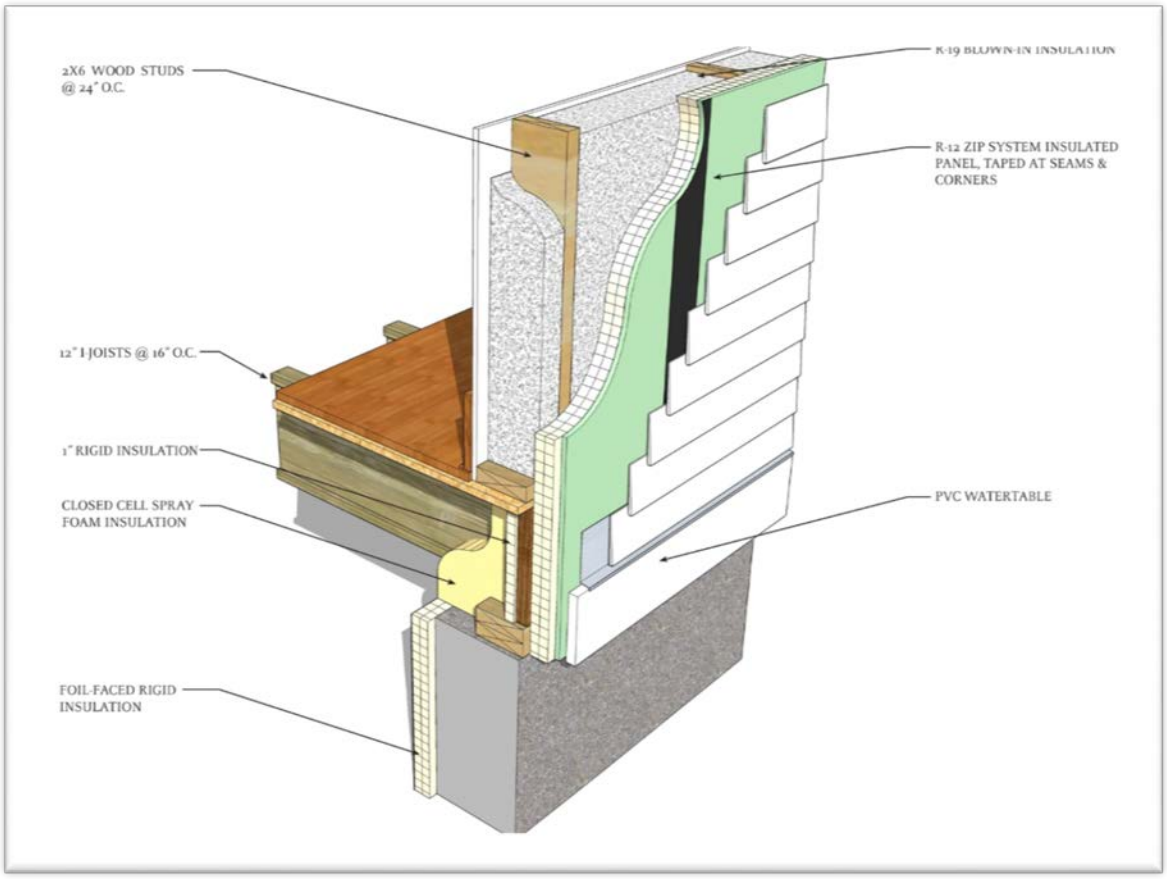
emersongreen

Sustainability without sacrifice.

Building an energy efficient envelope for comfort and reduced energy usage. The buzz-speak is all about "green." To put it simply, green building is largely about how well and how long buildings perform. Buildings built without a thoughtful and integrated systems approach will most often do neither. From conception to finish, Emerson Green is intended to create a secure, comfortable, aesthetically-pleasing environment for homeowners, with minimal impact on the environment and low operating costs for the long term.



Above: A custom designed, highly efficient wall construction at Emerson Green minimizes air infiltration and thermal bridging

The energy efficient building envelope at Emerson Green is achieved by:

- Minimizing air infiltration from outside to inside. Air gaps are a primary culprit in allowing cold air to seep into the house in winter or warm moist air in the summer.
    - Taped R Zip insulated exterior sheathing to minimize air leaks, noise transfer and thermal bridging

- Continuously sealed top of foundation wall to wood sill connection to minimize air leakage
- Foam insulation around all windows and doors
- Air tight electrical boxes at 2nd floor or other ceilings below the attic space

- Providing insulation at all exterior surfaces (high R value: R-value is the measure of how well the insulation resists heat flow)
  - Fully insulated basement slabs and walls
  - Dense pack/ HD cavity fill and attic insulation
  - Triple glazed windows with coated glass to minimize both heat loss in winter and heat gain in summer
  - fiberglass entry doors providing good R values

- Utilizing construction techniques to minimize thermal bridging. Thermal bridging occurs when there is heat transfer across building materials that are not isolated by insulation; the prime culprit in house construction is through the wood studs. In tradition construction each wood stud touches both the exterior sheathing and the interior drywall; on a cold day this will transmit heat from the exterior. Wood studs allow heat transfer at about 3 times the rate of the insulation between the studs. The Emerson Green construction technique isolates wood studs by providing rigid insulation on the exterior and by reducing the use of redundant studs at the house corners. This is also called advanced framing.

Emerson Green ensures a comfortable living environment, while minimizing utility costs and environmental impacts through:

- HERS rating system to equal 55 or less; this means your home uses on average 45% of the typical similarly sized home built in the U.S.
- Whole house fire protection system

- Watersense, low flow plumbing fixtures
- Durable, high performance electric hot water heater
- Air sourced, high efficiency, multi zone, heating and cooling system
- Whole house ventilation system
- LED lighting throughout
- Passive radon vent from under slab thru roof
- Perimeter drain and sump
- Pre-wired for PV panel-generated electricity. PV systems to be purchased by homeowners so that homeowners can receive the tax credits.
- Tight building envelope allows for sustained heating / cooling comfort in the event of short power outages.

You'll have time to enjoy your home with less time spent on maintenance due to:

- Low maintenance and long life exterior finish materials
- 30 year composite roof shingles
- High efficiency, EnergyStar rated appliances
- Water proof Advan-tech subflooring
- Low maintenance and long life interior finishes