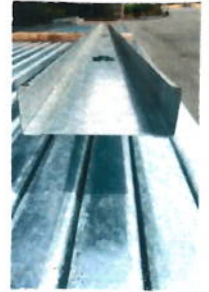


Light Gauge Hemmed Stud Section Geometry

The Imperial BP Light Gauge cold-formed steel stud is a C-section member with standard overall dimensions but with hemmed stiffening lips. The nominal dimensions are listed in Table 3-1. The punch-out for the 1-5/8" and 2-1/2" studs is 1-1/2" long by 3/4" wide. The punch-out for the 3-5/8" and 6" studs is 2-1/2" long by 1-1/2" wide. The punch-outs were spaced every 24". The track section used in conjunction with stud had 1-1/4" wide flanges, a nominal thickness of 17mils.

Table 3-1: Nominal Section Dimensions

Section Designation	Depth (in)	Flange Width (in)	Lip Length (in)
162S125-17	1.625	1.25	0.25
250S125-17	2.50	1.25	0.25
362S125-17	3.625	1.25	0.25
600S125-17	6.00	1.25	0.25
162T125-17	1.625	1.25	n/a
250T125-17	2.50	1.25	n/a
362T125-17	3.625	1.25	n/a
600T125-17	6.00	1.25	n/a



Limiting Height Tables

Table 7-1: Limiting Heights for Steelform 17 mil Hemmed Studs with 5/8" Type X Gypsum Board

Member Size	Spacing (in.)	5 (psf)						7.5 (psf)						10 (psf)						15 (psf)							
		L/120		L/240		L/360		L/120		L/240		L/360		L/120		L/240		L/360		L/120		L/240		L/360			
		ft	in	ft	in	ft	in	ft	in	ft	in	ft	in	ft	in	ft	in	ft	in	ft	in	ft	in	ft	in		
1-5/8"	12	14	- 6	12	- 9	11	- 5	12	- 8	11	- 2	10	- 0	11	- 6	10	- 2	8	- 5	8	- 0f	8	- 0f				
	16	13	- 2	11	- 7	10	- 5	11	- 6	10	- 2	8	- 5	10	- 6	8	- 9										
	24	11	- 6	10	- 2	8	- 5	9	- 11f	8	- 1			8	- 7f												
2-1/2"	12	16	- 4f	15	- 8	14	- 1	13	- 4f	13	- 4f	12	- 3	11	- 7f	11	- 7f	11	- 2								
	16	14	- 2f	14	- 2f	12	- 9	11	- 7f	11	- 7f	11	- 2	10	- 0f	10	- 0f	10	- 0f								
	24	11	- 7f	11	- 7f	11	- 2	9	- 5f	9	- 5f	9	- 5f	8	- 2f	8	- 2f	8	- 2f								
3-5/8"	12	19	- 8f	17	- 6	15	- 4	16	- 1f	15	- 4	13	- 4	13	- 11f	13	- 11f	12	- 2	9	- 2f	9	- 2f	9	- 2f		
	16	17	- 0f	15	- 11	13	- 11	13	- 11f	13	- 11f	12	- 2	12	- 1f	12	- 1f	11	- 0	7	- 11f	7	- 11f	7	- 11f		
	24	13	- 11f	13	- 11f	12	- 2	11	- 4f	11	- 4f	10	- 6	9	- 10f	9	- 10f	9	- 6	6	- 6	6	- 6	6	- 6		
6"	12	23	- 6	24	- 5	22	- 7	20	- 0f	20	- 0f	19	- 9	17	- 4f	17	- 4f	17	- 4f								
	16	21	- 2f	21	- 2f	20	- 6	17	- 4f	17	- 4f	17	- 4f	15	- 0f	15	- 0f	15	- 0f								
	24	17	- 4f	17	- 4f	17	- 4f	14	- 1f	14	- 1f	14	- 1f	12	- 3f	12	- 3f	12	- 3f								

NOTES:

- Allowable composite limiting heights are calculated using ICC-ES AC86-2012 without the end reaction tests.
- Minimum safety factor for strength = 1.508 for 5 to 10 psf, and 2.327 for 15 psf.
- The gypsum board must be applied full height to each stud flange and installed using minimum No. 6 Type S Drywall screws spaced a maximum of 12 in. on-center for studs at 24-in spacing, and 16 in. on-centre spacing for studs at 16- and 12-in spacing.
- No fasteners are required for attaching the stud to the track.
- Minimum material yield strength equals 33 ksi. Design thickness equals 0.0175 in.
- 'f' adjacent to the height value indicates that flexural stress controls the allowable wall height.

Referenced Documents

CSA-S136-12, *North American Specification for the Design of Cold-Formed Steel Structural Members*, Canadian Standards Association, Rexdale, ON.

ASTM A370-16, *Standard Test Methods and Definitions for Mechanical Testing of Steel Products*, ASTM International, West Conshohocken, PA.

ASTM E72-15, *Standard Test Methods of Conducting Strength Tests of Panels for Building Construction*, ASTM International, West Conshohocken, PA.

ICC AC86-12, *Acceptance Criteria for Cold-Formed Steel Framing Members - Interior Non load-bearing Wall Assemblies*, International Code Council (ICC), Whittier, CA.