1. Does your company sell and install cold climate air source heat pumps? Heat Tek sells; we also design custom projects residentially and commercially, service and maintain each, and will do complete installs start to finish.

2. How many installations has your company done? We have completed well over a hundred systems and more.

3. In your opinion, what is the best brand? Mitsubishi.

4. What’s the lowest temperature at which they are efficient? Mitsubishi will run at highest efficiency at 5 degrees Fahrenheit, will operate down to minus 13 degrees Fahrenheit without losing a BTU.

5. Do you typically advise a supplementary heat source? Each design is different; in some cases we use supplemental heat. Usually if the ASHP is only source of heat, we might add electric coil or simply size unit to next size in BTUs.

6. Do you find that people are happy with the air-source heat pumps? We have truly not encountered one client who is dissatisfied with their choice of using an ASHP. In fact most can’t believe how well they work.

7. What complaints have you heard, if any? We have one common complaint; when it’s really cold outside / the system will go into a defrost mode. It will melt ice off the outdoor coil and create a small pond beneath the unit. This creates an icy condition if near a walkway. We have corrected that through initial design and built a special mounting system that prevents this from happening in future.

8. What kind of problems have come up with air-source heat pumps or their installation? Not many problems to speak of, a few with control boards that were defective but most likely open boxes or returns from other contractors that were not inspected by manufacturer and sent back out for sale. The most difficult problem is trying to hide pipe work in walls or outside to make system look like it was planned with original construction.

9. Do you recommend air-source heat pumps for all homes or buildings? Why or why not? I definitely recommend them for all homes and buildings. First, the cost vs. ground source is much cheaper. The efficiency is amazing, The ease of maintenance, the ability to easily control many areas at different set points without major installation costs, the ability to use solar and other green technologies to subsidize operating costs and even in some case free operation. The fact that in the Mitsubishi line there is a system to replace a standard household furnace using existing ductwork and there many, many others styles in their arsenal to compliment any space.

10. Do installers require a particular license or is there a certificate your staff needs to have? Installers need to carry a license to handle refrigerant from the EPA as well as need to be licensed by the local municipality in some areas. Some manufacturers have a special group of contractors they consider elite and will extend warranties for clients up to 12 years. We are a Diamond dealer for Mitsubishi.
1. Does your company sell and install cold climate air source heat pumps? Yes. We have worked with the Tompkins County HeatSmart program.

2. How many installations has your company done? We have completed 12 installations in the past year.

3. In your opinion, what is the best brand? Fujitsu

4. What’s the lowest temperature at which they are efficient? Even though the heat pump will work to minus 15 degrees, below 5 degrees the efficiency is reduced.

5. Do you typically advise a supplementary heat source? Baseboard or woodstove or propane may be needed.

6. Do you find that people are happy with the air-source heat pumps? Yes. Also, there are families who welcome tours in Tompkins County.

7. What complaints have you heard, if any? Understanding the controls and how the system works. Although air is exiting the unit, it is not always warm air if the temperature has been attained and that confused a resident.

8. What kind of problems have come up with air-source heat pumps or their installation? One time, the remote was triggered by a wireless phone. The solution was to shut down the ASHP and turn it back on.

9. Do you recommend air-source heat pumps for all homes or buildings? Why or why not? We have certified installers.

10. Do installers require a particular license or is there a certificate your staff needs to have?

11. Additional information?
   - Families below a certain income level can receive 50% discount if they have an electric water heater and go to ASHP water heating.
   - There is a 6 month old program called the Home Advance Program, in association with NYS Green Bank, a private company similar to the on-bill-finance program, which arranges for the costs of your upgrades to be included on your regular electric bill, thus eliminating an upfront cost, allowing you to pay the same monthly amount until the system is paid off. Go to SEELED.COM to learn more.
   - What should happen first is a home energy audit...determine your electric load...add appropriate renewable energy (on or off-site solar, for example) to power your ASHP and other energy needs.

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3) Bryant Heating & Air Conditioning
175 W. Service Hwy
Binghamton, NY 13901
(607) 722-1283 Email: info@bryantbing.com
Website: www.bryantbing.com
1. Does your company sell and install cold climate air source heat pumps? We have installed and serviced air source heat pumps for over 15 years.
2. How many installations has your company done? More than 50.

3. In your opinion, what is the best brand? Carrier, Bryant.

4. What’s the lowest temperature at which they are efficient? We use a program that takes into account fuel type, fuel cost, kW cost, product type. This program tells us the balance point to automatically switch from one fuel to optimize fuel cost based on ambient air.

5. Do you typically advise a supplementary heat source? Always, because air to air heat pumps need to do defrost shutdown. Cost and size of heat system is not practical and normally air to air pump systems are installed where existing forced air heating are in place. Most manufacturers have disclaimer to air to air system as primary heat, but if you build a Coleman cooler house?

6. Do you find that people are happy with the air-source heat pumps? Very satisfied with comfort, pay back.

7. What complaints have you heard, if any? Very few. Basically you get what you pay for. We only offer high end products.

8. What kind of problems have come up with air-source heat pumps or their installation? Heavy snow fall not being cleared off unit before start up; poor installation practices.

9. Do you recommend air-source heat pumps for all homes or buildings? Why or why not? I do not recommend for people with natural gas, as it has no real payback, unless they have grandfather electrical. I use PV solar, heat pump with natural gas.

10. Do installers require a particular license or is there a certificate your staff needs to have? I am a factory dealer with NATE (North American Technician Excellence) certification. Licensing of HVAC industries would be nice.

11. Additional information? Ductless heat pump systems are another subject. They have their place. Every house needs a good survey.

4) Zabadal Plumbing, Heating, Air Conditioning
Mike Zabadal
220 Front Street
Vestal, NY 13850
(607) 797-4702
Website: Zabadal.com

1. Does your company sell and install cold climate air source heat pumps? Yes we do.

2. How many installations has your company done? Varies from year to year with the cold climate heat pumps...about 50 so far and in addition, they also they install heat pumps that serve mostly as air conditioners.

3. In your opinion, what is the best brand? Mitsubishi hyperheat model with inverter technology.

4. What’s the lowest temperature at which they are efficient? About minus 5 degrees.

5. Do you typically advise a supplementary heat source? Not always. It depends on tightness of the building, insulation, south-facing windows.

6. Do you find that people are happy with the air-source heat pumps? Yes.

7. What complaints have you heard, if any? Initially, some don’t like seeing it on the wall unit until they get used to it being there.
8. What kind of problems have come up with air-source heat pumps or their installation? None.

9. Do you recommend air-source heat pumps for all homes or buildings? Why or why not? Yes...much better than geothermal, which can be problematic...noisy...a lot of moving parts...Driller and two other specialists need to coordinate and all must be correct.

10. Do installers require a particular license or is there a certificate your staff needs to have?

11. Do you wish to add any additional information? At this time, ducted units do not serve the lowest temperatures. Mitsubishi ductless (mini-split) does. Ruud is working on developing a ducted model that will heat down to lower temperatures than current ducted models. Mike himself has a ducted model at his home that operates to about 30 degrees F; below 30 degrees, he uses fuel.

5) Blue Ox Energy Products and Services
38 North Canal St.
Oxford, NY 13830
Zach Williams
877-233-8176
www.blueoxenergy.com

1. Does your company sell and install them? Yes we do, both ducted and ductless.

2. How many installations has your company done? About 25 of the ductless heat pumps last year and 25 the year before. We also have ducted whole house systems available by Ruud and have installed 5-10 of these in the past 8 years.

3. In your opinion, what is the best brand? We install both Mitsubishi and Fujitsu. We have installed up to 4 interior ductless heat pumps per outside unit. Mitsubishi calls its cold climate model a “hyperheat” model. Fujitsu calls its cold climate model “extreme low temperature”. Mitsubishi is reliable and offers good warranties.

4. What’s the lowest temperature at which they are efficient? Minus 13 degrees for Mitsubishi and minus 15 for Fujitsu. At that temperature, they operate at about 70% efficiency.

5. Do you typically advise a supplementary heat source? The ducted models operate to about 25-30 degree outdoor temperature, so they add only about a month of service before the secondary system is needed. For ductless cold climate heat pumps, supplemental heat is needed for rooms not served by the heat pumps.

6. Do you find that people are happy with the air-source heat pumps? Yes they rant and rave about the ductless heat pumps. They are quiet and efficient and create even heat throughout the room.

7. What complaints have you heard, if any? None, but regarding a question of how to establish even heating, place the fan speed on “automatic” and the vanes on “oscillate”.

8. What kind of problems have come up with air-source heat pumps or their installation? Anything with moving parts can need service or parts. The units are shipped and have dust and moisture. The technicians make sure that the lines and coils are vacuumed before the system is turned on. They do not cut corners on installation.

9. Do you recommend air-source heat pumps for all homes or buildings? Why or why not? Yes...75-85% of European homes make use of ductless heat pumps...but we are just now catching on.
10. Do you have anything you’d like to add? Our main office is in Oxford. We serve a 40-60 mile geographical area, including west as far as Owego, including Richford, Whitney Point, Maine.

6) Halco Energy
865 County Road #6
Phelps, NY 14532
Matt Dennis Mattd@halcoenergy.com
607-342-3331

1. Does your company sell and install cold climate air source heat pumps?
2. How many installations has your company done? We have completed hundreds of hyperheat (extreme climate) heat pumps.
3. In your opinion, what is the best brand? We mostly install Mitsubishi who has a 12 year warranty on parts; also LG.
4. What’s the lowest temperature at which they are efficient? Minus 13 degrees at 95% efficiency; more than zero degrees-100% efficiency. Minus 18 or 19, will possibly quit.
5. Do you typically advise a supplementary heat source? Yes, because at minus 18 or 19, the units can possibly quit working. The supplementary source need not be fossil fuel. It could be an air handler (An HVAC air handling unit (also called an AHU) is the indoor part of your heating and cooling system. An air handler circulates both cool and hot air, depending on the season. When properly matched with a heat pump or air conditioner, an air handler will help you maximize the overall efficiency of your HVAC system.) Also, the ASHPS don’t fail often, but when they do, there may be a delay in obtaining parts/repair.
6. Do you find that people are happy with the air-source heat pumps? Very happy. Indoor units are quiet. (Outdoor units can be up to 50 db at full blast - lowest temperatures). Efficient. Installation is quick.
7. What complaints have you heard, if any? Aesthetics of outdoor unit, depending on placement.
8. What kind of problems have come up with air-source heat pumps or their installation? None, when properly installed.
9. Do you recommend air-source heat pumps for all homes or buildings? Why or why not? Yes. Assessment and insulation is needed first. Then the heating/cooling units can be sized appropriately.
10. Do installers require a particular license or is there a certificate your staff needs to have? Municipality specific. Certifications in insulation, diagnosis, refrigerants.
11. Additional information? One-stop shopping – assessment, insulation, heat pumps, zero carbon footprint. Open 7 days/week, 7am-9pm, 24 hour emergency service. 150 employees.