



ALPEN

HIGH PERFORMANCE PRODUCTS

Tyrol Series TR-9



Tyrol Series TR-9 Windows and Doors

TR-9 windows and doors combine best-in-class European styling and quality German hardware with the outstanding performance, craftsmanship and short lead times you've come to expect from Alpen High Performance Products.

The Tyrol Series is a fiberglass reinforced polymer system composed of a proprietary fiber composite material, RAU-FIPRO™, and is similar to composites employed in aeronautic construction and racing vehicles for outstanding strength and load capacities. Combined with Alpen's multiple glazing options, this unique uPVC frame design substantially improves thermal performance and provides multiple chamber insulation options.

Benefits:

- NFRC whole-window ratings up to R-9.1 (U-0.11)
- Center-of-glass performances from R-10.0 (U-0.08) to R-14.3 (U-0.07)
- AAMA certified for residential, commercial and multifamily applications
- Based on the award winning Rehau 4700 Geneo profile
- Fiberglass-reinforced profile allows for larger sizes without steel reinforcement



TECHNICAL SPECIFICATIONS



Tyrol Series TR-9 Full Frame NFRC Thermal Performance:

TR-9 (Standard Foam)	Description			NFRC Full-Frame / Total Unit Performance			
	Glass Package	Use	Makeup	U-factor	R-value	SHGC	VT
Fixed	Balanced-9	Lowest U-factor All Climate Best Insulation	Quad Pane with Suspended Film, Krypton Gas Fill	0.11	9.1	0.24	0.38
	SolarControl-9	Lowest Solar Heat Gain Coefficient	Quad Pane with Suspended Film, Krypton Gas Fill	0.11	9.1	0.18	0.40
	HighGain-9	Low U-factor, High Gain/ Passive Solar Homes	Quad Pane with Suspended Film, Krypton Gas Fill	0.12	8.3	0.35	0.49
Tilt Turn/ Hopper	Balanced-9	Low U-factor All Climate Best Insulation	Quad Pane with Suspended Film, Krypton Gas Fill	0.13	7.7	0.21	0.33
	SolarControl-9	Lowest Solar Heat Gain Coefficient	Quad Pane with Suspended Film, Krypton Gas Fill	0.13	7.7	0.15	0.34
	HighGain-9	Low U-factor, High Gain/ Passive Solar Homes	Quad Pane with Suspended Film, Krypton Gas Fill	0.13	7.7	0.30	0.42



DESIGNING WITH ALPENGLASS:

Alpenglass <i>Balanced</i>	Optimal blend of low U-factor and moderate solar control, a well-rounded solution for high performance homes in all climates
Alpenglass <i>SolarControl</i>	Extra protection against unwanted solar gain to keep spaces cool in summer and swing seasons, ideal for West- and South-facing windows in most climates
Alpenglass <i>HighGain</i>	Maximum light and solar heat gain, ideal for passive solar homes and North-facing and well-shaded windows in spaces where more daylight is desired

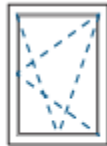
WINDOW AND DOOR TYPES



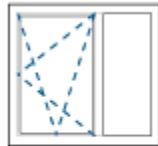
Fixed Window



Hopper Window



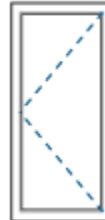
Tilt Turn/
Hopper Window



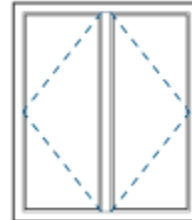
Combination Units

Windows

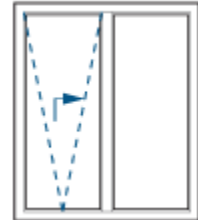
Doors



Side-Hinged Doors



French Doors



2-Panel
Tilt Glide Doors

FINISH OPTIONS

Standard Color

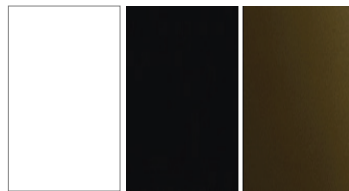
White

Upgrade Color Options

Black or Bronze

Custom Finishes

Please call to inquire about the availability of custom laminated foil and painted finishes.



Hardware

German-engineered Roto® NT window handles are available in the following standard finishes: White, Black, Dark Bronze and Nickel Silver

Please call to inquire about the availability of custom handle finishes.



Acoustic Insulation

ASTM E90 Acoustical
Up to 45 dB