JetStream Outdoor Cooling utilizes high velocity air to force rapid flash evaporation to cool outdoor patios. This is accomplished by using 1000 psi mist and a ducted air system with an inline blower in the crawl space. The system will cool an outdoor covered patio without the heavy moisture associated with conventional mist systems where moisture may collect or settle on patio. The system requires a minimum ceiling height of 10', which allows enough distance for the mist to evaporate before head level. Maximum ceiling height is 12', as that is the max distance that we can force the cooled air to the floor to circulate and cool the space.

Requirements

Ducted System - Rough in for the ducted cooling system needs to happen after dry in and before mechanicals and electric. Port placement locations are very specific especially when paired with the integrated electrical heating. Placement of can lights and ceiling fans will be affected. To accommodate the ducting of the system, approximately 24" of clearance down the center of the patio, in between roof and ceiling joists is required. Attic crawlspace must be accessible to test system and replace any components as needed. If no access, a scuttle hole 22" x 22" will be required. Fresh air is also required, either vented scuttle hole, roof vents, or soffit vents.

Cooling Box System - When attic crawlspace is not available or there is a second story above, and the boxed system is utilized, we will need a plug at each location in which a box is located. Each box pulls 1.5 AMPS and all boxes will need to be on one switch to control power. To keep the high pressure tubing hidden, we will run a pex chase to each location from the pump, which needs to be roughed in before ceiling to patio is installed. They can also be flush mounted in the ceiling.

Pump - Pump will be located away from the patio area outdoors as to avoid any sound disturbance in the patio area. Usually located in AC area or pool equipment area, it has to be within 75 feet of ducted system or the first cooling box, as we have to use pex to chase our high-pressure tubing from pump to trunk of the ducted works. At the pump location, a plug that is switched on the patio area is required. Timer for pump is available to keep pump from being left on overnight. Pump will be damaged if it is left on for more than 6-8 hours. Pump pulls around 12 Amps of electricity or so depending on size of system. Pump size is approximately an 18" Cube, and the noise level is close to that of a pool pump. Water source for the pump is a conventional water faucet or spigot without the air gap. The air gap/back flow device will fail very quickly with our pump connected constantly. If a regular faucet with garden hose threads is used, an addon air gap can be used for inspection and removed later. Spigot should be connected to water softener system if available.

Blower – The air pressure in our ducted system is provided by an inline blower. This fan will pull somewhere between 8-12 AMPS per blower and needs to be hard wired to a switch that is next to the mist pump switch, somewhere convenient for the homeowner to switch on the cooling system. If it is a multiple blower system, one switch needs to be utilized to control both blowers in order for them to both come on at the same time, when the mist is on. This blower may be used without the mist pump to provide air movement when it is not hot enough for mist. To control the volume of air and during cooler months, a rheostat may be incorporated. One rheostat per blower is required and will need to be in its own single gang box as the rheostat covers more than a single opening.