

Resource Efficiency - Innovative Options

2.8.2 Use a life-cycle assessment (LCA) tool to compare the environmental burden of building materials and, based on the analysis, use the most environmentally preferable product for that building component.

Energy Efficiency - Innovative Options

3.3.1 Building envelope

- Increase effective R-value of building envelope using advanced framing techniques, continuous administrator insulation, and/or, integrated structural insulating system. Measures may include but are not limited to:

- SIPS*, or
- ICFS*, or
- Advanced framing, or Insulated corners and interior/exterior wall intersections* Insulated headers on exterior walls
- Raised heel trusses
- Continuous insulation on exterior wall
- Continuous insulation on cathedral ceiling

* This line item also has a resource-efficiency benefit.

- Incorporate air sealing package to reduce infiltration. (All measures that apply to project must be performed.)
 - Sill sealer between foundation and sill plate.
 - Caulk bottom plate of exterior walls.
 - Air seal band joist cavities between floors.
 - Ensure air barrier continuity at all framed cavities such as air chases, soffits, coffered or dropped ceilings, and behind tub/shower units on exterior walls. Use either an interior or exterior air barrier as per local practice.
 - Caulk/foam all electrical, plumbing, heating penetrations between floors (including attic, basement, crawl space, and garage) and to exterior
 - Block and seal cantilevered floors and kneewalls.
 - Weatherstrip attic hatches, kneewall doors.
 - Insulate, caulk, or foam between window and doorjamb and framing.
 - If installing recessed lights in ceilings adjacent to unconditioned space, use rated, airtight Type IC housings.
 - Caulk/foam HVAC register boots that penetrate the building envelope to subfloor or drywall.
 - If a fireplace is requested, install a sealed combustion gas fireplace or a wood-burning fireplace with gasketed doors.

3.3.6 Verification

3.3.6.1 Conduct onsite third-party inspection to verify installation of energy-related features such as:

- Duct installation and sealing
- Building envelope air sealing details
- Proper installation of insulation including no gaps, voids, or compression
- Insulation cut accurately to fit cavity
- Windows and doors flashed, caulked, and sealed properly.

Indoor Environmental Quality

5.1.4 Ensure a tightly-sealed door between the garage and living area, and provide continuous air barrier between garage and living areas including air sealing penetrations, walls, ceilings, and floors.

Operation, Maintenance, and Homeowner Education

6.2 OPTIONAL INFORMATION TO INCLUDE IN THE HOME MANUAL (Choose at least five.)

- A list of local service providers that focus on regularly scheduled maintenance and proper operation of equipment and the structure (sealants, caulks, gutter and downspout system; shower/tub surrounds, irrigation systems, etc.)
- A photo record of framing with utilities installed. Photos should be taken prior to installing insulation, clearly marked, and provided in homeowner's manual.
- List of Green Home Building Guidelines items included in the home
- User-friendly maintenance checklist
- Instructions for proper handling and disposal of hazardous materials
- Information on organic pest control, fertilizers, de-icers, and cleaning products
- Information about native or low-water landscape
- Information on how to keep a home's relative humidity in the range of 30%-60%
- Instructions for checking crawl space for termite tubes periodically
- Instructions for keeping gutters clean. Instructions should note that downspouts should divert water at least five feet away from foundation

Global Impact

7.1.3 Use low-VOC sealants. VOC concentrations for construction adhesives and sealants should meet the or limits specified in the California Air Resources Board Regulation for Reducing Volatile Organic Compound

Emissions from Consumer Products:

- Construction adhesives: the greater of 15% by weight or 200 grams/liter
- Sealants and caulks: the greater of 4% by weight or 60 grams/liter
- Contact adhesives: the greater of 80% by weight or 650 grams/liter