

# RHINO-HBL

Blast Resistant Hinged Doors

# RHINO-SBL

Blast Resistant Sliding Doors



Rhino Doors

THE STRENGTH TO PROTECT

## Hinged and Sliding Blast Rated Doors

Standard and purpose designed hinged and sliding steel doors designed to withstand high blast pressures

Rhino-HBL & SBL doors are in-house designed to withstand blast attack, either as discrete products, 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.



### Contact Details

#### Rhino Systems Ltd

Maritime Road  
Llewellyns Quay  
Port Talbot  
SA13 1RF

T: +44 (0)1639 888 119

F: +44 (0)1639 898 119

[enquiries@rhinodoors.com](mailto:enquiries@rhinodoors.com)

[www.rhinodoors.com](http://www.rhinodoors.com)

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

