

# TOWER ACCESS STAIRS

CASE STUDY

## PROJECT PROFILE

### LOCATION

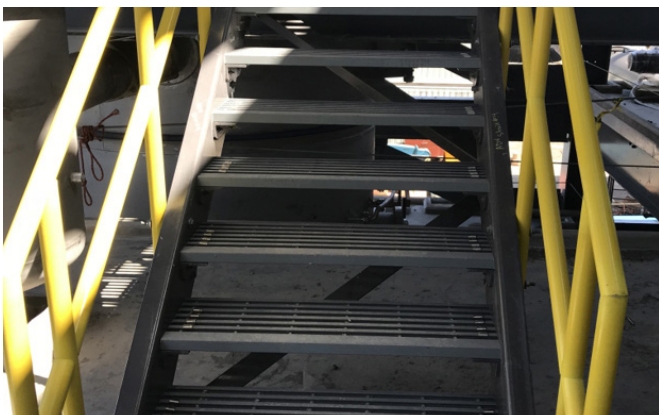
Louisville, KY

### COMPLETED

2017

### PROBLEM STATEMENT

A 9-story industrial tower processing corrosive chemistries required primary stairs, edge protection, floor grating, and mechanical access platforms. Galvanized steel solutions were heavy and inflexible, introducing safety and coordination challenges as well as high cost of construction in tight quarters.



## ADVANTIC SCOPE

Advantic engineered the solution to meet project and code requirements, generated PE-stamped design documents and calculations for local permitting authorities, fabricated the access systems and their connection details, and performed field installation support.

## TECHNICAL APPROACH

Advantic structural engineers utilized fiber-reinforced polymer structural profiles to meet Code-prescribed strength and serviceability criteria. Connection details were coordinated with the steel elements for integrated design and delivery. Project Managers facilitated BIM coordination with the mechanical trades to ensure seamless installation.

## ECONOMICS

Structural system dead load was reduced by 63-percent, reducing foundation and seismic lateral system costs. Fabrication lead times were reduced by 50%. Crane time was eliminated from installation, and FRP grating was installed at least 2x faster than steel. Little future maintenance will be required.

## TIMELINE

8 WEEKS