



# DEANSTEEL

MANUFACTURING COMPANY

## Blast Resistant Doors & Frames

BULLET & BLAST RESISTANT PRODUCTS

### Safety Compliance

Deansteel's Blast Resistant door and frame products have been analyzed and/or tested by independent laboratories. The door units are labeled and certified by Deansteel.

### Testing Agencies

- Architectural Testing Inc.
- Baker Engineering and Risk Consultants Inc.
- Texas Tech University Wind Engineering Labs

### Fire Protection

Many of Deansteel's Blast Resistant Door and Frame assemblies can be certified under Underwriters Laboratories 10B and 10C Positive Pressure Fire tests.

### Options

Door designs with optional full or half-glass or 10"x10" visions are available in most of our DSLB rating levels, depending on the projected blast conditions. Please inquire for specific projects.



www.deansteel.com

All Deansteel blast resistant products have been analyzed and/or tested by an independent, nationally recognized engineering laboratory to meet the blast conditions for which they are certified. Most of the analyses are validated by actual shock tube or static pressure testing, and are either used to extend the physical sizes of door/frame assemblies or to extend the peak blast pressure and/or impulse that the designs will resist.

Deansteel offers the Architectural and Engineering communities a wide range of blast resistant products to withstand a variety of projected blast conditions and installations. Our door assembly model designations for a "standard" 3'-0"X7'-0" door are:

- DSLB-1–The lowest peak blast loads up to 2 psi for all blast load durations.
- DSLB-2–Low pressure blast events from 2 psi and very long duration loads, up to 4 psi with a blast load duration of 35 milliseconds or less.
- DSLB-3–Medium pressure blast events from 4 and very long duration loads, up to 10 psi with a blast load duration of 10 milliseconds or less.
- DSLB-4–Moderate pressure blast events from 9 psi and very long duration loads, up to 15 psi with a blast load duration of 10 milliseconds or less.
- DSLB-5–High pressure blast events from 15 psi and very long duration loads, up to 35 psi with a blast load duration of 10 milliseconds or less.

*Note: Blast parameter limits (pressure and duration) for each model are lower for larger doors sizes.*

Deansteel blast resistant door and frame assemblies are certified to provide a minimum of a Category II response per the ASTM F 2247-03

specification to the projected blast event (unless otherwise required). This performance level is characterized by limited permanent deformation to the door/frame assembly, but the door unit remains operational.

Door assemblies are available in standard or custom sizes and are furnished as complete assemblies with all required hardware. Vision lites (fixed glass openings) are optionally available depending on the projected blast level. A permanent label is affixed to the assembly certifying the blast resistance rating of the unit.

Many of our blast resistant door designs can be certified as UL Fire Doors with 20 minutes to 3 hour ratings. We can also offer ballistic resistance ratings on most of our blast resistant doors to meet the various ballistic resistance levels as specified in UL 752, NIJ 0108.1, ASTM F 1233 or MIL-SAMIT specifications.

Deansteel also offers custom engineered solutions for most blast resistance applications. For example, we have manufactured custom door assemblies that were designed to withstand special blast events. One assembly was manufactured to withstand a peak pressure of 50 psi with a blast wave duration of 30 milliseconds. Contact our Sales Department if you have special blast resistance requirements.



**BLAST RESISTANT DOOR UNITS**  
Standard units up to 35 psi with custom units for higher pressures

*American Made ~ American Owned ~ Buy American*

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