



## Hinged and Sliding Blast Rated Doors

Bespoke hinged and sliding steel doors designed to withstand high blast pressures

Rhino blast doors are in-house designed to withstand blast attack, either as discrete constructions, or in conjunction with physical attack delay and/or vehicle ram resistance performance.

There are two distinct design methodologies for the design of Blast Doors and the method selected is dependent upon the design information provided by the Client.

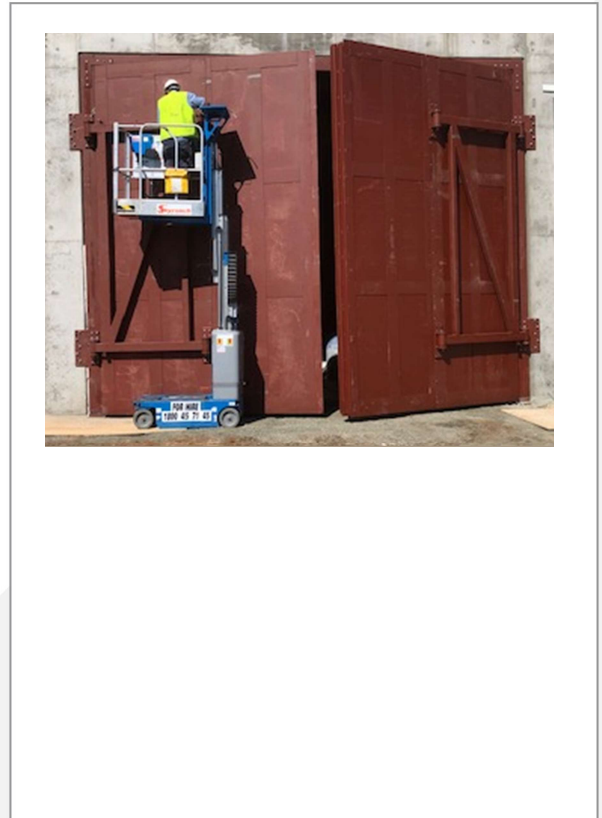
### Dynamic Design Blast Load Method:

- dynamic peak blast pressure, impulse and duration defined by the client.
- door response criteria defined by the client, i.e. Class I (elastic) or Classes II, III or IV (elasto-plastic).
- door leaf designed for the dynamic blast load using a single degree of freedom (SDOF) numerical analysis such that the response (leaf deformation) is within the client defined limits.
- door hinges, latches, shoot bolts and their connections designed for the rebound forces determined by the SDOF analysis.

### Static Design Blast Load Method:

- static seated and unseated pressure defined by the client. Note; in the majority of cases the unseated (i.e. rebound) pressure is 50% of the static seated pressure.
- door leaf designed to take the seated blast pressure and remain in the elastic range.
- door hinges, latches, shoot bolts and their connections designed to take the unseated blast pressure.

**Rhino Blast Rated Doors – available from 0.15bar to over 15bar.**



### Contact Details

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