



By PLY GEM



## **Manufacturer's Certification** **Seabrooke Window & Door Products**

Great Lakes Window by Ply Gem, located at 30499 Tracy Road, Walbridge, OH, 43465, manufactures Seabrooke products, which when purchased with optional Low-E glass, spacer system and argon gas fill in an insulated glass unit, meet or exceed the prescriptive criteria established by the IECC for all climate zones in which the window or doors are installed.

To qualify for the Energy Improvement and Extension Act tax credit, exterior windows and doors must have both a U-Factor rating of .30 or lower and a Solar Heat Gain Coefficient (SHGC) rating of .30 or lower. The Seabrooke exterior window and door products set forth on Attachment A have a U-Factor and SHGC of .30 or below and qualify for this tax credit. To qualify for the tax credit, homeowners must purchase the qualifying Seabrooke exterior window and door products and install in accordance with Great Lakes Window by Ply Gem's instructions between January 1, 2009 and December 31, 2010.

To certify the qualifying Seabrooke products for purposes of the tax credits available under the Energy Improvement and Extension Act of 2008, **Great Lake Window by Ply Gem represents that its window and door products having a U-Factor and SHGC of .30 or below as set forth on Attachment A are "Eligible Building Envelope Component(s)" that qualify for the federal income tax credit allowed under the Energy Improvement and Extension Act of 2008.**

**Homeowners should consult their tax advisor to determine whether they qualify for any potential income tax credits.**

Under penalties of perjury, I declare that I have examined this certification statement, and to the best of my knowledge and belief, the facts are true, correct, and complete.

Lynn Morstad  
President, Ply Gem Windows

March, 2010



ATTACHMENT A

By PLY GEM

Product Type / Popular Glazing Options	U-Factor (Center of Glass)	R-value (Center of Glass)	Total Unit R-value	NFRC Certified Values					Energy Star Qualified			
				NFRC CPD Number	Total Unit U-Factor	SHGC	VT	CR	Northern	North-Central	South-Central	Southern
<b>Double Hung</b>												
<b>EnergyEdge Spacer</b>												
Maxuus (Double Low E Argon IGU)	0.25	4.0	3.3		0.30	0.25	0.43	52	●	●	●	●
Grilles (<1")	0.25	4.0	3.3		0.30	0.22	0.39	52	●	●	●	●
Georgian Grilles (>1")	0.25	4.0	3.3		0.30	0.20	0.34	52	●	●	●	●
Maxuus <sup>SC</sup> (Solar Cooling Double Low E Argon IGU)	0.25	4.0	3.3		0.30	0.18	0.27	52	●	●	●	●
Grilles (<1")	0.25	4.0	3.3		0.30	0.16	0.24	52	●	●	●	●
Georgian Grilles (Width>1")	0.25	4.0	3.3		0.30	0.14	0.21	52	●	●	●	●
Maxuus 7.6 ( Triple Pane Double Low E Argon IGU)	0.18	5.6	4.0		0.25	0.23	0.40	64	●	●	●	●
Grilles (<1")	0.18	5.6	3.8		0.26	0.21	0.38	64	●	●	●	●
Georgian Grilles (>1")	N/A	N/A	N/A		N/A	N/A	N/A	N/A	-	-	-	-
Maxuus 7.6 <sup>SC</sup> (Triple Pane Double Solar Cooling Low E Argon IGU)	0.17	5.9	4.0		0.25	0.17	0.25	64	●	●	●	●
Grilles (<1")	0.17	5.9	3.8		0.26	0.15	0.22	64	●	●	●	●
Georgian Grilles (Width>1")	N/A	N/A	N/A		N/A	N/A	N/A	N/A	-	-	-	-
<b>Reinforced &amp; Insulated Sash Option</b>												
<b>EnergyEdge Spacer</b>												
Hi-R Plus ( Low E Argon IGU)	0.26	3.8	3.4		0.30	0.27	0.51	52	●	●	●	●
Grilles (Width<1")	0.26	3.8	3.4		0.30	0.24	0.45	52	●	●	●	●
Georgian Grilles (Width>1")	0.26	3.8	3.4		0.30	0.22	0.40	52	●	●	●	●
Hi-R Plus <sup>SC</sup> (Solar Cooling Low E Argon IGU)	0.25	4.0	3.3		0.30	0.20	0.40	52	●	●	●	●
Grilles (<1")	0.25	4.0	3.3		0.30	0.18	0.36	52	●	●	●	●
Georgian Grilles (Width>1")	0.25	4.0	3.3		0.30	0.16	0.31	52	●	●	●	●
Maxuus (Double Low E Argon IGU)	0.25	4.0	3.3		0.30	0.25	0.43	52	●	●	●	●
Grilles (Width<1")	0.25	4.0	3.3		0.30	0.22	0.39	52	●	●	●	●
Georgian Grilles (Width>1")	0.25	4.0	3.3		0.30	0.20	0.34	52	●	●	●	●
Maxuus <sup>SC</sup> (Solar Cooling Double Low E Argon IGU)	0.25	4.0	3.3		0.30	0.18	0.27	53	●	●	●	●
Grilles (<1")	0.25	4.0	3.3		0.30	0.16	0.24	53	●	●	●	●
Georgian Grilles (Width>1")	0.25	4.0	3.3		0.30	0.14	0.21	53	●	●	●	●
Maxuus 7.6 ( Triple Pane Double Low E Argon IGU)	0.18	5.6	4.2		0.24	0.23	0.40	64	●	●	●	●
Grilles (Width<1")	0.18	5.6	4.2		0.24	0.21	0.35	64	●	●	●	●
Georgian Grilles (Width>1")	N/A	N/A	N/A		N/A	N/A	N/A	N/A	-	-	-	-
Maxuus 7.6 <sup>SC</sup> (Triple Pane Double Solar Cooling Low E Argon IGU)	0.17	5.9	4.2		0.24	0.17	0.25	64	●	●	●	●
Grilles (<1")	0.17	5.9	4.2		0.24	0.15	0.22	64	●	●	●	●
Georgian Grilles (Width>1")	N/A	N/A	N/A		N/A	N/A	N/A	N/A	-	-	-	-
<b>EnergyEdge Plus+ Spacer</b>												
Hi-R Plus ( Low E Argon IGU)	0.26	3.8	3.4		0.30	0.27	0.51	56	●	●	●	●
Grilles (<1")	0.26	3.8	3.4		0.30	0.24	0.45	56	●	●	●	●
Georgian Grilles (>1")	0.26	3.8	3.4		0.30	0.22	0.40	56	●	●	●	●
Hi-R Plus <sup>SC</sup> (Solar Cooling Low E Argon IGU)	0.25	4.0	3.4		0.29	0.20	0.40	57	●	●	●	●
Grilles (<1")	0.25	4.0	3.4		0.29	0.18	0.36	57	●	●	●	●
Georgian Grilles (Width>1")	0.25	4.0	3.4		0.29	0.16	0.31	57	●	●	●	●
Maxuus (Double Low E Argon IGU)	0.25	4.0	3.4		0.29	0.25	0.43	57	●	●	●	●
Grilles (<1")	0.25	4.0	3.4		0.29	0.22	0.39	57	●	●	●	●
Georgian Grilles (>1")	0.25	4.0	3.4		0.29	0.20	0.34	57	●	●	●	●
Maxuus <sup>SC</sup> (Solar Cooling Double Low E Argon IGU)	0.25	4.0	3.4		0.29	0.18	0.27	57	●	●	●	●
Grilles (<1")	0.25	4.0	3.4		0.29	0.16	0.24	57	●	●	●	●
Georgian Grilles (Width>1")	0.25	4.0	3.4		0.29	0.14	0.21	57	●	●	●	●
<b>Reinforced &amp; Insulated Sash Option</b>												
<b>EnergyEdge Plus+ Spacer</b>												
Hi-R Plus ( Low E Argon IGU)	0.26	3.8	3.4		0.29	0.27	0.51	56	●	●	●	●
Grilles (Width<1")	0.26	3.8	3.4		0.29	0.24	0.45	56	●	●	●	●
Georgian Grilles (Width>1")	0.26	3.8	3.4		0.29	0.22	0.40	56	●	●	●	●
Hi-R Plus <sup>SC</sup> (Solar Cooling Low E Argon IGU)	0.25	4.0	3.4		0.29	0.20	0.40	56	●	●	●	●
Grilles (<1")	0.25	4.0	3.4		0.29	0.18	0.36	56	●	●	●	●
Georgian Grilles (Width>1")	0.25	4.0	3.4		0.29	0.16	0.31	56	●	●	●	●
Maxuus (Double Low E Argon IGU)	0.25	4.0	3.6		0.28	0.25	0.43	57	●	●	●	●
Grilles (Width<1")	0.25	4.0	3.6		0.28	0.22	0.39	57	●	●	●	●
Georgian Grilles (Width>1")	0.25	4.0	3.6		0.28	0.20	0.34	57	●	●	●	●
Maxuus <sup>SC</sup> (Solar Cooling Double Low E Argon IGU)	0.25	4.0	3.6		0.28	0.18	0.27	57	●	●	●	●
Grilles (<1")	0.25	4.0	3.6		0.28	0.16	0.24	57	●	●	●	●
Georgian Grilles (Width>1")	0.25	4.0	3.6		0.28	0.14	0.21	57	●	●	●	●

PGW-M-31



ATTACHMENT A

By PLY GEM

Product Type / Popular Glazing Options	U-Factor (Center of Glass)	R-value (Center of Glass)	Total Unit R-value	NFRC Certified Values					Energy Star Qualified			
				NFRC CPD Number	Total Unit U-Factor	SHGC	VT	CR	Northern	North-Central	South-Central	Southern
<b>Slider</b>												
<b>EnergyEdge Spacer</b>												
Hi-R Plus ( Low E Argon IGU)	0.26	3.8	3.3		0.30	0.26	0.50	54	●	●	●	●
Grilles (<1")	0.26	3.8	3.3		0.30	0.24	0.45	54	●	●	●	●
Georgian Grilles (>1")	0.26	3.8	3.3		0.30	0.21	0.39	54	●	●	●	●
Hi-R Plus <sup>SC</sup> (Solar Cooling Low E Argon IGU)	0.25	4.0	3.3		0.30	0.20	0.39	54	●	●	●	●
Grilles (<1")	0.25	4.0	3.3		0.30	0.18	0.35	54	●	●	●	●
Georgian Grilles (Width>1")	0.25	4.0	3.3		0.30	0.16	0.31	54	●	●	●	●
Maxuus (Double Low E Argon IGU)	0.25	4.0	3.3		0.30	0.25	0.43	55	●	●	●	●
Grilles (<1")	0.25	4.0	3.3		0.30	0.22	0.38	55	●	●	●	●
Georgian Grilles (>1")	0.25	4.0	3.3		0.30	0.20	0.33	55	●	●	●	●
Maxuus <sup>SC</sup> (Solar Cooling Double Low E Argon IGU)	0.25	4.0	3.3		0.30	0.17	0.26	55	●	●	●	●
Grilles (<1")	0.25	4.0	3.3		0.30	0.16	0.23	55	●	●	●	●
Georgian Grilles (Width>1")	0.25	4.0	3.3		0.30	0.14	0.21	55	●	●	●	●
Maxuus 7.6 ( Triple Pane Double Low E Argon IGU)	0.18	5.6	4.2		0.24	0.23	0.39	61	●	●	●	●
Grilles (<1")	0.18	5.6	4.2		0.24	0.21	0.35	61	●	●	●	●
Georgian Grilles (>1")	N/A	N/A	N/A		N/A	N/A	N/A	N/A	-	-	-	-
Maxuus 7.6 <sup>SC</sup> (Triple Pane Double Solar Cooling Low E Argon IGU)	0.17	5.9	4.2		0.24	0.16	0.24	61	●	●	●	●
Grilles (<1")	0.17	5.9	4.2		0.24	0.15	0.21	61	●	●	●	●
Georgian Grilles (Width>1")	N/A	N/A	N/A		N/A	N/A	N/A	N/A	-	-	-	-
<b>Reinforced &amp; Insulated Sash Option</b>												
<b>EnergyEdge Spacer</b>												
Hi-R Plus ( Low E Argon IGU)	0.26	3.8	3.4		0.29	0.26	0.50	54	●	●	●	●
Grilles (Width<1")	0.26	3.8	3.4		0.29	0.24	0.45	54	●	●	●	●
Georgian Grilles (>1")	0.26	3.8	3.4		0.29	0.21	0.39	54	●	●	●	●
Hi-R Plus <sup>SC</sup> (Solar Cooling Low E Argon IGU)	0.25	4.0	3.4		0.29	0.20	0.39	54	●	●	●	●
Grilles (<1")	0.25	4.0	3.4		0.29	0.18	0.35	54	●	●	●	●
Georgian Grilles (Width>1")	0.25	4.0	3.4		0.29	0.16	0.31	54	●	●	●	●
Maxuus (Double Low E Argon IGU)	0.25	4.0	3.4		0.29	0.25	0.43	55	●	●	●	●
Grilles (Width<1")	0.25	4.0	3.4		0.29	0.22	0.38	55	●	●	●	●
Georgian Grilles (Width>1")	0.25	4.0	3.4		0.29	0.20	0.33	55	●	●	●	●
Maxuus <sup>SC</sup> (Solar Cooling Double Low E Argon IGU)	0.25	4.0	3.4		0.29	0.17	0.26	55	●	●	●	●
Grilles (<1")	0.25	4.0	3.4		0.29	0.16	0.23	55	●	●	●	●
Georgian Grilles (Width>1")	0.25	4.0	3.4		0.29	0.14	0.21	55	●	●	●	●
Maxuus 7.6 ( Triple Pane Double Low E Argon IGU)	0.18	5.6	4.3		0.23	0.23	0.39	61	●	●	●	●
Grilles (Width<1")	0.18	5.6	4.2		0.24	0.21	0.35	61	●	●	●	●
Georgian Grilles (Width>1")	N/A	N/A	N/A		N/A	N/A	N/A	N/A	-	-	-	-
Maxuus 7.6 <sup>SC</sup> (Triple Pane Double Solar Cooling Low E Argon IGU)	0.17	5.9	4.3		0.23	0.16	0.24	61	●	●	●	●
Grilles (<1")	0.17	5.9	4.2		0.24	0.15	0.21	61	●	●	●	●
Georgian Grilles (Width>1")	N/A	N/A	N/A		N/A	N/A	N/A	N/A	-	-	-	-
<b>EnergyEdge Plus+ Spacer</b>												
Hi-R Plus ( Low E Argon IGU)	0.26	3.8	3.4		0.29	0.26	0.50	59	●	●	●	●
Grilles (<1")	0.26	3.8	3.4		0.29	0.24	0.45	59	●	●	●	●
Georgian Grilles (>1")	0.26	3.8	3.4		0.29	0.21	0.39	59	●	●	●	●
Hi-R Plus <sup>SC</sup> (Solar Cooling Low E Argon IGU)	0.25	4.0	3.4		0.29	0.20	0.39	59	●	●	●	●
Grilles (<1")	0.25	4.0	3.4		0.29	0.18	0.35	59	●	●	●	●
Georgian Grilles (Width>1")	0.25	4.0	3.4		0.29	0.16	0.31	59	●	●	●	●
Maxuus (Double Low E Argon IGU)	0.25	4.0	3.6		0.28	0.25	0.43	60	●	●	●	●
Grilles (<1")	0.25	4.0	3.6		0.28	0.22	0.38	60	●	●	●	●
Georgian Grilles (>1")	0.25	4.0	3.6		0.28	0.20	0.33	60	●	●	●	●
Maxuus <sup>SC</sup> (Solar Cooling Double Low E Argon IGU)	0.25	4.0	3.6		0.28	0.17	0.26	60	●	●	●	●
Grilles (<1")	0.25	4.0	3.6		0.28	0.16	0.23	60	●	●	●	●
Georgian Grilles (Width>1")	0.25	4.0	3.6		0.28	0.14	0.21	60	●	●	●	●
<b>Reinforced &amp; Insulated Sash Option</b>												
<b>EnergyEdge Plus+ Spacer</b>												
Hi-R Plus ( Low E Argon IGU)	0.26	3.8	3.6		0.28	0.26	0.50	59	●	●	●	●
Grilles (Width<1")	0.26	3.8	3.6		0.28	0.24	0.45	59	●	●	●	●
Georgian Grilles (>1")	0.26	3.8	3.6		0.28	0.21	0.39	59	●	●	●	●
Hi-R Plus <sup>SC</sup> (Solar Cooling Low E Argon IGU)	0.25	4.0	3.6		0.28	0.20	0.39	59	●	●	●	●
Grilles (<1")	0.25	4.0	3.6		0.28	0.18	0.35	59	●	●	●	●
Georgian Grilles (Width>1")	0.25	4.0	3.6		0.28	0.16	0.31	59	●	●	●	●
Maxuus (Double Low E Argon IGU)	0.25	4.0	3.7		0.27	0.25	0.43	60	●	●	●	●
Grilles (Width<1")	0.25	4.0	3.7		0.27	0.22	0.38	60	●	●	●	●
Georgian Grilles (Width>1")	0.25	4.0	3.7		0.27	0.20	0.33	60	●	●	●	●
Maxuus <sup>SC</sup> (Solar Cooling Double Low E Argon IGU)	0.25	4.0	3.7		0.27	0.17	0.26	60	●	●	●	●
Grilles (<1")	0.25	4.0	3.7		0.27	0.16	0.23	60	●	●	●	●
Georgian Grilles (Width>1")	0.25	4.0	3.7		0.27	0.14	0.21	60	●	●	●	●

PWG-M-35

Slider with grilles and triple strength glass - does NOT meet the requirements.



ATTACHMENT A

By PLY GEM

Product Type / Popular Glazing Options	U-Factor (Center of Glass)	R-value (Center of Glass)	Total Unit R-value	NFRC Certified Values					Energy Star Qualified				
				NFRC CPD Number	Total Unit U-Factor	SHGC	VT	CR	Northern	North-Central	South-Central	Southern	
<b>Picture</b>													
<b>EnergyEdge Spacer</b>													
Grilles (Width<1")	0.26	3.8	3.6	PWG-M-41	0.28	0.29	0.55	56	●	●	●	●	
Georgian Grilles (Width>1")	0.26	3.8	3.6		0.28	0.26	0.49	56	●	●	●	●	
Hi-R Plus <sup>SC</sup> (Solar Cooling Low E Argon IGU)	0.26	3.8	3.6		0.28	0.24	0.48	57	●	●	●	●	
Grilles (<1")	0.20	5.0	3.6		0.28	0.22	0.43	57	●	●	●	●	
Georgian Grilles (Width>1")	0.26	3.8	3.6		0.28	0.20	0.39	57	●	●	●	●	
Maxuus (Double Low E Argon IGU)	0.26	3.8	3.6		0.28	0.30	0.52	57	●	●	●	●	
Grilles (Width<1")	0.26	3.8	3.6		0.28	0.27	0.47	57	●	●	●	●	
Georgian Grilles (Width>1")	0.26	3.8	3.6		0.28	0.24	0.42	57	●	●	●	●	
Maxuus <sup>SC</sup> (Solar Cooling Double Low E Argon IGU)	0.25	4.0	3.7		0.27	0.21	0.32	57	●	●	●	●	
Grilles (<1")	0.25	4.0	3.7		0.27	0.19	0.29	57	●	●	●	●	
Georgian Grilles (Width>1")	0.25	4.0	3.7		0.27	0.17	0.26	57	●	●	●	●	
Maxuus 7.6 (Triple Pane Double Low E Argon IGU)	0.17	5.9	5.3		0.19	0.28	0.47	66	●	●	●	●	
Grilles (Width<1")	0.17	5.9	4.8		0.21	0.25	0.43	66	●	●	●	●	
Georgian Grilles (Width>1")	N/A	N/A	N/A		N/A	N/A	N/A	N/A	-	-	-	-	
Maxuus 7.6 <sup>SC</sup> (Triple Pane Double Solar Cooling Low E Argon IGU)	0.16	6.3	5.3		0.19	0.20	0.29	67	●	●	●	●	
Grilles (<1")	0.16	6.3	4.8		0.21	0.18	0.26	67	●	●	●	●	
Georgian Grilles (Width>1")	N/A	N/A	N/A		N/A	N/A	N/A	N/A	-	-	-	-	
<b>EnergyEdge Plus+ Spacer</b>													
Hi-R Plus (Low E Argon IGU)													
Grilles (Width<1")	0.26	3.8	3.6		0.28	0.29	0.55	56	●	●	●	●	
Georgian Grilles (Width>1")	0.26	3.8	3.6	0.28	0.26	0.49	56	●	●	●	●		
Hi-R Plus <sup>SC</sup> (Solar Cooling Low E Argon IGU)	0.26	3.8	3.6	0.28	0.24	0.48	56	●	●	●	●		
Grilles (<1")	0.20	5.0	3.6	0.28	0.22	0.43	56	●	●	●	●		
Georgian Grilles (Width>1")	0.26	3.8	3.6	0.28	0.20	0.39	56	●	●	●	●		
Maxuus (Double Low E Argon IGU)	0.26	3.8	3.6	0.28	0.30	0.52	57	●	●	●	●		
Grilles (Width<1")	0.26	3.8	3.6	0.28	0.27	0.47	57	●	●	●	●		
Georgian Grilles (Width>1")	0.26	3.8	3.6	0.28	0.24	0.42	57	●	●	●	●		
Maxuus <sup>SC</sup> (Solar Cooling Double Low E Argon IGU)	0.25	4.0	3.7	0.27	0.21	0.32	57	●	●	●	●		
Grilles (<1")	0.25	4.0	3.7	0.27	0.19	0.29	57	●	●	●	●		
Georgian Grilles (Width>1")	0.25	4.0	3.7	0.27	0.17	0.26	57	●	●	●	●		
<b>Architectural Shapes</b>													
<b>EnergyEdge Spacer</b>													
Hi-R Plus (Low E Argon IGU)													
Grilles (Width<1")	0.26	3.8	3.6	0.28	0.28	0.54	57	●	●	●	●		
Georgian Grilles (Width>1")	0.26	3.8	3.6	0.28	0.26	0.48	57	●	●	●	●		
Hi-R Plus <sup>SC</sup> (Solar Cooling Low E Argon IGU)	0.25	4.0	3.6	0.28	0.24	0.47	58	●	●	●	●		
Grilles (<1")	0.25	4.0	3.6	0.28	0.22	0.42	58	●	●	●	●		
Georgian Grilles (Width>1")	0.25	4.0	3.6	0.28	0.20	0.38	58	●	●	●	●		
Maxuus (Double Low E Argon IGU)	0.25	4.0	3.6	0.28	0.29	0.51	58	●	●	●	●		
Grilles (Width<1")	0.25	4.0	3.6	0.28	0.27	0.46	58	●	●	●	●		
Georgian Grilles (Width>1")	0.25	4.0	3.6	0.28	0.24	0.41	58	●	●	●	●		
Maxuus <sup>SC</sup> (Solar Cooling Double Low E Argon IGU)	0.25	4.0	3.7	0.27	0.21	0.31	58	●	●	●	●		
Grilles (<1")	0.25	4.0	3.7	0.27	0.19	0.28	58	●	●	●	●		
Georgian Grilles (Width>1")	0.25	4.0	3.7	0.27	0.17	0.25	58	●	●	●	●		
Maxuus 7.6 (Triple Pane Double Low E Argon IGU)	0.19	5.3	4.5	0.22	0.27	0.46	64	●	●	●	●		
Grilles (Width<1")	0.19	5.3	4.3	0.23	0.25	0.42	64	●	●	●	●		
Georgian Grilles (Width>1")	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	-		
Maxuus 7.6 <sup>SC</sup> (Triple Pane Double Solar Cooling Low E Argon IGU)	0.19	5.3	4.5	0.22	0.20	0.29	64	●	●	●	●		
Grilles (Width<1")	0.19	5.3	4.3	0.23	0.18	0.26	64	●	●	●	●		
Georgian Grilles (Width>1")	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	-		
<b>Casement</b>													
<b>EnergyEdge Spacer</b>													
Hi-R Plus (Low E Argon IGU)	0.26	3.8	3.6	0.28	0.25	0.48	59	●	●	●	●		
Grilles (Width<1")	0.26	3.8	3.6	0.28	0.23	0.43	59	●	●	●	●		
Georgian Grilles (Width>1")	0.26	3.8	3.6	0.28	0.21	0.39	59	●	●	●	●		
Hi-R Plus <sup>SC</sup> (Solar Cooling Low E Argon IGU)	0.25	4.0	3.6	0.28	0.19	0.37	59	●	●	●	●		
Grilles (<1")	0.25	4.0	3.6	0.28	0.18	0.34	59	●	●	●	●		
Georgian Grilles (Width>1")	0.25	4.0	3.6	0.28	0.16	0.30	59	●	●	●	●		
Maxuus (Double Low E Argon IGU)	0.25	4.0	3.6	0.28	0.24	0.40	59	●	●	●	●		
Grilles (Width<1")	0.25	4.0	3.6	0.28	0.22	0.37	59	●	●	●	●		
Georgian Grilles (Width>1")	0.25	4.0	3.6	0.28	0.20	0.33	59	●	●	●	●		
Maxuus <sup>SC</sup> (Solar Cooling Double Low E Argon IGU)	0.25	4.0	3.6	0.28	0.17	0.25	59	●	●	●	●		
Grilles (<1")	0.25	4.0	3.6	0.28	0.15	0.23	59	●	●	●	●		
Georgian Grilles (Width>1")	0.25	4.0	3.6	0.28	0.14	0.20	59	●	●	●	●		
Maxuus 7.6 (Triple Pane Double Low E Argon IGU)	0.18	5.6	4.3	0.23	0.22	0.37	66	●	●	●	●		
Grilles (Width<1")	0.18	5.6	4.3	0.23	0.20	0.33	66	●	●	●	●		
Georgian Grilles (Width>1")	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	-		
Maxuus 7.6 <sup>SC</sup> (Triple Pane Double Solar Cooling Low E Argon IGU)	0.17	5.9	4.3	0.23	0.16	0.23	66	●	●	●	●		
Grilles (<1")	0.17	5.9	4.3	0.23	0.15	0.21	66	●	●	●	●		
Georgian Grilles (Width>1")	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	-		



ATTACHMENT A

By PLY GEM

Product Type / Popular Glazing Options	U-Factor (Center of Glass)	R-value (Center of Glass)	Total Unit R-value	NFRC Certified Values					Energy Star Qualified				
				NFRC CPD Number	Total Unit U-Factor	SHGC	VT	CR	Northern	North-Central	South-Central	Southern	
<b>EnergyEdge Plus+ Spacer - Casement Continued</b>													
Hi-R Plus (Low E Argon IGU)	0.26	3.8	3.7	PWG-M-25	0.27	0.25	0.48	62	●	●	●	●	
Grilles (Width<1")	0.26	3.8	3.7		0.27	0.23	0.43	62	●	●	●	●	
Georgian Grilles (Width>1")	0.26	3.8	3.7		0.27	0.21	0.39	62	●	●	●	●	
Hi-R Plus <sup>SC</sup> (Solar Cooling Low E Argon IGU)	0.25	4.0	3.7		0.27	0.19	0.37	62	●	●	●	●	
Grilles (<1")	0.25	4.0	3.7		0.27	0.18	0.34	62	●	●	●	●	
Georgian Grilles (Width>1")	0.25	4.0	3.7		0.27	0.20	0.33	62	●	●	●	●	
Maxuus (Double Low E Argon IGU)	0.25	4.0	3.7		0.27	0.24	0.40	63	●	●	●	●	
Grilles (Width<1")	0.25	4.0	3.7		0.27	0.22	0.37	63	●	●	●	●	
Georgian Grilles (Width>1")	0.25	4.0	3.7		0.27	0.20	0.33	63	●	●	●	●	
Maxuus <sup>SC</sup> (Solar Cooling Double Low E Argon IGU)	0.25	4.0	3.7		0.27	0.17	0.25	63	●	●	●	●	
Grilles (<1")	0.25	4.0	3.7		0.27	0.15	0.23	63	●	●	●	●	
Georgian Grilles (Width>1")	0.25	4.0	3.7		0.27	0.14	0.20	63	●	●	●	●	
<b>Fixed Casement</b>													
<b>EnergyEdge Spacer</b>													
Hi-R Plus (Low E Argon IGU)	0.26	3.8	3.7	PWG-M-24	0.27	0.29	0.55	58	●	●	●	●	
Grilles (Width<1")	0.26	3.8	3.7		0.27	0.26	0.50	58	●	●	●	●	
Georgian Grilles (Width>1")	0.26	3.8	3.7		0.27	0.24	0.44	58	●	●	●	●	
Hi-R Plus <sup>SC</sup> (Solar Cooling Low E Argon IGU)	0.25	4.0	3.7		0.27	0.22	0.44	58	●	●	●	●	
Grilles (<1")	0.25	4.0	3.7		0.27	0.20	0.39	58	●	●	●	●	
Georgian Grilles (Width>1")	0.25	4.0	3.7		0.27	0.18	0.34	58	●	●	●	●	
Maxuus (Double Low E Argon IGU)	0.25	4.0	3.7		0.27	0.27	0.47	59	●	●	●	●	
Grilles (Width<1")	0.25	4.0	3.7		0.27	0.25	0.42	59	●	●	●	●	
Georgian Grilles (Width>1")	0.25	4.0	3.7		0.27	0.22	0.37	59	●	●	●	●	
Maxuus <sup>SC</sup> (Solar Cooling Double Low E Argon IGU)	0.25	4.0	3.7		0.27	0.19	0.55	59	●	●	●	●	
Grilles (<1")	0.25	4.0	3.7		0.27	0.18	0.26	59	●	●	●	●	
Georgian Grilles (Width>1")	0.25	4.0	3.7		0.27	0.16	0.23	59	●	●	●	●	
Maxuus 7.6 (Triple Pane Double Low E Argon IGU)	0.18	5.6	4.8		0.21	0.25	0.43	65	●	●	●	●	
Grilles (Width<1")	0.18	5.6	4.8		0.21	0.23	0.38	65	●	●	●	●	
Georgian Grilles (Width>1")	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	-		
Maxuus 7.6 <sup>SC</sup> (Triple Pane Double Solar Cooling Low E Argon IGU)	0.17	5.9	4.8	0.21	0.18	0.27	65	●	●	●	●		
Grilles (<1")	0.17	5.9	4.8	0.21	0.17	0.24	65	●	●	●	●		
Georgian Grilles (Width>1")	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	-		
<b>EnergyEdge Plus+ Spacer</b>													
Hi-R Plus (Low E Argon IGU)	0.26	3.8	3.8	PWG-M-26	0.26	0.29	0.55	62	●	●	●	●	
Grilles (Width<1")	0.26	3.8	3.8		0.26	0.26	0.50	62	●	●	●	●	
Georgian Grilles (Width>1")	0.26	3.8	3.8		0.26	0.24	0.44	62	●	●	●	●	
Hi-R Plus <sup>SC</sup> (Solar Cooling Low E Argon IGU)	0.25	4.0	3.8		0.26	0.22	0.44	62	●	●	●	●	
Grilles (<1")	0.25	4.0	3.8		0.26	0.20	0.39	62	●	●	●	●	
Georgian Grilles (Width>1")	0.25	4.0	3.8		0.26	0.18	0.34	62	●	●	●	●	
Maxuus (Double Low E Argon IGU)	0.25	4.0	3.8		0.26	0.27	0.47	63	●	●	●	●	
Grilles (Width<1")	0.25	4.0	3.8		0.26	0.25	0.42	63	●	●	●	●	
Georgian Grilles (Width>1")	0.25	4.0	3.8		0.26	0.22	0.37	63	●	●	●	●	
Maxuus <sup>SC</sup> (Solar Cooling Double Low E Argon IGU)	0.25	4.0	3.8		0.26	0.19	0.29	63	●	●	●	●	
Grilles (<1")	0.25	4.0	3.8		0.26	0.18	0.26	63	●	●	●	●	
Georgian Grilles (Width>1")	0.25	4.0	3.8		0.26	0.16	0.23	63	●	●	●	●	
<b>Awning</b>													
<b>EnergyEdge Spacer</b>													
Hi-R Plus (Low E Argon IGU)	0.26	3.8	3.6	PWG-M-26	0.28	0.25	0.48	55	●	●	●	●	
Grilles (Width<1")	0.26	3.8	3.6		0.28	0.23	0.43	55	●	●	●	●	
Georgian Grilles (Width>1")	0.26	3.8	3.6		0.28	0.21	0.39	55	●	●	●	●	
Hi-R Plus <sup>SC</sup> (Solar Cooling Low E Argon IGU)	0.25	4.0	3.6		0.28	0.19	0.37	55	●	●	●	●	
Grilles (<1")	0.25	4.0	3.6		0.28	0.18	0.34	55	●	●	●	●	
Georgian Grilles (Width>1")	0.25	4.0	3.6		0.28	0.16	0.30	55	●	●	●	●	
Maxuus (Double Low E Argon IGU)	0.25	4.0	3.6		0.28	0.17	0.44	56	●	●	●	●	
Grilles (Width<1")	0.25	4.0	3.6		0.28	0.24	0.40	56	●	●	●	●	
Georgian Grilles (Width>1")	0.25	4.0	3.6		0.28	0.20	0.33	56	●	●	●	●	
Maxuus <sup>SC</sup> (Solar Cooling Double Low E Argon IGU)	0.25	4.0	3.6		0.28	0.22	0.37	56	●	●	●	●	
Grilles (<1")	0.25	4.0	3.6		0.28	0.15	0.23	56	●	●	●	●	
Georgian Grilles (Width>1")	0.25	4.0	3.6		0.28	0.14	0.20	56	●	●	●	●	
Maxuus 7.6 (Triple Pane Double Low E Argon IGU)	0.18	5.6	4.3		0.23	0.22	0.37	67	●	●	●	●	
Grilles (Width<1")	0.18	5.6	4.3		0.23	0.22	0.37	67	●	●	●	●	
Georgian Grilles (Width>1")	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	-		
Maxuus 7.6 <sup>SC</sup> (Triple Pane Double Solar Cooling Low E Argon IGU)	0.17	5.9	4.3	0.23	0.16	0.23	67	●	●	●	●		
Grilles (<1")	0.17	5.9	4.3	0.23	0.15	0.21	67	●	●	●	●		
Georgian Grilles (Width>1")	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	-		



ATTACHMENT A

Product Type / Popular Glazing Options	U-Factor (Center of Glass)	R-value (Center of Glass)	Total Unit R-value	NFRC Certified Values					Energy Star Qualified			
				NFRC CPD Number	Total Unit U-Factor	SHGC	VT	CR	Northern	North-Central	South-Central	Southern
<b>EnergyEdge Plus+ Spacer - Awning Continued</b>												
Hi-R Plus (Low E Argon IGU)	0.26	3.8	3.7	PWG-M-26	0.27	0.25	0.48	62	●	●	●	●
Grilles (Width<1")	0.26	3.8	3.7		0.27	0.23	0.43	62	●	●	●	●
Georgian Grilles (Width>1")	0.26	3.8	3.7		0.27	0.21	0.39	62	●	●	●	●
Hi-R Plus <sup>SC</sup> (Solar Cooling Low E Argon IGU)	0.25	4.0	3.7		0.27	0.19	0.37	62	●	●	●	●
Grilles (<1")	0.25	4.0	3.7		0.27	0.18	0.34	62	●	●	●	●
Georgian Grilles (Width>1")	0.25	4.0	3.7		0.27	0.16	0.30	62	●	●	●	●
Maxuus (Double Low E Argon IGU)	0.25	4.0	3.7		0.27	0.24	0.40	63	●	●	●	●
Grilles (Width<1")	0.25	4.0	3.7		0.27	0.22	0.37	63	●	●	●	●
Georgian Grilles (Width>1")	0.25	4.0	3.7		0.27	0.20	0.33	63	●	●	●	●
Maxuus <sup>SC</sup> (Solar Cooling Double Low E Argon IGU)	0.25	4.0	3.7		0.27	0.17	0.25	63	●	●	●	●
Grilles (<1")	0.25	4.0	3.7		0.27	0.15	0.23	63	●	●	●	●
Georgian Grilles (Width>1")	0.25	4.0	3.7		0.27	0.14	0.20	63	●	●	●	●
<b>Sliding Patio Door Premier (CPD)</b>												
<b>EnergyEdge Spacer</b>												
Hi-R Plus (Low E Argon IGU)	0.26	3.8	3.4	PWG-M-46	0.29	0.22	0.44	57	●	●	●	●
Grilles (Width<1")	0.26	3.8	3.4		0.29	0.20	0.38	57	●	●	●	●
Georgian Grilles (Width>1")	0.26	3.8	3.4		0.29	0.17	0.33	57	●	●	●	●
Hi-R Plus <sup>SC</sup> (Solar Cooling Low E Argon IGU)	0.26	3.8	3.4		0.29	0.19	0.38	57	●	●	●	●
Grilles (<1")	0.26	3.8	3.4		0.29	0.17	0.33	57	●	●	●	●
Georgian Grilles (Width>1")	0.26	3.8	3.4		0.29	0.15	0.28	57	●	●	●	●
Maxuus (Double Low E Argon IGU)	0.26	3.8	3.6		0.28	0.21	0.34	57	●	●	●	●
Grilles (Width<1")	0.26	3.8	3.6		0.28	0.19	0.30	57	●	●	●	●
Georgian Grilles (Width>1")	0.26	3.8	3.6		0.28	0.16	0.25	57	●	●	●	●
Maxuus <sup>SC</sup> (Solar Cooling Double Low E Argon IGU)	0.25	4.0	3.6		0.28	0.17	0.25	57	●	●	●	●
Grilles (<1")	0.25	4.0	3.6		0.28	0.15	0.22	57	●	●	●	●
Georgian Grilles (Width>1")	0.25	4.0	3.6		0.28	0.13	0.19	57	●	●	●	●
Maxuus 7.6 (Triple Pane, Double Low E Argon IGU)	0.17	5.9	4.5		0.22	0.20	0.31	64	●	●	●	●
Grilles (Width<1")	0.17	5.9	4.3	0.23	0.17	0.27	64	●	●	●	●	
Georgian Grilles (Width>1")	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	-	
Maxuus 7.6 <sup>SC</sup> (Triple Pane Double Solar Cooling Low E Argon IGU)	0.16	6.3	4.5	0.22	0.16	0.23	64	●	●	●	●	
Grilles (<1")	0.16	6.3	4.3	0.23	0.14	0.20	64	●	●	●	●	
Georgian Grilles (Width>1")	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-	-	-	
<b>Sliding Patio Door Premier (CPD)</b>												
<b>EnergyEdge Plus+ Spacer</b>												
Hi-R Plus (Low E Argon IGU)	0.26	3.8	3.6	PWG-M-46	0.28	0.22	0.44	61	●	●	●	●
Grilles (Width<1")	0.26	3.8	3.6		0.28	0.20	0.38	61	●	●	●	●
Georgian Grilles (Width>1")	0.26	3.8	3.6		0.28	0.17	0.33	61	●	●	●	●
Hi-R Plus <sup>SC</sup> (Solar Cooling Low E Argon IGU)	0.26	3.8	3.6		0.28	0.19	0.38	61	●	●	●	●
Grilles (<1")	0.26	3.8	3.6		0.28	0.17	0.33	61	●	●	●	●
Georgian Grilles (Width>1")	0.26	3.8	3.6		0.28	0.15	0.28	61	●	●	●	●
Maxuus (Double Low E Argon IGU)	0.26	3.8	3.6		0.28	0.21	0.34	61	●	●	●	●
Grilles (Width<1")	0.26	3.8	3.6		0.28	0.19	0.30	61	●	●	●	●
Georgian Grilles (Width>1")	0.26	3.8	3.6		0.28	0.16	0.25	61	●	●	●	●
Maxuus <sup>SC</sup> (Solar Cooling Double Low E Argon IGU)	0.25	4.0	3.6		0.28	0.17	0.25	61	●	●	●	●
Grilles (<1")	0.25	4.0	3.6		0.28	0.15	0.22	61	●	●	●	●
Georgian Grilles (Width>1")	0.25	4.0	3.6		0.28	0.13	0.19	61	●	●	●	●

**NFRC (National Fenestration Rating Council)**

- CPD - Certified Product Directory
- SHGC - Solar Heat Gain Coefficient
- VT - Visible Light Transmission
- CR - Condensation Resistance



**U-Factor** - Rate of Heat Loss  
**R-Value** - Resistance to Heat Flow

● -Option is Energy Star Qualified per zone.

Footnotes: Total unit values: Single strength glass for all dual & Triple pain windows with and w/o Grilles.  
 Total unit values: Double strength glass for all dual & triple pane Patio Doors, Picture Windows and Architectural Shapes.