How a Gas Furnace Works: Quick Reference

The five-stage cycle from thermostat call to warm air

The Five-Stage Cycle

1. **Thermostat calls for heat**
   The control board runs a self-check and confirms the venting is clear before anything else happens.
2. **Igniter lights the burners**
   A flame sensor confirms ignition before the gas valve is allowed to stay open.
3. **Heat exchanger warms the air**
   Combustion gases and household air stay separated by a sealed metal chamber.
4. **Blower moves the warm air**
   A short delay lets the exchanger warm up before the fan starts pushing air.
5. **Exhaust vents outside**
   The venting material depends on the furnace's efficiency tier.

What to Ask Your Technician

1. **Ask when the heat exchanger was last inspected**
   This is one of the main checks worth confirming happened at your last service.
2. **Ask what your venting type is designed for**
   Confirm whether your furnace vents through metal flue or PVC, and why.
3. **Ask about carbon monoxide detector placement**
   A qualified technician can confirm whether your detectors are positioned appropriately.
4. **Ask what a normal startup sounds like for your model**
   Knowing your furnace's normal pattern makes it easier to notice when something changes.

Save this guide, and bring your questions to your next inspection.

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