



PROJECT PROFILE:
GOVERNMENT



Design Services Help Health Center Meet Government Safety Criteria

Risk Management

Situation

The Kimbrough Ambulatory Care Center provides medical services to soldiers, their families and beneficiaries in Fort Meade, Maryland. The facility recently underwent a renovation and addition project involving about 25,500 square feet of space. ABS Consulting was contracted to provide structural engineering design services for the project and verify compliance with all Unified Facilities Criteria (UFC) requirements.

Approach

The Department of Defense (DoD) requires its new buildings and buildings undergoing major renovations meet UFC structural and anti-terrorism/force protection (AT/FP) requirements. For this project, the design needed to be in full compliance with UFC 4-010-01 and DoD Minimum Antiterrorism Standards. New and replacement windows are required to meet a designated level of blast resistance as well as the walls and framing that support the windows.

Result

To comply with both seismic and AT/FP requirements, the addition was designed to be structurally independent of the existing hospital. All new and replacement windows were specified to meet the required level of blast resistance. Walls of the new addition also were designed to transfer the window blast loads as required by the UFC, and steel frames were added in the existing building where older construction was not adequate to transfer specified blast loading.

Benefits

As part of a design-build team, ABS Consulting was able to provide structural analysis and design of the hospital renovation and addition as well as mandated AT/FP requirements for the windows and related framing elements. This allowed the project team to provide a fully integrated structural design submittal.