



Pickett, Kelm & Associates, Inc.  
Consulting Structural Engineers

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## Four Points Middle School

**PROJECT LOCATION:**

AUSTIN, TEXAS

**PROJECT OWNER:** LEANDER ISD

**ARCHITECT:** FIELDS & ASSOCIATES

**GENERAL CONTRACTOR:**

AMERICAN CONSTRUCTORS, Inc.

**COMPLETED:** 2009

**CONSTRUCTION COST:**

\$34,967,750



**PROJECT DESCRIPTION:**

Pickett, Kelm & Associates provided structural engineering services for this 179,000 square foot middle school campus facility near the intersection of RR2222 and McNeil Drive. The project includes a two-story building housing classrooms, the library and administrative offices, and a one-story building with varying roof heights, housing two gymnasiums, locker rooms, restrooms, the cafeteria, theater arts, band and choir. The buildings have offset foundations, and are connected by a high-roofed connecting link with a tunnel and elevator. An outdoor post-tensioned concrete basketball court was also provided.



The classroom/library/admin building consists of a steel framed superstructure supported by a combination of exterior tilt-up concrete wall panels, steel columns and isolated interior tilt-up wall panels. Second floor framing consists of composite steel and concrete decks supported by composite steel and concrete framing, load-bearing tilt-up concrete wall panels and steel columns. Mechanical platforms above the second floor level consist of composite steel and concrete decks. Framing at the gabled roof, which includes hips and/or offset hips at the ends, consists of metal decking supported by a combination

of sloped, open-web steel parallel chord bar joists and gabled joists, steel trusses, steel beams and girders, steel columns and load-bearing concrete tilt-up wall panels. Low sloping roofs were provided over the library and administrative areas. A screen wall, consisting of metal siding and framing, was provided at the administrative area roof to screen mechanical rooftop equipment from view.

The athletics/cafeteria building roof consists of metal decking supported by parallel chord open-web steel bar joists and load-bearing interior and exterior tilt-up wall panels. High, low-sloping roofs were provided at the gymnasiums. Mono-sloped shed roofs were provided over the ends of the building. The corridor along the south edge of the building utilizes steel acoustical decking supported by exposed tubular steel framing, with glass curtain walls along the south perimeter wall. Mechanical platforms consist of composite steel and concrete decks supported by composite steel framing and steel columns. A raised stage area was provided at the cafeteria.



Sloped roofs consist of standing seam metal roofing over polyisocyanurate insulation, metal decking and roof framing. Low sloping roofs consist of built-up membrane roofing over polyisocyanurate insulation, metal deck and roof framing.

Foundations generally consist of ground-supported concrete slabs with shallow continuous grade beams, with drilled piers at isolated columns and where the depth to adequate limestone was excessive.