

COMPARISON OF TYPES OF HEAT PUMP SYSTEMS

PARAMETERS	GSHP + central AH (b)	AAHP + central AH (b)	Mini Split HP	AWHP or GSHP + HWBB
New construction suitability (c) (10 = most suitable)	10	10	4	3
Renovation suitability (10 = most suitable)	1	6	10	6
Cost (10 = highest cost)	10	2	3	10
Efficiency of heat pump (a) (10 = most efficient)	10	6	9	8
Ability to zone system (10 = easiest to zone)	3	3	10	10

TYPES OF SYSTEMS:

GSHP = Ground Source Heat Pump (water to air)

AAHP = Air to Air Heat Pump

AWHP = Air to Water Heat Pump

AH = Air Handler

HWBB = Hot water baseboard heating

RATINGS:

10 = Highest

1 = Lowest

(a) Heat Pumps with lower Btu capacity tend to have highest efficiency

(b) Instead of single central air handler can be zoned with one AH for living spaces and one AH for sleeping spaces.

(c) New construction of single family home

SUMMARY OF RESULTS:

1. For renovations, Mini Split HP is best (SEER 22+, HSPF 13+, COP 4+)
2. For New construction with land and larger budget GSHP is best
3. For New construction with smaller lot and tight budget AAHP is best
4. For renovation with HWBB heating system use high temperature air to water Daikin heat pump or GSHP