

BuildDesk Carbon Checker v1.8.1.004 SBEM v5.2.d patch 01 Release notes

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1 Overview

This version of Carbon Checker incorporates SBEM v5.2.d patch 1. This version of SBEM supports EPC and Part L calculations in Wales. The majority of the changes to this version of Carbon Checker involve supporting this revised version of SBEM.

This version also includes:

- the ability to globally edit glazing and window settings for a project rather than having to change them individually
- revised behaviour for calculating the default air flow rate of solar collectors
- a fix for a bug that led to potential errors with calculations involving brise-soleils.

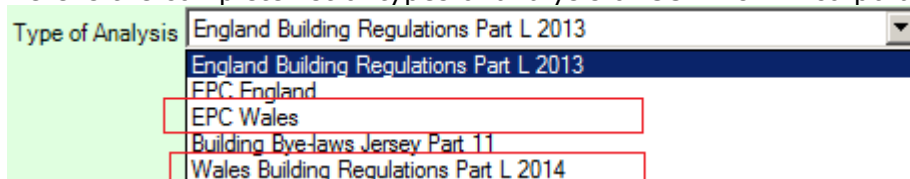
2 Changes associated with supporting calculations in Wales

2.1 Project settings

2.1.1 Types of analysis

The type of analysis “EPC Wales” is available again and a new type of analysis “Wales Building Regulations Part L 2014” has been added.

Here is the complete list of types of analysis of CC v1.8.1 incorporating SBEM v5.2.d:



For calculations in Scotland and Northern Ireland, users should continue to use CC v1.7.3.

2.1.2 Checkbox for LENI-Calculations carried out available for Wales

Has LENI calculation been carried out?

This checkbox is located on the "Building Settings" tab and is enabled for the types of analysis "England Building Regulations Part L 2013", "EPC England", "EPC Wales", "Wales Building Regulations Part L 2014" as in iSBEM v5.2.d.

2.1.3 Special considerations – Changed combo box items for date of manufacture

Date of manufacture	After 31 July 2014
	<ul style="list-style-type: none"> After 31 July 2014 6 April 2014 - 31 July 2014 1 October 2010 - 5 April 2014 6 April 2006 - 30 September 2010 1 April 2002 - 5 April 2006 Pre 1 April 2002

2.1.4 Checkbox for gas availability

The Checkbox for gas availability has been moved outside the frame "Addition Parameters for Scottish Building Regulation" and is now also available for the types of analysis "EPC Wales" and "Wales Building Regulations Part L 2014" as in iSBEM v5.2.d.

Type of Analysis	Wales Building Regulations Part L 2014	Weather Zone	
Stage of Analysis	As built	NOS Level	Level 3
<input type="checkbox"/> Additional check of Building Regulation	<input type="checkbox"/> EPC is produced in Welsh language		
<input type="checkbox"/> Tick if main gas supply is available to development site	<input type="checkbox"/> Create HTML Data Reflection Reports		
Additional Parameters for Scottish Building Regulation			
Type of EPC	Actual	Type of Building	Other buildings
Main renewable source	From calculation	<input type="checkbox"/> Building implements lighting voltage reduction scheme.	
<input type="checkbox"/> Building is fully naturally ventilated and will not overheat without the need for any mechanical ventilation			

2.2 Result Screens

2.2.1 New buttons for additional output documents

Please note that these results only deal with criterion 1 of Part L2A

FAIL

New button for new document →

New button for new document

- Data Reflection Report - Actual Building as PDF
- Data Reflection Report - Actual Building as HTML
- Data Reflection Report - Notional Building as HTML
- Compliance Document
- Additional Details on Project Parameters as Input by the Certifier
- Energy Performance Certificate
- EPC Recommendations Report
- EPC Secondary Recommendations

Regulations Part F 2012, Scottish Building Regulations Part L, EPC E = EPC England, Building Energy Rating, BBLJ = Building

2.2.2 New note for rules over grid with historic results

Current and previous results
 Note to Rule: BR = Building Regulations (England Building Regulations Part L 2013, Northern Ireland Building Regulations Part F 2012, Scottish Building Regulations 2010), BR W = Wales Building Regulations Part L 2014, BR IRL = Republic of Ireland: Building Regulations Part L, EPC E = EPC England, EPC NI = EPC Northern Ireland, EPC SC = EPC Scotland, EPC W = EPC Wales, BER IRL = Republic of Ireland: Building Energy Rating, BBLJ = Building Bye-laws Jersey Part 11

2.2.3 Corrected units

Units are corrected to kgCO2/m²/yr as in iSBEM v5.2.d throughout all result screens and charts.

2.2.4 Revised results screens for different types of analysis

Wales Building Regulations Part L 2014

Results

Compliance | Energy Consumption by End Uses | Monthly Energy Consumption by End Uses | Monthly Energy Consumption by Fuel Type | Key Results | Overheating risk

Wales Building Regulations Part L 2014 As in iSBEM v5.2.d Please note that these results only deal with criterion 1 of Part L2A

CO2 Emissions Actual (BER)	368.54 kgCO2/m ² /yr	Primary Energy Actual (BPEC)	2043.58 kWh/m ² /yr
CO2 Emissions Notional	308.71 kgCO2/m ² /yr	Primary Energy Notional	1763.42 kWh/m ² /yr
CO2 Emissions Target (TER)	308.71 kgCO2/m ² /yr	Primary Energy Target (TPEC)	1763.42 kWh/m ² /yr
CO2 Emissions PASS	NO	Primary Energy PASS	NO
Criterion 1 PASS	NO		

SBEM Outputs

Data Reflection Report - Actual Building as PDF

Data Reflection Report - Actual Building as HTML

Data Reflection Report - Notional Building as HTML

Compliance Document

Additional Details on Project Parameters as Input by the Certifier

Energy Performance Certificate

EPC Recommendations Report

EPC Secondary Recommendations

Current and previous results
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Columns which existed already, have been reused

Creation Date	Rule	BER	Notional	TER	Result	BR W Primary Energy Actual (BPEC)	BR W Primary Energy Target (TPEC)	BR W Primary Energy Notional	BR W Primary Energy PASS	BR W Criterion 1 PASS	Description
<input type="checkbox"/> 13/08/2014 16:04:25	BR W	368.54	308.71	308.71	FAIL	2043.58	1763.42	1763.42	FAIL	FAIL	NEW COLUMNS For Additional Results for "Wales Building Regulations Part L 2014"
<input type="checkbox"/> 13/08/2014 16:03:43	EPC W	377.7	308.71	308.7	-	-	-	-	-	-	
<input type="checkbox"/> 13/08/2014 16:01:11	EPC E	374.1	308.9	308.9	-	-	-	-	-	-	
<input type="checkbox"/> 13/08/2014 15:54:06	BR	368.17	308.9	308.9	FAIL	-	-	-	-	-	
<input type="checkbox"/> 13/08/2014 14:49:23	BR W	368.54	308.71	308.71	FAIL	2043.58	1763.42	1763.42	FAIL	FAIL	
<input type="checkbox"/> 13/08/2014 14:44:57	BR W	368.54	308.71	308.71	FAIL	2043.58	1763.42	1763.42	FAIL	FAIL	
<input type="checkbox"/> 13/08/2014 14:38:42	BR W	374.07	308.71	308.71	FAIL	2053.3	1763.42	1763.42	FAIL	FAIL	
<input type="checkbox"/> 13/08/2014 14:37:31	BR W	366.46	308.71	308.71	FAIL	2039.91	1763.42	1763.42	FAIL	FAIL	
<input type="checkbox"/> 13/08/2014 14:36:41	BR W	374.07	308.71	308.71	FAIL	2053.3	1763.42	1763.42	FAIL	FAIL	
<input type="checkbox"/> 13/08/2014 14:30:37	BR W	364.14	308.71	308.71	FAIL	2035.83	1763.42	1763.42	FAIL	FAIL	

Compare Selected Results | Remove Selected Result(s) | Remove All Previous Results

OK | Save Image | Copy Image

EPC Wales

Results

Energy Performance | Energy Consumption by End Uses | Monthly Energy Consumption by End Uses | Monthly Energy Consumption by Fuel Type | Key Results | Overheating risk | Graphic Rating

EPC Wales Please note that these results only deal with criterion 1 of Part L2A

Building Emissions Rate (BER)	377.7 kgCO2/m ² /yr	B
Target Emissions Rate (Part L)	308.7 kgCO2/m ² /yr	B
Typical Emissions Rate (Typical)	1029 kgCO2/m ² /yr	E
Standard Emissions rate (SER)	481.6 kgCO2/m ² /yr	B-C
EPC Rating	39	B

SBEM Outputs

Data Reflection Report - Actual Building as PDF

Data Reflection Report - Actual Building as HTML

Data Reflection Report - Notional Building as HTML

Compliance Document

Additional Details on Project Parameters as Input by the Certifier

Energy Performance Certificate

EPC Recommendations Report

EPC Secondary Recommendations

Current and previous results
 Note to Rule: BR = Building Regulations (England Building Regulations Part L 2013, Northern Ireland Building Regulations Part F 2012, Scottish Building Regulations 2010), BR W = Wales Building Regulations Part L 2014, BR IRL = Republic of Ireland Building Regulations Part L, EPC E = EPC England, EPC NI = EPC Northern Ireland, EPC SC = EPC Scotland, EPC W = EPC Wales, BER IRL = Republic of Ireland Building Energy Rating, BBLJ = Building Bye-laws Jersey Part 11

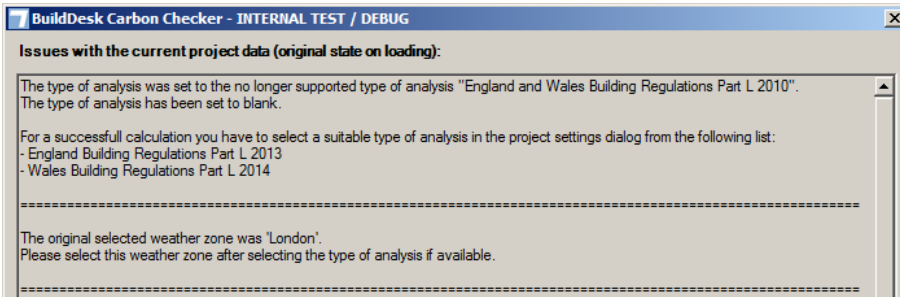
Creation Date	Rule	BER	Notional	TER	Typical	SER	BER improved	Result	EPC Rating	Description
<input type="checkbox"/> 13/08/2014 16:03:43	EPC W	377.7	308.71	308.7	1029	481.6	-	-	39	
<input type="checkbox"/> 13/08/2014 16:01:11	EPC E	374.1	308.9	308.9	905.2	476.4	-	-	39	
<input type="checkbox"/> 13/08/2014 15:54:06	BR	368.17	308.9	308.9	-	-	-	FAIL	-	
<input type="checkbox"/> 13/08/2014 14:49:23	BR W	368.54	308.71	308.71	-	-	-	FAIL	-	
<input type="checkbox"/> 13/08/2014 14:44:57	BR W	368.54	308.71	308.71	-	-	-	FAIL	-	
<input type="checkbox"/> 13/08/2014 14:38:42	BR W	374.07	308.71	308.71	-	-	-	FAIL	-	
<input type="checkbox"/> 13/08/2014 14:37:31	BR W	366.46	308.71	308.71	-	-	-	FAIL	-	
<input type="checkbox"/> 13/08/2014 14:36:41	BR W	374.07	308.71	308.71	-	-	-	FAIL	-	
<input type="checkbox"/> 13/08/2014 14:30:37	BR W	364.14	308.71	308.71	-	-	-	FAIL	-	

Compare Selected Results | Remove Selected Result(s) | Remove All Previous Results

OK | Save Image | Copy Image

2.3 Opening existing projects

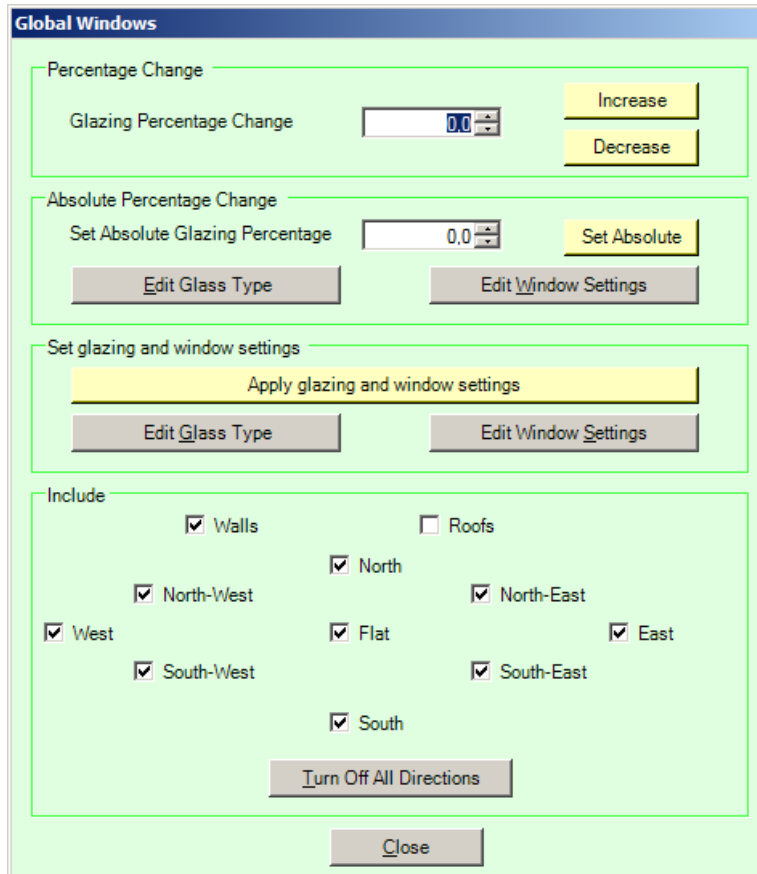
If the existing project's type of analysis is: "England **and Wales** Building Regulations Part L 2010", the following dialog is displayed:



3 Other changes

3.1 Change For Global Window Settings

Users can now globally edit glazing and window settings for a project rather than having to change them individually. This new feature will help users to make quick changes to projects and assess the effect on the building's energy performance.



The new features are found in the frame headed "Set glazing and window settings"

Apply glazing and window settings

Takes the glass and window types specified (see buttons below) and applies the changes to the windows specified in the "Include" section.

Edit Glass Type Button

This is the glass type that will be applied to the "Included" windows when the Apply button is clicked.

Edit Window Settings

These are the window settings that will be applied to the "Included" windows when the Apply button is clicked.

3.2 Solar Collectors – Default Value for Design Air Flow Rate

The default value for the design air flow rate is calculated and displayed as shown below.

If you choose the option for the default value for the Design Air Flow Rate for a specific solar collector, this is calculated by multiplying [a standard value from an SBEM table] by [the total area of this solar collector].

3.3 Bug fix for brise-soleil

The brise-soleil option in the window-settings dialog was failing to pass the correct flag through to SBEM. This has been corrected.