



RENOVATIONS . CUSTOM HOMES
HERITAGE RESTORATIONS . COMMERCIAL

CHECKLIST FOR ENERGY EFFICIENT RENOVATIONS AND HEALTHY INDOOR ENVIRONMENT

Renovation is a great time to improve your home's energy efficiency and indoor air quality. With today's products and technology, it is possible to get "new home performance" in any home, regardless of its age. Whether you are undertaking a major renovation or making minor changes, there are many opportunities to save on energy bills, enjoy greater comfort and make your home healthier to live in. Here are some items to discuss with your renovator.

Exterior Walls

- Insulation, air and vapor barriers
- New energy-efficient windows, doors and skylights. If existing window frames are good, you may only need to replace the glass with double or triple thermal panes
- Caulking and weather stripping around windows and doors

Kitchen

- Energy-efficient appliances. Check Energy Guide labels to compare energy consumption
- Task lighting. It not only saves energy, it can also make work easier and safer
- A range hood, vented to the outside to keep cooking odors and moisture out of the house. If you are installing a large CFM fan, you may have to provide a make-up air system

Bathroom

- High-efficiency exhaust fan or a central ventilation system, to expel moisture
- Anti-scald valves on faucets, to protect your family and save energy (or a lower temperature setting on the hot water tank)
- Water-efficient toilet and showerhead, to reduce water use and hot water heating costs
- Make-up or mirror lighting, to save on overall lighting.

Living, Dining and Bedroom Areas

- Area lighting
- Programmable thermostats
- Automatic timers and dimmer switches

Mechanical Systems

- Energy-efficient heating and cooling system, sized correctly for your home
- Whole-house mechanical ventilation system with heat recovery. Draws fresh air from outside and exhausts stale air for inside, to keep the indoor air fresh and healthy with a minimum of heat loss
- Balanced, well-designed ductwork, to ensure comfortable and effective airflow in your home
- Air filtration with medium-efficiency filters
- An energy-efficient hot water tank, or an insulating blanket for the existing tank
- Insulation for the hot water pipes

Basement

- Insulation, with air and moisture sealing for exterior walls and the floor
- Clean-up of molds
- Increased natural light; energy-efficient windows; caulking and weather stripping

Attic

- Upgraded insulation and draft proofing
- Ventilation
- Weather stripping and insulating the attic hatch

Outside

- Energy-efficient lighting, for outdoor living and safety
- Properly placed air intakes and exhausts, for mechanical systems and appliances
- Eaves troughs, and drainage to keep water away from foundations, to prevent moisture problems
- Roof overhang for shade, to prevent overheating in the summer and to protect your exterior finish
- Trees placed strategically on the property, for windbreak, maximum solar gain in winter and shade in summer
- Light-color driveway, to reduce heat absorption in the summer

Product Selection for Healthier Indoor Air Quality

Low-emission construction materials, cabinetry, doors and trim to reduce emissions from glues and formaldehyde; sealing of exposed surfaces; pre-finished products

- Flooring that minimizes off-gassing, reduces build-up of dust, pollen and mites, and does not retain moisture, to discourage mold growth (e.g., ceramic tiles, hardwood)
- Paint, varnishes, sealants, cements and grouts with no or few volatile organic compounds
- Low- or no-emission furnishings and drapery, with hardwood frames and natural fabrics

Source: Greater Vancouver Home Builders Association