

Attachment A: Pricing Proposal Pricing and Equipment Form

Section 1: Air Source Heat Pump Equipment & Installer Workmanship Warranty

Warranty

Boucher Energy Systems (BES) offers a 1 year 100% bumper to bumper warranty on all installations. This covers all aspects of the installation provided by BES and its subcontractors . As a Mitsubishi Elite Diamond Dealer our installations carry a 12 year parts and 12 year compressor warranty. As an American Standard Customer Care dealer equipment comes with a 10 year parts and 12 year compressor warranty. This includes any American Standard accessories installed as part of the original installation. LG has a 10 year parts and compressor warranty. BES will complete all equipmentwarranty registrations for the customer within 7 days of project completion and payment. BES will also process all HeatLoan paperwork, MassSave/ MassCEC rebate paperwork for each Installation.

Section 2: Air Source Heat Pump Equipment Pricing

Single-Head Ductless Systems

Base System Equipment

Standard assumptions:
 -16 feet Line Hide or similar (including one 90 degree ell, one wall inlet, one end fitting.);
 -20 feet line set;
 -Outdoor unit to be installed on a precast concrete pad and a 18" tall stand.
 -Outdoor unit to be installed on same side of the home as interior unit;
 -Home construction to be wood frame with clapboard or shingle siding and rain cap is not necessary;
 -Includes a pan heater;
 -Electrical panel located in unfinished basement; and
 -Standard installation assumes 40' of electrical feed cable from panel to outdoor condenser.

Fees associated with additional material and labor for non-standard installations (adders) are detailed in the Cost Adders tab.

Manufacturer	Model Number	Installed cost per Unit	Value of Incentives (MassCEC + MassSave rebates)	Heating Capacity at 5°F (btu/hr)	Cost per Ton of Heating Capacity at 5°F	Deposit Required at Contracting (if applicable)	Eligible for MassCEC Rebate?
Mitsubishi	MUZ-FH06NAH	\$4,470	\$925	8,700	\$6,166	\$1,340	yes
Mitsubishi	MUZ-FH09NAH	\$4,573	\$925	10,900	\$5,034	\$1,370	yes
Mitsubishi	MUZ-FH12NAH	\$4,727	\$725	13600	\$4,171	\$1,420	yes
Mitsubishi	MUZ-FH15NAH	\$5,345	\$725	18000	\$3,563	\$1,600	yes
Mitsubishi	MUZ-FH18NAH2	\$5,450	\$725	20900	\$3,129	\$1,640	yes

Multi-Head Ductless System/Central Ducted Systems

Base System Equipment

Standard Assumptions:
 -All indoor head units are installed on exterior walls and all interconnected piping will be on the exterior of the home;
 -All multi head units will be installed on a precast concrete pad (not styrofoam) and a 18" tall stand.
 -Central ducted units will be installed on a precast concrete pad and manufacturer supplied snow legs.
 -Exterior units must be mounted above the level of snow drifts typically experienced at the location of the installation;
 -Home construction is wood frame with clapboard or shingle siding and rain cap is not necessary;
 -Electrical panel located in unfinished basement;
 -All branch box units will have the branch box located in the basement with a 20' interconnecting line set;
 -Standard installation assumes 40' of electrical feed cable from panel to outdoor condenser; and
 -Central ducted systems are a standard replacement of an existing ducted ASHP.

Fees associated with additional material and labor for non-standard installations (adders) should be detailed in the ASHP Cost Adders tab. Any additional non-standard cost adders beyond those provided should also be included.

Manufacturer	Model Number	Base number and type of indoor heads (indicate if ducted units will be installed)	Base length of line set and line hide (feet)	Installed cost for Base System	Heating Capacity at 5°F (btu/hr)	Cost per Ton of Heating Capacity at 5°F	Deposit Required at Contracting (if applicable)	Eligible for MassCEC Rebate? (i.e., meets efficiency requirements)
Mitsubishi	MXZ-3C24NAHZ-U1	(2) MSZ-GL09NA-U1 ductless	32' line hide, 40' lines	\$8,337	25,000	\$4,002	\$2,440	yes
Mitsubishi	MXZ-3C24NAHZ-U1	(3) MSZ-GL09NA-U1 ductless	48' line hide, 60' lines	\$9,676	25,000	\$4,644	\$2,845	yes
Mitsubishi	MXZ-3C30NAHZ-U1	(2)MSZ-GL09NA-U1 (1) GL12NA-U1	48' line hide, 60' lines	\$9,832	28,600	\$4,125	\$2,925	yes
Mitsubishi	MXZ-4C36NAHZ-U1	(4) MSZ-GL09NA	48' line hide, 60' lines	\$14,420	45,000	\$3,845	\$4,326	yes
Mitsubishi	MXZ-5C42NAHZ-U1	(5) MSZ-GL09NA	60' line hide, 100' lines	\$16,940	48,000	\$4,235	\$5,025	yes
Mitsubishi	PUZ-HA36NHA5	PVA36AA	25' lines	\$12,828	38,000	\$4,051	\$3,850	yes
American Standard	4A6V8024A1	TAM9 ducted indoor units	25' lines	\$10,000	12,920	\$9,288	\$3,100	no, NEEP Listed ccASHP
American Standard	4A6V8036A1	TAM9 ducted indoor units	25' lines	\$10,500	20,760	\$6,069	\$3,150	no, NEEP Listed ccASHP
American Standard	4A6V8048A1	TAM9 ducted indoor units	25' lines	\$11,200	28,920	\$4,647	\$3,360	no, NEEP Listed ccASHP
LG	LUU368HV	LVN360HV4	25' lines	\$11,500	30,000	\$4,600	\$3,450	no, NEEP Listed ccASHP

Attachment A: Pricing Proposal Cost Adders

Factors	Adder (\$)	Adder units (if applicable)	High use adder? Please indicate if over 50% of systems will require this adder (Y/N)	Description of Cost Adder / Scope of Work
Electrical				
Electric work in a finished basement or other space	\$500-\$2500		n	Depends on the specific construction of the home
Electrical feed longer than 40' from the outdoor unit to the electrical panel	\$50-\$500		n	Depends on the extra length of the electrical feed and the number of outdoor units that require extra electrical feed.
Electrical subpanel upgrade	1200	per subpanel	n	Install 60 amp 8 circuit subpanel
Outdoor GFCI outlet	200	per outlet	y	Most installs require an additional outlet at outdoor unit, need an outlet within 25' feet of each outdoor unit
Indoor Upgrades				
Remote/smart thermostat	\$350	per thermostat	n	MHK-1 programable thermostat (only applicable to Mitsubishi units)
Indoor Units are not installed on an exterior wall	\$250-\$1500	per indoor unit	n	Depends on the specific layout of the home
More expensive indoor units (e.g. floor mounted)(per indoor unit)	\$50-\$750	per indoor unit	n	Change indoor wall head to floor standing unit, ceiling recessed unit, etc.
Upgrade to FH indoor wall units for the multi-heads	\$100	per indoor unit	n	Upgrade Mitsubishi equipment to FH indoor unit with more features
Existing central ductwork requires upgrades or repairs	\$500-\$5000	central ducted	y	This adder depends on the scope of the repairs needed
Outdoor Upgrades				
Line hide beyond base (per foot price)	\$7.50	per foot	n	Cost for additional line length. Each additional fitting will be figured as 3' of line hide.
Line set beyond base (per foot price)	\$5 or \$10	per foot	n	\$5 for line sizes 1/4"&3/8" and 1/4"&1/2" line sizes. \$10 on all larger sizes
Single-head ductless outdoor units mounted on an exterior wall with brackets with vibration dampening features	(\$150)	per outdoor unit	n	This would be a subtractor from the base price. Single ductless units mounted to wood frame construction can transfer sound and vibration through wall system. This configuration should only be considered if the exterior unit can be mounted on a concrete foundation.
Projects involving installations on three or more stories (per project)	\$1,000	per project	n	Only applicable if a ladder cannot reach all parts of the job. Cost is for lift rental and extra time
General				
Annual maintenance & servicing: Single-head ductless heat pump	\$100	per year		
Annual maintenance & servicing: Multi-head ductless heat pump (up to	\$170	per year		
Annual maintenance & servicing: Central Ducted Heat Pump (with	\$200	per year		
Additional permitting costs	\$150-\$450		n	The base pricing includes an electrical permit fee. Additional permitting fees could apply to certain projects, such as if modifications to ductwork are required.