



What's Behind Your InsulWall®?

Data Center Stays Cool and Keeps Servers Humming

Client	Focus	Challenge
IT team at a manufacturing company	Data Center	As the space of the data center was downsizing, the temperatures were rising. This organization needed a thermal, flexible wall system that could easily grow or contract with changing needs while also efficiently maintain temperatures.

Randall Warehouse helps design and build a data center wall system with InsulWall that delivers temperature control, flexibility and scalability.



The Challenge

A mid-sized manufacturing company was facing a data center's worst enemy – heat. By consolidating servers into tightly packed racks, this organization was decreasing its data center footprint and dealing with rising temperatures. They needed a data center structure which would create a flexible room within a permanent room to minimize power consumption, cooling requirements and optimize air flow. Paramount in the decision process was evaluating a structural solution that was **thermal, flexible** and **scalable**.

Key Considerations

- **Control temperature and humidity.** This IT team was cognizant of the American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE)'s Thermal Guidelines for Data Processing Environments. Wanting to stay within the recommended temperature range of 20-25°C (68-78°F) (dry bulb temperature) and a relative humidity range of 40-55%, the team required a thermal wall system to help maintain optimal data center temperature and humidity conditions.
- **Enhance flexibility and scalability.** Incorporate a flexible, scalable infrastructure within a permanent room to support on-going data center changes and growth. In addition, the wall system must be flexible to compensate for existing wall penetrations such as wires and pipes.

How Randall Helped

Working with the organization's IT team, Randall was able to provide a contemporary solution with InsulWall - a thermal, flexible wall system. InsulWall, as opposed to a permanent wall structure within a data center, provides the ability to create a flexible, scalable temperature zone. InsulWall's thermal properties helped to save money and reduce the environmental impact of IT by cooling only the area required. This organization also opted to include a fan system within InsulWall to optimize air flow and maintain safe temperatures in the event of a power failure.

InsulWall Delivered

InsulWall is the ideal solution for data center's rigorous temperature controls while also providing flexibility and scalability to quickly adjust to changing needs.