

LEED FOR HOMES VERIFICATION TEAM SCOPE OF SERVICES

Each project pursuing LEED for Homes certification is required to have onsite verification and performance testing. The Verification Team is responsible for providing these services. This document outlines the required verification steps and minimum scope of services required by the Verification Team on a LEED Homes project.

STEP 1: ESTABLISH YOUR VERIFICATION TEAM.

There are three mandatory members of the verification team:

1. LEED for Homes Green Rater – The Green Rater is responsible for onsite verification of LEED measures and supplemental documentation review.
2. Qualified Energy Rater, or HERS Rater- The Energy Rater is responsible for providing performance testing at mid-construction and final construction.
3. LEED for Homes Provider- each Provider has an appointed Quality Assurance Designee (QAD)- the QAD oversees the verification team, providing quality assurance throughout process and before submitting for certification.

You'll find two business models among the Verification Team Network. In one model, large LEED for Homes Provider organizations have Quality Assurance Designees, Green Raters and Energy Raters on staff. In this case, you will likely contract with the Provider organization for all your verification services. In the second model, Green Raters and Energy Raters are independent contractors with contracts in place with Providers for the quality assurance oversight that GBCI requires and QADs provide. In this case, you will likely contract directly with the Green Rater and Energy Rater. You may not have much contact at all with the Provider and QAD providing quality assurance for the Green Rater and Energy Rater. Also, many Green Raters are also Energy Raters and can offer both onsite verification and performance testing services.

STEP 2: CONTRACT WITH THE VERIFICATION TEAM FOR REQUIRED VERIFICATION SERVICES.

The required scope of services you will need from your Verification Team includes:

- Conduct Preliminary Rating with key Project Team members.
- Review all verification requirements applicable to project with Project Team.

- Green Rater will provide verification services, including on-site verification and review of supplemental documentation as specified in the LEED for Homes Verification and Submittal Guidelines. At a minimum, a project will require two verification site visits, one at mid-construction, or pre-drywall, and a second at final construction. However, many projects will require multiple site visits. The number of site visits required and duration of each will vary based on project type, scale and development schedule.
- Energy Rater will perform the mandatory performance testing* and inspections. Performance testing is completed during various times throughout the construction cycle, and may be required at both mid-construction and/or once construction is complete. A list of all mandatory performance testing is included on pages 3-5.
- The rating system offers a few opportunities to earn credits for optional performance testing and inspections. If you wish to pursue these credits, the Verification Team may provide these services.
- Green Rater will communicate any and all project issues as relate to LEED for Homes verification and certification in a timely manner to Project Team throughout project design, construction and certification process. It is the responsibility of the Project Team to coordinate site visits with the Green Rater and Energy Rater at the appropriate times during construction.
- Green Rater will assemble complete certification submittal and pass it to the QAD for their review. The QAD will then submit to GBCI for certificate review.
- Also, members of Verification Team will guide the Project Team through verification and certification process as needed.

*mandatory performance testing is defined in pages 3-5

STEP 3: PROVIDE FEEDBACK TO VERIFICATION TEAM.

After your project has obtained certification, be sure to provide feedback to your verification team. This helps them provide high quality services to you on your next project as well as other project teams.

LEED FOR HOMES MANDATORY PERFORMANCE TESTS

The following is a list of mandatory performance tests required for the LEED BD&C: Homes and Multifamily Midrise v2008 and v4 Rating Systems.

LEED HOMES V2008

Mandatory Performance Test	Required Verification Team Member	Rating System Requirement
Envelope leakage (aka air infiltration or blower door)	Energy Rater	LEED & EnergyStar v2
Duct leakage (except if 100% of ducts are within conditioned space, or if project has non-ducted HVAC system)	Energy Rater	LEED & EnergyStar v2

LEED MULTIFAMILY MIDRISE V2008

Mandatory Performance Test	Required Verification Team Member	Rating System Requirement
Unit leakage (aka compartmentalization)	Energy Rater	LEED & EnergyStar Multifamily Highrise
Duct leakage to outside (except if 100% of ducts are visibly within unit envelope or if project has non-ducted HVAC system)	Energy Rater	LEED & EnergyStar Multifamily Highrise
Fundamental commissioning of central HVAC systems	Commissioning Agent	LEED & EnergyStar Multifamily Highrise

LEED HOMES V4

There are many more mandatory performance tests for v4 largely due to the enhanced requirements in EnergyStar v3.

Mandatory Performance Test	Required Verification Team Member	Rating System Requirement
Water leakage	Green Rater	LEED
Water pressure (single family homes only)	Green Rater	LEED

Envelope leakage (aka air infiltration or blower door) for single family only	Energy Rater	LEED & EnergyStar v3
Unit leakage (aka compartmentalization) for multifamily and attached single family	Energy Rater	LEED
Duct leakage to outside or total duct leakage (except if 100% of ducts are within conditioned space or project has non-ducted HVAC system)	Energy Rater	LEED & EnergyStar v3
Local exhaust air flow (kitchen and bath)	Energy Rater	LEED & EnergyStar v3
Whole house ventilation air flow for single family, or whole unit ventilation air flow for multifamily	Energy Rater	LEED & EnergyStar v3
Supply & return duct static pressure for conventional ducted HVAC systems	Energy Rater	LEED & EnergyStar v3
Supply & return air flows for conventional ducted HVAC systems	Energy Rater (or installation contractor)	LEED & EnergyStar v3
Bedroom pressure balancing (unless there is at least 1 sq. in. of free area opening per 1 CFM of supply air) for conventional ducted HVAC systems	Energy Rater	LEED & EnergyStar v3
Special Case Testing		
Combustion zone depressurization test (for areas with fireplaces/woodstoves that are not closed-combustion or power-vented)	Energy Rater	LEED & EnergyStar v3
Radon test (for gut-rehab projects in EPA Radon Zone 1)	Green Rater	LEED
Pressure zonal test (for projects that place air handlers in rooms that open into a garage)	Energy Rater	LEED

LEED MULTIFAMILY MIDRISE V4

Water leakage	Green Rater	LEED
Unit leakage (aka compartmentalization) for multifamily and attached single family	Energy Rater	LEED
Duct leakage to outside or total duct leakage (except if 100% of ducts are	Energy Rater	LEED & EnergyStar Multifamily Highrise

visibly within conditioned space or project has non-ducted HVAC system)		
Local exhaust air flow (kitchen and bath)	Energy Rater	LEED & EnergyStar Multifamily Highrise
Whole unit ventilation air flow for multifamily units	Energy Rater	LEED & EnergyStar Multifamily Highrise
Fundamental commissioning of central HVAC systems	Commissioning Agent	LEED
Special Case Testing		
Combustion zone depressurization test (for areas with fireplaces/woodstoves that are not closed-combustion or power-vented)	Energy Rater	LEED & EnergyStar Multifamily Highrise
Radon test (for gut-rehab projects in EPA Radon Zone 1)	Green Rater	LEED
Pressure zonal test (for projects that place air handlers in rooms that open into a garage)	Energy Rater	LEED