

Helio Rail Selection Chart

The following table was prepared in compliance with applicable engineering codes and standards. Values are based on the following criteria: ASCE 7-10, Roof Zone 1, Exposure B, Roof Slope of 7 to 27 degrees and Mean Building Height of 30 feet.

Load		Rail Span					
SNOW (PSF)	WIND (MPH)	4 ft	5 ft	6 ft	8 ft	10 ft	12 ft
None	100	HR150	HR250	HR350	HR350	HR500	HR500
	120						
	140						
	150						
	160						
	175						
20	100	HR150	HR250	HR350	HR350	HR500	HR500
	120						
	140						
	150						
	160						
	175						
40	100	HR150	HR250	HR350	HR350	HR500	HR500
	120						
	140						
	150						
	160						
	175						
50-70	100	HR150	HR250	HR350	HR350	HR500	HR500
	120						
	140						
	150						
	160						
	175						
80-90	100	HR150	HR250	HR350	HR350	HR500	HR500
	120						
	140						
	150						
	160						
	175						

Properties	Units	HR150 A20242	HR250 A20144	HR350 A20145	HR500 A20146
Material	N/A	Aluminum 6005-T5	Aluminum 6005-T5	Aluminum 6005-T5	Aluminum 6005-T5
Finish	N/A	Clear and Black	Clear and Black	Clear and Black	Clear and Black
Approx. Weight (per linear ft)	plf	.672	.850	1.143	1.388
Total Cross Section Area	in ²	.566	.723	.973	1.182
Section Modulus (X—Axis)	in ³	.299	.387	.683	.851
Section Modulus (Y—Axis)	in ³	.106	.190	.333	.542
Moment of Inertia (X—Axis)	in ⁴	.348	.486	1.049	1.412
Moment of Inertia (Y—Axis)	in ⁴	.060	.095	.209	.443
Radius of Gyration (X—Axis)	in	.785	.820	1.093	1.093
Radius of Gyration (Y—Axis)	in	.327	.363	.612	.612