



All-Wood Windows and Patio Doors

Product Performance Guide

Clear Insulating Glass and High-Performance Glazings

11/3/2010

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NFRC Thermal Performance Values									
		Glazing Description	U-Factor	R-Value	SHGC	VT	CR	Energy Star Rating	
Wood Casement	Air-filled	No GIAS	Insul Clear	0.45	2.22	0.53	0.56	41	None
			LowE Clear	0.33	3.03	0.27	0.48	52	S/C and S
			LowE Clear SPF	0.33	3.03	0.27	0.47	51	S/C and S
			Climate Control	0.33	3.03	0.23	0.43	51	S/C and S
			Climate Control SPF	0.33	3.03	0.25	0.46	51	S/C and S
			Super Sun Blocker	0.33	3.03	0.19	0.37	52	S/C and S
		Super Sun Blocker SPF	0.33	3.03	0.19	0.36	52	S/C and S	
		366 LowE	0.32	3.13	0.19	0.44	56	N/C,S/C, S	
		w/ GIAS & HDL < 1"	Insul Clear	0.45	2.22	0.48	0.51	41	None
			LowE Clear	0.33	3.03	0.25	0.44	52	S/C and S
			LowE Clear SPF	0.33	3.03	0.24	0.43	51	S/C and S
			Climate Control	0.33	3.03	0.21	0.39	51	S/C and S
	Climate Control SPF		0.33	3.03	0.23	0.42	51	S/C and S	
	Super Sun Blocker		0.33	3.03	0.18	0.34	52	S/C and S	
	w/ GIAS & HDL ≥ 1"	Insul Clear	0.45	2.22	0.44	0.45	41	None	
		LowE Clear	0.33	3.03	0.22	0.39	52	S/C and S	
		LowE Clear SPF	0.33	3.03	0.22	0.38	51	S/C and S	
		Climate Control	0.33	3.03	0.19	0.35	51	S/C and S	
		Climate Control SPF	0.33	3.03	0.21	0.38	51	S/C and S	
		Super Sun Blocker	0.33	3.03	0.16	0.30	52	S/C and S	
	TRIPLE IG NOGIAS	Super Sun Blocker SPF	0.33	3.03	0.16	0.30	52	S/C and S	
		366 LowE	0.32	3.13	0.16	0.36	56	N/C,S/C, S	
		Triple IG LE/CL/CL	0.30	3.33	0.24	0.44	58	All Zones	
		Triple IG LE/CL/LE	0.26	3.85	0.22	0.37	63	All Zones	
Triple IG LE/CL/CL (HDL)		0.30	3.33	0.22	0.39	58	All Zones		
Triple IG LE/CL/LE (HDL)		0.26	3.85	0.20	0.34	63	All Zones		
Argon-filled	No GIAS	LowE Clear	0.30	3.33	0.27	0.48	54	All Zones	
		LowE Clear SPF	0.29	3.45	0.27	0.48	54	All Zones	
		Climate Control	0.30	3.33	0.22	0.43	54	All Zones	
		Climate Control SPF	0.30	3.33	0.25	0.46	54	All Zones	
		Super Sun Blocker	0.30	3.33	0.19	0.37	54	All Zones	
		Super Sun Blocker SPF	0.30	3.33	0.19	0.36	54	All Zones	
		366 LowE	0.28	3.57	0.19	0.44	59	All Zones	
		w/ GIAS & HDL < 1"	LowE Clear	0.30	3.33	0.24	0.44	54	All Zones
			LowE Clear SPF	0.29	3.45	0.24	0.44	54	All Zones
			Climate Control	0.30	3.33	0.20	0.39	54	All Zones
			Climate Control SPF	0.30	3.33	0.23	0.42	54	All Zones
			Super Sun Blocker	0.30	3.33	0.17	0.34	54	All Zones
	Super Sun Blocker SPF		0.30	3.33	0.17	0.33	54	All Zones	
	w/ GIAS & HDL ≥ 1"	366 LowE	0.28	3.57	0.17	0.40	59	All Zones	
		LowE Clear	0.30	3.33	0.22	0.39	54	All Zones	
		LowE Clear SPF	0.29	3.45	0.22	0.39	54	All Zones	
		Climate Control	0.30	3.33	0.19	0.35	54	All Zones	
		Climate Control SPF	0.30	3.33	0.21	0.38	54	All Zones	
		Super Sun Blocker	0.30	3.33	0.16	0.30	54	All Zones	
	TRIPLE IG NOGIAS	Super Sun Blocker SPF	0.30	3.33	0.16	0.30	54	All Zones	
		366 LowE	0.28	3.57	0.16	0.36	59	All Zones	
		Triple IG LE/CL/CL	0.27	3.70	0.24	0.44	61	All Zones	
		Triple IG LE/CL/LE	0.23	4.35	0.22	0.37	66	All Zones	
		Triple IG LE/CL/CL (HDL)	0.27	3.70	0.22	0.39	61	All Zones	
Triple IG LE/CL/LE (HDL)		0.23	4.35	0.20	0.34	66	All Zones		

DP Ratings (Air/Water/Structural Performance)					
DP Rating (Max. Size Tested)	Air Infiltration (CFM)	Water Resistance (PSF)	Structural Test Pressure (PSF)	Test Report #	Notes
C-C50 36x72	0.01	7.5	+75/-75	180-7756	Units require tempered glass to meet DP50; annealed glass = DP40
C-C50 36x60	0.04	7.5	+75/-75	180-7103	
C-C50 36x52	0.01	7.5	+75/-75	06-51473.01	
C-C50 36x40	0.01	7.5	+75/-75	06-51472.01	

Performance ratings are based on individual units only. Hurd is constantly working to refine and improve our products. For this reason specifications change without notice.

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NFRC Thermal Performance Values									
		Glazing Description	U- Factor	R- Value	SHGC	VT	CR	Energy Star Rating	
Wood Casement Arch Head	Air-Filled	No GIAS	Insul Clear	0.45	2.22	0.53	0.56	41	None
			LowE Clear	0.33	3.03	0.27	0.48	51	S/C and S
			LowE Clear SPF	0.33	3.03	0.27	0.47	51	S/C and S
			Climate Control	0.33	3.03	0.25	0.47	50	S/C and S
			Climate Control SPF	0.33	3.03	0.25	0.46	50	S/C and S
			Super Sun Blocker	0.33	3.03	0.19	0.37	51	S/C and S
			Super Sun Blocker SPF	0.33	3.03	0.19	0.36	51	S/C and S
		366 LowE	0.32	3.13	0.19	0.44	56	N/C,S/C, S	
		w/ GIAS & HDL < 1"	Insul Clear	0.45	2.22	0.48	0.51	41	None
			LowE Clear	0.33	3.03	0.25	0.44	51	S/C and S
			LowE Clear SPF	0.33	3.03	0.24	0.43	51	S/C and S
			Climate Control	0.33	3.03	0.23	0.43	50	S/C and S
			Climate Control SPF	0.33	3.03	0.23	0.42	50	S/C and S
			Super Sun Blocker	0.33	3.03	0.18	0.34	51	S/C and S
	Super Sun Blocker SPF		0.33	3.03	0.18	0.33	51	S/C and S	
	366 LowE	0.32	3.13	0.18	0.40	56	N/C,S/C, S		
	w/ GIAS & HDL ≥ 1"	Insul Clear	0.45	2.22	0.44	0.45	41	None	
		LowE Clear	0.33	3.03	0.22	0.39	51	S/C and S	
		LowE Clear SPF	0.33	3.03	0.22	0.36	51	S/C and S	
		Climate Control	0.33	3.03	0.21	0.39	50	S/C and S	
		Climate Control SPF	0.33	3.03	0.21	0.38	50	S/C and S	
		Super Sun Blocker	0.33	3.03	0.16	0.30	51	S/C and S	
		Super Sun Blocker SPF	0.33	3.03	0.16	0.30	51	S/C and S	
	366 LowE	0.32	3.13	0.16	0.36	56	N/C,S/C, S		
	TRIPLE IG NO GIAS	Triple IG LE/CL/CL	0.30	3.33	0.24	0.44	58	All Zones	
		Triple IG LE/CL/LE	0.26	3.85	0.22	0.37	63	All Zones	
		Triple IG LE/CL/CL (HDL)	0.30	3.33	0.22	0.39	58	All Zones	
		Triple IG LE/CL/LE (HDL)	0.26	3.85	0.20	0.34	63	All Zones	
Argon-Filled	No GIAS	LowE Clear	0.30	3.33	0.27	0.48	53	All Zones	
		LowE Clear SPF	0.30	3.33	0.26	0.47	53	All Zones	
		Climate Control	0.30	3.33	0.25	0.47	53	All Zones	
		Climate Control SPF	0.30	3.33	0.25	0.46	53	All Zones	
		Super Sun Blocker	0.30	3.33	0.19	0.37	53	All Zones	
		Super Sun Blocker SPF	0.30	3.33	0.19	0.36	53	All Zones	
		366 LowE	0.28	3.57	0.19	0.44	59	All Zones	
	w/ GIAS & HDL < 1"	LowE Clear	0.30	3.33	0.24	0.44	53	All Zones	
		LowE Clear SPF	0.30	3.33	0.24	0.43	53	All Zones	
		Climate Control	0.30	3.33	0.23	0.43	53	All Zones	
		Climate Control SPF	0.30	3.33	0.23	0.42	53	All Zones	
		Super Sun Blocker	0.30	3.33	0.17	0.34	53	All Zones	
		Super Sun Blocker SPF	0.30	3.33	0.17	0.33	53	All Zones	
		366 LowE	0.28	3.57	0.17	0.40	59	All Zones	
	w/ GIAS & HDL ≥ 1"	LowE Clear	0.30	3.33	0.22	0.39	53	All Zones	
		LowE Clear SPF	0.30	3.33	0.22	0.38	53	All Zones	
		Climate Control	0.30	3.33	0.21	0.39	53	All Zones	
		Climate Control SPF	0.30	3.33	0.21	0.38	53	All Zones	
		Super Sun Blocker	0.30	3.33	0.16	0.30	53	All Zones	
		Super Sun Blocker SPF	0.30	3.33	0.16	0.30	53	All Zones	
		366 LowE	0.28	3.57	0.16	0.36	59	All Zones	
	TRIPLE IG NO GIAS	Triple IG LE/CL/CL	0.27	3.70	0.24	0.44	61	All Zones	
		Triple IG LE/CL/LE	0.23	4.35	0.22	0.37	66	All Zones	
		Triple IG LE/CL/CL (HDL)	0.27	3.70	0.22	0.39	61	All Zones	
		Triple IG LE/CL/LE (HDL)	0.23	4.35	0.20	0.34	66	All Zones	

DP Ratings (Air/Water/Structural Performance)					
DP Rating (Max. Size Tested)	Air Infiltration (CFM)	Water Resistance (PSF)	Structural Test Pressure (PSF)	Test Report #	Notes
Full Arch (DP 40)	0.01	7.5	+60/-60	06-30326.01	
1/4 Arch (DP 40)	0.01	7.5	+60/-60	06-30319.01	
C-C50 36x40	0.01	7.5	+75/-75	06-51472.01	

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NFRC Thermal Performance Values									
Glazing Description		U- Factor	R- Value	SHGC	VT	CR	Energy Star Rating		
Wood Awning	Air-Filled	No GIAS	Insul Clear	0.44	2.27	0.52	0.55	40	None
			LowE Clear	0.32	3.13	0.26	0.47	49	N/C,S/C, S
			LowE Clear SPF	0.33	3.03	0.24	0.31	49	S/C and S
		Climate Control	0.32	3.13	0.25	0.46	49	N/C,S/C, S	
		Climate Control SPF	0.32	3.13	0.24	0.45	49	N/C,S/C, S	
		Super Sun Blocker	0.32	3.13	0.19	0.36	49	N/C,S/C, S	
	w/ GIAS & HDL < 1"	Super Sun Blocker SPF	0.32	3.13	0.19	0.36	50	N/C,S/C, S	
		366 LowE	0.31	3.23	0.19	0.44	52	N/C,S/C, S	
		Insul Clear	0.44	2.27	0.47	0.49	40	None	
		LowE Clear	0.32	3.13	0.24	0.43	49	N/C,S/C, S	
		LowE Clear SPF	0.33	3.03	0.22	0.28	49	S/C and S	
		Climate Control	0.32	3.13	0.23	0.42	49	N/C,S/C, S	
w/ GIAS & HDL ≥ 1"	Climate Control SPF	0.32	3.13	0.22	0.41	49	N/C,S/C, S		
	Super Sun Blocker	0.32	3.13	0.17	0.33	49	N/C,S/C, S		
	Super Sun Blocker SPF	0.32	3.13	0.17	0.32	50	N/C,S/C, S		
	366 LowE	0.31	3.23	0.18	0.40	52	N/C,S/C, S		
	Insul Clear	0.44	2.27	0.43	0.44	40	None		
	LowE Clear	0.32	3.13	0.22	0.38	49	N/C,S/C, S		
Argon-Filled	TRIPLE IG NO GIAS	LowE Clear SPF	0.33	3.03	0.20	0.26	49	S/C and S	
		Climate Control	0.32	3.13	0.21	0.38	49	N/C,S/C, S	
		Climate Control SPF	0.32	3.13	0.20	0.37	49	N/C,S/C, S	
		Super Sun Blocker	0.32	3.13	0.16	0.30	49	N/C,S/C, S	
		Super Sun Blocker SPF	0.32	3.13	0.16	0.29	50	N/C,S/C, S	
		366 LowE	0.31	3.23	0.16	0.36	52	N/C,S/C, S	
	No GIAS	Triple IG LE/CL/CL	0.30	3.33	0.24	0.44	58	All Zones	
		Triple IG LE/CL/LE	0.26	3.85	0.22	0.37	61	All Zones	
		Triple IG LE/CL/CL (HDL)	0.30	3.33	0.22	0.40	58	All Zones	
		Triple IG LE/CL/LE (HDL)	0.26	3.85	0.20	0.34	61	All Zones	
		LowE Clear	0.29	3.45	0.26	0.47	52	All Zones	
		LowE Clear SPF	0.29	3.45	0.26	0.46	52	All Zones	
w/ GIAS & HDL < 1"	Climate Control	0.29	3.45	0.24	0.46	52	All Zones		
	Climate Control SPF	0.29	3.45	0.24	0.45	52	All Zones		
	Super Sun Blocker	0.29	3.45	0.19	0.36	52	All Zones		
	Super Sun Blocker SPF	0.29	3.45	0.18	0.36	52	All Zones		
	366 LowE	0.28	3.57	0.19	0.44	56	All Zones		
	LowE Clear	0.30	3.33	0.24	0.43	52	All Zones		
w/ GIAS & HDL ≥ 1"	LowE Clear SPF	0.30	3.33	0.24	0.42	52	All Zones		
	Climate Control	0.30	3.33	0.22	0.42	52	All Zones		
	Climate Control SPF	0.30	3.33	0.22	0.41	52	All Zones		
	Super Sun Blocker	0.30	3.33	0.17	0.33	52	All Zones		
	Super Sun Blocker SPF	0.30	3.33	0.17	0.32	52	All Zones		
	366 LowE	0.29	3.45	0.18	0.40	56	All Zones		
TRIPLE IG NO GIAS	LowE Clear	0.30	3.33	0.22	0.38	52	All Zones		
	LowE Clear SPF	0.30	3.33	0.21	0.37	52	All Zones		
	Climate Control	0.30	3.33	0.20	0.38	52	All Zones		
	Climate Control SPF	0.30	3.33	0.20	0.37	52	All Zones		
	Super Sun Blocker	0.30	3.33	0.16	0.30	52	All Zones		
	Super Sun Blocker SPF	0.30	3.33	0.16	0.29	52	All Zones		
TRIPLE IG NO GIAS	366 LowE	0.29	3.45	0.16	0.36	56	All Zones		
	Triple IG LE/CL/CL	0.27	3.70	0.24	0.44	61	All Zones		
	Triple IG LE/CL/LE	0.23	4.35	0.22	0.37	64	All Zones		
	Triple IG LE/CL/CL (HDL)	0.27	3.70	0.22	0.40	61	All Zones		
	Triple IG LE/CL/LE (HDL)	0.23	4.35	0.20	0.34	64	All Zones		

DP Ratings (Air/Water/Structural Performance)					
DP Rating (Max. Size Tested)	Air Infiltration (CFM)	Water Resistance (PSF)	Structural Test Pressure (PSF)	Test Report #	Notes
AP-C50 48x36	0.01	7.5	+75/-75	180-7807	None
AP-C40 48x48	0.01	7.5	+60/-60	180-7806	None
AP-LC35 60x32	0.01	7.5	+52.5/-75	180-7808	None

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NFRC Thermal Performance Values									
Glazing Description		U- Factor	R- Value	SHGC	VT	CR	Energy Star Rating		
Wood Casement Picture	Air-Filled	No GIAS	Insul Clear	0.45	2.22	0.61	0.64	41	None
			LowE Clear	0.31	3.23	0.31	0.56	50	N/C
			LowE Clear SPF	0.31	3.23	0.31	0.54	50	N/C
			Climate Control	0.31	3.23	0.29	0.54	50	S/C and S
			Climate Control SPF	0.31	3.23	0.29	0.53	50	S/C and S
			Super Sun Blocker	0.31	3.23	0.22	0.42	50	N/C,S/C, S
			Super Sun BlockerSPF	0.31	3.23	0.22	0.42	54	N/C,S/C, S
			366 LowE	0.30	3.33	0.22	0.50	54	All Zones
			w/ GIAS & HDL < 1"	Insul Clear	0.45	2.22	0.55	0.57	41
	LowE Clear	0.32		3.13	0.28	0.49	50	S/C and S	
	LowE Clear SPF	0.31		3.23	0.28	0.48	50	S/C and S	
	Climate Control	0.31		3.23	0.26	0.48	50	N/C,S/C, S	
	Climate Control SPF	0.31		3.23	0.26	0.47	50	N/C,S/C, S	
	Super Sun Blocker	0.31		3.23	0.20	0.38	50	N/C,S/C, S	
	Super Sun Blocker SPF	0.31		3.23	0.20	0.37	54	N/C,S/C, S	
	366 LowE	0.30		3.33	0.20	0.45	54	All Zones	
	w/ GIAS & HDL ≥ 1"	Insul Clear		0.45	2.22	0.49	0.50	41	None
		LowE Clear	0.32	3.13	0.25	0.44	50	N/C,S/C, S	
		LowE Clear SPF	0.31	3.23	0.25	0.43	50	N/C,S/C, S	
		Climate Control	0.31	3.23	0.24	0.43	50	N/C,S/C, S	
		Climate Control SPF	0.31	3.23	0.23	0.42	50	N/C,S/C, S	
		Super Sun Blocker	0.31	3.23	0.18	0.34	50	N/C,S/C, S	
		Super Sun Blocker SPF	0.31	3.23	0.18	0.33	54	N/C,S/C, S	
		366 LowE	0.30	3.33	0.18	0.40	54	All Zones	
		TRIPLE IG NO GIAS	Triple IG LE/CL/CL	0.31	3.23	0.27	0.50	55	N/C,S/C, S
	Triple IG LE/CL/LE		0.27	3.70	0.25	0.42	59	All Zones	
	Triple IG LE/CL/CL (HDL)		0.31	3.23	0.24	0.44	55	N/C,S/C, S	
	Triple IG LE/CL/LE (HDL)		0.27	3.70	0.22	0.38	59	All Zones	
	Argon-Filled	No GIAS	LowE Clear	0.28	3.57	0.31	0.55	53	N/C, SC
			LowE Clear SPF	0.28	3.57	0.30	0.54	53	S/C and S
			Climate Control	0.28	3.57	0.29	0.54	53	S/C and S
			Climate Control SPF	0.28	3.57	0.28	0.53	53	S/C and S
			Super Sun Blocker	0.28	3.57	0.22	0.42	53	All Zones
			Super Sun Blocker SPF	0.28	3.57	0.22	0.42	57	All Zones
			366 LowE	0.27	3.70	0.22	0.50	57	All Zones
			w/ GIAS & HDL < 1"	LowE Clear	0.29	3.45	0.28	0.49	53
LowE Clear SPF				0.29	3.45	0.27	0.48	53	All Zones
Climate Control		0.29		3.45	0.26	0.48	53	All Zones	
Climate Control SPF		0.29		3.45	0.26	0.47	53	All Zones	
Super Sun Blocker		0.29		3.45	0.20	0.38	53	All Zones	
Super Sun Blocker SPF		0.29		3.45	0.20	0.37	57	All Zones	
366 LowE		0.28		3.57	0.20	0.45	57	All Zones	
w/ GIAS & HDL ≥ 1"		LowE Clear		0.29	3.45	0.25	0.43	53	All Zones
		LowE Clear SPF		0.29	3.45	0.25	0.43	53	All Zones
		Climate Control	0.29	3.45	0.24	0.43	53	All Zones	
		Climate Control SPF	0.29	3.45	0.23	0.42	53	All Zones	
		Super Sun Blocker	0.29	3.45	0.18	0.34	53	All Zones	
		Super Sun Blocker SPF	0.29	3.45	0.18	0.33	57	All Zones	
		366 LowE	0.28	3.57	0.18	0.40	57	All Zones	
		TRIPLE IG NO GIAS	Triple IG LE/CL/CL	0.27	3.70	0.27	0.50	58	All Zones
			Triple IG LE/CL/LE	0.24	4.17	0.24	0.42	59	All Zones
Triple IG LE/CL/CL (HDL)			0.27	3.70	0.24	0.44	58	All Zones	
Triple IG LE/CL/LE (HDL)			0.24	4.17	0.22	0.38	59	All Zones	

DP Ratings (Air/Water/Structural Performance)					
DP Rating (Max. Size Tested)	Air Infiltration (CFM)	Water Resistance (PSF)	Structural Test Pressure (PSF)	Test Report #	Notes
FW-C50 48x60	0.01	7.5	+105/-105	180-7802	
FW-C50 72x72	0.01	7.5	+75/-75	180-7772	
FW-C50 52x84	0.01	7.5	+52.5/-60	180-7179	

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NFRC Thermal Performance Values									
Glazing Description		U- Factor	R- Value	SHGC	VT	CR	Energy Star Rating		
Air-Filled	No G/AS	Insul Clear	0.45	2.22	0.61	0.64	41	None	
		LowE Clear	0.31	3.23	0.31	0.56	50	N/C	
		LowE Clear SPF	0.31	3.23	0.31	0.54	50	N/C	
	w/ G/AS & HDL < 1"	Climate Control	0.31	3.23	0.29	0.54	50	S/C and S	
		Climate Control SPF	0.31	3.23	0.29	0.53	50	S/C and S	
		Super Sun Blocker	0.31	3.23	0.22	0.42	50	N/C,S/C, S	
		Super Sun BlockerSPF	0.31	3.23	0.22	0.42	51	N/C,S/C, S	
		366 LowE	0.30	3.33	0.22	0.50	54	All Zones	
		w/ G/AS & HDL ≥ 1"	Insul Clear	0.45	2.22	0.55	0.57	41	None
			LowE Clear	0.31	3.23	0.28	0.49	50	S/C and S
LowE Clear SPF	0.31		3.23	0.28	0.48	50	S/C and S		
Climate Control	0.31		3.23	0.26	0.48	50	N/C,S/C, S		
Climate Control SPF	0.31		3.23	0.26	0.47	50	N/C,S/C, S		
Super Sun Blocker	0.31		3.23	0.20	0.38	50	N/C,S/C, S		
Super Sun Blocker SPF	0.31		3.23	0.20	0.37	51	N/C,S/C, S		
TRIPLE IG NO G/AS	366 LowE	0.30	3.33	0.20	0.45	54	All Zones		
	Insul Clear	0.45	2.22	0.49	0.50	41	None		
	LowE Clear	0.31	3.23	0.25	0.44	50	N/C,S/C, S		
	LowE Clear SPF	0.31	3.23	0.25	0.43	50	N/C,S/C, S		
	Climate Control	0.31	3.23	0.24	0.43	50	N/C,S/C, S		
	Climate Control SPF	0.31	3.23	0.23	0.42	50	N/C,S/C, S		
	Super Sun Blocker	0.31	3.23	0.18	0.34	50	N/C,S/C, S		
Argon-Filled	No G/AS	Super Sun Blocker SPF	0.31	3.23	0.18	0.33	51	N/C,S/C, S	
		366 LowE	0.30	3.33	0.18	0.40	54	All Zones	
		Triple IG LE/CL/CL	0.31	3.23	0.27	0.50	55	N/C,S/C, S	
	w/ G/AS & HDL < 1"	Triple IG LE/CL/LE	0.27	3.70	0.25	0.42	59	All Zones	
		Triple IG LE/CL/CL (CHDL)	0.31	3.23	0.24	0.44	55	N/C,S/C, S	
		Triple IG LE/CL/LE (CHDL)	0.27	3.70	0.22	0.38	59	All Zones	
		LowE Clear	0.28	3.57	0.31	0.55	53	N/C, SC	
		LowE Clear SPF	0.28	3.57	0.30	0.54	53	S/C and S	
		Climate Control	0.28	3.57	0.29	0.54	53	S/C and S	
		Climate Control SPF	0.28	3.57	0.28	0.53	53	S/C and S	
w/ G/AS & HDL ≥ 1"	Super Sun Blocker	0.28	3.57	0.22	0.42	53	All Zones		
	Super Sun Blocker SPF	0.28	3.57	0.22	0.42	53	All Zones		
	366 LowE	0.27	3.70	0.22	0.50	57	All Zones		
	LowE Clear	0.29	3.45	0.28	0.49	52	S/C and S		
	LowE Clear SPF	0.29	3.45	0.27	0.48	52	All Zones		
	Climate Control	0.29	3.45	0.26	0.48	52	All Zones		
	Climate Control SPF	0.29	3.45	0.26	0.47	52	All Zones		
TRIPLE IG NO G/AS	Super Sun Blocker	0.29	3.45	0.20	0.38	52	All Zones		
	Super Sun Blocker SPF	0.29	3.45	0.20	0.37	53	All Zones		
	366 LowE	0.28	3.57	0.20	0.45	57	All Zones		
	LowE Clear	0.29	3.45	0.25	0.44	52	All Zones		
	LowE Clear SPF	0.29	3.45	0.25	0.43	52	All Zones		
	Climate Control	0.29	3.45	0.24	0.43	52	All Zones		
	Climate Control SPF	0.29	3.45	0.23	0.42	52	All Zones		
TRIPLE IG NO G/AS	Super Sun Blocker	0.29	3.45	0.18	0.34	52	All Zones		
	Super Sun Blocker SPF	0.29	3.45	0.18	0.33	53	All Zones		
	366 LowE	0.28	3.57	0.18	0.40	57	All Zones		
	Triple IG LE/CL/CL	0.27	3.70	0.27	0.50	58	All Zones		
TRIPLE IG NO G/AS	Triple IG LE/CL/LE	0.24	4.17	0.24	0.42	59	All Zones		
	Triple IG LE/CL/CL (CHDL)	0.27	3.70	0.24	0.44	58	All Zones		
	Triple IG LE/CL/LE (CHDL)	0.24	4.17	0.22	0.38	59	All Zones		
	Triple IG LE/CL/LE (CHDL)	0.24	4.17	0.22	0.38	59	All Zones		

DP Ratings (Air/Water/Structural Performance)					
DP Rating (Max. Size Tested)	Air Infiltration (CFM)	Water Resistance (PSF)	Structural Test Pressure (PSF)	Test Report #	Notes
F-C50 48x61	0.01	7.5	+75/-75	06-51641.01	
F-C50 72x73	0.01	7.5	+75/-75	06-51640.01	
FW-C50 52x84	0.01	7.5	+52.5/-60	180-7179	

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NFRC Thermal Performance Values									
Glazing Description		U- Factor	R- Value	SHGC	VT	CR	Energy Star Rating		
Wood Casement Arched Sash & Frame	Air-Filled	No GIAS	Insul Clear	0.45	2.22	0.58	0.65	40	None
			LowE Clear	0.31	3.23	0.31	0.55	50	N/C
			LowE Clear SPF	0.31	3.23	0.31	0.54	50	N/C
			Climate Control	0.32	3.13	0.29	0.54	49	S/C and S
			Climate Control SPF	0.32	3.13	0.29	0.53	50	S/C and S
			Super Sun Blocker	0.31	3.23	0.22	0.42	50	N/C,S/C, S
			Super Sun BlockerSPF	0.31	3.23	0.22	0.42	50	N/C,S/C, S
			366 LowE	0.30	3.33	0.22	0.50	54	All Zones
			w/ GIAS & HDL < 1"	Insul Clear	0.45	2.22	0.52	0.56	40
	LowE Clear	0.31		3.23	0.28	0.49	50	S/C and S	
	LowE Clear SPF	0.31		3.23	0.28	0.48	50	S/C and S	
	Climate Control	0.32		3.13	0.26	0.48	49	N/C,S/C, S	
	Climate Control SPF	0.32		3.13	0.26	0.47	50	N/C,S/C, S	
	Super Sun Blocker	0.31		3.23	0.20	0.38	50	N/C,S/C, S	
	Super Sun Blocker SPF	0.31		3.23	0.20	0.37	50	N/C,S/C, S	
	366 LowE	0.30		3.33	0.20	0.45	54	All Zones	
	w/ GIAS & HDL ≥ 1"	Insul Clear		0.45	2.22	0.47	0.51	40	None
		LowE Clear	0.31	3.23	0.25	0.44	50	N/C,S/C, S	
		LowE Clear SPF	0.31	3.23	0.25	0.43	50	N/C,S/C, S	
		Climate Control	0.32	3.13	0.24	0.43	49	N/C,S/C, S	
		Climate Control SPF	0.32	3.13	0.23	0.42	50	N/C,S/C, S	
		Super Sun Blocker	0.31	3.23	0.18	0.34	50	N/C,S/C, S	
		Super Sun Blocker SPF	0.31	3.23	0.18	0.33	50	N/C,S/C, S	
		366 LowE	0.30	3.33	0.18	0.40	54	All Zones	
		TRIPLE IG NO GIAS	Triple IG LE/CL/CL	0.31	3.23	0.27	0.50	55	N/C,S/C, S
	Triple IG LE/CL/LE		0.27	3.70	0.25	0.42	59	All Zones	
	Triple IG LE/CL/CL (CHDL)		0.31	3.23	0.24	0.44	55	N/C,S/C, S	
	Triple IG LE/CL/LE (CHDL)		0.27	3.70	0.22	0.38	59	All Zones	
	Argon-Filled	No GIAS	LowE Clear	0.28	3.57	0.31	0.55	52	N/C, SC
			LowE Clear SPF	0.28	3.57	0.30	0.54	53	S/C and S
			Climate Control	0.28	3.57	0.29	0.54	52	S/C and S
			Climate Control SPF	0.28	3.57	0.28	0.53	53	S/C and S
			Super Sun Blocker	0.28	3.57	0.22	0.42	52	All Zones
			Super Sun Blocker SPF	0.28	3.57	0.22	0.42	53	All Zones
			366 LowE	0.27	3.70	0.22	0.50	57	All Zones
			w/ GIAS & HDL < 1"	LowE Clear	0.29	3.45	0.28	0.49	52
LowE Clear SPF				0.29	3.45	0.27	0.48	52	All Zones
Climate Control		0.29		3.45	0.26	0.48	51	All Zones	
Climate Control SPF		0.29		3.45	0.26	0.47	52	All Zones	
Super Sun Blocker		0.29		3.45	0.20	0.38	52	All Zones	
Super Sun Blocker SPF		0.29		3.45	0.20	0.37	52	All Zones	
366 LowE		0.28		3.57	0.20	0.45	57	All Zones	
w/ GIAS & HDL ≥ 1"		LowE Clear		0.29	3.45	0.25	0.44	52	All Zones
		LowE Clear SPF		0.29	3.45	0.25	0.43	52	All Zones
		Climate Control	0.29	3.45	0.23	0.43	51	All Zones	
		Climate Control SPF	0.29	3.45	0.23	0.43	52	All Zones	
	Super Sun Blocker	0.29	3.45	0.18	0.34	52	All Zones		
	Super Sun BlockerSPF	0.29	3.45	0.18	0.33	52	All Zones		
	366 LowE	0.28	3.57	0.18	0.40	57	All Zones		
	TRIPLE IG NO GIAS	Triple IG LE/CL/CL	0.27	3.70	0.27	0.50	58	All Zones	
		Triple IG LE/CL/LE	0.24	4.17	0.24	0.42	59	All Zones	
Triple IG LE/CL/CL (CHDL)		0.27	3.70	0.24	0.44	58	All Zones		
Triple IG LE/CL/LE (CHDL)		0.24	4.17	0.22	0.38	59	All Zones		

DP Ratings (Air/Water/Structural Performance)					
DP Rating (Max. Size Tested)	Air Infiltration (CFM)	Water Resistance (PSF)	Structural Test Pressure (PSF)	Test Report #	Notes
F-C50 48x61	0.01	7.5	+75/-75	06-51641.01	
F-C50 72x73	0.01	7.5	+75/-75	06-51640.01	
FW-C50 52x84	0.01	7.5	+52.5/-60	180-7179	

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NFRC Thermal Performance Values												
		Glazing Description	U-Factor	R-Value	SHGC	VT	CR	Energy Star Rating				
Wood Double Hung Picture	Air-Filled	No GIAS	Insul Clear	0.46	2.17	0.58	0.60	43	None			
			Insul Bronze	0.46	2.17	0.47	0.36	43	None			
			Insul Gray	0.46	2.17	0.44	0.30	43	None			
			LowE Clear	0.32	3.13	0.30	0.52	53	S/C and S			
			LowE Bronze	0.32	3.13	0.28	0.31	54	S/C and S			
			LowE Gray	0.32	3.13	0.27	0.26	54	N/C,S/C, S			
			LowE Clear SPF	0.32	3.13	0.29	0.51	54	S/C and S			
			Climate Control	0.33	3.03	0.28	0.51	53	S/C and S			
			Climate Control SPF	0.33	3.03	0.27	0.50	54	S/C and S			
			Super Sun Blocker	0.32	3.13	0.21	0.40	53	N/C,S/C, S			
			Super Sun Blocker SPF	0.32	3.13	0.21	0.39	54	N/C,S/C, S			
			366 LowE	0.31	3.23	0.21	0.47	57	N/C,S/C, S			
			Insul Clear	0.46	2.17	0.52	0.53	43	None			
			Insul Bronze	0.46	2.17	0.42	0.32	43	None			
			Insul Gray	0.46	2.17	0.39	0.27	43	None			
			LowE Clear	0.32	3.13	0.27	0.46	53	N/C,S/C, S			
			LowE Bronze	0.32	3.13	0.26	0.27	53	N/C,S/C, S			
			LowE Gray	0.32	3.13	0.24	0.23	53	N/C,S/C, S			
	LowE Clear SPF	0.32	3.13	0.26	0.45	54	N/C,S/C, S					
	Climate Control	0.33	3.03	0.25	0.45	53	S/C and S					
	Climate Control SPF	0.33	3.03	0.25	0.44	54	S/C and S					
	Super Sun Blocker	0.32	3.13	0.19	0.36	53	N/C,S/C, S					
	Super Sun BlockerSPF	0.32	3.13	0.19	0.35	54	N/C,S/C, S					
	366 LowE	0.31	3.23	0.19	0.42	57	N/C,S/C, S					
	w/ GIAS & HDL < 1"	w/ GIAS & HDL ≥ 1"	w/ GIAS & HDL ≥ 1"	Insul Clear	0.46	2.17	0.46	0.47	43	None		
				Insul Bronze	0.46	2.17	0.38	0.28	43	None		
				Insul Gray	0.46	2.17	0.35	0.23	43	None		
				LowE Clear	0.32	3.13	0.24	0.41	53	N/C,S/C, S		
				LowE Bronze	0.32	3.13	0.23	0.24	53	N/C,S/C, S		
				LowE Gray	0.32	3.13	0.27	0.35	53	N/C,S/C, S		
				LowE Clear SPF	0.32	3.13	0.24	0.40	54	N/C,S/C, S		
				Climate Control	0.33	3.03	0.22	0.40	53	S/C and S		
				Climate Control SPF	0.33	3.03	0.22	0.39	54	S/C and S		
				Super Sun Blocker	0.32	3.13	0.17	0.31	53	N/C,S/C, S		
				Super Sun BlockerSPF	0.32	3.13	0.17	0.31	54	N/C,S/C, S		
				366 LowE	0.31	3.23	0.17	0.37	57	N/C,S/C, S		
TRIPLE IG NO GIAS				TRIPLE IG NO GIAS	TRIPLE IG NO GIAS	Triple IG LE/CL/CL	0.29	3.45	0.26	0.48	62	All Zones
						Triple IG LE/CL/LE	0.25	4.00	0.24	0.41	64	All Zones
						Triple IG LE/CL/CL (CHDL)	0.29	3.45	0.24	0.43	62	All Zones
						Triple IG LE/CL/LE (CHDL)	0.25	4.00	0.21	0.37	64	All Zones

See next page for DP Ratings.

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NFRC Thermal Performance Values									
		Glazing Description	U-Factor	R-Value	SHGC	VT	CR	Energy Star Rating	
Wood Double Hung Picture	Argon-Filled	No GAS	LowE Clear	0.29	3.45	0.29	0.52	56	S/C and S
			LowE Bronze	0.29	3.45	0.29	0.37	56	S/C and S
			LowE Gray	0.29	3.45	0.27	0.33	56	All Zones
			LowE Clear SPF	0.29	3.45	0.29	0.51	57	S/C and S
			Climate Control	0.29	3.45	0.27	0.51	56	All Zones
			Climate Control SPF	0.29	3.45	0.27	0.50	57	All Zones
			Super Sun Blocker	0.29	3.45	0.21	0.40	56	All Zones
			Super Sun Blocker SPF	0.29	3.45	0.21	0.39	57	All Zones
			366 LowE	0.28	3.57	0.21	0.47	57	All Zones
			LowE Clear	0.30	3.33	0.26	0.46	56	All Zones
			LowE Bronze	0.30	3.33	0.26	0.27	56	All Zones
			LowE Gray	0.30	3.33	0.24	0.23	56	All Zones
	w/ GAS & HDL < 1"	LowE Clear SPF	0.30	3.33	0.26	0.45	56	All Zones	
		Climate Control	0.30	3.33	0.24	0.44	56	All Zones	
		Climate Control SPF	0.30	3.33	0.24	0.44	56	All Zones	
		Super Sun Blocker	0.30	3.33	0.19	0.36	56	All Zones	
		Super Sun Blocker SPF	0.30	3.33	0.19	0.34	56	All Zones	
		366 LowE	0.28	3.57	0.19	0.47	57	All Zones	
		w/ GAS & HDL ≥ 1"	LowE Clear	0.30	3.33	0.24	0.41	56	All Zones
			LowE Bronze	0.30	3.33	0.23	0.24	56	All Zones
			LowE Gray	0.30	3.33	0.22	0.20	56	All Zones
			LowE Clear SPF	0.30	3.33	0.23	0.40	56	All Zones
			Climate Control	0.30	3.33	0.22	0.40	56	All Zones
			Climate Control SPF	0.30	3.33	0.22	0.39	56	All Zones
	Super Sun Blocker		0.30	3.33	0.17	0.31	56	All Zones	
	Super Sun Blocker SPF		0.30	3.33	0.17	0.31	56	All Zones	
	366 LowE		0.28	3.57	0.17	0.37	57	All Zones	
	TRIPLE IG NO GAS		Triple IG LE/CL/CL	0.26	3.85	0.26	0.48	64	All Zones
			Triple IG LE/CL/LE	0.22	4.55	0.24	0.41	64	All Zones
			Triple IG LE/CL/CL (CHDL)	0.26	3.85	0.23	0.43	64	All Zones
		Triple IG LE/CL/LE (CHDL)	0.25	4.00	0.21	0.37	64	All Zones	

DP Ratings (Air/Water/Structural Performance)					
DP Rating (Max. Size Tested)	Air Infiltration (CFM)	Water Resistance (PSF)	Structural Test Pressure (PSF)	Test Report #	Notes
FW-C50 61x81	0.01	7.5	+97.5/-105	180-7801	Requires High Performance Sill Liner for DP50
FW-C35 61x93	0.02	5.25	+52.5/-75	180-7479	
FW-C35 69x81	0.01	5.25	+52.5/-75	180-7521	

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NFRC Thermal Performance Values								
		Glazing Description	U-Factor	R-Value	SHGC	VT	CR	Energy Star Rating
Wood Double Hung	No G/AS	Insul Clear	0.47	2.13	0.55	0.58	41	None
		Insul Bronze	0.47	2.13	0.45	0.43	41	None
		Insul Gray	0.47	2.13	0.42	0.39	41	None
		LowE Clear	0.35	2.86	0.28	0.50	50	S/C and S
		LowE Bronze	0.35	2.86	0.27	0.37	50	S/C and S
		LowE Gray	0.35	2.86	0.26	0.34	50	S/C and S
		LowE Clear SPF	0.35	2.86	0.28	0.49	50	S/C and S
		Climate Control	0.35	2.86	0.26	0.49	50	S/C and S
		Climate Control SPF	0.35	2.86	0.26	0.48	50	S/C and S
		Super Sun Blocker	0.35	2.86	0.20	0.39	50	S/C and S
		Super Sun Blocker SPF	0.35	2.86	0.20	0.38	51	S/C and S
		366 LowE	0.33	3.03	0.20	0.46	55	S/C and S
	w/ G/AS & HDL < 1"	Insul Clear	0.47	2.13	0.49	0.52	41	None
		Insul Bronze	0.47	2.13	0.40	0.38	41	None
		Insul Gray	0.47	2.13	0.37	0.34	41	None
		LowE Clear	0.35	2.86	0.25	0.45	50	S/C and S
		LowE Bronze	0.35	2.86	0.25	0.33	50	S/C and S
		LowE Gray	0.35	2.86	0.23	0.30	50	S/C and S
		LowE Clear SPF	0.35	2.86	0.25	0.43	50	S/C and S
		Climate Control	0.35	2.86	0.24	0.44	50	S/C and S
		Climate Control SPF	0.35	2.86	0.23	0.43	50	S/C and S
		Super Sun Blocker	0.35	2.86	0.18	0.34	50	S/C and S
		Super Sun Blocker SPF	0.35	2.86	0.18	0.34	51	S/C and S
		366 LowE	0.33	3.03	0.18	0.41	55	S/C and S
	w/ G/AS & HDL ≥ 1"	Insul Clear	0.47	2.13	0.44	0.45	41	None
		Insul Bronze	0.47	2.13	0.35	0.34	41	None
		Insul Gray	0.47	2.13	0.33	0.30	41	None
		LowE Clear	0.35	2.86	0.23	0.39	50	S/C and S
		LowE Bronze	0.35	2.86	0.22	0.29	50	S/C and S
		LowE Gray	0.35	2.86	0.21	0.26	50	S/C and S
		LowE Clear SPF	0.35	2.86	0.22	0.38	50	S/C and S
		Climate Control	0.35	2.86	0.21	0.38	50	S/C and S
		Climate Control SPF	0.35	2.86	0.21	0.38	50	S/C and S
		Super Sun Blocker	0.35	2.86	0.16	0.30	50	S/C and S
		Super Sun Blocker SPF	0.35	2.86	0.16	0.29	51	S/C and S
		366 LowE	0.33	3.03	0.16	0.36	55	S/C and S

See next page for DP Ratings.

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NFRC Thermal Performance Values								DP Ratings (Air/Water/Structural Performance)							
Glazing Description		U-Factor	R-Value	SHGC	VT	CR	Energy Star Rating	DP Ratings (Air/Water/Structural Performance)							
Wood Double Hung	Argon-Filled	No GAS	LowE Clear	0.32	3.13	0.28	0.50	53	S/C and S	DP Rating (Max. Size Tested)	Air Infiltration (CFM)	Water Resistance (PSF)	Structural Test Pressure (PSF)	Test Report #	Notes
			LowE Bronze	0.32	3.13	0.27	0.37	53	N/C,S/C, S						
			LowE Gray	0.32	3.13	0.25	0.34	53	N/C,S/C, S						
			LowE Clear SPF	0.32	3.13	0.28	0.49	53	S/C and S	H-LC50 38x77	0.11	7.50	+75/-75	180-7757	High Performance Sill Liner, Balance Support Blocks
			Climate Control	0.32	3.13	0.26	0.49	52	N/C,S/C, S						
			Climate Control SPF	0.32	3.13	0.26	0.48	53	N/C,S/C, S						
			Super Sun Blocker	0.32	3.13	0.20	0.39	53	N/C,S/C, S	H-LC25 46x93	0.11	5.25	+37.5/-37.5	180-7441	
			Super Sun Blocker SPF	0.32	3.13	0.21	0.18	0	N/C,S/C, S						
			366 LowE	0.30	3.33	0.20	0.46	58	All Zones						
	Argon-Filled	w/ GAS & HDL < 1"	LowE Clear	0.33	3.03	0.25	0.45	52	S/C and S	H-LC25 34x93	0.11	5.25	+37.5/-60	180-7439	
			LowE Bronze	0.33	3.03	0.25	0.33	52	S/C and S						
			LowE Gray	0.33	3.03	0.23	0.30	52	S/C and S						
			LowE Clear SPF	0.33	3.03	0.25	0.43	52	S/C and S	H-LC40 46x65	0.11	7.50	+60/-67.5	180-7443	High Performance Sill Liner, Balance Support Blocks
			Climate Control	0.33	3.03	0.24	0.44	52	S/C and S						
			Climate Control SPF	0.33	3.03	0.23	0.43	52	S/C and S						
			Super Sun Blocker	0.32	3.13	0.18	0.34	52	N/C,S/C, S	H-LC35 30x81	0.11	5.25	+67.5/-90	180-7440	
			Super Sun Blocker SPF	0.32	3.13	0.18	0.34	53	N/C,S/C, S						
			366 LowE	0.30	3.33	0.18	0.41	58	All Zones						
		w/ GAS & HDL ≥ 1"	LowE Clear	0.33	3.03	0.22	0.39	52	S/C and S	H-LC45 38x81	0.11	7.50	+67.5/-75	180-7442	High Performance Sill Liner, Balance Support Blocks
			LowE Bronze	0.33	3.03	0.22	0.29	52	S/C and S						
			LowE Gray	0.33	3.03	0.21	0.26	52	S/C and S						
			LowE Clear SPF	0.33	3.03	0.22	0.38	52	S/C and S	H-LC35 34x81	0.11	5.25	+52.5/-52.5	180-7461	
			Climate Control	0.33	3.03	0.21	0.38	52	S/C and S						
			Climate Control SPF	0.33	3.03	0.21	0.38	52	S/C and S						
			Super Sun Blocker	0.32	3.13	0.16	0.30	52	N/C,S/C, S	H-LC35 34x81	0.11	5.25	+52.5/-52.5	180-7461	
			Super Sun Blocker SPF	0.32	3.13	0.16	0.29	53	N/C,S/C, S						
			366 LowE	0.30	3.33	0.16	0.36	58	All Zones						

Performance ratings are based on individual units only. Hurd is constantly working to refine and improve our products. For this reason specifications change without notice.

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NFRC Thermal Performance Values									
Glazing Description		U- Factor	R- Value	SHGC	VT	CR	Energy Star Rating		
Wood Double Hung Sash Packs	No GIAS	Insul Clear	0.47	2.13	0.55	0.58	41	None	
		Insul Bronze	0.47	2.13	0.45	0.43	41	None	
		Insul Gray	0.47	2.13	0.42	0.39	41	None	
		LowE Clear	0.35	2.86	0.28	0.50	50	S/C and S	
		LowE Bronze	0.35	2.86	0.27	0.37	50	S/C and S	
		LowE Gray	0.35	2.86	0.26	0.34	50	S/C and S	
		LowE Clear SPF	0.35	2.86	0.28	0.49	50	S/C and S	
		Climate Control	0.35	2.86	0.26	0.49	50	S/C and S	
		Climate Control SPF	0.35	2.86	0.26	0.48	50	S/C and S	
		Super Sun Blocker	0.35	2.86	0.20	0.39	50	S/C and S	
		Super Sun Blocker SPF	0.35	2.86	0.20	0.38	50	S/C and S	
		366 LowE	0.33	3.03	0.20	0.46	55	S/C and S	
		LowE Clear W/Storm	0.25	4.00	0.29	0.46	63	S/C and S	
		Climate Control W/Storm	0.25	4.00	0.27	0.45	63	All Zones	
		Super Sun Blocker W/Storm	0.25	4.00	0.23	0.36	63	All Zones	
		366 LowE W/Storm	0.24	4.17	0.22	0.42	65	All Zones	
		w/ GIAS & CHDL < 1"	Insul Clear	0.47	2.13	0.49	0.52	41	None
			Insul Bronze	0.47	2.13	0.40	0.38	41	None
	Insul Gray		0.47	2.13	0.37	0.34	41	None	
	LowE Clear		0.35	2.86	0.25	0.45	50	S/C and S	
	LowE Bronze		0.35	2.86	0.25	0.33	50	S/C and S	
	LowE Gray		0.35	2.86	0.23	0.30	50	S/C and S	
	LowE Clear SPF		0.35	2.86	0.25	0.44	50	S/C and S	
	Climate Control		0.35	2.86	0.24	0.44	50	S/C and S	
	Climate Control SPF		0.35	2.86	0.23	0.43	50	S/C and S	
	Super Sun Blocker		0.35	2.86	0.18	0.34	50	S/C and S	
	Super Sun Blocker SPF		0.35	2.86	0.18	0.34	50	S/C and S	
	366 LowE		0.33	3.03	0.18	0.41	55	S/C and S	
	LowE Clear W/Storm		0.25	4.00	0.26	0.41	63	All Zones	
	Climate Control W/Storm		0.25	4.00	0.24	0.40	63	All Zones	
	Super Sun Blocker W/Storm		0.25	4.00	0.21	0.32	63	All Zones	
	366 LowE W/Storm		0.24	4.17	0.20	0.37	65	All Zones	
	w/ GIAS & CHDL ≥ 1"		Insul Clear	0.47	2.13	0.44	0.46	41	None
			Insul Bronze	0.47	2.13	0.35	0.34	41	None
		Insul Gray	0.47	2.13	0.33	0.30	41	None	
		LowE Clear	0.35	2.86	0.23	0.39	50	S/C and S	
LowE Bronze		0.35	2.86	0.22	0.29	50	S/C and S		
LowE Gray		0.35	2.86	0.21	0.26	50	S/C and S		
LowE Clear SPF		0.35	2.86	0.22	0.38	50	S/C and S		
Climate Control		0.35	2.86	0.21	0.39	50	S/C and S		
Climate Control SPF		0.35	2.86	0.21	0.38	50	S/C and S		
Super Sun Blocker		0.35	2.86	0.16	0.30	50	S/C and S		
Super Sun Blocker SPF		0.35	2.86	0.16	0.30	50	S/C and S		
366 LowE		0.33	3.03	0.16	0.36	55	S/C and S		
LowE Clear W/Storm		0.25	4.00	0.23	0.36	63	All Zones		
Climate Control W/Storm		0.25	4.00	0.22	0.35	63	All Zones		
Super Sun Blocker W/Storm		0.25	4.00	0.18	0.28	63	All Zones		
366 LowE W/Storm		0.24	4.17	0.18	0.33	65	All Zones		

NO DESIGN PRESSURE RATINGS AVAILABLE FOR SASH PACKS

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NFRC Thermal Performance Values									
	Glazing Description	U- Factor	R- Value	SHGC	VT	CR	Energy Star Rating		
Wood Double Hung Sash Packs	Argon-Filled	No GIAS	LowE Clear	0.32	3.13	0.28	0.50	53	S/C and S
			LowE Clear W/Technoform SS Spacer ¹	0.30	3.33	0.28	0.50	60	S/C and S
			LowE Bronze	0.32	3.13	0.27	0.37	53	N/C,S/C, S
			LowE Gray	0.32	3.13	0.26	0.34	53	N/C,S/C, S
			LowE Clear SPF	0.32	3.13	0.28	0.49	52	S/C and S
			Climate Control	0.32	3.13	0.26	0.49	52	N/C,S/C, S
			Climate Control SPF	0.32	3.13	0.26	0.48	52	N/C,S/C, S
			Super Sun Blocker	0.31	3.23	0.20	0.39	53	N/C,S/C, S
			Super Sun Blocker SPF	0.31	3.23	0.20	0.38	53	N/C,S/C, S
			366 LowE	0.30	3.33	0.20	0.46	58	All Zones
			LowE Clear W/Storm	0.23	4.35	0.28	0.46	65	S/C and S
			Climate Control W/Storm	0.23	4.35	0.27	0.45	65	All Zones
			Super Sun Blocker W/Storm	0.23	4.35	0.22	0.36	65	All Zones
			366 LowE W/Storm	0.22	4.55	0.21	0.42	67	All Zones
			LowE Clear	0.32	3.13	0.25	0.45	53	N/C,S/C, S
			LowE Clear W/Technoform SS Spacer ¹	0.30	3.33	0.25	0.45	60	All Zones
			LowE Bronze	0.32	3.13	0.25	0.33	53	N/C,S/C, S
			LowE Gray	0.32	3.13	0.23	0.30	53	N/C,S/C, S
	LowE Clear SPF	0.32	3.13	0.25	0.44	52	N/C,S/C, S		
	Climate Control	0.32	3.13	0.23	0.44	52	N/C,S/C, S		
	Climate Control SPF	0.32	3.13	0.23	0.43	52	N/C,S/C, S		
	Super Sun Blocker	0.31	3.23	0.18	0.34	53	N/C,S/C, S		
	Super Sun Blocker SPF	0.31	3.23	0.18	0.34	53	N/C,S/C, S		
	366 LowE	0.30	3.33	0.18	0.41	58	All Zones		
	LowE Clear W/Storm	0.23	4.35	0.25	0.41	65	All Zones		
	Climate Control W/Storm	0.23	4.35	0.24	0.40	65	All Zones		
	Super Sun Blocker W/Storm	0.23	4.35	0.20	0.31	65	All Zones		
	366 LowE W/Storm	0.22	4.55	0.19	0.37	67	All Zones		
	LowE Clear	0.32	3.13	0.22	0.39	53	N/C,S/C, S		
	LowE Clear W/Technoform SS Spacer ¹	0.30	3.33	0.22	0.39	60	All Zones		
	LowE Bronze	0.32	3.13	0.22	0.29	53	N/C,S/C, S		
	LowE Gray	0.32	3.13	0.20	0.26	53	N/C,S/C, S		
	LowE Clear SPF	0.32	3.13	0.22	0.38	52	N/C,S/C, S		
	Climate Control	0.32	3.13	0.21	0.39	52	N/C,S/C, S		
	Climate Control SPF	0.32	3.13	0.21	0.38	52	N/C,S/C, S		
	Super Sun Blocker	0.31	3.23	0.16	0.30	53	N/C,S/C, S		
Super Sun Blocker SPF	0.31	3.23	0.16	0.30	53	N/C,S/C, S			
366 LowE	0.30	3.33	0.16	0.36	58	All Zones			
LowE Clear W/Storm	0.23	4.35	0.22	0.36	65	All Zones			
Climate Control W/Storm	0.23	4.35	0.21	0.35	65	All Zones			
Super Sun Blocker W/Storm	0.23	4.35	0.18	0.28	65	All Zones			
366 LowE W/Storm	0.22	4.55	0.17	0.33	67	All Zones			

NO DESIGN PRESSURE RATINGS AVAILABLE FOR SASH PACKS

¹Glazing options requires Technoform stainless steel spacer to meet this u-factor; must be specified on order. Please submit request to Hurd Quote Department to ensure IG is produced accordingly and price is reflective of this spacer.

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NFRC Thermal Performance Values								
Glazing Description		U-Factor	R-Value	SHGC	VT	CR	Energy Star Rating	
Air-Filled	No GIAS	Insul Clear	0.46	2.17	0.61	0.64	42	None
		LowE Clear	0.32	3.13	0.31	0.55	53	N/C
		LowE Clear SPF	0.32	3.13	0.30	0.54	53	S/C and S
		Climate Control	0.32	3.13	0.29	0.54	53	S/C and S
		Climate Control SPF	0.32	3.13	0.28	0.53	53	S/C and S
		Super Sun Blocker	0.32	3.13	0.22	0.43	53	N/C,S/C, S
		Super Sun Blocker SPF	0.32	3.13	0.22	0.42	53	N/C,S/C, S
		366 LowE	0.31	3.23	0.22	0.49	57	N/C,S/C, S
	w/ GIAS & HDL < 1"	Insul Clear	0.46	2.17	0.54	0.57	42	None
		LowE Clear	0.32	3.13	0.28	0.49	53	S/C and S
		LowE Clear SPF	0.32	3.13	0.27	0.48	53	N/C,S/C, S
		Climate Control	0.32	3.13	0.26	0.48	53	N/C,S/C, S
Climate Control SPF		0.32	3.13	0.26	0.47	53	N/C,S/C, S	
Super Sun Blocker		0.32	3.13	0.20	0.38	53	N/C,S/C, S	
Super Sun Blocker SPF		0.32	3.13	0.20	0.37	53	N/C,S/C, S	
366 LowE		0.31	3.23	0.20	0.44	57	N/C,S/C, S	
w/ GIAS & CHDL ≥ 1"	Insul Clear	0.46	2.17	0.49	0.51	42	None	
	LowE Clear	0.32	3.13	0.25	0.44	53	N/C,S/C, S	
	LowE Clear SPF	0.32	3.13	0.25	0.43	53	N/C,S/C, S	
	Climate Control	0.32	3.13	0.23	0.43	53	N/C,S/C, S	
	Climate Control SPF	0.32	3.13	0.23	0.42	53	N/C,S/C, S	
	Super Sun Blocker	0.32	3.13	0.18	0.34	53	N/C,S/C, S	
	Super Sun Blocker SPF	0.32	3.13	0.18	0.33	53	N/C,S/C, S	
	366 LowE	0.32	3.13	0.18	0.39	57	N/C,S/C, S	
TRIPLE IG NO GIAS	Triple IG LE/CL/CL	0.29	3.45	0.27	0.50	62	All Zones	
	Triple IG LE/CL/LE	0.24	4.17	0.25	0.43	64	All Zones	
	Triple IG LE/CL/CL (CHDL)	0.29	3.45	0.25	0.43	64	All Zones	
	Triple IG LE/CL/LE (CHDL)	0.24	4.17	0.20	0.34	64	All Zones	
No GIAS	LowE Clear	0.29	3.45	0.31	0.55	56	N/C, SC	
	LowE Clear SPF	0.29	3.45	0.30	0.54	56	S/C and S	
	Climate Control	0.29	3.45	0.29	0.54	56	S/C and S	
	Climate Control SPF	0.29	3.45	0.28	0.53	56	S/C and S	
	Super Sun Blocker	0.28	3.57	0.22	0.43	56	All Zones	
	Super Sun Blocker SPF	0.28	3.57	0.21	0.42	56	All Zones	
	366 LowE	0.27	3.70	0.21	0.49	61	All Zones	
	w/ GIAS & HDL < 1"	LowE Clear	0.29	3.45	0.28	0.49	55	S/C and S
LowE Clear SPF		0.29	3.45	0.27	0.48	56	All Zones	
Climate Control		0.30	3.33	0.26	0.48	55	All Zones	
Climate Control SPF		0.30	3.33	0.25	0.47	55	All Zones	
Super Sun Blocker		0.29	3.45	0.20	0.38	55	All Zones	
Super Sun Blocker SPF		0.29	3.45	0.20	0.37	56	All Zones	
366 LowE		0.27	3.70	0.19	0.44	61	All Zones	
w/ GIAS & CHDL ≥ 1"		LowE Clear	0.29	3.45	0.25	0.44	55	All Zones
	LowE Clear SPF	0.29	3.45	0.24	0.43	56	All Zones	
	Climate Control	0.30	3.33	0.23	0.43	55	All Zones	
	Climate Control SPF	0.30	3.33	0.23	0.42	55	All Zones	
	Super Sun Blocker	0.29	3.45	0.18	0.34	55	All Zones	
	Super Sun Blocker SPF	0.29	3.45	0.18	0.33	56	All Zones	
	366 LowE	0.27	3.70	0.18	0.39	61	All Zones	
	TRIPLE IG NO GIAS	Triple IG LE/CL/CL	0.25	4.00	0.27	0.50	64	All Zones
Triple IG LE/CL/LE		0.21	4.76	0.25	0.43	64	All Zones	
Triple IG LE/CL/CL (CHDL)		0.25	4.00	0.22	0.39	64	All Zones	
Triple IG LE/CL/LE (CHDL)		0.21	4.76	0.20	0.34	64	All Zones	

DP Ratings (Air/Water/Structural Performance)					
DP Rating (Max. Size Tested)	Air Infiltration (CFM)	Water Resistance (PSF)	Structural Test Pressure (PSF)	Test Report #	Notes
FW-LC50 57x101	0.01	7.50	+75/-82.5	180-7478	
FW-C50 75x78	0.01	12.00	+75/-97.5	180-7695	

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NFRC Thermal Performance Values										
		Glazing Description	U-Factor	R-Value	SHGC	VT	CR	Energy Star Rating		
Wood Double Hung Arched Sash & Frame	Air-Filled	No GIAS	Insul Clear	0.46	2.17	0.61	0.64	42	None	
			LowE Clear	0.31	3.23	0.31	0.55	49	N/C	
			LowE Clear SPF	0.31	3.23	0.30	0.54	56	S/C and S	
			Climate Control	0.32	3.13	0.29	0.54	55	S/C and S	
			Climate Control SPF	0.32	3.13	0.28	0.53	55	S/C and S	
			Super Sun Blocker	0.31	3.23	0.22	0.43	55	N/C,S/C, S	
			Super Sun Blocker SPF	0.31	3.23	0.22	0.42	56	N/C,S/C, S	
			366 LowE	0.31	3.23	0.22	0.49	57	N/C,S/C, S	
			Insul Clear	0.46	2.17	0.54	0.57	42	None	
		LowE Clear	0.31	3.23	0.28	0.49	49	S/C and S		
		LowE Clear SPF	0.31	3.23	0.27	0.48	56	N/C,S/C, S		
		Climate Control	0.32	3.13	0.26	0.48	55	N/C,S/C, S		
		Climate Control SPF	0.32	3.13	0.26	0.47	55	N/C,S/C, S		
		Super Sun Blocker	0.31	3.23	0.20	0.38	55	N/C,S/C, S		
		Super Sun Blocker SPF	0.31	3.23	0.20	0.37	56	N/C,S/C, S		
		366 LowE	0.31	3.23	0.20	0.44	57	N/C,S/C, S		
		w/ GIAS & HDL < 1"	Insul Clear	0.46	2.17	0.49	0.51	42	None	
			LowE Clear	0.31	3.23	0.25	0.44	49	N/C,S/C, S	
	LowE Clear SPF		0.31	3.23	0.25	0.43	56	N/C,S/C, S		
	Climate Control		0.32	3.13	0.23	0.43	55	N/C,S/C, S		
	Climate Control SPF		0.32	3.13	0.23	0.42	55	N/C,S/C, S		
	Super Sun Blocker		0.31	3.23	0.18	0.34	55	N/C,S/C, S		
	Super Sun Blocker SPF		0.31	3.23	0.18	0.33	56	N/C,S/C, S		
	366 LowE		0.32	3.13	0.18	0.39	57	N/C,S/C, S		
	w/ GIAS & CHDL ≥ 1"		LowE Clear	0.28	3.57	0.31	0.55	58	N/C, SC	
		LowE Clear SPF	0.28	3.57	0.30	0.54	59	S/C and S		
		Climate Control	0.28	3.57	0.29	0.54	58	S/C and S		
		Climate Control SPF	0.28	3.57	0.28	0.53	59	S/C and S		
		Super Sun Blocker	0.28	3.57	0.22	0.43	58	All Zones		
		Super Sun Blocker SPF	0.28	3.57	0.21	0.42	59	All Zones		
		366 LowE	0.27	3.70	0.21	0.49	61	All Zones		
		Argon-Filled	w/ GIAS & HDL < 1"	LowE Clear	0.29	3.45	0.28	0.49	57	S/C and S
				LowE Clear SPF	0.29	3.45	0.27	0.48	58	All Zones
	Climate Control			0.29	3.45	0.26	0.48	57	All Zones	
	Climate Control SPF			0.29	3.45	0.25	0.47	58	All Zones	
	Super Sun Blocker			0.29	3.45	0.20	0.38	57	All Zones	
Super Sun Blocker SPF	0.29			3.45	0.20	0.37	58	All Zones		
366 LowE	0.27			3.70	0.19	0.44	61	All Zones		
w/ GIAS & CHDL ≥ 1"	LowE Clear			0.29	3.45	0.25	0.44	57	All Zones	
	LowE Clear SPF			0.29	3.45	0.24	0.43	58	All Zones	
	Climate Control	0.29	3.45	0.23	0.43	57	All Zones			
	Climate Control SPF	0.29	3.45	0.23	0.42	58	All Zones			
	Super Sun Blocker	0.29	3.45	0.18	0.34	57	All Zones			
	Super Sun Blocker SPF	0.29	3.45	0.18	0.33	58	All Zones			
366 LowE	0.27	3.70	0.18	0.39	61	All Zones				

DP Ratings (Air/Water/Structural Performance)					
DP Rating (Max. Size Tested)	Air Infiltration (CFM)	Water Resistance (PSF)	Structural Test Pressure (PSF)	Test Report #	Notes
F-C50 57x101	0.01	12	+75/-75	06-30630.01	
F-HC50 75x78	0.01	12	+75/-75	06-30770.01	

Performance ratings are based on individual units only. Hurd is constantly working to refine and improve our products. For this reason specifications change without notice.

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NFRC Thermal Performance Values							
Glazing Description		U- Factor	R- Value	SHGC	VT	CR	Energy Star Rating
Wood Sliding Patio Door (HES)	Air-Filled	No GAS	Insul Clear	Values Not Available At Time of Publication			
			LowE Clear	Values Not Available At Time of Publication			
			LowE Clear SPF	Values Not Available At Time of Publication			
			Climate Control	Values Not Available At Time of Publication			
			Climate Control SPF	Values Not Available At Time of Publication			
			Super Sun Blocker SPF	Values Not Available At Time of Publication			
		Super Sun Blocker	Values Not Available At Time of Publication				
		w/ GAS & HDL < 1"	Insul Clear	Values Not Available At Time of Publication			
			LowE Clear	Values Not Available At Time of Publication			
			LowE Clear SPF	Values Not Available At Time of Publication			
			Climate Control	Values Not Available At Time of Publication			
			Climate Control SPF	Values Not Available At Time of Publication			
	Super Sun Blocker		Values Not Available At Time of Publication				
	Argon-Filled	No GAS	LowE Clear	Values Not Available At Time of Publication			
			LowE Clear SPF	Values Not Available At Time of Publication			
			Climate Control	Values Not Available At Time of Publication			
			Climate Control SPF	Values Not Available At Time of Publication			
			Super Sun Blocker	Values Not Available At Time of Publication			
			Super Sun Blocker SPF	Values Not Available At Time of Publication			
		w/ GAS & HDL < 1"	LowE Clear	Values Not Available At Time of Publication			
			LowE Clear SPF	Values Not Available At Time of Publication			
			Climate Control	Values Not Available At Time of Publication			
			Climate Control SPF	Values Not Available At Time of Publication			
			Super Sun Blocker	Values Not Available At Time of Publication			
Super Sun Blocker SPF			Values Not Available At Time of Publication				

DP Ratings (Air/Water/Structural Performance)					
DP Rating (Max. Size Tested)	Air Infiltration (CFM)	Water Resistance (PSF)	Structural Test Pressure (PSF)	Test Report #	Notes
No Air, Water, Structural Test Data Available For This Product At This Time					

Performance ratings are based on individual units only. Hurd is constantly working to refine and improve our products. For this reason specifications change without notice.

Hurd Product Performance Guide

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NFRC Thermal Performance Values									
		Glazing Description	U- Factor	R- Value	SHGC	VT	CR	Energy Star Rating	
Wood French Sliding Patio Door (HES-F)	Air-Filled	No GIAS	Insul Clear						Values Not Available At Time of Publication
		No GIAS	LowE Clear						Values Not Available At Time of Publication
		No GIAS	LowE Clear SPF						Values Not Available At Time of Publication
		No GIAS	Climate Control						Values Not Available At Time of Publication
		No GIAS	Climate Control SPF						Values Not Available At Time of Publication
		No GIAS	Super Sun Blocker						Values Not Available At Time of Publication
		No GIAS	Super Sun Blocker SPF						Values Not Available At Time of Publication
	Air-Filled	w/ GIAS & HDL < 1"	Insul Clear						Values Not Available At Time of Publication
		w/ GIAS & HDL < 1"	LowE Clear						Values Not Available At Time of Publication
		w/ GIAS & HDL < 1"	LowE Clear SPF						Values Not Available At Time of Publication
		w/ GIAS & HDL < 1"	Climate Control						Values Not Available At Time of Publication
		w/ GIAS & HDL < 1"	Climate Control SPF						Values Not Available At Time of Publication
		w/ GIAS & HDL < 1"	Super Sun Blocker						Values Not Available At Time of Publication
		w/ GIAS & HDL < 1"	Super Sun Blocker SPF						Values Not Available At Time of Publication
	Argon-Filled	w/ GIAS & CHDL ≥ 1"	Insul Clear						Values Not Available At Time of Publication
		w/ GIAS & CHDL ≥ 1"	LowE Clear						Values Not Available At Time of Publication
		w/ GIAS & CHDL ≥ 1"	LowE Clear SPF						Values Not Available At Time of Publication
		w/ GIAS & CHDL ≥ 1"	Climate Control						Values Not Available At Time of Publication
		w/ GIAS & CHDL ≥ 1"	Climate Control SPF						Values Not Available At Time of Publication
		w/ GIAS & CHDL ≥ 1"	Super Sun Blocker						Values Not Available At Time of Publication
		w/ GIAS & CHDL ≥ 1"	Super Sun Blocker SPF						Values Not Available At Time of Publication
	Argon-Filled	No GIAS	LowE Clear						Values Not Available At Time of Publication
			LowE Clear SPF						Values Not Available At Time of Publication
			Climate Control						Values Not Available At Time of Publication
			Climate Control SPF						Values Not Available At Time of Publication
			Super Sun Blocker						Values Not Available At Time of Publication
			Super Sun Blocker SPF						Values Not Available At Time of Publication
			Super Sun Blocker SPF						Values Not Available At Time of Publication
		w/ GIAS & HDL < 1"	LowE Clear						Values Not Available At Time of Publication
			LowE Clear SPF						Values Not Available At Time of Publication
			Climate Control						Values Not Available At Time of Publication
			Climate Control SPF						Values Not Available At Time of Publication
			Super Sun Blocker						Values Not Available At Time of Publication
			Super Sun Blocker SPF						Values Not Available At Time of Publication
			Super Sun Blocker SPF						Values Not Available At Time of Publication
	w/ GIAS & CHDL ≥ 1"	LowE Clear						Values Not Available At Time of Publication	
LowE Clear SPF						Values Not Available At Time of Publication			
Climate Control						Values Not Available At Time of Publication			
Climate Control SPF						Values Not Available At Time of Publication			
Super Sun Blocker						Values Not Available At Time of Publication			
Super Sun Blocker SPF						Values Not Available At Time of Publication			
Super Sun Blocker SPF						Values Not Available At Time of Publication			

DP Ratings (Air/Water/Structural Performance)					
DP Rating (Max. Size Tested)	Air Infiltration (CFM)	Water Resistance (PSF)	Structural Test Pressure (PSF)	Test Report #	Notes
No Air, Water, Structural Test Data Available For This Product At This Time					

Performance ratings are based on individual units only. Hurd is constantly working to refine and improve our products. For this reason specifications change without notice.

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NFRC Thermal Performance Values																
		Glazing Description	U- Factor	R- Value	SHGC	VT	CR	Energy Star Rating								
Wood Direct Set	Air-Filled	No GlAS	Insul Clear	0.48	2.08	0.70	0.73	40	None							
			Insul Bronze	0.48	2.08	0.57	0.43	40	None							
			Insul Gray	0.48	2.08	0.53	0.36	40	None							
			LowE Clear	0.31	3.23	0.36	0.63	50	N/C							
			LowE Bronze	0.31	3.23	0.35	0.37	50	N/C							
			LowE Gray	0.31	3.23	0.33	0.31	50	N/C							
			LowE Clear SPF	0.31	3.23	0.34	0.60	53	N/C							
			Climate Control	0.31	3.23	0.32	0.60	53	N/C							
			Climate Control SPF	0.31	3.23	0.32	0.59	53	N/C							
			Super Sun Blocker	0.31	3.23	0.25	0.47	53	N/C,S/C, S							
			Super Sun Blocker SPF	0.31	3.23	0.24	0.46	53	N/C,S/C, S							
			366 LowE	0.31	3.23	0.25	0.57	53	N/C,S/C, S							
	DP Ratings (Air/Water/Structural Performance)															
									DP Rating (Max. Size Tested)	Air Infiltration (CFM)	Water Resistance (PSF)	Structural Test Pressure (PSF)	Test Report #	Notes		
			w/ GlAS & HDL < 1"	Insul Clear	0.48	2.08	0.64	0.65	40	None	FW-C50 98x60	0.01	7.5	+75/-97.5	180-7870	Tested With BM and Through Frame Installation
				Insul Bronze	0.48	2.08	0.51	0.39	40	None						
				Insul Gray	0.48	2.08	0.48	0.32	40	None						
				LowE Clear	0.31	3.23	0.32	0.56	50	N/C						
				LowE Bronze	0.31	3.23	0.32	0.34	50	N/C						
				LowE Gray	0.31	3.23	0.30	0.28	50	S/C and S						
			LowE Clear SPF	0.31	3.23	0.31	0.54	53	N/C							
			Climate Control	0.31	3.23	0.29	0.54	53	S/C and S							
			Climate Control SPF	0.31	3.23	0.29	0.53	53	S/C and S							
			Super Sun Blocker	0.31	3.23	0.23	0.42	53	N/C,S/C, S							
			Super Sun Blocker SPF	0.31	3.23	0.22	0.41	53	N/C,S/C, S							
			366 LowE	0.32	3.13	0.23	0.51	53	N/C,S/C, S							
			w/ GlAS & CHDL ≥ 1"	Insul Clear	0.48	2.08	0.57	0.58	40	None	FW-C50 48x84 Muller	0.01	7.5	+90-97.5	180-7871	Tested With BM and Through Frame Installation
				Insul Bronze	0.48	2.08	0.46	0.35	40	None						
				Insul Gray	0.48	2.08	0.43	0.29	40	None						
				LowE Clear	0.31	3.23	0.29	0.50	50	S/C and S						
				LowE Bronze	0.31	3.23	0.29	0.30	50	S/C and S						
				LowE Gray	0.31	3.23	0.27	0.25	50	N/C,S/C, S						
				LowE Clear SPF	0.31	3.23	0.29	0.49	53	S/C and S						
				Climate Control	0.31	3.23	0.27	0.49	53	N/C,S/C, S						
				Climate Control SPF	0.31	3.23	0.27	0.49	53	N/C,S/C, S						
				Super Sun Blocker	0.31	3.23	0.21	0.39	53	N/C,S/C, S						
		Super Sun Blocker SPF		0.31	3.23	0.21	0.38	53	N/C,S/C, S							
		366 LowE		0.32	3.13	0.21	0.46	53	N/C,S/C, S							
		TRIPLE IG NO GlAS	Triple IG LE/CL/CL	0.24	4.17	0.30	0.56	63	S/C and S							
			Triple IG LE/CL/LE	0.18	5.56	0.28	0.47	67	S/C and S							
			Triple IG LE/CL/CL (CHDL)	0.24	4.17	0.28	0.50	63	S/C and S							
			Triple IG LE/CL/LE (CHDL)	0.18	5.56	0.26	0.42	67	All Zones							

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Hurd Product Performance Guide

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NFRC Thermal Performance Values										
		Glazing Description	U- Factor	R- Value	SHGC	VT	CR	Energy Star Rating		
Wood Direct Set	Argon-Filled	No GIAS	LowE Clear	0.27	3.70	0.35	0.63	53	N/C, SC	
			LowE Bronze	0.27	3.70	0.35	0.37	53	N/C, SC	
			LowE Gray	0.27	3.70	0.32	0.31	53	N/C, SC	
			LowE Clear SPF	0.27	3.70	0.34	0.60	56	N/C, SC	
			Climate Control	0.27	3.70	0.32	0.60	56	N/C, SC	
			Climate Control SPF	0.27	3.70	0.32	0.59	56	N/C, SC	
			Super Sun Blocker	0.27	3.70	0.24	0.47	56	All Zones	
			Super Sun Blocker SPF	0.27	3.70	0.24	0.46	56	All Zones	
			366 LowE	0.27	3.70	0.25	0.57	56	All Zones	
		w/ GIAS & HDL < 1"	LowE Clear	0.28	3.57	0.32	0.56	52	N/C, SC	
			LowE Bronze	0.28	3.57	0.31	0.34	52	N/C, SC	
			LowE Gray	0.28	3.57	0.29	0.28	52	S/C and S	
			LowE Clear SPF	0.28	3.57	0.31	0.54	56	N/C, SC	
			Climate Control	0.28	3.57	0.29	0.54	55	S/C and S	
			Climate Control SPF	0.28	3.57	0.29	0.53	55	S/C and S	
			Super Sun Blocker	0.28	3.57	0.22	0.42	55	All Zones	
			Super Sun Blocker SPF	0.28	3.57	0.22	0.41	56	All Zones	
			366 LowE	0.28	3.57	0.23	0.51	56	All Zones	
		w/ GIAS & CHDL ≥ 1"	LowE Clear	0.28	3.57	0.32	0.56	52	N/C, SC	
			LowE Bronze	0.28	3.57	0.31	0.34	52	N/C, SC	
			LowE Gray	0.28	3.57	0.29	0.28	52	S/C and S	
			LowE Clear SPF	0.28	3.57	0.31	0.54	56	N/C, SC	
			Climate Control	0.28	3.57	0.29	0.54	55	S/C and S	
			Climate Control SPF	0.28	3.57	0.29	0.53	55	S/C and S	
			Super Sun Blocker	0.28	3.57	0.22	0.42	55	All Zones	
			Super Sun Blocker SPF	0.28	3.57	0.22	0.41	56	All Zones	
			366 LowE	0.28	3.57	0.21	0.46	56	All Zones	
	TRIPLE IG NO GIAS			Triple IG LE/CL/CL	0.21	4.76	0.30	0.56	65	S/C and S
				Triple IG LE/CL/LE	0.15	6.67	0.28	0.47	59	S/C and S
				Triple IG LE/CL/CL (CHDL)	0.21	4.76	0.28	0.50	65	S/C and S
				Triple IG LE/CL/LE (CHDL)	0.15	6.67	0.26	0.42	59	All Zones

DP Ratings (Air/Water/Structural Performance)					
DP Rating (Max. Size Tested)	Air Infiltration (CFM)	Water Resistance (PSF)	Structural Test Pressure (PSF)	Test Report #	Notes
FW-C50 98x60	0.01	7.5	+75/-97.5	180-7870	Tested With BM and Through Frame Installation
FW-C50 48x84 Mullled	0.01	7.5	+90-97.5	180-7871	Tested With BM and Through Frame Installation

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NFRC Thermal Performance Values								
Glazing Description		U- Factor	R- Value	SHGC	VT	CR	Energy Star Rating	
Wood Circle Top Air-Filled	No GIAS	Insul Clear	0.46	2.17	0.68	0.70	42	None
		Insul Bronze	0.46	2.17	0.55	0.42	42	None
		Insul Gray	0.46	2.17	0.51	0.35	42	None
		LowE Clear	0.30	3.33	0.35	0.61	54	N/C, SC
		LowE Bronze	0.30	3.33	0.34	0.36	54	N/C, SC
		LowE Gray	0.30	3.33	0.32	0.30	54	N/C, SC
		LowE Clear SPF	0.30	3.33	0.34	0.60	55	N/C, SC
		Climate Control	0.31	3.23	0.32	0.60	54	N/C
		Climate Control SPF	0.31	3.23	0.32	0.59	55	N/C
		Super Sun Blocker	0.30	3.33	0.25	0.47	54	All Zones
		Super Sun Blocker SPF	0.30	3.33	0.24	0.46	55	All Zones
		366 LowE	0.30	3.33	0.25	0.57	56	All Zones
	w/ GIAS & HDL < 1"	Insul Clear	0.48	2.08	0.64	0.65	40	None
		Insul Bronze	0.48	2.08	0.51	0.39	40	None
		Insul Gray	0.48	2.08	0.48	0.32	40	None
		LowE Clear	0.30	3.33	0.31	0.55	54	N/C, SC
		LowE Bronze	0.30	3.33	0.31	0.33	54	N/C, SC
		LowE Gray	0.30	3.33	0.32	0.30	54	N/C, SC
		LowE Clear SPF	0.30	3.33	0.31	0.54	55	N/C, SC
		Climate Control	0.31	3.23	0.29	0.54	54	S/C and S
		Climate Control SPF	0.31	3.23	0.29	0.53	55	S/C and S
		Super Sun Blocker	0.30	3.33	0.23	0.42	54	All Zones
		Super Sun Blocker SPF	0.30	3.33	0.22	0.41	55	All Zones
		366 LowE	0.30	3.33	0.22	0.51	56	All Zones
	w/ GIAS & CHDL ≥ 1"	Insul Clear	0.48	2.08	0.64	0.65	40	None
		Insul Bronze	0.48	2.08	0.51	0.39	40	None
		Insul Gray	0.48	2.08	0.48	0.32	40	None
		LowE Clear	0.30	3.33	0.31	0.55	54	N/C, SC
		LowE Bronze	0.30	3.33	0.31	0.33	54	N/C, SC
		LowE Gray	0.30	3.33	0.32	0.30	54	N/C, SC
		LowE Clear SPF	0.30	3.33	0.31	0.54	55	N/C, SC
		Climate Control	0.31	3.23	0.29	0.54	54	S/C and S
		Climate Control SPF	0.31	3.23	0.29	0.53	55	S/C and S
		Super Sun Blocker	0.30	3.33	0.23	0.42	54	All Zones
		Super Sun Blocker SPF	0.30	3.33	0.22	0.41	55	All Zones
		366 LowE	0.30	3.33	0.20	0.46	56	All Zones
TRIPLE IG NO GIAS	Triple IG LE/CL/CL	0.24	4.17	0.30	0.56	63	S/C and S	
	Triple IG LE/CL/LE	0.18	5.56	0.28	0.47	67	S/C and S	
	Triple IG LE/CL/CL (CHDL)	0.24	4.17	0.28	0.50	63	S/C and S	
	Triple IG LE/CL/LE (CHDL)	0.18	5.56	0.26	0.42	67	All Zones	

DP Ratings (Air/Water/Structural Performance)					
DP Rating (Max. Size Tested)	Air Infiltration (CFM)	Water Resistance (PSF)	Structural Test Pressure (PSF)	Test Report #	Notes
FW-C50 98x60	0.01	7.5	+97.5/-97.5	180-7876	Tested with BM Installation & Through Frame

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NFRC Thermal Performance Values								
		U- Factor	R- Value	SHGC	VT	CR	Energy Star Rating	
Wood Circle Top Argon-Filled	No GIAS	LowE Clear	0.26	3.85	0.34	0.61	57	N/C, SC
		LowE Bronze	0.26	3.85	0.34	0.36	57	N/C, SC
		LowE Gray	0.26	3.85	0.31	0.30	57	N/C, SC
		LowE Clear SPF	0.26	3.85	0.34	0.60	58	N/C, SC
		Climate Control	0.27	3.70	0.32	0.60	57	N/C, SC
		Climate Contro SPF	0.27	3.70	0.32	0.59	56	N/C, SC
		Super Sun Blocker	0.26	3.85	0.24	0.47	58	All Zones
		Super Sun Blocker SPF	0.26	3.85	0.24	0.46	58	All Zones
		366 LowE	0.26	3.85	0.24	0.55	59	All Zones
	w/ GIAS & HDL < 1"	LowE Clear	0.27	3.70	0.31	0.55	57	N/C, SC
		LowE Bronze	0.27	3.70	0.30	0.33	57	S/C and S
		LowE Gray	0.27	3.70	0.28	0.27	57	S/C and S
		LowE Clear SPF	0.27	3.70	0.31	0.54	57	N/C, SC
		Climate Control	0.28	3.57	0.29	0.54	56	S/C and S
		Climate Contro SPF	0.28	3.57	0.29	0.53	57	S/C and S
		Super Sun Blocker	0.27	3.70	0.22	0.42	57	All Zones
		Super Sun Blocker SPF	0.27	3.70	0.22	0.41	57	All Zones
		366 LowE	0.27	3.70	0.22	0.50	59	All Zones
	w/ GIAS & CHDL ≥ 1"	LowE Clear	0.27	3.70	0.31	0.55	57	N/C, SC
		LowE Bronze	0.27	3.70	0.30	0.33	57	S/C and S
		LowE Gray	0.27	3.70	0.28	0.27	57	S/C and S
		LowE Clear SPF	0.27	3.70	0.31	0.54	57	N/C, SC
		Climate Control	0.28	3.57	0.29	0.54	56	S/C and S
		Climate Contro SPF	0.28	3.57	0.29	0.53	57	S/C and S
		Super Sun Blocker	0.27	3.70	0.22	0.42	57	All Zones
		Super Sun Blocker SPF	0.27	3.70	0.22	0.41	57	All Zones
		366 LowE	0.27	3.70	0.20	0.44	59	All Zones
	TRIPLE IG NO GIAS	Triple IG LE/CL/CL	0.21	4.76	0.30	0.54	65	S/C and S
		Triple IG LE/CL/LE	0.15	6.67	0.27	0.46	70	All Zones
		Triple IG LE/CL/CL (CHDL)	0.21	4.76	0.27	0.49	65	All Zones
		Triple IG LE/CL/LE (CHDL)	0.15	6.67	0.25	0.41	70	All Zones

DP Ratings (Air/Water/Structural Performance)					
DP Rating (Max. Size Tested)	Air Infiltration (CFM)	Water Resistance (PSF)	Structural Test Pressure (PSF)	Test Report #	Notes
FW-C50 98x60	0.01	7.5	+97.5/-97.5	180-7876	Tested with BM Installation & Through Frame

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NFRC Thermal Performance Values								
Glazing Description		U- Factor	R- Value	SHGC	VT	CR	Energy Star Rating	
Wood Inswing Patio Door	No GAS	Insul Clear	0.45	2.22	0.49	0.51	43	None
		Insul Bronze	0.45	2.22	0.39	0.35	43	None
		Insul Gray	0.45	2.22	0.37	0.31	43	None
		LowE Clear	0.34	2.94	0.25	0.44	54	S/C and S
		LowE Bronze	0.34	2.94	0.24	0.31	54	S/C and S
		LowE Gray	0.34	2.94	0.23	0.27	54	S/C and S
		LowE Clear SPF	0.34	2.94	0.25	0.43	55	S/C and S
		Climate Control	0.34	2.94	0.23	0.43	54	S/C and S
		Climate Contro SPF	0.34	2.94	0.23	0.42	55	S/C and S
		Super Sun Blocker	0.34	2.94	0.18	0.34	54	S/C and S
	Super Sun Blocker SPF	0.34	2.94	0.18	0.33	55	S/C and S	
	w/ GAS & HDL < 1"	Insul Clear	0.45	2.22	0.42	0.44	43	None
		Insul Bronze	0.45	2.22	0.34	0.30	43	None
		Insul Gray	0.45	2.22	0.32	0.27	43	None
		LowE Clear	0.34	2.94	0.22	0.38	54	S/C and S
		LowE Bronze	0.34	2.94	0.21	0.26	54	S/C and S
		LowE Gray	0.34	2.94	0.20	0.23	54	S/C and S
		LowE Clear SPF	0.34	2.94	0.21	0.37	55	S/C and S
		Climate Control	0.34	2.94	0.20	0.37	54	S/C and S
		Climate Control SPF	0.34	2.94	0.20	0.36	55	S/C and S
		Super Sun Blocker	0.34	2.94	0.16	0.29	54	S/C and S
	Super Sun Blocker SPF	0.34	2.94	0.16	0.29	55	S/C and S	
	w/ GAS & CHDL ≥ 1"	Insul Clear	0.45	2.22	0.42	0.44	43	None
		Insul Bronze	0.45	2.22	0.34	0.30	43	None
		Insul Gray	0.45	2.22	0.32	0.27	43	None
		LowE Clear	0.34	2.94	0.22	0.38	54	S/C and S
		LowE Bronze	0.34	2.94	0.21	0.26	54	S/C and S
		LowE Gray	0.34	2.94	0.20	0.23	54	S/C and S
		LowE Clear SPF	0.34	2.94	0.21	0.37	55	S/C and S
		Climate Control	0.34	2.94	0.20	0.37	54	S/C and S
		Climate Control SPF	0.34	2.94	0.20	0.36	55	S/C and S
		Super Sun Blocker	0.34	2.94	0.16	0.29	54	S/C and S
	Super Sun Blocker SPF	0.34	2.94	0.16	0.29	55	S/C and S	

DP Ratings (Air/Water/Structural Performance)					
DP Rating (Max. Size Tested)	Air Infiltration (CFM)	Water Resistance (PSF)	Structural Test Pressure (PSF)	Test Report #	Notes
No Ratings available at this time					

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NFRC Thermal Performance Values									
		Glazing Description	U- Factor	R- Value	SHGC	VT	CR	Energy Star Rating	
Wood Inswing Patio Door	Argon-Filled	No GIAS	LowE Clear	0.31	3.23	0.25	0.44	57	N/C,S/C, S
			LowE Bronze	0.31	3.23	0.24	0.31	57	N/C,S/C, S
			LowE Gray	0.31	3.23	0.23	0.27	57	N/C,S/C, S
			LowE Clear SPF	0.31	3.23	0.24	0.43	58	N/C,S/C, S
			Climate Control	0.31	3.23	0.23	0.43	57	N/C,S/C, S
			Climate Control SPF	0.31	3.23	0.23	0.42	58	N/C,S/C, S
			Super Sun Blocker	0.31	3.23	0.18	0.34	57	N/C,S/C, S
			Super Sun Blocker SPF	0.31	3.23	0.17	0.33	58	N/C,S/C, S
			LowE Clear	0.32	3.13	0.22	0.38	57	N/C,S/C, S
	LowE Bronze	0.32	3.13	0.21	0.26	57	N/C,S/C, S		
	LowE Gray	0.32	3.13	0.20	0.23	57	N/C,S/C, S		
	LowE Clear SPF	0.32	3.13	0.21	0.37	57	N/C,S/C, S		
	Climate Control	0.32	3.13	0.20	0.37	56	N/C,S/C, S		
	Climate Control SPF	0.32	3.13	0.20	0.36	57	N/C,S/C, S		
	Super Sun Blocker	0.32	3.13	0.16	0.29	57	N/C,S/C, S		
	Super Sun Blocker SPF	0.32	3.13	0.15	0.28	57	N/C,S/C, S		
	LowE Clear	0.32	3.13	0.22	0.38	57	N/C,S/C, S		
	LowE Bronze	0.32	3.13	0.21	0.26	57	N/C,S/C, S		
	LowE Gray	0.32	3.13	0.20	0.23	57	N/C,S/C, S		
	LowE Clear SPF	0.32	3.13	0.21	0.37	57	N/C,S/C, S		
	Climate Control	0.32	3.13	0.20	0.37	56	N/C,S/C, S		
	Climate Control SPF	0.32	3.13	0.20	0.36	57	N/C,S/C, S		
	Super Sun Blocker	0.32	3.13	0.16	0.29	57	N/C,S/C, S		
	Super Sun Blocker SPF	0.32	3.13	0.15	0.28	57	N/C,S/C, S		

DP Ratings (Air/Water/Structural Performance)					
DP Rating (Max. Size Tested)	Air Infiltration (CFM)	Water Resistance (PSF)	Structural Test Pressure (PSF)	Test Report #	Notes
No Ratings available at this time					

Performance ratings are based on individual units only. Hurd is constantly working to refine and improve our products. For this reason specifications change without notice.

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NFRC Thermal Performance Values								
		Glazing Description	U- Factor	R- Value	SHGC	VT	CR	Energy Star Rating
Wood Outswing Patio Door	No GIAS	Insul Clear	0.45	2.22	0.48	0.50	43	None
		Insul Bronze	0.45	2.22	0.39	0.35	43	None
		Insul Gray	0.45	2.22	0.36	0.31	43	None
		LowE Clear	0.34	2.94	0.25	0.43	54	S/C and S
		LowE Bronze	0.34	2.94	0.24	0.30	54	S/C and S
		LowE Gray	0.34	2.94	0.22	0.26	54	S/C and S
		LowE Clear SPF	0.34	2.94	0.24	0.42	55	S/C and S
		Climate Control	0.34	2.94	0.23	0.42	54	S/C and S
		Climate Control SPF	0.35	2.86	0.23	0.41	55	S/C and S
		Super Sun Blocker	0.34	2.94	0.18	0.33	54	S/C and S
	Super Sun Blocker SPF	0.34	2.94	0.18	0.32	55	S/C and S	
	w/ GIAS & HDL < 1"	Insul Clear	0.45	2.22	0.41	0.43	43	None
		Insul Bronze	0.45	2.22	0.34	0.30	43	None
		Insul Gray	0.45	2.22	0.31	0.26	43	None
		LowE Clear	0.34	2.94	0.21	0.37	54	S/C and S
		LowE Bronze	0.34	2.94	0.21	0.26	54	S/C and S
		LowE Gray	0.34	2.94	0.20	0.23	54	S/C and S
		LowE Clear SPF	0.34	2.94	0.21	0.36	55	S/C and S
		Climate Control	0.34	2.94	0.20	0.36	54	S/C and S
		Climate Control SPF	0.35	2.86	0.20	0.35	55	S/C and S
		Super Sun Blocker	0.34	2.94	0.16	0.28	54	S/C and S
	Super Sun Blocker SPF	0.34	2.94	0.16	0.28	55	S/C and S	
	w/ GIAS & CHDL ≥ 1"	Insul Clear	0.45	2.22	0.41	0.43	43	None
		Insul Bronze	0.45	2.22	0.34	0.30	43	None
		Insul Gray	0.45	2.22	0.31	0.26	43	None
		LowE Clear	0.34	2.94	0.21	0.37	54	S/C and S
		LowE Bronze	0.34	2.94	0.21	0.26	54	S/C and S
		LowE Gray	0.34	2.94	0.20	0.23	54	S/C and S
		LowE Clear SPF	0.34	2.94	0.21	0.36	55	S/C and S
		Climate Control	0.34	2.94	0.20	0.36	54	S/C and S
Climate Control SPF		0.35	2.86	0.20	0.35	55	S/C and S	
Super Sun Blocker		0.34	2.94	0.16	0.28	54	S/C and S	
Super Sun Blocker SPF	0.34	2.94	0.16	0.28	55	S/C and S		

DP Ratings (Air/Water/Structural Performance)					
DP Rating (Max. Size Tested)	Air Infiltration (CFM)	Water Resistance (PSF)	Structural Test Pressure (PSF)	Test Report #	Notes
No Ratings available at this time					

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NFRC Thermal Performance Values									
Glazing Description			U- Factor	R- Value	SHGC	VT	CR	Energy Star Rating	
Wood Outswing Patio Door	Argon-Filled	No GIAS	LowE Clear	0.31	3.23	0.24	0.43	57	N/C,S/C, S
			LowE Bronze	0.31	3.23	0.24	0.30	57	N/C,S/C, S
			LowE Gray	0.31	3.23	0.22	0.26	57	N/C,S/C, S
			LowE Clear SPF	0.32	3.13	0.24	0.42	58	N/C,S/C, S
			Climate Control	0.32	3.13	0.23	0.42	57	N/C,S/C, S
			Climate Control SPF	0.32	3.13	0.22	0.41	57	N/C,S/C, S
			Super Sun Blocker	0.31	3.23	0.17	0.33	57	N/C,S/C, S
			Super Sun Blocker SPF	0.32	3.13	0.17	0.32	58	N/C,S/C, S
			w/ GIAS & HDL < 1"	LowE Clear	0.32	3.13	0.21	0.37	56
	LowE Bronze	0.32		3.13	0.21	0.26	56	N/C,S/C, S	
	LowE Gray	0.32		3.13	0.20	0.23	56	N/C,S/C, S	
	LowE Clear SPF	0.32		3.13	0.21	0.36	57	N/C,S/C, S	
	Climate Control	0.32		3.13	0.20	0.36	56	N/C,S/C, S	
	Climate Control SPF	0.33		3.03	0.20	0.35	57	S/C and S	
	Super Sun Blocker	0.32		3.13	0.15	0.28	56	N/C,S/C, S	
	Super Sun Blocker SPF	0.32		3.13	0.15	0.28	57	N/C,S/C, S	
	w/ GIAS & CHDL ≥ 1"	LowE Clear		0.32	3.13	0.21	0.37	56	N/C,S/C, S
		LowE Bronze	0.32	3.13	0.21	0.26	56	N/C,S/C, S	
		LowE Gray	0.32	3.13	0.20	0.23	56	N/C,S/C, S	
		LowE Clear SPF	0.32	3.13	0.21	0.36	57	N/C,S/C, S	
		Climate Control	0.32	3.13	0.20	0.36	56	N/C,S/C, S	
		Climate Control SPF	0.33	3.03	0.20	0.35	57	S/C and S	
		Super Sun Blocker	0.32	3.13	0.15	0.28	56	N/C,S/C, S	
		Super Sun Blocker SPF	0.32	3.13	0.15	0.28	57	N/C,S/C, S	

DP Ratings (Air/Water/Structural Performance)					
DP Rating (Max. Size Tested)	Air Infiltration (CFM)	Water Resistance (PSF)	Structural Test Pressure (PSF)	Test Report #	Notes
No Ratings available at this time					

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Center Of Glass Data

Glass Type	Ext. Lite Color & Coating/ Int. Lite Coating & Color	U-Factor / h-ft2 -F	Btu	SC	SHGC	Rel. Ht Gain Btu / h-ft2 -F	% Visible Light Trans	Tuv	
								Tuv	Tdw-K
Insul	Clear/Clear	0.48		0.89	0.78	186	0.82	0.58	0.61
Hurd Low-E (Air)	Clear LE/Clear	0.29		0.45	0.39	94	0.71	0.24	0.37
Hurd Low-E SPF (Air)	Clear LE/Clear SPF	0.29		0.44	0.39	93	0.69	0.001	0.20
Hurd Climate Control (Air)	Clear LE/Clear	0.29		0.42	0.37	88	0.70	0.29	0.40
Hurd Climate Control SPF (Air)	Clear LE/Clear SPF	0.29		0.41	0.36	57	0.68	0.002	0.19
Hurd Super Sun Blocker (Air)	Clear LE/Clear	0.29		0.32	0.28	68	0.55	0.18	0.26
Hurd Super Sun Blocker SPF (Air)	Clear LE/Clear SPF	0.29		0.32	0.28	68	0.53	0.001	0.13
Hurd Low-E (Gas)	Clear LE/Clear	0.24		0.45	0.39	92	0.71	0.24	0.37
Hurd Low-E SPF (Gas)	Clear LE/Clear SPF	0.25		0.44	0.38	91	0.69	0.001	0.20
Hurd Climate Control (Gas)	Clear LE/Clear	0.25		0.42	0.36	87	0.70	0.29	0.40
Hurd Climate Control SPF (Gas)	Clear LE/Clear SPF	0.25		0.41	0.36	85	0.68	0.002	0.19
Hurd Super Sun Blocker (Gas)	Clear LE/Clear	0.24		0.32	0.27	66	0.55	0.18	0.26
Hurd Super Sun Blocker SPF (Gas)	Clear LE/Clear SPF	0.24		0.31	0.27	65	0.53	0.001	0.13
Hurd Solar Ban 70 Low-E (Gas)	Clear LE/Clear	0.24		0.43	0.24	89	0.64	0.06	0.22
Insul	Bronze/Clear	0.48		0.73	0.63	152	0.62	0.32	0.38
Hurd Low-E (Air)	Bronze/LE Clear	0.29		0.44	0.38	93	0.53	0.14	0.25
Hurd Low-E (Gas)	Bronze/LE Clear	0.24		0.44	0.38	91	0.53	0.14	0.25
Insul	Gray/Clear	0.48		0.69	0.6	146	0.56	0.33	0.39
Hurd Low-E (Air)	Gray/LE Clear	0.29		0.42	0.37	88	0.48	0.15	0.26
Hurd Low-E (Gas)	Gray/LE Clear	0.24		0.42	0.36	87	0.48	0.15	0.26
Hurd 366 Low-E (Air)	Clear LE/Clear	0.29		0.32	0.28	67	0.65	0.05	0.21
Hurd 366 Low-E (Gas)	Clear LE/Clear SPF	0.24		0.31	0.27	66	0.65	0.05	0.21
Hurd Triple IG LE/CL/CL (Air)	Clear LE/Clear/Clear	0.27		0.40	0.34	83	0.64	0.12	0.28
Hurd Triple IG LE/CL/LE (Air)	Clear LE/Clear/Clear LE	0.22		0.39	0.34	82	0.64	0.12	0.28
Hurd Triple IG LE/CL/CL (Gas)	Clear LE/Clear/Clear	0.21		0.36	0.31	75	0.55	0.04	0.19
Hurd Triple IG LE/CL/LE (Gas)	Clear LE/Clear/Clear LE	0.16		0.36	0.31	74	0.55	0.04	0.19

Performance ratings are based on individual units only. Hurd is constantly working to refine and improve our products. For this reason specifications change without notice.

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Energy Terminology:

U-VALUE -- The heat flow rate through a given construction expressed in Btu/hr/ft²/F. Values are normally given for NFRC/ASHRAE winter conditions of 0 degrees outdoor temperature, 70 degrees indoor temperature, 15 mph wind and no solar load. U-values can be expressed in terms of the glass alone (U_{cog}) or for the entire window (U_{window}) which includes the effect of the frame and the spacer materials.

SHADING COEFFICIENT (SC) -- The ratio of solar heat gain through a glazing to the solar heat gain through a single lite of 1/8" (3.0mm) glass. Dimensionless and varying between 0 and 1, the smaller the number, the better the glazing is at preventing solar gain. The shading coefficient is specific to normal incidence angle and is being phased out in favor of the solar heat gain coefficient.

SOLAR HEAT GAIN COEFFICIENT (SHGC) -- The fraction of incident solar radiation which enters a building as heat. It is based on the sum of the solar energy transmittance + the inwardly flowing fraction of absorbed solar energy on all lites of the glazing. Dimensionless and varying between 0 and 1, the smaller the number, the better the glazing is at preventing solar gain. Preferred over the shading coefficient since it can be used for solar incidence angles other than normal to the glass surface. It can be expressed in terms of the glass alone (SHGC_{cog}) or for the entire window (SHGC_{window}).

RELATIVE-HEAT GAIN (RHG) -- The total amount of heat gain through a glazing system at NFRC/ASHRAE specified summer conditions, incorporating the U-value and the Solar Heat Gain Coefficient. The conditions are 230 Btu/hr/ft², outdoor temperature of 89 degrees F, indoor temperature of 75 degrees F, and 7.5 mph wind. [RHG=U_{summer} x (89-75) + SHGC x (230)]. Expressed in terms of Btu/hr/ft².

VISIBLE LIGHT TRANSMITTANCE -- In the visible spectrum (380 to 720 nanometers), the percentage of light that is transmitted through the glazing relative to the C.I.E. [Commission Internationale de l'Eclairage (International Commission on Illumination)] standard observer.

UV TRANSMISSIONS (T_{uv}) -- The percentage of ultra violet rays that enter a room through the glazing system. It is a predictor of potential fading damage. Lower percentages indicate less fading potential. (UV rays are those with a wavelength ranging from 0.30 to 0.38 nanometers.)

LBL DAMAGE FUNCTION (T_{dw-K}) -- This function is another way of expressing UV Transmission. It is a better predictor of potential fading damage than UV Transmission. Lower values indicate less fading potential. The LBL Damage Function is a weighted value, which takes into account that as the wavelength of the UV rays get shorter, the fading damage potential increases. Therefore, two glazing systems with the same UV Transmission may have different LBL Damage Function values because one allows more shorter wavelength rays to pass through than the other.

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Design Pressure Table

DP Rating	Structural Performance		Water Performance	
	Static Load PSF	Wind Velocity MPH	Static Load PSF	Wind Velocity MPH
15	22.50	94.90	2.86	33.80
20	30.00	109.50	3.00	34.60
25	37.50	122.50	3.75	38.70
30	45.00	134.20	4.50	42.40
35	52.50	144.90	5.25	45.80
40	60.00	154.90	6.00	48.90
45	67.50	164.30	6.75	52.00
50	75.00	173.20	7.50	54.80
55	82.50	181.70	8.25	57.40
60	90.00	189.70	9.00	60.00
65	97.50	197.50	9.75	62.40
70	105.00	204.90	10.50	64.80
75	112.50	212.10	11.25	67.10
80	120.00	219.10	12.00	69.30

Please note that this chart merely reflects the simulated wind speed that a test unit is exposed to during each respective test category. The wind speeds listed in this chart do not reflect the wind zone that a DP-rated product meets as required by the International Building Codes (IE: 100 mph Zone, 110 mph Zone, 120 mph zone, 130 mph zone, 140 mph zone).

AAMA / WDMA / CSA 101 / IS2 / A440-05 Ratings Terminology

1. Product Designations

Window and door products are designated by a four part code which includes product type, performance class, performance grade and maximum size tested.

The format for product designation is:

Typical Designation

Ex.: "HS - LC 25 48 x 76"

HS 2. Product Type
 LC 3. Performance Class
 25 4. Performance Grade
 48 x 76 Maximum Size Tested Width x Height

2. Product Type

Window and door product types are as follows:

AP Awning
 C Casement
 FD Fixed Door
 FW Fixed Window
 H Hung - Single / Double
 SHD Side-Hinged Door
 HS Horizontal Sliding window
 SD Sliding Door
 VS Vertical Sliding window

3. Performance Class

Window and door products are divided into 5 performance classes as follows:

R Residential
 LC Light Commercial
 C Commercial
 HC Heavy Commercial
 AW Architectural

R 15 psf (720 Pa)
 LC 25 psf (1200 Pa)
 C 30 psf (1440 Pa)
 HC 40 psf (1920 Pa)
 AW 40 psf (1920 Pa)

In addition, products may be tested to optional performance grades higher than the minimum grade in increments of 5 psf (240 Pa)

4. Performance Grade

Products are designated by the design pressure for which they have been tested in pounds per square foot. The structural test pressure for all products is 1.5 times the design pressure. Each product performance class shall have a minimum performance grade as follows:

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PERFORMANCE GRADES

Performance Grade	Applicable Product Designation(s)	Design Pressure		Structural Test Pressure			Water Resistance Test Pressure			
		R,LC,C and HC		R,LC,C and HC		R,LC,C and HC		R,LC,C and HC		
		lb/ft ²	(Pa)	lb/ft ²	(Pa)		lb/ft ²	(Pa)		
15	R	15	720	22.5	1080	1080	2.86	2.86	-140	
20	R	20	960	30.0	1440	1440	3.00	3.00	-150	
25	R	25	1200	37.5	1800	1800	3.75	3.75	-180	
30	R,LC	30	1440	45.0	2160	2160	4.50	4.50	-220	
35	R,LC,C	35	1680	52.5	2520	2520	5.25	5.25	-260	
40	R,LC,C	40	1920	60.0	2880	2880	6.00	6.00	-290	
45	R,LC,C,HC,AW	45	2160	67.5	3240	3240	6.75	6.75	-330	
50	R,LC,C,HC,AW	50	2400	75.0	3600	3600	7.50	7.50	-360	
55	R,LC,C,HC,AW	55	2640	82.5	3960	3960	8.25	8.25	-400	
60	R,LC,C,HC,AW	60	2880	90.0	4320	4320	9.00	9.00	-440	
65	R,LC,C,HC,AW	65	3120	97.5	4680	4680	9.75	9.75	-470	
70	R,LC,C,HC,AW	70	3360	105.0	5040	5040	10.50	10.50	-510	
75	R,LC,C,HC,AW	75	3600	112.5	5400	5400	11.25	11.25	-540	
80	R,LC,C,HC,AW	80	3830	120.0	5750	5750	12.00	12.00	-580	
85	R,LC,C,HC,AW	85	4080	127.5	6110	6110	12.00	12.00	-580	
90	R,LC,C,HC,AW	90	4320	135.0	6470	6470	12.00	12.00	-580	

CONFORMANCE: Hurd windows and patio doors conform to ANSI/AAMA/WDMA101/I.S. 2-97 or AAMA/WDMA/CSA 101/I.S.2/A440-08. Hurd windows and patio doors are water repellent preservative treated in accordance with the industry standard I/S. 4-00.

All performance level calculations done using sealed insulating glass with two panes.

Hurd's performance ratings are derived from third-party independent laboratory test results. The unit testing results reflected in this performance guide are achieved under laboratory conditions. The results from these tests may or may not be duplicated in actual situations due to environmental conditions or installation differences.

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Sample NFRC Temporary Label
(not to scale)

		HURD WINDOWS AND DOORS H-3 CASEMENT LE CLR W/SS SPCR (GIA)ACHDL<1" CPD HUR-N-083 GAS FILLED TP	
ENERGY Performance Ratings			
U-Factor (U.S./I-P) 0.30		Solar Heat Gain Coefficient 0.27	
ADDITIONAL PERFORMANCE RATINGS			
Visible Transmittance 0.48		_____	
<p>Manufacturer stipulates that these ratings conform to applicable NFRC procedures for determining whole product performance. NFRC ratings are determined for a fixed set of environmental conditions and specific product sizes. NFRC does not recommend any product and does not warrant the suitability of any product for any specific use. Consult manufacturer's literature for other product performance information.</p>			
ENERGY STAR® Qualified in All 50 States			
			
All Qualified			

Hurd Product Performance Guide

11/3/2010

Rely on Hurd Performance

All Hurd products are manufactured to some of the most exacting standards in the industry. And now, you have even more assurance that the Hurd products you select will perform to the standards you require. The reason? All Hurd windows and patio doors have been independently certified by the National Fenestration Rating Council (NFRC) and carry the NFRC label.

NFRC Ratings

The testing and rating methods the NFRC has designed make window comparisons easy and accurate. Look for the NFRC labels on windows and doors. Use the U-factor rating to compare products, and to determine whether they meet your energy efficiency needs. U-factor is a thermal performance rating: the lower the U-factor, the better energy performance. Hurd is a founding member of the NFRC and supports work of the council on behalf of homeowners and the building industry.

- R-value is calculated as the reciprocal of the U-value
- Insulated Units (Insul) are not gas filled

For more information on performance characteristics of our products contact your local Hurd Distributor.



ENERGY STAR CRITERIA FOR WINDOWS

<u>Climate/Region</u>	<u>U-Factor</u>	<u>SHGC</u>
All Zones	.30 or lower	.27 or lower
Northern	.30 or lower	Any
North/Central	.32 or lower	.40 or lower
South/Central	.35 or lower	.30 or lower
Southern	.60 or lower	.27 or lower

ENERGY STAR CRITERIA FOR DOORS WITH GLAZING OF 1/2-LITE OR GREATER

<u>Climate/Region</u>	<u>U-Factor</u>	<u>SHGC</u>
All Zones	.32 or lower	.30 or lower

The Energy Star program was developed by the U.S. Department of Energy and the Environmental Protection Agency to assist consumers and businesses to identify products that shall help them save money and protect the environment. Hurd is proud to be an Energy Star Partner. Please note that the Energy Star criteria was revised in January, 2010. Window criteria is now different than door criteria as shown in the above tables.

Total Unit Thermal Ratings

U-Factor R-Value SHGC VT

All thermal data was calculated using the latest NFRC approved computer programs and standard NFRC/ASHRAE winter conditions of 0° F outside temperature, 15 mph wind and 70° F inside temperature. Total unit thermal values are based on NFRC model sizes. See the listing shown below.

Product Type	Model Size
Casement	24" x 59"
Fixed	47" x 59"
Horizontal Slider	59" x 47"
Awning	59" x 24"
Sidelite	24" x 79"

Product Type	Model Size
Sliding Patio Door	79" x 79"
Swinging Patio Door	39" x 79"
Transom	79" x 24"
Vertical Slider	47" x 59"

Energy Star® Maps

