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RICS WLC Assessment 2nd Edition

Madaster compliancy guide

Background information on how Madaster implements the RICS WLCA V2 Standard



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<mark>M</mark> RICS WLCA Functionality

Introduction

This document aims to provide clarity and transparency to the way Madaster has interpreted, aligned and implemented the RICS WLCA Standard as part of its new functionality. WLCA assessors can refer to this document to fully understand how each phase has been calculated and to what extent the standards requirements are met.

How can Madaster support RICS V2 reporting?

Madaster can automatically calculate the non-decarbonised scenario for the embodied carbon (A-C, excluding B6-B8) for the building and report this in the buildings template at the technical design stage (Granularity levels 2 and 3).

Within the Environmental tab users with access to the RICS WLCA feature are able to choose between the following reporting compliances: EN 1508 (A1), EN 15804 (A2), RICS (V2), DGNB (if requested). For RICS WLCA reporting Madaster only uses EPDs that are EN 15804 A2 compliant as EPDs that follow this standard separately report biogenic sequestered carbon. It is important as a result that when connecting EPDs to your asset you select EN 15804 A2 complaint EPDs.

Madaster allows user to generate reports aligned with the RICS standard at granularity levels 2 and 3. Using the generate report button a user can export a RICS WLCA report that reflects the buildings RIBA Plan of Work Stage. The RIBA Plan of Work Stage can be adjusted in the buildings 'General' tab. Plan of Work Stages 4 upward will produce detailed granularity report outputs.

Reference Study Period + reviewing datasources

Madaster uses the reference study period of 60 years (in accordance with page 42 of RICS) irrespective of the declared lifespan of the building on Madaster.

Biogenic Sequestered Carbon (A1-A3s)

Sequestered biogenic carbon (measured as CO2) is deducted and reported separately for life modules A1–A3. Whilst enriching your asset you can filter EPDs by compliancy. It's important to use EN15804 A2 compliant EPDs when conducting a RICS WLCA using Madaster in order to report sequestered carbon separately.

A1-A3

A1-A3 is calculated and reported using EPDs available in databases connected to the Madaster platform. The data sources can be checked and reviewed through the databases on the Madaster platform

A4

Madaster has not implemented the early design stage transport scenarios. Transport impacts for technical design are calculated from connected EPDs. Madaster does not currently follow the methodology outlined in the RICS WLCA Standard 4.8 p53.



A5

In Madaster when A5 is selected in the RICS WLCA V2 compliancy on the environmental tab A5.1-A5.3 is summed together.

A5.1 is filled based on the values provided in the 'General' tab of the previous asset demolished. It can also be filled in if the IFC has items modelled and tagged for demolition.

A5.2 is calculated based on the GIA of the BUILT asset and is an assumed value per m2 that has been described in RICS Section 5.1.4 p82.

A5.3 is calculated calculated using (waste rate x site waste treatment embodied carbon factor) as described in RICS section 5.1.4 p82. Table 18 of RICS supersedes EPD information.

B1

B1.1 is summed up based on the B1 phase taken from the EPD. This is recalculated to account for the 60 year service life period outlined by RICS.

B1.2 is not reported or calculated by the Madaster Platform

B2 + B3

B2 and B3 are calculated from the connected EPDs and summed for input into the RICS template. Madaster does not include the proxy information outlined in sections 5.2.2 and 5.2.3 of the RICS standard if there are no B2 and B3 values.

B4

B4.1 is calculated using the B4 values from the associated EPDs. Madaster has not implemented the extra steps for the proxy information outlined in table 20 of the RICS standard.

B4.2 is not reported or calculated by the Madaster Platform

B5, B6, B7 + B8

Are not reported or calculated by the Madaster Platform

С

Madaster assumes the end of life scenarios present in the EPDs.

C1

Madaster has not implemented any of the proxy information provided on page 111 table 25 of the RICS document.

C2

Madaster only follows the transport values from the associated EPDs and does not infill specific location based transportation information. Currently Madaster has not implemented the CIBSE TM65 methodology for MEP products.

C3 +C4

EPD information is used



How to find RICS compliant information for WLCA

Firstly ensure you have access to the RICS reporting functionality. This functionality comes as standard to Core and Premium subscription users. If you are unsure whether you have access or not contact your account admin or service@madaster.co.uk.

Upload your source file using the 'upload' button in the dossier tab of a new building.

Ensure during the enrichment process you adopt EN15804 A2 compliant EPDs. During the enrichment process you can filter results based on this compliancy.

Activate your source files to start the platform calculations and aggregations.

Navigate to the 'Environmental' tab which will appear once platform calculations are complete.

From the compliancy drop down select RICS WLCA V2 compliancy.

Using the lifecycle stage drop down you can select a lifecycle stage or a combination of stages. Madaster will provide you with values for total whole life carbon and whole life carbon per m2 in t CO2e.

Beneath these results you can review whole life carbon across all lifecycle stages.

How to issue/ generate a RICS report.

Once satisfied with the enrichment process and the connected EPD information you can generate a RICS WLCA V2 report.

The level of granularity is infilled depending on your selected RIBA Plan of Work Stage. This can be adjusted on the 'General' tab of a building. For building designated stage four and above a RICS WLCA report with granularity levels 2 and 3 infilled will be generated .

To generate a RICS report click the 'Generate report' button in the 'General' this pop up will allow you to select a material passport output, a RICS report or select multiple output options.

Your RICS report will then be generated and you will receive a notification once it has been completed. Once complete your RICS report will be stored within the 'Doisser' tab, where you are able to download it by clicking on the file.





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