



ENERGY EFFICIENCY CHECKLIST FOR MODERATE CLIMATES



ZONES 4 AND 5

AIR LEAKAGE

- Caulk or foam penetrations to exterior, e.g., electrical service, plumbing lines, telephone/TV cables, ductwork for vents and fans.
- Caulk or foam penetrations to attic, basement, and garage, e.g., electrical wiring and fixtures, plumbing supply and waste lines.
- Caulk sill plate and rim joist around perimeter of house.
- Weatherstrip/insulate attic and/or crawl space access panels.
- Install foam gaskets behind receptacle and switch cover plates.
- Install exterior air barrier/house wrap during extensive siding replacement or install 3/4" layer of rigid foam insulation and tape seams for extra thermal advantage.
- Ensure fireplace damper and/or doors operate properly.

WINDOWS

- Replace broken or missing window panes.
- Replace locking hardware if missing or damaged.
- Reglaze windows.
- Caulk around exterior frame/interior trim.
- Weatherstrip sashes.
- Repaint exterior wood frames and sashes.
- Install exterior/interior storm.
- Install Low-e replacement windows.(U-value < 0.45 SHGC < 0.45)

DOORS

- Replace/adjust locksets on exterior doors and doors to unconditioned spaces, e.g., outdoors, attic, basement, garage to ensure doors close tightly.
- Caulk around exterior door frames; reglaze as needed.
- Replace weatherstripping and install door sweeps on exterior doors or doors that adjoin unconditioned spaces.
- Install storm door(s).
- Replace exterior door(s) – steel with polyurethane foam core.

INSULATION

- Insulate attic to at least R-38.
(Make sure that soffit vents are not blocked and that insulation does not contact roof sheathing.)
- Insulate floor above unconditioned basement, crawl space, or garage with heated room above to R-30.
- Insulate exterior walls (R-13 to R-19 when practical) or blow insulation into wall cavities from interior or exterior.

SPACE HEATING/COOLING EQUIPMENT AND DUCTWORK

- Have furnace, boiler, or heat pump professionally cleaned and serviced; check burner and heat exchanger.
- Replace furnace or heat pump filters with pleated filters.

- Seal ductwork in basements, attics, and crawl spaces with mastic or aluminum tape.
- Insulate ductwork in uninsulated basements, attics, and crawl spaces.
- Install programmable thermostat.
- If replacing furnace, boiler, or heat pump, install an ENERGY STAR® model.

PLUMBING/WATER HEATER

- Reduce water heater thermostat setting to 120°F or "Medium."
- Install water heater insulation blanket.
- Flush water heater to remove sediment.
- Install pipe insulation on hot and cold lines within 5' of water heater.
- Install pipe insulation on all hot water pipes in basement or crawl space.
- Replace washers on leaky bath and kitchen sink faucets.
- Install low-flow aerators on bath and kitchen sink faucets.
- Install low-flow showerheads.
- Reduce volume of water in older toilet tanks.
- If replacing water heater, install energy efficient model.
(Energy Factors: Gas >0.60, Electric >0.93.)

LIGHTING/APPLIANCES

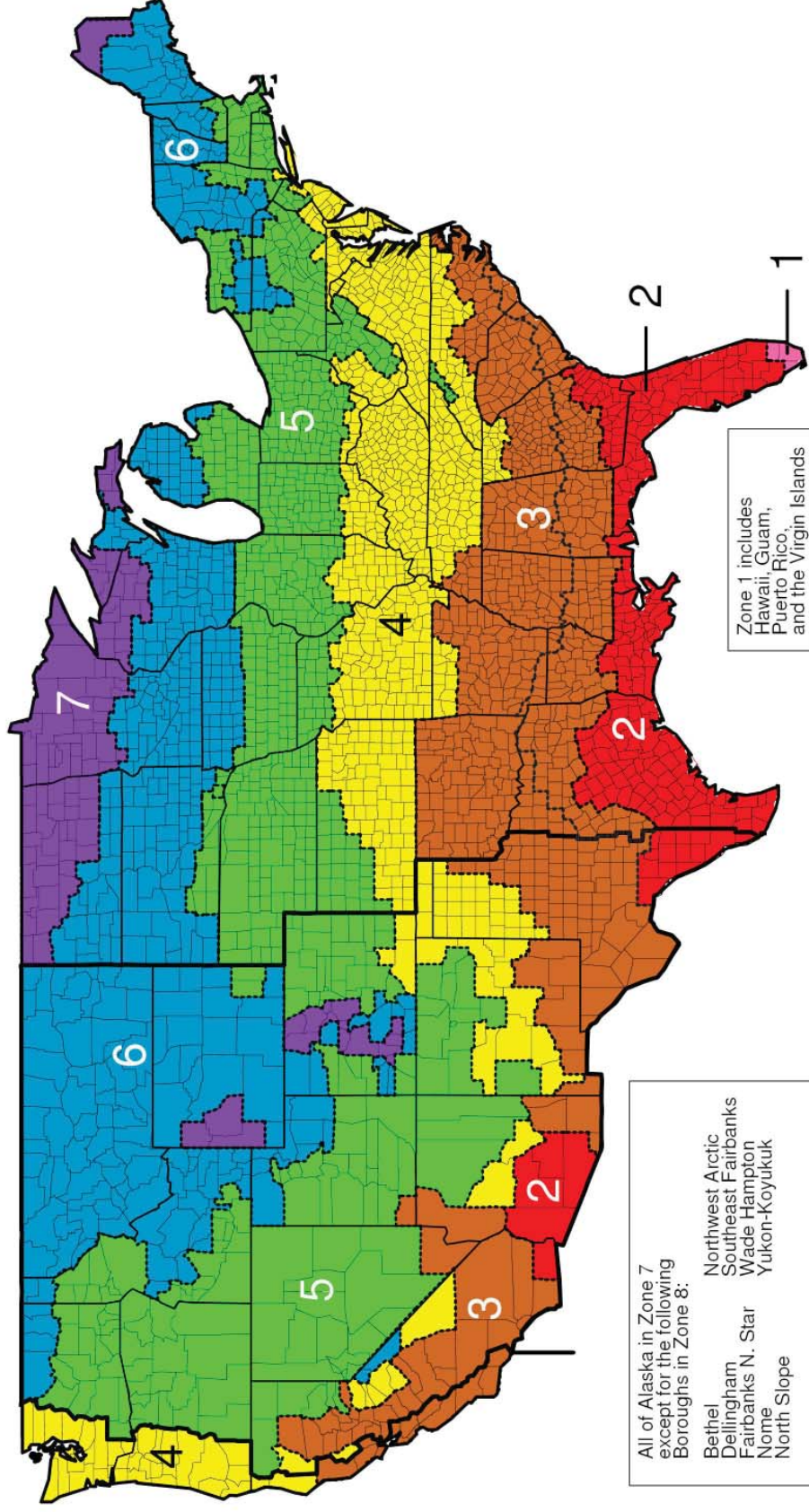
- Install compact fluorescent bulbs in high-use areas, e.g., kitchen, living area, entryway, porch.
- Install light-/motion-sensitive fixture on main entrance light fixture and spots.
- Vacuum refrigerator coils and clean fan grill.
- Consider replacing refrigerator if it was manufactured before 1990.
(ENERGY STAR models will be the most efficient.)
- Clean/replace dryer, range hood, bath fan vents with dampered vents.

MOISTURE CONTROL

- Replace fixed crawl space vents with operable vents that can be closed during hot, humid and/or cold periods.
- Install 6-mil (or heavier) poly on dirt crawl space floors and seal to foundation walls with caulk.
- Do not install vapor barriers such as vinyl wallpaper or poly on interior of exterior walls.
- Rake soil away from exterior of foundation if it is closer than 6" from wood framing or siding.
- Ensure grade slopes away from the house at a 5% slope.
- Install gutters and downspouts, especially in regions receiving more than 30" rainfall annually.

Climate Zones

FOR THE 2004 SUPPLEMENT TO THE IECC, THE 2006 IECC, AND ASHRAE 90.1-2004.



Source: http://resourcecenter.pnl.gov/cocoon/morf/ResourceCenter/graphic/973&datasource_name=EnergyDS

For more information about energy efficiency home improvements, see www.rebuildingtogether.org