

CE Product Performance and Information

Manual History	1.2
How to use this Manual	1.3
Product Performance – Windows	1.4
Thermal Performance – Awning	1.5
Thermal Performance – Casement	1.6
Thermal Performance – Double Hung	1.7
Thermal Performance – Direct Glaze Polygon	1.8
Thermal Performance – Inswing French Door	1.9
Thermal Performance – Outswing French Door	1.10
Thermal Performance – Sliding French Door	1.11
Thermal Performance – Sliding French Door OXXO	1.12
Thermal Performance – Sliding Patio Door	1.13

ATTENTION:

- Specifications and technical data are subject to change without notice.
- Dimensions in parenthesis are in millimeters or square meters
- Allow 1/16" (2) tolerance on all measurements.
- For answers to technical questions about Integrity products you may call our Integrity Support Line: 1-218-386-1430.
- Website: www.integritywindows.com/CE

MANUAL HISTORY

On the bottom left hand corner of each page is a date and year that will help the user identify when a change has been made to the information contained on the page. The most current version of the manual can be found at www.integritywindowsce.com. The chart below details when the paper copy of the revised manual was printed along with the corresponding month and date.

PRINT DATE	NOTES/MEMO TOPIC
August 2013	Original Release of Product Performance Chapter for CE and updates to existing Integrity Wood-Ultrex Casement / Awning, Wood-Ultrex Double Hung, and Wood-Ultrex Direct Glaze Polygon ADM chapters
October 2014	Original Release of Product Performance Chapter for CE and updates to existing Integrity Wood-Ultrex Sliding Patio Door, Wood-Ultrex Sliding French Door, Wood-Ultrex Inswing French Door, Wood-Ultrex Outswing French Door ADM chapters. Updated glass naming conventions to call out Low E1, E2, and E3.

HOW TO USE THIS MANUAL

Manual Objectives:

The content of this manual will aid in understanding the wide variety of standards, codes, and regulations governing the use of windows and doors. Consumer-friendly information on a variety of highly-rated Integrity Windows and Door products along with fenestration standards, including glazing, Ultrex finishes, and overall product performance can be used to help your clients understand what products best fit their project needs.

Intended Audience:

This manual is primarily intended for professionals who:

- Provide shop drawings, sales and service to customers
- Write job specifications
- Need further product knowledge

Sources of Additional Help:

- Our Website: integritywindows.com
- CSI specifications
- Installation Instructions
- Warranty Information
- Care and Maintenance
- Owner's Manual
- Parts Manual

The online version of this document is the document of record and will be the most current version. Specifications and technical data are subject to change without notice.

Product Notes:

- Allow 1/16" (2) tolerance on all measurements
- Number in parentheses () following measurements are metric equivalents in millimeters to the nearest whole number.
- For accessories, dimensions and application, see the Accessories chapter in this manual.
- All measurements for Rough Opening, Masonry Opening, Frame Size Casing OM are rounded to the nearest 1/16th of an inch. Rounded fractions for Glass Size, Daylight Opening are to the nearest 32nd of an inch.
- E = (Egress): Windows that meets the requirements for Egress. Please note that the top of the sill must be no more than 44" (1118) from the floor. Code restrictions may vary depending on your local building codes.

Trademark Information:

- The following trademarks are referenced in this manual.
- E-Gard is a registered trademark of Truth Hardware
- Low E2, E3, and E1, this naming convention is no longer Trademarked.

How to Submit Suggestions

- Comments or suggestions regarding this publication can be directed to Technical Publications. Marvin Window and Door, P.O. Box 100, Warroad, MN 56763 or call (218) 386-1430 or 1-800-346-5044

PRODUCT PERFORMANCE – WINDOWS

Product and Configuration	Maximum Size Tested				Wind Load	Watertightness	Air Permeability
	Width	Height	Width	Height			
	Millimeters		Inches				
Integrity Awning	1219	1197	48"	47 1/8"	A2	7A	3
Integrity Awning (Stationary)	1219	1197	48"	47 1/8"	A2	7A	3
Integrity Casement	914	1807	36"	71 1/8"	A2	3A	3
Integrity Casement (Stationary)	914	1807	36"	71 1/8"	A2	3A	3
Integrity Traditional Double Hung	1054	1924	41 1/2"	75 3/4"	A3	6A	3
Integrity Direct Glaze Casement	2134	2134	84"	84"	C5	8A	4
Integrity Direct Glaze Double Hung / Door	2134	2134	84"	84"	C5	8A	4
Integrity Inswing French Door	1804	2426	71"	95 1/2"	NPD	NPD	NPD
Integrity Outswing French Door	1804	2426	71"	95 1/2"	NPD	NPD	NPD
Integrity Sliding French Door	2426	2426	95 1/2"	95 1/2"	NPD	NPD	NPD
Integrity Sliding Patio Door	2705	2083	106 1/2"	82"	NPD	NPD	NPD

THERMAL PERFORMANCE – AWNING

Size	Millimeters	Inches
Smallest	610 x 486	24 x 19 1/8
Middle	914 x 892	36 x 35 1/8
Largest	1219 x 1197	48 x 47 1/8

Formula for units with dividers	
Divider Type	U value
CE GBG	+0.2
CE SDLS	+0.2
CE SDLN	+0.0

CERTIFIED THERMAL UNIT VALUES									
Glass Options	Glass Thickness	U Value Smallest	U Value Middle	U Value Largest	g Value (Solar Gain)	Visible Transmittance	Ug	PSI	Uf
3.9mm Low E2 / 9.8mm air / 3.9mm clr	18 mm (11/16") Dual	2.00	1.90	1.90	0.44	0.72	1.80	0.05	1.60
3.9mm Low E2 / 9.8mm argon / 3.9mm clr	18 mm (11/16") Dual	1.80	1.60	1.60	0.44	0.72	1.40	0.05	1.60
3.9mm Low E3 / 9.8mm air / 3.9mm clr	18 mm (11/16") Dual	1.90	1.90	1.90	0.31	0.64	1.80	0.05	1.60
3.9mm Low E3 / 9.8mm argon / 3.9mm clr	18 mm (11/16") Dual	1.70	1.60	1.60	0.31	0.64	1.40	0.05	1.60
3.9mm clr / 9.8mm air / Low E1 3.9mm	18 mm (11/16") Dual	2.00	2.00	2.00	0.68	0.79	1.90	0.05	1.60
3.9mm clr / 9.8mm argon / Low E1 3.9mm	18 mm (11/16") Dual	1.80	1.70	1.70	0.68	0.79	1.50	0.05	1.60
3.1mm Low E2 / 11.5mm air / 3.1mm clr	18 mm (11/16") Dual	1.90	1.80	1.70	0.45	0.72	1.60	0.04	1.60
3.1mm Low E2 / 11.5mm argon / 3.1mm clr	18 mm (11/16") Dual	1.70	1.50	1.50	0.45	0.72	1.30	0.04	1.60
3.1mm Low E3 / 11.5mm air / 3.1mm clr	18 mm (11/16") Dual	1.80	1.80	1.70	0.31	0.65	1.60	0.04	1.60
3.1mm Low E3 / 11.5mm argon / 3.1mm clr	18 mm (11/16") Dual	1.60	1.50	1.40	0.31	0.65	1.20	0.04	1.60
3.1mm clr / 11.5mm air / Low E1 3.1mm	18 mm (11/16") Dual	1.90	1.80	1.80	0.70	0.79	1.70	0.04	1.60
3.1mm clr / 11.5mm argon / Low E1 3.1mm	18 mm (11/16") Dual	1.70	1.60	1.60	0.70	0.79	1.40	0.04	1.60
3.1mm Low E2 / 9.8mm air / 3.1mm clr / 9.8mm air / Low E1 3.1mm	29 mm (1 1/8") Tripane	1.50	1.40	1.30	0.41	0.63	1.10	0.04	1.50
3.1mm Low E2 / 9.8mm argon / 3.1mm clr / 9.8mm argon / Low E1 3.1mm	29 mm (1 1/8") Tripane	1.40	1.20	1.10	0.40	0.63	0.80	0.04	1.50

THERMAL PERFORMANCE – CASEMENT

Size	Millimeters	Inches
Smallest	406 x 791	16 x 31 1/8
Middle	711 x 1197	28 x 47 1/8
Largest	914 x 1807	36 x 71 1/8

Formula for units with dividers	
Divider Type	U value
CE GBG	+0.2
CE SDLS	+0.2
CE SDLN	+0.0

CERTIFIED THERMAL UNIT VALUES									
Glass Options	Glass Thickness	U Value Smallest	U Value Middle	U Value Largest	g Value (Solar Gain)	Visible Transmittance	Ug	PSI	Uf
3.9mm Low E2 / 9.8mm air / 3.9mm clr	18 mm (11/16") Dual	2.00	1.90	1.90	0.44	0.72	1.80	0.05	1.60
3.9mm Low E2 / 9.8mm argon / 3.9mm clr	18 mm (11/16") Dual	1.80	1.70	1.60	0.44	0.72	1.40	0.05	1.60
3.9mm Low E3 / 9.8mm air / 3.9mm clr	18 mm (11/16") Dual	2.00	1.90	1.90	0.31	0.64	1.80	0.05	1.60
3.9mm Low E3 / 9.8mm argon / 3.9mm clr	18 mm (11/16") Dual	1.70	1.60	1.60	0.31	0.64	1.40	0.05	1.60
3.9mm clr / 9.8mm air / Low E1 3.9mm	18 mm (11/16") Dual	2.00	2.00	2.00	0.68	0.79	1.90	0.05	1.60
3.9mm clr / 9.8mm argon / Low E1 3.9mm	18 mm (11/16") Dual	1.80	1.70	1.70	0.68	0.79	1.50	0.05	1.60
3.1mm Low E2 / 11.5mm air / 3.1mm clr	18 mm (11/16") Dual	1.90	1.80	1.80	0.45	0.72	1.60	0.04	1.60
3.1mm Low E2 / 11.5mm argon / 3.1mm clr	18 mm (11/16") Dual	1.70	1.50	1.50	0.45	0.72	1.30	0.04	1.60
3.1mm Low E3 / 11.5mm air / 3.1mm clr	18 mm (11/16") Dual	1.80	1.80	1.70	0.31	0.65	1.60	0.04	1.60
3.1mm Low E3 / 11.5mm argon / 3.1mm clr	18 mm (11/16") Dual	1.60	1.50	1.40	0.31	0.65	1.20	0.04	1.60
3.1mm clr / 11.5mm air / Low E1 3.1mm	18 mm (11/16") Dual	1.90	1.90	1.80	0.70	0.79	1.70	0.04	1.60
3.1mm clr / 11.5mm argon / Low E1 3.1mm	18 mm (11/16") Dual	1.70	1.60	1.60	0.70	0.79	1.40	0.04	1.60
3.1mm Low E2 / 9.8mm air / 3.1mm clr / 9.8mm air / Low E1 3.1mm	29 mm (1 1/8") Tripane	1.50	1.40	1.30	0.41	0.63	1.10	0.04	1.50
3.1mm Low E2 / 9.8mm argon / 3.1mm clr / 9.8mm argon / Low E1 3.1mm	29 mm (1 1/8") Tripane	1.40	1.20	1.10	0.40	0.63	0.80	0.04	1.50

THERMAL PERFORMANCE – DOUBLE HUNG

Size	Millimeters	Inches
Smallest	546 x 908	21 1/2 x 35 3/4
Middle	851 x 1518	33 1/2 x 59 3/4
Largest	1054 x 1924	41 1/2 x 75 3/4

Formula for units with dividers	
Divider Type	U value
CE GBG	+0.2
CE SDLS	+0.2
CE SDLN	+0.0

CERTIFIED THERMAL UNIT VALUES									
Glass Options	Glass Thickness	U Value Smallest	U Value Middle	U Value Largest	g Value (Solar Gain)	Visible Transmittance	Ug	PSI	Uf
3.1mm Low E2 / 11.5mm air / 3.1mm clr	18 mm (11/16") Dual	2.20	2.00	1.90	0.45	0.72	1.60	0.05	1.80
3.1mm Low E2 / 11.5mm argon / 3.1mm clr	18 mm (11/16") Dual	2.00	1.80	1.70	0.45	0.72	1.30	0.05	1.80
3.1mm Low E3 / 11.5mm air / 3.1mm clr	18 mm (11/16") Dual	2.20	2.00	1.90	0.31	0.65	1.60	0.05	1.80
3.1mm Low E3 / 11.5mm argon / 3.1mm clr	18 mm (11/16") Dual	2.00	1.70	1.60	0.31	0.65	1.20	0.05	1.80
3.1mm clr / 11.5mm air / Low E1 3.1mm	18 mm (11/16") Dual	2.20	2.10	2.00	0.70	0.79	1.70	0.05	1.80
3.1mm clr / 11.5mm argon / Low E1 3.1mm	18 mm (11/16") Dual	2.00	1.80	1.80	0.70	0.79	1.40	0.05	1.80

THERMAL PERFORMANCE – DIRECT GLAZE POLYGON

Size	Millimeters	Inches
Smallest	327 x 327	12 7/8 x 12 7/8
Middle	1231 x 1231	48 7/16 x 47 7/16
Largest	2134 x 2134	84 x 84

Formula for units with dividers	
Divider Type	U value
CE GBG	+0.2
CE SDLS	+0.2
CE SDLN	+0.0

CERTIFIED THERMAL UNIT VALUES									
Glass Options	Glass Thickness	U Value Smallest	U Value Middle	U Value Largest	g Value (Solar Gain)	Visible Transmittance	Ug	PSI	Uf
3.9mm Low E2 / 9.8mm air / 3.9mm clr	18 mm (11/16") Dual	2.20	2.00	1.90	0.44	0.72	1.80	0.06	1.70
3.9mm Low E2 / 9.8mm argon / 3.9mm clr	18 mm (11/16") Dual	2.10	1.70	1.60	0.44	0.72	1.40	0.06	1.70
3.9mm Low E3 / 9.8mm air / 3.9mm clr	18 mm (11/16") Dual	2.20	1.90	1.90	0.31	0.64	1.80	0.06	1.70
3.9mm Low E3 / 9.8mm argon / 3.9mm clr	18 mm (11/16") Dual	2.10	1.60	1.50	0.31	0.64	1.40	0.06	1.70
3.9mm clr / 9.8mm air / Low E1 3.9mm	18 mm (11/16") Dual	2.30	2.00	2.00	0.68	0.79	1.90	0.06	1.70
3.9mm clr / 9.8mm argon / Low E1 3.9mm	18 mm (11/16") Dual	2.10	1.70	1.70	0.68	0.79	1.50	0.06	1.70
3.1mm Low E2 / 11.5mm air / 3.1mm clr	18 mm (11/16") Dual	2.10	1.80	1.70	0.45	0.72	1.60	0.06	1.70
3.1mm Low E2 / 11.5mm argon / 3.1mm clr	18 mm (11/16") Dual	2.00	1.50	1.40	0.45	0.72	1.30	0.06	1.70
3.1mm Low E3 / 11.5mm air / 3.1mm clr	18 mm (11/16") Dual	2.10	1.80	1.70	0.31	0.65	1.60	0.06	1.70
3.1mm Low E3 / 11.5mm argon / 3.1mm clr	18 mm (11/16") Dual	2.00	1.50	1.40	0.31	0.65	1.20	0.06	1.70
3.1mm clr / 11.5mm air / Low E1 3.1mm	18 mm (11/16") Dual	2.20	1.90	1.80	0.70	0.79	1.70	0.06	1.70
3.1mm clr / 11.5mm argon / Low E1 3.1mm	18 mm (11/16") Dual	2.00	1.60	1.50	0.70	0.79	1.40	0.06	1.70
3.1mm Low E2 / 9.8mm air / 3.1mm clr / 9.8mm air / Low E1 3.1mm	29 mm (1 1/8") Tripane	1.70	1.30	1.20	0.41	0.63	1.10	0.06	1.30
3.1mm Low E2 / 9.8mm argon / 3.1mm clr / 9.8mm argon / Low E1 3.1mm	29 mm (1 1/8") Tripane	1.60	1.10	1.00	0.40	0.63	0.80	0.06	1.30
3.9mm Low E2 / 9.8mm air / 3.9mm clr / 9.8mm air / Low E1 3.9mm	29 mm (1 1/8") Tripane	1.80	1.30	1.20	0.39	0.63	1.10	0.07	1.30
3.9mm Low E2 / 9.8mm argon / 3.9mm clr / 9.8mm argon / Low E1 3.9mm	29 mm (1 1/8") Tripane	1.60	1.10	1.00	0.39	0.63	0.80	0.07	1.30

THERMAL PERFORMANCE – INSWING FRENCH DOOR

Size	Millimeters	Inches
Smallest	770 x 2019	30 5/16 x 79 1/2
Middle	1287 x 2222	50 11/16 x 87 1/2
Largest	1804 x 2426	71 x 95 1/2

Formula for units with dividers	
Divider Type	U value
CE GBG	+0.2
CE SDLS	+0.2
CE SDLN	+0.0

CERTIFIED THERMAL UNIT VALUES									
Glass Options	Glass Thickness	U Value Smallest	U Value Middle	U Value Largest	g Value (Solar Gain)	Visible Transmittance	Ug	PSI	Uf
3.9mm clr / 11.5mm argon / Low E1 3.9mm	19 mm (3/4") Dual	2.10	1.90	1.80	0.68	0.79	1.40	0.06	2.00
3.9mm Low E2 / 11.5mm air / 3.9mm clr	19 mm (3/4") Dual	2.20	2.00	1.90	0.44	0.72	1.60	0.06	2.00
3.9mm Low E2 / 11.5mm argon / 3.9mm clr	19 mm (3/4") Dual	2.00	1.80	1.70	0.44	0.72	1.30	0.06	2.00
3.9mm Low E3 / 11.5mm air / 3.9mm clr	19 mm (3/4") Dual	2.20	2.00	1.90	0.31	0.64	1.60	0.06	2.00
3.9mm Low E3 / 11.5mm argon / 3.9mm clr	19 mm (3/4") Dual	2.00	1.80	1.70	0.31	0.64	1.20	0.06	2.00
3.1mm Low E2 / 13.0mm air / 3.1mm clr	19 mm (3/4") Dual	2.10	1.90	1.80	0.45	0.72	1.50	0.06	2.00
3.1mm Low E2 / 13.0mm argon / 3.1mm clr	19 mm (3/4") Dual	2.00	1.70	1.60	0.45	0.72	1.20	0.06	2.00
3.1mm Low E3 / 13.0mm air / 3.1mm clr	19 mm (3/4") Dual	2.10	1.90	1.80	0.31	0.65	1.50	0.06	2.00
3.1mm Low E3 / 13.0mm argon / 3.1mm clr	19 mm (3/4") Dual	2.00	1.70	1.60	0.31	0.65	1.10	0.06	2.00
3.1mm clr / 13.0mm air / Low E1 3.1mm	19 mm (3/4") Dual	2.20	2.00	1.90	0.70	0.79	1.60	0.06	2.00
3.1mm clr / 13.0mm argon / Low E1 3.1mm	19 mm (3/4") Dual	2.00	1.80	1.70	0.70	0.79	1.30	0.06	2.00
3.9mm clr / 11.5mm air / Low E1 3.9mm	19 mm (3/4") Dual	2.20	2.00	2.00	0.68	0.79	1.70	0.06	2.00

THERMAL PERFORMANCE – OUTSWING FRENCH DOOR

Size	Millimeters	Inches
Smallest	770 x 2019	30 5/16 x 79 1/2
Middle	1287 x 2222	50 11/16 x 87 1/2
Largest	1804 x 2426	71 x 95 1/2

Formula for units with dividers	
Divider Type	U value
CE GBG	+0.2
CE SDLS	+0.2
CE SDLN	+0.0

CERTIFIED THERMAL UNIT VALUES									
Glass Options	Glass Thickness	U Value Smallest	U Value Middle	U Value Largest	g Value (Solar Gain)	Visible Transmittance	Ug	PSI	Uf
3.9mm Low E2 / 11.5mm air / 3.9mm clr	19 mm (3/4") Dual	2.10	2.00	1.90	0.44	0.72	1.60	0.06	2.00
3.9mm Low E2 / 11.5mm argon / 3.9mm clr	19 mm (3/4") Dual	2.00	1.80	1.70	0.44	0.72	1.30	0.06	2.00
3.9mm Low E3 / 11.5mm air / 3.9mm clr	19 mm (3/4") Dual	2.10	1.90	1.90	0.31	0.64	1.60	0.06	2.00
3.9mm Low E3 / 11.5mm argon / 3.9mm clr	19 mm (3/4") Dual	2.00	1.70	1.60	0.31	0.64	1.20	0.06	2.00
3.1mm Low E2 / 13.0mm air / 3.1mm clr	19 mm (3/4") Dual	2.10	1.90	1.80	0.45	0.72	1.50	0.06	2.00
3.1mm Low E2 / 13.0mm argon / 3.1mm clr	19 mm (3/4") Dual	1.90	1.70	1.60	0.45	0.72	1.20	0.06	2.00
3.1mm Low E3 / 13.0mm air / 3.1mm clr	19 mm (3/4") Dual	2.10	1.90	1.80	0.31	0.65	1.50	0.06	2.00
3.1mm Low E3 / 13.0mm argon / 3.1mm clr	19 mm (3/4") Dual	1.90	1.70	1.60	0.31	0.65	1.10	0.06	2.00
3.1mm clr / 13.0mm air / LoE 180 3.1mm	19 mm (3/4") Dual	2.10	1.90	1.90	0.70	0.79	1.60	0.06	2.00
3.1mm clr / 13.0mm argon / LoE 180 3.1mm	19 mm (3/4") Dual	2.00	1.80	1.70	0.70	0.79	1.30	0.06	2.00
3.9mm clr / 11.5mm air / LoE 180 3.9mm	19 mm (3/4") Dual	2.20	2.00	2.00	0.68	0.79	1.70	0.06	2.00
3.9mm clr / 11.5mm argon / LoE 180 3.9mm	19 mm (3/4") Dual	2.00	1.80	1.70	0.68	0.79	1.40	0.06	2.00

THERMAL PERFORMANCE – SLIDING FRENCH DOOR

Size	Millimeters	Inches
Smallest	1498 x 2019	59 x 79 1/2
Middle	2102 x 2222	82 3/4 x 87 1/2
Largest	2426 x 2426	95 1/2 x 95 1/2

Formula for units with dividers	
Divider Type	U value
CE GBG	+0.2
CE SDL5	+0.2
CE SDLN	+0.0

CERTIFIED THERMAL UNIT VALUES									
Glass Options	Glass Thickness	U Value Smallest	U Value Middle	U Value Largest	g Value (Solar Gain)	Visible Transmittance	Ug	PSI	Uf
3.9mm Low E2 / 11.5mm air / 3.9mm clr	19 mm (3/4") Dual	1.90	1.90	1.80	0.44	0.72	1.60	0.06	2.00
3.9mm Low E2 / 11.5mm argon / 3.9mm clr	19 mm (3/4") Dual	1.70	1.60	1.60	0.44	0.72	1.30	0.06	2.00
3.9mm Low E3 / 11.5mm air / 3.9mm clr	19 mm (3/4") Dual	1.90	1.80	1.80	0.31	0.64	1.60	0.06	2.00
3.9mm Low E3 / 11.5mm argon / 3.9mm clr	19 mm (3/4") Dual	1.70	1.60	1.50	0.31	0.64	1.20	0.06	2.00
3.1mm Low E2 / 13.0mm air / 3.1mm clr	19 mm (3/4") Dual	1.90	1.80	1.70	0.45	0.72	1.50	0.05	2.00
3.1mm Low E2 / 13.0mm argon / 3.1mm clr	19 mm (3/4") Dual	1.60	1.60	1.50	0.45	0.72	1.20	0.05	2.00
3.1mm Low E3 / 13.0mm air / 3.1mm clr	19 mm (3/4") Dual	1.80	1.80	1.70	0.31	0.65	1.50	0.05	2.00
3.1mm Low E3 / 13.0mm argon / 3.1mm clr	19 mm (3/4") Dual	1.60	1.50	1.50	0.31	0.65	1.10	0.05	2.00
3.1mm clr / 13.0mm air / Low E1 3.1mm	19 mm (3/4") Dual	1.90	1.80	1.80	0.70	0.79	1.60	0.05	2.00
3.1mm clr / 13.0mm argon / Low E1 3.1mm	19 mm (3/4") Dual	1.70	1.60	1.60	0.70	0.79	1.30	0.05	2.00
3.9mm clr / 11.5mm air / Low E1 3.9mm	19 mm (3/4") Dual	2.00	1.90	1.90	0.68	0.79	1.70	0.06	2.00
3.9mm clr / 11.5mm argon / Low E1 3.9mm	19 mm (3/4") Dual	1.80	1.70	1.70	0.68	0.79	1.40	0.06	2.00

THERMAL PERFORMANCE – SLIDING FRENCH DOOR OXXO

Size	Millimeters	Inches
Smallest	2971 x 2019	117 x 79 1/2
Middle	3886 x 2222	153 x 87 1/2
Largest	4801 x 2426	189 x 95 1/2

Formula for units with dividers	
Divider Type	U value
CE GBG	+0.2
CE SDLS	+0.2
CE SDLN	+0.0

CERTIFIED THERMAL UNIT VALUES									
Glass Options	Glass Thickness	U Value Smallest	U Value Middle	U Value Largest	g Value (Solar Gain)	Visible Transmittance	Ug	PSI	Uf
3.9mm Low E2 / 11.5mm air / 3.9mm clr	19 mm (3/4") Dual	1.80	1.80	1.80	0.44	0.72	1.60	0.05	2.00
3.9mm Low E2 / 11.5mm argon / 3.9mm clr	19 mm (3/4") Dual	1.60	1.50	1.50	0.44	0.72	1.30	0.05	2.00
3.9mm Low E3 / 11.5mm air / 3.9mm clr	19 mm (3/4") Dual	1.80	1.80	1.70	0.31	0.64	1.60	0.05	2.00
3.9mm Low E3 / 11.5mm argon / 3.9mm clr	19 mm (3/4") Dual	1.50	1.50	1.50	0.31	0.64	1.20	0.05	2.00
3.1mm Low E2 / 13.0mm air / 3.1mm clr	19 mm (3/4") Dual	1.70	1.70	1.70	0.45	0.72	1.50	0.05	2.00
3.1mm Low E2 / 13.0mm argon / 3.1mm clr	19 mm (3/4") Dual	1.50	1.50	1.40	0.45	0.72	1.20	0.05	2.00
3.1mm Low E3 / 13.0mm air / 3.1mm clr	19 mm (3/4") Dual	1.70	1.70	1.60	0.31	0.65	1.50	0.05	2.00
3.1mm Low E3 / 13.0mm argon / 3.1mm clr	19 mm (3/4") Dual	1.50	1.40	1.40	0.31	0.65	1.10	0.05	2.00
3.1mm clr / 13.0mm air / Low E1 3.1mm	19 mm (3/4") Dual	1.80	1.80	1.80	0.70	0.79	1.60	0.05	2.00
3.1mm clr / 13.0mm argon / Low E1 3.1mm	19 mm (3/4") Dual	1.60	1.50	1.50	0.70	0.79	1.30	0.05	2.00
3.9mm clr / 11.5mm air / Low E1 3.9mm	19 mm (3/4") Dual	1.90	1.90	1.80	0.68	0.79	1.70	0.05	2.00
3.9mm clr / 11.5mm argon / Low E1 3.9mm	19 mm (3/4") Dual	1.70	1.60	1.60	0.68	0.79	1.40	0.05	2.00

THERMAL PERFORMANCE – SLIDING PATIO DOOR

Size	Millimeters	Inches
Smallest	1498 x 2019	59 x 79 1/2
Middle	2102 x 2051	82 3/4 x 80 3/4
Largest	2705 x 2083	106 1/2 x 82

Formula for units with dividers	
Divider Type	U value
CE GBG	+0.2
CE SDLS	+0.2
CE SDLN	+0.0

CERTIFIED THERMAL UNIT VALUES									
Glass Options	Glass Thickness	U Value Smallest	U Value Middle	U Value Largest	g Value (Solar Gain)	Visible Transmittance	Ug	PSI	Uf
3.1mm Low E2 / 13.0mm air / 3.1mm clr	19 mm (3/4") Dual	1.80	1.70	1.70	0.45	0.72	1.50	0.05	2.00
3.1mm Low E2 / 13.0mm argon / 3.1mm clr	19 mm (3/4") Dual	1.50	1.50	1.40	0.45	0.72	1.20	0.05	2.00
3.1mm Low E3 / 13.0mm air / 3.1mm clr	19 mm (3/4") Dual	1.80	1.70	1.70	0.31	0.65	1.50	0.05	2.00
3.1mm Low E3 / 13.0mm argon / 3.1mm clr	19 mm (3/4") Dual	1.50	1.40	1.40	0.31	0.65	1.10	0.05	2.00
3.1mm clr / 13.0mm air / Low E1 3.1mm	19 mm (3/4") Dual	1.90	1.80	1.80	0.70	0.79	1.60	0.05	2.00
3.1mm clr / 13.0mm argon / Low E1 3.1mm	19 mm (3/4") Dual	1.60	1.60	1.50	0.70	0.79	1.30	0.05	2.00