


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

Product name: Alpen Tyrol TR-9 PH+ Tilt Turn				Center-of-glass properties			
ASHRAE/IECC /DOE North American Climate Zone	North, East, South- facing	West - facing					
			Alpen Balanced-9 PH+		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			0.75	0.13	0.333	0.417	0.074
7			0.74	0.13	0.333	0.397	0.070
6		✓	0.72	0.13	0.333	0.376	0.066
5		✓	0.72	0.13	0.333	0.373	0.066
4		✓	0.72	0.13	0.333	0.376	0.066
Marine North		✓	0.72	0.13	0.333	0.378	0.067
Marine South	✓		0.72	0.13	0.333	0.381	0.067
3	✓		0.72	0.13	0.333	0.379	0.067
2 West			0.73	0.13	0.333	0.388	0.068
2 East			0.73	0.13	0.333	0.388	0.068
Alpen Tyrol TR-9 PH+ Tilt Turn SS-D	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	117	4.61	0.86	0.15	0.047	0.027
Sill	117	4.61	0.86	0.15	0.047	0.027	BTU/hr.ft.F
left jamb	117	4.61	0.85	0.15	0.047	0.027	0.091
right jamb	117	4.61	0.85	0.15	0.047	0.027	Grade C

Valid through April 2022