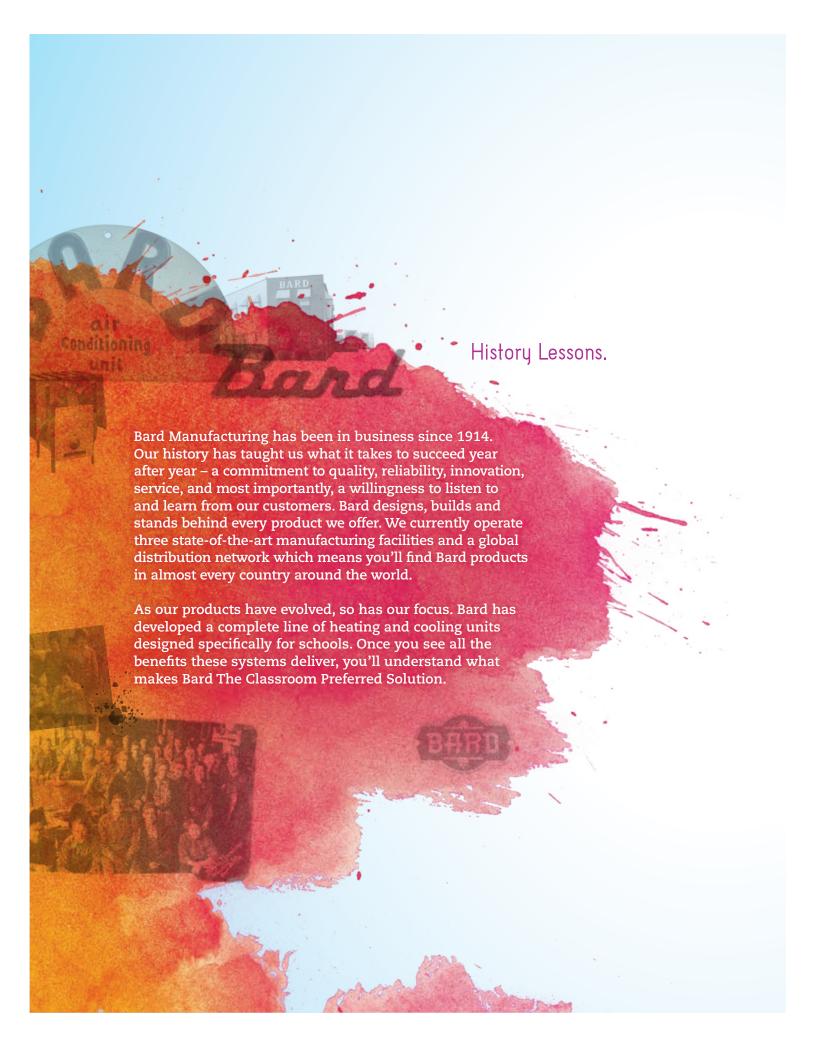


Bard Manufacturing.

Classroom Preferred™

School HVAC Solutions.







Bard. Classroom Preferred[™] for Schools.

All across the country, forward-thinking communities are moving toward a better way of thinking when it comes to HVAC for schools. They're adapting to a system that offers flexibility, efficiency and more. They're switching to Bard Manufacturing. Classroom Preferred.™

Going Back to School.

Whether building a new school or retrofitting an existing building, when it comes to HVAC, the traditional way was to go straight to a four-pipe boiler system. But, when you look at efficiency, installation costs, flexibility and comfort levels, there's a better way – Bard Manufacturing's Classroom Preferred Solution for schools.

Bard pioneered the concept of providing a single comfort solution per classroom. We believe every classroom is its own environment, sometimes requiring significant fresh air and cooling capacity and other times requiring just a hint of mechanical comfort conditioning. Bard's individualized Classroom Preferred Solution provides significant energy savings while offering quiet operation, individualized control and unsurpassed dependability – making Bard The Classroom Preferred Solution for schools across the country.



Why Bard Is Classroom Preferred.

Bard's Classroom Preferred Solution is more than another HVAC option for schools. It is a move towards a better way of thinking than the traditional four-pipe systems that are used in schools. Classroom Preferred offers a better, more economical and efficient method of heating and cooling schools. It's a new philosophy that brings individual control to each classroom for maximum comfort.

Our Lesson Plan spells out why Classroom Preferred is a smart solution for schools. Once you see all the advantages Bard offers, we're convinced you won't go back to the traditional way of thinking about providing comfort for schools.

CLASSROOM PREFERRED BY BARI

Lesson Plan

- 1 Comfort and Control
- 2 Efficiency
- 3 Quiet Operation
- 4 Fresh Air Control
- 5 Flexibility

- 6 Blends Into Classroom
- 7 Durable and Dependable
- 8 Easy Maintenance
- 9 Low Construction Costs
- 10 Bard Quality



(1) Comfort and Control.

Bard sees each classroom as its own unique environment. Our solution allows teachers to set the temperature for their own classrooms throughout the day, within pre-set limits, as needs change. Only classrooms being used need to be heated or cooled to temperatures necessary for occupied rooms. It's not only more efficient than running a large boiler or chiller to heat or cool entire sections of a school, it's smarter.

2 Efficiency.

Utilizing Classroom Preferred technology allows schools to maximize efficiencies at all load variances. So, whether a school's AC is operating at peak-load at noon or part-load in the evening, efficiency is maximized by fluidly adjusting to the actual fluctuating needs of individual classrooms. Big four-pipe systems are much less efficient because they power up to handle large areas, even if only one or two classrooms are calling for climate control.



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

(3) Quiet Operation.

Classrooms need to be quiet. That's why Bard's Classroom Preferred Solution uses advanced acoustic technology for the quietest operation possible. In fact, our modern classroom solutions are so quiet, they can't be heard over typical classroom noise.

4 Fresh Air Control.

Bard offers better fresh air control than traditional four-pipe systems which use enormous systems to bring in fresh air from outside to meet carbon dioxide (CO₂) guidelines. This usually results in dumping more untreated outside air than is actually necessary at a large cost and without guaranteeing CO₂ level standards are met. With Bard, each room has the option to have its own CO₂ monitor that gently provides the exact amount of fresh air each room needs.

(5) Flexibility.

The Classroom Preferred Solution provides the ultimate in flexibility by allowing individualized control in each room based on usage, weather and activity levels.



"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, North Carolina







(6) Blends Into Classroom.

A lot has changed since Bard first designed our Wall-Mount units for schools over 50 years ago. Modern units offer sophisticated options and are designed to blend into the background – both visually and audibly.



"With the Bard units and building in a complimentary color selection, they virtually disappear on the building. You don't even see them."

Larry Stegner, Maintenance Director, Darlington County Schools, Darlington, South Carolina

7 Durable and Dependable.

Bard's classroom products are made to withstand conditions much harsher than those of the typical school environments. We also offer generous warranties adding even more peace of mind.

8 Easy Maintenance.

Bard offers easy maintenance, which can usually be performed by the school's staff instead of costly HVAC professionals. Unlike large, four-pipe systems, if one particular Bard unit requires maintenance, it doesn't effect the whole school, so an entire wing of the school never has to be shut down. What's more, with Bard's Wall-Mounts, any maintenance can be done during school hours without disturbing teachers or students.

9 Low Construction Costs.

Schools everywhere have demonstrated how the Classroom Preferred Solution saves money on installation and overall cost. Traditional boilers and chillers require expensive and complicated piping systems that take many more labor hours to install. Traditional systems often utilize ductwork above the ceiling that feeds into the classrooms, creating a need for fire-dampers and access hatches. Bard systems are centralized and don't require these extra and expensive measures.

"Teachers love the control, and we like the simplicity of installation!"

Frank Williams, Partner, Pinnacle Architecture, discussing the Bard Classroom Preferred Solution

10) Bard Quality.

Bard is recognized across the country and around the world for the high quality of our products. The Classroom Preferred Solution is certainly no different. The schools who have installed Bard products give rave reviews at every level.



To keep budgets in line you must demand high performance, affordable installation costs and low operating costs. Bard delivers all three, plus perfect classroom control for your teachers. Bard interior units blend seamlessly into the environment with quiet operation and optimum functionality with dry erase and magnetic board exteriors. Selecting Bard lowers your maintenance costs, up-front investment dollars and long-term costs, while adding incredible reliability in one of the quietest packages available.



You'll love Bard's Classroom Preferred Solution that allows you to easily design for the needs of each classroom, while eliminating costly and complicated central systems. There's no need for rooftop units or a boiler room. Bard's solution provides high efficiency, low sound levels, ventilation and humidity control. You can also choose a stand-alone, DDC-compatible commercial controls platform with the option of customized operation within pre-set parameters established by the maintenance director.

Architects

Invisible comfort makes Bard stand apart. Our I-TEC units blend into the classroom with magnetic dry erase board covers, and increase useable school square footage by eliminating the need for equipment rooms. Our exterior mounted units offer the same quality, dependability and quiet operation with a wide choice of colors to choose from. Bard also helps fit your design into your client's time and budget constraints by eliminating costly piping, duct-work and fire dampers, along with the possibility of risky roof penetrations, while significantly reducing installation time.



Bard's I-TEC provides superior indoor air quality and the ultimate in quiet operation. Vented above the sill at window level, it's designed to look as good as it works, both inside and out.

Features and Benefits

- Easily accessible air filters.
- Corrosion resistant hydrophilic finned coils resist bacterial growth and shed water quickly, eliminating potential indoor air quality issues.
- Blower's highly efficient teardrop shape streamlines air for maximum circulation with quiet delivery.
- Custom-molded, one-piece drain pan channels moisture to a drain, 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, highperformance insulation made of recycled denim.
- Several fresh air ventilation options available to meet current ASHRAE standards.

• Window height condenser air path.





Bard's Q-TEC is specially designed for classroom installation. It provides total comfort through innovative design and engineering, offering a variety of ventilation options, including an integrated energy recovery ventilator, to address the latest air quality requirements. It also gives you the option of high-efficiency geothermal heating and cooling.

Features and Benefits

- Special "soft start/stop" ECM variable speed motor provides quiet operation.
- Integrated energy recovery ventilator available for optimum air quality.
- Incorporates proprietary doubleisolated 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.
- Compressor time delay relay optimizes longevity.
- 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.
- Stainless steel drain pans for long life and high reliability.
- Ground level condenser air path.





The Bard TS Series Wall-Mount Heat Pump is a self-contained energy efficient heating and cooling system designed to offer maximum indoor comfort at a minimal cost. Our Wall-Mount options are an ideal product for new school construction, school modernization or modular school buildings.

TS Series 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 2-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.





The Classroom Preferred Solution for Every School.

Regardless of whether you are designing a new school, retrofitting an existing school or adding modular classrooms, Bard's Classroom Preferred Solution is the smart choice. It provides efficiency, flexibility, cost savings and durability – all from a name you can trust. Bard Manufacturing.

To find out more, please visit us online at **BardSchools.com**.

Bard Warranties.

Bard Manufacturing backs up our products with some of the most comprehensive warranties in the industry. See your Bard Manufacturing representative for more information.

Bard Manufacturing. Earning Your Business for 100 Years.

One hundred years. That's how long Bard Manufacturing has been in business. That's a long time in any field, but especially the competitive HVAC industry. So how has Bard managed to succeed for so long? We believe it's because we work to earn our customers' business – every day. We work tirelessly to provide outstanding service that earns business and builds loyalty. Our technical expertise, a flexible manufacturing process, personalized attention and accessible support make all the difference. Of course, innovative solutions like our Classroom Preferred HVAC Solutions help, too. Bard Manufacturing. Working with you since 1914.

BardSchools.com



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