# Seasonal Maintenance For a Healthy Home



## **HVAC SYSTEM**

- □ Heating systems should be professionally serviced every two years for a gas furnace and every year for an oil furnace.
- □ Contact a professional repair technician if any potential problems are discovered.
- □ Arrange for service calls before the start of heating and cooling season to get better attention and have more flexibility when scheduling appointments.
- □ Before turning on your Forced Warm Air heating system, make sure nothing flammable has been stored next to the furnace over the summer.
  - Be sure access panels are secure & screws are in place.
  - Be sure the thermostat is set in the heating mode.
  - Run your heater for a few minutes to burn off the dust that usually collects on the heat exchanger over the summer (don't worry, that smell is normal) and to make sure it is in working order before you need it.
  - Remove grille on forced air systems and vacuum inside ducts.
  - Consider hiring a professional to perform a furnace maintenance check-up, including these steps:
    - Check furnace filter throughout heating season to ensure it's clean. If not, replace the filter.
    - Inspect thermostat for proper operation.
    - Check all electrical components and controls.
    - Oil motors as needed.
    - Inspect heat exchanger for possible cracks, which would introduce carbon monoxide into living space.
    - Check air flow. If diminished, it may be necessary to clean the evaporator coil and ductwork.
    - Check air fuel mixture, where appropriate.
- □ Gas burners should be professionally cleaned.
- □ Schedule an annual service call for a Heat Pump to have a certified professional to inspect the wiring, check belts and replace if needed, and oil the moving parts.
- □ FOR OLDER HOMES: For steam heating, check shutoff valve for leaks and drain lower water cut-off per manufacturer's instructions. Lubricate pump and motor; bleed air from radiators or convectors.
- □ Hire a professional for annual maintenance of oil-fired boilers including flue cleaning, a fuel-filter change, cleaning and adjustment of the jets.
- $\hfill\square$  Clean thermostat heat sensor, contact points, & contacts.
- □ FOR OLDER HOMES: Turn ON gas furnace pilot light (if your furnace has one), set the thermostat to "heat"; test

the furnace for proper operation by raising the thermostat setting until the furnace starts to operate. Once you have confirmed proper operation, return the thermostat to the desired setting.

- Make sure the thermostat is working properly and the pilot light is functioning. Be sure the gas flame is blue and not streaked with yellow. If you do see yellow, call a professional as this indicates that the furnace is not burning gas efficiently.
- □ Be sure that the pipe bringing the fuel or gas into the furnace does not have a leak or a loose connection. The fitting should be secure. The pipe should not have any cracks or signs of erosion.
- □ Make sure the drain pan under the cooling coil mounted in the furnace plenum of central air conditioning is draining properly and is clean.
- $\hfill\square$  Vacuum electric baseboard heaters to remove dust.
- Check to see that the ductwork leading to and from the heat recovery ventilator is in good shape, the joints are tightly sealed (aluminum tape or mastic) and any duct insulation and plastic duct wrap is free of tears and holes.
- □ Consider having the air ducts in your home cleaned if family members suffer excessively from respiratory infections asthma or allergies, there is visible mold growth inside ducts or on other components of your heating and cooling system, the ducts are infested with insects or rodents or excessive amounts of dust and debris and/or particles are actually released into the home from your supply registers.
- □ Clean heating system more frequently if you have pets.
- □ Bleed air from hot water radiators.
- □ Check the insulation in the attic and basement.

# **FIREPLACE & CHIMNEY**

- Check chimneys for obstructions such as nests.
  Hire a professional chimney sweep to clean the chimney to remove creosote buildup and prevent chimney fires. Be sure the damper closes completely to keep cold are out when the fireplace is not in use.
- □ Have your wood burning fireplaces and stoves inspected annually and cleaned and repaired as required to prevent chimney fires, carbon monoxide poisoning and mortar and flashing failure.
- □ Water leaks can cause mortar to deteriorate prematurely.
- □ Consider installing a chimney cap to protect your chimney from water, debris and critters.



# **ELECTRICAL SYSTEM**

- □ Check and tighten light fixtures, wall plugs and wall switches.
- □ Test ground fault circuit interrupter(s) on electrical outlets monthly by pushing the test button, which should then cause the reset button to pop up.
- □ If there are young children in the house, make sure electrical outlets are equipped with safety plugs.

## **SMOKE ALARM & CARBON MONOXIDE DETECTORS**

- □ Check the batteries regularly. Some alarms are hard wired directly into your home.
- □ If the unit emits a light to signal that it is working, be sure the light is on.

## **EXHAUST FAN & VENT OVER RANGE**

- □ Grease from the stove can accumulate in the exhaust area and could create a fire hazard.
- □ Grease also prevents the vent from closing properly, allowing heat loss through the exhaust vent.

#### **EXTERIOR**

- □ Look for loose, curled or missing shingles to repair or replace.
- □ Check for warping, aging, moss, and cracking, making sure that shingles, shakes or tiles are sound; repair or replace as needed.
- $\hfill\square$  Do NOT cover air vents or turbines.
- □ Check trim and woodwork for scratches, cracks or pulling away from surface.
- Inspect siding (especially on the south and storm sides of the house) for evidence of deterioration, including cracks, splintering, decay, and insect damage; clean, treat and repair as needed.
- Paint protects wood and stucco surfaces; postponing necessary painting will require more extensive and expensive preparation (scraping, sanding and priming) and repairs before repainting in the future.
- Brick and stone: check joints between wood and masonry.
  Waterproof, repair or repoint if necessary.
- □ Wood: Look for lifting or peeling paint, splitting wood or areas where the wood grain is separating or "checking" because water is getting into the siding.
- Stucco: a chalky residue that rubs off on your hand is evidence of oxidation, a deterioration of paint or color coat that reduces stucco's insulating value. If the stucco is cracked, this allows water to get in around windows and doors. Repair as needed.
- □ Trim: look for peeling paint on the fascia boards, window sills and sashes that could allow water in to form mildew

and fungus on the interior behind curtains, blinds and window coverings. Consider installing maintenance free vinyl or aluminum trim.

- □ Caulking: check caulking around all openings in the exterior envelope of the home, such as windows & doors.
- $\hfill\square$  Inspect for cracks and moisture.
- □ Inspect exterior wood for cracks, splintering, decay, and insect damage; treat and repair as needed.

#### **GUTTERS & RIDGE VENTS**

- □ When gutters are clogged, rainwater backs up in the gutters and spills over onto walkways. The water can freeze, creating a hazard for walking on the walkways.
- □ Clogged gutters and downspouts can also cause "ice damming", which can result in damage to the roof.
- □ When the temperature drops, water standing in gutters freezes potentially causing the gutter to expand and crack.
- □ If the water can't drain properly, it can freeze on the shingles and also cause damage.
- □ Ridge vents need to be cleaned in order to allow the house to breathe properly. Air can stagnate creating an unhealthy environment.
- Make sure downspouts divert water away from foundation walls. Install gutter accessories to divert water, channel underground drain lines into existing yard drainage or storm sewers, or consider installing a dry well at the end of drainpipe to slowly distribute water to surrounding soil.

## WINDOWS & DOORS

- □ Inspect caulking around exterior doors and windows. If caulking is cracked or peeling away, heat will escape.
- Inspect all windows and doors- replace any cracked or broken glass, tighten or repair any loose or damaged frames and repaint if necessary; replace broken, worn, or missing hardware; tighten and lubricate door hinges and closers; check for broken or missing glazing.
- □ Consider installing dual pane thermal windows to eliminate all need to remove or replace storm windows.
- □ If there is frost on the interior side of your windows, cold air is seeping into the home. Be sure that doors, windows and skylights shut tightly so that no air can enter. Check the door between the house and the garage also.
- □ Check the weather-stripping around all doors and windows and replace it if necessary to reduce drafts and heat loss.
- □ As homes 'settle', the seals around the doors and windows may be affected, creating gaps for outside air to enter and for your cooled or heated air inside the home to escape.
- □ Check door sweeps to see if worn and allowing cold to enter house. Replace if needed.
- $\hfill\square$  Replace screens with storm windows and doors.





- Remove interior insect screens from windows to allow air from the heating system to keep condensation off window glass and allow more free solar energy into your home.
- □ Remove room air conditioning units or cover outside and shut off power.
- Install weather-stripping along the bottom of the garage door and keep it free of snow and ice to be certain that the door will function safely and prolong its life.
   Clean and lubricate garage door hinges, rollers, and tracks; tighten screws.
- Make sure weather-stripping on door between garage and home is intact to reduce the risk of carbon monoxide poisoning.

# **DRIVEWAYS, WALKWAYS, DECKS & PATIOS**

 Resurface patios, walks and drives if cracks have developed to avoid water intrusion, which can lift surfaces.
 Keep decks clean, removing wet leaves and debris that can cause staining or encourage wood decay, mold and mildew growth.

Cleaning and sealing your deck can add years to its life.

# LANDSCAPING

- □ Winterize landscaping: store outdoor furniture, prepare gardens and, if necessary, protect young trees or bushes for winter.
- Ensure that the ground around your home slopes away from the foundation wall, so that water does not drain into basement.
- Check for erosion or shifting around house.
  Bury any exposed sprinkler, wiring or cable lines.
- □ Check, tighten and adjust fences, gates and doors.
- $\hfill\square$  Cut back any trees or shrubs that touching the exterior.
- $\hfill\square$  Rake and bag leaves from lawn.
- Insects and other critters would naturally prefer to come indoors out of the rain and cold, if possible, as winter sets in. Make sure all vents and other openings are covered and spray for insects along perimeter of house. Termites can cause thousands of dollars worth of property damage before a homeowner even realizes they have an infestation, and other pests can threaten your family members and pets with bites and diseases. Visually inspect for insects every 6 months to avoid potential infestations and damage to exterior walls.
- Check with a local gardening service or your county extension agent for information about appropriate measures in your area for fertilizing, thatching, aerating and reseeding lawn, and controlling disease and insects in all your landscaping.

#### **PLUMBING SYSTEM**

- □ Remove all hoses or other attachments to outside faucets before the onset of cold weather to prevent freezing of the plumbing lines. Leaving an attachment will not allow the faucet to drain and the fixture may freeze.
- Shut off & drain external lines, outside faucets (in older homes), hose bibs & sprinklers to prevent pipes from bursting; put away hoses. In most newer homes, the outside faucets cannot be turned off but are frost proof to prevent damage.
- Check for leaking around the outside hose bibs.
  Install insulation around outdoor water pipes to protect from freezing.
- $\Box$  Fill all sinks, drain and check for leaks.
- $\Box$  Check toilet for leaks.
- Drain water from the hot water heater tank seasonally to remove rust and sediment from the bottom of the tank.
   Every 6 months, turn off the power source and drain the water heater completely until it's clear of sediment.
- □ Inspect flue assembly of a gas water heater; check for leaks and corrosion.
- If sump pump is exposed to extreme cold, ice may form on the pump and cause damage, preventing the pump from turning on. This can be a critical problem when snow begins to melt and the pumps are needed to keep the basement from flooding.
- □ Make sure the sump pumps are covered to keep out large objects that could clog the pump.
- □ Check your pipes for rust or white lime deposits that may indicate a leak is starting- replace if necessary.
- □ Have well water tested for quality. It is recommended that you test for bacteria every 6 months.
- If you have a septic tank, measure the sludge and scum to determine if the tank needs to be emptied before the spring. Tanks should be pumped out at least once every 3 years.
- □ Make sure overflow holes on tubs are clear and open to prevent water damage to floors and ceilings.
- Never use caustic liquid drain openers on a completely clogged drain because it can severely damage your pipes.
  If you can't clear a clog after a few attempts, contact a drain-cleaning service or licensed plumber.
- After having a drain cleared mechanically, consider using a non-toxic biological drain cleaner regularly to keep drains clear. (Avoid putting bleach or mouthwash down biologically treated drains because it kills the "friendly bacteria" working to keep your drains clear.)
- □ Clean faucet aerators: Unscrew, disassemble & wash out.
- □ Fix leaky faucets promptly; a leak wastes up to 20 gallons of water a day and can ruin a faucet set.
- □ Clean out debris from tub drain assembly, inspect rubber seal and replace if necessary.



## **MISCELLANEOUS**

- □ Check to be sure your shovel and/or snow blower is in good operational condition.
- □ Close all crawl space vents for the winter to help avoid freezing water lines that are located in the crawl space.
- □ Check to see that bathroom exhaust fans and range hoods are operating properly.
- □ Jetted tubs should be cleaned following the manufacturer's recommendations on a regular basis to prevent accumulation of soap scum in the lines.
- □ Clean portable humidifier, if one is used.
- □ Change indoor air filters.
- $\Box$  Clean dryer vents and exhaust vents.
- □ Check linoleum for rips, tears and curling.
- □ Have your carpets, upholstery and draperies cleaned regularly to remove the dirt and grit that can wear them out prematurely.
- □ Check that fire extinguishers are fully charged; recharge if necessary. Keep an adequate number in kitchen, garage & basement.

- Clean grease filter. (Running it through the dishwasher is easiest!) This may need to be done more or less often, depending on how much you cook and/or fry foods.
- Although garbage disposers are generally self-cleaning, grinding small bones, eggshells, citrus peels and pulp, or a little ice will clean deposits and get rid of odors.
- Always run cold water when grinding to harden fats and grease and move waste all the way down the drain lines.
- Never grind clam or oyster shells, highly fibrous materials such as cornhusks, or non-organic materials like glass, plastic or metal in a garbage disposal.
- Natural stone like granite needs regular maintenance every 6 months. Seal with an impregnating liquid silicon stone sealer to repel both water & oil based stains more effectively.