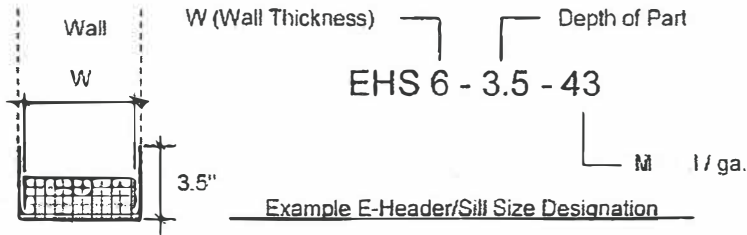


E-HEADER/SILL™ NOMENCLATURE



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.

TABLE S-3.2 ALLOWABLE SILL SPANS for ENVIRO E-HEADER/SILL™

Design Criteria:															
Wall height:		14 ft													
Header height:		9 ft													
SILL height:		3 ft													
Lateral Wind Load: WL =		20 psf													
Wind Deflection Factor: DF =		0.7													
Vertical deflection limits: $\Delta=L/$		180	180	240	360	480	600	720							
Horizontal deflection limits: $\Delta=L/$		120	180	240	360	480	600	720							
Wall Thick.	Member Identification	ALLOWABLE SILL SPANS, ft. & HORIZONTAL REACTIONS, kips													
4 inches	EHS4-3.5-33	7.48	-	7.48	-	7.48	-	7.48	-	7.48	-	7.48	-	7.20	-
			0.411		0.411		0.411		0.411		0.411		0.411		0.396
4 inches	EHS4-3.5-43	9.22	-	9.22	-	9.22	-	9.22	-	9.22	-	8.59	-	8.08	-
			0.507		0.507		0.507		0.507		0.507		0.507		0.472
4 inches	EHS4-3.5-54 (50ksi)	12.75	-	12.75	-	12.59	-	11.00	-	9.99	-	9.27	-	8.73	-
			0.701		0.701		0.692		0.605		0.549		0.510		0.480
6 inches	EHS6-3.5-33	9.26	-	9.26	-	9.26	-	9.26	-	9.26	-	9.26	-	9.26	-
			0.509		0.509		0.509		0.509		0.509		0.509		0.509
6 inches	EHS6-3.5-43	11.69	-	11.69	-	11.69	-	11.69	-	11.69	-	11.69	-	11.05	-
			0.643		0.643		0.643		0.643		0.643		0.643		0.608
6 inches	EHS6-3.5-54 (50ksi)	16.32	-	16.32	-	16.32	-	15.03	-	13.66	-	12.68	-	11.93	-
			0.898		0.898		0.898		0.827		0.751		0.697		0.656
8 inches	EHS8-3.5-33	10.60	-	10.60	-	10.60	-	10.60	-	10.60	-	10.60	-	10.60	-
			0.583		0.583		0.583		0.583		0.583		0.583		0.583
8 inches	EHS8-3.5-43	13.61	-	13.61	-	13.61	-	13.61	-	13.61	-	13.61	-	13.61	-
			0.749		0.749		0.749		0.749		0.749		0.749		0.749
8 inches	EHS8-3.5-54 (50ksi)	18.99	-	18.99	-	18.99	-	18.73	-	17.02	-	15.80	-	14.87	-
			1.044		1.044		1.044		1.030		0.936		0.869		0.818

Notes:

1. See E-HEADER/SILL™ SECTION PROPERTIES TABLE for additional notes and details.
2. See DETAIL 4 - SHEET SK-4, ENVIRO HEADER/SILL™ WALL ELEVATION for Loading Information.
3. Top - indicates no vertical reaction. Bottom number indicates SILL horizontal reaction

Design Example:

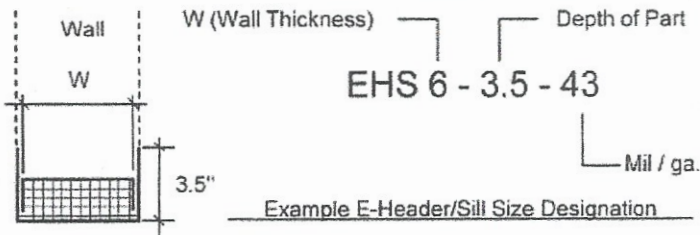
Exterior wall with Lateral Load of 20 psf
 Wall height: 14 ft
 Wall construction: Depth 8 inches with total wall dead weight of 18 psf
 Horizontal Deflection Limits: L/360
 SILL span = 14 ft, Header height = 9 feet, SILL height = 3 ft

Use: EHS8-3.5-54 (50ksi): Allowable SILL Span = 18.73 ft which is greater than 14 ft.
 Maximum horizontal reactions to jamps at each end = 1.030 kips

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E-HEADER/SILL™ NOMENCLATURE



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.

TABLE S-3.1 ALLOWABLE SILL SPANS for ENVIRO E-HEADER/SILL™

Design Criteria:															
Wall height:	12 ft														
Header height:	9 ft														
SILL height:	3 ft														
Lateral Wind Load: WL =	20 psf														
Wind Deflection Factor: DF =	0.7														
Vertical deflection limits: $\Delta=L/$	180	180	240	360	480	600	720								
Horizontal deflection limits: $\Delta=L/$	120	180	240	360	480	600	720								
Wall Thick.	Member Identification	ALLOWABLE SILL SPANS, ft. & HORIZONTAL REACTIONS, kips													
4 inches	EHS4-3.5-33	8.27	- 0.372	8.27	- 0.372	8.27	- 0.372	8.27	- 0.372	8.27	- 0.372	8.18	- 0.368	7.69	- 0.346
4 inches	EHS4-3.5-43	10.19	- 0.459	10.19	- 0.459	10.19	- 0.459	10.19	- 0.459	9.89	- 0.445	9.18	- 0.413	8.64	- 0.389
4 inches	EHS4-3.5-54 (50ksi)	14.10	- 0.634	14.10	- 0.634	13.46	- 0.606	11.76	- 0.529	10.68	- 0.481	9.92	- 0.446	9.33	- 0.420
6 inches	EHS6-3.5-33	10.24	- 0.461	10.24	- 0.461	10.24	- 0.461	10.24	- 0.461	10.24	- 0.461	10.24	- 0.461	10.24	- 0.461
6 inches	EHS6-3.5-43	12.93	- 0.582	12.93	- 0.582	12.93	- 0.582	12.93	- 0.582	12.93	- 0.582	12.56	- 0.565	11.82	- 0.532
6 inches	EHS6-3.5-54 (50ksi)	18.05	- 0.812	18.05	- 0.812	18.05	- 0.812	16.07	- 0.723	14.60	- 0.657	13.55	- 0.610	12.75	- 0.574
8 inches	EHS8-3.5-33	11.72	- 0.527	11.72	- 0.527	11.72	- 0.527	11.72	- 0.527	11.72	- 0.527	11.72	- 0.527	11.72	- 0.527
8 inches	EHS8-3.5-43	15.05	- 0.677	15.05	- 0.677	15.05	- 0.677	15.05	- 0.677	15.05	- 0.677	15.05	- 0.677	14.68	- 0.661
8 inches	EHS8-3.5-54 (50ksi)	20.99	- 0.944	20.99	- 0.944	20.99	- 0.944	20.03	- 0.901	18.20	- 0.819	16.89	- 0.760	15.90	- 0.715

Notes:

1. See E-HEADER/SILL™ SECTION PROPERTIES TABLE for additional notes and details.
2. See DETAIL 4 - SHEET SK-4, ENVIRO HEADER/SILL™ WALL ELEVATION for Loading Information.
3. Top - indicates no vertical reaction. Bottom number indicates SILL horizontal reaction

Design Example:

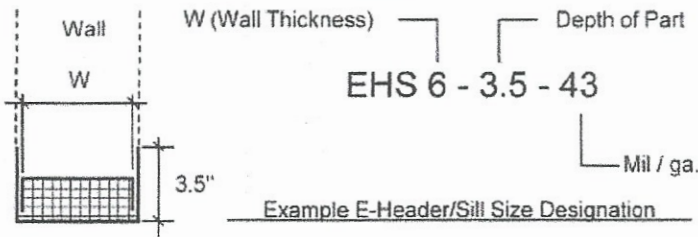
Exterior wall with Lateral Load of 20 psf
 Wall height: 12 ft
 Wall construction: Depth 8 inches with total wall dead weight of 18 psf
 Horizontal Deflection Limits: L/480
 SILL span = 14 feet, Header height = 9 feet, SILL height = 3 ft

Use: EHS8-3.5-43: Allowable SILL Span = 15.05 ft which is greater than 14 ft.
 Maximum horizontal reactions to jambs at each end = 0.667 kips

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E-HEADER/SILL™ NOMENCLATURE



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.

TABLE S-3.0 ALLOWABLE SILL SPANS for ENVIRO E-HEADER/SILL™

Design Criteria:															
Wall height:	10 ft														
Header height:	9 ft														
SILL height:	3 ft														
Lateral Wind Load: WL =	20 psf														
Wind Deflection Factor: DF =	0.7														
Vertical deflection limits: $\Delta=L/$	180	180	240	360	480	600	720								
Horizontal deflection limits: $\Delta=L/$	120	180	240	360	480	600	720								
Wall Thick.	Member Identification	ALLOWABLE <u>SILL</u> SPANS, ft. & HORIZONTAL REACTIONS, kips													
4 inches	EHS4-3.5-33	9.38	- 0.328	9.38	- 0.328	9.38	- 0.328	9.38	- 0.328	9.38	- 0.328	8.89	- 0.311	8.37	- 0.293
4 inches	EHS4-3.5-43	11.56	- 0.404	11.56	- 0.404	11.56	- 0.404	11.56	- 0.404	10.76	- 0.377	9.99	- 0.350	9.40	- 0.329
4 inches	EHS4-3.5-54 (50ksi)	15.99	- 0.560	15.99	- 0.560	14.63	- 0.512	12.78	- 0.447	11.61	- 0.406	10.78	- 0.377	10.15	- 0.355
6 inches	EHS6-3.5-33	11.61	- 0.406	11.61	- 0.406	11.61	- 0.406	11.61	- 0.406	11.61	- 0.406	11.61	- 0.406	11.25	- 0.394
6 inches	EHS6-3.5-43	14.66	- 0.513	14.66	- 0.513	14.66	- 0.513	14.66	- 0.513	14.66	- 0.513	13.66	- 0.478	12.85	- 0.450
6 inches	EHS6-3.5-54 (50ksi)	20.46	- 0.716	20.46	- 0.716	20.00	- 0.700	17.47	- 0.612	15.88	- 0.556	14.74	- 0.516	13.87	- 0.485
8 inches	EHS8-3.5-33	13.29	- 0.465	13.29	- 0.465	13.29	- 0.465	13.29	- 0.465	13.29	- 0.465	13.29	- 0.465	13.29	- 0.465
8 inches	EHS8-3.5-43	17.07	- 0.597	17.07	- 0.597	17.07	- 0.597	17.07	- 0.597	17.07	- 0.597	16.97	- 0.594	15.97	- 0.559
8 inches	EHS8-3.5-54 (50ksi)	23.80	- 0.833	23.80	- 0.833	23.80	- 0.833	21.78	- 0.762	19.79	- 0.693	18.37	- 0.643	17.29	- 0.605

Notes:

1. See E-HEADER/SILL™ SECTION PROPERTIES TABLE for additional notes and details.
2. See DETAIL 4 - SHEET SK-4, ENVIRO HEADER/SILL™ WALL ELEVATION for Loading Information.
3. Top - indicates no vertical reaction. Bottom number indicates SILL horizontal reaction

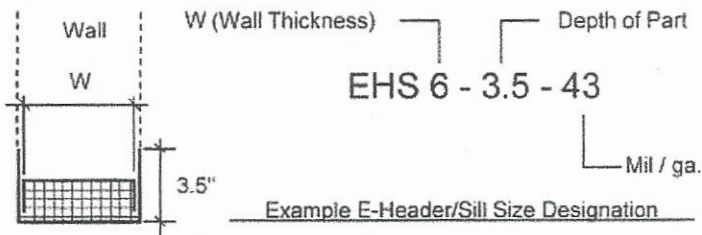
Design Example:

Exterior wall with Lateral Load of 20 psf
 Wall height: 10 ft
 Wall construction: Depth 8 inches with total wall dead weight of 18 psf
 Horizontal Deflection Limits: L/600
 SILL span = 13 feet, Header height = 9 feet, SILL height = 3 ft

Use: EHS8-3.5-33: Allowable SILL Span = 13.29 ft which is greater than 13 ft.
 Maximum horizontal reactions to jambs at each end = 0.465 kips

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E-HEADER/SILL™ NOMENCLATURE



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.

TABLE S-2.2 ALLOWABLE SILL SPANS for ENVIRO E-HEADER/SILL™

Design Criteria:															
Wall height:	14 ft														
Header height:	9 ft														
SILL height:	3 ft														
Lateral Wind Load: WL =	15 psf														
Wind Deflection Factor: DF =	0.7														
Vertical deflection limits: $\Delta=L/$	180	180	240	360	480	600	720								
Horizontal deflection limits: $\Delta=L/$	120	180	240	360	480	600	720								
Wall Thick.	Member Identification	ALLOWABLE SILL SPANS, ft, & HORIZONTAL REACTIONS, kips													
4 inches	EHS4-3.5-33	8.64	-	8.64	-	8.64	-	8.64	-	8.64	-	8.42	-	7.92	-
			0.356		0.356		0.356		0.356		0.356		0.347		0.327
4 inches	EHS4-3.5-43	10.64	-	10.64	-	10.64	-	10.64	-	10.18	-	9.45	-	8.90	-
			0.439		0.439		0.439		0.439		0.420		0.390		0.367
4 inches	EHS4-3.5-54 (50ksi)	14.73	-	14.73	-	13.85	-	12.10	-	11.00	-	10.21	-	9.61	-
			0.607		0.607		0.571		0.499		0.454		0.421		0.396
6 inches	EHS6-3.5-33	10.70	-	10.70	-	10.70	-	10.70	-	10.70	-	10.70	-	10.65	-
			0.441		0.441		0.441		0.441		0.441		0.441		0.439
6 inches	EHS6-3.5-43	13.50	-	13.50	-	13.50	-	13.50	-	13.50	-	12.93	-	12.17	-
			0.557		0.557		0.557		0.557		0.557		0.533		0.502
6 inches	EHS6-3.5-54 (50ksi)	18.85	-	18.85	-	18.85	-	16.54	-	15.03	-	13.95	-	13.13	-
			0.777		0.777		0.777		0.682		0.620		0.576		0.542
8 inches	EHS8-3.5-33	12.24	-	12.24	-	12.24	-	12.24	-	12.24	-	12.24	-	12.24	-
			0.505		0.505		0.505		0.505		0.505		0.505		0.505
8 inches	EHS8-3.5-43	15.72	-	15.72	-	15.72	-	15.72	-	15.72	-	15.72	-	15.12	-
			0.648		0.648		0.648		0.648		0.648		0.648		0.624
8 inches	EHS8-3.5-54 (50ksi)	21.92	-	21.92	-	21.92	-	20.62	-	18.73	-	17.39	-	16.37	-
			0.904		0.904		0.904		0.851		0.773		0.717		0.675

Notes:

1. See E-HEADER/SILL™ SECTION PROPERTIES TABLE for additional notes and details.
2. See DETAIL 4 - SHEET SK-4, ENVIRO HEADER/SILL™ WALL ELEVATION for Loading Information.
3. Top - indicates no vertical reaction. Bottom number indicates SILL horizontal reaction

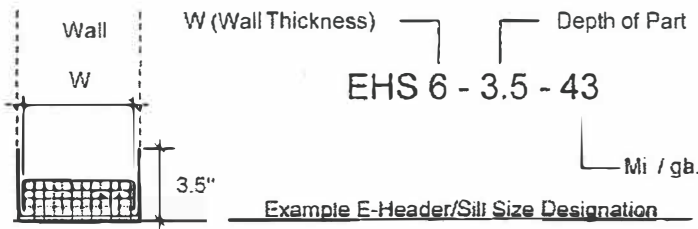
Design Example:

Exterior wall with Lateral Load of 15 psf
 Wall height: 10 ft
 Wall construction: Depth 6 inches with total wall dead weight of 12 psf
 Horizontal Deflection Limits: L/360
 SILL span = 16 feet, Header height = 9 feet, SILL height = 3 ft

Use: EHS6-3.5-54 (50ksi): Allowable SILL Span = 16.54 ft which is greater than 16 ft.
 Maximum horizontal reactions to jambs at each end = 0.682 kips

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E-HEADER/SILL™ NOMENCLATURE



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.

TABLE S-2.1 ALLOWABLE SILL SPANS for ENVIRO E-HEADER/SILL™

Design Criteria:															
Wall height:		12 ft													
Header height:		9 ft													
SILL height:		3 ft													
Lateral Wind Load: WL =		15 psf													
Wind Deflection Factor: DF =		0.7													
Vertical deflection limits: $\Delta=L/$		180	180	240	360	480	600	720							
Horizontal deflection limits: $\Delta=L/$		120	180	240	360	480	600	720							
Wall Thick.	Member Identification	ALLOWABLE <u>SILL</u> SPANS, ft. & HORIZONTAL REACTIONS, kips													
4 inches	EHS4-3.5-33	9.55	- 0.322	9.55	- 0.322	9.55	- 0.322	9.55	- 0.322	9.55	- 0.322	9.00	- 0.304	8.47	- 0.286
4 inches	EHS4-3.5-43	11.77	- 0.397	11.77	- 0.397	11.77	- 0.397	11.77	- 0.397	10.89	- 0.367	10.11	- 0.341	9.51	- 0.321
4 inches	EHS4-3.5-54 (50ksi)	16.28	- 0.549	16.28	- 0.549	14.81	- 0.500	12.94	- 0.437	11.76	- 0.397	10.91	- 0.368	10.27	- 0.347
6 inches	EHS6-3.5-33	11.83	- 0.399	11.83	- 0.399	11.83	- 0.399	11.83	- 0.399	11.83	- 0.399	11.83	- 0.399	11.39	- 0.384
6 inches	EHS6-3.5-43	14.93	- 0.504	14.93	- 0.504	14.93	- 0.504	14.93	- 0.504	14.89	- 0.503	13.82	- 0.467	13.01	- 0.439
6 inches	EHS6-3.5-54 (50ksi)	20.84	- 0.703	20.84	- 0.703	20.25	- 0.683	17.69	- 0.597	16.07	- 0.542	14.92	- 0.503	14.04	- 0.474
8 inches	EHS8-3.5-33	13.54	- 0.457	13.54	- 0.457	13.54	- 0.457	13.54	- 0.457	13.54	- 0.457	13.54	- 0.457	13.54	- 0.457
8 inches	EHS8-3.5-43	17.38	- 0.587	17.38	- 0.587	17.38	- 0.587	17.38	- 0.587	17.38	- 0.587	17.18	- 0.580	16.16	- 0.545
8 inches	EHS8-3.5-54 (50ksi)	24.24	- 0.818	24.24	- 0.818	24.24	- 0.818	22.05	- 0.744	20.03	- 0.676	18.60	- 0.628	17.50	- 0.591

Notes:

1. See E-HEADER/SILL™ SECTION PROPERTIES TABLE for additional notes and details.
2. See DETAIL 4 - SHEET SK-4, ENVIRO HEADER/SILL™ WALL ELEVATION for Loading Information.
3. Top - indicates no vertical reaction. Bottom number indicates SILL horizontal reaction

Design Example:

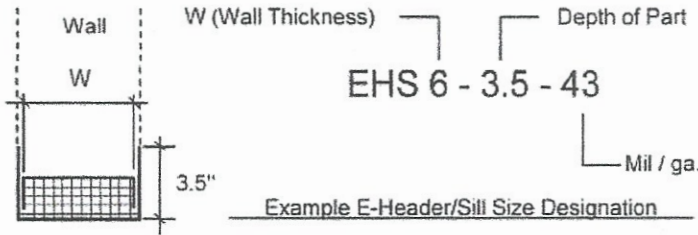
Exterior wall with Lateral Load of 15 psf
 Wall height: 12 ft
 Wall construction: Depth 6 inches with total wall dead weight of 12 psf
 Horizontal Deflection Limits: L/240
 SILL span = 12 feet, Header height = 9 feet, SILL height = 3 ft

Use: EHS6-3.5-43: Allowable SILL Span = 14.93 ft which is greater than 12 ft.
 Maximum horizontal reactions to jambs at each end = 0.504 kips

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E-HEADER/SILL™ NOMENCLATURE



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.

TABLE S-2.0 ALLOWABLE SILL SPANS for ENVIRO E-HEADER/SILL™

Design Criteria:															
Wall height:	10 ft														
Header height:	9 ft														
SILL height:	3 ft														
Lateral Wind Load: WL =	15 psf														
Wind Deflection Factor: DF =	0.7														
Vertical deflection limits: $\Delta=L/$	180	180	240	360	480	600	720								
Horizontal deflection limits: $\Delta=L/$	120	180	240	360	480	600	720								
Wall Thick.	Member Identification	ALLOWABLE SILL SPANS, ft, & HORIZONTAL REACTIONS, kips													
4 inches	EHS4-3.5-33	10.83	-	10.83	-	10.83	-	10.83	-	10.54	-	9.78	-	9.21	-
		0.284	-	0.284	-	0.284	-	0.284	-	0.277	-	0.257	-	0.242	-
4 inches	EHS4-3.5-43	13.34	-	13.34	-	13.34	-	13.03	-	11.84	-	10.99	-	10.34	-
		0.350	-	0.350	-	0.350	-	0.342	-	0.311	-	0.289	-	0.272	-
4 inches	EHS4-3.5-54 (50ksi)	18.46	-	17.73	-	16.11	-	14.07	-	12.78	-	11.87	-	11.17	-
		0.485	-	0.465	-	0.423	-	0.369	-	0.336	-	0.312	-	0.293	-
6 inches	EHS6-3.5-33	13.41	-	13.41	-	13.41	-	13.41	-	13.41	-	13.16	-	12.38	-
		0.352	-	0.352	-	0.352	-	0.352	-	0.352	-	0.345	-	0.325	-
6 inches	EHS6-3.5-43	16.93	-	16.93	-	16.93	-	16.93	-	16.19	-	15.03	-	14.14	-
		0.444	-	0.444	-	0.444	-	0.444	-	0.425	-	0.395	-	0.371	-
6 inches	EHS6-3.5-54 (50ksi)	23.63	-	23.63	-	22.02	-	19.23	-	17.47	-	16.22	-	15.26	-
		0.620	-	0.620	-	0.578	-	0.505	-	0.459	-	0.426	-	0.401	-
8 inches	EHS8-3.5-33	15.35	-	15.35	-	15.35	-	15.35	-	15.35	-	15.35	-	15.03	-
		0.403	-	0.403	-	0.403	-	0.403	-	0.403	-	0.403	-	0.394	-
8 inches	EHS8-3.5-43	19.71	-	19.71	-	19.71	-	19.71	-	19.71	-	18.68	-	17.57	-
		0.517	-	0.517	-	0.517	-	0.517	-	0.517	-	0.490	-	0.461	-
8 inches	EHS8-3.5-54 (50ksi)	27.48	-	27.48	-	27.44	-	23.97	-	21.78	-	20.22	-	19.03	-
		0.721	-	0.721	-	0.720	-	0.629	-	0.572	-	0.531	-	0.499	-

Notes:

1. See E-HEADER/SILL™ SECTION PROPERTIES TABLE for additional notes and details.
2. See DETAIL 4 - SHEET SK-4, ENVIRO HEADER/SILL™ WALL ELEVATION for Loading Information.
3. Top - indicates no vertical reaction. Bottom number indicates SILL horizontal reaction

Design Example:

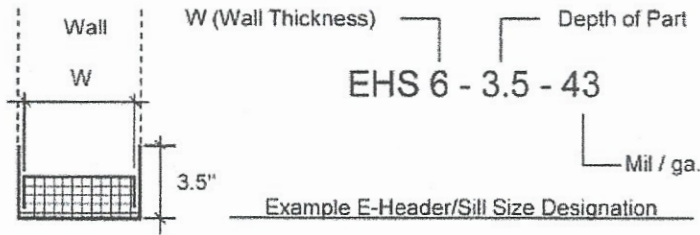
Exterior wall with Lateral Load of 15 psf
 Wall height: 12 ft
 Wall construction: Depth 6 inches with total wall dead weight of 12 psf
 Horizontal Deflection Limits: L/240
 SILL span = 13'-0", Header height = 9 feet, SILL height = 3 ft

Use: EHS6-3.5-33: Allowable SILL Span = 13.41 ft which is greater than 13'-0".
 Maximum horizontal reactions to jambs at each end = 0.352 kips

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E-HEADER/SILL™ NOMENCLATURE



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.

TABLE S-1.2 ALLOWABLE SILL SPANS for ENVIRO E-HEADER/SILL™

Design Criteria:															
Wall height:		14 ft													
Header height:		9 ft													
SILL height:		3 ft													
Lateral Wind Load: WL =		5 psf													
Wind Deflection Factor: DF =		1.0													
Vertical deflection limits: $\Delta=L/$		180	180	240	360	480	600	720							
Horizontal deflection limits: $\Delta=L/$		120	180	240	360	480	600	720							
Wall Thick.	Member Identification	ALLOWABLE SILL SPANS, ft. & HORIZONTAL REACTIONS, kips													
4 inches	EHS4-3.5-33	14.96	-	14.96	-	14.63	-	12.78	-	11.61	-	10.78	-	10.14	-
		0.206	0.206	0.201	0.176	0.160	0.148	0.139							
4 inches	EHS4-3.5-43	18.44	-	18.09	-	16.43	-	14.35	-	13.04	-	12.11	-	11.39	-
		0.254	0.249	0.226	0.197	0.179	0.166	0.157							
4 inches	EHS4-3.5-54 (50ksi)	22.35	-	19.53	-	17.74	-	15.50	-	14.08	-	13.07	-	12.30	-
		0.307	0.268	0.244	0.213	0.194	0.180	0.169							
6 inches	EHS6-3.5-33	18.53	-	18.53	-	18.53	-	17.18	-	15.61	-	14.49	-	13.64	-
		0.255	0.255	0.255	0.236	0.215	0.199	0.188							
6 inches	EHS6-3.5-43	23.39	-	23.39	-	22.47	-	19.63	-	17.83	-	16.56	-	15.58	-
		0.322	0.322	0.309	0.270	0.245	0.228	0.214							
6 inches	EHS6-3.5-54 (50ksi)	30.55	-	26.69	-	24.25	-	21.18	-	19.25	-	17.87	-	16.81	-
		0.420	0.367	0.333	0.291	0.265	0.246	0.231							
8 inches	EHS8-3.5-33	21.21	-	21.21	-	21.21	-	20.85	-	18.95	-	17.59	-	16.55	-
		0.292	0.292	0.292	0.267	0.261	0.242	0.228							
8 inches	EHS8-3.5-43	27.23	-	27.23	-	27.23	-	24.39	-	22.16	-	20.57	-	19.36	-
		0.374	0.374	0.374	0.335	0.305	0.283	0.266							
8 inches	EHS8-3.5-54 (50ksi)	37.97	-	33.27	-	30.23	-	26.41	-	23.99	-	22.27	-	20.96	-
		0.522	0.457	0.416	0.363	0.330	0.306	0.288							

Notes:

1. See E-HEADER/SILL™ SECTION PROPERTIES TABLE for additional notes and details.
2. See DETAIL 4 - SHEET SK-4, ENVIRO HEADER/SILL™ WALL ELEVATION for Loading Information.
3. Top - indicates no vertical reaction. Bottom number indicates SILL horizontal reaction

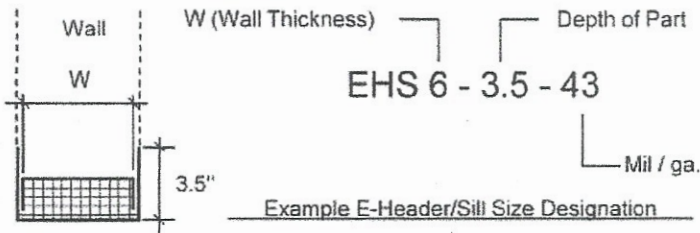
Design Example:

Interior wall minimum lateral load 5 psf
 Wall height: 14 ft
 Wall construction: Depth 4 inches with two layers 0.625" gypsum board, total dead load including infill studs 6 psf
 Horizontal Deflection Limits: L/240
 SILL span = 16'-6", Header height = 9 feet, SILL height = 3 ft

Use: EHS4-3.5-54 (50ksi): Allowable SILL Span = 17.74 ft which is greater than 16'-6".
 Maximum horizontal reactions to jamps at each end = 0.244 kips

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E-HEADER/SILL™ NOMENCLATURE



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.

TABLE S-1.1 ALLOWABLE SILL SPANS for ENVIRO E-HEADER/SILL™

Design Criteria:															
Wall height:		12 ft													
Header height:		9 ft													
SILL height:		3 ft													
Lateral Wind Load: WL =		5 psf													
Wind Deflection Factor: DF =		1.0													
Vertical deflection limits: $\Delta=L/$		180	180	240	360	480	600	720							
Horizontal deflection limits: $\Delta=L/$		120	180	240	360	480	600	720							
Wall Thick.	Member Identification	ALLOWABLE SILL SPANS, ft, & HORIZONTAL REACTIONS, kips													
4 inches	EHS4-3.5-33	16.54	-	16.54	-	15.64	-	13.66	-	12.41	-	11.52	-	10.84	-
			0.186		0.186		0.176		0.154		0.140		0.130		0.122
4 inches	EHS4-3.5-43	20.38	-	19.34	-	17.57	-	15.35	-	13.94	-	12.94	-	12.18	-
			0.229		0.218		0.198		0.173		0.157		0.146		0.137
4 inches	EHS4-3.5-54 (50ksi)	23.90	-	20.88	-	18.97	-	16.57	-	15.05	-	13.98	-	13.15	-
			0.269		0.235		0.213		0.186		0.169		0.157		0.148
6 inches	EHS6-3.5-33	20.48	-	20.48	-	20.48	-	18.37	-	16.69	-	15.49	-	14.58	-
			0.230		0.230		0.230		0.207		0.188		0.174		0.164
6 inches	EHS6-3.5-43	25.85	-	25.85	-	24.02	-	20.99	-	19.07	-	17.70	-	16.66	-
			0.291		0.291		0.270		0.236		0.215		0.199		0.187
6 inches	EHS6-3.5-54 (50ksi)	32.67	-	28.54	-	25.93	-	22.65	-	20.58	-	19.10	-	17.98	-
			0.367		0.321		0.292		0.255		0.232		0.215		0.202
8 inches	EHS8-3.5-33	23.44	-	23.44	-	23.44	-	22.30	-	20.26	-	18.80	-	17.70	-
			0.264		0.264		0.264		0.251		0.228		0.212		0.199
8 inches	EHS8-3.5-43	30.10	-	30.10	-	29.85	-	26.08	-	23.60	-	21.99	-	20.70	-
			0.339		0.339		0.336		0.293		0.267		0.247		0.233
8 inches	EHS8-3.5-54 (50ksi)	40.72	-	35.57	-	32.32	-	28.23	-	25.65	-	23.81	-	22.41	-
			0.458		0.400		0.364		0.318		0.289		0.268		0.252

Notes:

1. See E-HEADER/SILL™ SECTION PROPERTIES TABLE for additional notes and details.
2. See DETAIL 4 - SHEET SK-4, ENVIRO HEADER/SILL™ WALL ELEVATION for Loading Information.
3. Top - indicates no vertical reaction. Bottom number indicates SILL horizontal reaction

Design Example:

Interior wall minimum lateral load 5 psf

Wall height: 12 ft

Wall construction: Depth 4 inches with two layers 0.625" gypsum board, total dead load including infill studs 6 psf

Horizontal Deflection Limits: L/360

SILL span = 14 ft, Header height = 9 feet, SILL height = 3 ft

Use: EHS4-3.5-43: Allowable SILL Span = 15.35 ft which is greater than 14 ft.

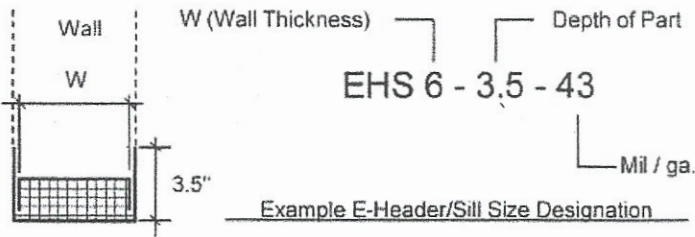
Maximum horizontal reactions to jambs at each end = 0.173 kips

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E-HEADER/SILL™ NOMENCLATURE



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.

TABLE S-1.0 ALLOWABLE SILL SPANS for ENVIRO E-HEADER/SILL™

Design Criteria:															
Wall height:	10 ft														
Header height:	9 ft														
SILL height:	3 ft														
Lateral Wind Load: WL =	5 psf														
Wind Deflection Factor: DF =	1.0														
Vertical deflection limits: $\Delta=L/$	180	180	240	360	480	600	720								
Horizontal deflection limits: $\Delta=L/$	120	180	240	360	480	600	720								
Wall Thick.	Member Identification	ALLOWABLE SILL SPANS, ft, & HORIZONTAL REACTIONS, kips													
4 inches	EHS4-3.5-33	18.75	-	18.72	-	17.01	-	14.86	-	13.50	-	12.53	-	11.79	-
			0.164		0.164		0.149		0.130		0.118		0.110		0.103
4 inches	EHS4-3.5-43	23.11	-	21.03	-	19.10	-	16.69	-	15.16	-	14.08	-	13.25	-
			0.202		0.184		0.167		0.146		0.133		0.123		0.116
4 inches	EHS4-3.5-54 (50ksi)	25.99	-	22.70	-	20.62	-	18.02	-	16.37	-	15.20	-	14.30	-
			0.227		0.199		0.180		0.158		0.143		0.133		0.125
6 inches	EHS6-3.5-33	23.22	-	23.22	-	22.87	-	19.98	-	18.15	-	16.85	-	15.86	-
			0.203		0.203		0.200		0.175		0.159		0.147		0.139
6 inches	EHS6-3.5-43	29.32	-	28.75	-	26.12	-	22.82	-	20.73	-	19.25	-	18.11	-
			0.257		0.252		0.229		0.200		0.181		0.168		0.158
6 inches	EHS6-3.5-54 (50ksi)	35.52	-	31.03	-	28.19	-	24.63	-	22.38	-	20.77	-	19.55	-
			0.311		0.272		0.247		0.216		0.196		0.182		0.171
8 inches	EHS8-3.5-33	26.58	-	26.58	-	26.58	-	24.24	-	22.03	-	20.45	-	19.24	-
			0.233		0.233		0.233		0.212		0.193		0.179		0.168
8 inches	EHS8-3.5-43	34.13	-	34.13	-	32.46	-	28.36	-	25.76	-	23.92	-	22.51	-
			0.299		0.299		0.284		0.248		0.225		0.209		0.197
8 inches	EHS8-3.5-54 (50ksi)	44.28	-	38.68	-	35.14	-	30.70	-	27.89	-	25.89	-	24.37	-
			0.387		0.338		0.307		0.269		0.244		0.227		0.213

Notes:

1. See E-HEADER/SILL™ SECTION PROPERTIES TABLE for additional notes and details.
2. See DETAIL 4 - SHEET SK-4, ENVIRO HEADER/SILL™ WALL ELEVATION for Loading Information.
3. Top - indicates no vertical reaction. Bottom number indicates SILL horizontal reaction

Design Example:

Interior wall minimum lateral load 5 psf
 Wall height: 10 ft
 Wall construction: Depth 4 inches with two layers 0.625" gypsum board, total dead load including infill studs 6 psf
 Horizontal Deflection Limit: L/480
 SILL span = 12 feet, Header height = 9 feet, SILL height = 3 ft

Use: EHS4-3.5-33: Allowable SILL Span = 13.50 ft which is greater than 12 ft.
 Maximum horizontal reactions to jamba at each end = 0.118 kips

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ENVIRO HEAD-SILL™ SECTION PROPERTIES TABLE

Design Thickness	Gross Properties											Effective Properties											
	F _y	Area	Weight	I _x	S _x	R _x	I _y	S _y	S _{xy}	R _y	I _{xx}	S _{xx}	M _{xx}	V _{xx}	I _{yy}	S _{yy}	M _{yy}	I _{xy}	S _{xy}	M _{xy}	V _{xy}		
	(in)	(ksi)	(in ²)	(lb/ft)	(in ⁴)	(in ³)	(in)	(in ⁴)	(in ³)	(in)	(in ⁴)	(in ³)	(k-in)	(lbs)	(in ⁴)	(in ³)	(k-in)	(in ⁴)	(in ³)	(k-in)	(lbs)		
4" WALL	EHS4-3.5-33	0.0346	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	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	50	1.001	3.405	2.824	1.373	1.679	0.970	0.447	0.727	0.984	2.342	0.896	2.834	9471	0.970	0.442	13.238	0.904	0.407	12.179	6643
6" WALL	EHS6-3.5-33	0.0346	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	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	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	33	0.892	3.032	8.360	2.077	3.066	0.889	0.392	0.723	0.999	5.706	0.964	19.043	2886	0.811	0.279	5.506	0.510	0.265	5.233	935
	EHS8-3.5-43	0.0451	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	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:

1. 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
2. User should check end reaction for web crippling based on project loading requirements.
3. Bending capacities are based on the assumption that the compression flange is adequately laterally braced on both sides.
4. Allowable Moment and Shear Values are calculated assuming a negligible axial load.
5. Strength increase due to cold work of forming has not been incorporated.
6. The effective Moment of Inertia for deflection has been calculated using Procedure 1 of the AISI S100-2007 Specification for serviceability determination.
7. 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.
8. User should check interaction between bending and shear based on project loading requirements.

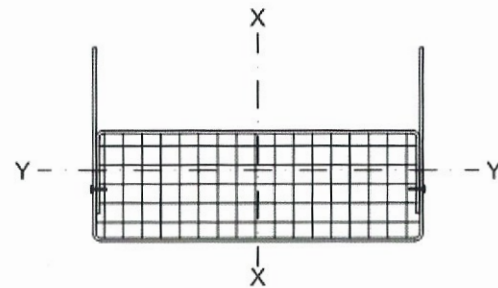


Table A – Section Properties