Savvy desert design

Kaiser Permanente, one of the largest not-for-profit health providers in the United States, planned a net-zero energy use facility to bring specialty medical services to patients in California’s remote Antelope Valley. The design featured a large, custom curtain wall to streamline air flow and a turbine to generate energy in this desert region where wind gusts can reach 90 mph and temperature fluctuates greatly from day to night. Kaiser’s architecture team chose GE Elemax Air and Water-Resistive Barrier (AWB) to stand up to these daily air and water-resistive barrier stressors, and help achieve energy efficiency to meet a goal of LEED (Platinum) Certification.

GE ELEMEX® AWB ENABLES INNOVATION IN REMOTE FACILITY

Kaiser Permanente—Antelope Valley Health Care Facility | Lancaster, California

Elemax is a trademark of Momentive Performance Materials Inc.
“GE Elemax’ AWB was the only solution for us. No other AWB stays as resilient against daily, continuous exposure to the elements.”

PATRICIA REYES CAPPELLI
Kaiser Permanente Project Director, Architect and Director of Design

Ambitious open joints

Kaiser’s plan called for an open joint rain screen system with 8” gaps to accommodate the winds—much larger than the 2” gaps typical of such buildings. This size meant that the harsh desert sun and rain from occasional storms would come in direct contact with the selected AWB throughout the building’s life.

The 100% silicone formulation of GE Elemax AWB is able to withstand these conditions. Durable, waterproof, and permanently flexible, GE Elemax coating helps the building excel in form and function with an open joint façade appropriately sized for the wind load. “GE Elemax AWB was the only solution for us,” said Patricia Reyes Cappelli, Kaiser Permanente Project Director, Architect and Director of Design. “No other AWB stays as resilient against daily, continuous exposure to the elements.”

Super stability and waterproofing

Because GE Elemax coating is permeable, it can stop bulk water penetration while regulating air and water flow through the building envelope, which can help reduce a building’s energy use by up to 35%, a key to meeting Kaiser’s net-zero energy and LEED goals. Its stability and waterproofing feature also offers better control of moisture penetration that can lead to mold, mildew, rot, and dust—crucial in a healthcare setting.

The Kaiser Permanente facility opened in September 2014. GE Elemax silicone coating has helped the facility realize daily energy savings and water protection benefits while supporting comfort and wellbeing for the patients and staff inside.

NOTE: Performance results are those of reported accounts, and are not to be relied upon as typical or expected under any other circumstances. Performance results will vary depending upon a number of factors. Prospective customers should rely solely upon their own evaluative techniques to determine what results are attainable and optimal to their specific needs.