



# AEGIS LAUNCHES BLAST FORCE DESIGN TOOL

AFTER 2 YEARS OF RESEARCH, PLANNING, TESTING AND EVALUATION, AEGIS METAL FRAMING, A DIVISION OF MITEK AND THE LEADER IN INNOVATION, SOFTWARE, DESIGN AND ENGINEERING SERVICES IN THE COLD-FORMED STEEL TRUSS MARKET WILL AGAIN BE THE FIRST TO INTRODUCE WHAT THE INDUSTRY HAS BEEN ASKING FOR.

## FULL SCALE BLAST TESTING HAS BEEN CONDUCTED WITH ULTRA-SPAN® TRUSSES

Aegis Metal Framing is proud and excited to announce that it has successfully completed the **development of an ATRP, blast force CFS truss design tool**. This tool is incorporated in the Aegis Truss Design Program and will provide the Aegis network of fabricators with a software solution for Blast Analysis using the Aegis Ultra-Span® Truss System. Together with the analysis for all Live and Dead loads per the IBC, **Ultra-Span trusses can be designed for blast force loads with a click of the mouse.**

## SOFTWARE TOOL HAS BEEN DEVELOPED FOR DESIGN OF ULTRA-SPAN TRUSSES FOR BLAST LOADS

Blast criteria of Charge Weight and Standoff Distance or Peak Pressure and Impulse or Duration is simply entered into the software. All levels of protection (LOP), Very Low Level, Low Level, Medium and High can be specified. The program performs a non-linear dynamic analysis, in accordance with the UFC, on any truss shape, span and web configuration to determine the necessary members, connectors and quantity of screws. Using the software, Aegis can **provide the final sealed truss designs without the involvement of a Blast Consultant.**

**AEGIS®**  
Metal Framing  
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Learn More at [www.AegisMetalFraming.com](http://www.AegisMetalFraming.com)

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## EXPLOSIVE COLLABORATION

Aegis teamed up with Karagozian and Case to lead the development of this project. Karagozian & Case, Inc. (K&C) is a **world-renowned blast consulting firm** that was established in 1945. Since the time of its founding, K&C has become a leading firm in the explosive effects and protective design field while serving the **U.S. Department of Defense (DoD), General Services Administration, Federal Aviation Administration**, and numerous private customers all over the world. K&C has assembled a team of professional engineers and scientists with decades of experience that are well-versed in first principles analysis, explosive effects testing, and cutting-edge computational modeling techniques.

## AEGIS FABRICATORS CAN PROVIDE ACCURATE ESTIMATE AND FINAL TRUSS DESIGN FOR ATPF PROJECTS

Until now, roofs for buildings that required ATPF were designed with materials deemed standard construction materials, which limited the architectural aspect of the buildings or required the involvement of a blast consultant adding some time, communication, and cost to the project. In many cases basic flat or simple roofs were the main options. With the introduction of this software tool, through Aegis truss fabricators, the **architect is able to incorporate the desired architectural appearance** into the building knowing that the **blast resistance requirements can be resolved in a timely and economical manner** using Ultra-Span® trusses.



| *Trusses creating the module*



| *Full scale building module testing setup*



| *Aftermath of one of the blast tests*