



Protective Structures, Ltd.
7565 Industrial Court • Alpharetta • Georgia • 30004

PRODUCT DESCRIPTION

Blast Resistant Security Glazing
Nominal Thickness 2.047
Weight 13.36 lbs per SF
Available sizes – Any size up to maximum 48" x 96"
Dimensional Tolerance: 1.947" Minimum
2.147" Maximum

CONSTRUCTION:

1/4" Glass (*Exterior Side*)
5/8" Polycarbonate
1/8" Annealed Glass
1/2" Airspace
3/8" Laminated Glass
.007" PET (*Interior Side*)

PERFORMANCE

FEMA 361 2008
ICC 500-2008
AAMA 101.1
AAMA 506-08

TECHNICAL DATA:

Compliance:

ASTM C 1036-01 – Standard Specification for Flat Glass
ASTM C 1048-04 – Standard Specification for Heat Treated Flat Glass – Kind HS, Kind FT
Coated and Uncoated Glass
ASTM C 1172-03 – Standard Specification for Laminated Architectural Flat Glass
ANSI (American National Standard Institute Inc) Z97.1: For Safety Materials used in
buildings

Specifications & Methods of Test

CPSC 16 CFR 1201 (Category I and II): Safety Standard for Architectural Glazing

Materials

ASTM E283, 'Test Method For Determining The Rate Of Air Leakage Through Exterior
Windows, Curtain Walls, And Doors Under Specified Pressure Differences Across The
Specimen'

ASTM E330-02, 'Test Method For Structural Performance Of Exterior Windows, Curtain
Walls, And Doors By Uniform Static Air Pressure Difference'

ASTM E331, 'Test Method For Water Penetration Of Exterior Windows, Curtain Walls, And
Doors By Uniform Static Air Pressure Difference'

ASTM E1886-05, 'Standard Test Method For Performance Of Exterior Windows, Curtain
Walls, Doors And Impact Protective Systems Impacted By Missile(s) and Exposed To Cyclic
Pressure Differentials'

ASTM E1996-05, 'Standard Test Method For Performance Of Exterior Windows, Curtain
Walls, Doors And Impact Protective Systems Impacted By Windborne Debris In
Hurricanes'



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APPLICABLE STANDARDS

Tornadic and Hurricane Resistant with Insulgard TH600 Framing System (ICC-500 and FEMA 361-2008 Specifications).

INSTALLATION

All glass should be installed in accordance with the guidelines set forth in the Glass Association DS216 1209

TOR-GARD® NBR-IG Tornado and Hurricane Security Glass

of North America (GANA) Distribution & Installation Division, formerly known as the Flat Glass Marketing Association

(FGMA), Glazing Manual, 1997 edition and Sealant Manual, 1990 edition.

Glazing systems should incorporate a weep system to allow moisture and water to escape the glazing channel.

Recommended Clearance:

Face: 1/8" per side

Edge: 1/4"

Bite: 3/4"

WARRANTY (Short Version)

LEXGARD Laminates LLC warrants Tor-Gard NBR 2 against defects in material and workmanship resulting in edge separation or delamination for a period of five (5) year from date of manufacture. (See Warranty Sheet for complete warranty information and specifications).



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