

## **Procedure**

In this activity you will select one category for a residential LEED credit. You will research and document your proposed plan to gain LEED points within that category for the Affordable Housing Project.

Consider all segments of potential LEED credits for this activity. The site, location, building materials, renewable energy, indoor environment, and water efficiency are potential LEED categories.

1. Calculate the Home Size Adjustment for each of the three home sizes specified in the New Construction Guidelines – Habitat for Humanity.

Our Assignment: 2 bedrooms with a basement for recreation

- 900 square feet
- Relocate the HVAC and the water heater to the basement to increase square footage
- Add a staircase to access the basement, which will decrease square footage
- Where basements are required, access will be provided from the interior of the house. In addition, an exterior access will be provided to meet egress requirements.
- Foundation drainage shall be provided. Drainage of the system shall be by gravity flow if the site allows it; by sump pump if the site requires it.
- Exterior wood frame wall construction will consist of 2X6 fully sheathed with ½-inch foam board insulation. • Exterior concrete wall construction will conform to the systems manufacturer's recommendations for concrete wall construction. • Roof construction shall consist of trusses @ 16-inch centers with 7/16 OSB rated panels. • Roof pitch shall be approximately 5/12 (optimized to minimize waste) with gable ends.

2. Select the LEED credit category from the LEED design credit sheet: (ID) Innovative Design, (LL) Location and Linkages, (SS) Sustainable Site, (WE) Water Efficiency, (EA) Energy and Atmosphere, (MR) Materials and Resources, or (IEQ) Indoor Environmental Quality. (AE) Awareness and Education cannot be selected for this research.

3. Research your chosen credit category. Write a brief description of the credit category and give prerequisites and criteria that must be met in order to gain LEED points under this category. Explain how a home that meets the LEED requirements in this category will “promote the transformation of the mainstream homebuilding industry toward more sustainable practices.”

4. Complete the LEED Design Credit **Record Sheet** for your credit category. For each credit title complete the final column *Credit Description* by describing the requirements for the credit and your design intent for your affordable home (that is, how you propose to meet the criterion to earn the credit). Include any documents that support your application for LEED credit.

