

Section Properties - Cold Formed C Channel Posts - ASTM F1043 - Group II & II-L													
					Strong Axis					Weak Axis / Weak Direction			
Post Size	D _p	t _{nom}	E	A	I _x	S _x	r _x	F _y	M _{x-allow}	I _y	S _y	r _y	M _{y-allow}
	lbs /ft	in	msi	in ²	in ⁴	in ³	in	ksi	kip-ft	in ⁴	in ³	in	kip-ft
12 Ga C1-7/8"	1.9	0.105	29.5	0.558	0.297	0.317	0.730	50	0.790	0.190	0.206	0.583	0.514
11 Ga C1-7/8"	2.2	0.121	29.5	0.633	0.331	0.353	0.723	50	0.880	0.210	0.228	0.576	0.569
11 Ga C2-1/4"	2.5	0.121	29.5	0.742	0.545	0.485	0.857	50	1.209	0.293	0.310	0.629	0.773
10 Ga C3-1/4"	4.1	0.130	29.5	1.195	1.957	1.205	1.280	60	3.606	1.064	0.754	0.944	2.257
9 Ga C3-1/4"	4.6	0.150	29.5	1.364	2.204	1.356	1.271	60	4.061	1.192	0.845	0.935	2.529

Net Section Properties - Cold Formed Hat Channel Posts													
					Weak Axis / Weak Direction					Strong Axis - Corners Only			
Post Size	D _p	t _{nom}	E	A	I _x	S _x	r _x	F _y	M _{x-allow}	I _y	S _y	r _y	M _{y-allow}
	lbs /ft	in	msi	in ²	in ⁴	in ³	in	ksi	kip-ft	in ⁴	in ³	in	kip-ft
11 Ga H4"	2.7	0.120	29.5	0.605	0.219	0.244	0.602	34	0.347	0.580	0.291	0.979	0.412
12 Ga H4-1/2"	2.5	0.100	29.5	0.683	0.271	0.324	0.629	50	0.808	0.866	0.385	1.113	0.950
11 Ga H3-1/2"	2.6	0.120	29.5	0.728	0.307	0.333	0.649	50	0.831	0.505	0.288	0.833	0.719

Strengths are fully braced

Section properties per RGS CFS Software

11 Ga H3-1/2" - x direction is the strong axis due to the geometry but all hat channels are drawn in the same orientation.