



Calculation based on ISO 15099

Product name: Cascadia Universal Inswing Door (Single)				Center-of-glass properties		
ASHRAE/IECC /DOE North American Climate Zone	North, East, South- facing West - facing			Cardinal E366/ Arg/ Clear/ Arg/ E180 (6mm) 44,0mm No Grids		
Climate specific recommendations:		Whole-window installed U-value		Ucog-Value		
		W/m2K	BTU/hr.ft2.F	SHGC	W/m2K	BTU/hr.ft2.F
8		0.90	0.16	0.239	0.710	0.125
7		0.89	0.16	0.239	0.693	0.122
6		0.89	0.16	0.239	0.681	0.120
5		0.88	0.16	0.239	0.680	0.120
4		0.88	0.16	0.239	0.679	0.120
Marine North		0.88	0.16	0.239	0.679	0.120
Marine South	✓	0.89	0.16	0.239	0.681	0.120
3	✓	0.88	0.16	0.239	0.680	0.120
2 West	✓	0.89	0.16	0.239	0.686	0.121
2 East	✓	0.89	0.16	0.239	0.686	0.121
Cascadia Universal Inswing D		FRAME		Psi-spacer		Psi-opaque
Cardinal Endur		Frame height		Ψ		
		mm	in	W/m2K	BTU/hr.ft.F	W/mK
Head		132	5.21	0.91	0.16	0.016
Sill		146	5.74	0.95	0.17	0.009
left jamb		132	5.21	0.92	0.16	0.017
right jamb		132	5.21	0.92	0.16	0.010


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ASHRAE/IECC /DOE North American Climate Zone	North, East, South- facing West - facing			Cardinal E366/ Arg/ Clear/ Arg/ E180 (6mm) 44,0mm SDL/no Internal grids < 25.4mm	
Climate specific recommendations:		Whole-window installed U-value		Ucog-Value	
		W/m2K	BTU/hr.ft2.F	SHGC	BTU/hr.ft2.F
8		0.90	0.16	0.207	0.125
7		0.89	0.16	0.207	0.122
6		0.89	0.16	0.207	0.120
5		0.88	0.16	0.207	0.120
4		0.88	0.16	0.207	0.120
Marine North		0.88	0.16	0.207	0.120
Marine South	✓	0.89	0.16	0.207	0.120
3	✓	0.88	0.16	0.207	0.120
2 West	✓	0.89	0.16	0.207	0.121
2 East	✓	0.89	0.16	0.207	0.121
Cascadia Universal Inswing D		FRAME		Psi-spacer	
Cardinal Endur		U-frame		Psi	
		mm	in	W/mK	BTU/hr.ft.F
Head		132	5.21	0.016	0.009
Sill		146	5.74	0.016	0.009
left jamb		132	5.21	0.017	0.010
right jamb		132	5.21	0.017	0.010
				W/mK	
				BTU/hr.ft.F	
				Grade C	


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			Whole-window installed U-value		Ucog-Value	
Climate specific recommendations:			W/m2K	BTU/hr.ft2.F	SHGC	BTU/hr.ft2.F
					W/m2K	
8			0.90	0.16	0.207	0.125
7			0.89	0.16	0.207	0.122
6			0.89	0.16	0.207	0.120
5			0.88	0.16	0.207	0.120
4			0.88	0.16	0.207	0.120
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Cascadia Universal Inswing D			FRAME		Psi-spacer	
Cardinal Endur			U-frame		Ψ	
			Frame height		W/mK	BTU/hr.ft.F
			mm	in	W/mK	BTU/hr.ft.F
Head			132	5.21	0.016	0.009
Sill			146	5.74	0.016	0.009
left jamb			132	5.21	0.017	0.010
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					Grade C	


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Product name: Cascadia Universal Inswing Door (Single)			Center-of-glass properties		
ASHRAE/IECC /DOE North American Climate Zone	North, East, West - facing	South- facing			
			Cardinal E366/ Arg/ Clear/ Arg/ E180 (6mm) 44,0mm Internal grids And SDL with Internal grids < 25.4mm		
			Whole-window installed U-value		Ucog-Value
Climate specific recommendations:			W/m2K	BTU/hr.ft2.F	SHGC
					W/m2K
					BTU/hr.ft2.F
8			0.96	0.17	0.207
7			0.95	0.17	0.207
6			0.94	0.17	0.207
5			0.94	0.17	0.207
4			0.94	0.17	0.207
Marine North			0.94	0.17	0.207
Marine South	✓	✓	0.94	0.17	0.207
3	✓	✓	0.94	0.17	0.207
2 West	✓	✓	0.95	0.17	0.207
2 East	✓	✓	0.95	0.17	0.207
Cascadia Universal Inswing D		FRAME		Psi-spacer	
Cardinal Endur		U-frame		Psi-opaque	
		Frame height			
		mm in	W/m2K	BTU/hr.ft2.F	W/mK
Head		132 5.21	0.91	0.16	0.016
Sill		146 5.74	0.95	0.17	0.009
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Climate specific recommendations:		Whole-window installed U-value		Ucog-Value	
		W/m2K	BTU/hr.ft2.F	SHGC	W/m2K BTU/hr.ft2.F
8		0.90	0.16	0.176	0.710 0.125
7		0.89	0.16	0.176	0.693 0.122
6		0.89	0.16	0.176	0.681 0.120
5		0.88	0.16	0.176	0.680 0.120
4		0.88	0.16	0.176	0.679 0.120
Marine North		0.88	0.16	0.176	0.679 0.120
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Cascadia Universal Inswing D		FRAME		Psi-spacer	
Cardinal Endur		U-frame		Ψ	
		mm in	W/m2K BTU/hr.ft2.F	W/mK	BTU/hr.ft.F
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<div>Climate specific recommendations:</div> <table><tr><td>8</td><td></td><td></td></tr><tr><td>7</td><td></td><td></td></tr><tr><td>6</td><td></td><td></td></tr><tr><td>5</td><td></td><td></td></tr><tr><td>4</td><td></td><td></td></tr><tr><td>Marine North</td><td></td><td>✓</td></tr><tr><td>Marine South</td><td>✓</td><td>✓</td></tr><tr><td>3</td><td>✓</td><td>✓</td></tr><tr><td>2 West</td><td>✓</td><td>✓</td></tr><tr><td>2 East</td><td>✓</td><td>✓</td></tr></table>		8			7			6			5			4			Marine North		✓	Marine South	✓	✓	3	✓	✓	2 West	✓	✓	2 East	✓	✓	Whole-window installed U-value		Ucog-Value
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Cascadia Universal Inswing D Cardinal Endur	FRAME				Psi-spacer		Psi-opaque	
	Frame height		U-frame		Ψ		W/mK	
	mm	in	W/m2K	BTU/hr.ft2.F	W/mK	BTU/hr.ft.F		
	Head	132	5.21	0.91	0.16	0.016	0.009	0.157
	Sill	146	5.74	0.95	0.17	0.016	0.009	BTU/hr.ft.F
left jamb	132	5.21	0.92	0.16	0.017	0.010	0.091	
right jamb	132	5.21	0.92	0.16	0.017	0.010	Grade C	

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