



Unico, Inc.
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Unico, Inc. manufacturing plant and sub-assembly plant

Unico, Inc. is the leader in small duct heating and cooling systems and other high-end HVAC systems. The company manufactures all of its products in St. Louis, Missouri, with over 125,000 square feet of modern manufacturing space. The company is well known for extensive use in older, architecturally unique homes and buildings as well as elite, high-end custom homes. The company is family owned and operated and their products are available throughout the United States and Canada, and in over 28 countries around the world.



National Trust for
Historic Preservation
Save the past. Enrich the future.



Small Duct System Preserves British History While Adding Modern Heating

Tithe barns were established in the Middle Ages to house independent farmers' stores and tithes – the tenth of their produce reserved for the Church. The practice was commonplace within farming villages throughout the British countryside and, while it continued in some areas into the 19th century, it is quite rare for original structures to remain standing.

However, one such barn still stands among the country houses of Surrey in England and has been converted

into a large main residence. Tithe barns were typically constructed with a stone foundation, clapboard walls and high, steep roofs of thatch. While this converted structure maintains original and/or like foundation and wall materials, the roof has long since been replaced with durable, modern shingles.

But, the very nature of the barn's high, steep roof construction presented a situation when it came to providing indoor comfort for the loft-like second floor. There

The Unico System®



Unico System outlets blend into the historic property's decor.

was simply no room for a traditional heating solution; installing such a system would drastically alter the building's historic design. Such was the problem the owner presented to Unico's UK rep, Quantum Group.

Luckily, they had just the answer.

Strategy:

Quantum Group knows the only answer to providing modern indoor comfort in historic, architecturally significant structures is the Unico System. At one-third the size of conventional forced air heating systems, only Unico System air handlers and main trunks could fit within the tithe barn's limited ceiling space. Additionally, the Unico System's round terminating outlets are smaller, more aesthetically pleasing and better fit the barn's interior design than conventional grilles.

Quantum Group tasked Excel Cooling Services Ltd. with installing 14kW Unico System heating throughout the second story, which includes the master suite, three bedrooms, a hallway gallery and small annex containing an additional bedroom and kitchenette.

The Unico System EC fan motor, paired with an air-to-water heat pump, provides individual temperature control to five separate zones, each with variable speed operation.

Results:

This historic property's owner could not have been happier. "We are extremely impressed with how quickly the system heats the rooms on a cold day," he said. "The outlets are discreet and provide a very even room temperature. They have also allowed us to maximize our wall space for furniture."

Not only does the Unico System preserve the integrity of this historic structure, but it does so efficiently and economically allowing for extremely low running costs for this off-grid location. In addition, the owners qualify for monetary returns from the British Renewable Heat Incentive program.

As a member and supporter of the National Trust for Historic Preservation and Britain's Historic England, the Unico System is committed to preserving historic properties. And with its energy efficiencies, homeowners can keep the tithes for themselves.

Benefits:

- Even, draft-free temperatures
- Quiet operation
- Zone control options
- Discreet supply outlets
- Flexible design and installation
- EC Variable Speed Control

Modern heating with the Unico System relegates the original fireplace to an aesthetic feature only.



The better aesthetics and energy efficiencies of the Unico System make it the only choice for historic renovations.



The Unico System fits where others can't and preserves the integrity of historic homes and structures.



Contractors:

Excel Cooling Services Ltd.