

SRP PROJECT of the MONTH

MEADOW FARMHOUSE MUSEUM-HENRICO COUNTY

Simmons, Rockecharlie, & Prince, Inc. was commissioned early in 2004 to design new mechanical systems at this circa 1860 interpretative Museum. The existing house was divided into three separate zones with one of the zones serving both upstairs and downstairs areas. Improved zoning was created by installing one unit to serve the entire upstairs and a separate unit to serve the entire downstairs. The new systems are variable speed heat pumps that are able to vary their output to match the loads in the space. This allows for more even temperatures and humidity as the house changes from being totally empty to full of visitors and school groups during tours. The units have dehumidification cycles to allow operation if the humidity levels in the house rise due to the lack of vapor barriers in the exterior walls. A new humidification system was also installed to increase the humidity during the winter months. Serviceability was enhanced by adding a new Attic access door with integral ladder where the second floor unit was installed in the attic. Simmons, Rockecharlie, & Prince received a First Place Award in the ASHRAE Region III Technology Award competition for this project.



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