

Blast Resistant Window Model WB-X

PART 1 - GENERAL

1.2 Scope:

Furnish blast resistant window assembly where indicated on window schedule and specified. Unit shall include steel frame, anchorage, glass, glass stops, neoprene gasketing, caulk and all accessories to resist the design requirements specified.

1.5 Submittals:

Before fabrication is started, manufacturer shall furnish (1) complete set of submittal drawings, and if required, analysis calculations showing conformance or blast loading certification for Architect's approval. Drawings shall detail frame members, mullions, if required, frames to wall anchors, glass composition and thickness, and neoprene gasketing. (*Optional:* Calculations shall bear the stamp and signature of a registered Professional Engineer for state of Illinois or Pennsylvania.)

1.6 Warranty:

Manufacturer shall warrant its products to be free of defects in labor and material for one year after shipment.

PART 2 - PRODUCT

2.1 Design Basis:

Blast resistant window systems as shown on drawings shall be Sonicbar series Model WB-X manufactured by Protective Door Industries, Harvey, IL 60426 at 708/225-3539 or prior approved equal. Window manufacturer shall submit evidence of having been engaged in the successful design and manufacture of blast resistant window assemblies for a minimum of 10 years.

2.2 Design Criteria:

Window system shall be designed to resist a positive blast force of up to _____ PSF or PSI static equivalent loading at _____ % rebound (if not specified, 100% rebound percentage will be used).

2.3 Fabrication:

2.3.1 Frame:

Frame shall be structural steel with welded-on bar stops *or* heavy gauge formed steel with formed stops; and removable glass stops. The frame shall be four-sided, set-up and welded, and factory reinforced. Mullions are optional and may be required to resist the blast load. Frames are to be equipped with appropriate anchors designed to transfer blast loadings to adjacent walls or structural embeds.

Steel material shall conform to the standards of the American Institute of Steel Construction. All work shall be assembled using all welded construction per the standards of AWS D1.1. Welds to be of a size and type as required per the blast load analysis criteria.

2.3.2 Glass

Suitable glass, single pane or laminated, shall be included with the glass composite and thickness determined by the blast door manufacturer. Closed cell sponge neoprene glazing material and caulk shall be applied between the glass stops and vision panel.

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2.4 Frame Finish:

All tool marks and imperfections shall be removed and exposed welded joints dressed smooth. Frame surfaces shall be cleaned and/or ground smooth for maximum paint adhesion. Exposed surfaces shall be factory prime painted with the manufacturer's standard rust inhibitive prime paint.

PART 3 - EXECUTION

3.1 Storage:

Prior to installation, cover and store all materials in a dry, protected location to prevent damage.

3.2 Installation:

Installation of materials shall be performed by skilled glazing installers. Installation shall be in strict accordance with installation instructions and approved installation drawings provided by the window manufacturer. Frames and embeds shall be installed plumb, level, square and rigid. Glass is shipped separate for field glazing. Frames shall be finished painted as applicable under another referenced section.