
Request for Proposals (RFP): Design of Energy Auditor Test House

Issued by: Isles, Inc.

Issue Date: FRIDAY 9/12/25

Q&A session: 10/2/25

Submission Deadline: 10/16/25 by 5:00PM

Contact: testhouse@isles.org

1. Overview

Isles, Inc. is soliciting proposals from qualified architectural and design professionals to develop a comprehensive design for 2 test house structures and related spaces in an existing 4,000 sq ft room. The result will be used as a training center for the Home Energy Professional (HEP) Energy Auditor and other certifications. This project must also include plans for offices and classrooms in the same area. A test house is a controlled training environment designed to replicate real-world building conditions so trainees can practice conducting energy audits, diagnosing building performance issues, and applying efficiency testing techniques safely and consistently. This project calls for 2 separate, 1 story structures: a 1-bedroom reproduction of a home and a separate one-story reproduction of attic space. Both structures will be built inside an existing building, which has a separate entrance. This space has existing mechanical, electrical, and plumbing systems already in the unit which will need to be connected to the structures.

The design must incorporate specific features and systems that simulate a realistic residential environment and meet the minimum test site criteria required for Energy Auditor examinations. Final plans will be approved by Hamilton Township and must meet all relevant municipal codes. CAD files of the existing facilities will be made available to the winning bid.

2. Objective

To produce detailed architectural and system design documents for a training facility to include a test house, classroom, offices, and related spaces to be built within an existing workshop space. This design replicates the residential conditions required to assess practical energy auditing skills. The design will support future construction and instructional use, ensuring that all testable material can be demonstrated and evaluated consistently while providing space for all elements described above.

3. Scope of Work

The selected designer will be responsible for delivering a complete design package that includes:

- Site layout and building floor plan
- Architectural and structural drawings
- Mechanical, electrical, and plumbing (MEP) system plans
- Appliance and equipment specifications
- Integration of testing features
- A separate outside shed with blower door and noise isolation compatibility
- A design narrative explaining how the design meets the minimum test site criteria
- Optional: 3D model or renderings of the proposed structure

This RFP does not include construction services—only design services. Note that gas, electric and water connections are already on site.

4. Design Requirements: Minimum Test Site Criteria

The design must include the following elements to comply with Energy Auditor test site requirements:

1. Simulated House with the Following Minimum Requirements for TH

- 32' long 15' wide
- 1 Bedroom, kitchen, bathroom and combustible appliance zone (CAZ)
- 2 rooms with air supply to demonstrate pressurization
- 1 operable window in every room
- CAZ
 1. Running water for water heater
 2. Forced air furnace (must vent to outside Mill1)
 3. Dryer vented to outside TH
- Kitchen
 1. Gas stove and range hood
 2. Refrigerator
- Bathroom
 1. Operable exhaust fan

2. Attic Simulation Space

- Attic space with ventilation (gable, soffit, ridge, etc.) to train on attic insulation
- 10' long 15' wide
- Standing room in middle for trainer to monitor;

- Studs on floor
- Insulation, heat source, and plumbing stacks on sides
- recreates space between slanted roofline and ceiling

3. Additional Required Spaces

- Offices:
 1. 2 offices and 3 workstations -
 2. Inside offices 16'X11' each
- Equipment cage
 1. 16'X11'
 2. Must be able to store and lock securely all testing equipment (blower doors, combustion analyzer,) ALCI class supplies and materials
- Classroom Space
 1. Must be able to accommodate 10-15 students and 2 tables to display props and teaching materials
 2. Open to rest of training space
- Shed
 1. On site but outside the main building
 2. To be used to operate the insulation machine and must be able to isolate the noise of the machine and the cellulose insulation material
 3. 15'x15'x15'
 4. Frame it to demonstrate insulation installation
 5. Windows for ventilation
 6. Electricity
- Prop demo/training area
 1. Outside of classroom
 2. 4-6 lab tables for student workstations (tables w/ storage)
 3. Shelving to house props, equipment and containers

4. Safe Environment

- Must not include any potentially hazardous materials

5. Ducted Distribution System

- Must include ductwork for HVAC or other air systems

Designers are encouraged to consider functionality, educational value, and serviceability in all proposed layouts.

5. Deliverables

- Complete set of architectural and MEP plans (digital and printable)
 - Design narrative explaining compliance with each of the minimum criteria
 - List of recommended appliances and systems (with sample models/specs)
 - Bill of materials (optional)
 - 3D rendering or model of the design (optional but preferred)
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6. Proposal Requirements

Please include the following in your submission:

- Company or individual qualifications
 - Examples of relevant past design work
 - Design approach and methodology
 - Timeline for project completion
 - Fee structure and cost proposal
 - Resumes of key personnel
 - Three references from previous clients
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7. Evaluation Criteria

Proposals will be evaluated based on:

- Compliance with required design elements (30%)
- Relevant experience and qualifications (25%)
- Design approach and innovation (20%)
- Cost-effectiveness (15%)
- Project timeline (10%)

8. Submission Instructions

All proposals must be submitted electronically in PDF format to:

Email testhouse@isles.org

Subject line: **Proposal – Test House Design**

Deadline: 10/16/25 by 5:00PM

9. Questions and Clarifications

Isles will host a Q&A session on 10/2/25 from 2:30-3:30 to answer questions related to this RFP.

Use this [link](#) to join. Meeting ID: 259 924 790 286 5 Passcode: U7uN3TC6

10. Visual References





