

Preserving the Masterpiece in the Sistine Chapel

VATICAN CITY, ROME, ITALY

Known for their beauty and delicacy, Michelangelo's stunning frescoes line the walls and ceiling of the famed Sistine Chapel in Vatican City. The priceless works of art draw in millions of visitors each year, which exposes the art to a wide array of airborne pollution. Engineers from the Vatican worked with Carrier to develop a custom environmental control system to preserve Michelangelo's masterpieces for generations to come. They partnered with Purafil and our local representative, E.T.T., to provide insights and a gas phase solution that traditional filters simply don't address.

Painted in 1512, Michelangelo's works have been exposed to airborne pollutants and gaseous contaminants for centuries. To restore the frescoes and prevent further degradation, the masterpieces underwent extensive restoration efforts. Engineers at the Vatican also established the need for a discrete air filtration system that would eliminate the gaseous contaminants from the air inside the Sistine Chapel. The solution needed to fit into the new air handling system and be easy to service.

Together, E.T.T., Carrier and the Vatican engineers designed a system that was hidden from view, directing air through discrete channels in the chapel. The contaminated air now passes through the HVAC system and Purafil PuraGrids®, resulting in purified air that is recirculated throughout the chapel.

A very low velocity flow of purified air is directed over the surface of the frescoes while a slightly higher velocity flow showers visitors. This new system works successfully behind the scenes, silently helping to preserve Michelangelo's artwork so it can continue to inspire millions who visit the Sistine Chapel each year.

"Together, we developed an environmental control system that now works behind the scenes, protecting Michelangelo's delicate work for future generations." – Representative

