

special joist profiles highlighted by forty-three scissor type joists with six different depths and panel configurations. The accommodation of the mechanical equipment and ductwork sizes was identified on the contract drawings and incorporated into nearly every joist on the project. The floor joists had special deflection criteria in selected areas. A number of roof joists were designed for the skylights, recognizing the increased unbraced length for the top chords on these joists.

### **The Rewards of Teamwork**

While it was challenging to design every structural element of the building to be exposed to view, it was rewarding to have a finished project that displays the versatility and structural beauty of steel. The building required extraordinary cooperation between the design team, as well as builders. The effort spent producing clear, well-coordinated construction documents was essential to the success of the project.

This building is a testament to the ability of steel to move beyond structural support toward the architectural essence.

*Robin Wendler, S.E., is a structural engineer and managing principal for ZFA Structural Engineers in Santa Rosa, CA. Deirdre Van Olden is the marketing coordinator and Webmaster for ZFA Structural Engineers.*

**Owner:**

City of Pittsburg

**Architect:**

Hansen Associates Architects.  
(Tiburon, CA)

**Structural Engineer:**

ZFA Structural Engineers. (Santa Rosa, CA)

**Contractor:**

Lathrop Construction (Benicia, CA)

**Software:**

RISA 3D