

JM MANUFACTURING PLANT RECEIVES ROBUST RETROFIT

60 MIL TPO RHINOPLATE® SYSTEM CHOSEN FOR LARGE-SCALE METAL RETROFIT



Description: This approximately 190,000 square foot metal retrofit project at the Johns Manville manufacturing facility in Fernley, Nevada, transformed an aging standing-seam metal roof into a durable, Factory Mutual (FM) approved roofing system. Completed in approximately eight weeks while the plant remained fully operational, the project utilized 1.25" flute-fill insulation, 1" polyiso insulation, ProtectoR® HD high-density cover board, and a 60 mil TPO RhinoPlate® system mechanically fastened into the building's structural purlins.

Challenge: The existing roof had become difficult to maintain due to aging fasteners and complex roof details. The team needed to address low-profile skylights, internal gutters, smoke hatches, and perimeter conditions while keeping manufacturing operations running. Achieving FM approval also required the assembly to meet strict structural and wind uplift requirements.

"We reroofed this entire building while the plant was in function, and the plant never had to shut down for any part of this roofing project."

— Todd Nathan, Director of Technical Services, Johns Manville

Solution: Johns Manville collaborated with Kodiak Roofing and Waterproofing to design a FM-approved retrofit assembly tailored to the existing structure. An engineering analysis verified compliance with FM requirements, and the system was fastened directly into the building's purlins to meet FM uplift criteria while preserving structural integrity. Flute-fill insulation created a level substrate over the metal roof, while custom EPDM skylight flashings and redesigned drainage details delivered long-term waterproofing and performance.

The result was a durable, energy-efficient roofing system that improved weather protection, simplified maintenance, and extended the life of the facility without interrupting plant operations.

Location:
Fernley, Nevada

Contractor:
Kodiak Roofing and Waterproofing
Dwayne Nash, CEO
JM Peak Advantage® 5280 Council™ Contractor

JM Roofing System Solution: ST6RR
20-Year ND L Peak Advantage® Guarantee

60 mil TPO RhinoPlate®
ProtectoR® HD cover board
1" polyiso insulation
1.25" flute-fill