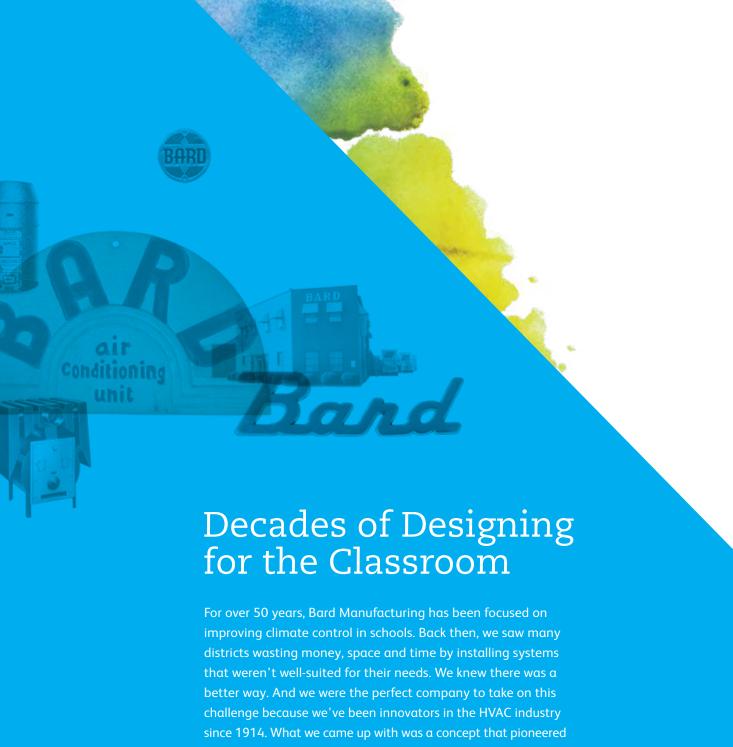


School HVAC Solutions







the idea of a climate for each room in a school—and has since benefitted hundreds of schools. We call it Classroom Preferred™.



The Classroom Preferred™ Solution for Every School

Schools are unique environments. They're typically large buildings with lots of different rooms of various sizes. At times, they have dozens of people in them for hours every day, then they're empty for months. But it's what happens inside them that really makes them special—teaching young minds. Because of that, schools need to be safe, healthy spaces so that kids have the best chance to learn. Bard Classroom Preferred[™] systems keep all these things in mind.



A Singular Focus and a Simple Formula

When we first set out to engineer HVAC systems that specifically serve schools, we determined what would have the biggest impact and isolated two main points: emphasizing ventilation and designing them to be one system per classroom. With these goals in mind, we created an entire line of products that have enormous benefits.



Better Health & Safety

Reduced Energy Cost

Budget Friendly

Greater Comfort

Quiet Operation

Smaller Footprint

Easier Maintenance

Discreet Appearance



Better Health & Safety

Indoor air quality is important everywhere, but especially for schools. The EPA says, "The developing bodies of children might be more susceptible to environmental exposures than those of adults...

Therefore, air quality in schools is of particular concern." When it comes to good indoor air quality, ventilation is key. But some systems are simply not designed to ventilate. And central air systems combine outside air with recirculated air from other rooms. Bard's Classroom Preferred™ systems are different. They regularly introduce fresh outside air and exhaust stale room air. And since each room has its own system, air never mixes between rooms. That greatly reduces the risks of spreading airborne pollutants—including viruses and bacteria.



Per the World Health Organization, most indoor air quality problems in schools can be avoided with adequate outdoor air ventilation during the school day.

Reduced Energy Cost

A Classroom Preferred™ system is designed to regulate the climate in just one space—the room it's installed in—or on a room-by-room basis. It adjusts according to conditions, like whether the room is in a sunny location or if it's occupied. That individualized approach conserves energy over big four-pipe systems that often operate at peak capacity even if just a few areas need to be heated or cooled.



Green Ridge Elementary School, which uses Bard's Classroom Preferred™ systems, was recognized as the most energy efficient school in North Carolina's Montgomery County Schools.

Budget Friendly

It's important to spend education dollars wisely. Central-air systems come with construction costs like duct work, chillers, boilers and piping. You'll continue paying for the upkeep of these over the life of the building. But Classroom Preferred™ are complete, factory-built systems that require little installation labor.



Greater Comfort

One system per classroom gives each space its own control. That means every classroom is its own ecosystem with more precise temperature, humidity and ventilation management.



"What we liked best overall about the Bard units was having individual control over the environment in each of our classrooms."

—Phil Couch,

MAINTENANCE DIRECTOR AND ASSISTANT SUPERINTENDENT WILKES COUNTY, N.C.

Quiet Operation

Noise level is important in classrooms. That's why Bard uses advanced acoustic technology to create optimal sound insulation in our Classroom Preferred™ models. As a result, our systems are quieter than typical classroom background noise.

Smaller Footprint

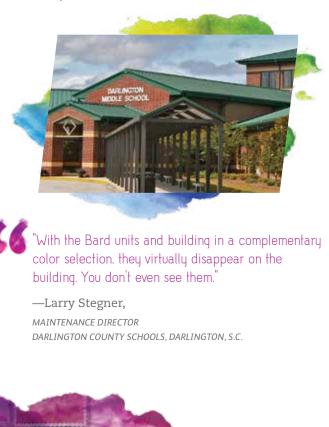
Bard's systems free up valuable square footage. Instead of requiring large mechanical rooms for chillers and boilers, interior models take up a minimal footprint in the classroom. Or, if you go with an exterior wall-mount, they take up no floor or ground space at all.

Easy Maintenance

Even though Classroom Preferred™ systems are the latest in HVAC technology, they are very simple to own. Most customers use their school maintenance staff to perform regular service, saving time and money. Plus, troubleshooting or replacing one unit doesn't require a building-wide system shutdown.

Discreet Appearance

Classroom Preferred™ systems are designed to blend into the environment. If they're mounted outside, there are many colors to choose from to match the exterior. If they're inside, there are options to incorporate the unit into the classroom.





Classroom Preferred™ by Everyone

Bard's systems offer benefits that please all interested parties and decision makers.



Administrators | School Boards

Dollars are spent wisely with Classroom Preferred™. There are no on-going costs beyond normal maintenance and operation of the system itself. And installation—whether new or retrofit—is simple and doesn't require expensive structural work. Because of Bard's focus on ventilation, you'll also have peace of mind, knowing you're giving students and teachers a healthy environment to learn in.



Engineers

Classroom Preferred™ makes it easy to maximize efficiency, because every system can be specifically designed for the needs of each room. Bard has several series with many models to choose from so you can determine the right fit for your building requirements. Because there's no central system, designing for them is straightforward and you'll be impressed by the low sound levels as well as the ventilation and humidity control options. A stand-alone DDC-compatible commercial controls platform is also available, which allows operation to be customized within pre-set parameters established by the maintenance director.



Architects

You'll regain useable square footage with Classroom Preferred™ systems by eliminating the need for large mechanical rooms. You also won't have to figure in space for ductwork in the ceilings. And you don't have to worry about aesthetics, because our exterior wall-mounts come in a wide variety of colors so you can choose one that complements your building. Interior models are also available in many colors and some blend seamlessly into the classroom with options like magnetic dry erase board covers or vinyl graphics.



I-TEC

SERIES Interior Systems

The I-TEC is an interior model that provides superior indoor air quality and the ultimate in quiet operation. Vented above the sill at window level, it's designed to blend in with exterior features.



IH SERIES
Heat Pumps



IZ SERIES
Heat Pumps



IA SERIES
Air Conditioners

- Easily accessible pleated MERV8 air filter standard, optional filters available up to MERV13.
- Corrosion-resistant hydrophilic finned coils resist bacterial growth and shed water quickly, reducing potential indoor air quality issues
- Blower's highly efficient teardrop shape streamlines air for maximum circulation with quiet delivery
- Supply air can be introduced through either a top mount plenum or a ducted system for optimized air circulation and maximized occupancy comfort
- Custom-molded, one-piece drain pan channels moisture to a collection area, minimizing potential mold and mildew formation

- Easily-accessed electrical panel is designed with multiple connections for optional accessories
- Locking doors and optional anti-huffing lock on refrigerant port for added student safety
- Highly efficient 5/16" rifled copper tubing and micro-perforated aluminum fin coils use less refrigerant
- Floating compressor platform absorbs vibration for ultra-quiet operation
- Heavyweight compressor cover and discharge muffler eliminate refrigerant circuit noise
- Eco-friendly, kid-friendly, high-performance insulation made of recycled denim
- Several fresh air ventilation options available to meet current ASHRAE standards
- Wall opening for condenser air is adjustable to match new or existing window height



Q-TEC

SERIES Interior Systems



QH SERIES
Heat Pumps

These more budget-friendly interior mounts boast many of Bard's best features. All maintenance and service can be performed inside the building, making multi-story installations simple. There's also a high-efficiency geothermal heating and cooling option.



QWS SERIESGeothermal Heat Pumps



QC SERIES
Chilled Water/Hot Water

- Special "soft start/stop" ECM variable speed motor provides quiet operation
- Integrated energy recovery ventilator available for optimum indoor air quality
- Incorporates proprietary double-isolated floating compressor base to prevent transfer of sound vibration
- Supply air can be introduced through either a top mount plenum or a ducted system for optimized air circulation and maximized occupancy comfort
- A special dehumidification circuit can be specified and used with the humidistat climate control option
- Small unit footprint requires less than 1 % of available floor space in the average classroom
- Special sound-deadening insulation material minimizes sound levels

- All Bard equipment includes an industryleading five-year warranty for compressor and parts
- Totally enclosed condenser motor with double oil reservoir enhances reliability and longevity
- Grooved copper tubing and enhanced aluminum fins provide maximum heat transfer and high energy efficiency levels
- Lockable service door provides easy access to air filters and primary controls
- Built-in rollers make the unit simple to move for installation and servicing
- Stainless steel drain pans for long life and high reliability
- $\bullet\;$ QH Series has a ground-level condenser air path



All of our exterior wall-mounts are installed on the outside of the building, meaning they don't take up any valuable indoor floor space or outside ground space.



TS SERIES Step Capacity Heat Pumps

Features and Benefits

- Copper tube and aluminum fin coils provide maximum heat transfer and high energy efficiency
- Evaporator coil constructed with hydrophilic fin stock seals fin surface against oxide formation and resists mold and mildew growth
- Twin blowers move air quietly
- Motor overload protection is standard on all models
- ECM indoor blower motor provides high-efficiency, low sound levels and soft-start capabilities
- Scroll two-stage compressors eliminate need for crankcase heater
- Double isolated floating compressor mounting system, compressor sound blanket and discharge muffler reduce outdoor sound levels
- Phase rotation monitor protects against reverse rotation if power supply is improperly connected
- Liquid line filter drier protects system against moisture
- Lockable access cover for safety and security
- Many ventilation options available to meet various ASHRAE standards
- Natural fiber insulation
- Enclosed condenser fan motor

WH SERIES

Single Stage Electric Heat Pumps

- Optional single or two-stage operation using resistance heaters
- Single stage cooling option
- Dehumidification operation option
 - Three-way valve, reheat coil and electronic expansion valve standard
- Many ventilation options available to meet various ASHRAE standards
- Balanced Climate™ standard
- Evaporator coil constructed with hydrophilic fin stock seals fin surface against oxide formation and resists mold and mildew growth
- Natural fiber insulation
- Brushless DC blower motor/ECM
- Enclosed condenser fan motor





WA SERIES

Single Stage Electric Air Conditioners

Features and Benefits

- Optional single or two-stage operation using resistance heaters
- Dehumidification operation option
 - Three-way valve, reheat coil and electronic expansion valve standard
- Reheat coil and electronic expansion valve standard
- Many ventilation operation options offered to meet various ASHRAE standards
- Balanced Climate™ standard
- Evaporator coil constructed with hydrophilic fin stock seals fin surface against oxide formation and resists mold and mildew growth
- Natural fiber insulation
- Brushless DC blower motor/ECM
- Enclosed condenser fan motor



WG SERIES

Electric Air Conditioners With Gas-Fired Heating

- Twin blowers move air quietly. All models feature multispeed blower motors for variable airflow adjustment
- Also available with two-stage compessor
- Two-inch pleated air filters standard. Optional one-inch washable filter is available
- Barometric fresh air damper standard on all units allows up to 25 % outside air
- Efficient and comfortable gas heat with multiple heating output choices
- Dehumidification operation option
 - Three-way valve, reheat coil and electronic expansion valve standard
- Reheat coil and electronic expansion valve standard
- Balanced Climate[™] standard
- Many ventilation operation options offered to meet various ASHRAE codes
- Evaporator coil constructed with hydrophilic fin stock seals fin surface against oxide formation and resists mold and mildew growth
- Brushless DC blower motor/ECM enclosed condenser fan motor

Making the Grade

There's a reason why we call our school systems Classroom Preferred™. It's because districts across the country have realized all the advantages of Bard's unique solution and are now choosing us over other options. In fact, we're the world's largest manufacturer of wall-mounted heating and cooling equipment. Contact your Bard representative for more information on how Classroom Preferred™ can make the grade for your school.

BardSchools.com

A Trusted Industry Leader

We've built a name for ourselves over the century we've been in business. We're known for durability and reliability. Our focus is quality. And we're dedicated to making products that solve problems for our customers. Plus, we back it all up with some of the most comprehensive warranties in the industry. When you buy an HVAC system from us, you don't have to worry. Because you have 100 years of history on your side. Breathe easy—you've got Bard.



Bard Manufacturing Company, Inc. 1914 Randolph Dr., Bryan, OH 43506 419-636-1194

www.bardhvac.com sales@bardhvac.com The AHRI Certified® mark indicates Bard Manufacturing's participation in the AHRI Certification program. For verification of individual certified products, go to www.ahridirectory.org.