

## Performance Standards

The Window and Door Manufacturers Association (WDMA), the American Architectural Manufacturers Association (AAMA) and the Canadian Standards Association (CSA) jointly release AAMA/WDMA/CSA 101/I.S. 2/A440; North American Fenestration Standard/Specification for Windows, Doors and Skylights (NAFS), which calls for using "Performance Grade" as the rating to describe products that comply to all the requirements in the standard. The latest version was published in 2011 and is commonly referred to as "NAFS-11". NAFS-11 has been adopted by the 2012 and 2015 International Building Code (IBC) and the International Residential Code (IRC) as the means to indicate the window, door or skylights design pressure rating used to determine compliance to the jobsite design pressure requirements.

A product only achieves a "Performance Grade Rating" or "PG Rating" when it complies with all of the NAFS performance requirements such as ease of operation, air infiltration resistance, resistance to water penetration, structural loading and resistance to forced entry, etc. A "Design Pressure Rating" or "DP Rating" describes the design and structural load performance only.

## Performance Classes

The NAFS Standard/Specification defines requirements for four performance classes. The performance classes are designated R, LC, CW, and AW. This classification system provides for several levels of performance. Product selection is always based on the performance and building code requirements of the particular project.

## Elements of Performance Grade (PG) Designations

In order to qualify for a given performance grade (PG), test specimens need to pass all required performance tests for the following, in addition to all required auxiliary (durability) and applicable material/component tests (not shown here) for the applicable product type and desired performance class:

**(a) Operating force (if applicable):** minimum and maximum operating force varies by product type and performance class.

**(b) Air leakage resistance:** tested in accordance with ASTM E283 at a test pressure of 1.57 psf. The allowable air infiltration for R, LC & CW is 0.3 cubic feet per minute per square foot of frame (cfm/ft<sup>2</sup>).

**(c) Water penetration resistance:** tested in accordance with ASTM E547 with the specified test pressure applied per NAFS-11 Standard. The test consists of four cycles. Each cycle consists of five minutes with pressure applied and one minute with the pressure released, during which the water spray is continuously applied. The water spray shall be uniformly applied at a constant rate of 5.0 U.S. gal/ft<sup>2</sup> • hr.

**(d) Uniform load deflection test:** tested in accordance with ASTM E330 for both positive and negative pressure (pressure defined by NAFS-11) with the load maintained for a period of 60 seconds. The test specimen shall be evaluated for deflection during each load, for permanent damage after each load, and for any effects on the normal operation of the specimen.

**Starting with the 2008 version of NAFS, design pressure (DP) will only represent the "uniform load deflection test."**

**(e) Uniform load structural test:** tested in accordance with ASTM E330 for both positive and negative pressure (pressure defined by NAFS-11) with the load maintained for a period of 10 seconds. After loads are removed there shall be no more permanent deformation in excess of 0.4% of its span and no damage to the unit which would make it inoperable.

**(f) Forced-entry resistance (if applicable):** tested in accordance with ASTM F588 (Windows), F476 (Swinging Doors) and F842 (Sliding Doors) at a performance level 10 rating.

## Maximum Size Tested (MST)

Test size is a factor in determining compliance with this Standard/Specification. Each product type and class has a defined minimum set of requirements. The minimum test size increases with each class (i.e. R, LC, CW or AW).

## Minimum Requirements

The minimum requirements to obtain a Performance Grade (PG) are listed below:

Product Performance Class	Minimum Performance Grade (PG) (psf)	Minimum Design Pressure (DP) (psf)	Minimum Structural Test Pressure (STP) (psf)	Minimum Water Penetration Test Pressure (WTP) (psf)
<b>Windows and Doors</b>				
<b>R</b>	15	15	22.50	2.90
<b>LC</b>	25	25	37.50	3.75
<b>CW</b>	30	30	45.00	4.50
<b>AW</b>	40	40	60.00	6.00

• "Structural Test Pressure (STP)" is 150% of the Performance Grade (PG) for windows and doors.

• "Water Penetration Test Pressure (WTP)" is 15% of the Performance Grade (PG)

## Optional Higher Performance Grades (PG) & Corresponding Test Pressures (psf)

	PG20	PG25	PG30	PG35	PG40	PG45	PG50	PG55	PG60
WTP	3.00	3.75	4.50	5.25	6.00	6.75	7.50	8.25	9.00
DP	20	25	30	35	40	45	50	55	60
STP	30.0	37.5	45.0	52.5	60.0	67.5	75.0	82.5	90.0
Air	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3


- Forced Entry Resistance (FER) is always a performance level 10 regardless of Performance Grade (PG).
- Minimum and maximum Operating Force varies by product type.

## Hallmark Certification

The Window and Door Manufacturers Association (WDMA) sponsored Hallmark Certification Program provides manufacturers with certification to the AAMA/WDMA/CSA 101/I.S. 2/A440-11 standard and is designed to provide builders, architects, specifiers and consumers with an easily recognizable means of identifying products that have been manufactured in accordance with the appropriate WDMA and other referenced performance standards. Conformance is determined by periodic in-plant inspections by a third party administrator. The inspections include auditing licensee quality control procedures and processes, and a review to confirm products are manufactured in accordance with the appropriate performance standards. Periodic testing of representative product constructions and components by a third party testing laboratory is also required. When all of the program requirements are met, the licensee is authorized to use the WDMA Hallmark registered logo on the Certification Label as a means of identifying products.

Products successfully obtaining Hallmark Certification will be labeled with a 3-part code, which includes performance class, performance grade and maximum size tested.

Below is a sample certification label:

 <b>Hallmark Certified</b> <a href="http://www.wdma.com">www.wdma.com</a>	Licensee 440-H-071 <b>Silver Line Windows</b> <b>8601 Double Hung Vinyl Dual Glazed</b> Manufacturer Stipulates Conformance as indicated below
<b>STANDARD</b>	<b>RATING</b>
AAMA/WDMA/CSA 101/I.S.2/A440-08	CLASS LC - PG40 SIZE TESTED 36 x 62 in DP +40/-40 psf
AAMA/WDMA/CSA 101/I.S.2/A440-11	CLASS LC - PG40 SIZE TESTED 36 x 62 in DP +40/-40 psf

- (1) – Performance Class
- (2) – Performance Grade
- (3) – Size Tested
- (4) – Design Pressure

In the example above, the performance class is LC, the performance grade (PG) is 40 psf and the size tested is 36" x 62" and a design pressure rating of positive 40 psf and negative 40 psf. What this means to the specifier is, based on the optional higher performance grade chart, the laboratory tested air infiltration was less than 0.3 cfm/ft<sup>2</sup> (test pressure is always 1.57 psf and the allowable airflow is 0.3 cfm/ft<sup>2</sup>), the product tested successfully resisted a laboratory water penetration test at a test pressure of 6.0 psf (test pressure equals 15% of PG), the product tested successfully withstood a laboratory positive and negative structural test at a pressure of 60 psf (test pressure equals 150% of performance grade) in both the positive and negative directions and the product tested passed the laboratory requirements for operational force and forced entry resistance. Based on this test, all products smaller in both width and height can be labeled with this product performance rating.

## Important

Building codes prescribe design pressures based on a variety of criteria (i.e. wind speed zone, building height, jobsite exposure, etc.), therefore structural test pressures should not be used for code compliance. In the example above, a PG 50 performance grade rating, which passes a 50 psf design pressure, should be used for determining code compliance, not the structural test pressure of 75-psf.

If you need further details about how Silver Line® products perform to this standard, contact your Silver Line supplier.

If you need further information about the AAMA/WDMA/CSA 101/I.S.2/A440-11 standard or the Hallmark Certification Program please contact: WDMA, 401 N. Michigan Avenue, Suite 2200 Chicago, IL 60611 Phone: 312-321-6802 Web: [www.wdma.com](http://www.wdma.com)

Where designated, Silver Line products are tested, certified and labeled to the requirements of the Hallmark Certification Program. Actual performance may vary based on variations in manufacturing, shipping, installation, environmental conditions and conditions of use.

- "Performance Grade (PG)" ratings may vary from tested performance rating for larger or smaller units of a particular type.
- This data is accurate as of October 2018. Due to ongoing product changes, updated test results, or new industry standards, this data may change over time.
- Where designated, Silver Line products are certified and labeled to the requirements of the Hallmark Certification Program. Actual performance may vary based on variations in manufacturing, shipping, installation, environmental conditions and conditions of use.
- Contact your Silver Line supplier for more information.

This performance data is effective October 1, 2018.

Silver Line® Product Series	Silver Line Product Type	Configuration	AAMA/WDMA/CSA 101/IS2/A440 Performance Grade (PG)	+/- Corresponding Design Pressure (DP)	Air Infiltration CFM/FT²
V3 Series	Double-Hung Window Nailing Flange or optional J-channel Frame	Single	Class LC-PG35 Size Tested 38" x 77"	DP +35/-35	< 0.3
V3 Series	Double-Hung Window Nailing Flange or optional J-channel Frame	Single	Class LC-PG35 Size Tested 48" x 57"	DP +35/-35	< 0.3
V3 Series	Double-Hung Window Nailing Flange or optional J-channel Frame	Single	Class LC-PG45 Size Tested 36" x 72"	DP +45/-45	< 0.3
V3 Series	Double-Hung Window Nailing Flange or optional J-channel Frame	Single	Class LC-PG50 Size Tested 36" x 72"	DP +50/-50	< 0.3
V3 Series	Double-Hung Window Nailing Flange or optional J-channel Frame	Single	Class LC-PG25 Size Tested 48" x 77"	DP +25/-25	< 0.3
V3 Series	Double-Hung Window Nailing Flange or optional J-channel Frame	Single	Class LC-PG50 Size Tested 38" x 57"	DP +50/-50	< 0.3
V3 Series	Double-Hung Window Nailing Flange or optional J-channel Frame	Single	Class LC-PG50 Size Tested 38" x 59"	DP+50/-50	< 0.3
V3 Series	Double-Hung Window Nailing Flange or optional J-channel Frame	Twin	Class R-PG25 Size Tested 96" x 77"	DP+25/-25	< 0.3
V3 Series	Double-Hung Window Nailing Flange or optional J-channel Frame	Twin	Class R-PG50 Size Tested 76" x 57"	DP+50/-50	< 0.3
V3 Series	Double-Hung Window Nailing Flange or optional J-channel Frame	Twin	Class R-PG40 Size Tested 76" x 77"	DP+40/-40	< 0.3
V3 Series	Double-Hung Window Nailing Flange or optional J-channel Frame	Twin	Class R-PG50 Size Tested 76" x 65"	DP +50/-50	< 0.3
V3 Series	Double-Hung Window Nailing Flange or optional J-channel Frame	Twin	Class R-PG30 Size Tested 96" x 57"	DP +30/-30	< 0.3
V3 Series	Double-Hung Window Nailing Flange or optional J-channel Frame	Triple, Unequal Triple, DH/PW/DH, PW/DH/PW	Class R-PG40 Size Tested 107" x 77"	DP +40/-40	< 0.3
V3 Series	Double-Hung Window Nailing Flange or optional J-channel Frame	Triple, Unequal Triple, DH/PW/DH, PW/DH/PW	Class R-PG45 Size Tested 107" x 57"	DP +45/-45	< 0.3
V3 Series	Double-Hung Window Nailing Flange or optional J-channel Frame	Triple, Unequal Triple, DH/PW/DH, PW/DH/PW	Class R-PG50 Size Tested 107" x 57"	DP +50/-50	< 0.3

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Silver Line® Product Series	Silver Line Product Type	Configuration	AAMA/WDMA/CSA 101/IS2/A440 Performance Grade (PG)	+/- Corresponding Design Pressure (DP)	Air Infiltration CFM/FT²
V3 Series	Double-Hung Window Nailing Flange or optional J-channel Frame	Unequal Triple, PW/DH/PW	Class R-PG20 Size Tested 107" x 77"	DP +20/20-	< 0.3
V3 Series	Double-Hung Window Nailing Flange or optional J-channel Frame	Unequal Triple, PW/DH/PW	Class R-PG40 Size Tested 107" x 77"	DP +40/-40	< 0.3
V3 Series	Double-Hung Window Nailing Flange or optional J-channel Frame	Unequal Triple, PW/DH/PW	Class R-PG45 Size Tested 107" x 57"	DP +45/-45	< 0.3
V3 Series	Double-Hung Window Nailing Flange or optional J-channel Frame	Unequal Triple, PW/DH/PW	Class R-PG50 Size Tested 107" x 57"	DP +50/-50	< 0.3
V3 Series	Double-Hung Picture & Specialty Windows Nailing Flange or optional J-channel Frame	Single	Class R-PG35 Size Tested 96" x 54"	DP +35/-35	< 0.3
V3 Series	Double-Hung Picture & Specialty Windows Nailing Flange or optional J-channel Frame	Single	Class R-PG50 Size Tested 54" x 96"	DP +50/-50	< 0.3
V3 Series	Double-Hung Picture & Specialty Windows Nailing Flange or optional J-channel Frame	Single	Class R-PG50 Size Tested 74" x 72"	DP +50/-50	< 0.3
V3 Series	Double-Hung Picture & Specialty Windows Nailing Flange or optional J-channel Frame	Single	Class R-PG50 Size Tested 72" x 74"	DP +50/-50	< 0.3
V3 Series	Double-Hung Picture & Specialty Windows Nailing Flange or optional J-channel Frame	Twin	Class R-PG20 Size Tested 96" x 77"	DP +20/-20	< 0.3
V3 Series	Double-Hung Picture & Specialty Windows Nailing Flange or optional J-channel Frame	Twin	Class R-PG35 Size Tested 96" x 57"	DP +35/-35	< 0.3
V3 Series	Double-Hung Picture & Specialty Windows Nailing Flange or optional J-channel Frame	Twin	Class R-PG50 Size Tested 76" x 57"	DP +50/-50	< 0.3
V3 Series	Double-Hung Picture & Specialty Windows Nailing Flange or optional J-channel Frame	Twin	Class R-PG50 Size Tested 96" x 48"	DP +50/-50	< 0.3
V3 Series	Double-Hung Picture & Specialty Windows Nailing Flange or optional J-channel Frame	Twin	Class R-PG50 Size Tested 96" x 42"	DP +50/-50	< 0.4
V3 Series	Double-Hung Picture & Specialty Windows Nailing Flange or optional J-channel Frame	Triple, Unequal Triple	Class R-PG45 Size Tested 108" x 57"	DP +45/-45	< 0.3
V3 Series	Double-Hung Picture & Specialty Windows Nailing Flange or optional J-channel Frame	Triple, Unequal Triple	Class R-PG40 Size Tested 108" x 77"	DP +40/-40	< 0.3

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Silver Line® Product Series	Silver Line Product Type	Configuration	AAMA/WDMA/CSA 101/IS2/A440 Performance Grade (PG)	+/- Corresponding Design Pressure (DP)	Air Infiltration CFM/FT²
V3 Series	Double-Hung Picture & Specialty Windows Nailing Flange or optional J-channel Frame	Triple, Unequal Triple	Class R-PG45 Size Tested 108" x 42"	DP +45/-45	< 0.3
V3 Series	Double-Hung Window Insert Frame	Single	Class LC-PG40 Size Tested 36" x 62"	DP +40/-40	< 0.3
V3 Series	Double-Hung Window Insert Frame	Single	Class LC-PG30 Size Tested 48" x 80"	DP +30/-30	< 0.3
V3 Series	Gliding Window Insert Frame	Two-Panel	Class R-PG40 Size Tested 73" x 48"	DP +40/-40	< 0.3
V3 Series	Gliding Window Insert Frame	Two-Panel	Class LC-PG50 Size Tested 73" x 63"	DP +50/-50	< 0.3
V3 Series	Gliding Window Insert Frame	Two-Panel	Class R-PG40 Size Tested 73" x 36"	DP +40/-40	< 0.3
V3 Series	Gliding Window Insert Frame	Two-Panel	Class R-PG15 Size Tested 86" x 66"	DP +15/-15	< 0.3
V3 Series	Gliding Window Insert Frame	Two-Panel	Class R-PG20 Size Tested 73" x 63"	DP +20/-20	< 0.3
V3 Series	Gliding Window Insert Frame	Two-Panel	Class R-PG15 Size Tested 86" x 36"	DP +15/-15	< 0.3
V3 Series	Gliding Window Insert Frame	Three-Panel	Class R-PG25 Size Tested 108" x 62"	DP +25/-25	< 0.3
V3 Series	Gliding Window Insert Frame	Three-Panel	Class R-PG35 Size Tested 108" x 48"	DP +35/-35	< 0.3
V3 Series	Gliding Window Nailing Flange Frame	Two-Panel	Class R-PG40 Size Tested 73" x 36"	DP +/-40	< 0.3
V3 Series	Gliding Window Nailing Flange Frame	Two-Panel	Class R-PG15 Size Tested 73" x 60"	DP +15/-15	< 0.3
V3 Series	Gliding Window Nailing Flange Frame	Two-Panel	Class R-PG35 Size Tested 72" x 48"	DP +35/-35	< 0.3
V3 Series	Gliding Window Nailing Flange Frame	Three-Panel	Class R-PG20 Size Tested 108" x 48"	DP +20/-20	< 0.3

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Silver Line® Product Series	Silver Line Product Type	Configuration	AAMA/WDMA/CSA 101/IS2/A440 Performance Grade (PG)	+/- Corresponding Design Pressure (DP)	Air Infiltration CFM/FT²
V3 Series	Double-Hung Window HVHZ Upgrade Insert Frame	Single	Class LC-PG50 Size Tested 44" x 75"	DP +50/-50	< 0.3
V3 Series	Double-Hung Window HVHZ Upgrade Insert Frame	Single	Class LC-PG60 Size Tested 36" x 62"	DP +60/-60	< 0.3
V3 Series	Double-Hung Window HVHZ Upgrade Insert Frame	Single	Class LC-PG30 Size Tested 54" x 90"	DP +30/-30	< 0.3
V3 Series	Casement Window Insert, Nailing Flange, or optional J-channel Frame	Single	Class CW-PG50 Size Tested 36" x 72"	DP +50/-50	< 0.3
V3 Series	Casement Window Insert, Nailing Flange, or optional J-channel Frame	Single	Class CW-PG50 Size Tested 36" x 72"	DP +50/-50	< 0.3
V3 Series	Casement Window Insert, Nailing Flange, or optional J-channel Frame	Single	Class CW-PG30 Size Tested 36" x 72"	DP +30/-30	< 0.3
V3 Series	Casement Window Insert, Nailing Flange, or optional J-channel Frame	CW/PW, PW/CW	Class R-PG30 Size Tested 84" x 72"	DP +30/-30	< 0.3
V3 Series	Casement Window Insert, Nailing Flange, or optional J-channel Frame	CW/PW/CW, Quad	Class R-PG30 Size Tested 108" x 72"	DP +30/-30	< 0.3
V3 Series	Casement & Transom Windows Insert, Nailing Flange or optional J-channel Frame	Twin, Triple, Quad	Class R-PG50 Size Tested 78" x 50"	DP +50/-50	< 0.3
V3 Series	Casement & Transom Windows Insert, Nailing Flange or optional J-channel Frame	Twin, Triple, Quad	Class LC-PG30 Size Tested 108" x 72"	DP +30/3-0	< 0.3
V3 Series	Awning Window Insert, Nailing Flange or optional J-channel Frame	Single	Class CW-PG50 Size Tested 48" x 36"	DP +50/-50	< 0.3
V3 Series	Awning Window Insert, Nailing Flange or optional J-channel Frame	Twin Horizontal	Class CW-PG50 Size Tested 96" x 36"	DP +50/-50	< 0.3
V3 Series	Awning Window Insert, Nailing Flange or optional J-channel Frame	Triple Horizontal	Class CW-PG50 Size Tested 108" x 36"	DP +50/-50	< 0.3
V3 Series	Awning Window Insert, Nailing Flange or optional J-channel Frame	Twin Vertical, Triple Vertical	Class R-PG30 Size Tested 48" x 108"	DP +30/-30	< 0.3
V3 Series	Casement Picture & Specialty Windows Insert, Nailing Flange or optional J-channel Frame	Single	Class CW-PG50 Size Tested 80" x 72"	DP +50/-50	< 0.3

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Silver Line® Product Series	Silver Line Product Type	Configuration	AAMA/WDMA/CSA 101/IS2/A440 Performance Grade (PG)	+/- Corresponding Design Pressure (DP)	Air Infiltration CFM/FT²
V3 Series	Casement Picture & Specialty Windows Insert, Nailing Flange or optional J-channel Frame	Single	Class CW-PG50 Size Tested 72" x 80"	DP +50/-50	< 0.3
V3 Series	Casement Picture & Specialty Windows Insert, Nailing Flange or optional J-channel Frame	Single	Class R-PG50 Size Tested 96" x 54"	DP +50/-50	< 0.3
V3 Series	Casement Picture & Specialty Windows Insert, Nailing Flange or optional J-channel Frame	Single	Class R-PG50 Size Tested 54" x 96"	DP +50/-50	< 0.3
V3 Series	Gliding Patio Door Nailing Flange with J-channel Frame	Two-Panel	Class R-PG35 Size Tested 72" x 80"	DP +35/-35	< 0.3
V3 Series	Gliding Patio Door Nailing Flange with J-channel Frame	Two-Panel	Class R-PG50 Size Tested 72" x 80"	DP +50/-50	< 0.3
V3 Series	Gliding Patio Door Nailing Flange with J-channel Frame	Two-Panel	Class R-PG25 Size Tested 76" x 82"	DP +25/-25	< 0.3
V3 Series	Gliding Patio Door Nailing Flange with J-channel Frame	Two-Panel	Class R-PG20 Size Tested 96" x 80"	DP +20/-20	< 0.3
V3 Series	Gliding Patio Door Nailing Flange with J-channel Frame	Two-Panel	Class LC-PG30 Size Tested 96" x 96"	DP +30/-30	< 0.3
V3 Series	Gliding Patio Door Nailing Flange with J-channel Frame	Two-Panel	Class R-PG15 Size Tested 96" x 82"	DP +15/-15	< 0.3
V3 Series	Gliding Patio Door Nailing Flange with J-channel Frame	Two-Panel	Class R-PG50 Size Tested 96" x 82"	DP +50/-50	< 0.3
V3 Series	Gliding Patio Door Side Lite & Transom Nailing Flange with J-channel Frame	Single	Class R-PG50 Size Tested 48" x 96"	DP +50/-50	< 0.3
V3 Series	Gliding Patio Door Side Lite & Transom Nailing Flange with J-channel Frame	Single	Class R-PG50 Size Tested 108" x 24"	DP +50/-50	< 0.3
V3 Series with Coastal Watch Protection	Double-Hung Window Nailing Flange or optional J-channel Frame	Single	Class R-PG50 Size Tested 46" x 72"	DP +50/-50	< 0.3
V3 Series with Coastal Watch Protection	Gliding Window Insert Frame	Two-Panel	Class R-PG50 Size Tested 73" x 63"	DP +50/-50	< 0.3
V3 Series with Coastal Watch Protection	Casement Window Insert, Nailing Flange or optional J-channel Frame	Single	Class CW-PG50 Size Tested 36" x 72"	DP +50/-50	< 0.3

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V3 Series with Coastal Watch Protection	Casement Window Insert, Nailing Flange or optional J-channel Frame	Single	Class CW-PG50 Size Tested 36" x 72"	DP +50/-50	< 0.3
V3 Series with Coastal Watch Protection	Awning Window Insert, Nailing Flange or optional J-channel Frame	Single	Class CW-PG50 Size Tested 48" x 36"	DP +50/-50	< 0.3
V3 Series with Coastal Watch Protection	Awning Window Insert, Nailing Flange or optional J-channel Frame	Single	Class CW-PG50 Size Tested 48" x 36"	DP +50/-50	< 0.3
V3 Series with Coastal Watch Protection	Awning Window Insert, Nailing Flange or optional J-channel Frame	Picture Over Awning	Class R-PG35 Size Tested 48" x 108"	DP +35/-35	< 0.3
V3 Series with Coastal Watch Protection	Casement Picture & Specialty Windows Insert, Nailing Flange or optional J-channel Frame	Single	Class R-PG50 Size Tested 73" x 53"	DP +50/-50	< 0.3
V3 Series with Coastal Watch Protection	Casement Picture & Specialty Windows Insert, Nailing Flange or optional J-channel Frame	Single	Class R-PG50 Size Tested 53" x 73"	DP +50/-50	< 0.3
V3 Series with Coastal Watch Protection	Casement Picture & Specialty Windows Insert, Nailing Flange or optional J-channel Frame	Single	Class R-PG50 Size Tested 73" x 53"	DP +50/-50	< 0.3
V3 Series with Coastal Watch Protection	Casement Picture & Specialty Windows Insert, Nailing Flange or optional J-channel Frame	Single	Class R-PG50 Size Tested 53" x 73"	DP +50/-50	< 0.3
V3 Series with Coastal Watch Protection	Gliding Patio Door Nailing Flange with J-channel Frame	Two-Panel	Class R-PG50 Size Tested 72" x 80"	DP +50/-50	< 0.3
V3 Series with Coastal Watch Protection	Gliding Patio Door Nailing Flange with J-channel Frame	Two-Panel	Class R-PG50 Size Tested 96" x 82"	DP +50/-50	< 0.3
V1 Series	Double-Hung Window Insert Frame	Single	Class R-PG20 Size Tested 43" x 77"	DP +20/-20	< 0.3
V1 Series	Double-Hung Window Insert Frame	Single	Class R-PG20 Size Tested 48" x 72"	DP +20/-20	< 0.3
V1 Series	Double-Hung Window Insert Frame	Single	Class R-PG35 Size Tested 36" x 63"	DP +35/-35	< 0.3
V1 Series	Single-Hung, Arch Single-Hung, Springline Single-Hung Windows Nailing Flange with J-channel Frame	Single	Class LC-PG35 Size Tested 44" x 62"	DP +50/-50	< 0.3
V1 Series	Single-Hung, Arch Single-Hung, Springline Single-Hung Windows Nailing Flange with J-channel Frame	Single	Class R-PG35 Size Tested 36" x 84"	DP +35/-35	< 0.3



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V1 Series	Single-Hung, Arch Single-Hung, Springline Single-Hung Windows Nailing Flange with J-channel Frame	Single	Class LC-PG35 Size Tested 38" x 74"	DP +50/-50	< 0.3
V1 Series	Single-Hung, Arch Single-Hung, Springline Single-Hung Windows Nailing Flange with J-channel Frame	Single	Class R-PG20 Size Tested 48" x 84"	DP +20/-20	< 0.3
V1 Series	Single-Hung, Arch Single-Hung, Springline Single-Hung Windows Nailing Flange with J-channel Frame	Single	Class R-PG25 Size Tested 52" x 72"	DP +25/-25	< 0.3
V1 Series	Single-Hung, Arch Single-Hung, Springline Single-Hung Windows Nailing Flange with J-channel Frame	Single	Class LC-PG35 Size Tested 48" x 72"	DP +35/-35	< 0.3
V1 Series	Single-Hung, Arch Single-Hung, Springline Single-Hung Windows Nailing Flange with J-channel Frame	Single	Class LC-PG35 Size Tested 38" x 77"	DP +35/-35	< 0.3
V1 Series	Single-Hung, Arch Single-Hung, Springline Single-Hung Windows Nailing Flange with J-channel Frame	Single	Class LC-PG35 Size Tested 38" x 66"	DP +50/-50	< 0.3
V1 Series	Single-Hung, Arch Single-Hung, Springline Single-Hung Windows Nailing Flange with J-channel Frame	Single	Class R-PG20 Size Tested 48" x 96"	DP +20/-20	< 0.3
V1 Series	Single-Hung, Arch Single-Hung, Springline Single-Hung Windows Nailing Flange with J-channel Frame	Single	Class LC-PG35 Size Tested 38" x 74"	DP +50/-50	< 0.3
V1 Series	Single-Hung, Arch Single-Hung, Springline Single-Hung Windows Nailing Flange with J-channel Frame	Single	Class LC-PG35 Size Tested 38" x 66"	DP +50/-50	< 0.3
V1 Series	Single-Hung, Arch Single-Hung, Springline Single-Hung Windows Nailing Flange with J-channel Frame	Single	Class LC-PG35 Size Tested 44" x 62"	DP +50/-50	< 0.3
V1 Series	Single-Hung, Arch Single-Hung, Springline Single-Hung Windows Nailing Flange with J-channel Frame	Single	Class R-PG35 Size Tested 36" x 84"	DP +35/-35	< 0.3
V1 Series	Single-Hung, Arch Single-Hung Windows Nailing Flange with J-channel Frame	Twin	Class R-PG15 Size Tested 86" x 84"	DP +15/-15	< 0.3
V1 Series	Single-Hung, Arch Single-Hung Windows Nailing Flange with J-channel Frame	Twin	Class R-PG35 Size Tested 76" x 72"	DP +50/-50	< 0.3
V1 Series	Single-Hung, Arch Single-Hung Windows Nailing Flange with J-channel Frame	Twin	Class R-PG30 Size Tested 96" x 74"	DP +30/-30	< 0.3
V1 Series	Single-Hung, Arch Single-Hung Windows Nailing Flange with J-channel Frame	Twin	Class R-PG35 Size Tested 80" x 74"	DP +35/-35	< 0.3

This performance data is effective October 1, 2018.

Silver Line® Product Series	Silver Line Product Type	Configuration	AAMA/WDMA/CSA 101/IS2/A440 Performance Grade (PG)	+/- Corresponding Design Pressure (DP)	Air Infiltration CFM/FT²
V1 Series	Single-Hung, Arch Single-Hung Windows Nailing Flange with J-channel Frame	Twin	Class R-PG35 Size Tested 76" x 62"	DP +50/-50	< 0.3
V1 Series	Single-Hung, Arch Single-Hung Windows Nailing Flange with J-channel Frame	Twin	Class R-PG35 Size Tested 76" x 62"	DP +50/-50	< 0.3
V1 Series	Single-Hung, Arch Single-Hung Windows Nailing Flange with J-channel Frame	Twin	Class R-PG35 Size Tested 72" x 62"	DP +35/-35	< 0.3
V1 Series	Single-Hung, Arch Single-Hung Windows Nailing Flange with J-channel Frame	Twin	Class R-PG15 Size Tested 96" x 74"	DP +15/-15	< 0.3
V1 Series	Single-Hung, Arch Single-Hung Windows Nailing Flange with J-channel Frame	Twin	Class R-PG25 Size Tested 80" x 74"	DP +25/-25	< 0.3
V1 Series	Single-Hung, Arch Single-Hung Windows Nailing Flange with J-channel Frame	Twin	Class R-PG25 Size Tested 76" x 77"	DP +25/-25	< 0.3
V1 Series	Single-Hung, Arch Single-Hung Windows Nailing Flange with J-channel Frame	Twin	Class R-PG30 Size Tested 96" x 74"	DP +30/-30	< 0.3
V1 Series	Single-Hung, Arch Single-Hung Windows Nailing Flange with J-channel Frame	Twin	Class R-PG25 Size Tested 72" x 84"	DP +25/-25	< 0.3
V1 Series	Single-Hung, Arch Single-Hung Windows Nailing Flange with J-channel Frame	Twin	Class R-PG35 Size Tested 72" x 84"	DP +35/-35	< 0.3
V1 Series	Single-Hung, Arch Single-Hung Windows Nailing Flange with J-channel Frame	Twin	Class R-PG35 Size Tested 79" x 60"	DP +50/-50	< 0.3
V1 Series	Single-Hung Window Nailing Flange with J-channel Frame	SH/PW, PW/SH	Class R-PG30 Size Tested 72" x 62"	DP +30/-30	< 0.3
V1 Series	Single-Hung Window Nailing Flange with J-channel Frame	SH/PW, PW/SH	Class R-PG35 Size Tested 72" x 62"	DP +50/-50	< 0.3
V1 Series	Single-Hung Window Nailing Flange with J-channel Frame	SH/PW, PW/SH	Class R-PG15 Size Tested 72" x 84"	DP +15/-15	< 0.3
V1 Series	Single-Hung Window Nailing Flange with J-channel Frame	SH/PW, PW/SH	Class R-PG30 Size Tested 72" x 62"	DP +30/-30	< 0.3
V1 Series	Single-Hung Window Nailing Flange with J-channel Frame	SH/PW, PW/SH	Class R-PG35 Size Tested 72" x 72"	DP +50/-50	< 0.3

This performance data is effective October 1, 2018.

Silver Line® Product Series	Silver Line Product Type	Configuration	AAMA/WDMA/CSA 101/IS2/A440 Performance Grade (PG)	+/- Corresponding Design Pressure (DP)	Air Infiltration CFM/FT²
V1 Series	Single-Hung Window Nailing Flange with J-channel Frame	SH/PW, PW/SH	Class R-PG20 Size Tested 72" x 84"	DP +20/-20	< 0.3
V1 Series	Single-Hung Window Nailing Flange with J-channel Frame	SH/PW, PW/SH	Class R-PG35 Size Tested 72" x 74"	DP +35/-35	< 0.3
V1 Series	Single-Hung Window Nailing Flange with J-channel Frame	Triple Single-Hung, SH/PW/SH	Class R-PG35 Size Tested 108" x 62"	DP +50/-50	< 0.3
V1 Series	Single-Hung Window Nailing Flange with J-channel Frame	Triple Single-Hung, SH/PW/SH	Class R-PG30 Size Tested 108" x 62"	DP +30/-30	< 0.3
V1 Series	Single-Hung Window Nailing Flange with J-channel Frame	Triple Single-Hung, SH/PW/SH	Class R-PG35 Size Tested 108" x 72"	DP +50/-50	< 0.3
V1 Series	Single-Hung Window Nailing Flange with J-channel Frame	Triple Single-Hung, SH/PW/SH	Class R-PG20 Size Tested 108" x 84"	DP +20/-20	< 0.3
V1 Series	Single-Hung Window Nailing Flange with J-channel Frame	Triple Single-Hung, SH/PW/SH	Class R-PG25 Size Tested 108" x 84"	DP +25/-25	< 0.3
V1 Series	Single-Hung Window Nailing Flange with J-channel Frame	Triple Single-Hung, SH/PW/SH	Class R-PG35 Size Tested 108" x 74"	DP +35/-35	< 0.3
V1 Series	Single-Hung Window Nailing Flange with J-channel Frame	Unequal Triple, PW/SH/PW	Class R-PG35 Size Tested 108" x 62"	DP +50/-50	< 0.3
V1 Series	Single-Hung Window Nailing Flange with J-channel Frame	Unequal Triple, PW/SH/PW	Class R-PG15 Size Tested 108" x 84"	DP +15/-15	< 0.3
V1 Series	Single-Hung Window Nailing Flange with J-channel Frame	Unequal Triple, PW/SH/PW	Class R-PG30 Size Tested 108" x 62"	DP +30/-30	< 0.3
V1 Series	Single-Hung Window Nailing Flange with J-channel Frame	Unequal Triple, PW/SH/PW	Class R-PG35 Size Tested 108" x 72"	DP +50/-50	< 0.3
V1 Series	Single-Hung Window Nailing Flange with J-channel Frame	Unequal Triple, PW/SH/PW	Class R-PG25 Size Tested 108" x 84"	DP +25/-25	< 0.3
V1 Series	Single-Hung, Arch Single-Hung, Springline Single-Hung, Non Interlocking Meeting Rails Nailing Flange with J-channel Frame	Single	Class R-PG20 Size Tested 48" x 84"	DP +20/-20	< 0.3
V1 Series	Single-Hung, Arch Single-Hung, Springline Single-Hung, Non Interlocking Meeting Rails Nailing Flange with J-channel Frame	Single	Class R-PG35 Size Tested 40" x 68"	DP +35/-35	< 0.3

This performance data is effective October 1, 2018.

Silver Line® Product Series	Silver Line Product Type	Configuration	AAMA/WDMA/CSA 101/IS2/A440 Performance Grade (PG)	+/- Corresponding Design Pressure (DP)	Air Infiltration CFM/FT²
V1 Series	Single-Hung, Arch Single-Hung, Springline Single-Hung, Non Interlocking Meeting Rails Nailing Flange with J-channel Frame	Single	Class R-PG35 Size Tested 44" x 60"	DP +35/-35	< 0.3
V1 Series	Single-Hung Window Non Interlocking Meeting Rails Nailing Flange with J-channel Frame	Twin	Class R-PG35 Size Tested 64" x 68"	DP +35/-35	< 0.3
V1 Series	Single-Hung Window Non Interlocking Meeting Rails Nailing Flange with J-channel Frame	Twin	Class R-PG15 Size Tested 80" x 84"	DP +15/-15	< 0.3
V1 Series	Single-Hung Window Non Interlocking Meeting Rails Nailing Flange with J-channel Frame	Twin	Class R-PG15 Size Tested 90" x 74"	DP +15/-15	< 0.3
V1 Series	Single-Hung Window Non Interlocking Meeting Rails Nailing Flange with J-channel Frame	Twin	Class R-PG20 Size Tested 80" x 62"	DP +20/-20	< 0.3
V1 Series	Single-Hung Window Non Interlocking Meeting Rails Nailing Flange with J-channel Frame	Twin	Class R-PG35 Size Tested 72" x 60"	DP +35/-35	< 0.3
V1 Series	Single-Hung Window Non Interlocking Meeting Rails Nailing Flange with J-channel Frame	SH/PW, PW/SH	Class R-PG20 Size Tested 72" x 74"	DP +20/-20	< 0.3
V1 Series	Single-Hung Window Non Interlocking Meeting Rails Nailing Flange with J-channel Frame	SH/PW, PW/SH	Class R-PG35 Size Tested 72" x 62"	DP +35/-35	< 0.3
V1 Series	Single-Hung Window Non Interlocking Meeting Rails Nailing Flange with J-channel Frame	SH/PW, PW/SH	Class R-PG20 Size Tested 72" x 74"	DP +20/-20	< 0.3
V1 Series	Single-Hung Window Non Interlocking Meeting Rails Nailing Flange with J-channel Frame	Triple	Class R-PG20 Size Tested 108" x 74"	DP +20/-20	< 0.3
V1 Series	Single-Hung Window Non Interlocking Meeting Rails Nailing Flange with J-channel Frame	Triple	Class R-PG35 Size Tested 108" x 60"	DP +35/-35	< 0.3
V1 Series	Single-Hung Window Non Interlocking Meeting Rails Nailing Flange with J-channel Frame	Unequal Triple, SH/PW/SH, PW/SH/PW	Class R-PG20 Size Tested 107" x 74"	DP +20/-20	< 0.3
V1 Series	Gliding Window Nailing Flange with J-channel Frame	Two-Panel	Class R-PG20 Size Tested 73" x 63"	DP +20/-20	< 0.3
V1 Series	Gliding Window Nailing Flange with J-channel Frame	Two-Panel	Class R-PG35 Size Tested 73" x 50"	DP +35/-35	< 0.3
V1 Series	Gliding Window Nailing Flange with J-channel Frame	Three-Panel	Class R-PG15 Size Tested 108" x 59"	DP +15/-15	< 0.3

This performance data is effective October 1, 2018.

Silver Line® Product Series	Silver Line Product Type	Configuration	AAMA/WDMA/CSA 101/IS2/A440 Performance Grade (PG)	+/- Corresponding Design Pressure (DP)	Air Infiltration CFM/FT²
V1 Series	Gliding Window Nailing Flange with J-channel Frame	Three-Panel	Class R-PG30 Size Tested 90" x 48"	DP +30/-30	< 0.3
V1 Series	Single-Hung Picture & Specialty Windows Nailing Flange with J-channel Frame	Single	Class R-PG35 Size Tested 96" x 54"	DP +50/-50	< 0.3
V1 Series	Single-Hung Picture & Specialty Windows Nailing Flange with J-channel Frame	Single	Class R-PG35 Size Tested 54" x 96"	DP +50/-50	< 0.3
V1 Series	Single-Hung Picture & Specialty Windows Nailing Flange with J-channel Frame	Single	Class CW-PG35 Size Tested 74" x 72"	DP +50/-50	< 0.3
V1 Series	Single-Hung Picture & Specialty Windows Nailing Flange with J-channel Frame	Single	Class CW-PG35 Size Tested 72" x 74"	DP +50/-50	< 0.3
V1 Series	Single-Hung Picture & Specialty Windows Nailing Flange with J-channel Frame	Single	Class CW-PG35 Size Tested 74" x 72"	DP +50/-50	< 0.3
V1 Series	Single-Hung Picture & Specialty Windows Nailing Flange with J-channel Frame	Single	Class CW-PG35 Size Tested 72" x 74"	DP +50/-50	< 0.3
V1 Series	Single-Hung Picture & Specialty Windows Nailing Flange with J-channel Frame	Single	Class R-PG35 Size Tested 82" x 72"	DP +50/-50	< 0.3
V1 Series	Single-Hung Picture & Specialty Windows Nailing Flange with J-channel Frame	Single	Class R-PG35 Size Tested 72" x 82"	DP +50/-50	< 0.3
V1 Series	Single-Hung Picture Window Nailing Flange with J-channel Frame	Twin	Class R-PG35 Size Tested 96" x 74"	DP +35/-35	< 0.3
V1 Series	Single-Hung Picture Window Nailing Flange with J-channel Frame	Twin	Class R-PG35 Size Tested 76" x 62"	DP +50/-50	< 0.3
V1 Series	Single-Hung Picture Window Nailing Flange with J-channel Frame	Twin	Class R-PG30 Size Tested 86" x 84"	DP +30/-30	< 0.3
V1 Series	Single-Hung Picture Window Nailing Flange with J-channel Frame	Twin	Class R-PG35 Size Tested 96" x 48"	DP +50/-50	< 0.3
V1 Series	Single-Hung Picture Window Nailing Flange with J-channel Frame	Triple & Unequal Triple	Class R-PG35 Size Tested 108" x 74"	DP +40/-40	< 0.3
V1 Series	Single-Hung Picture Window Nailing Flange with J-channel Frame	Triple & Unequal Triple	Class R-PG35 Size Tested 108" x 48"	DP +50/-50	< 0.3

This performance data is effective October 1, 2018.

Silver Line® Product Series	Silver Line Product Type	Configuration	AAMA/WDMA/CSA 101/IS2/A440 Performance Grade (PG)	+/- Corresponding Design Pressure (DP)	Air Infiltration CFM/FT²
V1 Series	Single-Hung, Arch Single-Hung, Springline Single-Hung Windows Nailing Flange Frame	Single	Class R-PG20 Size Tested 48" x 84"	DP +20/-20	< 0.3
V1 Series	Single-Hung, Arch Single-Hung, Springline Single-Hung Windows Nailing Flange Frame	Single	Class R-PG35 Size Tested 36" x 62"	DP +50/-50	< 0.3
V1 Series	Single-Hung, Arch Single-Hung, Springline Single-Hung Windows Nailing Flange Frame	Single	Class R-PG20 Size Tested 48" x 96"	DP +20/-20	< 0.3
V1 Series	Single-Hung, Arch Single-Hung, Springline Single-Hung Windows Nailing Flange Frame	Single	Class R-PG25 Size Tested 52" x 73"	DP +25/-25	< 0.3
V1 Series	Single-Hung, Arch Single-Hung, Springline Single-Hung Windows Nailing Flange Frame	Single	Class R-PG35 Size Tested 36" x 72"	DP +45/-45	< 0.3
V1 Series	Single-Hung, Arch Single-Hung, Springline Single-Hung Windows Nailing Flange Frame	Single	Class R-PG35 Size Tested 48" x 63"	DP +35/-35	< 0.3
V1 Series	Single-Hung, Arch Single-Hung Windows Nailing Flange Frame	Twin	Class R-PG15 Size Tested 96" x 84"	DP +15/-15	< 0.3
V1 Series	Single-Hung, Arch Single-Hung Windows Nailing Flange Frame	Twin	Class R-PG25 Size Tested 72" x 72"	DP +25/-25	< 0.3
V1 Series	Single-Hung Window Nailing Flange Frame	Triple Single-Hung, SH/PW/SH, SH/PW, PW/SH	Class R-PG20 Size Tested 108" x 77"	DP +20/-20	< 0.3
V1 Series	Single-Hung Window Nailing Flange Frame	Triple Single-Hung, SH/PW/SH, SH/PW, PW/SH	Class R-PG25 Size Tested 108" x 72"	DP +25/-25	< 0.3
V1 Series	Single-Hung Window Nailing Flange Frame	Unequal Triple Single-Hung, PW/SH/PW, SH/PW, PW/SH	Class R-PG15 Size Tested 108" x 74"	DP +15/-15	< 0.3
V1 Series	Single-Hung Window Nailing Flange Frame	Unequal Triple Single-Hung, PW/SH/PW, SH/PW, PW/SH	Class R-PG20 Size Tested 96" x 72"	DP +20/-20	< 0.3
V1 Series	Gliding Window Nailing Flange Frame	Two-Panel	Class R-PG20 Size Tested 73" x 50"	DP +20/-20	< 0.3
V1 Series	Gliding Window Nailing Flange Frame	Two-Panel	Class R-PG15 Size Tested 73" x 63"	DP +15/-15	< 0.3
V1 Series	Gliding Window Nailing Flange Frame	Three-Panel	Class R-PG15 Size Tested 108" x 59"	DP +15/-15	< 0.3

This performance data is effective October 1, 2018.

Silver Line® Product Series	Silver Line Product Type	Configuration	AAMA/WDMA/CSA 101/IS2/A440 Performance Grade (PG)	+/- Corresponding Design Pressure (DP)	Air Infiltration CFM/FT <sup>2</sup>
V1 Series	Single-Hung Picture & Specialty Windows Nailing Flange Frame	Single	Class R-PG60 Size Tested 53" x 38"	DP +60/-60	< 0.3
V1 Series	Single-Hung Picture & Specialty Windows Nailing Flange Frame	Single	Class R-PG60 Size Tested 38" x 53"	DP +60/-60	< 0.3
V1 Series	Single-Hung Picture & Specialty Windows Nailing Flange Frame	Single	Class CW-PG50 Size Tested 74" x 60"	DP +50/-50	< 0.3
V1 Series	Single-Hung Picture & Specialty Windows Nailing Flange Frame	Single	Class CW-PG50 Size Tested 60" x 74"	DP +50/-50	< 0.3
V1 Series	Single-Hung Picture & Specialty Windows Nailing Flange Frame	Single	Class R-PG50 Size Tested 54" x 96"	DP +50/-50	< 0.3
V1 Series	Single-Hung Picture & Specialty Windows Nailing Flange Frame	Single	Class R-PG50 Size Tested 96" x 54"	DP +50/-50	< 0.3
V1 Series	Single-Hung Picture & Specialty Windows Nailing Flange Frame	Single	Class R-PG50 Size Tested 108" x 24"	DP +50/-50	< 0.3
V1 Series	Single-Hung Picture & Specialty Windows Nailing Flange Frame	Single	Class R-PG60 Size Tested 63" x 53"	DP +60/-60	< 0.3
V1 Series	Single-Hung Picture & Specialty Windows Nailing Flange Frame	Single	Class R-PG60 Size Tested 53" x 63"	DP +60/-60	< 0.3
V1 Series	Single-Hung Picture & Specialty Windows Nailing Flange Frame	Twin	Class R-PG25 Size Tested 96" x 74"	DP +25/-25	< 0.3
V1 Series	Single-Hung Picture & Specialty Windows Nailing Flange Frame	Twin	Class R-PG35 Size Tested 72" x 60"	DP +40/-40	< 0.3
V1 Series	Single-Hung Picture & Specialty Windows Nailing Flange Frame	Twin	Class R-PG15 Size Tested 86" x 84"	DP +15/-15	< 0.3
V1 Series	Single-Hung Picture & Specialty Windows Nailing Flange Frame	Triple	Class R-PG20 Size Tested 108" x 84"	DP +20/-20	< 0.3
V1 Series	Single-Hung Picture & Specialty Windows Nailing Flange Frame	Triple	Class R-PG35 Size Tested 108" x 48"	DP +50/-50	< 0.3
V1 Series	Single-Hung Picture & Specialty Windows Nailing Flange Frame	Unequal Triple	Class R-PG15 Size Tested 108" x 84"	DP +15/-15	< 0.3

This performance data is effective October 1, 2018.

Silver Line® Product Series	Silver Line Product Type	Configuration	AAMA/WDMA/CSA 101/IS2/A440 Performance Grade (PG)	+/- Corresponding Design Pressure (DP)	Air Infiltration CFM/FT²
V1 Series	Single-Hung Window Insert Frame	Single	Class R-PG15 Size Tested 48" x 80"	DP +15/-15	< 0.3
V1 Series	Single-Hung Window Insert Frame	Single	Class R-PG35 Size Tested 36" x 62"	DP +35/-35	< 0.3
V1 Series	Single-Hung Window Insert Frame	Single	Class R-PG30 Size Tested 52" x 73"	DP +30/-30	< 0.3
V1 Series	Single-Hung Window Insert Frame	Single	Class R-PG35 Size Tested 45" x 62"	DP +40/-40	< 0.3
V1 Series	Single-Hung Window Insert Frame	Single	Class R-PG35 Size Tested 36" x 62"	DP +50/-50	< 0.3
V1 Series	Single-Hung Window Insert Frame	Twin	Class R-PG15 Size Tested 96" x 80"	DP +15/-15	< 0.3
V1 Series	Single-Hung Window Insert Frame	Twin	Class R-PG20 Size Tested 96" x 72"	DP +20/-20	< 0.3
V1 Series	Single-Hung Window Insert Frame	Twin	Class R-PG20 Size Tested 72" x 80"	DP +20/-20	< 0.3
V1 Series	Single-Hung Window Insert Frame	Twin	Class R-PG35 Size Tested 72" x 62"	DP +35/-35	< 0.3
V1 Series	Single-Hung Window Insert Frame	Triple	Class R-PG25 Size Tested 108" x 80"	DP +25/-25	< 0.3
V1 Series	Single-Hung Window Insert Frame	Triple	Class R-PG35 Size Tested 108" x 62"	DP +35/-35	< 0.3
V1 Series	Gliding Window Insert Frame	Two-Panel	Class R-PG15 Size Tested 73" x 61"	DP +15/-15	< 0.3
V1 Series	Gliding Window Insert Frame	Three-Panel	Class R-PG15 Size Tested 108" x 60"	DP +15/-15	< 0.3
V1 Series	Single-Hung Picture & Specialty Windows Insert Frame	Single	Class R-PG35 Size Tested 96" x 54"	DP +35/-35	< 0.3
V1 Series	Single-Hung Picture & Specialty Windows Insert Frame	Single	Class R-PG35 Size Tested 54" x 96"	DP +35/-35	< 0.3



This performance data is effective October 1, 2018.

Silver Line® Product Series	Silver Line Product Type	Configuration	AAMA/WDMA/CSA 101/IS2/A440 Performance Grade (PG)	+/- Corresponding Design Pressure (DP)	Air Infiltration CFM/FT²
V1 Series	Single-Hung Picture & Specialty Windows Insert Frame	Single	Class R-PG35 Size Tested 73" x 60"	DP +50/-50	< 0.3
V1 Series	Single-Hung Picture & Specialty Windows Insert Frame	Single	Class R-PG35 Size Tested 60" x 73"	DP +50/-50	< 0.3
V1 Series	Single-Hung Window Masonry Flange Frame	Single	Class R-PG30 Size Tested 52" x 73"	DP +30/-30	< 0.3
V1 Series	Single-Hung Window Masonry Flange Frame	Single	Class R-PG35 Size Tested 45" x 62"	DP +40/-40	< 0.3
V1 Series	Single-Hung Window Masonry Flange Frame	Single	Class R-PG35 Size Tested 36" x 62"	DP +50/-50	< 0.3
V1 Series	Single-Hung Window, HVHZ Upgrade Masonry Flange or Nailing Flange Frame	Single	Class R-PG50 Size Tested 52" x 73"	DP +50/-50	< 0.3
V1 Series	Single-Hung Window, HVHZ Upgrade Masonry Flange or Nailing Flange Frame	Single	Class R-PG60 Size Tested 52" x 63"	DP +60/-60	< 0.3
V1 Series	Single-Hung Window, HVHZ Upgrade Masonry Flange or Nailing Flange Frame	Single	Class R-PG50 Size Tested 52" x 73"	DP +50/-50	< 0.3
V1 Series	Single-Hung Window, HVHZ Upgrade Masonry Flange or Nailing Flange Frame	Single	Class R-PG60 Size Tested 52" x 63"	DP +60/-60	< 0.3
V1 Series	Single-Hung Picture & Specialty Windows Masonry Flange Frame	Single	Class R-PG60 Size Tested 53" x 38"	DP +60/-60	< 0.3
V1 Series	Single-Hung Picture & Specialty Windows Masonry Flange Frame	Single	Class R-PG60 Size Tested 38" x 53"	DP +60/-60	< 0.3
V1 Series	Single-Hung Picture & Specialty Windows Masonry Flange Frame	Single	Class R-PG60 Size Tested 63" x 53"	DP +60/-60	< 0.3
V1 Series	Single-Hung Picture & Specialty Windows Masonry Flange Frame	Single	Class R-PG60 Size Tested 53" x 63"	DP +60/-60	< 0.3
V1 Series	Gliding Patio Door Insert or Installation Flange Frame	Two-Panel, Two-Panel with Blinds-Between-the-Glass	Class R-PG20 Size Tested 72" x 96"	DP +20/-20	< 0.3
V1 Series	Gliding Patio Door Insert or Installation Flange Frame	Two-Panel, Two-Panel with Blinds-Between-the-Glass	Class R-PG35 Size Tested 72" x 80"	DP +35/-35	< 0.3

This performance data is effective October 1, 2018.

Silver Line® Product Series	Silver Line Product Type	Configuration	AAMA/WDMA/CSA 101/IS2/A440 Performance Grade (PG)	+/- Corresponding Design Pressure (DP)	Air Infiltration CFM/FT²
V1 Series	Gliding Patio Door Insert or Installation Flange Frame	Two-Panel, Two-Panel with Blinds-Between-the-Glass	Class R-PG30 Size Tested 76" x 82"	DP +30/-30	< 0.3
V1 Series	Gliding Patio Door Insert or Installation Flange Frame	Two-Panel, Two-Panel with Blinds-Between-the-Glass	Class R-PG25 Size Tested 96" x 82"	DP +25/-25	< 0.3
V1 Series	Gliding Patio Door, HVHZ Upgrade Insert or Installation Flange Frame	Two-Panel, Two-Panel with Blinds-Between-the-Glass	Class R-PG50 Size Tested 72" x 80"	DP +50/-50	< 0.3
V1 Series	Gliding Patio Door Insert or Installation Flange Frame	Three-Panel	Class R-PG20 Size Tested 144" x 80"	DP +20/-20	< 0.3
V1 Series	Gliding Patio Door Insert or Installation Flange Frame	Three-Panel	Class R-PG20 Size Tested 108" x 82"	DP +20/-20	< 0.3
V1 Series	Gliding Patio Door Insert or Installation Flange Frame	Four-Panel	Class R-PG25 Size Tested 142" x 80"	DP +25/-25	< 0.3
V1 Series	Gliding Patio Door Sidelight Insert or Installation Flange Frame	Single	Class R-PG35 Size Tested 96" x 49"	DP +35/-35	< 0.3
V1 Series	Gliding Patio Door Sidelight Insert or Installation Flange Frame	Single	Class R-PG35 Size Tested 49" x 96"	DP +35/-35	< 0.3
V1 Series	Gliding Patio Door Transom Insert or Installation Flange Frame	Single	Class R-PG35 Size Tested 36" x 108"	DP +35/-35	< 0.3
V1 Series	Gliding Patio Door Transom Insert or Installation Flange Frame	Single	Class R-PG35 Size Tested 108" x 36"	DP +35/-35	< 0.3
V1 Series with Coastal Watch Protection	Single-Hung Window, HVHZ Upgrade Masonry Flange or Nailing Flange Frame	Single	Class R-PG55 Size Tested 52" x 73"	DP +55/-55	< 0.3
V1 Series with Coastal Watch Protection	Single-Hung Picture & Specialty Windows Masonry Flange or Nailing Flange Frame	Single	Class R-PG55 Size Tested 53" x 73"	DP +55/-55	< 0.3
V1 Series with Coastal Watch Protection	Single-Hung Picture & Specialty Windows Masonry Flange or Nailing Flange Frame	Single	Class R-PG55 Size Tested 73" x 53"	DP +55/-55	< 0.3