

# Big Sky Acoustics, LLC

## PROJECT PROFILE: **WOODWORKING STUDIO**



**PROJECT:** A. L. SWANSON GALLERY & STUDIO  
Helena, Montana

As an urban showcase, A.L. Swanson planned to combine his gallery and studio spaces into one location in the Great Northern Town Center. The existing 2nd Floor tenants requested that the woodworking equipment be inaudible in their offices. Big Sky Acoustics worked closely with the architect and mechanical engineer to provide a Sound Isolation Design that ensured peace and quiet between tenants.

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

- Measured the existing woodworking equipment to determine the maximum noise levels.
- Predicted how loud each piece of equipment would be with different ceiling configurations, and determined which configuration would make the equipment inaudible upstairs.
- The Sound Isolation Design in the studio included:
  - ◇ Resiliently suspended gypsum board ceiling,
  - ◇ Lagged HVAC ductwork,
  - ◇ Sealed access door configuration,
  - ◇ Sealed full height walls,
  - ◇ Double-paned insulated glass, and
  - ◇ Dust collection system under the ceiling.
- The full-height open ceiling configuration was retained in the galley space, without compromising the sound isolation functionality of the studio space.

The shop and woodworking equipment were operating for over a week before the 2nd floor tenants realized that they were working in the studio. Peace and quiet between tenants ensued.

