

eQuest for LEED Training

Watch as we go step-by-step through setting up a building in eQUEST and completing the LEED energy model. Earn 8 GBCI CE Credits and PDHs.



This course breaks down an eQUEST model and goes step by step through the LEED energy modeling process (LEED NC 2009). We'll model a building step by step and talk about how to do things the 'LEED' way and how to reduce those pesky review comments. The case study starts with design documents and ends with eQUEST reports to submit to LEED.

Proposed Building Setup

- Starting a New File in eQuest
- Drawing the Building in eQuest
- Custom Zones
- Creating the Second Floor
- System Setup- Wizards
- Assign Zones to Systems
- Plant Setup
- DHW Setup
- Rate Structure Wizards
- Detailed Mode
- Naming Spaces
- Space Renaming
- Lighting Power Density
- Global Parameter LPD
- Plug Loads
- People and Ventilation
- Window Setup
- Materials and U-Values
- Detailed System Setup
- Room Exhaust
- Boiler and DHW Setup
- System Specifics

Details



Unlimited
Online Access



Watch in-depth
Video Instruction
on your own time



Earn LEED CE Hours &
PDHs



For: Auditors, LEED,
Architects,
Materials & Equipment
Sales,
Engineers, Building
Professionals

- Rate Structures
- Exterior Lighting

Part I: Getting Started

- What the course covers
- Five things you should know about the model
- Priorities for LEED

Part II: Starting the proposed building in eQuest

- Starting the initial eQuest Model
- Starting with the Design Development Wizard in eQuest
- Utility Rates in eQuest
- Natural Gas Rates in eQuest
- Project Navigator and Building Shells in eQuest
- Starting the eQuest PD2 file
- Viewing the Building Shell in eQuest
- Plenums and Space Renaming in eQuest
- Global Parameters in eQuest
- Lighting Power Density Parameter and Whole Building Method
- eQuest Systems
- What are we modeling in eQuest?
- Building Drawings and Dimensions in eQuest
- eQuest Thermal Blocks for LEED Thermal Blocks and Unmet Hours in eQuest
- eQuest System Simplification and Thermal Blocks
- How Thermal Blocks Yield LEED Points
- Starting the Proposed Building
- Things to know about your project
- Starting the LEED Energy Model
- eQuest for LEED equipment schedules
- eQuest Air Handling Unit (AHU) System
- Space by Space vs Whole Building Method
- Air-Side HVAC Systems
- Defining Fan Power in eQuest
- LEED Specific Setup
- Outdoor Air
- Cooling in eQUEST

- Prepping the Proposed
- COP Unit Conversion
- Heating Coils in eQUEST
- Preheat and Baseboard Heat
- Performance Curves and SEER in eQUEST
- Main Parameters for LEED in eQUEST
- Defaults from the eQUEST Wizards
- Heat Input Ratio (HIR) in eQUEST
- Heating Source Differences in eQUEST
- VAV Hot Water Loop
- PTACs and Thermal Blocks
- Finishing Up the Proposed Building
- Moving to the Baseline Building
- Baseline Building Envelope and Glass
- Changing Glass Type in eQUEST
- U-Values, Materials and Construction in eQUEST
- Changes to the Building
- An Example of how to Change the Building
- eQUEST Syntax Help
- How Do I Create the Baseline Building in eQUEST?
- eQUEST Rotations and Parametric Runs
- Simulating and Reports in eQUEST
- Determining Percent Glass in eQUEST
- Energy Model Square Footage
- LEED Energy Modeling Cheat Sheet
- Next Steps for a LEED eQUEST Model
- Opaque Envelope and Climate Zones
- Roof Reflectivity, U-Value
- Window to Wall Ratio
- Lighting and CFM
- Completing the Baseline Building
- Updating the Envelope
- Re-using Building Elements in eQUEST
- LEED, Glass Types and U-Value in eQUEST
- Constructions in eQUEST
- Floor Constructions in eQUEST
- Finishing the Envelope in eQUEST
- Simulating the Baseline in eQUEST
- Completing the Envelope
- Interior Lighting in eQUEST
- Space by Space vs. Whole Building Method

Part III: Continuing the Baseline Building in eQuest

- Airside Parameters
- Creating Air Handling Units for both Floors in eQuest
- Heating
- Finishing up the baseline
- MERV an Filters
- Fan Power
- Efficiency
- Unit Converter
- eQuest User Expression for CFM
- Fan Curves in eQuest
- Completing System Inputs
- Waterside HVAC
- Pumping Requirements
- Domestic Hot Water
- Creating the Second Boiler
- Boiler Location
- Simulating the Boilers
- Parking Lot Lights in eQuest
- Loads in eQuest

Part IV: Energy Modeling for LEED for eQuest

- eQuest LEED Best Practices
- Cost of LEED Energy Model
- Cost per Square Foot
- PTACs and Residential LEED
- eQuest LEED Model Time Estimation
- Life After LEED Comments
- LEED Energy Modeling Cost Breakdown
- Unmet Hours in eQuest
- Throttling Range, Unmet Hours, and eQuest
- Number One Cause of Unmet Hours
- Exhaust Fans in eQuest
- Modeling Complex Systems in eQuest

Final Exam