



HARVEY
BUILDING PRODUCTS

**THERMAL PERFORMANCE DATA SUMMARY
REPLACEMENT WINDOWS & PATIO DOORS**

U-Factor in accordance with NFRC-100-2004 and based on whole window values. To calculate R-value, divide 1 by the U-Factor (example: 1 div. by 0.30 = 3.33 R-value). Tempered Low-E and Bronze tint glass will affect U-Factor, SHGc and VT numbers. Energy Star and Tax Credit Eligibility based on NO GRID Thermal Performance Data. Test results subject to change without notice due to periodic re-testing.

Product Line	Glazing Description	Thermal Performance Data No GRIDS				Thermal Performance Data With GRIDS				ENERGY STAR Zone Compliance Based on NO Grid	Tax Credit Eligible			
		U	R	SHGc	VT	U	R	SHGc	VT					
Tribute Double Hung	Tribute DG Low-E/Argon SunClean™	0.30	3.33	0.25	0.45	0.30	3.33	0.22	0.40	N	NC	SC	S	YES
	Tribute HP TG 2X Low-E/Krypton SunClean™ & SPF™	0.20	5.00	0.21	0.36	0.20	5.00	0.19	0.32	N	NC	SC	S	YES
Classic Double Hung	Clear	0.48	2.08	0.59	0.62	0.48	2.08	0.53	0.55	---	---	---	---	---
	Low-E	0.35	2.86	0.30	0.55	0.35	2.86	0.27	0.49	---	---	SC	---	---
	Low-E/Argon	0.30	3.33	0.30	0.55	0.30	3.33	0.27	0.49	N	NC	SC	---	YES
Slimline Double Hung & Single Hung	Clear	0.49	2.04	0.61	0.64	0.49	2.04	0.54	0.57	---	---	---	---	---
	Low-E	0.35	2.86	0.30	0.55	0.35	2.86	0.27	0.49	---	---	SC	---	---
	Low-E/Argon	0.30	3.33	0.30	0.55	0.30	3.33	0.27	0.49	N	NC	SC	---	YES
Signature Double Hung Mechanical sash & frame	Clear	0.50	2.00	0.58	0.61	0.50	2.00	0.52	0.54	---	---	---	---	---
	Low-E	0.37	2.70	0.29	0.54	0.37	2.70	0.26	0.48	---	---	---	---	---
	Low-E/Argon	0.34	2.94	0.29	0.54	0.34	2.94	0.26	0.48	---	---	SC	---	---
	2X Low-E/Argon	0.30	3.33	0.19	0.38	0.30	3.33	0.17	0.34	N	NC	SC	S	YES
Vinyl Casement, Awning & Fixed Lite Casement	Clear	0.44	2.27	0.45	0.47	0.44	2.27	0.40	0.42	---	---	---	---	---
	Low-E	0.33	3.03	0.23	0.42	0.33	3.03	0.21	0.38	---	---	SC	S	---
	Low-E/Argon	0.30	3.33	0.23	0.42	0.30	3.33	0.21	0.38	N	NC	SC	S	YES
	Tribute DG Low-E/Argon SunClean™	0.30	3.33	0.21	0.36	0.30	3.33	0.19	0.32	N	NC	SC	S	YES
	Tribute HP TG 2X Low-E/Krypton SunClean™ & SPF™	0.22	4.55	0.17	0.29	0.23	4.35	0.16	0.26	N	NC	SC	S	YES
Vinyl Picture Window When used in combination will have the glass matched to the operable or flanker window	Clear	0.45	2.22	0.61	0.65	0.45	2.22	0.54	0.58	---	---	---	---	---
	Low-E	0.31	3.23	0.31	0.58	0.31	3.23	0.28	0.52	---	NC	---	---	---
	Low-E/Argon	0.28	3.57	0.30	0.57	0.28	3.57	0.26	0.49	N	NC	SC	---	YES
	Tribute DG Low-E/Argon SunClean™	0.28	3.57	0.27	0.51	0.28	3.57	0.25	0.45	N	NC	SC	S	YES
	Tribute HP TG 2X Low-E/Krypton SunClean™ & SPF™	0.18	5.56	0.23	0.40	0.18	5.56	0.21	0.36	N	NC	SC	S	YES
Vinyl Designer Shape When used in combination will have the glass matched to the operable or flanker window	Clear	0.47	2.13	0.66	0.71	0.47	2.13	0.60	0.64	---	---	---	---	---
	Low-E	0.32	3.13	0.34	0.63	0.32	3.13	0.31	0.57	---	NC	---	---	---
	Low-E/Argon	0.28	3.57	0.32	0.61	0.28	3.57	0.28	0.53	---	NC	---	---	---
	2X Low-E/Argon	0.27	3.70	0.30	0.28	0.27	3.70	0.28	0.48	N	NC	SC	S	YES
	Tribute DG Low-E/Argon SunClean™	0.28	3.57	0.30	0.54	0.28	3.57	0.27	0.49	N	NC	SC	S	YES
Vinyl Rolling Window	Clear	0.50	2.00	0.61	0.64	0.50	2.00	0.55	0.57	---	---	---	---	---
	Low-E	0.38	2.63	0.31	0.57	0.37	2.70	0.28	0.51	---	---	---	---	---
	Low-E/Argon	0.33	3.03	0.31	0.57	0.33	3.03	0.28	0.51	---	---	---	---	---
	Tribute DG Low-E/Argon SunClean™	0.33	3.03	0.27	0.49	0.33	3.03	0.24	0.44	---	---	SC	S	---
	Triple Glazing 2X Low-E/Argon	0.27	3.70	0.27	0.46	0.27	3.70	0.24	0.41	N	NC	SC	S	YES
Tribute HP TG 2X Low-E/Krypton SunClean™ & SPF™	0.22	4.55	0.23	0.39	0.23	4.35	0.21	0.35	N	NC	SC	S	YES	
Vinyl Hopper	Clear	0.46	2.17	0.55	0.57	0.46	2.17	0.50	0.51	---	---	---	---	---
	Low-E	0.34	2.94	0.28	0.50	0.34	2.94	0.25	0.46	---	---	---	---	---
	Low-E/Argon	0.31	3.23	0.27	0.50	0.31	3.23	0.25	0.46	---	---	---	---	---
	Tribute DG Low-E/Argon SunClean™	0.31	3.23	0.24	0.44	0.31	3.23	0.22	0.39	---	NC	SC	S	---
	2X Low-E/Argon	0.30	3.33	0.26	0.43	0.30	3.33	0.24	0.39	N	NC	SC	---	YES
	Tribute HP TG 2X Low-E/Krypton SunClean™ & SPF™	0.21	4.76	0.20	0.35	0.22	4.55	0.19	0.31	N	NC	SC	S	YES



**THERMAL PERFORMANCE DATA SUMMARY
REPLACEMENT WINDOWS & PATIO DOORS**

U-Factor in accordance with NFRC-100-2004 and based on whole window values. To calculate R-value, divide 1 by the U-Factor (example: 1 div. by 0.30 = 3.33 R-value). Tempered Low-E and Bronze tint glass will affect U-Factor, SHGc and VT numbers. Energy Star and Tax Credit Eligibility based on NO GRID Thermal Performance Data. Test results subject to change without notice due to periodic re-testing.

Product Line	Glazing Description	Thermal Performance Data No GRIDS				Thermal Performance Data With GRIDS				ENERGY STAR Zone Compliance Based on NO Grid	Tax Credit Eligible			
		U	R	SHGc	VT	U	R	SHGc	VT					
Vinyl Deadlite When used in combination will have the glass matched to the operable or flanker window	Clear	0.49	2.04	0.66	0.70	0.49	2.04	0.59	0.63	---	---	---	---	---
	Low-E	0.35	2.86	0.34	0.62	0.35	2.86	0.31	0.56	---	---	---	---	---
	Low-E/Argon	0.31	3.23	0.34	0.62	0.31	3.23	0.30	0.56	---	NC	---	---	---
	Tribute DG Low-E/Argon SunClean™	0.31	3.23	0.30	0.55	0.31	3.23	0.27	0.49	---	NC	SC	---	---
	2X Low-E/Argon	0.30	3.33	0.30	0.52	0.30	3.33	0.26	0.45	N	NC	SC	---	YES
	Tribute HP TG 2X Low-E/Krypton SunClean™ & SPF™	0.19	5.26	0.25	0.43	0.19	5.26	0.23	0.39	N	NC	SC	S	YES

PATIO DOORS:

Vinyl Patio Door Stock/Standard size Using SB60 Low-E No SPF™ >>	Clear	0.46	2.17	0.56	0.60	0.46	2.17	0.49	0.52	---	---	---	---	---
	Low-E	0.34	2.94	0.29	0.53	0.34	2.94	0.25	0.46	---	---	SC	---	---
	Low-E/Argon	0.30	3.33	0.29	0.53	0.30	3.33	0.25	0.46	N	NC	SC	---	YES
	2X Low-E/Argon	0.30	3.33	0.27	0.47	0.30	3.33	0.24	0.41	N	NC	SC	S	YES
	Tribute DG Low-E/Argon SunClean™	0.30	3.33	0.25	0.46	0.30	3.33	0.22	0.40	N	NC	SC	S	YES
	HP TG 2X Low-E/Krypton SunClean™	0.21	4.76	0.22	0.37	0.21	4.76	0.19	0.32	N	NC	SC	S	YES

Vinyl Patio Door Custom Size Using HT 7138 Low-E No SPF™ No SunClean™ >>	Clear	0.46	2.17	0.56	0.60	0.46	2.17	0.49	0.52	---	---	---	---	---
	Low-E	0.37	2.70	0.41	0.51	0.37	2.70	0.36	0.45	---	---	SC	---	---
	Low-E/Argon	0.30	3.33	0.29	0.52	0.30	3.33	0.25	0.45	N	NC	SC	---	YES
	2X Low-E/Argon	0.29	3.45	0.27	0.45	0.29	3.45	0.24	0.39	N	NC	SC	S	YES
	HP TG 2X Low-E/Krypton	0.20	5.00	0.25	0.41	0.21	4.76	0.22	0.35	N	NC	SC	S	YES

MAJESTY WOOD WINDOWS:

Majesty Double Hung	2X Low-E/Argon	0.30	3.33	0.26	0.46	0.30	3.33	0.24	0.41	N	NC	SC	S	YES
Majesty Picture Window	2X Low-E/Argon	0.30	3.33	0.27	0.48	0.30	3.33	0.25	0.43	N	NC	SC	S	YES
Majesty Casement & Awning	2X Low-E/Argon Triple Glazing 2X Low-E/Krypton	0.36	2.78	0.26	0.45	0.36	2.78	0.24	0.41	---	---	---	S	---
		0.27	3.70	0.21	0.36	0.27	3.70	0.24	0.42	N	NC	SC	S	YES
Majesty Fixed Casement	2X Low-E/Argon Triple Glazing 2X Low-E/Krypton	0.32	3.13	0.30	0.52	0.32	3.13	0.27	0.46	---	NC	SC	---	---
		0.23	4.35	0.27	0.47	0.23	4.35	0.25	0.42	N	NC	SC	S	YES

IMPACT RATED WINDOWS & DOORS:

Vigilance Double Hung	Low-E/Argon	0.30	3.33	0.28	0.51	0.31	3.23	0.25	0.45	N	NC	SC	S	YES
Vigilance Casement	Low-E/Argon	0.30	3.33	0.26	0.47	0.30	3.33	0.24	0.43	N	NC	SC	S	YES
Vigilance Picture Window	Low-E/Argon Federal Incentive Package <=0.30U/0.30SHGc	0.27	3.70	0.35	0.56	0.27	3.70	0.32	0.56	N	NC	---	---	---
		0.27	3.70	0.29	0.50	0.27	3.70	0.26	0.45	N	NC	SC	---	YES
Vigilance Patio Door	Low-E/Argon	0.28	3.57	0.26	0.43	0.28	3.57	0.24	0.41	N	NC	SC	S	YES



THERMAL PERFORMANCE DATA SUMMARY REPLACEMENT WINDOWS & PATIO DOORS

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		U	R	SHGc	VT	U	R	SHGc	VT					

ACOUSTICAL INSULATING WINDOWS:

Acoustic Double Hung STC 40 and 44	Clear	0.33	3.03	0.52	0.57	0.33	3.03	0.47	0.50	---	---	---	---	---
	Low-E	0.26	3.85	0.29	0.50	0.26	3.85	0.26	0.45	N	NC	SC	---	YES
	Low-E/Argon	0.24	4.17	0.29	0.50	0.24	4.17	0.26	0.45	N	NC	SC	---	YES
Classic Double Hung STC = 35	Clear	0.48	2.08	0.59	0.62	0.48	2.08	0.53	0.55	---	---	---	---	---
	Low-E	0.35	2.86	0.30	0.55	0.35	2.86	0.27	0.49	---	---	SC	---	---
	Low-E/Argon	0.32	3.13	0.30	0.55	0.32	3.13	0.27	0.49	---	NC	SC	---	---
Slimline DH & SH STC = 35	Clear	0.49	2.04	0.61	0.64	0.49	2.04	0.54	0.57	---	---	---	---	---
	Low-E	0.35	2.86	0.30	0.55	0.35	2.86	0.27	0.49	---	---	SC	---	---
	Low-E/Argon	0.32	3.13	0.30	0.54	0.32	3.13	0.27	0.49	---	NC	SC	---	---
Acoustic Picture Window STC = 40	Clear	0.31	3.23	0.54	0.58	0.31	3.23	0.48	0.52	---	---	---	---	---
	Low-E	0.23	4.35	0.31	0.52	0.23	4.35	0.28	0.46	N	NC	---	---	---
	Low-E/Argon	0.21	4.76	0.30	0.52	0.21	4.76	0.27	0.46	N	NC	SC	---	YES
Acoustic Picture Window STC = 44	Clear	0.32	3.13	0.54	0.60	0.32	3.13	0.49	0.54	---	---	---	---	---
	Low-E	0.24	4.17	0.32	0.53	0.24	4.17	0.29	0.48	N	NC	---	---	---
	Low-E/Argon	0.22	4.55	0.31	0.53	0.22	4.55	0.28	0.48	N	NC	---	---	---
Acoustic Rolling Window STC 40 and 44 (2- and 3-Lite)	Clear	0.34	2.94	0.50	0.55	0.34	2.94	0.45	0.48	---	---	---	---	---
	Low-E	0.26	3.85	0.28	0.48	0.26	3.85	0.25	0.43	N	NC	SC	---	YES
	Low-E/Argon	0.25	4.00	0.28	0.48	0.25	4.00	0.25	0.43	N	NC	SC	---	YES
Acoustic Casement Window STC = 40	Clear	0.31	3.23	0.45	0.50	0.31	3.23	0.41	0.45	---	---	---	---	---
	Low-E	0.25	4.00	0.24	0.44	0.25	4.00	0.22	0.40	N	NC	SC	S	YES
	Low-E/Argon	0.24	4.17	0.24	0.44	0.24	4.17	0.22	0.40	N	NC	SC	S	YES



Zone Compliance based on Energy Star Qualification Criteria outlined below effective January 4, 2010
For more ENERGY STAR® Information
Visit www.energystar.gov for details.

ENERGY STAR® Qualification Criteria for Residential Windows, Doors, and Skylights

Windows				Doors		
Climate Zone	U-Factor ¹	SHGC ²		Glazing Level	U-Factor ¹	SHGC ²
Northern	≤ 0.30	Any	Prescriptive Equivalent Energy Performance	Opaque	≤ 0.21	No Rating
	≈ 0.31	≥ 0.35		≤ ½-Lite	≤ 0.27	≤ 0.30
	≈ 0.32	≥ 0.40		> ½-Lite	≤ 0.32	≤ 0.30
North-Central	≤ 0.32	≤ 0.40				
South-Central	≤ 0.35	≤ 0.30				
Southern	≤ 0.60	≤ 0.27				

Skylights		
Climate Zone	U-Factor ¹	SHGC ²
Northern	≤ 0.55	Any
North-Central	≤ 0.55	≤ 0.40
South-Central	≤ 0.57	≤ 0.30
Southern	≤ 0.70	≤ 0.30

¹ Btu/h.ft².°F

² Fraction of incident solar radiation

