



Calculation based on ISO 15099

Product name: Quaker V300 & VuPoint Direct Set		Center-of-glass properties					
ASHRAE/IECC /DOE North American Climate Zone	North, East, West - facing South-facing			Cardinal DS 366 / ARG 90 / DS 180 / ARG 90 / DS i89 - 1-1/4" IG 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		0.87	0.15	0.236	0.657 0.116		
7		0.87	0.15	0.236	0.652 0.115		
6		0.87	0.15	0.236	0.649 0.114		
5		0.87	0.15	0.236	0.648 0.114		
4	✓	0.87	0.15	0.236	0.647 0.114		
Marine North	✓	0.87	0.15	0.236	0.646 0.114		
Marine South	✓	0.86	0.15	0.236	0.642 0.113		
3	✓	0.86	0.15	0.236	0.645 0.114		
2 West	✓	0.83	0.15	0.236	0.599 0.105		
2 East	✓	0.83	0.15	0.236	0.599 0.105		
Quaker V300 & VuPoint Direct Cardinal Endur	FRAME		Psi-spacer		Psi-opaque		
	Frame height		U-frame		Ψ		
	mm	in	W/m2K	BTU/hr.ft2.F			
	Head	52	2.06	1.45	0.26	0.009	0.005
Sill	52	2.06	1.45	0.26	0.009	0.005	BTU/hr.ft.F
left jamb	52	2.06	1.41	0.25	0.009	0.005	0.050
right jamb	52	2.06	1.41	0.25	0.009	0.005	Grade A


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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		0.87	0.15	0.208	0.657	0.116		
7		0.87	0.15	0.208	0.652	0.115		
6		0.87	0.15	0.208	0.649	0.114		
5		0.87	0.15	0.208	0.648	0.114		
4	✓	0.87	0.15	0.208	0.647	0.114		
Marine North	✓	0.87	0.15	0.208	0.646	0.114		
Marine South	✓	0.86	0.15	0.208	0.642	0.113		
3	✓	0.86	0.15	0.208	0.645	0.114		
2 West	✓	0.83	0.15	0.208	0.599	0.105		
2 East	✓	0.83	0.15	0.208	0.599	0.105		
Quaker V300 & VuPoint Directur 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	52	2.06	1.45	0.26	0.009	0.005	0.087
	Sill	52	2.06	1.45	0.26	0.009	0.005	BTU/hr.ft.F
left jamb	52	2.06	1.41	0.25	0.009	0.005	0.050	
right jamb	52	2.06	1.41	0.25	0.009	0.005	Grade A	


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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		0.87	0.15	0.208	0.657	0.116		
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Quaker V300 & VuPoint Direct Cardinal Endur	FRAME		Psi-spacer		Psi-opaque			
	Frame height		U-frame		Ψ			
	mm	in	W/m2K	BTU/hr.ft2.F		W/mK		
	Head	52	2.06	1.45	0.26	0.009	0.005	0.087
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ASHRAE/IECC /DOE North American Climate Zone	North, East, West - facing South-facing	 Passive House Institute US	Cardinal DS 366 / ARG 90 / DS 180 / ARG 90 / DS i89 - 1-1/4" IG SDL/no Internal grids >= 25.4mm					
Climate specific recommendations:	Whole-window installed U-value		Ucog-Value					
		W/m2K	BTU/hr.ft2.F	SHGC	W/m2K	BTU/hr.ft2.F		
	8	0.87	0.15	0.182	0.657	0.116		
	7	0.87	0.15	0.182	0.652	0.115		
	6	0.87	0.15	0.182	0.649	0.114		
	5	0.87	0.15	0.182	0.648	0.114		
	4	0.87	0.15	0.182	0.647	0.114		
	Marine North	0.87	0.15	0.182	0.646	0.114		
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