



Brock Built's dedication to environmental cognizance and preservation led to the development of the **greensmart**® program. The **greensmart**® program effectively saves energy and money. Buildings currently consume 40% of all energy in the United States. Buildings constructed under the **greensmart**® program are much more efficient, inherently meaning they will consume significantly less. This consequently leads to less expensive utility bills, saving homeowners hundreds of dollars annually. The **greensmart**® program is very comprehensive and consists of multiple components developed in order to preserve both the environment and the wallet of our customers. The program consists of the following standards:

House Wrap

All **greensmart**® homes are entirely covered in House Wrap. House Wrap is a protective material that prevents air and water infiltration of your home structure. The wrap further seals the house, yet allows it to breathe to avoid condensation buildup. This better seal contributes to the lowered energy costs of homeowners.

Windows and Exterior Doors

In order to fulfill the standards of the **greensmart**® program, all openings between windows, door assemblies, jambs, and framing must have a spray foam sealant applied. Tape and silicon are also applied around all windows in order to further seal them and protect your home from the elements. Brock Built uses low emissivity glass; a coated glass product that reflects heat, in order to lower homeowners' energy costs. This glass has a very low Solar Heat Gain Coefficient (SGHC); the standard measurement of a windows shading ability. The windows reduce energy costs by preventing sunlight from heating up your home, inherently maintaining a more constant temperature within the home.

Air Sealing

The **greensmart**® program requires the sealing of the attic stairs and knee walls, as well as all of the exterior utility penetrations. The building's thermal envelope is sealed to limit infiltration. It also requires the application of mastic and caulk on all HVAC boots. This extensive sealing process ultimately encloses the home and protects it from air permeation.

Insulation

The **greensmart**® program offers the option of Cellulose Insulation to homeowners. Cellulose insulation is more environmentally friendly, as it is made purely from recycled newspapers and other paper sources. Batt Fiberglass Insulation and Blown Fiberglass insulation are typical. Batt Fiberglass Insulation offers an R-13 rating in exterior walls, an R-19 rating in vaults, knee walls, and garage ceilings, as well as an R-30 rating in flat areas of the attic. Blown Fiberglass Insulation offers an R-30 rating inside of the attic. The **greensmart**® program leaves all of these options open for homeowners.

Plumbing Fixtures

One of the primary components of the **greensmart**[®] program is the conservation of water. Water conservation is achieved through setting maximum gallon per minute (GPM) standards on plumbing fixtures. Lavatory fixtures are set at a low flow 1.5 GPM, shower fixtures are set at a 1.75 GPM low flows setting, and tub fixtures are also set at a low flow 1.75 GPM. Toilets are set at a standard of 1.6 gallons, but the **greensmart**[®] program offers an optional 1.28-gallon as well.

HVAC

The heating, ventilation, and air conditioning of a home typically accounts for a large part of every homeowners utility bills. This is why the **greensmart**[®] program utilizes 14 Seer A/C units, which save hundreds of dollars annually when compared to a standard 13 Seer air conditioning unit. High efficiency gas furnaces are also used in **greensmart**[®] homes. These furnaces pay for themselves with the outstanding savings they offer. They provide a more comfortable temperature and the quietest noise level. Digital Programmable Thermostats are the last component of a **greensmart**[®] home's HVAC system. These thermostats are proven to cut utility bills for homeowners up to 20%. And all HVAC systems include a fresh air exchanger to reduce moisture, pollutants and stale air inside the home with fresh air from the outside.

Light Fixtures

Under the **greensmart**[®] program, 50% of all light bulbs within each home must be high efficiency bulbs. This protects the environment by conserving a considerable amount of energy. On average, high efficiency bulbs use 75% less energy than standard incandescent bulbs, saving roughly \$40 in electricity costs over the course of the bulbs lifetime. Additionally, high efficiency bulbs produce about 75% less heat, consequentially resulting in safer operation and lower home cooling costs.

Appliances

Brock Built proudly and exclusively uses energy efficient appliances under the **greensmart**[®] program. ENERGY STAR[®] dishwashers are roughly 41% more efficient than the current 2007 Federal standard dishwasher, and they save an average of \$120 over the life of the product. 20-30% more energy efficiency can be expected from an ENERGY STAR[®] refrigerator, opposed to non-qualified refrigerators. Qualified ENERGY STAR[®] washing machines typically use 37% less energy and over 50% less water than regular washers, despite their larger load capacity.

Testing

Quality and functionality testing are mandated under the Brock Built **greensmart**[®] program, resulting in a Duct Tightness Test and Blower Door Test. Testing is always performed by a certified verifier test. The test requires less than 7 air changes per hour at 50 Pascal's, the unit of measurement for air pressure (7 ACH50). These tests reassure the premium optimality of Brock Built's homes, saving the consumer money and from future headaches resulting from dysfunctional products. Brock Built always strives to provide the best quality, most efficient, and environmentally friendly home to all of our fellow "green-minded" individuals.

