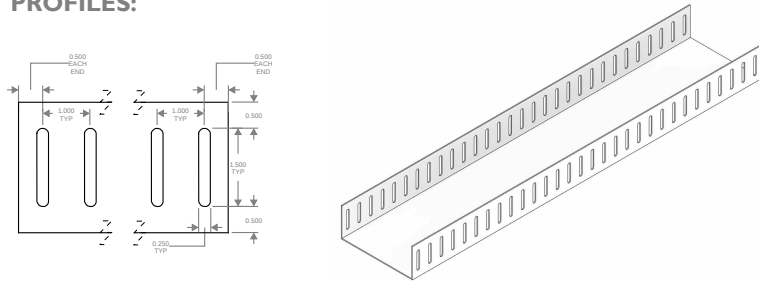


PROFILES:



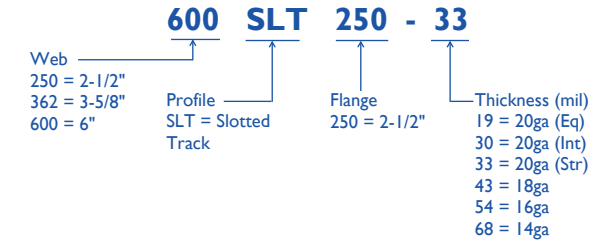
ASTM & CODE STANDARDS:

1. Members shall meet or exceed ASTM C645, A653, and A1003 for 19-30mil members.
2. Members shall meet or exceed ASTM C955, A653, and A1003 for 33-68mil members.

GENERAL FRAMING NOTES:

1. Gross properties and weight calculated at the gross section, away from slots.
2. Web depth taken as nominal depth + (2 x thickness) + inside corner radius.

NOMENCLATURE (Example):



THICKNESS IDENTIFICATION:

Designation (mils)	Gauge	Design Thickness (in.)
19	20-EQ	0.0200
30	20-INT	0.0312
33	20-STR	0.0346
43	18	0.0451
54	16	0.0566
68	14	0.0713

PROJECT:

APPROVAL:

SUBMITTED TO:

SUBMITTED BY:

DATE SUBMITTED:

Gross Properties:

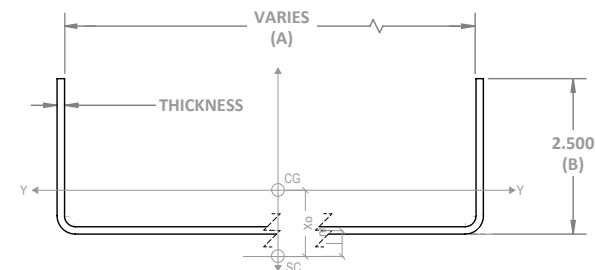
I_x = Moment of Inertia of cross-section about the x-axis
 S_x = Section Modulus about the x-axis
 R_x = Radius of Gyration of cross-section about the x-axis
 I_y = Moment of Inertia of cross-section about the y-axis
 R_y = Radius of Gyration of cross-section about the y-axis

Effective Properties:

I_y = Effective Moment of Inertia of cross-section about the y-axis
 S_y = Effective Section Modulus about the y-axis
 M_a = Allowable Bending Moment

Notes:

1. Effective properties based on AISI S100-16 and the following: net flange on tension side; effective flange on compression side, ignoring steel below the slot; effective web per S100-16, Appendix I, Section I.1.2; $\Omega_b = 2.0$ per S100-16, Section A1.2 (c).


SLOTTED TRACK PROPERTIES - 19 MIL

Member	Web Depth (A) (in.)	Flange Width (B) (in.)	Slot Width (in.)	Design Thickness (in.)	Yield Strength F_y (ksi)	Gross Properties						Effective Properties			
						Area (in ²)	Weight (lb/ft)	I_x (in ⁴)	S_x (in ³)	R_x (in)	I_y (in ⁴)	R_y (in)	I_y (in ⁴)	S_y (in ³)	M_a (in-k)
250SLT250-19	2.500	2.500	1.500	0.0200	55	0.150	0.511	0.103	0.149	0.830	0.195	1.141	0.065	0.036	0.988
362SLT250-19	3.625	2.500	1.500	0.0200	55	0.173	0.587	0.117	0.228	0.822	0.427	1.573	0.148	0.054	1.473
600SLT250-19 ¹	6.000	2.500	1.500	0.0200	55	0.220	0.749	0.136	0.422	0.786	1.292	2.422	-	-	-

¹Web $h/t > 260$. Only gross properties are available.

Gross Properties:

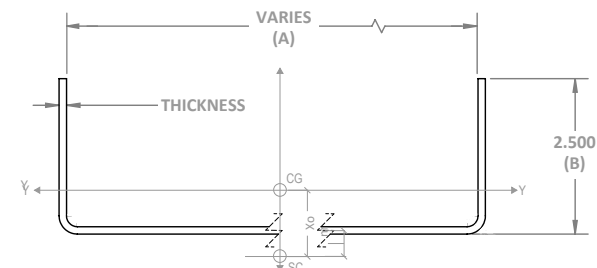
I_x = Moment of Inertia of cross-section about the x-axis
 S_x = Section Modulus about the x-axis
 R_x = Radius of Gyration of cross-section about the x-axis
 I_y = Moment of Inertia of cross-section about the y-axis
 R_y = Radius of Gyration of cross-section about the y-axis

Torsional Properties:

J = St Vincent Torsional Constant ($J \times 1000$)
 C_w = Warping Constant
 X_o = Dist. From Shear Center to Neutral Axis
 m = Dist. From Shear Center to Mid-Plane of Web
 R_o = Radii of Gyration
 β = Torsional Flexural Constant

Effective Properties:

I_x = Effective Moment of Inertia of cross-section about the x-axis
 S_x = Effective Section Modulus about the x-axis
 M_a = Allowable Bending Moment
 M_{ad} = Allowable Distortional Buckling Moment at $K\phi = 0$
 V_{ag} = Allowable Shear Force in Web (Unpunched)
 V_{anet} = Allowable Shear Force in Web (Punched)



Notes:

- Effective properties based on 2007 NASPEC with 2010 Supplement and the following: net flange on tension side; effective flange on compression side, ignoring steel below the slot; effective web per NASPEC B2.3; $\Omega_b = 2.0$ per S100-16/S2-20, A1.2; meets the requirements of the IBC 2021 Building Code.
- Effective properties are not available for 6" x 18-mil product. Web $h/t > 260$

SLOTTED TRACK PROPERTIES - 30-68 MIL

SLOTTED TRACK PROPERTIES - 30-68 MIL						Gross Properties							Effective Properties						Torsional Properties						
Member	Web Depth (A) (in.)	Flange Width (B) (in.)	Slot Width (in.)	Design Thickness (in.)	Yield Strength Fy (ksi)	Area (in ²)	Weight (lb/ft)	I _x (in ⁴)	S _x (in ³)	R _x (in)	I _y (in ⁴)	R _y (in)	I _x (in ⁴)	S _x (in ³)	M _a (in-k)	M _{ad} (in-k)	V _{ag} (lb)	V _{anet} (lb)	Jx1000 (in ⁴)	C _w (in ⁶)	X _o (in)	m (in)	R _o (in ⁴)	β	
250SLT250-30	2.500	2.500	1.500	0.0312	33	0.234	0.796	0.160	0.000	0.828	0.306	1.143	0.116	0.079	1.300	0.000	0.000	0.000	-	-	-	-	-	-	
362SLT250-30	3.625	2.500	1.500	0.0312	33	0.269	0.915	0.181	0.000	0.820	0.667	1.575	0.281	0.126	2.080	0.000	0.000	0.000	-	-	-	-	-	-	
600SLT250-30	6.000	2.500	1.500	0.0312	33	0.343	1.168	0.211	0.000	0.784	2.016	2.424	0.928	0.224	3.700	0.000	0.000	0.000	-	-	-	-	-	-	
250SLT250-33	2.500	2.500	1.500	0.0346	33	0.259	0.883	0.178	0.000	0.827	0.339	1.144	0.129	0.087	1.430	0.000	0.000	0.000	-	-	-	-	-	-	
362SLT250-33	3.625	2.500	1.500	0.0346	33	0.298	1.015	0.200	0.000	0.820	0.740	1.575	0.312	0.144	2.380	0.000	0.000	0.000	-	-	-	-	-	-	
600SLT250-33	6.000	2.500	1.500	0.0346	33	0.380	1.295	0.233	0.000	0.783	2.236	2.424	1.051	0.260	4.290	0.000	0.000	0.000	-	-	-	-	-	-	
362SLT250-43	3.625	2.500	1.500	0.0451	33	0.389	1.322	0.260	0.000	0.818	0.966	1.577	0.406	0.195	3.230	0.000	0.000	0.000	-	-	-	-	-	-	
600SLT250-43	6.000	2.500	1.500	0.0451	33	0.496	1.687	0.303	0.000	0.781	2.916	2.425	1.425	0.378	6.240	0.000	0.000	0.000	-	-	-	-	-	-	
362SLT250-54	3.625	2.500	1.500	0.0566	50	0.487	1.659	0.324	0.000	0.816	1.224	1.585	0.512	0.244	6.110	0.000	0.000	0.000	-	-	-	-	-	-	
600SLT250-54	6.000	2.500	1.500	0.0566	50	0.622	2.116	0.377	0.000	0.779	3.678	2.432	1.793	0.478	11.950	0.000	0.000	0.000	-	-	-	-	-	-	
362SLT250-68	3.625	2.500	1.500	0.0713	50	0.614	2.089	0.406	0.000	0.813	1.565	1.597	0.650	0.306	7.660	0.000	0.000	0.000	-	-	-	-	-	-	
600SLT250-68	6.000	2.500	1.500	0.0713	50	0.783	2.665	0.472	0.000	0.776	4.670	2.442	2.266	0.655	16.370	0.000	0.000	0.000	-	-	-	-	-	-	