

US CASE STUDY #20

June 10, 2005

Schaghticoke, New York Hoosick Valley Church

The Hoosick Valley Church located in Schaghticoke, NY, nearby to Albany, New York was expanding its church to accommodate the growth in its membership. The church turned to *Advanced Heating and Cooling* of Saratoga Springs, New York for a cooling system to meet their needs of varying loads and provide a highly efficient system. Alan Ethier, owner of *Advanced Heating and Cooling* took on the challenge of providing the best solution to the newly converted narthex and new worship hall.

According to Mr. Ethier, an avid professional who aspires to use the highest quality products, the needs of the church were, "minimize the number of outdoor units, highest possible efficiency under the varying loads and the use of R410A". An additional challenge according to Mr. Ethier was "the need to run the refrigerant lines far enough to accommodate the large worship hall".

Fortunately, Mr. Ethier had recently attended a product seminar at FW Webb's Albany, NY branch who distributes the Daikin family of products throughout New England and upstate New York. During the seminar, Daikin's VRV and VRV-S product technology was presented and met the needs of the Hoosick Valley Church project and *Advanced Heating and Cooling*.

Advanced Heating and Cooling chose a Daikin VRV-S system which consisted of two 48,000 Btu/h RXYMQ48MVJU single phase condensers, each connected to two FXAQ24MVJU 24,000 Btu/h wall mounted units and one FXAQ12MVJU 12,000 Btu/h wall mounted unit. High efficiency at all operating ranges will meet the variation in the church's occupancy, as well as piping lengths up to 1,000 feet. Daikin's VRV-S product utilizes inverter technology in both the compressor and condenser fan section enabling such long pipe lengths, high efficiencies and up to five indoor units connected to one condenser.

The low sound levels associated with the Daikin indoor and outdoor units (a benefit of inverter technology) allows the church to enjoy the comfort of central cooling but without any noticeable operating sound to interfere with the activities in and around the church.

By locating one of the indoor units in the newly renovated narthex another benefit was the ability to provide individual control to this area. The Daikin system also allowed locating the other remote controllers in another place outside the worship hall, maintaining the aesthetics.

- written by Russell Tavolacci, Sales Manager, Daikin US Corporation

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