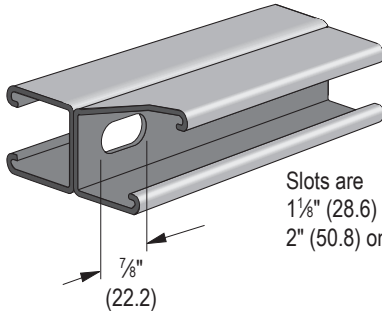
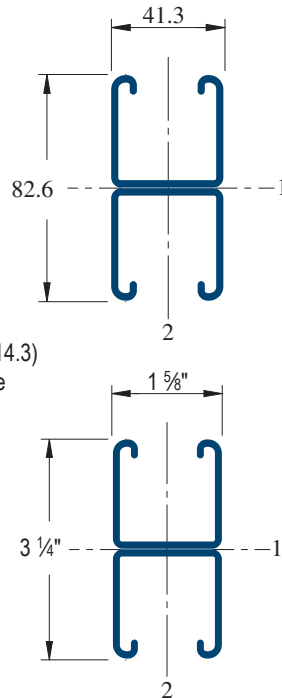


## CH1001T

3-1/4" x 1-5/8" - 12 Gauge Channel  
Wt/100 Ft: 321 Lbs



Slots are  
1 1/8" (28.6) x 9/16" (14.3)  
2" (50.8) on Centre



Materials & Finishes: PG, HG, SS

Lengths: 10' & 20'

Channel Material & Finish Specifications			
Desc.	Code	ASTM Designation	ASTM Description
Channel:	Use Finish Code	ASTM A1011 SS GR 33.	UBS channels are accurately and carefully cold formed to size from low-carbon strip steel.
[Stainless Steel: Channel	* SS304	A 240 TYPE 304	Heat resisting chromium and chromium-nickel stainless steel plate, sheet, strip for pressure vessel.
	* SS316	A 240 TYPE 316	
Aluminum: Channel	* AL	B 221 TYPE 6063 T5/T6	Aluminum alloy extruded bar, rod, wire, shape and tube.
Fiberglass: Channel	FG	Polyester and vinyl ester channels are manufactured from the pultrusion process and are color coded gray and beige respectively.	
Pre-Galvanized	PG	Components are cold-rolled from pre-galvanized sheet steel manufactured to the specification of ASTM A653 Grade 33 or ASTM A653 SS Grade 50. The pre-galvanized zinc coating to G-90 thickness, 0.75 MIL or 0.45 oz./sq. ft. of surface area.	
Hot Dip Galvanized After Fabrication	HG	Components are fabricated from plain steel meeting the specification of ASTM A1011 and hot dipped galvanized after fabrication. Hot dip galvanizing is performed to the specification requirements of ASTM A123. The zinc coating is typically 2.6 MIL or 1.5 oz./sq. ft. of surface area.	
Special Coatings	PL, GOLD	Other commercially available finishes can be supplied per specification when required to protect applications.	
* These materials have different physical properties and performance characteristics. Please Contact UBS for design support.			

### Beam Loading

Channel No.	Span In	Max. Allowable Uniform Load Lbs	Defl. at Uniform Load In	Uniform Loading at Deflection		
				Span/180 Lbs	Span/240 Lbs	Span/360 Lbs
CH1001	24	3,500*	0.02	3,500*	3,500*	3,500*
	36	3,190	0.07	3,190	3,190	3,190
	48	2,390	0.13	2,390	2,390	2,390
	60	1,910	0.20	1,910	1,910	1,620
	72	1,600	0.28	1,600	1,600	1,130
	84	1,370	0.39	1,370	1,240	830
	96	1,200	0.51	1,200	950	630
	108	1,060	0.64	1,000	750	500
	120	960	0.79	810	610	410
	144	800	1.14	560	420	280
	168	680	1.53	410	310	210
	192	600	2.02	320	240	160
	216	530	2.54	250	190	130
	240	480	3.16	200	150	100

### Column Loading

Channel No.	Unbraced Height In	Max. Allowable Load at Slot Face Lbs	Maximum Column Load Applied at C.G.			
			K = 0.65 Lbs	K = 0.80 Lbs	K = 1.0 Lbs	K = 1.2 Lbs
CH1001	24	6,430	24,280	23,610	22,700	21,820
	36	6,290	22,810	21,820	20,650	19,670
	48	6,160	21,410	20,300	18,670	16,160
	60	6,000	20,210	18,670	15,520	12,390
	72	5,620	18,970	16,160	12,390	8,950
	84	5,170	16,950	13,630	9,470	6,580
	96	4,690	14,890	11,190	7,250	5,040
	108	4,170	12,850	8,950	5,730	3,980
	120	3,690	10,900	7,250	4,640	**
	144	2,930	7,630	5,040	**	**

### Elements of Section

Channel No.	Area of Section in <sup>2</sup>	Axis 1-1			Axis 2-2		
		I in <sup>4</sup>	S in <sup>3</sup>	r in	I in <sup>4</sup>	S in <sup>3</sup>	r in
CH1001	1.111	0.928	0.571	0.914	0.471	0.580	0.651

Notes:

\* Load limited by spot weld shear.

\*\* KL/r > 200

NR = Not Recommended.

For pierced channel, multiply beam loads by the following factor:

"T" Series - 85%

"DS" Series - 70%

Refer to the UBS Products Catalog for loading information

PROJECT INFORMATION:		APPROVAL STAMP:
Project:		
Date:	Phone:	
Architect / Engineer:		
Contractor:		
Address:		
Notes 1:		