

PHribbon Embodied CO₂ full LCA tool

Tool Information Sheet

Tool name	PHribbon
Website	https://www.phribbon.co.uk/ (and some info at AECB)
Cost for users?	Basic tool module (required) + Embodied CO ₂ module = £105. Users will also need their own copy of the Passivhaus Planning Package (PHPP), available from the AECB
Where does it source its data for materials?	About 200 EPD entries and approx. another 100 calculated from the ICE database
Which life cycle modules does it include? (delete as applicable)	A1-A3 A4 A5 B1 B2 B3 B4 B5 B6 B7 C1 C2 C3 C4 Module D The embodied CO ₂ of materials and associated transport for Replacement, B4, is included, but B3 and B5 are not included automatically. The user would have to identify what that means in terms of materials. For domestic buildings Refurbishment scenarios, B5 may not be expected, but they definitely should be for commercial ones. Some EPDs may not declare (i.e. have missing information) in sections B, C and D. The ICE database information only gives A1-A3.
Which environmental indicators does it include? (delete as applicable)	Just kgCO ₂ e Embodied Carbon, but in 4 different units: - tonnes CO ₂ e for the building, - per m ² of Net Internal Area, as in RIBA Climate Challenge - per m ² TFA (Treated Floor area, i.e. useable space) - per person
Where is scenario data sourced from? (if relevant)	Transport: RICS guidance and Government reporting figures 2019 Site waste: Recycling and recovery rates for materials from RICS guidance Use of external dims of building allows for some site wastage Services lives: If in EPD then from that, otherwise from RICS guidance End of life routes: Standard scenario from RICS guidance
Does it link with CAD/BIM tools, if so which?	Not to CAD or BIM, but it links to the Passivhaus Planning Package (PHPP), it is suitable for any building modelled in that. The building does not have to be a Passivhaus; AECB compliant buildings are also modelled in PHPP and can use this tool.
Can you export results?	Already in Excel
Additional features (e.g. whole life costing)	There is an extra optional costing module (not included in the price given above) that can give an indicative capital cost and heating costs over 30 years, based on the PHPP energy model. PHribbon also has a dozen or so other features to help PHPP users (included in price).
What help is available to users?	Free online recorded training videos, online monthly question and answer sessions, User Guide, phone help. More details: Training videos at https://www.phribbon.co.uk/how-to-use/
Is there a checking or auditing service to review assessments?	Yes, I offer that, though it still would not be an official RICS calculation as it uses quantities from PHPP, which are a little rough. Nevertheless the calculation provides direction and feedback at design stage and can be used as a basis for fully compliant calcs by suitably qualified people.