



## PROJECT PROFILE

# USERY MOUNTAIN SHOOTING RANGE



### PROJECT DESCRIPTION

Arizona Game and Fish Department's Usery Mountain Shooting Range (UMSR) in Mesa, AZ, is a public range managed by the Rio Salado Sportsman's Club Inc. Situated on 140-acres, 20-miles from the heart of Mesa AZ. This facility houses 48 covered shooting benches, high power and small bore rifle ranges, pistol bays, shotgun ranges, and several training classroom facilities.

The UMSR were concerned with the hearing safety of their patrons at their high-powered rifle range. This range was covered with 7,200 sq. ft. of metal designed to provide some relief to shooters from the direct exposure of the blistering Arizona sun. However, the noise generated from rifle fire was deafening under these metal canopies creating a potentially hazardous auditory environment for the shooters.

Safety, being of paramount importance, UMSR researched several possible solutions to reduce the excessive noise, but a practical cost effective solution didn't appear feasible, until hearing about the acoustic benefits of spray foam.

### STRUCTURE FEATURES



Metal Canopy Acoustic Solution



Existing Construction: Shooting Range



7,200 sq. ft.



QUIK-SHIELD 108 Spray Foam Insulation



Mesa, AZ



### INSTALLER

Arizona Foam & Spray



### PRODUCT INSTALLED

The underside of the 7,200 sq. ft metal canopy was sprayed with SWD's open cell sound absorptive foam insulation and was completed in just 5-days. This formulation, designed to provide long-range application benefits, eliminated the need for scaffolding and significantly reduced the down time of the range.

### APPLICATION CHALLENGES

Arizona Foam & Spray was directed to apply the foam over existing refrigeration and electrical lines, but understood the challenges that would present in the future when those utilities needed servicing. They instead applied the foam in a manner where those lines remained exposed without detracting from the acoustical benefits the foam would provide.

### SPRAY FOAM BENEFITS

UMSR retained the services of an acoustician to measure the sound characteristics inside the gun range prior to and post spray foam application. The test results showed a significant in-use reduction in the sound characteristics under the canopy after the application of the spray foam. This provided the officials at the UMSR the solution they needed and the peace of mind knowing that they are now providing a safe and hearing friendly facility for their clientele.