



CASE STUDY

Lihue Airport, Kauai Hawaii

Research & Development

Project: Lihue Airport Terminal, Metal Roof – Kauai, Hawaii, 2009

The Challenge: The terminal's metal roof is exposed year-round to one of the world's most demanding environments, including:

- Intense tropical UV radiation
- Salt-laden coastal air
- High humidity
- Heavy rainfall
- Constant heat and weather exposure

The Solution In 2009, the Lihue Airport terminal metal roof was coated with the TEX-COTE® REFLECT-TEC® Heat-Reflective Roof Coating System with Kynar Aquatex®, a high-performance coating system designed for metal roof applications.

To the right, is a snapshot of Lihue Airport terminal in Kauai, Hawaii, showing the coated metal roof approximately 17 years after application.



Why REFLECT-TEC® The Lihue Airport terminal is located in Kauai, Hawaii - a tropical coastal environment where prolonged UV exposure, salt air, humidity, and heavy rainfall can accelerate fading and weathering. REFLECT-TEC® was selected for its heat-reflective technology, superior fade resistance, and ability to maintain the appearance of coated metal surfaces in demanding outdoor conditions. Its fluoropolymer resin technology helps the coating resist environmental exposure while preserving color and finish over the long term.

Results



2026 Field Evaluation (Visual Inspection)

- Updated photographs taken in 2026 show the terminal's metal roof continues to maintain a well-preserved appearance.
- Based on visual observation, the coating exhibits minimal apparent fading after approximately 17 years of continuous outdoor exposure.
- The finish appears to have maintained good overall color consistency despite prolonged exposure to Hawaii's tropical sun, rain, humidity, and coastal conditions.

Closer view of the coated metal roof in 2026, showing the continued appearance and color consistency of the finish.

Key Takeaway

Approximately 17 years after application, the REFLECT-TEC® Heat-Reflective Roof Coating continues to exhibit minimal visible fading based on a 2026 visual field evaluation. While no analytical testing was performed, the Lihue Airport terminal project still provides an on-site example of the coating maintaining its appearance after prolonged exposure to tropical UV radiation, coastal salt air, humidity, and heavy rainfall.