

Heat Pump Comparison Guide

This resource compares air, water, and ground-source heat pumps to help you choose the best solution for your building, budget, and needs.

1. Air Source Heat Pumps

Optimal For

Mild-to-moderate climates for standard models, retrofits or buildings with limited space, projects needing a fast, cost-effective solution

Key Features

Transfers heat between indoor and outdoor air, most common and widely available, can provide both heating and cooling, lowest upfront costs

2. Water Source Heat Pumps

Optimal For

Multi-family or commercial buildings with centralized systems, buildings nearby water sources or existing hydronic loops

Key Features

Exchanges heat with a water loop or nearby water source, often used in closed-loop systems in large buildings, needs steady access to a water source or loop, mid-range upfront costs

3. Ground Source Heat Pump

Optimal For

Long-term investments and deep decarbonization, buildings with access to land or boreholes, projects pursuing maximum energy efficiency

Key Features

Transfers heat to and from the ground via buried loops, utilizes stable underground temperatures. very efficient year-round, steeper upfront costs

Winter Weather Concerns?

Cold Climate Heat Pumps are generally designed to maintain their full heating capacity in as low as about 5 degrees Fahrenheit.



