

**FIRST BAPTIST CHURCH OF
MARION
UTILIZES HYDRO-TEMP
EARTH COUPLED HEAT PUMPS**

Located a few miles west of Memphis, Tennessee is the First Baptist Church of Marion , Arkansas. Their newest addition consists of 27,664 square feet of much needed class room and office space, as well as a 7,985 square foot gymnasium. The entire 35,000 plus square foot project is totally heated and cooled with one-hundred and three (103) tons of Hydro-Temp Earth Coupled Heat Pumps. The vertical ground loops for this project were drilled in front of the building in the parking lot area, prior to the installation of the parking lot.



First Baptist Church located in Marion, AR



Individual classroom temperature controls located in one central location.

Every classroom has an individual temperature control. This is accomplished by utilizing Hydro-Temp’s dual compressor units and an individual zone damper for each class room. The dampers are controlled by a microprocessor built into the Hydro-Temp units. The dual compressors provide three different heating/cooling capacities. This allows each earth coupled heat pump to provide the exact amount of heating/cooling necessary. In this case, as many as four classrooms are independently heated and cooled with one unit. All of the buildings thermostats are located in a locked room with their temperature sensors located in the individual conditioned areas.

The gymnasium is heated and cooled with eight corner consoles (4-tons each). These unique triangular shaped units were placed in the gym’s four corners on both the upper and lower levels. The corner console has its own air distribution system so no expensive duct work was needed.

As is the case with our designs, the ground loop piping and the heat exchangers in each unit are properly sized. This allows each unit to have its own fractional horse power pump, which only operates when the unit runs. Most commercial geothermal systems have one or more large pumps with expensive control systems that can run twenty four hours a day. By eliminating the large pumps thousand’s of dollars in energy usage are saved each year.



Two of eight corner consoles units located in gymnasium, one on lower level and one on upper level

Contacts from the Marion Baptist Church Project

Architect	Contractor	Church Contact	Equipment Manufacturer
Stacks Architectural Firm PLC	Moore Corp.	First Baptist Church	Hydro-Temp Corp.
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