

Framing Depth (Inches)	Framing Thickness (Inches)	EI x 10 ⁶	Design Pressure (psf)		5		7.5		10		15			
			Maximum End Reaction Bearing Load With Safety Factor Of (3) (Lbs. Force Per Foot Width)		End Condition	A	B	A	B	A	B	A	B	
			Cond. A	Cond. B										Deflection Limit
2-1/2	0.023	5.07	41.9	98.7	L/120 L/180 L/240 L/360	16-6	16-6	11-2"	14-5	8-5"	13-1	5-7"	11-5	
						14-5	14-5	11-2"	12-7	8-5"	11-5	5-7"	10-0	5-7"
						13-1	13-1	10-0	11-5	8-5"	9-1	5-7"	7-11	5-7"
	0.032	5.40	69.2	98.7**	L/120 L/180 L/240 L/360	16-10	16-10	14-9	14-9	13-5	9-3"	13-5	11-8	
						14-9	14-9	12-11	12-11	11-8	11-8	9-3"	10-3	9-3"
						13-5	13-5	11-8	11-8	10-8	10-8	9-3	9-3	8-1
0.038	6.43	76.0	98.7**	L/120 L/180 L/240 L/360	17-11	17-11	15-7	15-7	15-7	14-2	14-2	10-2"	12-5	
					15-7	15-7	13-8	13-8	12-5	12-5	10-2"	10-10	9-10	8-7
					14-2	14-2	12-5	12-5	11-3	11-3	9-10	9-10	8-7	8-7
4	0.023	12.9	41.9	113	L/120 L/180 L/240 L/360	16-9"	22-7	11-2"	19-8	8-5"	17-11	5-7"	15-0"	
						16-9"	19-8	11-2"	17-3	8-5"	15-8	5-7"	13-8	5-7"
						16-9"	17-11	11-2"	15-8	8-5"	14-2	5-7"	12-5	5-7"
	0.035	15.4	90.1	150	L/120 L/180 L/240 L/360	23-11	23-11	20-11	20-11	20-11	18-0"	19-0	12-0"	16-7
						20-11	20-11	18-3	18-3	16-7	16-7	12-0"	14-6	12-0"
						19-0	19-0	16-7	16-7	15-1	15-1	11-6	11-6	11-6
0.040	20.8	96.9	150**	L/120 L/180 L/240 L/360	26-5	26-5	23-1	23-1	23-1	19-5"	21-0	12-11"	18-4	
					23-1	23-1	20-2	20-2	18-4	18-4	12-11"	16-0	12-11"	
					21-0	21-0	18-4	18-4	16-8	16-8	12-11"	14-7	12-11"	
6	0.023	26.0	41.9	109	L/120 L/180 L/240 L/360	16-9"	26-6	11-2"	24-11	8-5"	21-10"	5-7"	14-7"	
						16-9"	24-11	11-2"	21-9	8-5"	19-9	5-7"	14-7"	
						16-9"	22-7	11-2"	19-9	8-5"	17-11	5-7"	14-7"	
	0.035	35.6	93.6	148	L/120 L/180 L/240 L/360	31-8	31-8	24-11"	27-8	18-9"	25-1	12-6"	19-9"	
						27-8	27-8	24-2	24-2	18-9"	21-11	12-6"	19-2	12-6"
						25-1	25-1	21-11	21-11	18-9"	19-11	12-6"	17-5	12-6"
0.040	39.6	102	172	L/120 L/180 L/240 L/360	32-9	32-9	27-3"	28-8	20-5"	26-0	13-8"	22-9		
					28-8	28-8	25-0	25-0	20-5"	22-9	13-8"	19-10	20-5"	
					26-0	26-0	22-9	22-9	20-5"	20-8	13-8"	18-0	20-5"	

* Reduced for end reaction to provide a minimum safety factor of (3) three.

** Based on tests with lesser framing metal thickness.

■ Steel component design data provided by Dietrich Industries, Inc.

NOTES: CONDITION "A" — Regular application.

CONDITION "B" — Similar to Cond. "A"

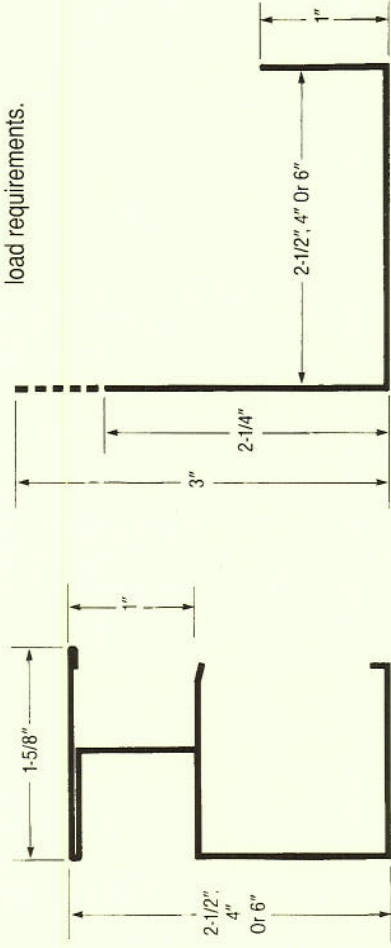
(Shaded Columns) with gypsum board

"load distributor" added.

C-T STUD DESIGN DATA
(Continued)

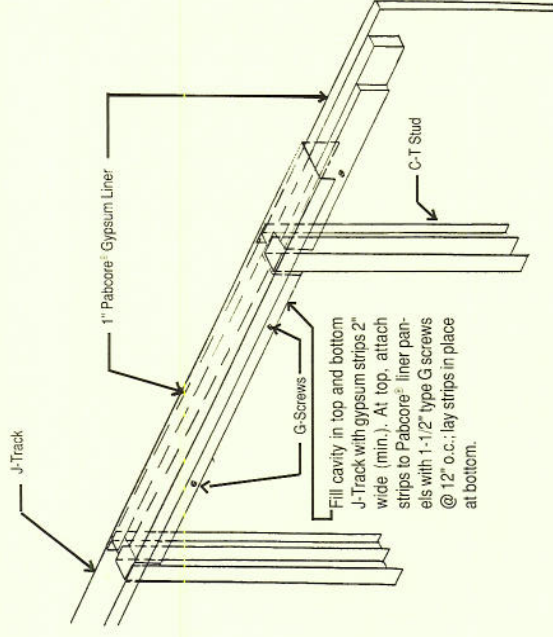
Stud Design Properties

Design Notes:
It is important the job engineer approve the type, size and maximum spacing of perimeter fasteners to meet the design load requirements.



C-T Stud

J Track



Load Distributors

Minimum Section Properties

Stud Size	Gauge	T (in.)	W (lb.)	A (In. ^2)	Ix (In. ^4)	Sx (In. ^3)
2-1/2"	25	0.021	0.524	0.154	0.155	0.108
	22	0.031	0.771	0.227	0.225	0.157
	20	0.036	0.893	0.263	0.259	0.181
4"	25	0.021	0.631	0.186	0.451	0.196
	22	0.031	0.929	0.273	0.658	0.286
	20	0.036	1.077	0.317	0.759	0.330
6"	25	0.021	0.774	0.228	1.172	0.345
	22	0.031	1.140	0.335	1.714	0.504
	20	0.036	1.322	0.389	1.981	0.583

T = Base Metal Thickness (Inches)
W = Average Weight (Pounds per Linear Foot) A = Section Area (Inches ^2) Ix = Section Modulus (Inches ^3)
Ix = Moment of Inertia (Inches ^4)

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