Concrete Results

The Challenge
In 1991, a group of Vietnamese Catholics purchased an old movie theater in Wheat Ridge, CO, and renovated it into the Queen of Vietnamese Martyrs Catholic Church, which continues to grow today. As they began renovations on the building, it became apparent that they needed to upgrade the old asphalt parking lot as well. They initially considered reconstructing the lot with asphalt pavement but found the price to be more than their budget could handle, so they began investigating other options.

The Solution
As they say, necessity is the mother of invention. Many of the parishioners, who had emigrated from Vietnam, were very familiar with concrete as a building material, as it is widely used throughout the country. So, the project manager decided to build a concrete overlay (3 ½ inches, 147,000 square feet) with the parishioners of the church providing the labor to construct the pavement. They used 2" x 4" wood forms to build the overlay in strips directly on the old asphalt pavement. The concrete was supplied by NRMCA Producer member Flannigan Ready Mixed Concrete (now Aggregate Industries).

The Results
NRMCA Vice President, Local Paving, Don Clem noted that, after 25 years of service, the concrete lot still welcomes parishioners and, over the years, has required very little maintenance.

Queen of Vietnamese Martyrs Catholic Church
4695 N Harlan St., Wheat Ridge, CO

Design Factors:
- 3.5 inch concrete overlay
- 147,000 sq. ft.
- Existing asphalt left in place as base material

Concrete Placement:
- 4,000 psi concrete w/micro fiber
- 2" x 4" wood forms
- Wood screed
- 10 +/- feet O.C. joint spacing
- Hand tooled joints