

# Big Sky Acoustics, LLC

## PROJECT PROFILE: **RECORDING STUDIO**



**PROJECT:** NORTHWEST COLLEGE  
Powell, Wyoming

The College renovated a workout space into a recording studio designed with flexible acoustics. Big Sky Acoustics provided Room Acoustics, Sound Isolation and Mechanical System Noise Control design services.

### **BSA's SERVICES AND SOLUTIONS:**

- ◆ Developed computer models of the Recording Studio, Radio and Control Rooms to analyze the reverberation times and determine the type, quantity and location of the acoustical treatments.
- ◆ Specified a suspended grid ceiling system of mineral board acoustical tiles, MDF board with a wood veneer and acoustical diffusers for the Studio and Control Room.
- ◆ Specified variable acoustical cabinets, constructed with wood and fabric-faced fiberglass, as a method to change the reverberation time in the Studio. Recommended acoustical diffusers and/or impact-resistant wall panels for the Radio and Control Room walls.
- ◆ Determined STC design goals for the wall constructions, modified the wall types, and specified resilient padding to prevent vibrations.
- ◆ Recommended sound-rated door and window assemblies and a vibration-isolated ceiling for sound isolation.
- ◆ Predicted the background noise levels in the rooms based on the proposed mechanical system.
- ◆ In order to mitigate mechanical system noise, recommended modifications including: perforated internal facing, duct liner, a duct silencer, relocating the AC unit, spring vibration isolators and flexible connections.

