

DIY: Insulating Pipes Near Your Water Heater

Priority: Medium

Difficulty Level: Easy - A straightforward beginner project requiring no plumbing skills.

Time Commitment: Takes about 15 to 30 minutes total.

Physical Requirements: Involves light reaching or kneeling near the water heater.

Purpose

The purpose of insulating your water heater pipes is to reduce standby heat loss, save energy, and ensure hot water arrives at your faucets faster. Insulating hot water pipes and tanks significantly improves energy efficiency by reducing heat loss, which can cut water heating costs by 7 - 16% and reduce standby heat loss by 25 - 45% according to Dept of Energy. It enables faster hot water delivery, reduces water waste, prevents pipes from freezing in winter, and minimizes pipe condensation in humid conditions

Indicators that this Action is worth doing in your home

- The sink or shower takes a long time for water to get hot.
- If the pipe near the water heater is hot to touch.
- If water droplets form on cold water inlet pipe in humid months.
 - The inlet pipe is located at the top of the water heater tank, and brings water into the tank. It usually has a blue label or blue handle.

Video:

[Insulate Your Hot Water Pipes to Save Energy, Time and Money](#)

Materials Needed

- Pre-slit foam pipe insulation w/ adhesive
- Rubber pipe insulation
- Fiberglass pipe wrap
- High quality duct tape
- Plastic zip ties
- Utility knife or heavy duty scissors
- Tape measure: Gauges pipe lengths and diameters before buying materials.
- Gloves
- Cloth and mild cleaner: Wipes dirt and dust off the pipes before insulating.

Directions

- Turn off the heater: Shut off power to electric units or turn gas valves to "pilot" for safety.
- Clean the pipes: Wipe down the first 3 feet of both hot and cold pipes to remove dust.
- Measure and cut foam: Cut the foam insulation sleeves to match the straight sections of pipe.
- Slip the foam on: Open the pre-slit sleeve and pop it directly over the copper or PEX pipe.
- Insulate the first 3 feet: Cover at least the first 3 feet of both the incoming and outgoing lines.
- Seal the seams: Wrap insulation tape around the slit opening and tape the ends securely to the pipe.

Tips

- Match the pipe diameter: Measure carefully because 3/4-inch pipes need different foam than 1/2-inch pipes.
- Keep clearance on gas units: Leave a 6-inch gap between insulation and the exhaust flue on gas heaters.
- Miter the corners: Cut foam ends at 45-degree angles to make clean, tight corners at elbow joints.
- Choose the right material: Use fiberglass pipe wrap instead of foam if pipes are within 6 inches of a gas flue.