

# PROTECTING A NATIONAL LANDMARK CASE STUDY



U.S. Department of Commerce  
Herbert C. Hoover Building  
Washington, DC



## + PROJECT SNAPSHOT

**Architect / Designer**

RTKL Associates, Inc.

**Dealer / Installer**

Amco Metal Products (Phase 3)

**Window Design Consultation**

Randy Boardman, Graham Architectural Products Rep

**Product**

IBG 6500 & 6500 Casement Windows

**Assignment**

Install new interior energy efficient blast protection windows while not disturbing the original exterior windows.



## + CHALLENGE

Provide a level of blast protection while retaining the historic existing wood windows. Adding energy efficiency, access to the original windows, and interior shading became a part of the challenge as well.

*“This is a unique product using an in-swing blast window that was engineered to resist the required blast load using the hardware only. The blast requirements were also higher than typical so a custom mullion had to be designed to support twin casement windows in the openings.”*

**Tom Haines, Mid-Atlantic Regional Sales Manager**

## + A CAPITOL IDEA: GRAHAM OFFERS INGENIOUS SOLUTION

In 2007, the Office of Building Renovation was created to manage the Department of Commerce’s role in the Herbert C. Hoover Building (HCHB) Renovation Project — a one billion dollar project to renovate and modernize this historic building.

As part of this modernization effort, the goal is to attain a Gold LEED® certificate by incorporating the latest innovations in perimeter security, energy efficient building systems, and high performance workspace design. The HCHB Renovation Project is planned in eight phases and is scheduled to be completed by 2021.

Graham was brought into the project during Phase 2 and asked to provide windows that would provide blast protection to the building while allowing the existing exterior historic windows to stay in place. Additionally since the project was to obtain a LEED Gold certificate, the window solution needed to be energy efficient. To overcome these challenges Graham provided Series IBG 6500 (Interior Blast Guard) inswing casement windows. According to Tom Haines, Graham regional sales manager, "This is a unique product using an in-swing blast window to that was engineered to resist the required blast load using the hardware only. The blast requirements were also higher than typical so a custom mullion had to be designed to support twin casement windows in the openings." Due to the complexity of this product, very few manufacturers can build and certify this type of blast product but Graham succeeded.

Phase 3 is now underway and Graham was contacted again to provide another 800 plus windows. As this massive renovation continues through the next decade, Graham fully expects to be involved providing energy efficiency and blast protection to one of Washington DC’s icons.