

APPENDIX L

TABLE L-1
 STEEL W BEAM SPAN CHART
 WEIGHT OF BEAM X HEIGHT (AISC A36)
 STEEL BEAM LOCATED IN MIDDLE HALF OF GARAGE

| WIDTH (FEET) BEAM SPAN (FEET) | 22 | | | 24 | | | 26 | | | 28 | | | 30 | | |
|-------------------------------------|----------|---|--------------|----------|---|--------------|----------|---|--------------|----------|---|--------------|----------|---|--------------|
| | | N | END REACTION | | N | END REACTION | | N | END REACTION | | N | END REACTION | | N | END REACTION |
| 22 | W8 X 31 | | | W8 X 35 | | | W8 X 35 | | | W8 X 40 | | | W8 X 40 | | |
| | W10 X 22 | 4 | 6050 | W10 X 22 | 4 | 6600 | W10 X 22 | 4 | 7150 | W10 X 26 | 4 | 7700 | W10 X 26 | 4 | 8250 |
| | W12 X 19 | | | W12 X 19 | | | W12 X 19 | | | W12 X 19 | | | W12 X 22 | | |
| 24 | W8 X 40 | | | W8 X 48 | | | W8 X 48 | | | W8 X 48 | | | W8 X 48 | | |
| | W10 X 26 | 4 | 6600 | W10 X 30 | 4 | 7200 | W10 X 30 | 4 | 7800 | W10 X 30 | 5 | 8400 | W10 X 39 | 5 | 9000 |
| | W12 X 22 | | | W12 X 22 | | | W12 X 22 | | | W12 X 26 | | | W12 X 26 | | |
| 26 | W14 X 22 | | | W14 X 22 | | | W14 X 26 | | | W14 X 26 | | | W14 X 26 | | |
| | W10 X 39 | 4 | 7150 | W10 X 39 | 4 | 7800 | W10 X 39 | 5 | 8450 | W10 X 39 | 5 | 9100 | W10 X 45 | 5 | 9750 |
| | W12 X 26 | | | W12 X 26 | | | W12 X 26 | | | W12 X 26 | | | W12 X 30 | | |
| 28 | W14 X 26 | | | W14 X 26 | | | W14 X 26 | | | W14 X 30 | | | W14 X 30 | | |
| | W10 X 45 | 4 | 7700 | W10 X 45 | 4 | 8400 | W10 X 45 | 5 | 9100 | W10 X 49 | 5 | 9800 | W10 X 54 | 5 | 10500 |
| | W12 X 30 | | | W12 X 30 | | | W12 X 30 | | | W12 X 35 | | | W12 X 35 | | |

NOTES:

- 1 Beam must be anchored at each end with a minimum of 4- 16d nails and laterally supported.
- 2 N = number of 2x4 studs (#2 SPF) required in stud column at each end of beam span.
- 3 Stud column shall be nailed with 2 - 12d nails @ 12" o.c.. for each stud.
- 4 Stud column shall not exceed 11' 0" in height
- 5 Floor system shall be tied together using minimum of 7/16" structural sheathing
- 6 Beam design for 40 psf live load
- 7 Wood columns designed for 30 psf live load.