

23-3

Insulate Domestic Hot Water Pipes

Job Aid for Insulate a Water Heater Tank and First Six Feet of Pipes Badge

Aligns With Standard Work Specifications 7.0301.1



Insulate pipes to a minimum R-3 at least 6 feet from the water heater on both hot and cold lines. Use pipe wrap with an interior diameter sized correctly to fit the pipe.



Insulation should be continuous with no gaps. Cut pieces at a 45 degree angle to join two pieces of a 90 degree angle.



Keep insulation back at least 6 inches from draft diverter and single wall pipe.



Do not rely on manufactured adhesive seam seal to hold closed.



Secure seams with tape.



When path is partially obstructed or curved, shape insulation to the location to eliminate gaps.



Checklist Insulate a water heater tank and the first six feet of pipes

DESIRED OUTCOME

Improved thermal performance of the water heating and delivery system.¹

Water heater storage tank is insulated to achieve overall tank R-10. ²
Added insulation does not obstruct the unit's:
Draft diverter.
Pressure relief valve.
Thermostats or other controls.
Access plates.
The first 6 feet of accessible inlet and outlet pipes are insulated so that coverage is complete and secure.
A minimum R-3 pipe insulation is the correct size for pipes.
Pipe insulation seams are sealed.
A minimum clearance of 6 inches between pipe insulation and the water heater draft diverter or single wall vent flue is maintained.

1. Relevant Standards: 7.0301.1

2. If variance request has been approved, replace this with approved figure.



For more information, visit: energy.gov/eere/wap DOE/GO-102023-5934 • September 2023