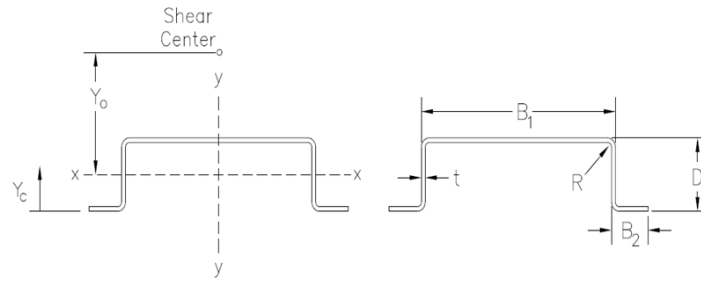




Gross Section Properties: Hat Channels

Hat Channel



Member	Ga.	Gross Section Properties																				
		Dimensions						Area	Weight	Axis X-X				Axis Y-Y			Centroid	Shear Center	Torsional Properties			
		D	B ₁	B ₂	t	R	α			β	I _x	S _x TOP	S _x BOT	r _x	I _y	S _y LEFT & RIGHT			r _y	Y _c	Y _o	J
(in)	(in)	(in)	(in)	(in)	'deg	(deg)	(in ²)	(lb/ft)	(in ⁴)	(in ³)	(in ³)	(in)	(in ⁴)	(in ³)	(in)	(in)	(in)	(in)	(in ⁴)	(in ⁶)	(in)	
Hat Channel	14	1.0069	3	0.75	0.0689	0.125	-	-	0.411	1.40	0.066	0.170	0.105	0.399	0.714	0.327	1.318	0.621	0.760	0.00065	0.051	-2.177
Hat Channel	14	1.0069	4	0.75	0.0689	0.125	-	-	0.480	1.63	0.073	0.217	0.108	0.390	1.312	0.489	1.653	0.672	0.711	0.00076	0.116	-2.982
Hat Channel	14	1.0069	6	0.75	0.0689	0.125	-	-	0.618	2.10	0.083	0.308	0.112	0.366	3.262	0.886	2.298	0.739	0.616	0.00098	0.367	-5.183
Hat Channel	14	1.0069	9	0.75	0.0689	0.125	-	-	0.824	2.80	0.091	0.435	0.114	0.332	8.590	1.658	3.228	0.797	0.507	0.00130	1.093	-10.027

- Section properties are calculated in accordance with the 2012 AISI North American Specification for the Design of Cold-Formed Steel Structural Members.
- Material: A1011 HSLAS Grade 55 Class 1 Steel or A653 SS Grade 55 Steel
- Strength Increase due to Cold Working has been applied where applicable

- Web Crippling values are based on a 1 inch bearing length, one flange fastened to support
- Appropriate factors of safety have been applied for Allowable Stress Design (ASD)
- Strength calculations based on a fully braced condition
- Consult with an engineering professional before using the above design aids

