



# Is IESVE software approved for LEED energy modelling?

The USGBC do not approve or certify software for LEED energy modelling. Instead, the requirement for LEED Submission is that the software must meet the specification of the relevant ASHRAE 90.1 Appendix G Performance Rating Method, be that 2007 (LEED v2009) or 2010 (LEED v4). IES have ASHRAE 90.1 PRM version 2004, 2007 and 2010 Navigators within the VE software suite.

The VE meets all the requirements of Appendix G, and has been tested in accordance with ASHRAE Standard 140; it meets or exceeds all requirements of this test.

IES supports the approach taken by the USGBC and LEED, as it recognizes that, given a suitable set of tools for modelling, the greatest variables are user skill, inputs, and assumptions, and how the tools are used to support the design process. Appendix G provides a clear methodology and benchmark while ASHRAE 140 tests confirm fundamental requirements of the software.

Although individual LEED reviewers will be more familiar with some energy modelling tools than others, it is important to realize that use of any particular modelling tool does not automatically guarantee approval. Given an appropriate tool is being used to dynamically simulate the entire building for all hours of a full year, LEED reviewers are more concerned with the quality of the modelling done than the tool that has been used.

In this respect it is very important to also consider that the requirements for EAc1 go well beyond the LEED letter template. The supporting documentation that must be provided is critical. The IES VE provides the design team with the flexibility to demonstrate further model input data and how the model was employed to actually optimize energy performance throughout the entire process—something the VE is notably capable of facilitating.

## The GBCI has clarified for IES that:

"To date, IES Software has been used successfully on several projects that have pursued and achieved LEED Certification. The software described in Appendix B of the Advanced Energy Modeling for LEED Technical Manual V1.0 should not in any way be construed to be exclusive. Instead, it was focused on the software packages that were being used the most for LEED submissions

at the time the modeling manual was developed (approximately 2 years ago)."

"The requirement for LEED Submission is that the software must meet the specifications of ASHRAE 90.1 Appendix G PRM. The USGBC does not make any other limitations regarding the software that can be used for submission other than those listed in Appendix G, and the

requirement for the software to be able to report the data required by Appendix G (such as unmet load hours, energy cost by end use, peak demand by end use, energy cost by fuel type, etc.)."

If required, additional clarification from the GBCI can be gained using the LEED Online "Contact Us" form [www.gbci.org/org-nav/contact.aspx](http://www.gbci.org/org-nav/contact.aspx)

## Supporting Documentation

- > V2.0 of Advanced Energy Modeling for LEED released September 2011 (includes IESVE) [click here](#)
- > Results of IESVE ASHRAE 140-2007 test [click here](#)
- > IES Software Validation and Approval page [click here](#)
- > IESVE compliance with 90.1 Appendix G [click here](#)
- > IESVE EPAc1 Qualification documents [click here](#)
- > Examples of LEED projects using IESVE [click here](#)