CASE STUDY

Bank - Rolling Hills, California

Expected ROI is less than 2.4 years on this project.

Application Overview

The goal of this project was to reduce energy consumption and improve thermal comfort within this Rolling Hills, CA bank branch. This customer is dedicated to reducing their environmental impact, CO2 footprint, and energy costs.

The customer wanted an energy conservation measure that could provide meaningful energy savings with a rapid ROI but insisted that the installation not disrupt ongoing operations.

ENRG Blanket™, installed above drop ceiling tiles, reduced energy consumption and improved thermal comfort
1. The Project
The purpose of this project was to reduce energy consumption and improve thermal comfort within this bank branch. The customer wanted to achieve this while adhering to aggressive corporate environmental goals and meeting their ROI requirements.

2. The Challenge
This 4,140-square foot retail bank branch was only two years old and is compliant with modern energy code standards. It is a well-insulated concrete masonry, single story facility which utilizes new heat pump equipment for both heating and cooling.

3. The Solution
Phase Change Energy Solutions completed a detailed site audit, followed by a measurement and verification (M&V) analysis of branch HVAC energy consumption. Approximately 2,900 sq. ft. of ENRG Blanket was installed over the drop ceiling, covering roughly 70% of the occupied space. The ENRG Blanket was selected to optimize the building’s thermal performance based on its operational characteristics and the weather patterns in the building’s geographic location. The ENRG Blanket was installed in less than 3 hours during one evening, with no disruption in bank operations. M&V analysis of HVAC energy consumption resumed after the installation to validate the ENRG Blanket’s performance.

4. The Results
The impact of ENRG Blanket on the facility's HVAC energy consumption was immediate. Post installation M&V indicated a significant decrease in raw HVAC current consumption. After normalizing the post installation energy data to account for annual weather patterns, the project resulted in a 26% reduction in HVAC energy consumption (30,000 kWh/yr.).