

## TECHNICAL DATA

### Performance Standards

The Window and Door Manufacturers Association (WDMA), The American Architectural Manufacturers Association (AAMA) and the Canadian Standards Association (CSA) have jointly released AAMA/WDMA/CSA 101/I.S. 2/A440-08; North American Fenestration Standard/ Specification for Windows, Doors and Skylights, which calls for using "Performance Grade" as the new rating to describe products that comply to the standard. This new version dated "-08" has been adopted by the 2009 International Building Code (IBC) and the International Residential Code (IRC).

Performance Grade ratings are being used to replace Design Pressure Ratings as the preferred method of measuring product performance throughout the window, door and skylight industry to define products that comply with all of the requirements of the 101/I.S. 2/A440 standard.

A product only achieves a "Performance Grade" or "PG" rating if that product complies with not only the structural loading requirement, but all other performance requirements such as air infiltration resistance, water penetration resistance, ease of operation and resistance to forced entry. A "Design Pressure Rating" or "DP" rating will now describe a product rating that has only been tested to structural loading and not air infiltration, water testing or other requirements for Performance Grade.

### Performance Classes

This 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 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) tests (not shown here) for the applicable product type and desired performance class:

**(a) Operating force (if applicable):** minimum and maximum operating force vary 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 AAMA/WDMA/CSA 101/I.S.2/A440-08. 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 AAMA/WDMA/CSA 101/I.S.2/A440-08) with the load maintained for a period of 60 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.

**Starting with the 2008 specification, 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 AAMA/WDMA/CSA 101/I.S.2/A440-08) with the load maintained for a period of 10 seconds. After loads are removed there shall be 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	22.5	2.90
<b>LC</b>	25	25	37.5	3.75
<b>CW</b>	30	30	45.0	4.50
<b>AW</b>	40	40	60.0	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
<b>WTP</b>	3.00	3.75	4.50	5.25	6.00	6.75	7.50	8.25	9.00
<b>DP</b>	20	25	30	35	40	45	50	55	60
<b>STP</b>	30.0	37.5	45.0	52.5	60.0	67.5	75.0	82.5	90.0
<b>Air</b>	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 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:

	Andersen Corporation 400 SERIES CASEMENT WINDOW Manufacturer Stipulates Conformance as indicated below					
	<table border="1"> <thead> <tr> <th>STANDARD</th> <th>RATING</th> </tr> </thead> <tbody> <tr> <td>AAMA/WDMA/CSA 101/I.S.2/A440-08</td> <td>CLASS LC<sup>(1)</sup> - PG50<sup>(2)</sup> - SIZE TESTED 56 X 71.8 in.<sup>(3)</sup> DP+50/-50<sup>(4)</sup></td> </tr> <tr> <td>AAMA/WDMA/CSA 101/I.S.2/A440-05</td> <td>C-LC50 DP + 50/-50</td> </tr> </tbody> </table>	STANDARD	RATING	AAMA/WDMA/CSA 101/I.S.2/A440-08	CLASS LC <sup>(1)</sup> - PG50 <sup>(2)</sup> - SIZE TESTED 56 X 71.8 in. <sup>(3)</sup> DP+50/-50 <sup>(4)</sup>	AAMA/WDMA/CSA 101/I.S.2/A440-05
STANDARD	RATING					
AAMA/WDMA/CSA 101/I.S.2/A440-08	CLASS LC <sup>(1)</sup> - PG50 <sup>(2)</sup> - SIZE TESTED 56 X 71.8 in. <sup>(3)</sup> DP+50/-50 <sup>(4)</sup>					
AAMA/WDMA/CSA 101/I.S.2/A440-05	C-LC50 DP + 50/-50					

- (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 50 PSF and the size tested is 56" x 71.8". 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 7.5 PSF (test pressure equals 15% of PG), the product tested successfully withstood a laboratory positive and negative structural test at a pressure of 75 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 Performance Grade (PG) based on a variety of criteria (i.e. windspeed zone, building height, 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 Andersen® products perform to this standard, contact your Andersen supplier.

If you need further information about the AAMA/WDMA/CSA 101/I.S.2/A440-08 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

Where designated, Andersen 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, Air Infiltration and Sound Transmission Ratings – 400 Series Windows and Patio Doors

For current performance information please visit [andersenwindows.com](http://andersenwindows.com).

Andersen® Product	AAMA/WDMA/CSA 101/IS2/A440 Performance Grade (PG)	+/- Corresponding Design Pressure (DP)	Sound Transmission Class (STC)	Outdoor/Indoor Transmission Class (OITC)	Air Infiltration CFM/FT <sup>2</sup>
<b>Casement Windows</b>					
Single, Stationary (CXW16)	Class LC-PG50 Size Tested 35" x 71"	50/50	26	22	< 0.3
Single, Venting (CXW16-155, CX16-155)	Class LC-PG40 Size Tested 35" x 71"	45/45	26	22	< 0.3
Single, Venting (CXW15)	Class LC-PG45 Size Tested 71" x 60"	50/50	26	22	< 0.3
Single, Venting (CW16 and smaller)	Class LC-PG50 Size Tested 56" x 71"	50/50	26	22	< 0.3
Single, Venting (CXW145 and smaller)	Class LC-PG50 Size Tested 71" x 52"	50/50	26	22	< 0.3
Single, Venting (CX15 and smaller)	Class LC-PG50 Size Tested 62" x 59"	50/50	26	22	< 0.3
Double, Stationary (CXW245, CX25, CW26 and smaller)	Class LC-PG50 Size Tested 56" x 71"	50/50	26	22	< 0.3
Double, Venting (CXW25)	Class LC-PG45 Size Tested 71" x 60"	45/45	26	22	< 0.3
Double, Venting (CXW245 and smaller)	Class LC-PG50 Size Tested 71" x 52"	50/50	26	22	< 0.3
Double, Venting (CX25 and smaller)	Class LC-PG50 Size Tested 62" x 59"	50/50	26	22	< 0.3
Double, Venting (CW26 and smaller)	Class LC-PG50 Size Tested 56" x 71"	50/50	26	22	< 0.3
Triple, Venting (CW35 and smaller)	Class LC-PG40 Size Tested 84" x 60"	40/40	26	22	< 0.3
Triple, Venting (C35 and smaller)	Class LC-PG50 Size Tested 71" x 60"	50/50	26	22	< 0.3
Casement/Awning Picture Windows (P5060 and smaller)	Class LC-PG70 Size Tested 59" x 71"	70/70	29	25	< 0.3
Casement/Awning Transom Windows (CTR32410 and smaller)	Class LC-PG70 Size Tested 84" x 12"	70/70	29	25	< 0.3
<b>Casement Windows, PG Upgrade</b>					
Single, Stationary (tempered glass, CXW16)	Class LC-PG70 Size Tested 35" x 71"	70/70	n/a	n/a	< 0.3
Single, Venting (CXW145 and smaller)	Class LC-PG70 Size Tested 35" x 52"	70/70	26	22	< 0.3
Single, Venting (CX16 and smaller)	Class LC-PG70 Size Tested 31" x 71"	70/70	26	22	< 0.3
Double, Venting (CW26 and smaller)	Class LC-PG70 Size Tested 56" x 71"	70/70	26	22	< 0.3
Triple, Venting (C35 and smaller)	Class LC-PG70 Size Tested 71" x 59"	70/70	26	22	< 0.3
<b>Complementary Casement Windows</b>					
Casement (venting)	Class CW-PG60 Size Tested 35" x 84"	60/60	n/a	n/a	< 0.3
Casement (stationary)	Class LC-PG60 Size Tested 107" x 84"	60/60	n/a	n/a	< 0.3
French Casement (venting)	Class LC-PG30 Size Tested 56" x 71"	30/30	n/a	n/a	< 0.3
<b>Awning Windows</b>					
Single, Stationary (AXW61)	Class LC-PG50 Size Tested 35" x 71"	50/50	26	21	< 0.3
Single, Venting (AXW51 and smaller)	Class LC-PG35 Size Tested 59" x 35"	35/35	26	21	< 0.3
Single, Venting (AX61 and smaller)	Class LC-PG35 Size Tested 72" x 31"	35/35	26	21	< 0.3
Double, Venting (AXW231 and smaller)	Class LC-PG35 Size Tested 71" x 36"	35/35	26	21	< 0.3
Triple, Venting (AX3251 and smaller)	Class LC-PG35 Size Tested 84" x 31"	35/35	26	21	< 0.3
Triple, Venting (A313 and smaller)	Class LC-PG35 Size Tested 35" x 71"	35/35	26	21	< 0.3
Picture, Venting (PA4060 and smaller)	Class LC-PG35 Size Tested 48" x 71"	35/35	n/a	n/a	< 0.3
<b>Awning Windows, PG Upgrade</b>					
Single, Stationary (tempered glass, AXW61)	Class LC-PG70 Size Tested 35" x 71"	70/70	n/a	n/a	< 0.3
Single, Double & Triple, Venting (AX3251 and smaller)	Class LC-PG60 Size Tested 84" x 31"	60/60	26	21	< 0.3
Triple, Venting (A313 and smaller)	Class LC-PG60 Size Tested 35" x 71"	60/60	26	21	< 0.3

- "Performance Grade (PG)" ratings may vary from tested performance rating for larger or smaller units of a particular type. *continued on next page*
- "Sound Transmission Class (STC)" & "Outdoor/Indoor Transmission Class (OITC)" ratings are for individual units based on independent tests and represent entire unit.
- This data is accurate as of March 2013. Due to ongoing product changes, updated test results, or new industry standards, this data may change over time.
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## TECHNICAL DATA

### Performance Grade, Air Infiltration and Sound Transmission Ratings – 400 Series Windows and Patio Doors *(continued)*

For current performance information please visit [andersenwindows.com](http://andersenwindows.com).

Andersen® Product	AAMA/WDMA/CSA 101/IS2/A440 Performance Grade (PG)	+/- Corresponding Design Pressure (DP)	Sound Transmission Class (STC)	Outdoor/Indoor Transmission Class (OITC)	Air Infiltration CFM/FT <sup>2</sup>
<b>Woodwright® Full-Frame Windows</b>					
Double-Hung (3862 and smaller)	Class LC-PG30 Size Tested 45" x 76"	30/30	27	23	< 0.3
Double-Hung (Cottage Style, 3862 and smaller)	Class R-20 Size Tested 45" x 76"	20/20	27	23	< 0.3
Arch Double-Hung (3862 and smaller)	Class LC-PG35 Size Tested 45" x 76"	35/35	28	23	< 0.3
Springline™ Double-Hung (3862 and smaller)	Class LC-PG30 Size Tested 45" x 76"	30/30	28	23	< 0.3
Picture (5662 and smaller)	Class LC-PG65 Size Tested 67" x 76"	65/65	28	23	< 0.3
Transom (6231 and smaller)	Class LC-PG70 Size Tested 75" x 39"	70/70	28	23	< 0.3
<b>Woodwright® Full-Frame Windows, PG Upgrade</b>					
Double-Hung (3052 and smaller)	Class LC-PG50 Size Tested 37" x 64"	50/50	27	23	< 0.3
<b>Woodwright® Insert Windows</b>					
Double-Hung (3862 and smaller)	Class R-PG25 Size Tested 45" x 77"	25/25	26	21	< 0.3
Double-Hung (Cottage Style, 3862 and smaller)	Class R-PG20 Size Tested 45" x 68"	20/20	26	21	< 0.3
Picture (5662 and smaller)	Class LC-PG30 Size Tested 68" x 78"	30/30	30	26	< 0.3
Transom (6878 and smaller)	Class LC-PG30 Size Tested 68" x 78"	30/35	30	26	< 0.3
<b>Tilt-Wash Full-Frame Windows</b>					
Double-Hung (3862 and smaller)	Class LC-PG30 Size Tested 45" x 76"	30/35	26	23	< 0.3
Double-Hung* (3876 and smaller)	Class LC-PG30 Size Tested 45" x 92"	30/35	26	23	< 0.3
Picture (5662 and smaller)	Class LC-PG50 Size Tested 67" x 76"	50/65	30	25	< 0.3
Transom (6231 and smaller)	Class LC-PG50 Size Tested 75" x 39"	50/50	28	23	< 0.3
<b>Tilt-Wash Windows, PG Upgrade</b>					
Double-Hung	Class LC-PG50 Size Tested 45" x 76"	50/65	26	23	< 0.3
Double-Hung (3456, 3856, 34510, 38510, 3462, 3862)	Class LC-PG50 Size Tested 45" x 76"	50/55	26	23	< 0.3
<b>Tilt-Wash Insert Windows</b>					
Double-Hung (3878 and smaller)	Class R-PG20 Size Tested 45" x 92"	20/20	27	24	< 0.3
Gliding Windows (G65 and smaller)	Class LC-PG30 Size Tested 71" x 59"	30/30	26	22	< 0.3
<b>Specialty Windows</b>					
Arch (AFFW6080 and smaller)	Class LC-PG50 Size Tested 71" x 105"	50/50	30	25	< 0.3
Flexiframe® (12050 and smaller)	Class LC-PG50 Size Tested 144" x 60"	50/50	30	25	< 0.3
Springline™ (SP802 and smaller)	Class LC-PG50 Size Tested 96" x 72"	50/50	30	25	< 0.3
<b>Specialty Windows, PG Upgrade</b>					
Arch (tempered glass, AFFW6080 and smaller)	Class LC-PG70 Size Tested 71" x 105"	70/70	n/a	n/a	< 0.3
Flexiframe® (tempered glass, 12050 and smaller)	Class LC-PG70 Size Tested 144" x 60"	70/70	n/a	n/a	< 0.3
Springline™ (tempered glass, SP802 and smaller)	Class LC-PG70 Size Tested 96" x 72"	70/70	n/a	n/a	< 0.3
<b>Frenchwood® Gliding Patio Doors</b>					
Single-Panel	Class LC-PG40 Size Tested 50" x 95"	40/40	31	26	< 0.3
Two-Panel	Class LC-PG40 Size Tested 95" x 95"	40/40	31	26	< 0.3
Four-Panel (8')	Class LC-PG35 Size Tested 189" x 95"	35/35	31	26	< 0.3

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- Contact your Andersen supplier for more information.
- \*7'-4 3/8" (2250) and 7'-8 7/8" (2359) high units have interior and exterior brackets. Interior brackets, located on each side of the check rail, must be flipped up for proper product performance.

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**Performance Grade, Air Infiltration and Sound Transmission Ratings – 400 Series Windows and Patio Doors** (continued)

For current performance information please visit [andersenwindows.com](http://andersenwindows.com).

Andersen® Product	AAMA/WDMA/CSA 101/IS2/A440 Performance Grade (PG)	+/- Corresponding Design Pressure (DP)	Sound Transmission Class (STC)	Outdoor/Indoor Transmission Class (OITC)	Air Infiltration CFM/FT <sup>2</sup>
<b>Four-Panel</b> (6'-11", 6'-8")	Class LC-PG25 Size Tested 189" x 82"	25/25	31	26	< 0.3
<b>Frenchwood® Hinged Inswing Patio Doors</b>					
<b>Single-Panel</b>	Class LC-PG40 Size Tested 38" x 95"	40/40	32	27	< 0.3
<b>Two-Panel</b>	Class LC-PG40 Size Tested 71" x 95"	40/40	31	26	< 0.3
<b>Three-Panel</b>	Class LC-PG40 Size Tested 107" x 95"	40/40	31	26	< 0.3
<b>Frenchwood® Hinged Outswing Patio Doors</b>					
<b>Single-Panel</b>	Class LC-PG40 Size Tested 38" x 95"	40/40	31	26	< 0.3
<b>Two-Panel</b>	Class LC-PG40 Size Tested 71" x 95"	40/40	31	26	< 0.3
<b>Frenchwood® Hinged Patio Door Sidelights</b>	Class LC-PG65 Size Tested 18" x 95"	65/65	32	26	< 0.3
<b>Frenchwood® Hinged Patio Door Transoms</b>	Class LC-PG65 Size Tested 71" x 21"	65/65	29	25	< 0.3
<b>Complementary Springline™ &amp; Arch Inswing Patio Doors</b>					
<b>Single Stationary</b>	Class LC-PG45 Size Tested 37" x 95"	45/45	30	25	< 0.3
<b>Single Active**</b>	Class LC-PG45 Size Tested 37" x 95"	45/45	30	25	< 0.3
<b>Two Panel Stationary</b>	Class LC-PG45 Size Tested 75" x 95"	45/45	30	25	< 0.3
<b>Two Panel Active**</b>	Class LC-PG45 Size Tested 75" x 95"	45/45	30	25	< 0.3
<b>Complementary Springline™ &amp; Arch Outswing Patio Doors</b>					
<b>Single Stationary</b>	Class LC-PG45 Size Tested 37" x 95"	45/45	31	25	< 0.3
<b>Single Active**</b>	Class LC-PG45 Size Tested 37" x 95"	45/45	31	25	< 0.3
<b>Two Panel Stationary</b>	Class LC-PG45 Size Tested 75" x 95"	45/45	31	25	< 0.3
<b>Two Panel Active**</b>	Class LC-PG45 Size Tested 75" x 95"	45/45	31	25	< 0.3

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- Contact your Andersen supplier for more information.
- \*\*Tested with standard multi-point hardware.

**Performance Grade, Air Infiltration and Sound Transmission Ratings – Folding Doors**

For current performance information please visit [andersenwindows.com](http://andersenwindows.com).

Andersen® Product	AAMA/WDMA/CSA 101/IS2/A440 Performance Grade (PG)	+/- Corresponding Design Pressure (DP)	Sound Transmission Class (STC)	Outdoor/Indoor Transmission Class (OITC)	Air Infiltration CFM/FT <sup>2</sup>
<b>Folding Outswing Doors</b>					
<b>1L3R</b>	Class SP-PG30 Size Tested 288" x 119"**	30/30	30	24	< 0.3
<b>2L2R</b>	Class SP-PG30 Size Tested 159" x 119"**	30/30	30	24	< 0.3

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- Contact your Andersen supplier for more information.
- \*Actual door size tested; certification maximum door size 288" x 119 1/2".

## TECHNICAL DATA

### Performance Grade, Air Infiltration and Sound Transmission Ratings – Residential Entry Doors

For current performance information please visit [andersenwindows.com](http://andersenwindows.com).

Andersen® Product	AAMA/WDMA/CSA 101/IS2/A440 Performance Grade (PG)	+/- Corresponding Design Pressure (DP)	Sound Transmission Class (STC)	Outdoor/Indoor Transmission Class (OITC)	Air Infiltration CFM/FT <sup>2</sup>
<b>Residential Springline™ Inswing Entry Door††</b>					
Single Stationary	Class LC-PG30 Size Tested 86" x 95"	30/35	30	25	< 0.3
Single Active**	Class LC-PG30 Size Tested 86" x 95"	30/35	30	25	< 0.3
Two Panel Stationary	Class LC-PG30 Size Tested 86" x 95"	30/35	30	25	< 0.3
Two Panel Active**	Class LC-PG30 Size Tested 86" x 95"	30/35	30	25	< 0.3
<b>Residential Springline™ Outswing Entry Door††</b>					
Single Stationary	Class LC-PG30 Size Tested 86" x 95"	30/30	31	25	< 0.3
Single Active**	Class LC-PG30 Size Tested 86" x 95"	30/30	31	25	< 0.3
Two Panel Stationary	Class LC-PG30 Size Tested 86" x 95"	30/30	31	25	< 0.3
Two Panel Active**	Class LC-PG30 Size Tested 86" x 95"	30/30	31	25	< 0.3
<b>Residential Arch Inswing Entry Doors††</b>					
Single Stationary	Class LC-PG30 Size Tested 86" x 95"	30/35	30	25	< 0.3
Single Active**	Class LC-PG30 Size Tested 86" x 95"	30/35	30	25	< 0.3
Two Panel Stationary	Class LC-PG30 Size Tested 86" x 95"	30/35	30	25	< 0.3
Two Panel Active**	Class LC-PG30 Size Tested 86" x 95"	30/35	30	25	< 0.3
<b>Residential Arch Outswing Entry Doors††</b>					
Single Stationary	Class LC-PG30 Size Tested 86" x 95"	30/30	31	25	< 0.3
Single Active**	Class LC-PG30 Size Tested 86" x 95"	30/30	31	25	< 0.3
Two Panel Stationary	Class LC-PG30 Size Tested 86" x 95"	30/30	31	25	< 0.3
Two Panel Active**	Class LC-PG30 Size Tested 86" x 95"	30/30	31	25	< 0.3
<b>Residential Rectangular Inswing Entry Door††</b>					
Single Stationary	Class LC-PG30 Size Tested 86" x 95"	30/35	30	25	< 0.3
Single Active**	Class LC-PG30 Size Tested 86" x 95"	30/35	30	25	< 0.3
Single Active (latch & deadbolt)	Class LC-PG25 Size Tested 74" x 95"	25/25	30	25	< 0.3
Two Panel Stationary	Class LC-PG30 Size Tested 86" x 95"	30/35	30	25	< 0.3
Two Panel Active**	Class LC-PG30 Size Tested 86" x 95"	30/35	30	25	< 0.3
Two Panel Active (latch & deadbolt)	Class LC-PG25 Size Tested 74" x 95"	25/25	30	25	< 0.3
<b>Residential Rectangular Outswing Entry Door††</b>					
Single Stationary	Class LC-PG30 Size Tested 86" x 95"	30/30	31	25	< 0.3
Single Active**	Class LC-PG30 Size Tested 86" x 95"	30/30	31	25	< 0.3
Single Active (latch & deadbolt)	Class LC-PG25 Size Tested 74" x 95"	25/25	31	25	< 0.3
Two Panel Stationary	Class LC-PG30 Size Tested 86" x 95"	30/30	31	25	< 0.3
Two Panel Active**	Class LC-PG30 Size Tested 86" x 95"	30/30	31	25	< 0.3
Two Panel Active (latch & deadbolt)	Class LC-PG25 Size Tested 74" x 95"	25/25	31	25	< 0.3
Residential Inswing Entry Door Sidelights	Class LC-PG35 Size Tested 28" x 95"	35/35	n/a	n/a	< 0.3
Residential Outswing Entry Doors Sidelights	Class LC-PG35 Size Tested 28" x 95"	35/35	n/a	n/a	< 0.3

- "Performance Grade (PG)" ratings may vary from tested performance rating for larger or smaller units of a particular type.
- "Sound Transmission Class (STC)" & "Outdoor/Indoor Transmission Class (OITC)" ratings are for individual units based on independent tests and represent entire unit.
- This data is accurate as of March 2013. Due to ongoing product changes, updated test results, or new industry standards, this data may change over time.
- Where designated, Andersen 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 Andersen supplier for more information.
- \*\*Tested with standard multi-point hardware.
- ††Sound Transmission Class (STC) and Outdoor/Indoor Transmission Class (OITC) for full light panel style.

**Performance Grade, Air Infiltration and Sound Transmission Ratings – Commercial Entry Doors**

For current performance information please visit [andersenwindows.com](http://andersenwindows.com).

Andersen® Product	AAMA/WDMA/CSA 101/IS2/A440 Performance Grade (PG)	+/- Corresponding Design Pressure (DP)	Sound Transmission Class (STC)	Outdoor/Indoor Transmission Class (OITC)	Air Infiltration CFM/FT <sup>2</sup>
<b>Commercial Rectangular Outswing Entry Door<sup>††</sup></b>					
Single Stationary	Class LC-PG35 Size Tested 45" x 95"	35/35	27	24	< 0.3
Two Panel Stationary	Class LC-PG35 Size Tested 74" x 95"	35/35	27	22	< 0.3
Commercial Outswing Entry Door Sidelights <sup>††</sup>	Class LC-PG30 Size Tested 28" x 95"	30/30	27	24	< 0.3
Andersen® Product	ASTM E330-02	Structural Rating (DP)	Sound Transmission Class (STC)	Outdoor/Indoor Transmission Class (OITC)	Air Infiltration CFM/FT <sup>2</sup>
<b>Commercial Rectangular Outswing Entry Door<sup>††</sup></b>					
Single Active (latch & deadbolt)	SHED +/- 35 Size Tested 45" x 95"	DP35	27	24	n/a
Two Panel Active (latch & deadbolt)	SHED +/- 35 Size Tested 74" x 95"	DP35	27	22	n/a
Two Panel Active (panic hardware)	SHED +/- 25 Size Tested 74" x 95"	DP25	27	22	n/a

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  - "Sound Transmission Class (STC)" & "Outdoor/Indoor Transmission Class (OITC)" ratings are for individual units based on independent tests and represent entire unit.
  - This data is accurate as of March 2013. Due to ongoing product changes, updated test results, or new industry standards, this data may change over time.
  - Where designated, Andersen 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 Andersen supplier for more information.
- <sup>††</sup>Sound Transmission Class (STC) and Outdoor/Indoor Transmission Class (OITC) for full light panel style.

**Performance Grade, Air Infiltration and Sound Transmission Ratings – 200 Series Windows and Patio Doors**

For current performance information please visit [andersenwindows.com](http://andersenwindows.com).

Andersen® Product	AAMA/WDMA/CSA 101/IS2/A440 Performance Grade (PG)	+/- Corresponding Design Pressure (DP)	Sound Transmission Class (STC)	Outdoor/Indoor Transmission Class (OITC)	Air Infiltration CFM/FT <sup>2</sup>
<b>Tilt-Wash Double-Hung, Half Circle &amp; Picture Windows</b>					
Double-Hung	Class LC-PG30 Size Tested 39" x 71"	30/30	27	22	< 0.3
Half Circle	Class LC-PG50 Size Tested 75" x 40"	50/50	29	24	< 0.3
Picture	Class LC-PG50 Size Tested 71" x 59"	50/50	29	24	< 0.3
Gliding Windows	Class R-PG20 Size Tested 71" x 59"	20/20	27	22	< 0.3
<b>Narroline® Gliding Patio Doors</b>					
Single-Panel	Class LC-PG40 Size Tested 50" x 95"	40/40	30	24	< 0.3
Two-Panel (6068)	Class LC-PG35 Size Tested 71" x 79"	35/35	30	24	< 0.3
Two-Panel (60611)	Class LC-PG40 Size Tested 71" x 82"	40/40	30	24	< 0.3
Two-Panel (8080)	Class LC-PG25 Size Tested 95" x 95"	25/25	30	24	< 0.3
Two-Panel (6080)	Class LC-PG30 Size Tested 71" x 95"	30/30	30	24	< 0.3
Four-Panel	Class LC-PG25 Size Tested 189" x 95"	25/25	30	24	< 0.3
<b>Perma-Shield® Gliding Patio Doors</b>					
Single-Panel	Class LC-PG45 Size Tested 50" x 95"	45/45	30	24	< 0.3
Two-Panel	Class LC-PG25 Size Tested 96" x 95"	25/25	29	23	< 0.3
Perma-Shield® Gliding Patio Doors, PG Upgrade (60611, 6068)	Class LC-PG40 Size Tested 96" x 82"	40/40	29	23	< 0.3
<b>Hinged Inswing Patio Doors</b>					
Single-Panel	Class LC-PG30 Size Tested 38" x 95"	30/30	30	24	< 0.3
Two-Panel	Class LC-PG30 Size Tested 71" x 95"	30/30	30	24	< 0.3

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- "Sound Transmission Class (STC)" & "Outdoor/Indoor Transmission Class (OITC)" ratings are for individual units based on independent tests and represent entire unit.
- This data is accurate as of March 2013. Due to ongoing product changes, updated test results, or new industry standards, this data may change over time.
- Where designated, Andersen 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 Andersen supplier for more information.