

## Product Evaluation

WIN1663 | 0222

Engineering Services Program

The following product has been evaluated for compliance with the wind loads specified in the International Residential Code (IRC) and the International Building Code (IBC).

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

For more information, contact TDI Engineering Services Program at (800) 248-6032.

**Evaluation ID:** WIN-1663

**Effective Date:** February 1, 2022

**Re-evaluation Date:** April 2025

**Product Name:** Model 9020 TB Aluminum Fixed Windows, Small Missile Impact Rated, Frame Installation, Impact Resistant

**Manufacturer:** WinDoor Incorporated  
7500 Amsterdam Drive  
Orlando, FL 32832  
(407) 481-8400

### General Description:

System	Description	Label Rating	Design Pressure Rating (psf)
1	Model 9020 TB Aluminum Impact Fixed; O	AW-PG100 60x120-Type FW Missile Level A	+100 / -100 psf
2	Model 9020 TB Aluminum Impact Fixed; O	AW-PG90 60x120-Type FW Missile Level A	+90 / -90 psf
3	Model 9020 TB Aluminum Impact Fixed Combo Assembly; Mull; O/O	AW-PG100 60x120-Type FW Missile Level A	+100 / -100 psf
4	Model 9020 TB Aluminum Impact Fixed; O	AW-PG110 96x72-Type FW Missile Level A	+110 / -110 psf
5	Model 9020 TB Aluminum Impact Fixed; O	AW-PG100 96x72-Type FW Missile Level A	+100 / -100 psf

**General Description (Continued):**

System	Description	Label Rating	Design Pressure Rating (psf)
6	Model 9020 TB Aluminum Impact Fixed Combo Assembly; Mull; O.O.O	AW-PG70 144x72-Type FW Missile Level A	+70 / -75 psf

**Product Dimensions:**

System	Overall Size	Glass Daylight Opening Size
1-2	60" x 120"	55" x 115-1/2"
3	60" x 120"	Two (2); 55" x 56"
4-5	96" x 72"	91-1/2" x 67-1/2"
6	144" x 72"	Three (3); 44-3/16" x 67-1/2"

**Product Identification (Certification Label on Window):**

System		
1	Certification Agency	Keystone
	Manufacturer's Name or Code Name	CAR 167-509; CAR 167-759
	Product Name	CAR 167-509: 9020 TB AL Imp Fix (SMI) CAR 167-759: 9020 TB Al Imp Fixed (SMI)
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-08 ASTM E 1886-02/04/05; ASTM E 1996-02/04/06/09 Missile Level A
2	Certification Agency	Keystone
	Manufacturer's Name or Code Name	CAR 167-510; CAR 167-760
	Product Name	CAR 167-510: 9020 TB AL Imp Fix (SMI) CAR 167-760: 9020 TB Al Imp Fixed (SMI)
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-08 ASTM E 1886-02/04/05; ASTM E 1996-02/04/06/09 Missile Level A
3	Certification Agency	Keystone
	Manufacturer's Name or Code Name	CAR 167-511; CAR 167-761
	Product Name	CAR 167-511: 9020 TB AL Imp Fix (SMI) Combo CAR 167-761: 9020 TB Al Imp Fixed (SMI) Combo Assembly O/O
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-08 ASTM E 1886-02/04/05; ASTM E 1996-02/04/06/09 Missile Level A

**Product Identification (Certification Label on Window)-Continued:**

System		
4	Certification Agency	Keystone
	Manufacturer's Name or Code Name	CAR 167-512; CAR 167-762
	Product Name	CAR 167-512: 9020 TB AL Imp Fix (SMI) CAR 167-762: 9020 TB Al Imp Fixed (SMI)
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-08 ASTM E 1886-02/04/05; ASTM E 1996-02/04/06/09 Missile Level A
5	Certification Agency	Keystone
	Manufacturer's Name or Code Name	CAR 167-513; CAR 167-763
	Product Name	CAR 167-513: 9020 TB AL Imp Fix (SMI) CAR 167-763: 9020 TB Al Imp Fixed (SMI)
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-08 ASTM E 1886-02/04/05; ASTM E 1996-02/04/06/09 Missile Level A
6	Certification Agency	Keystone
	Manufacturer's Name or Code Name	CAR 167-515; CAR 167-765
	Product Name	CAR 167-515: 9020 TB AL Imp Fix (SMI) Combo CAR 167-765: 9020 TB Al Imp Fixed (SMI) Combo Assembly OOO
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-08 ASTM E 1886-02/04/05; ASTM E 1996-02/04/06/09 Missile Level A

**Impact Resistance:**

System	Impact Resistant	Requirement
1-6	Yes	These products satisfy TDI's criteria for protection from windborne debris. Install the assemblies at a height 30' or greater above grade on the structure as long as it does not exceed the assemblies' design pressure rating.

**Acceptance of Smaller Assemblies:** Window assemblies with dimensions equal to or smaller than those specified are acceptable within the limitations specified in this report.

**Installation:**

System		
1-6	Type of Installation	Install the windows in accordance with drawing TDI-9020-SM-1; "Thermally-Broken Picture Window (SM);" sheets 1 thru 8 of 8; dated February 10, 2021; signed and sealed by Anthony Lynn Miller, P.E. on May 4, 2021.
	Wall Framing	
	Fasteners	
	Fastener Location/Spacing	
	Fastener Penetration	

**Note:** Keep the manufacturer's installation instructions available on the job site during installation. Use corrosion resistant fasteners as specified in the IRC and the IBC.