

150-FT. THROUGH PRATT TRUSS.

| SPECIFICATION | Stress | $L_0 L_2$ | $L_3 L_2$ | $L_1 C_2$ | $C_1 C_2$ | $C_2 C_3$ | $L_0 C_1$ | $L_1 C_1$ | $L_2 C_2$ | $L_3 C_3$ | $C_1 L_2$ | $C_2 L_3$ | $C_3 L_4$ | Com- pressive Weight |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|----------------------------------------|----------------------------------------|----------------------------------------|----------------------------------------|----------------------------------------|------------------------------|--------------------------------------|--------------------------------------|------------------------------------|----------------------------------------|----------------------------------------|-------------------------------------|----------------------------|
| Dom. Gov. 1905, Cl. I. | Dead Load... Live Load... | 58,600 - 151,200 | 93,800 - 252,600 | 93,800 + 252,600 | 93,800 + 252,600 | 105,500 + 293,400 | 95,100 - 245,700 | 69,300 + 193,000 | 25,000 + 75,000 | 10,000 + 35,300 | 57,200 - 163,200 | 19,100 - 95,300 | 13,400 - 44,800 | Trusses only |
| Dom. Gov. 1901 L^2 $I = D + L$ | Impact..... Total..... Unit..... Area reqd... | 109,100 - 318,900 16,000 19.9 | 166,500 + 492,900 16,000 30.8 | 166,500 + 492,900 14,600 33.8 | 166,500 + 492,900 14,600 33.8 | 184,500 + 553,400 14,600 37.9 | 177,200 - 518,000 40.4 | 53,600 + 142,900 16,000 8.9 | 56,000 + 176,000 8,100 19.3 | 27,700 + 73,000 8,100 9.0 | 121,200 - 341,600 16,000 21.4 | 78,900 - 193,300 16,000 12.1 | 18,500 - 49,900 16,000 3.1 | |
| Dom. Gov., 1905 L^2 $I = D + L > 80$ ft. | Impact..... Total..... Unit..... Area reqd... | 109,100 - 318,900 16,000 19.9 | 166,500 + 492,900 14,600 33.8 | 166,500 + 492,900 14,600 33.8 | 166,500 + 492,900 14,600 33.8 | 184,500 + 553,400 14,600 37.9 | 177,200 - 518,000 40.4 | 53,600 + 142,900 16,000 8.9 | 56,000 + 176,000 8,100 19.3 | 27,700 + 73,000 8,100 9.0 | 121,200 - 341,600 16,000 21.4 | 78,900 - 193,300 16,000 12.1 | 18,500 - 49,900 16,000 3.1 | 1.00 |
| $I = (1.40 - \frac{S}{200})L < 80$ ft. | Impact..... Total..... Unit..... Area reqd... | 109,100 - 318,900 16,000 19.9 | 166,500 + 492,900 14,600 33.8 | 166,500 + 492,900 14,600 33.8 | 166,500 + 492,900 14,600 33.8 | 184,500 + 553,400 14,600 37.9 | 177,200 - 518,000 40.4 | 53,600 + 142,900 16,000 8.9 | 56,000 + 176,000 8,100 19.3 | 27,700 + 73,000 8,100 9.0 | 121,200 - 341,600 16,000 21.4 | 78,900 - 193,300 16,000 12.1 | 18,500 - 49,900 16,000 3.1 | |
| Canadian Pacific Railway and American Bridge Company $I = (\frac{300}{S+300})L$ | Impact..... Total..... Unit..... Area reqd... | 100,800 - 310,600 16,000 19.4 | 155,100 + 481,500 16,000 30.1 | 155,100 + 481,500 14,600 33.0 | 155,100 + 481,500 14,600 33.0 | 175,600 + 504,600 14,600 37.3 | 163,800 - 504,600 39.6 | 59,400 + 148,700 16,000 9.3 | 60,000 + 190,000 8,100 19.8 | 30,300 + 75,600 8,100 9.3 | 122,400 - 342,800 16,000 21.4 | 76,300 - 190,700 16,000 11.9 | 38,400 - 96,600 16,000 6.0 | .96 |
| Pennsylvania Railway | Impact..... Total..... Unit..... Area reqd... | 108,700 - 318,500 16,000 19.9 | 164,500 + 490,900 16,000 30.7 | 164,500 + 490,900 14,600 33.6 | 164,500 + 490,900 14,600 33.6 | 185,300 + 534,800 14,600 38.0 | 176,500 - 517,300 40.4 | 54,300 + 143,600 16,000 9.0 | 81,000 + 181,000 8,100 22.3 | 27,500 + 72,800 8,100 9.0 | 141,100 - 361,500 16,000 22.6 | 114,400 - 228,800 16,000 14.3 | 31,400 - 62,800 16,000 3.9 | |
| F. H. Lewis, C.E., in Johnston's Framed Structures, $9,000(1 + \frac{\min.}{\max.})$ Tension $8,400(1 + \frac{\min.}{\max.})$ Compression | Total..... Unit..... Area reqd... | 209,800 - 11,500 18.3 | 326,400 - 11,600 28.1 | 326,400 + 9,800 33.3 | 326,400 + 9,800 33.3 | 368,000 + 9,800 37.6 | 340,800 - 38.8 | 89,300 + 11,000 8.1 | 100,000 + 5,350 18.7 | 45,300 + 6,500 7.0 | 220,400 - 10,800 20.4 | 114,400 - 9,000 12.7 | 31,400 - 9,000 3.5 | .91 |
| Cooper, 1901 | Total..... Units..... Area reqd... | 209,800 - 20,000 18.1 | 326,400 - 20,000 28.0 | 326,400 + 9,100 30.7 | 326,400 + 9,100 30.7 | 368,000 + 18,200 34.7 | 340,800 - 41.4 | 89,300 + 20,000 7.9 | 100,000 + 10,800 16.2 | 45,300 + 10,800 7.5 | 220,400 - 20,000 19.2 | 114,400 - 10,000 10.5 | 31,400 - 20,000 5.2 | |