

# COMMON QUESTIONS ABOUT ETS

1. **“I have never heard of ETS. Is this new?”** Electric Thermal Storage (ETS) has been in the United States since the early-70’s, and has been utilized in Europe since the 1940’s. This technology has been proven in many areas across North America to deliver great comfort; and, when combined with an off-peak, Time-of-Day or other preferential rate, low operating costs to make it the best cost heating option.

ETS is a technology whereby off-peak electricity is stored as heat which is used for heating 24-hours a day. Many power companies offer an off-peak electric rate option that provides as much as 50% or more savings off of the standard electric rate for energy used during off-peak hours. ETS equipment utilizes the low off-peak electric rate to store a sufficient amount of heat to meet the owners needs. ETS equipment available today includes room heating units, whole house heating systems, heat pump boosters, floor heating systems, and water heaters. Contact your power supplier to find out if off-peak electric rates are available to you.

2. **“How can ETS technology be applied in my home?”** There are several ETS options available for residential homes. Individual room heating units can be used either alone or in conjunction with electric baseboard, cove heaters, etc. Room units are also used to replace wood stoves. The Comfort Plus centrally ducted system is generally used as a whole house heating system. It can be used as a stand-alone furnace or can be combined with a heat pump to offer even better efficiencies and lower operating costs. The Comfort Plus hydronic unit can be used to do floor heating as well as provide ducted heating at the same time. Lastly, domestic water heaters can be applied as an ETS technology, saving you money on your water heating needs. Since space and water heating generally consume the most energy in the home, significant savings can be realized using ETS equipment with off-peak electric rates.
3. **“I have a 1000sf home. What size equipment do I need?”** There are several factors involved in determining the correct size(s) of equipment for your home. A heat loss calculation should be performed to determine the appropriate model(s). The cubic area, quality of home construction (insulation values), number & size of windows and doors, and number of off-peak hours available are all factors involved in making this determination. Contact you local Power Company or dealer to obtain a heat loss calculation.
4. **“Where can I purchase ETS equipment?”** Contact your local power company to see if they carry ETS equipment. If they do not, contact Steffes Corporation at 888-783-3337 and they will direct you to a dealer near you.
5. **“How much does it cost to operate the ETS equipment?”** Cost of operation is directly related to the amount of heat loss the unit is to satisfy and the off-peak heating rate available. The ETS equipment is 100% efficient like most electric heating systems; therefore, electric consumption will be very similar. However; if your power supplier provides an off-peak electric rate, ETS systems usually provide significant savings over standard electric systems and most fossil fuel systems.
6. **“How long will the ETS equipment hold heat?”** The ETS equipment is generally sized to satisfy the heating requirements on the coldest days of the year. If sized properly, the equipment will satisfy the owners desired comfort at all times. The brick core used to store the heat in the equipment is well insulated so static heat dissipation is minimized. The heating equipment has the ability to discharge heat even while it is storing heat during off-peak hours.
7. **“What happens if the unit is charged up, and I don’t need heat? Is that heat wasted?”** The ETS equipment is well insulated so the majority of the heat is retained in the brick cavity until needed. There is some heat radiated from the heater; however, this usually goes into the conditioned space of the home. Therefore, the heat is not wasted. On shoulder months of the heating season (October, November, March, April), it is important to regulate the heat storage amount according to outdoor temperature to reduce the amount of radiant heat from the unit.

8. **“How do I get the heat out of the heater?”** The discharge of heat from the ETS equipment is controlled with fans/blowers. These fans/blowers operate as needed to satisfy the heating requirements of the area as sensed by a room temperature thermostat. When there is a need for heat, the room thermostat signals the fans/blowers to operate and discharge heat. When the heating requirement has been satisfied, the fans/blowers turn off.
9. **“What happens if I run out of heat?”** In areas where the Power Company has a Time of Use (TOU) rate, you may purchase on-peak power for heating during this time. If this occurs frequently, it is an indicator the ETS system is undersized for the application and it may be necessary to install additional equipment.
10. **“What is the life expectancy of the heater?”** This equipment is designed to provide many years of operation to you. Life expectancy depends on proper sizing, installation, environment it is operating in, and maintenance. The ETS heating equipment has proven to be very reliable and has a five-year limited manufacturer’s parts warranty.
11. **“Can I install the heater myself?”** Most models are 240V directly connected heating appliances. It is required to have a qualified electrician do the installation for you. All electrical and safety listing codes must be adhered to.
12. **“I would like a different color heater than what is offered. Can I paint the heater?”** The equipment is available in a two tone, neutral color that blends with most decor’s. Optional colors are available from the factory at an additional charge. Painting over the existing heater paint is not recommended. Contact the factory for more details.
13. **“What type of maintenance is required?”** Like most electric heating systems, ETS systems require very little maintenance. It is suggested to regularly clean around the heater and make sure no debris falls behind the equipment. In addition, on centrally ducted systems, regularly replace the air filter so optimum efficiency can be maintained.
14. **“I have black streaks on the front of my room unit. What is it?”** This is likely a form of soot or carbon. This residue is the carbon from burned airborne particles, which were drawn into the heater from the room and oxidized in the brick core. If you experience this on your room unit, we suggest cleaning the unit when it is cool with a non-abrasive household cleanser.
15. **“Can I recess the room unit into a wall?”** Yes, however, the specified minimum clearances must be adhered to. These clearances vary by room unit; however, are approximately 2” from the sides and back, 4” on top, and 15” in front of the discharge grille area. Centrally ducted and hydronic systems also will have minimum clearance requirements. Failure to comply with stated clearances may cause operational difficulties, risk of fire, injury, or death.
16. **“Does this unit store “COLD” in the summer time?”** No. This unit is strictly a heat storage device. Cool storage requires a different storage medium currently not developed.
17. **“Can I install the equipment in my garage or workshop?”** Since this environment is prone to more dust and airborne particles and may have varnish, paint or other odors present, caution is recommended. Steffes Corporation does not recommend ETS in these types of environments.
18. **“We painted over the weekend, and now there is a foul smell coming from the heater. What is it?”** You are experiencing what is called odor amplification. The ETS system will draw room odors through its hot core. When this happens, the odors can be amplified. It is suggested to not operate the ETS heater when you are painting, varnishing, or doing anything else which causes a higher than normal level of airborne fumes or aerosols.