

Project

Name
Terry & Dianne Huey

Location
Oak Point, TX

Completion Date
September 2012

The Team

HVAC Contractor
Precision Equipment Co.

HVAC Distributor
JCI

Fujitsu Equipment

- (2) ASU18RLF Indoor Wall Mount
- (1) ASU24RLF Indoor Wall Mount
- (1) AOU48RLXFZ Outdoor Condensing Unit
- (1) UTP-PU03A Branch Box



Cooling a Large Great Room

The home is a beautiful white stone Italian style Villa approximately 15 years old with three bedrooms 2 ½ baths, a tower room, a stunning great room (20' x 34') with 25' ceilings and granite countertops. The 3,100 SQ FT home was built to entertain guests and has wonderful flow throughout. The home was constructed using concrete filled Styrofoam blocks (ICF Construction) on all exterior walls, thus giving the builder and original owners the feeling that they could hold off the hot Texas sun in August.

The home had two AC and Heat units installed prior. One was a 2.5 ton unit and the other was a 2 ton unit on separate ends of the home. The great room is situated in the middle of the home between the AC units and was being fed by a total of three vents (6X12) one from the 2 ton and two from the 2.5 ton unit. The previous AC contractor felt that the construction technique used would only require minimal BTU's to stay cool. When HVAC contractor Precision Equipment first assessed the home, the great room would only cool to 86 degrees and the tower room 93 degrees in the middle of the afternoon in July. This caused a big problem for the homeowner.

Design Challenge

The homeowner needed to heat and cool the great room and tower room without having to replace both existing air conditioning units.



Two wall mounted ASU18RLF indoor models shown in the great room.

Solution

After studying the Fujitsu Halcyon Flex Inverter system and the capabilities it offered, Precision Equipment decided to quote the 48,000 BTU system with (2)18,000 BTU heads for the great room and (1)24,000 BTU head for the tower room. The tower room was only 340 square feet but was completely exposed to the sun for twelve hours a day during the summer months. The customer wanted to be able to use the room on a moments notice.

Results

After final installation of the unit which was no small feat due to the home's construction, the Fujitsu unit satisfied both other AC thermostats in fifteen minutes. Cold air was felt blowing across the wide 34' expanse of the great room, and the tower room was cooled down to 70 degrees in a matter of minutes.

The customer is thrilled to have this problem solved so they can begin to entertain on a regular basis.



Situated on 5 acres facing South, this 3100 square foot Italian style home boasts 4 outdoor patio areas, Beautiful gardens lining the back yard, Horse stables, and a full sized Dressage Arena for practicing the art of "Horse Ballet". Cooling off after a long day training the horse was a must for this home owner.



“Our great room can now be cooled or heated to a comfortable temperature, something that was not possible before.”