

Project: **Frederick County Public Safety Building**, *Frederick County, VA*

Concrete Facts

- Total precast structure
- Architectural precast finish—combination of gold and white color, two sandblast finishes/fine & medium
- 2 story government building
- 61,500 sq. ft.
- 291 precast components

Products Used

- 10-foot double tees with 2-inch flange
- 8-inch interior wall panels
- 8-inch exterior load-bearing wall panels with architectural features and mixes
- Precast stair units
- 18-inch x 18-inch precast columns
- 18-inch x 36-inch inverted tee beams
- Architectural trim units (copings and cornices)

Owner

Frederick County, VA

General Contractor

Howard Shockey & Sons
Winchester, VA

Architectural Firm

HSMM, Inc.
Virginia Beach, VA

Engineering Firm

HSMM, Inc.
Virginia Beach, VA

Precaster

The Shockey Precast Group
Winchester, VA



CONCRETE EVIDENCE:

Frederick County, VA: Safe and Sound with Precast Construction

The Frederick County Public Safety Building looks the part—strong, sturdy and architecturally appealing as it stands gleaming against the clear blue Virginia sky. With its exterior precast panels in two complementary colors, the two-story structure displays the essence of contemporary design, careful planning and value engineering.

Designed by Hayes, Seay, Mattern & Mattern, the building was originally intended to be a steel structure. The Shockey Precast Group, brought in early in the design phase, persuaded the architect and Frederick County to alter the plans in favor of total precast construction.

"The use of precast concrete floor elements allowed for greater flexibility in design, due to the increased distance between columns," says John Riley, County Administrator.

The rectangular structure's design called for a linear style with clean lines, contemporary windows and sandblasted precast panels for texture and warmth. Precast gave the architects design flexibility and allowed the precaster to complete the superstructure in only three months. Riley notes, "The use of a total precast structure had significant value in reducing the time to construct the building by about 15%." This time savings translated into reduced construction costs—saving the county considerable money.

The total precast structure utilizes 291 precast components, including double tees for floors and ceilings, precast beams and columns for support, stair units, interior and exterior precast panels and unique architectural copings and cornices.

The building, which houses the County Sheriff's office, Fire and Rescue Departments, Emergency Communications Center and Emergency Operations Center along with space for support services, will serve the people of Frederick County today and for years to come—thanks in part to modern precast building techniques and the wise investment of public funds by local officials of Frederick County.



John R. Riley
County Administrator
Frederick County, VA

