

# Cold Weather Is Coming: Are You Prepared?

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Space heating accounts for 25% of commercial building energy use. With cold weather approaching, it's important to make sure your heating system is performing at its best and your building is tightly sealed. After an initial checkup, make regular maintenance a priority. It will pay off in lower energy bills and increased comfort all winter long.

## Heating system inspection and maintenance

A system checkup ensures all parts are in good working condition and operating properly. The following steps help to ensure efficient operations while avoiding equipment failure:

- Inspect heating ducts for leaks and seal them to reduce heat loss.
- Check all air filters. Dirty filters restrict airflow and reduce heating system efficiency.
- Make sure all hot water tanks and pipes are well insulated.
- Calibrate thermostats regularly to ensure they're functioning properly.
- Check outside air dampers to verify they're closed when the building is unoccupied.

- Make sure hot water or steam valves are in the proper position to allow full flow.
- Verify proper operation of in-duct humidifiers and humidity sensors.

If you have a limited maintenance staff, hire a qualified HVAC contractor to perform an inspection. A maintenance contract ensures checkups are performed according to a schedule, which can save money over the long term.

## Boiler cleaning and inspection

An annual inspection by a qualified technician, combined with regular maintenance, is the best way to optimize fuel efficiency and system performance. Key maintenance practices include:

- Inspect and clean the fireside and waterside.
- Check the refractory for cracking or erosion and repair as needed.
- Inspect burners for proper operation and thoroughly clean all components.
- Check fluid levels on water-regulating valves and look for signs of leakage.
- Empty and wash out condensate receivers and perform an internal inspection.
- Clean filters and replace as needed.
- Inspect electrical connections on starters and relays for tightness.



If your boiler is equipped with an alternate fuel system, inspect the condition of its fuel train and burner, as well as the stored fuel.

## Building envelope

A properly sealed and maintained building envelope is critical to maintaining comfort and maximizing heating system efficiency. Look for air leaks, especially around windows, doors and places where plumbing or ductwork penetrate the building.

Inspect the roof at least once a year. Make sure the roof and all drains are cleared of any debris, including branches and leaves. Tree limbs may have to be trimmed to avoid roof damage. For flat roofs, weekly inspections before and during the winter season are recommended.

## Year-round comfort and savings

You want to save energy and keep building occupants comfortable and productive this winter and all year long. Hire a qualified professional to perform an energy audit of your facility. An auditor can spot areas of energy waste and target the most effective measures to improve efficiency and optimize comfort.