



AMERICAN CRAFTSMAN WINDOW AND DOOR NFRC/ENERGY STAR INFORMATION

This document provides NFRC certified U-Factor and Solar Heat Gain Coefficient (SHGC) and Visible Transmittance (VT) values for Silver Line® products along with the corresponding ENERGY STAR® Version 6.0 climate zones in which the product and glass type are certified.

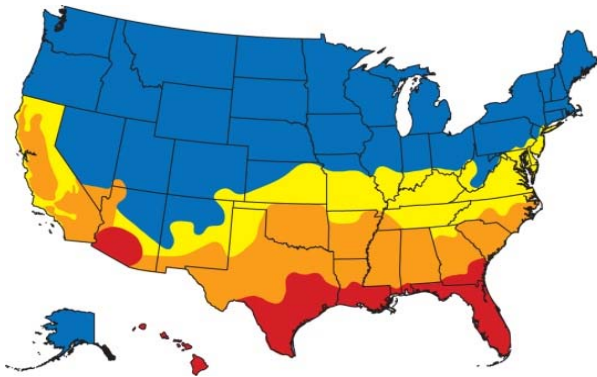


These products are rated, certified and labeled by the National Fenestration Rating Council® (NFRC) - a non-profit organization that provides fair, accurate and credible energy performance ratings for windows and doors.



Many of our products meet the stringent energy efficiency certification criteria set by the U.S. Environmental Protection Agency and the U.S. Department of Energy. The certification criteria is based on the heat gain and loss of each product in various regions of the country. Check the Silver Line product performance available at www.silverlinewindows.com for units that are ENERGY STAR certified.

United States ENERGY STAR® Climate Zone Criteria



- Northern
- North-Centra
- South-Centra
- Southern

Windows

Climate Zone	U-Factor ¹	SHGC ²	
Northern*	≤ 0.27	Any	Prescriptive
	= 0.28	≥ 0.32	Equivalent Energy Performance
	= 0.29	≥ 0.37	
	= 0.30	≥ 0.42	
North-Central	≤ 0.30	≤ 0.40	
South-Central	≤ 0.30	≤ 0.25	
Southern	≤ 0.40	≤ 0.25	

Air Leakage ≤ 0.3 cfm/ft²

¹ Btu/h ft² °F

² Solar Heat Gain Coefficient

* The effective date for the Northern Zone prescriptive and equivalent energy performance criteria for windows is January 1, 2016.

Doors

Glazing Level	U-Factor ¹	SHGC ²	
Opaque	≤ 0.17	No Rating	
≤ ½-Lite	≤ 0.25	≤ 0.25	
> ½-Lite	≤ 0.30	Northern	
		North-Central	
		Southern	
		South-Central	≤ 0.25

Air Leakage for Sliding Doors ≤ 0.3 cfm/ft²

Air Leakage for Swinging Doors ≤ 0.5 cfm/ft²

¹U-Factor defines the amount of heat loss through the total unit in BTU/hr·ft²·°F, metric in W/m²·K. The lower the value, the less the heat is lost through the entire product.

²Solar Heat Gain Coefficient (SHGC) defines the fraction of solar radiation admitted through the glass both directly transmitted and absorbed and subsequently released inward. The lower the value, the less heat is transmitted through the product.

³Visible Transmittance (VT) measures how much light comes through a product (glass and frame). The higher the value, from 0 to 1, the more daylight the product lets in over the product's total unit area. Visible Transmittance is measured over the 380 to 760 nanometer portion of the solar spectrum.

NFRC ratings are based on modeling by a third party agency as validated by an independent test lab in compliance with NFRC program and procedural requirements.

This data is accurate as of July 26, 2018. Due to ongoing product changes, updated test results or new industry standards or requirements, this data may change over time. Due to variations in dealer and distributor inventory levels, products that were manufactured before July 26, 2018 that were designed, tested and labeled with different NFRC values may still be available. Check the labels on the product packaging to confirm NFRC values. Ratings are for sizes specified by NFRC for testing and certification. Ratings may vary depending on use of tempered glass, different grille options, glass for high altitude, etc.

All marks where denoted are trademarks of their respective owners.

© 2018 Andersen Corporation. All rights reserved.

American Craftsman Series	American Craftsman Product Type	Glass Type/Infill	Glass Thickness	Spacer	NFR Certified Products Directory Number	U-Factor	SHGC2	VLT3	U.S. ENERGY STAR v 6.0				Spacer W/ Grid	U-Factor	SHGC2	VLT3	U.S. ENERGY STAR v 6.0				
									North	NC	SC	South					North	NC	SC	South	
70 Series Replacement & New Construction Picture & Shape (coordinates with 50 & 70, 70 Pro Series Replacement Double-Hung, Gliding, Casement and Awning)	Fixed/Picture Windows	Clear/Air	3.0mm	Intercept	SIL-N-55	0.46	0.66	0.69	-	-	-	-	Intercept	0.46	0.59	0.62	-	-	-	-	
			4.0mm	Intercept		0.46	0.64	0.69	-	-	-	-	Intercept	0.46	0.58	0.62	-	-	-	-	
		Low-E/Air	3.0mm	Intercept		0.31	0.33	0.59	-	-	-	-	Intercept	0.31	0.30	0.53	-	-	-	-	
			4.0mm	Intercept		0.31	0.33	0.59	-	-	-	-	Intercept	0.31	0.30	0.53	-	-	-	-	
		Low-E/Argon	3.0mm	Intercept		0.27	0.33	0.59	N	NC	-	-	Intercept	0.27	0.30	0.53	N	NC	-	-	
			4.0mm	Intercept		0.27	0.33	0.59	N	NC	-	-	Intercept	0.27	0.29	0.53	N	NC	-	-	
		Low-E SmartSun™/Air	3.0mm	Intercept		0.31	0.27	0.53	-	-	-	-	Intercept	0.31	0.24	0.47	-	-	-	-	
			4.0mm	Intercept		0.31	0.27	0.53	-	-	-	-	Intercept	0.31	0.24	0.47	-	-	-	-	
		Low-E SmartSun™/Argon	3.0mm	Intercept		0.27	0.26	0.53	N	NC	-	-	Intercept	0.27	0.24	0.47	N	NC	SC	SC	
			4.0mm	Intercept		0.27	0.26	0.53	N	NC	-	-	Intercept	0.27	0.24	0.47	N	NC	SC	SC	
		Low-E PassiveSun®	3.0mm	Intercept		0.31	0.48	0.60	-	-	-	-	Intercept	0.31	0.43	0.54	-	-	-	-	
			4.0mm	Intercept		0.31	0.47	0.59	-	-	-	-	Intercept	0.31	0.42	0.53	-	-	-	-	
		Low-E PassiveSun®/Argon	3.0mm	Intercept		0.27	0.48	0.60	N	NC	-	-	Intercept	0.27	0.44	0.54	N	NC	-	-	
			4.0mm	Intercept		0.27	0.47	0.59	N	NC	-	-	Intercept	0.27	0.43	0.53	N	NC	-	-	
		Low-E PassiveSun® HeatLock®	3.0mm	Intercept		0.27	0.40	0.60	N	NC	-	-	Intercept	0.27	0.36	0.54	N	NC	-	-	
		4.0mm	Intercept	0.27	0.39	0.60	N	NC	-	-	Intercept	0.27	0.36	0.54	N	NC	-	-			
	Low-E PassiveSun® HeatLock®/Argon	3.0mm	Intercept	0.24	0.40	0.60	N	NC	-	-	Intercept	0.24	0.36	0.54	N	NC	-	-			
		4.0mm	Intercept	0.24	0.39	0.60	N	NC	-	-	Intercept	0.24	0.36	0.54	N	NC	-	-			
	Low-E Sun/Air	3.0mm	Intercept	0.31	0.24	0.47	-	-	-	-	S	Intercept	0.31	0.22	0.42	-	-	-	-		
		4.0mm	Intercept	0.31	0.24	0.46	-	-	-	-	S	Intercept	0.31	0.22	0.42	-	-	-	-		
	Low-E Sun/Argon	3.0mm	Intercept	0.27	0.24	0.47	N	NC	SC	S	Intercept	0.27	0.22	0.42	N	NC	SC	SC			
		4.0mm	Intercept	0.27	0.24	0.46	N	NC	SC	S	Intercept	0.27	0.22	0.42	N	NC	SC	SC			
	Specialty Windows	Clear/Air	3.0mm	Super Spacer	SIL-N-55	0.45	0.66	0.69	-	-	-	-	Super Spacer	0.45	0.59	0.62	-	-	-	-	
			4.0mm	Super Spacer		0.45	0.64	0.69	-	-	-	-	Super Spacer	0.46	0.58	0.62	-	-	-	-	
		Low-E/Air	3.0mm	Super Spacer		0.30	0.33	0.59	-	-	-	NC	Super Spacer	0.30	0.30	0.53	-	-	NC	-	
			4.0mm	Super Spacer		0.30	0.33	0.59	-	-	-	NC	Super Spacer	0.32	0.30	0.53	-	-	-	-	
		Low-E/Argon	3.0mm	Super Spacer		0.26	0.33	0.59	N	NC	-	-	Super Spacer	0.26	0.30	0.53	N	NC	-	-	
			4.0mm	Super Spacer		0.26	0.33	0.59	N	NC	-	-	Super Spacer	0.27	0.29	0.53	N	NC	-	-	
		Low-E SmartSun™/Air	3.0mm	Super Spacer		0.26	0.40	0.60	N	NC	-	-	Super Spacer	0.26	0.36	0.54	N	NC	-	-	
			4.0mm	Super Spacer		0.27	0.40	0.60	N	NC	-	-	Super Spacer	0.28	0.36	0.54	N	NC	-	-	
Low-E SmartSun™/Argon		3.0mm	Super Spacer	0.23		0.40	0.60	N	NC	-	-	Super Spacer	0.23	0.36	0.54	N	NC	-	-		
		4.0mm	Super Spacer	0.24		0.39	0.60	N	NC	-	-	Super Spacer	0.24	0.36	0.54	N	NC	-	-		
Low-E PassiveSun®		3.0mm	Super Spacer	0.30		0.48	0.60	N	NC	-	-	Super Spacer	0.30	0.43	0.54	N	NC	-	-		
		4.0mm	Super Spacer	0.31		0.47	0.59	-	-	-	-	Super Spacer	0.32	0.42	0.53	-	-	-	-		
Low-E PassiveSun®/Argon		3.0mm	Super Spacer	0.26		0.48	0.60	N	NC	-	-	Super Spacer	0.26	0.44	0.54	N	NC	-	-		
		4.0mm	Super Spacer	0.26		0.47	0.59	N	NC	-	-	Super Spacer	0.27	0.43	0.53	N	NC	-	-		
Low-E PassiveSun® HeatLock®		3.0mm	Super Spacer	0.30		0.27	0.53	-	-	-	NC	Super Spacer	0.30	0.24	0.47	-	-	NC	SC		
	4.0mm	Super Spacer	0.30	0.27	0.53	-	-	-	NC	Super Spacer	0.31	0.24	0.47	-	-	NC	SC				
Low-E PassiveSun® HeatLock®/Argon	3.0mm	Super Spacer	0.26	0.26	0.53	N	NC	-	-	Super Spacer	0.26	0.24	0.47	N	NC	SC	SC				
	4.0mm	Super Spacer	0.26	0.26	0.53	N	NC	-	-	Super Spacer	0.27	0.24	0.47	N	NC	SC	SC				
Low-E Sun/Air	3.0mm	Super Spacer	0.30	0.24	0.47	-	-	-	NC	SC	Super Spacer	0.30	0.22	0.42	-	-	NC	SC			
	4.0mm	Super Spacer	0.30	0.24	0.46	-	-	-	NC	SC	Super Spacer	0.31	0.22	0.42	-	-	NC	SC			
Low-E Sun/Argon	3.0mm	Super Spacer	0.26	0.24	0.47	N	NC	SC	S	Super Spacer	0.26	0.22	0.42	N	NC	SC	SC				
	4.0mm	Super Spacer	0.26	0.24	0.46	N	NC	SC	S	Super Spacer	0.27	0.22	0.42	N	NC	SC	SC				
50 Series Replacement Double-Hung	Double-Hung Windows	Clear/Air	2.2mm	Intercept	SIL-N-2	0.48	0.62	0.65	-	-	-	-	Intercept	0.48	0.56	0.58	-	-	-	-	
			3.0mm	Intercept		0.48	0.61	0.64	-	-	-	-	Intercept	0.49	0.55	0.57	-	-	-	-	
		Low-E/Air	2.2mm	Intercept		0.34	0.29	0.55	-	-	-	-	Intercept	0.34	0.26	0.49	-	-	-	-	
			3.0mm	Intercept		0.35	0.29	0.54	-	-	-	-	Intercept	0.36	0.26	0.48	-	-	-	-	
		Low-E/Argon	2.2mm	Intercept		0.30	0.29	0.55	-	-	-	NC	Intercept	0.30	0.26	0.49	-	-	NC	-	
			3.0mm	Intercept		0.30	0.29	0.54	-	-	-	NC	Intercept	0.31	0.26	0.48	-	-	-	-	
		Low-E SmartSun™/Air	2.2mm	Intercept		0.34	0.25	0.50	-	-	-	-	S	Intercept	0.34	0.23	0.44	-	-	-	S
			3.0mm	Intercept		0.34	0.25	0.49	-	-	-	-	S	Intercept	0.35	0.23	0.44	-	-	-	S
		Low-E SmartSun™/Argon	2.2mm	Intercept		0.30	0.25	0.50	-	-	-	NC	SC	Intercept	0.30	0.23	0.44	-	-	NC	SC
			3.0mm	Intercept		0.30	0.25	0.49	-	-	-	NC	SC	Intercept	0.31	0.23	0.44	-	-	-	S
		Low-E PassiveSun®	2.2mm	Intercept		0.34	0.45	0.56	-	-	-	-	-	Intercept	0.34	0.40	0.50	-	-	-	-
			3.0mm	Intercept		0.35	0.44	0.56	-	-	-	-	-	Intercept	0.36	0.40	0.50	-	-	-	-
	Low-E PassiveSun®/Argon	2.2mm	Intercept	0.30	0.45	0.56	N	NC	-	-	-	Intercept	0.30	0.41	0.50	-	-	-	-		
		3.0mm	Intercept	0.31	0.45	0.56	-	-	-	-	-	Intercept	0.32	0.40	0.50	-	-	-	-		
	Low-E PassiveSun® HeatLock®	2.2mm	Intercept	0.31	0.38	0.56	-	-	-	-	-	Intercept	0.31	0.34	0.50	-	-	-	-		
		3.0mm	Intercept	0.31	0.37	0.56	-	-	-	-	-	Intercept	0.32	0.33	0.50	-	-	-	-		
	Low-E PassiveSun® HeatLock®/Argon	2.2mm	Intercept	0.28	0.37	0.56	N	NC	-	-	-	Intercept	0.28	0.34	0.50	N	NC	-	-		
		3.0mm	Intercept	0.28	0.37	0.56	N	NC	-	-	-	Intercept	0.29	0.33	0.50	-	-	-	-		
	Low-E Sun/Air	2.2mm	Intercept	0.34	0.23	0.43	-	-	-	-	-	Intercept	0.34	0.20	0.38	-	-	-	-		
		3.0mm	Intercept	0.34	0.23	0.43	-	-	-	-	-	Intercept	0.35	0.20	0.38	-	-	-	-		
	Low-E Sun/Argon	2.2mm	Intercept	0.30	0.22	0.43	-	-	-	NC	SC	Intercept	0.30	0.20	0.38	-	-	NC	SC		
		3.0mm	Intercept	0.30	0.22	0.43	-	-	-	NC	SC	Intercept	0.31	0.20	0.38	-	-	-	S		

American Craftsman Series	American Craftsman Product Type	Glass Type/Infill	Glass Thickness	Spacer	NFRC Certified Products Directory Number	U-Factor		SHGC		U.S. ENERGY STAR v 6.0				Spacer W/ Grid	U-Factor		SHGC		U.S. ENERGY STAR v 6.0						
						U-Factor	SHGC	VLT3	U.S. ENERGY STAR v 6.0				U-Factor		SHGC	VLT3	U.S. ENERGY STAR v 6.0								
									North	NC	SC	South					North	NC	SC	South					
50 Series Single-Hung	Single-Hung Windows	Clear/Air	2.2mm	Intercept	SIL-N-3	0.48	0.64	0.67	-	-	-	-	-	Intercept	0.48	0.58	0.60	-	-	-	-	-	-		
		3.0mm	Intercept	0.48		0.63	0.66	-	-	-	-	Intercept	0.49	0.57	0.59	-	-	-	-	-	-	-	-		
		Low-E/Air	2.2mm	Intercept		0.33	0.30	0.57	-	-	-	-	Intercept	0.33	0.27	0.51	-	-	-	-	-	-	-	-	
		3.0mm	Intercept	0.34		0.30	0.56	-	-	-	-	Intercept	0.35	0.27	0.50	-	-	-	-	-	-	-	-	-	
		Low-E/Argon	2.2mm	Intercept		0.29	0.30	0.57	-	-	-	NC	-	-	Intercept	0.29	0.27	0.51	-	-	-	NC	-	-	-
		3.0mm	Intercept	0.30		0.30	0.56	-	-	-	-	NC	-	-	Intercept	0.31	0.27	0.50	-	-	-	-	-	-	-
		Low-E SmartSun™/Air	2.2mm	Intercept		0.33	0.26	0.51	-	-	-	-	-	-	Intercept	0.33	0.24	0.46	-	-	-	-	-	-	SC
		3.0mm	Intercept	0.34		0.26	0.51	-	-	-	-	-	-	-	Intercept	0.35	0.24	0.46	-	-	-	-	-	-	SC
		Low-E SmartSun™/Argon	2.2mm	Intercept		0.29	0.26	0.51	-	-	-	NC	-	-	Intercept	0.29	0.23	0.46	-	-	-	NC	-	-	SC
		3.0mm	Intercept	0.29		0.26	0.51	-	-	-	-	NC	-	-	Intercept	0.30	0.23	0.46	-	-	-	NC	-	-	SC
		Low-E PassiveSun®	2.2mm	Intercept		0.34	0.46	0.58	-	-	-	-	-	-	Intercept	0.34	0.42	0.52	-	-	-	-	-	-	SC
		3.0mm	Intercept	0.34		0.46	0.57	-	-	-	-	-	-	-	Intercept	0.35	0.41	0.51	-	-	-	-	-	-	SC
		Low-E PassiveSun®/Argon	2.2mm	Intercept		0.30	0.47	0.58	-	-	-	-	-	-	Intercept	0.30	0.42	0.52	-	-	-	-	-	-	SC
		3.0mm	Intercept	0.30		0.46	0.57	-	-	-	-	-	-	-	Intercept	0.31	0.42	0.51	-	-	-	-	-	-	SC
		Low-E PassiveSun® HeatLock®	2.2mm	Intercept		0.30	0.39	0.58	-	-	-	-	-	-	Intercept	0.30	0.35	0.52	-	-	-	-	-	-	SC
	3.0mm	Intercept	0.30	0.38	0.58	-	-	-	-	-	-	-	Intercept	0.31	0.35	0.52	-	-	-	-	-	-	SC		
	Low-E PassiveSun® HeatLock®/Argon	2.2mm	Intercept	0.27	0.39	0.58	-	-	-	-	-	-	Intercept	0.27	0.35	0.52	-	-	-	-	-	-	SC		
	3.0mm	Intercept	0.27	0.38	0.58	-	-	-	-	-	-	-	Intercept	0.28	0.34	0.52	-	-	-	-	-	-	SC		
	Low-E Sun/Air	2.2mm	Intercept	0.33	0.23	0.44	-	-	-	-	-	-	Intercept	0.33	0.21	0.40	-	-	-	-	-	-	SC		
	3.0mm	Intercept	0.34	0.23	0.44	-	-	-	-	-	-	-	Intercept	0.35	0.21	0.39	-	-	-	-	-	-	SC		
	Low-E Sun/Argon	2.2mm	Intercept	0.29	0.23	0.44	-	-	-	-	NC	SC	S	Intercept	0.29	0.21	0.40	-	-	-	NC	SC	S		
	3.0mm	Intercept	0.29	0.23	0.44	-	-	-	-	-	NC	SC	S	Intercept	0.30	0.21	0.39	-	-	-	NC	SC	S		
	Fixed/Picture Windows	Clear/Air	3.0mm	Intercept	0.48	0.66	0.69	-	-	-	-	-	-	Intercept	0.48	0.59	0.62	-	-	-	-	-	-	-	
		4.0mm	Intercept	0.49	0.64	0.68	-	-	-	-	-	-	-	Intercept	0.50	0.57	0.61	-	-	-	-	-	-	-	
		Low-E/Air	3.0mm	Intercept	0.33	0.31	0.58	-	-	-	-	-	-	Intercept	0.34	0.28	0.52	-	-	-	-	-	-	-	
		4.0mm	Intercept	0.35	0.31	0.58	-	-	-	-	-	-	-	Intercept	0.37	0.28	0.52	-	-	-	-	-	-	-	
		Low-E/Argon	3.0mm	Intercept	0.29	0.31	0.58	-	-	-	-	-	-	Intercept	0.30	0.28	0.52	-	-	-	-	-	-	NC	
		4.0mm	Intercept	0.30	0.31	0.58	-	-	-	-	-	-	-	Intercept	0.32	0.28	0.52	-	-	-	-	-	-	NC	
		Low-E SmartSun™/Air	3.0mm	Intercept	0.33	0.27	0.53	-	-	-	-	-	-	Intercept	0.34	0.25	0.48	-	-	-	-	-	-	SC	
		4.0mm	Intercept	0.35	0.27	0.53	-	-	-	-	-	-	-	Intercept	0.37	0.25	0.47	-	-	-	-	-	-	SC	
		Low-E SmartSun™/Argon	3.0mm	Intercept	0.28	0.27	0.53	-	-	-	-	NC	-	-	Intercept	0.29	0.24	0.48	-	-	-	-	-	SC	
		4.0mm	Intercept	0.30	0.27	0.53	-	-	-	-	NC	-	-	-	Intercept	0.31	0.24	0.47	-	-	-	-	-	SC	
		Low-E PassiveSun®	3.0mm	Intercept	0.33	0.48	0.60	-	-	-	-	-	-	Intercept	0.35	0.43	0.53	-	-	-	-	-	-	-	
		4.0mm	Intercept	0.35	0.47	0.59	-	-	-	-	-	-	-	Intercept	0.37	0.42	0.53	-	-	-	-	-	-	-	
		Low-E PassiveSun®/Argon	3.0mm	Intercept	0.29	0.48	0.60	-	-	-	-	NC	-	-	Intercept	0.30	0.43	0.53	-	-	-	-	-	-	
		4.0mm	Intercept	0.30	0.47	0.59	-	-	-	-	NC	-	-	-	Intercept	0.32	0.42	0.53	-	-	-	-	-	-	
		Low-E PassiveSun® HeatLock®	3.0mm	Intercept	0.29	0.40	0.60	-	-	-	-	NC	-	-	Intercept	0.30	0.36	0.54	-	-	-	-	-	-	
	4.0mm	Intercept	0.31	0.39	0.60	-	-	-	-	-	-	-	-	Intercept	0.32	0.36	0.53	-	-	-	-	-	-		
	Low-E PassiveSun® HeatLock®/Argon	3.0mm	Intercept	0.26	0.40	0.60	-	-	-	-	NC	NC	-	Intercept	0.27	0.36	0.54	-	-	-	-	-	-		
	4.0mm	Intercept	0.27	0.39	0.60	-	-	-	-	-	NC	NC	-	Intercept	0.28	0.36	0.53	-	-	-	-	-	-		
	Low-E Sun/Air	3.0mm	Intercept	0.33	0.24	0.46	-	-	-	-	-	-	S	Intercept	0.34	0.22	0.41	-	-	-	-	-	-		
	4.0mm	Intercept	0.35	0.25	0.45	-	-	-	-	-	-	-	S	Intercept	0.37	0.22	0.41	-	-	-	-	-	-		
	Low-E Sun/Argon	3.0mm	Intercept	0.28	0.24	0.46	-	-	-	-	NC	SC	S	Intercept	0.29	0.22	0.41	-	-	-	-	-	SC		
	4.0mm	Intercept	0.30	0.24	0.45	-	-	-	-	-	NC	SC	S	Intercept	0.31	0.22	0.41	-	-	-	-	-	SC		
	Specialty Windows	Clear/Air	3.0mm	Super Spacer	0.47	0.66	0.69	-	-	-	-	-	-	Super Spacer	0.47	0.59	0.62	-	-	-	-	-	-	-	
		4.0mm	Super Spacer	0.48	0.64	0.68	-	-	-	-	-	-	-	Super Spacer	0.49	0.57	0.61	-	-	-	-	-	-	-	
		Low-E/Air	3.0mm	Super Spacer	0.32	0.31	0.58	-	-	-	-	-	-	Super Spacer	0.33	0.28	0.52	-	-	-	-	-	-	-	
		4.0mm	Super Spacer	0.34	0.31	0.58	-	-	-	-	-	-	-	Super Spacer	0.35	0.28	0.52	-	-	-	-	-	-	-	
		Low-E/Argon	3.0mm	Super Spacer	0.27	0.31	0.58	-	-	-	-	NC	-	-	Super Spacer	0.29	0.28	0.52	-	-	-	-	-	-	
		4.0mm	Super Spacer	0.29	0.31	0.58	-	-	-	-	NC	-	-	-	Super Spacer	0.31	0.28	0.52	-	-	-	-	-	NC	
		Low-E SmartSun™/Air	3.0mm	Super Spacer	0.32	0.27	0.53	-	-	-	-	-	-	Super Spacer	0.33	0.25	0.48	-	-	-	-	-	-	SC	
		4.0mm	Super Spacer	0.33	0.27	0.53	-	-	-	-	-	-	-	Super Spacer	0.35	0.25	0.47	-	-	-	-	-	-	SC	
		Low-E SmartSun™/Argon	3.0mm	Super Spacer	0.27	0.27	0.53	-	-	-	-	NC	-	-	Super Spacer	0.28	0.24	0.48	-	-	-	-	-	SC	
		4.0mm	Super Spacer	0.28	0.27	0.53	-	-	-	-	NC	-	-	-	Super Spacer	0.30	0.24	0.47	-	-	-	-	-	SC	
		Low-E PassiveSun®	3.0mm	Super Spacer	0.32	0.48	0.60	-	-	-	-	-	-	Super Spacer	0.33	0.43	0.53	-	-	-	-	-	-	-	
		4.0mm	Super Spacer	0.34	0.47	0.59	-	-	-	-	-	-	-	Super Spacer	0.36	0.42	0.53	-	-	-	-	-	-	-	
		Low-E PassiveSun®/Argon	3.0mm	Super Spacer	0.28	0.48	0.60	-	-	-	-	NC	-	-	Super Spacer	0.29	0.43	0.53	-	-	-	-	-	-	
		4.0mm	Super Spacer	0.29	0.47	0.59	-	-	-	-	NC	-	-	-	Super Spacer	0.31	0.42	0.53	-	-	-	-	-	-	
		Low-E PassiveSun® HeatLock®	3.0mm	Super Spacer*	0.29	0.47	0.59	-	-	-	-	-	-	Super Spacer	0.30	0.42	0.53	-	-	-	-	-	-	-	
	4.0mm	Super Spacer	0.28	0.40	0.60	-	-	-	-	NC	-	-	-	Super Spacer	0.29	0.36	0.54	-	-	-	-	-	NC		
	Low-E PassiveSun® HeatLock®/Argon	3.0mm	Super Spacer	0.30	0.39	0.60	-	-	-	-	NC	-	-	Super Spacer	0.31	0.36	0.53	-	-	-	-	-	-		
	4.0mm	Super Spacer	0.25	0.40	0.60	-	-	-	-	NC	-	-	-	Super Spacer	0.26	0.36	0.54	-	-	-	-	-	NC		
	Low-E Sun/Air	3.0mm	Super Spacer	0.32	0.24	0.46	-	-	-	-	-	-	S	Super Spacer	0.33	0.22	0.41	-	-	-	-	-	-		
	4.0mm	Super Spacer	0.33	0.24	0.45	-	-	-	-	-	-	-	S	Super Spacer	0.35	0.22	0.41	-	-	-	-	-	-		
	Low-E Sun/Argon	3.0mm	Super Spacer	0.27	0.24	0.46	-	-	-	-	NC	SC	S	Super Spacer	0.28	0.22	0.41	-	-	-	-	-	SC		
	4.0mm	Super Spacer	0.28	0.24	0.45	-	-	-	-	NC	SC	S	Super Spacer	0.30	0.22	0.41	-	-	-	-	-				

American Craftsman Series	American Craftsman Product Type	Glass Type/Infill	Glass Thickness	Spacer	NFR Certified Products Directory Number	U-Factor		SHGC2	VLT3	U.S. ENERGY STAR v 6.0				Spacer W/ Grid	U-Factor		SHGC2	VLT3	U.S. ENERGY STAR v 6.0			
						U-Factor	SHGC2			North	NC	SC	South		U-Factor	SHGC2			North	NC	SC	South
70 Series Double-Hung	Double-Hung Windows	Clear/Air	2.2mm	Intercept	SIL-N-33	0.46	0.62	0.64	-	-	-	-	Intercept	0.46	0.55	0.57	-	-	-	-		
		3.0mm	Intercept	0.46		0.60	0.64	-	-	-	-	Intercept	0.46	0.54	0.57	-	-	-	-			
		Low-E/Air	2.2mm	Intercept		0.33	0.29	0.54	-	-	-	-	Intercept	0.33	0.26	0.49	-	-	-	-		
		3.0mm	Intercept	0.33		0.29	0.54	-	-	-	-	Intercept	0.33	0.26	0.48	-	-	-	-			
		Low-E/Argon	2.2mm	Intercept		0.29	0.28	0.54	-	NC	-	-	Intercept	0.29	0.26	0.49	-	NC	-	-		
		3.0mm	Intercept	0.29		0.28	0.54	-	NC	-	-	Intercept	0.29	0.26	0.48	-	NC	-	-			
		Low-E SmartSun™/Air	2.2mm	Intercept		0.33	0.25	0.50	-	-	-	S	Intercept	0.33	0.22	0.44	-	-	-	S		
		3.0mm	Intercept	0.33		0.25	0.49	-	-	-	-	S	Intercept	0.33	0.22	0.44	-	-	-	S		
		Low-E SmartSun™/Argon	2.2mm	Intercept		0.29	0.25	0.50	-	NC	SC	S	Intercept	0.29	0.22	0.44	-	NC	SC	S		
		3.0mm	Intercept	0.29		0.24	0.49	-	NC	SC	S	Intercept	0.29	0.22	0.44	-	NC	SC	S			
		Low-E PassiveSun®	2.2mm	Intercept		0.33	0.45	0.56	-	-	-	-	Intercept	0.33	0.40	0.50	-	-	-	-		
		3.0mm	Intercept	0.33		0.44	0.55	-	-	-	-	-	Intercept	0.33	0.40	0.49	-	-	-	-		
		Low-E PassiveSun®/Argon	2.2mm	Intercept		0.30	0.45	0.56	N	-	-	-	Intercept	0.30	0.41	0.50	-	-	-	-		
		3.0mm	Intercept*	0.29		0.45	0.56	N	-	-	-	Intercept*	0.29	0.41	0.50	N	-	-	-			
		3.0mm	Intercept	0.30		0.44	0.55	N	-	-	-	Intercept	0.30	0.40	0.49	-	NC	-	-			
		3.0mm	Intercept*	0.29		0.44	0.55	N	-	-	-	Intercept*	0.29	0.40	0.49	N	NC	-	-			
		Low-E PassiveSun® HeatLock®	2.2mm	Intercept		0.29	0.37	0.56	N	NC	-	-	Intercept	0.29	0.33	0.50	-	NC	-	-		
		3.0mm	Intercept	0.29		0.37	0.55	N	NC	-	-	Intercept	0.29	0.33	0.49	-	NC	-	-			
		Low-E PassiveSun® HeatLock®/Argon	2.2mm	Intercept		0.27	0.37	0.56	N	NC	-	-	Intercept	0.27	0.33	0.50	N	NC	-	-		
		3.0mm	Intercept	0.27		0.37	0.55	N	NC	-	-	Intercept	0.27	0.33	0.49	N	NC	-	-			
	Low-E Sun/Air	2.2mm	Intercept	0.33	0.22	0.43	-	-	-	-	S	Intercept	0.33	0.20	0.38	-	-	-	S			
	3.0mm	Intercept	0.33	0.22	0.42	-	-	-	-	S	Intercept	0.33	0.20	0.38	-	-	-	S				
	Low-E Sun/Argon	2.2mm	Intercept	0.29	0.22	0.43	-	NC	SC	S	Intercept	0.29	0.20	0.38	-	NC	SC	S				
	3.0mm	Intercept	0.29	0.22	0.42	-	NC	SC	S	Intercept	0.29	0.20	0.38	-	NC	SC	S					
	Fixed/Picture Windows	Clear/Air	3.0mm	Intercept	0.45	0.65	0.68	-	-	-	-	Intercept	0.45	0.58	0.61	-	-	-	-			
		4.0mm	Intercept	0.46	0.63	0.68	-	-	-	-	Intercept	0.46	0.57	0.61	-	-	-	-				
		Low-E/Air	3.0mm	Intercept	0.31	0.31	0.58	-	-	-	-	Intercept	0.31	0.28	0.52	-	-	-	-			
		4.0mm	Intercept	0.31	0.31	0.57	-	-	-	-	Intercept	0.31	0.28	0.51	-	-	-	-				
		Low-E/Argon	3.0mm	Intercept	0.27	0.30	0.58	N	NC	-	-	Intercept	0.27	0.28	0.52	N	NC	-	-			
		4.0mm	Intercept	0.27	0.30	0.57	N	NC	-	-	Intercept	0.27	0.27	0.51	N	NC	-	-				
		Low-E SmartSun™/Air	3.0mm	Intercept	0.31	0.27	0.53	-	-	-	-	Intercept	0.31	0.24	0.47	-	-	-	S			
		4.0mm	Intercept	0.31	0.27	0.52	-	-	-	-	Intercept	0.31	0.24	0.47	-	-	-	S				
		Low-E SmartSun™/Argon	3.0mm	Intercept	0.27	0.26	0.53	N	NC	-	-	Intercept	0.27	0.24	0.47	N	NC	SC	S			
		4.0mm	Intercept	0.27	0.26	0.52	N	NC	-	-	Intercept	0.27	0.24	0.47	N	NC	SC	S				
		Low-E PassiveSun®	3.0mm	Intercept	0.31	0.47	0.59	-	-	-	-	Intercept	0.31	0.43	0.53	-	-	-	-			
		4.0mm	Intercept	0.31	0.46	0.59	-	-	-	-	Intercept	0.31	0.42	0.53	-	-	-	-				
		Low-E PassiveSun®/Argon	3.0mm	Intercept	0.28	0.48	0.59	N	-	-	-	Intercept	0.28	0.43	0.53	N	-	-	-			
		4.0mm	Intercept	0.27	0.47	0.59	N	-	-	-	Intercept	0.27	0.42	0.53	N	-	-	-				
		Low-E PassiveSun® HeatLock®	3.0mm	Intercept	0.27	0.39	0.60	N	NC	-	-	Intercept	0.27	0.36	0.53	N	NC	-	-			
		4.0mm	Intercept	0.28	0.39	0.59	N	NC	-	-	Intercept	0.28	0.35	0.53	N	NC	-	-				
Low-E PassiveSun® HeatLock®/Argon		3.0mm	Intercept	0.24	0.39	0.60	N	NC	-	-	Intercept	0.24	0.35	0.53	N	NC	-	-				
4.0mm		Intercept	0.24	0.39	0.59	N	NC	-	-	Intercept	0.24	0.35	0.53	N	NC	-	-					
Low-E Sun/Air		3.0mm	Intercept	0.31	0.24	0.45	-	-	-	-	S	Intercept	0.31	0.21	0.41	-	-	-	S			
4.0mm		Intercept	0.31	0.24	0.45	-	-	-	-	S	Intercept	0.31	0.22	0.40	-	-	-	S				
Low-E Sun/Argon	3.0mm	Intercept	0.27	0.23	0.45	N	NC	SC	S	Intercept	0.27	0.21	0.41	N	NC	SC	S					
4.0mm	Intercept	0.27	0.23	0.45	N	NC	SC	S	Intercept	0.27	0.21	0.40	N	NC	SC	S						
Specialty Windows	Clear/Air	3.0mm	Super Spacer	0.45	0.65	0.68	-	-	-	-	Super Spacer	0.45	0.58	0.61	-	-	-	-				
	4.0mm	Super Spacer	0.45	0.63	0.68	-	-	-	-	Super Spacer	0.46	0.57	0.61	-	-	-	-					
	Low-E/Air	3.0mm	Super Spacer	0.30	0.31	0.58	-	NC	-	-	Super Spacer	0.30	0.28	0.52	-	NC	-	-				
	4.0mm	Super Spacer	0.30	0.31	0.57	-	NC	-	-	Super Spacer	0.32	0.28	0.51	-	NC	-	-					
	Low-E/Argon	3.0mm	Super Spacer	0.26	0.30	0.58	N	NC	-	-	Super Spacer	0.26	0.28	0.52	N	NC	-	-				
	4.0mm	Super Spacer	0.26	0.30	0.57	N	NC	-	-	Super Spacer	0.28	0.27	0.51	-	NC	-	-					
	Low-E SmartSun™/Air	3.0mm	Super Spacer	0.30	0.27	0.53	-	NC	-	-	Super Spacer	0.30	0.24	0.47	-	NC	SC	S				
	4.0mm	Super Spacer	0.30	0.27	0.52	-	NC	-	-	Super Spacer	0.31	0.24	0.47	-	-	-	S					
	Low-E SmartSun™/Argon	3.0mm	Super Spacer	0.26	0.26	0.53	N	NC	-	-	Super Spacer	0.26	0.24	0.47	N	NC	SC	S				
	4.0mm	Super Spacer	0.26	0.26	0.52	N	NC	-	-	Super Spacer	0.27	0.24	0.47	N	NC	SC	S					
	Low-E PassiveSun®	3.0mm	Super Spacer	0.30	0.47	0.59	N	-	-	-	Super Spacer	0.30	0.43	0.53	N	-	-	-				
	4.0mm	Super Spacer	0.31	0.46	0.59	-	-	-	-	Super Spacer	0.32	0.42	0.53	-	-	-	-					
	Low-E PassiveSun®/Argon	3.0mm	Super Spacer	0.26	0.48	0.59	N	-	-	-	Super Spacer	0.26	0.43	0.53	N	-	-	-				
	4.0mm	Super Spacer	0.26	0.47	0.59	N	-	-	-	Super Spacer	0.27	0.42	0.53	N	-	-	-					
	Low-E PassiveSun® HeatLock®	3.0mm	Super Spacer	0.26	0.39	0.60	N	NC	-	-	Super Spacer	0.26	0.36	0.53	N	NC	-	-				
	4.0mm	Super Spacer	0.27	0.39	0.59	N	NC	-	-	Super Spacer	0.28	0.35	0.53	N	NC	-	-					
	Low-E PassiveSun® HeatLock®/Argon	3.0mm	Super Spacer	0.23	0.39	0.60	N	NC	-	-	Super Spacer	0.23	0.35	0.53	N	NC	-	-				
	4.0mm	Super Spacer	0.24	0.39	0.59	N	NC	-	-	Super Spacer	0.24	0.35	0.53	N	NC	-	-					
	Low-E Sun/Air	3.0mm	Super Spacer	0.30	0.24	0.45	-	NC	SC	S	Super Spacer	0.30	0.21	0.41	-	NC	SC	S				
	4.0mm	Super Spacer	0.30	0.24	0.45	-	NC	SC	S	Super Spacer	0.31	0.22	0.40	-	-	-	S					
Low-E Sun/Argon	3.0mm	Super Spacer	0.26	0.23	0.45	N	NC	SC	S	Super Spacer	0.26	0.21	0.41	N	NC	SC	S					
4.0mm	Super Spacer	0.26	0.23	0.45	N	NC	SC	S	Super Spacer	0.27	0.21	0.40	N	NC	SC	S						

American Craftsman Series	American Craftsman Product Type	Glass Type/Infill	Glass Thickness	Spacer	NFR Certified Products Directory Number	U-Factor		SHGC		VLT3	U.S. ENERGY STAR v 6.0				Spacer W/ Grid	U-Factor		SHGC		VLT3	U.S. ENERGY STAR v 6.0				
						U-Factor	SHGC	North	NC		SC	South	U-Factor	SHGC		North	NC	SC	South						
50 Series Gliding Patio Doors	Gliding Patio Doors	Clear/Air	3.0mm Temp	Intercept	SIL-N-60	0.47	0.63	0.67	-	-	-	-	-	-	Intercept	0.47	0.56	0.58	-	-	-	-	-	-	
			4.0mm Temp	Intercept		0.47	0.61	0.66	-	-	-	-	-	-	Intercept	0.47	0.54	0.58	-	-	-	-	-	-	
		Low-E/Air	3.0mm Temp	Intercept		0.33	0.30	0.56	-	-	-	-	-	-	-	Intercept	0.33	0.27	0.49	-	-	-	-	-	-
			4.0mm Temp	Intercept		0.33	0.30	0.56	-	-	-	-	-	-	-	Intercept	0.33	0.27	0.49	-	-	-	-	-	-
		Low-E/Argon	3.0mm Temp	Intercept		0.29	0.30	0.56	N	NC	-	-	-	-	-	Intercept	0.29	0.26	0.49	N	NC	-	-	-	-
			4.0mm Temp	Intercept		0.29	0.29	0.56	N	NC	-	-	-	-	-	Intercept	0.29	0.26	0.49	N	NC	-	-	-	-
		Low-E SmartSun™/Air	3.0mm Temp	Intercept		0.32	0.26	0.51	-	-	-	-	-	-	-	Intercept	0.32	0.23	0.45	-	-	-	-	-	-
			4.0mm Temp	Intercept		0.33	0.26	0.51	-	-	-	-	-	-	-	Intercept	0.33	0.23	0.45	-	-	-	-	-	-
		Low-E SmartSun™/Argon	3.0mm Temp	Intercept		0.29	0.26	0.51	N	NC	-	-	-	-	-	Intercept	0.29	0.23	0.45	N	NC	SC	S	-	-
			4.0mm Temp	Intercept		0.29	0.26	0.51	N	NC	-	-	-	-	-	Intercept	0.29	0.23	0.45	N	NC	SC	S	-	-
		Low-E PassiveSun®	3.0mm Temp	Intercept		0.33	0.46	0.58	-	-	-	-	-	-	-	Intercept	0.33	0.41	0.51	-	-	-	-	-	-
			4.0mm Temp	Intercept		0.33	0.45	0.57	-	-	-	-	-	-	-	Intercept	0.33	0.40	0.50	-	-	-	-	-	-
		Low-E PassiveSun®/Argon	3.0mm Temp	Intercept		0.29	0.46	0.58	-	-	-	-	-	-	-	Intercept	0.29	0.41	0.51	-	-	-	-	-	-
			4.0mm Temp	Intercept		0.29	0.45	0.57	-	-	-	-	-	-	-	Intercept	0.29	0.40	0.50	N	NC	-	-	-	-
	Low-E PassiveSun® HeatLock®	3.0mm Temp	Intercept	0.29	0.38	0.58	N	NC	-	-	-	-	-	Intercept	0.29	0.34	0.51	N	NC	-	-	-	-		
		4.0mm Temp	Intercept	0.29	0.38	0.57	N	NC	-	-	-	-	-	Intercept	0.29	0.34	0.50	N	NC	-	-	-	-		
	Low-E PassiveSun® HeatLock®/Argon	3.0mm Temp	Intercept	0.26	0.38	0.58	N	NC	-	-	-	-	-	Intercept	0.26	0.34	0.51	N	NC	-	-	-	-		
		4.0mm Temp	Intercept	0.26	0.38	0.57	N	NC	-	-	-	-	-	Intercept	0.26	0.33	0.50	N	NC	-	-	-	-		
	Low-E Sun/Air	3.0mm Temp	Intercept	0.32	0.23	0.44	-	-	-	-	-	-	-	Intercept	0.32	0.21	0.39	-	-	-	-	-	-		
		4.0mm Temp	Intercept	0.32	0.23	0.44	-	-	-	-	-	-	-	Intercept	0.32	0.21	0.39	-	-	-	-	-	-		
	Low-E Sun/Argon	3.0mm Temp	Intercept	0.29	0.23	0.44	N	NC	SC	S	-	-	-	Intercept	0.29	0.20	0.39	N	NC	SC	S	-	-		
		4.0mm Temp	Intercept	0.28	0.23	0.44	N	NC	SC	S	-	-	-	Intercept	0.28	0.20	0.39	N	NC	SC	S	-	-		
	Gliding Patio Doors with Blinds	Low-E/Air	3.0mm Temp	Intercept	SIL-N-60	0.35	0.30	0.56	-	-	-	-	-	-	Intercept	-	-	-	-	-	-	-	-		
	PG50 HVHZ Gliding Patio Doors	Clear/Air	3.0mm Temp	Intercept	SIL-N-60	0.47	0.64	0.67	-	-	-	-	-	-	Intercept	0.47	0.56	0.58	-	-	-	-	-	-	
			4.0mm Temp	Intercept		0.48	0.61	0.66	-	-	-	-	-	-	Intercept	0.48	0.54	0.58	-	-	-	-	-	-	
		Low-E/Air	3.0mm Temp	Intercept		0.33	0.30	0.56	-	-	-	-	-	-	-	Intercept	0.33	0.27	0.49	-	-	-	-	-	-
			4.0mm Temp	Intercept		0.33	0.30	0.56	-	-	-	-	-	-	-	Intercept	0.33	0.27	0.49	-	-	-	-	-	-
		Low-E/Argon	3.0mm Temp	Intercept		0.30	0.30	0.56	N	NC	-	-	-	-	-	Intercept	0.30	0.26	0.49	N	NC	-	-	-	-
			4.0mm Temp	Intercept		0.30	0.30	0.56	N	NC	-	-	-	-	-	Intercept	0.30	0.26	0.49	N	NC	-	-	-	-
		Low-E SmartSun™/Air	3.0mm Temp	Intercept		0.33	0.26	0.51	-	-	-	-	-	-	-	Intercept	0.33	0.23	0.45	-	-	-	-	-	-
			4.0mm Temp	Intercept		0.33	0.26	0.51	-	-	-	-	-	-	-	Intercept	0.33	0.23	0.45	-	-	-	-	-	-
		Low-E SmartSun™/Argon	3.0mm Temp	Intercept		0.29	0.26	0.51	N	NC	-	-	-	-	-	Intercept	0.29	0.23	0.45	N	NC	SC	S	-	-
			4.0mm Temp	Intercept		0.29	0.26	0.51	N	NC	-	-	-	-	-	Intercept	0.29	0.23	0.45	N	NC	SC	S	-	-
		Low-E PassiveSun®	3.0mm Temp	Intercept		0.34	0.46	0.58	-	-	-	-	-	-	-	Intercept	0.34	0.41	0.51	-	-	-	-	-	-
			4.0mm Temp	Intercept		0.34	0.45	0.57	-	-	-	-	-	-	-	Intercept	0.34	0.40	0.50	-	-	-	-	-	-
		Low-E PassiveSun®/Argon	3.0mm Temp	Intercept		0.30	0.46	0.58	-	-	-	-	-	-	-	Intercept	0.30	0.41	0.51	-	-	-	-	-	-
			4.0mm Temp	Intercept		0.30	0.45	0.57	-	-	-	-	-	-	-	Intercept	0.30	0.40	0.50	N	NC	-	-	-	-
	Low-E PassiveSun® HeatLock®	3.0mm Temp	Intercept	0.29	0.38	0.58	N	NC	-	-	-	-	-	Intercept	0.29	0.34	0.51	N	NC	-	-	-	-		
		4.0mm Temp	Intercept	0.30	0.38	0.57	N	NC	-	-	-	-	-	Intercept	0.30	0.34	0.50	N	NC	-	-	-	-		
	Low-E PassiveSun® HeatLock®/Argon	3.0mm Temp	Intercept	0.27	0.38	0.58	N	NC	-	-	-	-	-	Intercept	0.27	0.34	0.51	N	NC	-	-	-	-		
		4.0mm Temp	Intercept	0.27	0.38	0.57	N	NC	-	-	-	-	-	Intercept	0.27	0.33	0.50	N	NC	-	-	-	-		
	Low-E Sun/Air	3.0mm Temp	Intercept	0.33	0.23	0.44	-	-	-	-	-	-	-	Intercept	0.33	0.21	0.39	-	-	-	-	-	-		
		4.0mm Temp	Intercept	0.33	0.23	0.44	-	-	-	-	-	-	-	Intercept	0.33	0.21	0.39	-	-	-	-	-	-		
	Low-E Sun/Argon	3.0mm Temp	Intercept	0.29	0.23	0.44	N	NC	SC	S	-	-	-	Intercept	0.29	0.20	0.39	N	NC	SC	S	-	-		
		4.0mm Temp	Intercept	0.29	0.23	0.44	N	NC	SC	S	-	-	-	Intercept	0.29	0.20	0.39	N	NC	SC	S	-	-		
	HVHZ Gliding Patio Doors with Blinds	Low-E/Air	3.0mm Temp	Intercept	SIL-N-60	0.35	0.30	0.56	-	-	-	-	-	-	Intercept	-	-	-	-	-	-	-	-		
	Side Lites and Transoms	Clear/Air	3.0mm Temp	Intercept	SIL-N-60	0.47	0.63	0.67	-	-	-	-	-	-	Intercept	0.47	0.56	0.58	-	-	-	-	-	-	
			4.0mm Temp	Intercept		0.47	0.61	0.66	-	-	-	-	-	-	Intercept	0.47	0.54	0.58	-	-	-	-	-	-	
		Low-E/Air	3.0mm Temp	Intercept		0.33	0.30	0.56	-	-	-	-	-	-	-	Intercept	0.33	0.27	0.49	-	-	-	-	-	-
			4.0mm Temp	Intercept		0.29	0.30	0.56	-	-	-	-	-	-	-	Intercept	0.29	0.26	0.49	-	-	-	-	-	-
		Low-E/Argon	3.0mm Temp	Intercept		0.29	0.29	0.56	-	-	-	-	-	-	-	Intercept	0.29	0.26	0.49	-	-	-	-	-	-
			4.0mm Temp	Intercept		0.32	0.26	0.51	-	-	-	-	-	-	-	Intercept	0.32	0.23	0.45	-	-	-	-	-	-
		Low-E SmartSun™/Air	3.0mm Temp	Intercept		0.33	0.26	0.51	-	-	-	-	-	-	-	Intercept	0.33	0.23	0.45	-	-	-	-	-	-
			4.0mm Temp	Intercept		0.29	0.26	0.51	-	-	-	-	-	-	-	Intercept	0.29	0.23	0.45	-	-	-	-	-	-
		Low-E SmartSun™/Argon	3.0mm Temp	Intercept		0.29	0.26	0.51	N	NC	-	-	-	-	-	Intercept	0.29	0.23	0.45	-	-	-	-	-	-
			4.0mm Temp	Intercept		0.29	0.26	0.51	N	NC	-	-	-	-	-	Intercept	0.29	0.23	0.45	-	-	-	-	-	-
		Low-E PassiveSun®	3.0mm Temp	Intercept		0.33	0.46	0.58	-	-	-	-	-	-	-	Intercept	0.33	0.41	0.51	-	-	-	-	-	-
			4.0mm Temp	Intercept		0.33	0.45	0.57	-	-	-	-	-	-	-	Intercept	0.33	0.40	0.50	-	-	-	-	-	-
		Low-E PassiveSun®/Argon	3.0mm Temp	Intercept		0.29	0.46	0.58	N	NC	-	-	-	-	-	Intercept	0.29	0.41	0.51	N	NC	-	-	-	-
			4.0mm Temp	Intercept		0.29	0.45	0.57	N	NC	-	-	-	-	-	Intercept	0.29	0.40	0.50	N	NC	-	-	-	-
	Low-E PassiveSun® HeatLock®	3.0mm Temp	Intercept	0.29	0.38	0.58	N	NC	-	-	-	-	-	Intercept	0.29	0.34	0.51	-	-	-	-	-	-		
		4.0mm Temp	Intercept	0.29	0.38	0.57	N	NC	-	-	-	-	-	Intercept	0.29	0.34	0.50	-	-	-	-	-	-		
	Low-E PassiveSun® HeatLock®/Argon	3.0mm Temp	Intercept	0.26	0.38	0.58	N	NC	-	-	-	-	-	Intercept	0.26	0.34	0.51	N	NC	-	-	-	-		
		4.0mm Temp	Intercept	0.26	0.38	0.57	N	NC	-	-	-	-	-	Intercept	0.26	0.33	0.50	N	NC	-	-	-	-		
	Low-E Sun/Air	3.0mm Temp	Intercept	0.32	0.23	0.44	-	-	-	-	-	-	-	Intercept	0.32	0.21	0.39	-	-	-	-	-	-		
		4.0mm Temp	Intercept	0.32	0.23	0.44	-	-	-	-															

American Craftsman Series	American Craftsman Product Type	Glass Type/Infill	Glass Thickness	Spacer	NFR Certified Products Directory Number	U-Factor		SHGC			U.S. ENERGY STAR v 6.0				Spacer W/ Grid		U-Factor		SHGC			U.S. ENERGY STAR v 6.0						
						U-Factor	SHGC	VL T3	North	NC	SC	South	U-Factor	SHGC	VL T3	North	NC	SC	South									
70 Series Gliding Patio Door	Gliding Patio Doors	Clear/Air	3.0mm Temp	Intercept	SIL-N-36	0.46	0.63	0.67	-	-	-	-	-	Intercept	0.46	0.56	0.58	-	-	-	-	-	-	-	-			
		4.0mm Temp	Intercept	0.46		0.61	0.66	-	-	-	-	Intercept	0.46	0.54	0.58	-	-	-	-	-	-	-	-	-	-			
		Low-E/Air	3.0mm Temp	Intercept		0.32	0.30	0.56	-	-	-	-	Intercept	0.32	0.27	0.49	-	-	-	-	-	-	-	-	-	-		
		4.0mm Temp	Intercept	0.32		0.30	0.56	-	-	-	-	Intercept	0.32	0.26	0.49	-	-	-	-	-	-	-	-	-	-	-		
		Low-E/Argon	3.0mm Temp	Intercept		0.28	0.30	0.56	N	NC	-	-	Intercept	0.28	0.26	0.49	N	NC	-	-	-	-	-	-	-	-		
		4.0mm Temp	Intercept	0.28		0.29	0.56	N	NC	-	-	Intercept	0.28	0.26	0.49	N	NC	-	-	-	-	-	-	-	-	-		
		Low-E SmartSun™/Air	3.0mm Temp	Intercept		0.31	0.26	0.51	-	-	-	-	Intercept	0.31	0.23	0.45	-	-	-	-	-	-	-	-	-	-	-	
		4.0mm Temp	Intercept	0.32		0.26	0.51	-	-	-	-	Intercept	0.32	0.23	0.45	-	-	-	-	-	-	-	-	-	-	-	-	
		Low-E SmartSun™/Argon	3.0mm Temp	Intercept		0.28	0.25	0.51	N	NC	SC	S	Intercept	0.28	0.23	0.45	N	NC	SC	S	-	-	-	-	-	-	-	
		4.0mm Temp	Intercept	0.28		0.25	0.51	N	NC	SC	S	Intercept	0.28	0.23	0.45	N	NC	SC	S	-	-	-	-	-	-	-	-	
		Low-E PassiveSun®	3.0mm Temp	Intercept		0.32	0.46	0.58	-	-	-	-	Intercept	0.32	0.41	0.50	-	-	-	-	-	-	-	-	-	-	-	-
		4.0mm Temp	Intercept	0.32		0.45	0.57	-	-	-	-	Intercept	0.32	0.40	0.50	-	-	-	-	-	-	-	-	-	-	-	-	
	Low-E PassiveSun®/Argon	3.0mm Temp	Intercept	0.28	0.46	0.58	-	-	-	-	Intercept	0.28	0.41	0.50	-	-	-	-	-	-	-	-	-	-	-	-		
	4.0mm Temp	Intercept	0.28	0.45	0.57	-	-	-	-	Intercept	0.28	0.40	0.50	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Low-E PassiveSun® HeatLock®	3.0mm Temp	Intercept	0.28	0.38	0.58	N	NC	-	-	Intercept	0.28	0.34	0.51	N	NC	-	-	-	-	-	-	-	-	-	-		
	4.0mm Temp	Intercept	0.28	0.38	0.57	N	NC	-	-	Intercept	0.28	0.33	0.50	N	NC	-	-	-	-	-	-	-	-	-	-	-		
	Low-E PassiveSun® HeatLock®/Argon	3.0mm Temp	Intercept	0.25	0.38	0.58	N	NC	-	-	Intercept	0.25	0.34	0.51	N	NC	-	-	-	-	-	-	-	-	-	-		
	4.0mm Temp	Intercept	0.25	0.38	0.57	N	NC	-	-	Intercept	0.25	0.33	0.50	N	NC	-	-	-	-	-	-	-	-	-	-	-		
	Low-E Sun/Air	3.0mm Temp	Intercept	0.31	0.23	0.44	-	-	-	-	Intercept	0.31	0.20	0.39	-	-	-	-	-	-	-	-	-	-	-	-		
	4.0mm Temp	Intercept	0.32	0.23	0.44	-	-	-	-	Intercept	0.32	0.21	0.38	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Low-E Sun/Argon	3.0mm Temp	Intercept	0.28	0.22	0.44	N	NC	SC	S	Intercept	0.28	0.20	0.39	N	NC	SC	S	-	-	-	-	-	-	-	-		
	4.0mm Temp	Intercept	0.28	0.23	0.44	N	NC	SC	S	Intercept	0.28	0.20	0.38	N	NC	SC	S	-	-	-	-	-	-	-	-	-		
	Side Lites and Transoms		Clear/Air	3.0mm Temp	Intercept	SIL-N-36	0.46	0.63	0.67	-	-	-	-	-	Intercept	0.46	0.56	0.58	-	-	-	-	-	-	-	-	-	
			4.0mm Temp	Intercept	0.46		0.61	0.66	-	-	-	-	Intercept	0.46	0.54	0.58	-	-	-	-	-	-	-	-	-	-	-	
Low-E/Air			3.0mm Temp	Intercept	0.32		0.30	0.56	-	-	-	-	Intercept	0.32	0.27	0.49	-	-	-	-	-	-	-	-	-	-	-	
4.0mm Temp			Intercept	0.32	0.30		0.56	-	-	-	-	Intercept	0.32	0.26	0.49	-	-	-	-	-	-	-	-	-	-	-	-	
Low-E/Argon			3.0mm Temp	Intercept	0.28		0.30	0.56	-	-	-	-	Intercept	0.28	0.26	0.49	-	-	-	-	-	-	-	-	-	-	-	-
4.0mm Temp			Intercept	0.28	0.29		0.56	-	-	-	-	Intercept	0.28	0.26	0.49	-	-	-	-	-	-	-	-	-	-	-	-	-
Low-E SmartSun™/Air			3.0mm Temp	Intercept	0.31		0.26	0.51	-	-	-	-	Intercept	0.31	0.23	0.45	-	-	-	-	-	-	-	-	-	-	-	
4.0mm Temp			Intercept	0.32	0.26		0.51	-	-	-	-	Intercept	0.32	0.23	0.45	-	-	-	-	-	-	-	-	-	-	-	-	
Low-E SmartSun™/Argon			3.0mm Temp	Intercept	0.28		0.25	0.51	-	-	-	-	Intercept	0.28	0.23	0.45	-	-	-	-	-	-	-	-	-	-	-	-
4.0mm Temp			Intercept	0.28	0.25		0.51	-	-	-	-	Intercept	0.28	0.23	0.45	-	-	-	-	-	-	-	-	-	-	-	-	-
Low-E PassiveSun®			3.0mm Temp	Intercept	0.32		0.46	0.58	-	-	-	-	Intercept	0.32	0.41	0.50	-	-	-	-	-	-	-	-	-	-	-	-
4.0mm Temp			Intercept	0.32	0.45		0.57	-	-	-	-	Intercept	0.32	0.40	0.50	-	-	-	-	-	-	-	-	-	-	-	-	-
Low-E PassiveSun®/Argon	3.0mm Temp	Intercept	0.28	0.46	0.58	N	NC	-	-	Intercept	0.28	0.41	0.50	N	NC	-	-	-	-	-	-	-	-	-	-			
4.0mm Temp	Intercept	0.28	0.45	0.57	N	NC	-	-	Intercept	0.28	0.40	0.50	N	NC	-	-	-	-	-	-	-	-	-	-	-			
Low-E PassiveSun® HeatLock®	3.0mm Temp	Intercept	0.28	0.38	0.58	N	NC	-	-	Intercept	0.28	0.34	0.51	N	NC	-	-	-	-	-	-	-	-	-	-			
4.0mm Temp	Intercept	0.28	0.38	0.57	N	NC	-	-	Intercept	0.28	0.33	0.50	N	NC	-	-	-	-	-	-	-	-	-	-	-			
Low-E PassiveSun® HeatLock®/Argon	3.0mm Temp	Intercept	0.25	0.38	0.58	N	NC	-	-	Intercept	0.25	0.34	0.51	N	NC	-	-	-	-	-	-	-	-	-	-			
4.0mm Temp	Intercept	0.25	0.38	0.57	N	NC	-	-	Intercept	0.25	0.33	0.50	N	NC	-	-	-	-	-	-	-	-	-	-	-			
Low-E Sun/Air	3.0mm Temp	Intercept	0.31	0.23	0.44	-	-	-	-	Intercept	0.31	0.20	0.39	-	-	-	-	-	-	-	-	-	-	-	-			
4.0mm Temp	Intercept	0.32	0.23	0.44	-	-	-	-	Intercept	0.32	0.21	0.38	-	-	-	-	-	-	-	-	-	-	-	-	-			
Low-E Sun/Argon	3.0mm Temp	Intercept	0.28	0.22	0.44	-	-	-	-	Intercept	0.28	0.20	0.39	-	-	-	-	-	-	-	-	-	-	-	-			
4.0mm Temp	Intercept	0.28	0.23	0.44	-	-	-	-	Intercept	0.28	0.20	0.38	-	-	-	-	-	-	-	-	-	-	-	-	-			
70 Series Replacement Hopper	Hopper Windows	Clear/Air	2.2mm	Intercept	SIL-N-14	0.48	0.55	0.56	-	-	-	-	-	Intercept	0.48	0.50	0.51	-	-	-	-	-	-	-	-			
		3.0mm	Intercept	0.48		0.54	0.56	-	-	-	-	Intercept	0.48	0.49	0.50	-	-	-	-	-	-	-	-	-	-			
		Low-E/Air	2.2mm	Intercept		0.36	0.26	0.48	-	-	-	-	Intercept	0.36	0.24	0.43	-	-	-	-	-	-	-	-	-	-		
		3.0mm	Intercept	0.36		0.26	0.47	-	-	-	-	Intercept	0.36	0.23	0.43	-	-	-	-	-	-	-	-	-	-	-	-	
		Low-E/Argon	2.2mm	Intercept		0.33	0.25	0.48	-	-	-	-	Intercept	0.33	0.23	0.43	-	-	-	-	-	-	-	-	-	-	-	
		3.0mm	Intercept	0.33		0.25	0.47	-	-	-	-	Intercept	0.33	0.23	0.43	-	-	-	-	-	-	-	-	-	-	-	-	
		Low-E SmartSun™/Air	2.2mm	Intercept		0.36	0.22	0.43	-	-	-	-	Intercept	0.36	0.20	0.39	-	-	-	-	-	-	-	-	-	-	-	
		3.0mm	Intercept	0.36		0.22	0.43	-	-	-	-	Intercept	0.36	0.20	0.39	-	-	-	-	-	-	-	-	-	-	-	-	
		Low-E SmartSun™/Argon	2.2mm	Intercept		0.32	0.22	0.43	-	-	-	-	Intercept	0.32	0.20	0.39	-	-	-	-	-	-	-	-	-	-	-	-
		3.0mm	Intercept	0.32		0.22	0.43	-	-	-	-	Intercept	0.32	0.20	0.39	-	-	-	-	-	-	-	-	-	-	-	-	-
		Low-E PassiveSun®	2.2mm	Intercept		0.36	0.40	0.49	-	-	-	-	Intercept	0.36	0.36	0.44	-	-	-	-	-	-	-	-	-	-	-	-
		3.0mm	Intercept	0.36		0.39	0.48	-	-	-	-	Intercept	0.36	0.36	0.44	-	-	-	-	-	-	-	-	-	-	-	-	-
Low-E PassiveSun®/Argon	2.2mm	Intercept	0.33	0.40	0.49	-	-	-	-	Intercept	0.33	0.37	0.44	-	-	-	-	-	-	-	-	-	-	-	-			
3.0mm	Intercept	0.33	0.40	0.48	-	-	-	-	Intercept	0.33	0.36	0.44	-	-	-	-	-	-	-	-	-	-	-	-	-			
Low-E PassiveSun® HeatLock®	2.2mm	Intercept	0.33	0.33	0.49	-	-	-	-	Intercept	0.33	0.30	0.44	-	-	-	-	-	-	-	-	-	-	-	-			
3.0mm	Intercept	0.33	0.33	0.49	-	-	-	-	Intercept	0.33	0.30	0.44	-	-	-	-	-	-	-	-	-	-	-	-	-			
Low-E PassiveSun® HeatLock®/Argon	2.2mm	Intercept	0.30	0.33																								

American Craftsman Series	American Craftsman Product Type	Glass Type/Infill	Glass Thickness	Spacer	NFRC Certified Products Directory Number	U-Factor	SHGC	VT	U.S. ENERGY STAR v 6.0				Spacer W/ Grid	U-Factor	SHGC	VT	U.S. ENERGY STAR v 6.0					
									North	NC	SC	South					North	NC	SC	South		
70 Series Replacement Gliding	Gliding Windows	Clear/Air	2.2mm	Intercept	SIL-N-10	0.47	0.60	0.62	-	-	-	-	Intercept	0.47	0.53	0.55	-	-	-	-		
		Low-E/Air	3.0mm	Intercept		0.47	0.59	0.62	-	-	-	-	Intercept	0.47	0.52	0.55	-	-	-	-		
		Low-E/Argon	2.2mm	Intercept		0.33	0.28	0.53	-	-	-	-	Intercept	0.33	0.25	0.47	-	-	-	-		
		Low-E/Argon	3.0mm	Intercept		0.30	0.28	0.52	-	-	-	-	Intercept	0.30	0.25	0.46	-	-	-	-		
		Low-E SmartSun™/Air	2.2mm	Intercept		0.30	0.28	0.53	-	-	-	NC	-	-	Intercept	0.30	0.25	0.47	-	-	-	
		Low-E SmartSun™/Air	3.0mm	Intercept		0.30	0.28	0.52	-	-	-	NC	-	-	Intercept	0.30	0.25	0.46	-	-	-	
		Low-E SmartSun™/Argon	2.2mm	Intercept		0.33	0.24	0.48	-	-	-	-	-	S	Intercept	0.33	0.22	0.43	-	-	-	
		Low-E SmartSun™/Argon	3.0mm	Intercept		0.33	0.24	0.47	-	-	-	-	-	S	Intercept	0.33	0.22	0.42	-	-	-	
		Low-E PassiveSun®	2.2mm	Intercept		0.30	0.24	0.48	-	-	-	NC	SC	S	Intercept	0.30	0.22	0.43	-	-	-	
		Low-E PassiveSun®	3.0mm	Intercept		0.30	0.24	0.47	-	-	-	NC	SC	S	Intercept	0.30	0.21	0.42	-	-	-	
		Low-E PassiveSun®/Argon	2.2mm	Intercept		0.34	0.43	0.54	-	-	-	-	-	-	Intercept	0.34	0.39	0.48	-	-	-	
		Low-E PassiveSun®/Argon	3.0mm	Intercept		0.34	0.43	0.53	-	-	-	-	-	-	Intercept	0.34	0.38	0.47	-	-	-	
		Low-E PassiveSun®/HeatLock®	2.2mm	Intercept		0.30	0.44	0.54	-	-	-	N	-	-	Intercept	0.30	0.39	0.48	-	-	-	
		Low-E PassiveSun®/HeatLock®	3.0mm	Intercept		0.30	0.43	0.53	-	-	-	N	-	-	Intercept	0.30	0.39	0.47	-	-	-	
		Low-E PassiveSun®/HeatLock®/Argon	2.2mm	Intercept		0.30	0.36	0.54	-	-	-	NC	-	-	Intercept	0.30	0.32	0.48	-	-	-	
		Low-E PassiveSun®/HeatLock®/Argon	3.0mm	Intercept		0.30	0.36	0.54	-	-	-	NC	-	-	Intercept	0.30	0.32	0.48	-	-	-	
		Low-E Sun/Air	2.2mm	Intercept		0.28	0.36	0.54	-	-	-	N	NC	-	Intercept	0.28	0.32	0.48	N	NC	-	-
		Low-E Sun/Air	3.0mm	Intercept		0.28	0.35	0.54	-	-	-	N	NC	-	Intercept	0.28	0.32	0.48	N	NC	-	-
Low-E Sun/Argon	2.2mm	Intercept	0.33	0.21	0.41	-	-	-	-	-	S	Intercept	0.33	0.19	0.37	-	-	-	S			
Low-E Sun/Argon	3.0mm	Intercept	0.33	0.21	0.41	-	-	-	-	-	S	Intercept	0.33	0.19	0.36	-	-	-	S			
Low-E Sun/Argon	2.2mm	Intercept	0.30	0.21	0.41	-	-	-	NC	SC	S	Intercept	0.30	0.19	0.37	-	-	-	NC			
Low-E Sun/Argon	3.0mm	Intercept	0.30	0.21	0.41	-	-	-	NC	SC	S	Intercept	0.30	0.19	0.36	-	-	-	NC			
70 Series Casement & Awning Impact	Casement Windows	Clear/Air	Lami/3.0mm	Intercept	SIL-N-56	0.40	0.47	0.51	-	-	-	-	Intercept	0.41	0.43	0.46	-	-	-	-		
		Low-E/Air	Lami/3.0mm	Intercept		0.30	0.25	0.44	-	-	-	NC	SC	S	Intercept	0.31	0.23	0.39	-	-	-	
		Low-E/Argon	Lami/3.0mm	Intercept		0.27	0.25	0.44	-	-	-	N	NC	SC	S	Intercept	0.28	0.23	0.39	-	-	-
		Low-E SmartSun™/Air	Lami/3.0mm	Intercept		0.30	0.20	0.39	-	-	-	NC	SC	S	Intercept	0.31	0.19	0.35	-	-	-	
		Low-E SmartSun™/Argon	Lami/3.0mm	Intercept		0.27	0.20	0.39	-	-	-	N	NC	SC	S	Intercept	0.28	0.18	0.35	-	-	-
		Low-E Sun/Air	Lami/3.0mm	Intercept		0.30	0.18	0.35	-	-	-	NC	SC	S	Intercept	0.31	0.17	0.31	-	-	-	
	Awning Windows	Clear/Air	Lami/3.0mm	Intercept	SIL-N-57	0.41	0.47	0.51	-	-	-	-	Intercept	0.41	0.43	0.46	-	-	-	-		
		Low-E/Air	Lami/3.0mm	Intercept		0.31	0.25	0.44	-	-	-	-	S	Intercept	0.32	0.23	0.39	-	-	-	S	
		Low-E/Argon	Lami/3.0mm	Intercept		0.27	0.25	0.44	-	-	-	N	NC	SC	S	Intercept	0.28	0.23	0.39	-	-	-
		Low-E SmartSun™/Air	Lami/3.0mm	Intercept		0.31	0.20	0.39	-	-	-	-	S	Intercept	0.32	0.19	0.35	-	-	-	S	
		Low-E SmartSun™/Argon	Lami/3.0mm	Intercept		0.27	0.20	0.39	-	-	-	N	NC	SC	S	Intercept	0.28	0.18	0.35	-	-	-
		Low-E Sun/Air	Lami/3.0mm	Intercept		0.31	0.19	0.35	-	-	-	-	S	Intercept	0.32	0.17	0.31	-	-	-	S	
	Fixed/Picture Windows	Clear/Air	Lami/3.0mm	Intercept	SIL-N-55	0.45	0.63	0.69	-	-	-	-	Intercept	0.46	0.57	0.62	-	-	-	-		
		Low-E/Air	Lami/3.0mm	Intercept		0.32	0.33	0.59	-	-	-	-	-	Intercept	0.33	0.30	0.53	-	-	-		
		Low-E/Argon	Lami/3.0mm	Intercept		0.27	0.33	0.59	-	-	-	N	NC	-	Intercept	0.28	0.30	0.53	-	-	-	
		Low-E SmartSun™/Air	Lami/3.0mm	Intercept		0.32	0.27	0.53	-	-	-	-	-	Intercept	0.33	0.24	0.47	-	-	-		
		Low-E SmartSun™/Argon	Lami/3.0mm	Intercept		0.27	0.26	0.53	-	-	-	N	NC	-	Intercept	0.28	0.24	0.47	-	-	-	
		Low-E Sun/Air	Lami/3.0mm	Intercept		0.31	0.24	0.47	-	-	-	-	S	Intercept	0.33	0.22	0.42	-	-	-		
Specialty Windows	Clear/Air	Lami/3.0mm	Super Spacer	SIL-N-55	0.45	0.63	0.69	-	-	-	-	Super Spacer	0.46	0.57	0.62	-	-	-	-			
	Low-E/Air	Lami/3.0mm	Super Spacer		0.32	0.33	0.59	-	-	-	-	-	Super Spacer	0.34	0.30	0.53	-	-	-			
	Low-E/Argon	Lami/3.0mm	Super Spacer		0.27	0.33	0.59	-	-	-	N	NC	-	Super Spacer	0.29	0.30	0.53	-	-	-		
	Low-E SmartSun™/Air	Lami/3.0mm	Super Spacer		0.32	0.27	0.53	-	-	-	-	-	Super Spacer	0.33	0.24	0.47	-	-	-			
	Low-E SmartSun™/Argon	Lami/3.0mm	Super Spacer		0.27	0.26	0.53	-	-	-	N	NC	-	Super Spacer	0.28	0.24	0.47	-	-	-		
	Low-E Sun/Air	Lami/3.0mm	Super Spacer		0.32	0.24	0.47	-	-	-	-	S	Super Spacer	0.33	0.22	0.42	-	-	-			
70 Series Single-Hung Impact (Masonry Flange or Nailing Fin)	Impact Single-Hung Windows (Masonry Flange or Nailing Fin)	Clear/Air	Lami/3.0mm	Intercept	SIL-N-3	0.51	0.60	0.66	-	-	-	-	Intercept	0.52	0.54	0.59	-	-	-			
		Low-E/Air	Lami/3.0mm	Intercept		0.39	0.30	0.56	-	-	-	-	-	Intercept	0.42	0.27	0.50	-	-	-		
		Low-E/Argon	Lami/3.0mm	Intercept		0.34	0.30	0.56	-	-	-	-	-	Intercept	0.36	0.27	0.50	-	-	-		
		Low-E SmartSun™/Air	Lami/3.0mm	Intercept		0.39	0.26	0.51	-	-	-	-	-	Intercept	0.41	0.24	0.45	-	-	-		
		Low-E SmartSun™/Argon	Lami/3.0mm	Intercept		0.34	0.26	0.51	-	-	-	-	-	Intercept	0.36	0.23	0.45	-	-	-		
		Low-E Sun/Air	Lami/3.0mm	Intercept		0.39	0.24	0.44	-	-	-	-	S	Intercept	0.41	0.21	0.39	-	-	-		
	Fixed/Picture Windows	Clear/Air	Lami/3.0mm	Super Spacer	SIL-N-59	0.46	0.62	0.69	-	-	-	-	Super Spacer	0.47	0.56	0.61	-	-	-			
		Low-E/Air	Lami/3.0mm	Super Spacer		0.32	0.31	0.58	-	-	-	-	-	Super Spacer	0.34	0.28	0.52	-	-	-		
		Low-E/Argon	Lami/3.0mm	Super Spacer		0.27	0.31	0.58	-	-	-	N	NC	-	Super Spacer	0.29	0.28	0.52	-	-	-	
		Low-E SmartSun™/Air	Lami/3.0mm	Super Spacer		0.32	0.27	0.53	-	-	-	-	-	Super Spacer	0.34	0.24	0.47	-	-	-		
		Low-E SmartSun™/Argon	Lami/3.0mm	Super Spacer		0.27	0.27	0.53	-	-	-	N	NC	-	Super Spacer	0.29	0.24	0.47	-	-	-	
		Low-E Sun/Air	Lami/3.0mm	Super Spacer		0.32	0.24	0.46	-	-	-	-	S	Super Spacer	0.33	0.22	0.41	-	-	-		
Specialty Windows	Clear/Air	Lami/3.0mm	Super Spacer	SIL-N-59	0.46	0.62	0.69	-	-	-	-	Super Spacer	0.47	0.56	0.61	-	-	-				
	Low-E/Air	Lami/3.0mm	Super Spacer		0.32	0.31	0.58	-	-	-	-	-	Super Spacer	0.34	0.28	0.52	-	-	-			
	Low-E/Argon	Lami/3.0mm	Super Spacer		0.27	0.31	0.58	-	-	-	N	NC	-	Super Spacer	0.29	0.28	0.52	-	-	-		
	Low-E SmartSun™/Air	Lami/3.0mm	Super Spacer		0.32	0.27	0.53	-	-	-	-	-	Super Spacer	0.34	0.24	0.47	-	-	-			
	Low-E SmartSun™/Argon	Lami/3.0mm	Super Spacer		0.27	0.27	0.53	-	-	-	N	NC	-	Super Spacer	0.29	0.24	0.47	-	-	-		
	Low-E Sun/Air	Lami/3.0mm	Super Spacer		0.32	0.24	0.46	-	-	-	-	S	Super Spacer	0.33	0.22	0.41	-	-	-			
70 Series Double-Hung Impact	Double-Hung Impact Windows	Clear/Air	Lami/3.0mm	Intercept	SIL-N-33	0.47	0.56	0.61	-	-	-	-	Intercept	0.47	0.50	0.55	-	-	-			
		Low-E/Air	Lami/3.0mm	Intercept		0.35	0.28	0.52	-	-	-	-	-	Intercept	0.35	0.25	0.46	-	-	-		
		Low-E/Argon	Lami/3.0mm	Intercept		0.31	0.28	0.52	-	-	-	-	-	Intercept	0.31	0.25	0.46	-	-	-		
		Low-E SmartSun™/Air	Lami/3.0mm	Intercept		0.34	0.24	0.47	-	-	-	-	S	Intercept	0.34	0.22	0.42	-	-	-		
		Low-E SmartSun™/Argon	Lami/3.0mm	Intercept		0.31	0.24	0.47	-	-	-	-	S	Intercept	0.31	0.22	0.42	-	-	-		
		Low-E Sun/Air	Lami/3.0mm	Intercept		0.34	0.22	0.41	-	-	-	-	S	Intercept	0.34	0.20	0.36	-	-	-		
70 Series Impact Patio Door	Impact Patio Doors	Clear/Air	Lami/3.0mm Temp	Intercept	SIL-N-36	0.44	0.60	0.65	-	-	-	-	Intercept	0.44	0.53	0.57	-	-	-			
		Low-E/Air	Lami/3.0mm Temp	Intercept		0.31	0.29	0.55	-	-	-	-	-	Intercept	0.31	0.26	0.49	-	-	-		
		Low-E/Argon	Lami/3.0mm Temp	Intercept		0.28	0.29	0.55	-	-	-	N	NC	-	Intercept	0.28	0.26	0.49	-	-	-	
		Low-E SmartSun™/Air	Lami/3.0mm Temp	Intercept		0.31	0.25	0.50	-	-	-	-	-	Intercept</								