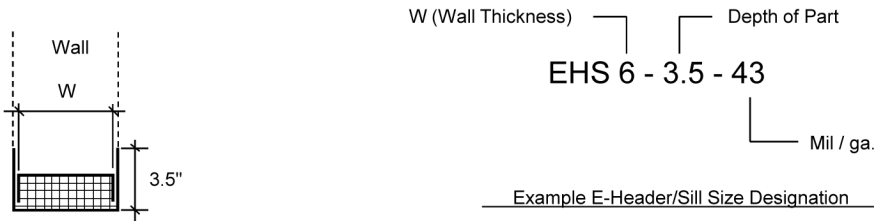


E-HEADER/SILL™ NOMENCLATURE

CSI SPEC # 054233



The designer should specify the wall thickness (W) and the metal thickness (mil) for E-Header/Sill Standard depth is 3.5". Custom depths are available.

Structural section properties are per the E- Header/Sill Section Properties Table.

The designer is responsible for determining the adequacy of the sections for their intended use.

E-HEADER/SILL™ SECTION PROPERTIES TABLE

	Design Thickness	Gauge	Gross Properties											Effective Properties										
			F _y	Area	Weight	I _x	S _x	R _x	I _y	S _{y+}	S _{y-}	R _y	I _{xe}	S _{xe}	M _{ax}	V _{ax}	I _{ye+}	S _{ye+}	M _{ay+}	I _{ye-}	S _{ye-}	M _{ay-}	V _{ay}	
			(in)	(No.)	(ksi)	(in ²)	(lb/ft)	(in ⁴)	(in ³)	(in)	(in ⁴)	(in ³)	(in ³)	(in)	(in ⁴)	(in ³)	(k-in)	(lbs)	(in ⁴)	(in ³)	(k-in)	(in ⁴)	(in ³)	(k-in)
4" WALL	EHS4-3.5-33	0.0346	20	33	0.615	2.091	1.731	0.851	1.678	0.600	0.277	0.450	0.988	1.313	0.467	9.231	2886	0.600	0.246	4.869	0.510	0.237	4.679	1899
	EHS4-3.5-43	0.0451	18	33	0.800	2.722	2.256	1.103	1.679	0.779	0.359	0.584	0.986	1.861	0.710	14.022	4901	0.779	0.354	6.991	0.648	0.324	6.411	3438
	EHS4-3.5-54	0.0566	16	50	1.001	3.405	2.824	1.373	1.679	0.970	0.447	0.727	0.984	2.342	0.896	26.834	9471	0.970	0.442	13.238	0.904	0.407	12.179	6643
6" WALL	EHS6-3.5-33	0.0346	20	33	0.753	2.561	4.302	1.418	2.390	0.747	0.335	0.587	0.996	3.192	0.717	14.159	2886	0.720	0.266	5.263	0.513	0.253	4.992	1253
	EHS6-3.5-43	0.0451	18	33	0.981	3.335	5.605	1.841	2.391	0.967	0.434	0.761	0.993	4.759	1.146	22.651	4901	0.958	0.397	7.848	0.742	0.350	6.910	2766
	EHS6-3.5-54	0.0566	16	50	1.228	4.175	7.014	2.295	2.390	1.204	0.540	0.947	0.990	5.982	1.468	43.961	9471	1.196	0.497	14.886	0.936	0.439	13.140	5481
8" WALL	EHS8-3.5-33	0.0346	20	33	0.892	3.032	8.380	2.077	3.066	0.889	0.392	0.723	0.999	5.706	0.939	18.549	2886	0.720	0.266	5.263	0.513	0.253	4.992	935
	EHS8-3.5-43	0.0451	18	33	1.161	3.948	10.916	2.699	3.066	1.151	0.507	0.936	0.996	9.129	1.548	30.582	4901	1.091	0.427	8.444	0.742	0.369	7.290	2066
	EHS8-3.5-54	0.0566	16	50	1.454	4.944	13.659	3.367	3.065	1.432	0.631	1.165	0.992	11.586	1.986	59.472	9471	1.363	0.535	16.030	0.937	0.463	13.868	4091

- Notes:
- Section properties are based on direct testing in accordance with AISI 911-08 and the AISI S100-2007 Specification. k values used are representative of the direct testing. For strong axis bending, k (inside flange) = 1.2 and k (outside flange) = 0.8. For weak axis bending, k (inside flange) = 4.0 and k (outside flange) = 4.0.
 - User should check end reaction for web crippling based on project loading requirements.
 - Bending capacities are based on the assumption that the compression flange is adequately laterally braced on both sides.
 - Allowable Moment and Shear Values are calculated assuming a negligible axial load.
 - Strength increase due to cold work of forming has not been incorporated.
 - The effective Moment of Inertia for deflection has been calculated using Procedure 1 of the AISI S100-2007 Specification for serviceability determination.
 - The distortional buckling limit state is not considered in this table. Consideration of distortional buckling may result in lower strengths when restraint against distortional buckling is not provided.
 - User should check interaction between bending and shear based on project loading requirements.