



**INTEGRATED
ENVIRONMENTAL
SOLUTIONS**

VE-SBEM – Guidance and FAQ

INTEGRATED ENVIRONMENTAL SOLUTIONS LIMITED

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Introduction

Section 1 - Introduction

This document is designed to give an overview and guidance to users of IES VE-SBEM. It will guide the user through the process of using the IES <VE> SketchUp™ or Revit® plug-in to bring geometry into <VE> and perform SBEM calculations using <VE Compliance>.

SketchUp Workflow

Section 2 – SketchUp Workflow

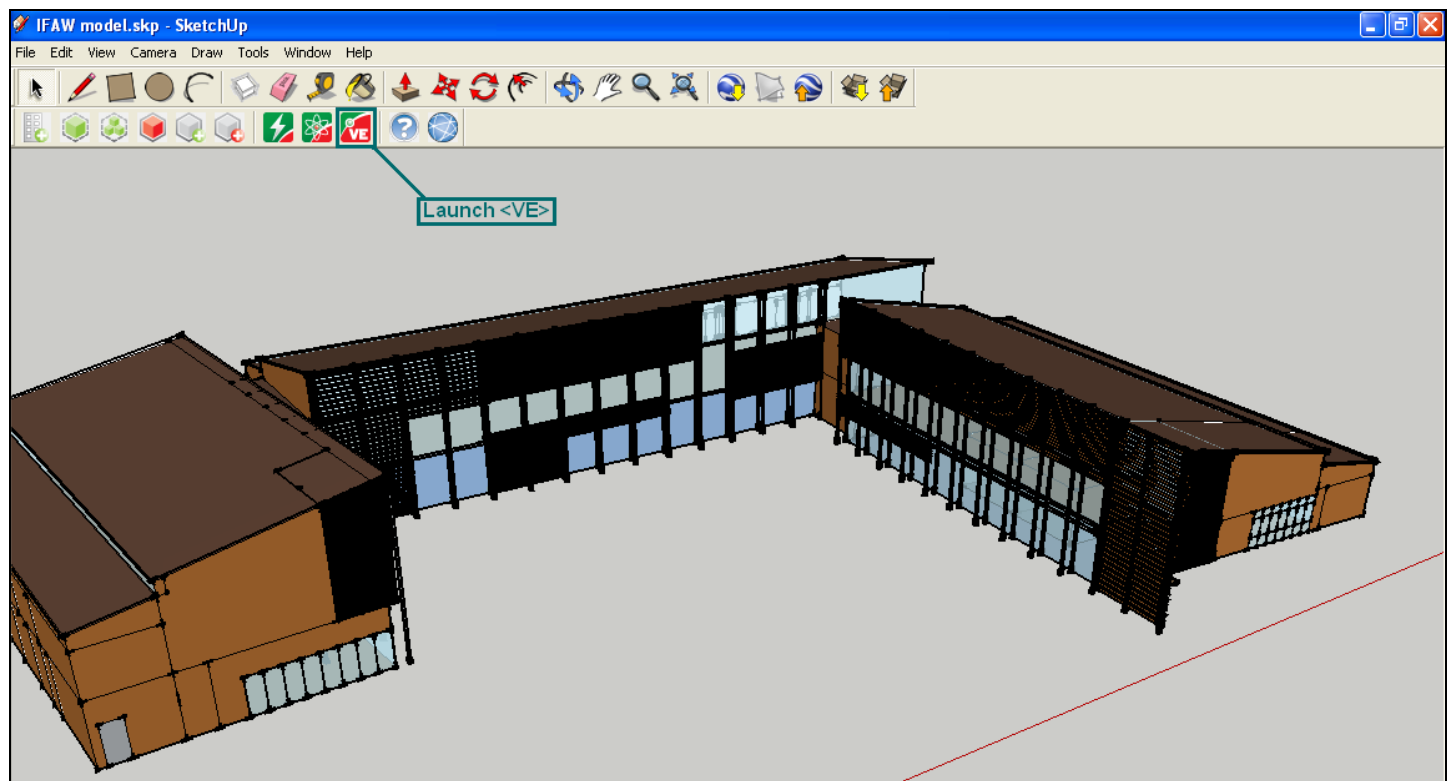
Google SketchUp

Step 1

Create geometry in Google SketchUp.

Step 2

Export this to IES <VE> by Identifying Rooms then click the Launch <VE> button for Free SBEM calculations.

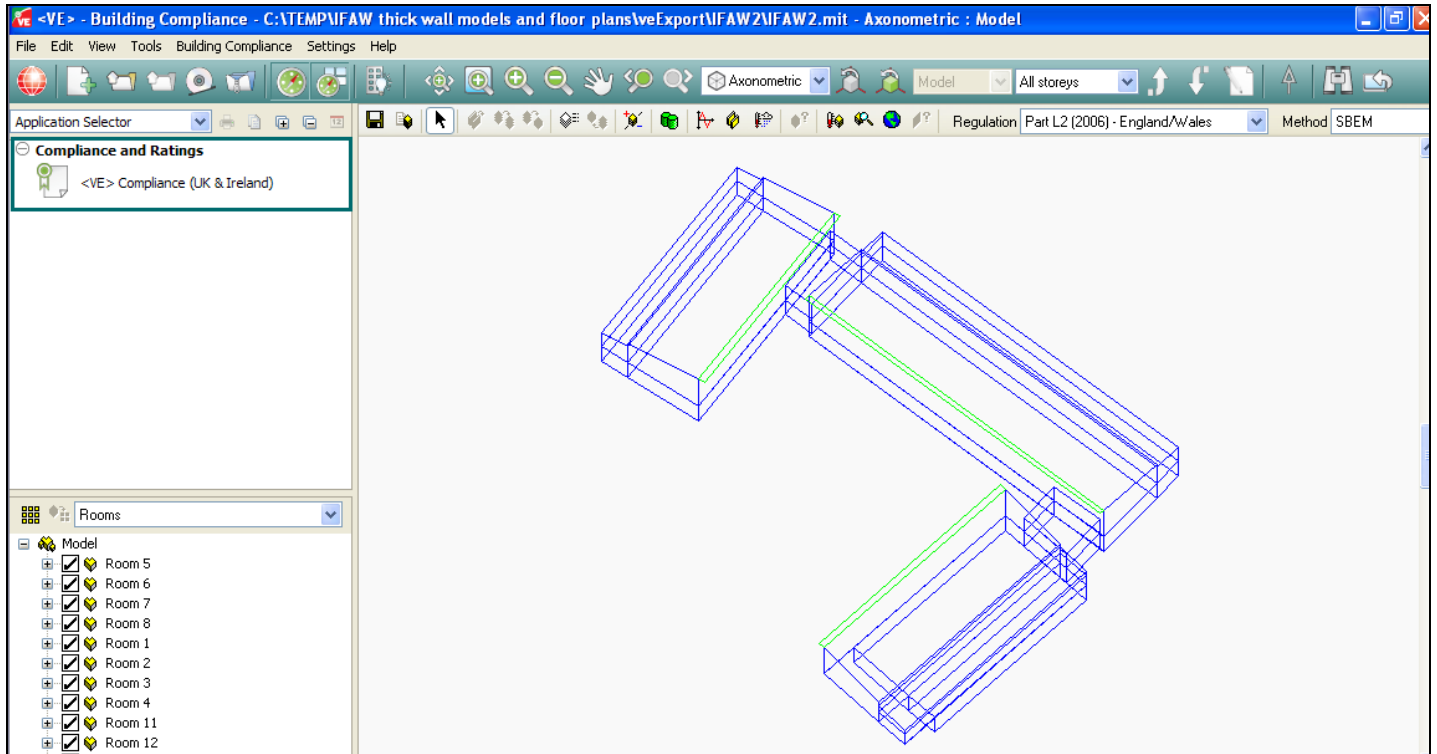


SketchUp Workflow

IES <Virtual Environment>

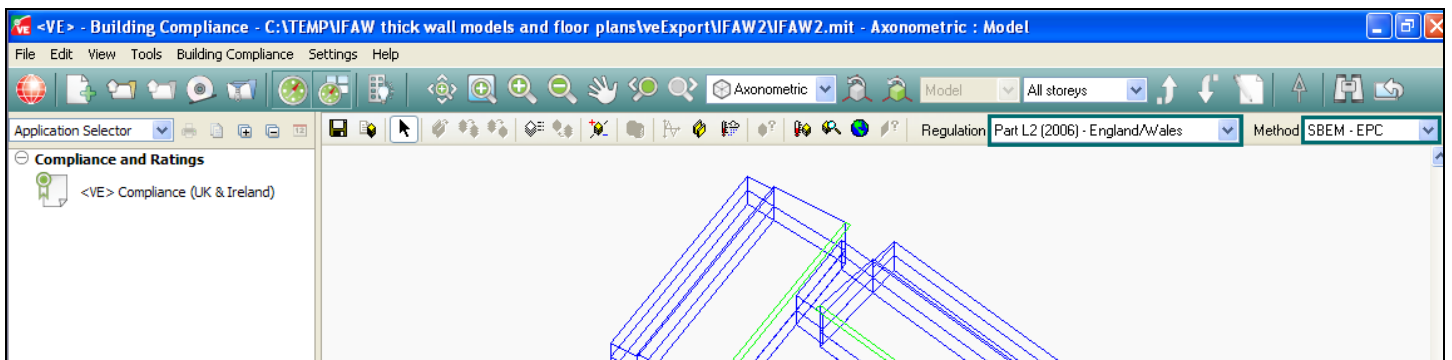
Step 3

Navigate to <VE Compliance> - select Compliance and Ratings section from the Application Selector then click the <VE> Compliance button.



Step 4

Select Regulation framework (options are Part L2 (2006) – England/Wales, Part F (2006) – N Ireland or Section 6 (2007) – Scotland) and Method (SBEM or SBEM-EPC)



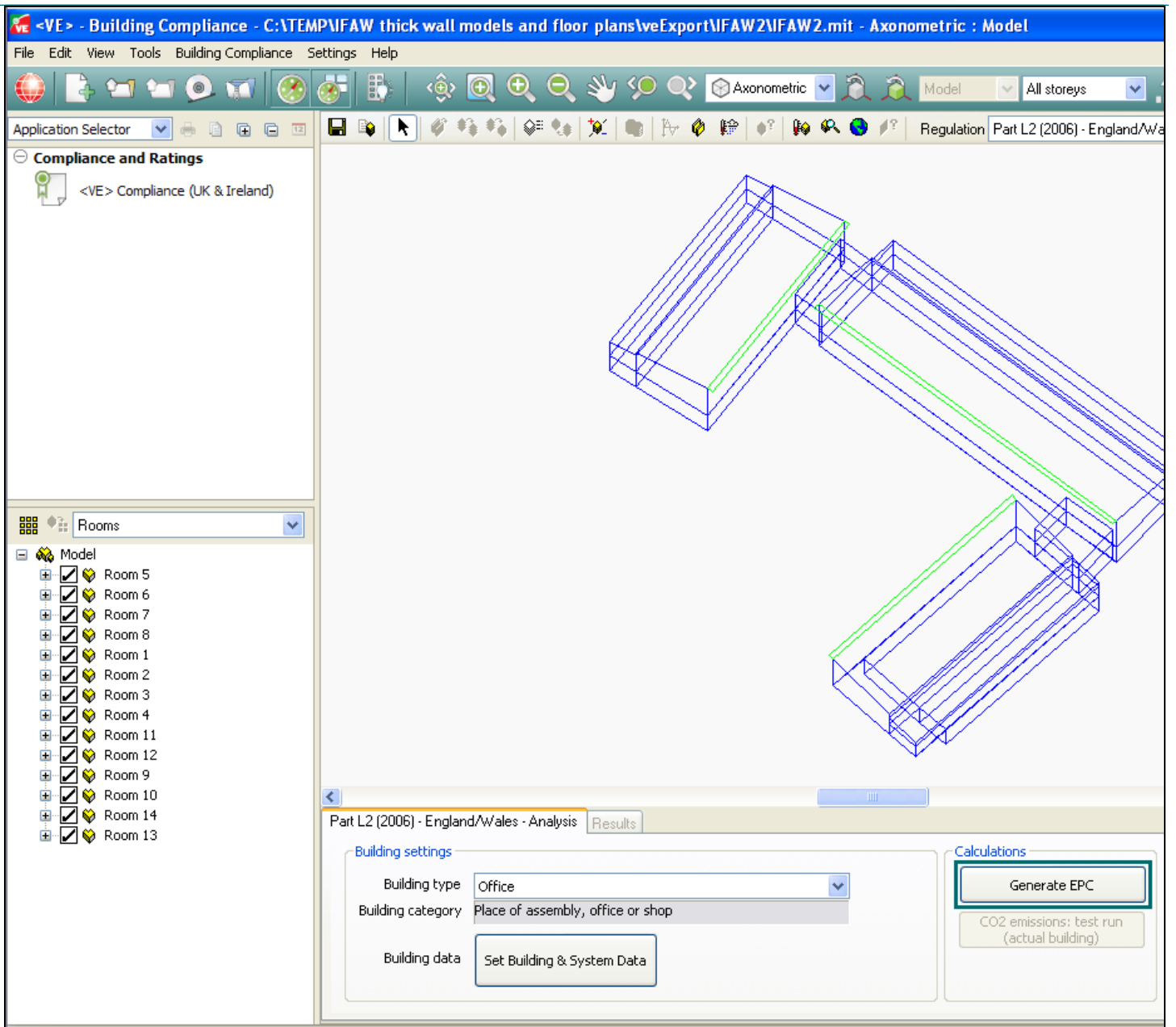
Step 5

Set up the model with NCM inputs – IES offer Training sessions that can help you fully utilise the software.

Step 6

Click Calculations button to run the CO2 Emission calculation/generate the EPC

SketchUp Workflow



Revit Workflow

Section 3 – Revit Workflow

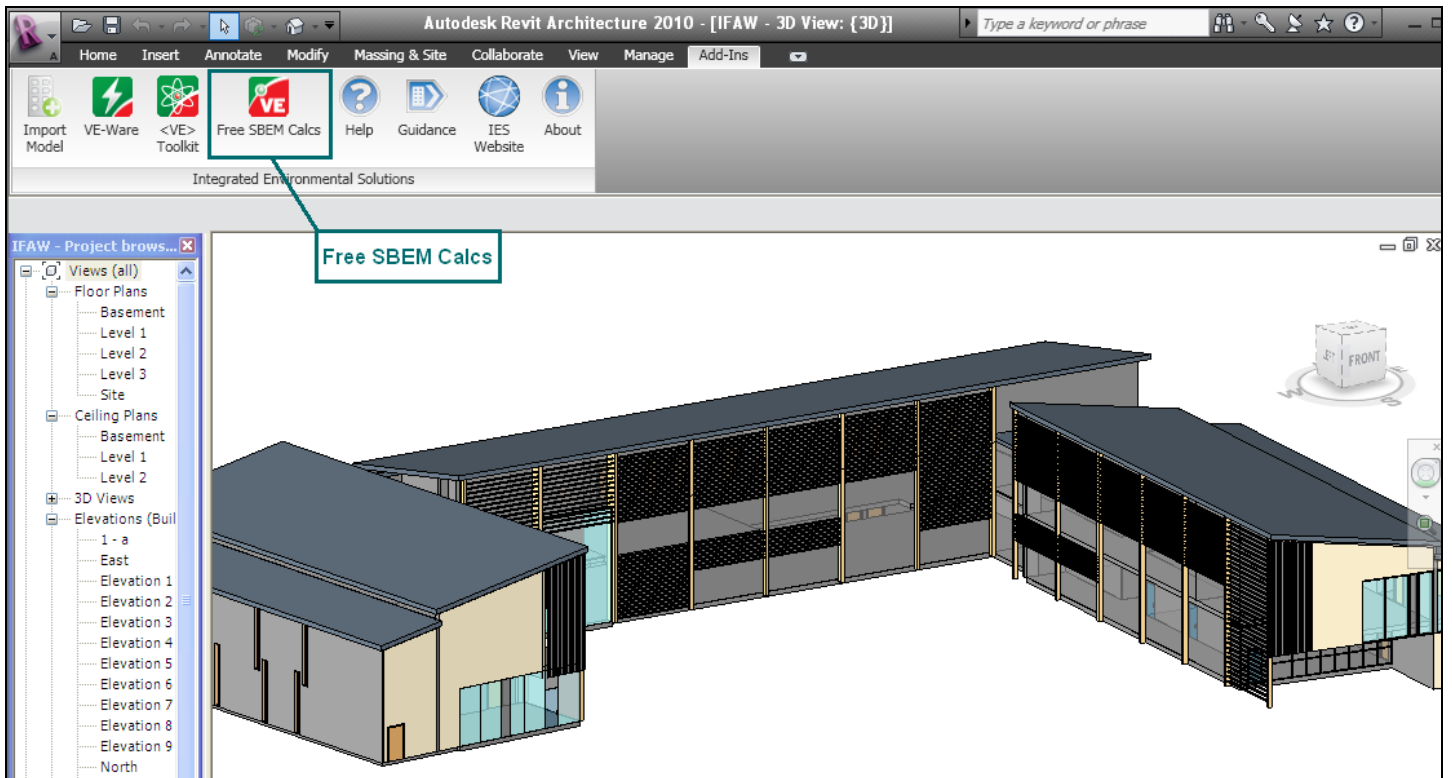
Revit Architecture or Revit MEP

Step 1

Create geometry in Revit.

Step 2

Export this to IES <VE> by clicking the Set Model Properties/Import Model button then the Free SBEM Calcs button on the IES Toolbar.

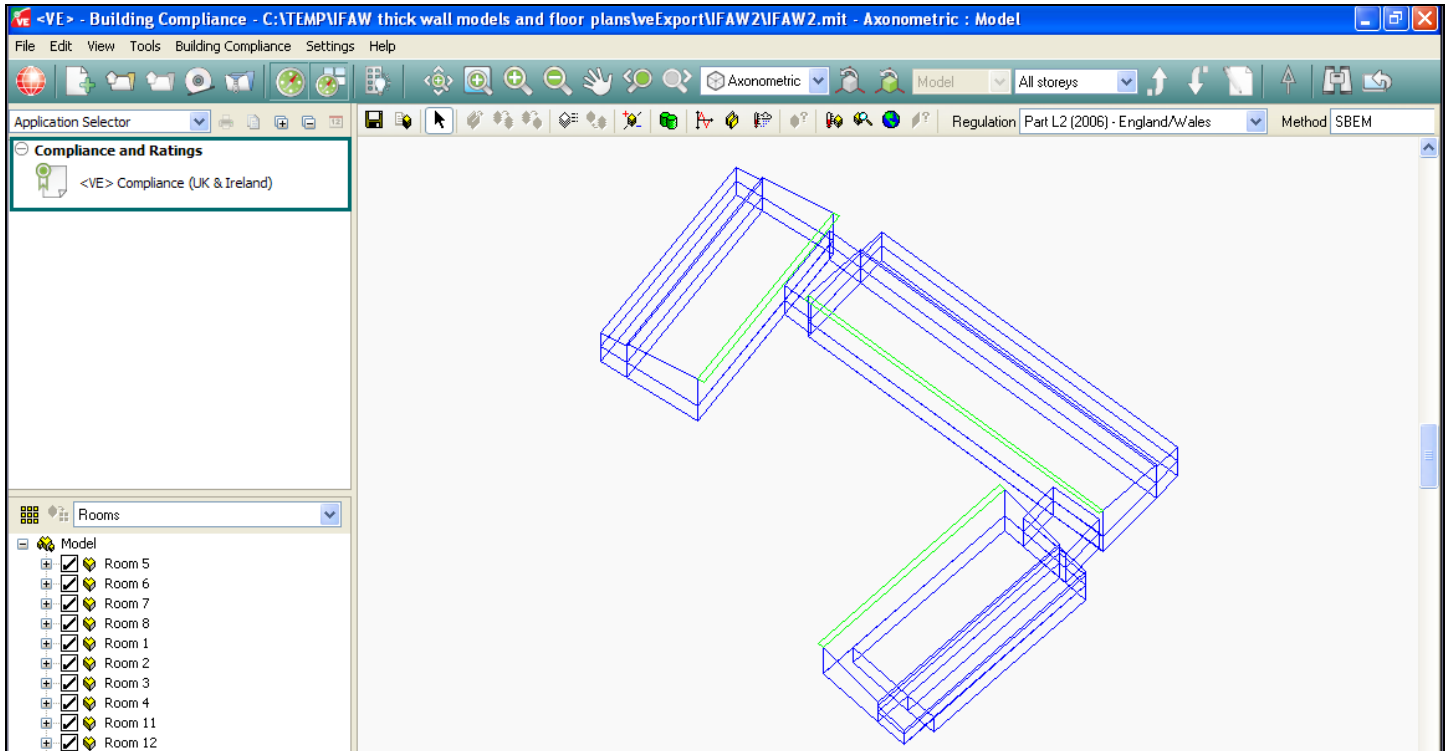


Revit Workflow

IES <Virtual Environment>

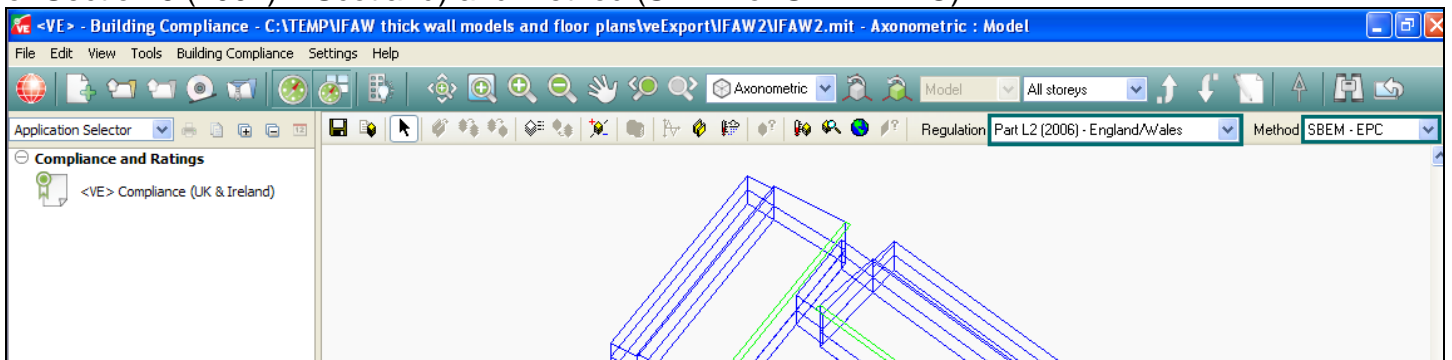
Step 3

Navigate to <VE Compliance> - select Compliance and Ratings section from the Application Selector then click the <VE> Compliance button.



Step 4

Select Regulation framework (options are Part L2 (2006) – England/Wales, Part F (2006) – N Ireland or Section 6 (2007) – Scotland) and Method (SBEM or SBEM-EPC)



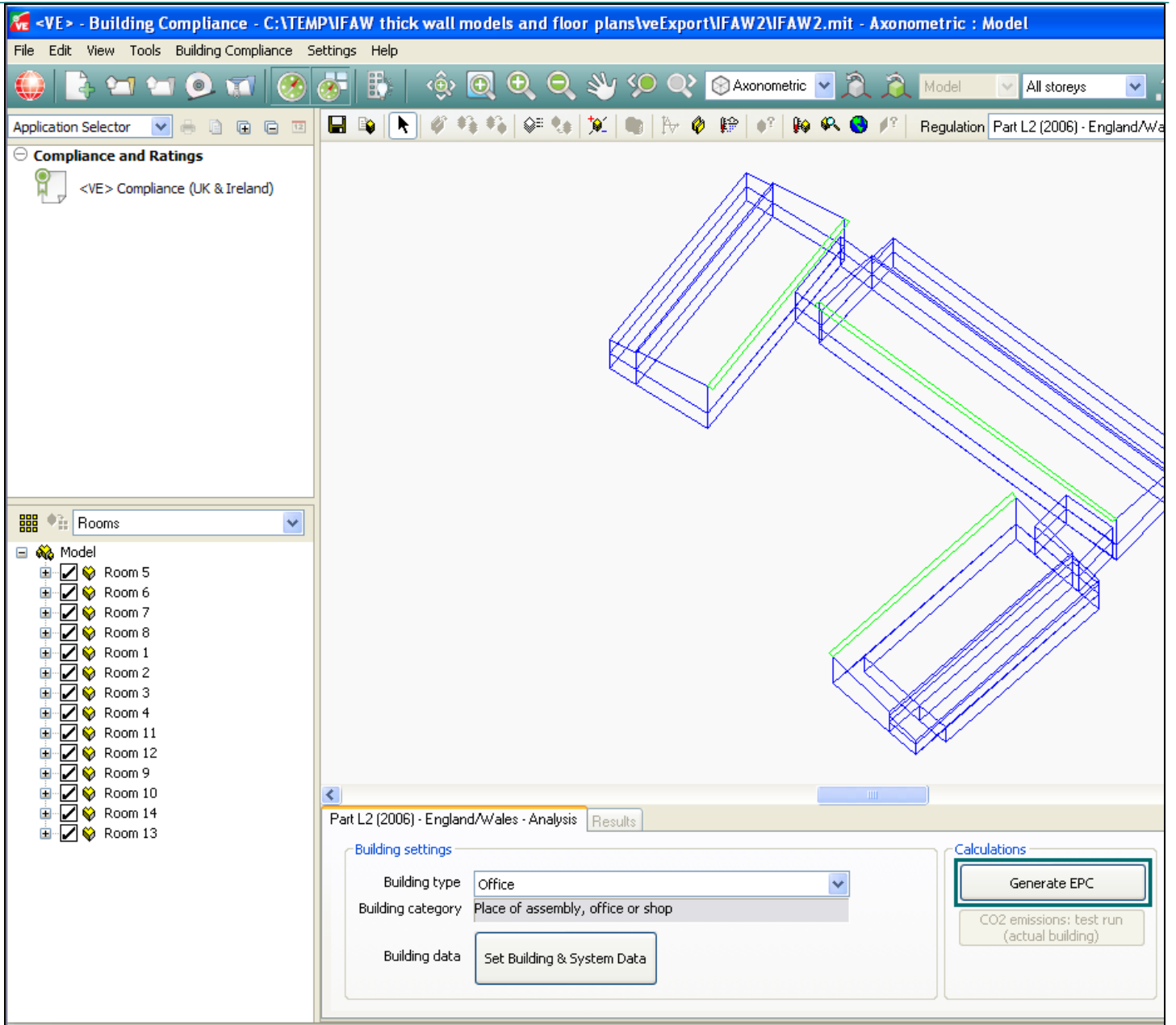
Step 5

Set up the model with NCM inputs – IES offer Training sessions that can help you fully utilise the software.

Step 6

Click Calculations button to run the CO2 Emission calculation/generate the EPC

Revit Workflow



FAQ

Section 4 – Frequently Asked Questions

FAQ1

I have downloaded VE-SBEM but can't run the installer.

Answer

If you already have the full <VE> installed then you don't have to install again. Simply launch the <VE> and you will be able to access VE-SBEM in <VE> Compliance as described in the workflows above.

To access <VE> from Autodesk Revit or Google SketchUp you will require the appropriate plug-in, these can be downloaded from the IES website Download Centre.

FAQ2

When I try to run the Compliance calculations or generate an EPC I get the error "No software license keys found! Cannot perform system simulation"

Answer

This is because you are trying to run an Apache Simulation method <VE> Compliance calculation and you do not have a license.

Note: VE-SBEM allows you to run Part L2 (2006) – England/Wales, Part F (2006) – N Ireland or Section 6 (2007) – Scotland Regulations SBEM or SBEM-EPC Method Compliance calculations.

FAQ3

I have installed the SketchUp/Revit plug-in but can't find a button to use VE-SBEM.

Answer

To use VE-SBEM, you must have installed the full <VE>, Shared Content and the IES <VE> Plug-in. When you install the plug-in you will see the IES Toolbar with a button called "Free SBEM Calcs" or "Launch <VE>".

Click Free SBEM Calcs/Launch <VE> to pass model geometry into the <Virtual Environment> then select Compliance and Ratings section from the Application Selector and click the <VE> Compliance button. Change the Regulation dropdown to the relevant regulation you want to assess and change the Method dropdown to SBEM or SBEM-EPC as required – you are now ready to perform the analysis.

FAQ

FAQ4

When I import a project from SketchUp or Revit and run VE-SBEM it fails and the project.err file gives the error:

```
[ 85] *** ERROR 1 *** : (Code unknown): TYPE          = LPG
```

Answer

This is because the systems applied in the IES plug-ins are not suitable for SBEM calculations. To correct this you should create new systems in VE-SBEM, using the SBEM HVAC System data wizard (always ensure systems have an NCM Type set before performing SBEM calculations).

FAQ5

I am a current <VE> user with a ModelIT license – do I need the IES <VE> plug-in to use VE-SBEM?

Answer

No. The SketchUp and Revit plug-in can be used to bring geometry into <VE> if you don't have a ModelIT license. If you are a ModelIT user you can create the geometry in <VE> then change to <VE Compliance> and perform VE-SBEM calculations on the model.

FAQ6

I am an existing <VE> user – what do I need to do to get VE-SBEM?

Answer

As you already have <VE> installed, you don't need to do anything else. In the Compliance and ratings section on the Application Selector you will have <VE> Compliance and this will allow you to use VE-SBEM without any additional licenses or plug-ins.

FAQ7

Where can I find out further information?

Answer

Contact IES to find out about VE-SBEM Training Sessions. Check the [IES User Forum](#) to join the User Community and share ideas on VE-SBEM as well as the IES <VE> Plug-ins and VE-Ware.