The St. Jude Dream Home 2017

Environmental Performance Profile

THE ST. JUDE DREAM HOME (SJDH) program is one of the largest and most highly promoted campaigns that St. Jude conducts nationwide to raise funds for children with catastrophic diseases. Over the past twenty-five years, they have raised over $340 million dollars for St. Jude. The home features environmentally friendly and sustainable building materials, products, energy-efficient methods, and construction processes to reduce its impact on the environment and provide the highest levels of comfort and quality for the residents. Through the home's systems engineering, Element Building Company demonstrates how to optimize energy performance without significantly impacting the cost of construction.

This brochure provides an Environmental Performance Profile of SJDH. Its high-performing design is extensive and comprehensive, as documented through the numerous third-party performance ratings the home has achieved.

Key Energy Features

SJDH demonstrates how systems engineering can make energy efficiency and innovation available at all price points. In designing the home, Element Building Company worked with industry partners to select cost-effective strategies for improving home performance and reduce the amount of material used. The home achieved remarkable air tightness (2.5895 air changes per hour) without the use of spray foam insulation, which can be more expensive than other insulation options. Rigid exterior wall insulation was combined with blown- in fiberglass wall and roof system insulation to achieve optimal thermal performance.

Due to the conscientious design and construction planning, SJDH 2017 achieved zero energy ready.

Performance Ratings

- USGBC: LEED Gold
- Home Innovation Research Labs: National Green Building Standard (NGBS) Emerald
- Energy Star Certified New Home
- Indoor airPLUS
- Zero Energy Ready
- HERS Index: 51
- ACH 50 (Air changes / hour): 2.5895
- Insulation: Attic / Ceiling R-value: R-56, Wall R-value: R-16, Floor / Slab R-value: R-2 Window U, SHGC: U=0.38, SHGC=0.25
- Heating System Type / Efficiency: Electric Heat Pump, HSPF=10.0
- Cooling System Type / Efficiency: Central Unit, SEER=18.00
- Water Heating System Type / Efficiency: Electric, EF=3.55
- 77.33% Reduction in Water Usage
- Landfill Diversion Rate of 68%
- Estimated Annual Energy savings of 39%
- Zero to Low VOC products used
- Energy Star Appliances 100%
- LED/CFL Lighting 100%