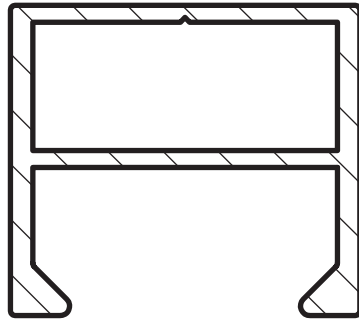


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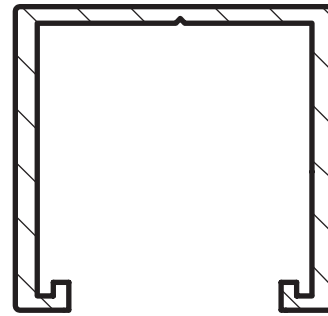
Product Alert - Echelon® Rail Strength

!!!!!!! Channel Cross-Section Designed for Added Strength !!!!!!!

The cross-section of the new Echelon® rail has been designed to optimize lateral strength while enabling the same security and biasability inherent in Ameristar’s ForeRunner internal picket retaining system.



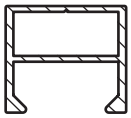
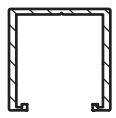
**Reinforced
Echelon®**



**Typical
Competitors**

The central reinforcing web and the fortified gussets on the feet of the two side walls give the Echelon rail a 20% strength advantage over typical residential aluminum fence rails. This extra strength is the basis for offering the Monarch 4’ tall 2-rail flush-bottom pool panel.

ECHELON® RAIL STRENGTH

Echelon® ForeRunner™ (Aluminum)	Structural Parameters		Typical U-Channel (Aluminum)
	Profile of the Architectural Shape of the Rail *Vertical Design Loads are per rail; for capacity of fence panel, multiply by number of rails.		
.0432	S_v = Section Modulus (IN) Vertical		.0367
.0901	S_h = Section Modulus (IN) Horizontal		.0732
.309	W = Rail Weight (LBS/FT)		.268
35,000	F_y = Yield Strength (PSI)		35,000
84	6' Span	Vertical Load Data PV_f = Ultimate Vertical	6' Span 71
175	6' Span	Horizontal Load Data PH_f = Ultimate Horizontal	6' Span 142
50	6' Span	* Vertical Load Data PV_d = Vertical Design Load @ .60 F	6' Span 43
105	6' Span	* Horizontal Load Data PH_d = Horizontal Design Load @ .60 F	6' Span 85

* RECOMMENDED LOAD VALUE FOR SAFE STRUCTURAL DESIGN (Allowable Strength = .60 F).