

PROJECT PROFILE

Northwest Fire
District Station 33

Tucson, Arizona



“Technically they’re very professional. We’ve discovered more unique structural solutions because of their expertise and depth of knowledge.”

— Paul Mickelberg, WSM Architects

Architect:
WSM Architects

Contractor:
Heery International

Structural Engineer:
Schneider Structural
Engineers

NORTHWEST FIRE DISTRICT STATION 33

This “green” fire station is a point of pride for the collaborative design-build team and the neighbors who participated in the design process. This is one of the first buildings in Tucson to feature environmentally friendly autoclaved aerated concrete walls (AAC). Schneider Structural Engineers introduced AAC for soundproofing and insulation of the 13-bedroom living area, integrating this technology with conventional CMU for the four-bay apparatus section.

INNOVATIVE MIX OF “GREEN” AAC WALLS, CONVENTIONAL CMU

- The angled 4-bay apparatus area is flanked on one side by the living quarters and on the other by a fitness center, laundry facilities and storage areas for gear and hazardous materials. AAC was ideal for the living area but not supportive enough for the apparatus bays, creating the engineering challenge.
- This fire station features energy-efficient AAC and other “green” features designed to meet LEED® specifications. The separate gear room uses an alternate venting system to keep toxins out of the air. Floors are uncarpeted concrete, smooth and easy to clean. Water is heated by the sun.
- Autoclaved aerated concrete is a pre-cast structural product made with all-natural raw materials. It is an economical, sustainable, solid block that provides thermal and acoustic insulation as well as fire and termite resistance.
- This 14,000-square-foot fire station was designed to fit on a long narrow slice of land close to a busy intersection. Neighbors, concerned about height and aesthetics, collaborated with architects, the fire district and engineers early in the design process and chose the final exterior design.
- Schneider Structural Engineers also engineered the City of Tucson Fire Station 22, a 15,355-square-foot 8-bay station that received LEED® Gold certification from the U.S. Green Building Council.

“They’ve been great. We don’t shop around too much. Once we find a group we like working with, that’s responsive and understands our clients’ needs, we tend to stick with them.”

— Paul Mickelberg, WSM Architects