case sensitive)
☐ Starts with
☐ Ends with

Language *
All languages

SAVE

Examples

Matching Type	Criteria	Value	Is a Match?
Equals	ABS	abs	✓
Equals	ABS	ABS	✓
Equals	ABS	Abs	✓
Equals	Abs	abs	✓
Equals	Abs	ABS	✓
Equals	Abs	Abs	✓
Equals (case sensitive)	ABS	ABS	✓

Equals sensitive)	(case	Abs	ABS	✗
Equals sensitive)	(case	ABS	abs	✗

5.1.2 Possibility to override the default (based on building usage) demolition and dismantling costs.

The Financial module of the Madaster platform provides insight into the financial (residual) value of materials used in a building. Specific costs such as demolition and dismantling costs are used in the calculation. Until now, these demolition & dismantling costs based on the building usages were not visible to the end-user on the building. In this release, default the demolition and dismantling costs have been made visible on edit of a building and there is a new possibility to override these.

Usage *
Semidetached

☐ Override the demolition costs (default: 26 EUR/m²)

☒ Override the demolition costs (default: 69 EUR/m²)

Demolition costs
72 EUR/m²

6 Build 8556

6.1 Bug Fixes

The following bug has been fixed on the platform:

- Folder overview page: navigating to a subfolder leads to a Page not found.
- Product/Materials search criteria: the label for equals criteria was wrong equals (Case sensitive) instead of Equals.

7 Build 8382

7.1 New features

7.1.1 UI improvements

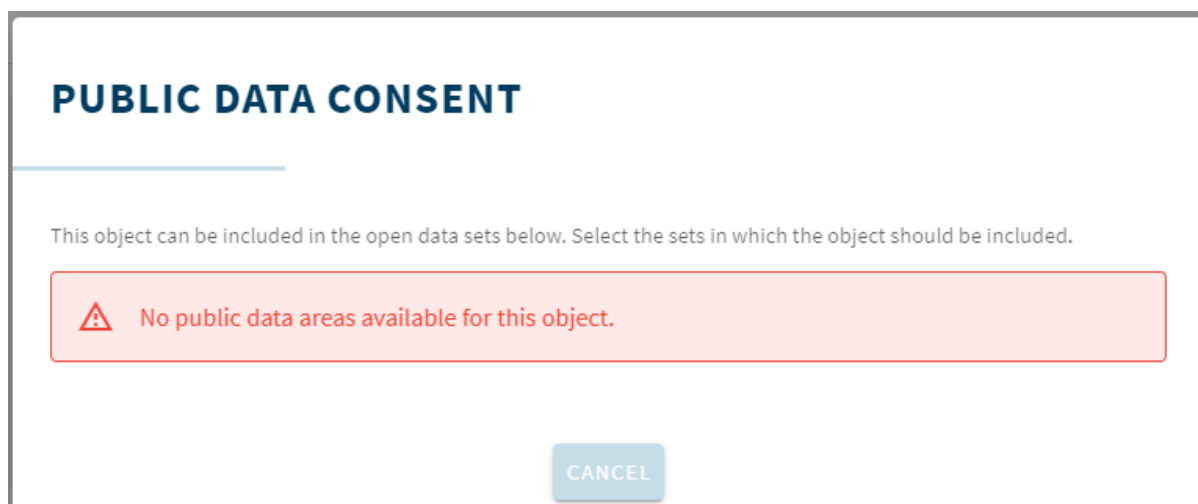
On the financial tab the bar charts have a mouse over displaying the values.

7.1.2 New classification method “Shearing Layer”

If a customer uses none of the classification available for that country in Madaster, it is now possible to just use a simple code to directly map the elements to the proper shearing layer of Brand.


7.1.3 New Button “Public Data” on building (NL only)

To support future functionality to ask consent to be able to use building data with a specific license within a location boundaries.



PUBLIC DATA CONSENT

This object can be included in the open data sets below. Select the sets in which the object should be included.

 No public data areas available for this object.

CANCEL

7.2 Bug Fixes

The following bug has been fixed on the platform:

- Percentage on the financial tabs where not properly displayed. (100% instead of 1%).
- Excel passports: material column names are missing when displaying products.

8 Build 8029

8.1 Bug Fixes

The following bug has been fixed on the platform

- When language settings are German or French, the databases list do not show material and/or products in chosen language but English.

9 Build 8023

9.1 Bug Fixes

The following bug has been fixed in the Public API

- Error when creating a buildingfileelement containing a materialId.

10 Build 8021

This release contains the following items:

10.1 Expansion material & product fields

In Madaster it is possible to add materials and / or products. In this release, a number of new tabs have been added at both material and product level and existing tabs have been changed in terms of design and content.

10.2 Addition of “Environment”-tab

In line with the guidelines from Platform CB'23 and to support producers / manufacturers in adding the necessary product data fields to comply with Environmental Product Declarations (EPDs) and to generate product passports, this release delivers for materials and products in Madaster a new tab, namely the 'Environment' tab.

PRODUCT INFORMATION CIRCULARITY **ENVIRONMENT** SEARCH CRITERIA FINANCIAL

This is in line with the [Bepalingsmethode Milieuprestatie Bouwwerken](#) (environmental performance assessment method); the calculation method for determining the environmental performance of construction works during their entire lifespan, based on the EN 15804 standard.

In addition to environmental information (such as Environmental Cost Indicator and NIBE classification), this new 'Environment' tab in Madaster contains the environmental impact categories (incl. toxicity) as in force in the European standards:

- EN 15804/A1:2013 (“set 1”) en

SET 1		SET 1 - TOXICITY	
Global Warming Potential 100 years	kg CO ₂ e	Human toxicity potential	kg 1,4-Dichlorobenzene
0		0	
Acidification potential of land and water	kg SO ₂ e	Freshwater aquatic ecotoxicity potential	kg 1,4-Dichlorobenzene
0		0	
Eutrophication potential	kg (PO ₄) ³ e	Marine water aquatic ecotoxicity potential	kg 1,4-Dichlorobenzene
0		0	
Photo Chemical Oxidant Formation	kg C ₂ H ₄ e	Terrestrial ecotoxicity potential	kg 1,4-Dichlorobenzene
0		0	

- EN 15804/A2:2019 (“set 2”).

SET 2		SET 2 - TOXICITY	
Global Warming Potential Total	0	Potential Incidence of disease due to PM emissions	0
	kg CO ₂ e		
Global Warming Potential Fossil	0	Potential Human Exposure Efficiency relative to U235	0
	kg CO ₂ e		kBq U235-eq
Global Warming Potential Biogenic	0	Potential comparative toxic unit for ecosystems	0
	kg CO ₂ e		CTU-e
Global Warming Potential Land use and Land use change	0	Potential comparative toxic unit for humans - cancerogenic	0
	kg CO ₂ e		CTU-h
Ozone Depletion Potential	0	Potential comparative toxic unit for humans - not(cancerogenic)	0
	kg CFC11e		CTU-h
Acidification Potential Accumulated Exceedance	0	Potential soil quality index	0
	mol H ⁺ e		
Eutrophication Potential Fresh Water	0	Toxicity: Contains materials that are on the Cradle-to-cradle banned list of chemicals? <input type="radio"/> Unknown <input type="radio"/> Yes <input type="radio"/> No	
	kg PO ₄ e		
Eutrophication Potential Marine Water	0		
	kg Ne		
Eutrophication potential terrestrial	0		
	mol Ne		
Photo Oxidant Creation Potential	0		
	kg NMVOCe		
Abiotic Depletion Non Fossil	0		
	kg Sbe		
Abiotic Depletion Fossil	0		
	MJ		
Water Use Deprivation Potential	0		
	m ³ e depr.		

10.2.1 Addition of “Circularity”-tab

PRODUCT INFORMATION **CIRCULARITY** ENVIRONMENT SEARCH CRITERIA FINANCIAL

In line with the guidelines from Platform CB'23, a new tab has been added in this release at both material and product level, namely the 'Circularity' tab. It displays and further specifies existing “Feedstock input” and “Output” (waste scenario) sections (now available under the "Material Information" or "Product Information" tab) on a separate tab.

FEEDSTOCK INPUT

VIRGIN FEEDSTOCK : 100%

0% Renewables

0% Renewable feedstock Sustainably Produced

0% Rapid Renewables

0% Rapid renewables sustainably produced

SECONDARY: 0%

Reuse

0

%

0% Subcomponents reused

0% Reuse

0% Recycled (0%Recycling Efficiency)

OUTPUT

CHECKLIST REUSABILITY

☐ The fastenings are accessible and the product can be removed without removing/damaging other parts of the building

☐ The product can be disassembled with standard (hand) tools without damaging the product or products attached to the product

☐ The fastenings and assembly method of the product is standardized and pre-manufactured

0% Reuse of sub components

0% Available for reuse

0% Available for recycle (0% Recycling efficiency)

0% Landfill

100% Incineration

A new section has also been added for "Scarcity".

SCARCITY

0% Exhaustion Risk

0% Socioeconomic scarce

10.2.2 New product identification fields

In preparation for entering product information (by producers / manufacturers) in Madaster and subsequently being able to automatically match these products with elements in source files (IFC / Excel), the number of product identification fields has been expanded in this release.

In addition to "product code", the fields "GTIN" and "EAN" are now also available separately and the Madaster system also automatically validates whether elements in source files contain this coding. If this is the case, the Madaster system will be able to automatically match such an element to the corresponding product in the Madaster database.

Product code

GTIN

EAN

10.2.3 New fields for product origin

In preparation for entering product information (by producers / manufacturers) in Madaster, a number of specific manufacturer and production site fields have been added in this release.

MANUFACTURER	PRODUCTION SITE
Name	Name
Website	Website
Street	Street
City	City
Zipcode	Zipcode
Country	Country
GLN	GLN

10.3 Upload new version of a source file which preserves existing mapping.

The Madaster platform offers users the possibility to read source files at different times during the life of the building. So far, there was no specific functionality to upload a new version of source file. Therefore, the files had to be uploaded and mapped as a completely new source file. This release introduces a new feature that allows users to upload a new version of a source file in Madaster preserving previously mapped materials/products.

Instead of the usual upload procedure, this function starts via the upload icon (in Dossier tab) that is located behind the version of the source file to be replaced.



Subsequently, the regular upload process steps must be followed. The system will process the new IFC file and, if a unique element occurs again and is linked in the previous IFC file, will maintain this relationship. Ultimately, only one version of the source file can be activated in the building dossier. By activating the most recent version, the system will automatically deactivate the old (replaced) IFC file.

10.4 Platform improvements

Madaster strives to implement improvements in the platform on a continuous basis. If necessary, this is carried out by means of hotfixes. The improvements below have been implemented in the platform as part of this release.

10.4.1 Add complete product in enrichment process.

The Madaster platform offers users the option to add a new material or product and / or copy an existing material or products (and modify it) during the “Enrich” process (manually linking elements in the source file (IFC / Excel) to materials and / or products). Certain material / product information (including search criteria and bill of materials) could not be entered directly in this process. In this release, the user is offered the option, if desired, to enter all relevant material or product data directly in the “Enrich” step.

10.4.2 Financial dataset representation (material)

When adding a new material in the Madaster platform, the user can, if desired, select a financial dataset in the material tab “Financial”. The selected dataset is then used to provide insight into the

financial (residual) value (at material level) in the Financial module of the Madaster platform. Previously, if a user did not select a financial dataset, it was not immediately visible that the system assigned an alternative (so-called "fallback") financial dataset (linked to the Madaster material classification) to the new material. In this release, this is modified so that this "fallback" dataset is also displayed in the material's "Financial" tab.

10.4.3 Other bug fixes

- When adding a new material and / or product, a check is now performed per database to see whether the search criteria used are unique. If a material and / or product is deactivated, the relevant search criteria are automatically removed to ensure that these search criteria do not become unjustifiably unusable.
- When adding an "Area" product (m²) in Madaster, the minimum height has now been adjusted, so that products with a height of less than 1 cm can also be added.
- Changes to the material name are now also immediately visible in the product tab "Bill of Materials", if the material is part of one or more products in Madaster.
- The interface of the vertical navigation drawer (left side of the screen) is immediately refreshed when executing the function "move building" (in user's own folder type structure).