

# DUAL ACTION(TILT&TURN) AND CASEMENT WINDOW

## BLAST MITIGATION PRODUCT

# B-Pro 400PA

### About the company

B-Pro Safeguard, Inc. was created to serve the AT/FP requirements of the Department Of Defense UFC 4-010-1 and the GSA and to provide the U.S. government the most advanced and cost effective protective glazing systems. The B-Pro products were developed by the world's most experienced engineers in the field and were subjected to a rigorous series of field blast test and AAMA weather testing.

### Blast Mitigation Windows Technology

B-Pro Safeguard offers an extraordinarily sophisticated, patented Energy-Absorbing system approach. This technology utilizes the window frames, glazing, hardware and anchoring system as energy dissipating components. Once hit by the blast wave dynamic loading, those components are gradually deforming, hence absorbing a significant portion of the blast energy which allows the window to stay in the opening and to protect the people within the building.

### Products & Aesthetics

The real-life experience of the B-Pro engineering team which include hundreds of thousands successful installations as well as the developing of numerous blast mitigation windows, doors and curtainwall systems, has provided B-Pro with the expertise in designing and refining the product in order to meet the most demanding architectural criteria while providing the highest level of blast protection required.

### Technical Support and Fabrication

B-Pro Safeguard erected a state of the art plant quipped with modern machinery dedicated for the manufacturing of blast mitigation window systems. The B-Pro team is committed to quality, service and support.

### Blast Rating

B-Pro Blast Levels	A*	B	C	Extreme blast environment
Impulse (psi*msec)	43	100	160	Check with the B-Pro technical support before specifying
Pressure ( psi )	7	35	45	
B-Pro 400	V	X	X	

\*Level A corresponds to the UFC 4-010-01 requirements where "conventional construction standoff distances are achieved".

### Technical Data

Glazing	AAMA Rating	Frame Depth	Thermal Performance
According to the specified requirements	DA C-40 Water 12.12psf	74 mm (3")	NFRC 100/200/500 U Factor 0.34: CR 58



\*HTL Blast Test

### B-Pro 400 PA Tilt & Turn Window

The B-Pro 400PA is a sophisticated window system that allows the inward opening both for tilt and full opening positions. This window design is light and architecturally appealing. It's a low maintenance, efficient and convenient window system. The B-Pro 400PA has also a casement and fixed window versions. All these versions are interconnected and can be installed in mulled units within a single opening with no need for any steel mullions or other reinforcement. The B-Pro 400PA utilizes high quality durable however easily replaceable hardware.

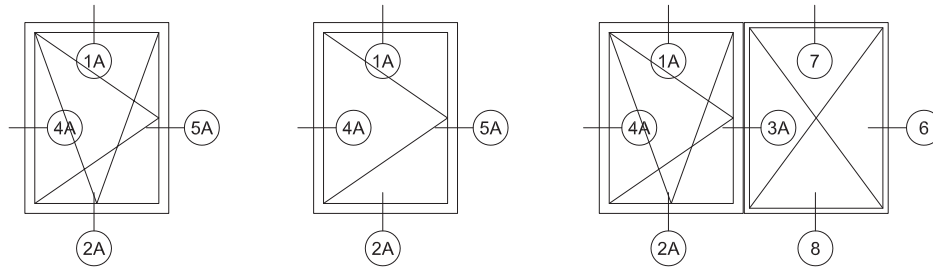
The B-Pro 400PA is a "green window": its shapes are pre-assembled with glass reinforced polyamide bars to achieve the enhanced thermal performance required for all Energy Star Climate Zones.

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### ELEVATIONS AND DETAILS

#### ELEVATIONS



#### DETAILS

