

Residential skylights

Tested performance information

VSE/VSS Tested Performance Information									
Glass	04	06**	08	10	99 94				
Air infiltration/exfiltration * [max. @ 75 Pa (1.57 lbs/ft ²) differential pressure]									
l/s/m ²	0.2	0.4	0.2	0.3	0.2				
cfm/ft ²	0.03	0.07	0.03	0.06	0.03				
Water resistance @ 3.4 L/m ² /min (5 USgal/ft ² /hr) * [max. tested differential pressure with no leakage]									
Pascals	720	720	720	720	720				
lbs/ft ²	15	15	15	15	15				
	Thermal p	erformance (Ce	rtified, complete ι	ınit values)					
 VELUX Glass Skylights are rated at 20° slope and labeled with NFRC-certified U-Factor, SHGC, and VT ratings listed in the NFRC Certified Products Directory. Ratings for products with standard available fitted shades are available. 									
U-Factor (Btu/hr·ft ² ·°F)	0.43	0.41	0.43	0.42	0.38				
SHGC	0.23	0.23	0.22	0.23	0.23				
VT	0.53	0.53	0.38	0.53	0.52				
	ι	JV protection, %	Glass panel only)					
(300-380 nm)	99.9	99.9	99.9	99.9	99.9				
	Fading protection	on, %, Krochmann	damage function	(Glass panel only)					
(300-600 nm)	83.1	84.6	88.4	83.2	85.1				
	Certified Struc	tural Performan	ce [Performance	Grade or DP] *					
Tested Size			Uplift (lbs/ft ²)						
S06	65	65	65	80	65				
M08	105	65	105	85	105				
C06	n.r.	n.r.	n.r.	90	n.r.				
Tested Size		[Download (lbs/ft ²	²)					
S06	370	300	370	860	370				
M08	440	360	440	1090	440				
C06	n.r.	n.r.	n.r.	1200	n.r.				
				2/A440-11 (NAFS 2					
 ** O6 variant is tested and WDMA Hallmark certified for Wind-Borne debris impact, in accordance with ASTM E 1886 and ASTM E 1996. Rated for Wind Zone 3, Missile Level C, Cycle Pressure +50/-50 Structural performance ratings also apply to sizes smaller than the Tested Sizes VSE and VSS skylights are WDMA Hallmark certified: Product Number 426-H-670.xx 									
V JE di		ot applicable to co			JI U.XX				
04 glass: Tempered over laminated HS (0.030" interlayer) 06 glass: Tempered over laminated HS (0.090" interlayer) 08 glass: Same as 04, with white interlayer 10 glass: Temp. over laminated temp. (0.030" interlayer)									
	99 94 glass:	Same as 04 , with	189 coating on inf	cerior surtace					

		VS Test	ed Perforn	nance Infor	mation						
Glass	04	05	06**	08	10	99 93	99 94				
	Air infilt	ration/exfiltrat	t ion * [max. @	75 Pa (1.57 lbs/	ft ²) differential p	ressure]					
l/s/m ²	0.2	0.5	0.4	0.2	0.3	0.5	0.2				
cfm/ft ²	0.03	0.09	0.07	0.03	0.06	0.09	0.03				
	Water resistance @ 3.4 L/m ² /min (5 USgal/ft ² /hr) * [max. tested differential pressure with no leakage]										
Pascals	720	720	720	720	720	720	720				
lbs/ft ²	15	15	15	15	15	15	15				
		Thermal per	formance (Ce	rtified, complete	e unit values)						
U-Factor,	SHGC, and VT	are rated at 20 ratings listed th standard ava	in the NFRC C	ertified Produc	ts Directory.						
U-Factor (Btu/hr·ft ² .°F)	0.43	0.44	0.41	0.43	0.42	0.39	0.38				
SHGC	0.23	0.23	0.23	0.22	0.23	0.23	0.23				
VT	0.53	0.54	0.53	0.38	0.53	0.52	0.52				
			-	(Glass panel on							
(300-380 nm)	99.9	95.2	99.9	99.9	99.9	95.3	99.9				
		•••		-	on (Glass panel or	-	05.3				
(300-600 nm)	83.1	79.2	84.6	88.4	83.2	81.6	85.1				
	C	ertified Structu	ral Performan	ce [Performand	ce Grade or DP] *						
Tested Size				Uplift (lbs/ft ²)							
S06	65	90	65	65	80	90	65				
M08	105	120	65	105	85	120	105				
C06	n.r.	n.r.	n.r.	n.r.	90	n.r.	n.r.				
Tested Size			D	ownload (lbs/f	't ²)						
S06	370	370	300	370	860	300	370				
M08	440	550	360	440	1090	400	440				
C06	n.r.	n.r.	n.r.	n.r.	1200	n.r.	n.r.				
 * Tested in accordance with AAMA/WDMA/CSA 101/I.S.2/A440-11 (NAFS 2011) ** 06 variant is tested and WDMA Hallmark certified for Wind-Borne debris impact, in accordance with ASTM E 1886 and ASTM E 1996. Rated for Wind Zone 3, Missile Level C, Cycle Pressure +50/-50 Structural performance ratings also apply to sizes smaller than the Tested Size VS skylights are WDMA Hallmark certified: Product Number 426-H-670.xx (not applicable to copper-clad variants) 04 glass: Tempered over laminated HS (0.030" interlayer) 05 glass: Tempered over tempered 06 glass: Tempered over laminated HS (0.090" interlayer) 08 glass: Same as 04, with white interlayer 10 glass: Temp. over laminated temp. (0.030" interlayer) 99 93 glass: Same as 05, with i89 coating on interior surface 											
	99 93 glass: Same as 05 , with i89 coating on interior surface 99 94 glass: Same as 04 , with i89 coating on interior surface										

FS Tested Performance Information										
Glass	04	05	06**	08	10	99 93	99 94			
	Air infiltr	ation/exfiltra	tion * [max. @	75 Pa (1.57 lbs	s/ft ²) differential	pressure]				
l/s/m ²	0.1	0.2	0.1	0.1	0.1	0.2	0.1			
cfm/ft ²	0.01	0.04	0.01	0.01	0.01	0.04	0.01			
Water resistance @ 3.4 L/m ² /min (5 USgal/ft ² /hr) * [max. tested differential pressure with no leakage]										
Pascals	720	720	720	720	720	720	720			
lbs/ft ²	15	15	15	15	15	15	15			
	Thermal performance (Certified, complete unit values)									
 VELUX Glass Skylights are rated at 20° slope and labeled with NFRC-certified U-Factor, SHGC, and VT ratings listed in the NFRC Certified Products Directory. Ratings for products with standard available fitted shades are available. 										
U-Factor (Btu/hr·ft ² ·°F)	0.44	0.44	0.41	0.44	0.42	0.39	0.38			
SHGC	0.26	0.26	0.26	0.25	0.26	0.25	0.25			
VT	0.60	0.61	0.60	0.42	0.60	0.59	0.59			
			rotection, %							
(300-380 nm)	99.9	95.2	99.9	99.9	99.9	95.3	99.9			
	-			-	on (Glass panel	-	051			
(300-600 nm)	83.1	79.2	84.6	88.4	83.2	81.6	85.1			
	Cert	ified Structur a	al Performan	ce [Performal	nce Grade or DP]*				
Tested Size				Uplift (lbs/ft ²))					
S06	60	45	65	70	65	45	70			
M08	105	90	120	105	100	90	105			
C06	n.r.	n.r.	n.r.	n.r.	65	n.r.	n.r.			
Tested Size			Do	wnload (lbs/1	ft ²)					
S06	160	400	300	160	720	400	160			
M08	350	400	300	350	1180	400	350			
C06	n.r.	n.r.	n.r.	n.r.	1250	n.r.	n.r.			
 * Tested in accordance with AAMA/WDMA/CSA 101/I.S.2/A440-11 (NAFS 2011) ** 06 variant is tested and WDMA Hallmark certified for Wind-Borne debris impact, in accordance with ASTM E 1886 and ASTM E 1996. Rated for Wind Zone 3, Missile Level C, Cycle Pressure +50/-50 Structural performance ratings also apply to sizes smaller than the Tested Size FS skylights are WDMA Hallmark certified: Product Number 426-H-672.xx (not applicable to copper-clad variants) 04 glass: Tempered over laminated HS (0.030" interlayer) 05 glass: Tempered over tempered 06 glass: Tempered over laminated HS (0.090" interlayer) 08 glass: Same as 04, with white interlayer 10 glass: Temp. over laminated temp. (0.030" interlayer) 99 93 glass: Same as 05, with i89 coating on interior surface 99 94 glass: Same as 04, with i89 coating on interior surface 										

VCE/VCS Tested Performance Information									
Glass	04	06**	08	10	99 94				
	Air infiltration/ex	filtration* [max. @	75 Pa (1.57 lbs/ft ²) differential pressure]					
l/s/m ²	0.1	0.1	0.1	<0.1	0.1				
cfm/ft ²	0.02	0.01	0.02	<0.01	0.02				
Water resistance @ 3.4 L/m ² /min (5 USgal/ft ² /hr) * [max. tested differential pressure with no leakage]									
Pascals	720	720	720	720	720				
lbs/ft ²	15	15	15	15	15				
	Therm	al performance (Co	ertified, complete ι	nit values)					
 VELUX Glass Skylights are rated at 20° slope and labeled with NFRC-certified U-Factor, SHGC, and VT ratings listed in the NFRC Certified Products Directory. Ratings for products with standard available fitted shades are available. 									
(Btu/hr·ft ² ·°F)	0.52	0.48	0.52	0.49	0.47				
SHGC	0.24	0.24	0.23	0.24	0.23				
VT	0.55	0.55	0.39 6 (Glass panel only	0.55	0.54				
(300-380 nm)	99.9	99.9	99.9	99.9	99.9				
(300-380 1111)		ction, % Krochmanr			99.9				
(300-600 nm)	83.1	84.6	88.4	83.2	85.1				
	Certified St	ructural Performa	nce [Performance	Grade or DP] *					
Tested Size			Uplift (lbs/ft ²)						
4646	45	60	45	40	45				
2246	n.r.	n.r.	n.r.	65	n.r.				
			Download (lbs/ft ²)					
4646	230	230	230	620	230				
2246	n.r.	n.r.	n.r.	1150	n.r.				
 * Tested in accordance with AAMA/WDMA/CSA 101/I.S.2/A440-11 (NAFS 2011) ** 06 variant is tested and WDMA Hallmark certified for Wind-Borne debris impact, in accordance with ASTM E 1886 and ASTM E 1996. Rated for Wind Zone 3, Missile Level C, Cycle Pressure +50/-50 Structural performance ratings also apply to sizes smaller than the Tested Size VCE and VCS skylights are WDMA Hallmark certified: Product Number 426-H-695.xx 04 glass: Tempered over laminated HS (0.030" interlayer) 06 glass: Tempered over laminated HS (0.090" interlayer) 08 glass: Same as 04, with white interlayer 10 glass: Temp. over laminated temp. (0.030" interlayer) 99 94 glass: Same as 04, with i89 coating on interior surface 									

VCM Tested Performance Information										
Glass	04	05	06**	08	10	99 93	99 94			
Air infiltration/exfiltration* [max. @ 75 Pa (1.57 lbs/ft ²) differential pressure]										
l/s/m ²	0.1	<0.1	0.1	0.1	<0.1	<0.1	0.1			
cfm/ft ²	0.02	<0.01	0.01	0.02	<0.01	<0.01	0.02			
Water resistance @ 3.4 L/m ² /min (5 USgal/ft ² /hr) * [max. tested differential pressure with no leakage]										
Pascals	720	720	720	720	720	720	720			
lbs/ft ²	15	15	15	15	15	15	15			
		Thermal perf	ormance (Cer	tified, complete	unit values)					
U-Factor,	SHGC, and VT	are rated at 20° ratings listed in th standard ava	n the NFRC Ce	ertified Product	s Directory.					
U-Factor (Btu/hr·ft ² .°F)	0.52	0.53	0.48	0.52	0.49	0.48	0.47			
SHGC	0.24	0.24	0.24	0.23	0.24	0.23	0.23			
VT	0.55	0.56	0.55	0.39	0.55	0.54	0.54			
				(Glass panel onl	-					
(300-380 nm)	99.9 Eadi	95.2	99.9 96 Krochmann (99.9	99.9 I (Glass panel onl	95.3	99.9			
(300-600 nm)	83.1	79.2	84.6	88.4	83.2	97 81.6	85.1			
	Ce	ertified Structur	al Performan	ce [Performanc	e Grade or DP] *					
Tested Size				Uplift (lbs/ft ²)						
4646	45	30	60	45	40	30	45			
2246	n.r.	n.r.	n.r.	n.r.	65	n.r.	n.r.			
			D	ownload (lbs/fl	²)					
4646	230	230	230	230	620	230	230			
2246	n.r.	n.r.	n.r.	n.r.	1150	n.r.	n.r.			
 * Tested in accordance with AAMA/WDMA/CSA 101/I.S.2/A440-11 (NAFS 2011) ** 06 variant is tested and WDMA Hallmark certified for Wind-Borne debris impact, in accordance with ASTM E 1886 and ASTM E 1996. Rated for Wind Zone 3, Missile Level C, Cycle Pressure +50/-50 Structural performance ratings also apply to sizes smaller than the Tested Size VCM skylights are WDMA Hallmark certified: Product Number 426-H-695.xx 04 glass: Tempered over laminated HS (0.030" interlayer) 										
		05 06 glass: Temp 08 glas	glass: Tempere pered over lamin s: Same as 04 , p. over laminate ne as 05 , with i	d over tempered nated HS (0.090 with white inter ed temp. (0.030' 89 coating on ir	l " interlayer) 'layer ' interlayer) iterior surface					

		FCI	M Testeo	d Performa	ance Inf	ormation					
Glass	04/14	05 / 15	05C	06 / 16**	08	10	29 / 30	99 93	99 94		
Air infiltration/exfiltration* [max. @ 75 Pa (1.57 lbs/ft ²) differential pressure]											
l/s/m ²	0.2	<.1	<.1	<.1	0.2	0.1	0.3	<.1	0.2		
cfm/ft ²	0.03	<0.01	<0.01	<0.01	0.03	0.01	0.05	<0.01	0.03		
	Water resistance @ 3.4 L/m ² /min (5 USgal/ft ² /hr) * [max. tested differential pressure with no leakage]										
Pascals	720	720	720	720	720	720	720	720	720		
lbs/ft ²	15	15	15	15	15	15	15	15	15		
		Therr	nal perforr	nance (Certif	ied, comple	ete unit values)				
	• VELU	SHGC, and	VT ratings li	d at 20° slope a isted in the NFI ith standard av	RC Certifie	d Products Dir	rectory.	ctor,			
U-Factor (Btu/hr·ft ² ·°F)	0.48	0.49	0.45	0.46	0.48	0.47	0.38	0.43	0.42		
SHGC	0.27 / 0.18	0.27 / 0.18	0.28	0.28 / 0.19	0.27	0.28	0.25	0.27	0.27		
VT	0.64 / 0.38	0.63 / 0.38	0.63	0.63 / 0.38	0.45	0.63	0.58	0.58	0.58		
(200,200,)	00.0	05.0	UV pro 95.2	tection, % (G 99.9	lass panel (99.9	-	05.0	05.2	00.0		
(300-380 nm)	99.9	95.2 Fading prot		99.9 Krochmann dar		99.9 ion (Glass pan	95.2 el only)	95.3	99.9		
(300-600 nm)	83.1	79.2	79.2	84.6	88.4	83.2	79.2	81.6	85.1		
		Certified S	Structural	Performance	[Performa	ance Grade or	DP] *				
Tested Size				Upl	ift (lbs/ft ²)					
4672	80	n.r.	n.r.	n.r.	80	n.r.	n.r.	n.r.	80		
4646	120	140	140	80	120	135	60	140	120		
2270	100	n.r.	n.r.	n.r.	100	n.r.	n.r.	n.r.	100		
Tested Size				Down	load (lbs/	ft²)					
4672	70	n.r.	n.r.	n.r.	70	n.r.	n.r.	n.r.	70		
4646	250	100	100	100	250	970	75	100	250		
2270	200	n.r.	n.r.	n.r.	200	n.r.	n.r.	n.r.	200		
	 * Tested in accordance with AAMA/WDMA/CSA 101/I.S.2/A440-11 (NAFS 2011) ** 06 and 16 variants are tested and WDMA Hallmark certified for Wind-Borne debris impact, Florida HVHZ : Large Missile Level D, Cycle Pressure +50/-50, tested per TAS 201, 202 and 203 (Wind Zone 4) Large Missile Level C, Cycle Pressure +50/-50, tested per ASTM E 1886 and ASTM E 1996 										
		FCM skylight	s are WDMA	ings also apply t Hallmark certifie	ed: Product	Number 426-H	-701.xx				
	04 and 14 glass: Tempered over laminated HS (0.030" interlayer) - Low-E366 (04) / Low-E340 (14) 05 and 15 glass: Tempered over tempered; 05C has a smaller pane gap - Low-E366 (05 and 05C) / Low-E340 (15) 06 and 16 glass: Tempered over laminated HS (0.090" interlayer) - Low-E366 (06) / Low-E340 (16) 08 glass: Same as 04, with white interlayer 10 glass: Temp. over laminated temp. (0.030" interlayer) 29 glass: Tempered over tempered over laminated HS (0.030" interlayer) 30 glass: Tempered over tempered over tempered 99 93 glass: Same as 05, with i89 coating on interior surface 99 94 glass: Same as 04, with i89 coating on interior surface										
	NOTE: The FCM 4646 (or smaller) 06 or 16 is the only VELUX glass skylight currently qualified for use in the Florida HVHZ (High Velocity Hurricane Zone).										

QPF Tested Performance Information										
Glass	04 / 14	05 / 15	06 / 16**	08	99 93	99 94				
Air infiltration/exfiltration* [max. @ 75 Pa (1.57 lbs/ft ²) differential pressure]										
l/s/m ²	0.5	0.3	0.4	0.5	0.3	0.5				
cfm/ft ²	0.09	0.06	0.08	0.09	0.06	0.09				
	Water resistance @ 3.4 L/m ² /min (5 USgal/ft ² /hr) * [max. tested differential pressure with no leakage]									
Pascals	580 720 720 580 720									
lbs/ft ²	12	15	15	12	15	12				
	Ther	mal performan	ce (Certified, con	nplete unit value	s)					
 VELUX Glass Skylights are rated at 20° slope and labeled with NFRC-certified U-Factor, SHGC, and VT ratings listed in the NFRC Certified Products Directory. Ratings for products with standard available fitted shades are available. 										
U-Factor (Btu/hr·ft ² ·°F)	0.42	0.43	0.40	0.42	0.38	0.37				
SHGC	0.25 / 0.16	0.24 / 0.16	0.25 / 0.17	0.24	0.24	0.24				
VT	0.57 <mark>/ 0.34</mark>	0.57 <mark>/ 0.34</mark>	0.57 <mark>/ 0.34</mark>	0.40	0.56	0.56				
		UV protect	ion, % (Glass pan	el only)						
(300-380 nm)	99.9	95.2	99.9	99.9	95.3	99.9				
	Fading pro	tection, %, Kroch	ımann damage fur	nction (Glass pan	el only)					
(300-600 nm)	83.1	79.2	84.6	88.4	81.6	85.1				
	Certified	Structural Perf	ormance [Perfor	mance Grade or	DP] *					
Tested Size			Uplift (lbs/ft ²)						
4646	80	80	100	80	80	80				
Tested Size			Download	l (lbs/ft ²)						
4646	320	300	300	320	300	320				
 * Tested in accordance with AAMA/WDMA/CSA 101/I.S.2/A440-11 (NAFS 2011) ** 06 and 16 variants are tested and WDMA Hallmark certified for Wind-Borne debris impact, in accordance with ASTM E 1886 and ASTM E 1996. Rated for Wind Zone 3, Missile Level C, Cycle Pressure +50/-50 Structural performance ratings also apply to sizes smaller than the Tested Size QPF skylights are WDMA Hallmark certified: Product Number 426-H-677.xx 										
	4 glass: Tempered 05 and 15 glas 6 glass: Tempered	d over laminated s: Tempered over d over laminated 08 glass: Same	HS (0.030" interla r tempered - Low- HS (0.090" interla e as 04 , with white	iyer) - Low-E366 E366 (05) / Low iyer) - Low-E366 e interlayer	9 (04) / Low-E34(-E340 (15) 9 (06) / Low-E34(
	-	=	aminated temp. ((-						
			5, with i89 coating 4, with i89 coating							

	Test	ed Perfo	rmance Info	ormation	- E-Class	and GSM	Products			
Model	EF 04	EF 05	EFHR 06**	EV 04	EV 05	EVMS 04	EVMS 05	GSM 99 100		
Air infiltration/exfiltration* [max. @ 75 Pa (1.57 lbs/ft ²) differential pressure]										
l/s/m ²	<.1	<.1	0.05	0.1	0.1	0.1	0.1	<.1		
cfm/ft ²	<0.01	<0.01	0.01	0.01	0.01	0.01	0.01	<0.01		
	Water resistance @ 3.4 L/m ² /min (5 USgal/ft ² /hr) * [max. tested differential pressure with no leakage]									
Pascals	958	958	760	720	720	720	720	580		
lbs/ft ²	20	20	15.75	15	15	15	15	12		
			ermal perform				· (·			
	• VELU	5	lights are rated d VT ratings list					,		
U-Factor (Btu/hr·ft ² ·°F)	0.48	0.46	0.45	0.48	0.49	0.48	0.49	0.51		
SHGC	0.26	0.26	0.25	0.25	0.25	0.25	0.25	0.25		
VT	0.57	0.59	0.57	0.57	0.58	0.57	0.58	0.58		
		Certifie	d Structural P	erformance	e [Performand	e Grade or DP]*			
Tested Size				Up	l ift (lbs/ft ²)	-				
4646	90	90	80 **	90	90	90	90	-		
5296	-	-	-	-	-	-	-	80		
Tested Size				Dow	nload (lbs/ft ²))				
4646	90	90	80 **	90	90	90	90	-		
5296	-	-	-	-	-	-	-	80		
	 * Tested in accordance with AAMA/WDMA/CSA 101/I.S.2/A440-11 (NAFS 2011) - except EFHR ** EFHR Tested in accordance with ASTM E283, ASTM E547, ASTM E330, ASTM E1996, ASTM E1886 TAS 201-94 Large Missile Impact Test, Level D, Wind Zone 4 									
T/	TAS 202 -94 Uniform Static Air Pressure, ±80.0psf design pressure, 9.0psf water penetration (safety factor of 2) TAS 203-94 Cyclic Pressure loading ±80.0psf design pressure									
	Structural performance ratings also apply to sizes smaller than the Tested Size EF skylights are AAMA certified.									
	0	05 g	_) ClearTempered glass: (EMT) Clear ar Tempered SB7(Tempered E3	366 (#2) over Cl	ear Tempered	-			
	991	5	ar SB70XL (#2) Te							