


# ZR-7 Series Fixed High Profile Balanced-7


Calculation based on ISO 10077-2, EN 673, EN 410

Product name: <b>ALPEN 725 High Performance Fixed</b>				Center-of-glass properties					
ASHRAE/IECC /DOE North American Climate Zone		North, East, West - facing South-facing							
				Alpen HPP 725-7L 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				0.89	0.16	0.369	0.609	0.107	
7				0.87	0.15	0.369	0.583	0.103	
6				0.87	0.15	0.369	0.581	0.102	
5				0.87	0.15	0.369	0.583	0.103	
4		✓		0.88	0.15	0.369	0.587	0.103	
Marine North		✓		0.88	0.15	0.369	0.590	0.104	
Marine South		✓		0.88	0.16	0.369	0.595	0.105	
3		✓		0.88	0.16	0.369	0.592	0.104	
2 West				0.89	0.16	0.369	0.606	0.107	
2 East				0.89	0.16	0.369	0.606	0.107	
ALPEN 725 High Performance Allmetal 250P SST		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	73	2.87	0.87	0.15	0.058	0.033	0.125
		Sill	73	2.87	0.87	0.15	0.058	0.033	BTU/hr.ft.F
left jamb	73	2.87	0.87	0.15	0.058	0.034	0.072		
right jamb	73	2.87	0.87	0.15	0.058	0.034	Grade B		

Valid through October 2018

# ZR-7 Series Fixed High Profile HighGain-7


Calculation based on ISO 10077-2, EN 673, EN 410

Product name: <b>ALPEN 725 High Performance Fixed</b>				Center-of-glass properties				
ASHRAE/IECC /DOE North American Climate Zone	North, East, West - facing			Alpen HPP 725-7H 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		0.97	0.17	0.558	0.703	0.124		
7		0.95	0.17	0.558	0.678	0.119		
6		0.95	0.17	0.558	0.684	0.120		
5		0.95	0.17	0.558	0.686	0.121		
4		0.96	0.17	0.558	0.692	0.122		
Marine North		0.96	0.17	0.558	0.695	0.122		
Marine South		0.96	0.17	0.558	0.702	0.124		
3		0.96	0.17	0.558	0.698	0.123		
2 West		0.98	0.17	0.558	0.716	0.126		
2 East		0.98	0.17	0.558	0.716	0.126		
ALPEN 725 High Performance Allmetal 250P SST	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	73	2.87	0.87	0.15	0.056	0.032	0.124
	Sill	73	2.87	0.87	0.15	0.056	0.033	BTU/hr.ft.F
left jamb	73	2.87	0.87	0.15	0.057	0.033	0.072	
right jamb	73	2.87	0.87	0.15	0.057	0.033	Grade B	

Valid through October 2018

# ZR-7 Series Casement/Awning Balanced-7


Calculation based on ISO 10077-2, EN 673, EN 410

Product name: <b>ALPEN 725 High Performance Casement</b>				Center-of-glass properties				
ASHRAE/IECC /DOE North American Climate Zone	South- facing	North, East, West - facing						
			Alpen HPP 725-7L 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			0.95	0.17	0.369	0.609	0.107	
7			0.93	0.16	0.369	0.583	0.103	
6			0.92	0.16	0.369	0.581	0.102	
5			0.93	0.16	0.369	0.583	0.103	
4			0.93	0.16	0.369	0.587	0.103	
Marine North		✓	0.93	0.16	0.369	0.590	0.104	
Marine South	✓		0.94	0.16	0.369	0.595	0.105	
3	✓		0.93	0.16	0.369	0.592	0.104	
2 West			0.94	0.17	0.369	0.606	0.107	
2 East			0.94	0.17	0.369	0.606	0.107	
ALPEN 725 High Performance Allmetal 250P SST	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	73	2.86	1.16	0.20	0.056	0.032	0.145
	Sill	73	2.86	1.16	0.20	0.056	0.032	BTU/hr.ft.F
left jamb	73	2.86	1.16	0.20	0.056	0.032	0.084	
right jamb	73	2.86	1.16	0.20	0.056	0.032	Grade B	

Valid through October 2018

# ZR-7 Series Casement/Awning HighGain-7

Calculation based on ISO 10077-2, EN 673, EN 410

Product name: <b>ALPEN 725 High Performance Casement</b>				Center-of-glass properties				
ASHRAE/IECC /DOE North American Climate Zone	North, East, South- facing	West - facing						
			Alpen HPP 725-7H No Grids					
<b>Climate specific recommendations:</b>			Whole-window installed U-value		<b>Ucog-Value</b>			
			W/m2K	BTU/hr.ft2.F	<b>SHGC</b>	W/m2K	BTU/hr.ft2.F	
8			1.02	0.18	0.558	0.703	0.124	
7			1.00	0.18	0.558	0.678	0.119	
6			1.00	0.18	0.558	0.684	0.120	
5			1.00	0.18	0.558	0.686	0.121	
4			1.01	0.18	0.558	0.692	0.122	
Marine North			1.01	0.18	0.558	0.695	0.122	
Marine South			1.02	0.18	0.558	0.702	0.124	
3			1.01	0.18	0.558	0.698	0.123	
2 West			1.03	0.18	0.558	0.716	0.126	
2 East			1.03	0.18	0.558	0.716	0.126	
<b>ALPEN 725 High Performance</b>		<b>FRAME</b>			<b>Psi-spacer</b>		<b>Psi-opaque</b>	
<b>Allmetal 250P SST</b>		Frame height		U-frame		$\Psi$		W/mK
		mm	in	W/m2K	BTU/hr.ft2.F	W/mK	BTU/hr.ft.F	
Head		73	2.86	1.15	0.20	0.054	0.031	0.143
Sill		73	2.86	1.16	0.20	0.054	0.031	BTU/hr.ft.F
left jamb		73	2.86	1.16	0.20	0.054	0.031	0.083
right jamb		73	2.86	1.16	0.20	0.054	0.031	Grade B

Valid through October 2018