

## **MTEC Spring Mini- Split Heat Pump 40-Hour Training**

**May 23 – May 27, 2016, 7:30AM – 3:00PM**

**Instructor: Roger Mitchell**

This 40-hour class will focus on Installation, Operations and Service of Ductless Mini Split Heat pump systems. The training will include discussions, live operations and 24 hours of hands on lab assignments.

Topics will include System components, Operating cycles, Installation practices and Service procedures.

The class will cover Mitsubishi, Daikin and Fujitsu mini split systems.

### **System components covered**

- Indoor / Outdoor heat exchangers
- Compressor
- Metering Device's
- Reversing valves
- Line driers
- Defrost Controls
- Thermostats

### **Operating Cycles**

- Cooling
- Heating
- Defrost
- Emergency Heat

### **Installation Practices**

- Locations
- Wall Brackett / Ground Mount installation
- Piping
- Nitrogen Pressure testing
- Wiring / NEC 70
- Triple Evacuation / Dehydration
- Manifold set up

### **Service Procedures**

- Pump down
- Test run mode
- Forced Cooling
- Reversing valve diagnostics



**Lab One - Installation Practices, 4 hours:**

- Ladder Safety
- Locating the indoor and outdoor unit
- Wall Brackett installation
- Line Hide installation
- Connect refrigeration lines
- Connect condensate drain line
- Pressure test lines

**Lab Two - Evacuation and Charging, 8 hours**

- Manifold Connections
- Vacuum Pump set up and operation
- Triple Evacuation procedure
- Charging calculations
- Refrigerant handling procedures
- Add required refrigerant

**Lab Three - Wiring methods, 4 hours**

- Electrical Safety
- Panel to outdoor unit
- Outdoor unit to indoor unit
- Operate unit

**Lab Four - Service Procedures, 4 hours**

- Pump down operation
- Remove refrigerant
- Recharge refrigerant

**Lab 5 - Service Procedures, 4 hours**

- Sensor testing
- Reversing valve testing
- LEV operation and testing
- Disassemble unit
- Lab Clean up

**Tuition:**

**Member: \$795.00**

**Non-Member: \$895.00**

**To register, or FMI please email  
Hannah Estes at**

**[hestes@maineenergymarketers.com](mailto:hestes@maineenergymarketers.com),**

**or call 207-729-5298**

