

SOME CONSIDERATIONS ON PASSIVE BLAST VALVES DESIGN

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Blast valves are required on occupied structures to prevent explosive shock waves from injuring occupants or equipment while permitting rather large airflows for service air. Passive blast valves offer attractive advantages over mechanically operating valves.

A series of experiments were conducted at our shock tube facility with passive blast valves of various geometries. In addition, a computational effort using the GenUinely Simple Hydrocode (GUSH) was undertaken to explore the range of experimental conditions.

A description of the viability of code simulation of passive blast valves Will be presented. Optimal passive blast valve construction for various circumstances will also be discussed.