

COMMERCIAL AIR CASE STUDY

Van Buren School District's HVAC Upgrades Ensure a Comfortable Space to Learn

Featured Rheem

Commercial Products:



Renaissance[™] Commercial Packaged Units

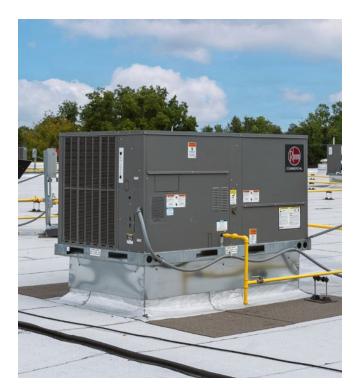


Resolute[™] Commercial Packaged Units

Rheem[®] Renaissance[™] and Resolute[™] lines increase temperature and humidity control.

Spread across 12 buildings and over 2 million square feet, the Van Buren School District is the bedrock of the Van Buren, Arkansas, community. Weekend football games, an award-winning marching band program, countless clubs and activities—it's where the next generation comes to grow, both in and out of the classroom.

The school district is also just down the road from Rheem's Fort Smith, Arkansas, manufacturing plant. So when some of the district's schools—including Northridge Middle School and Central Elementary—needed new heating and cooling systems, Rheem was the first choice.



You can ask any of my techs what brand they prefer working on, and every single one of them will say Rheem.

Justin Lowder Owner of Lowder Brothers Heating and Air



"You can ask any of my techs what brand they prefer working on, and every single one of them will say Rheem," says Justin Lowder, owner of Lowder Brothers Heating and Air. "I presented the Van Buren School District with some models from Rheem and said, 'This is what I think will work for you guys."

Danny Spears, director of maintenance at Van Buren School District, was more than happy to run with Lowder's suggestion. "The Rheem product has been a great product to us," he says. "We had already been putting Rheem in for about the last 10 years, so we were already familiar with Rheem, and we have enjoyed the product. Rheem being local, right across the bridge from us, made it very accessible to us to use Rheem products."



Cooling Needs Across the District

The latest HVAC changeout at the Van Buren School District was two years in the making. At Northridge, the previous HVAC system did not heat and cool the building efficiently. Issues managing humidity were also severe enough that the laid flooring was starting to pull up and papers would curl from the extra moisture in the air. At nearby Central Elementary, the units were 38 years old and needed an upgrade to comply with fresh air requirements mandated by the state of Arkansas.

"In Arkansas, we have extreme temperature swings. It's hard on our units to maintain that. I get more complaints about hot and cold rooms than anything else in the schools. Our humidity level can go off the charts here, so we need something that can help pull that out of our room," Spears says.

Beyond heating and cooling, the school also was working with a set timeline. The new units had to be installed over the summer with work completed before the beginning of the next school year to ensure minimal disruption to learning and keep students and faculty comfortable and safe no matter the weather.







The Solution

Lowder and his team installed 277.5 tons of Renaissance[™] and Resolute[™] packaged rooftop units at Northridge and another 286 tons at Central Elementary before the school year. Thanks to the equipment's direct replacement footprint, curb adapters were not needed, which cut overall project costs and improved install time and system performance.

"When you use curb adapters, it increases static pressure, which puts more pressure on unit to perform. When we don't have to use curb adapter, we don't have that obstacle to peak performance," Lowder says.

The units feature central controls that allow the Van Buren team to remotely monitor every unit and hot gas reheat with Rheem HumidiDry®, which was essential to the district.

"We have a challenge now where school districts are required to bring a certain amount of outside air—hot, humid air—and mix it with cool air. Having the hot gas reheat, we're able to kick that on without overcooling the space, bringing humidity down and keeping comfort," Lowder says.

Project Highlights:

- Hundreds of Rheem Commercial Air packaged units and 560+ tons at an elementary school and middle school.
- Reliable performance experienced for 10+ years at other schools in the district.
- Products feature hot gas reheat dehumidification, DDC controls and factory-installed economizers that bring in outside air for better IAQ.

The Rheem unit is built like a technician designed that unit. The ease of working on one—there's no other unit like it.

Kerry Russell, lead HVAC technician for Van Buren School District



Rheem HumidiDry uses an additional reheat coil inside the unit to achieve peak comfort. "When you cool air, moisture comes out of the air, but then it's too cold for occupants to be truly comfortable. You have to reheat the air," says Laura Meyerrose, Rheem Commercial product manager. "It goes over that heating coil to bring the air back up to comfortable heating levels."

"You can control temperature and humidity independently," adds Mark Ritz, director of commercial sales at Rheem Commercial. "You may be satisfied on temperature, but if you have a high humidity, the units will continue to dehumidify to make classrooms more comfortable." HumidiDry is also more durable than other reheat solutions on the market because it uses the unit's fan to modulate hot gas rather than a refrigerant metering device.

Hinged access panels and drain pans also make serviceability a breeze. "The Rheem unit is built like a technician designed that unit," says Kerry Russell, lead HVAC technician for Van Buren School District. "The ease of working on one—there's no other unit like it."

The Result

With school back in session, Lowder says the new Rheem units have "performed flawlessly."

"To know that the work that our Rheem team puts in every day to put out a quality product, taking care and supporting the community with our equipment—that's special," Ritz says.

For Spears, the new units have eliminated the constant refrain about hot and cold rooms, freeing up his team to address other maintenance needs in the district.

"Rheem has been quick to reach out to us to make sure we are completely satisfied and give us exactly what we need," he says. "It does matter bottom line to budget, efficiency and convenience. I very much recommend Rheem products."



Visit rheemcommercial.com to learn more about installing Rheem's commercial HVAC solutions on your next project.

Rheem Commercial Air Portfolio



Packaged Units

- 2 to 30 Tons
- Gas/Electric
- Air Conditioners
- Heat Pumps



Split Systems

- 1.5 to 20 Tons
- Air Conditioners
- Heat Pumps

O Rheem_Air



Mini-split Systems

- Single-zone (9k to 48k Btu/h)
- Multi-zone (18k to 48k Btu/h)
- Low Ambient Heating



Indoor Air Quality

- DOAS (3 to 60 Tons | 500 to 15,000 CFM)
- MERV 8 and MERV 13
- UV-C Light Kits

nearly 100 years of innovation

Rheem[®] is the only brand bringing innovative air and water solutions to homes and businesses around the world. Manufactured in Fort Smith, Arkansas, Rheem Commercial Air has research, design, manufacturing and Innovation Learning Centers throughout North America with products available nationwide through our extensive distributor network.

RheemAir

Rheem Commercial Air products are designed using our unique 360+1 Design Philosophy that embodies our commitment to examine every aspect of all products developed from every angle to ensure the highest standards in performance, installability, serviceability and durability are delivered.

Rheem Manufacturing Brands - Commercial

CONTACT US

commercial.hvac@rheem.com RheemCommercial.com

For additional information, contact your local Rheem sales representative.

Rheem

X RheemAir

Commercial Air

© 2024 Rheem Manufacturing Company. All rights reserved. Rheem trademarks owned by Rheem Manufacturing Company. In keeping with its policy of continuous progress & program improvement, Rheem reserves the right to make changes without notice.