



PROJECT PROFILE

Planet Fitness

Water Leakage Investigation and Repair Design | Frankfort, KY



CLIENT

Calhoun Construction Services, Inc.
(Calhoun)

BACKGROUND

The Planet Fitness building was completed in the fall of 2017. The one-story building is constructed with a structural steel frame supporting a standing seam metal roof.

Following construction completion, active water infiltration occurred throughout the roofing system. Calhoun implemented multiple topical repairs in attempts to address the leakage; however, water infiltration persisted. Calhoun retained WJE to investigate the reported water leakage sources and develop repair recommendations.



SOLUTION

WJE performed water testing of suspect conditions to investigate the probable sources of water infiltration. Water testing was performed using systematic procedures to isolate the sources of leakage. Based on the observed conditions and water testing results, WJE determined that the likely sources of water infiltration were related to seals between the roofing panel laps and standing seams.

Based on the results of the investigation, WJE recommended trial repair concepts that utilized preformed silicone seals and prefabricated standing seam repair caps to address the sources of leakage. Trial repairs were implemented at confirmed sources of water infiltration and tested by WJE to confirm the effectiveness of the repairs prior to full implementation.



Following the trial repair installation and testing, Calhoun completed repairs at the remaining areas. WJE's services mitigated the confirmed sources of leakage in the existing roofing system without significant disruption to the buildings operations.