

TREX ELEVATIONSTM SPAN CHART

TABLE E-50 RESIDENTIAL

50 PSF TOTAL LOAD

Table Instructions: Enter the table with a joist span and cantilever length, then read the maximum allowable box beam span.

| JOIST SPAN LIMITS (FEET / CENTIMETERS) | | | | | |
|---|----------|----------|---|----------|----------|
| 12" JOIST SPACING O.C. | | | 16" JOIST SPACING O.C. | | |
| MAXIMUM JOIST SPAN (LEDGER TO BOX BEAM) | 15' - 0" | 457.2 cm | MAXIMUM JOIST SPAN (LEDGER TO BOX BEAM) | 13' - 0" | 396.2 cm |
| MAXIMUM CANTILEVER LENGTH | 4' - 0" | 213.4 cm | MAXIMUM CANTILEVER LENGTH | 4' - 0" | 182.9 cm |

(Single Trex 1 5/8" Joist)

(Single Trex 1 5/8" Joist)

MAXIMUM BOX BEAM SPAN (SINGLE BOX BEAM BETWEEN POSTS)

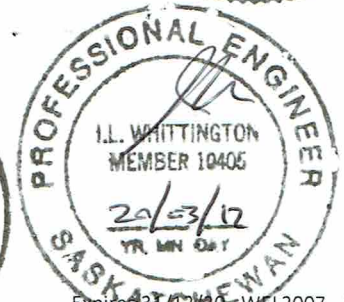
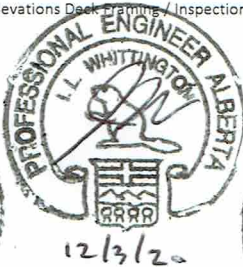
| CANTILEVER LENGTH (FEET/CENTIMETER) | JOIST SPAN (LEDGER TO BOX BEAM) (FEET / CENTIMETERS) | | | | | | | | | | | | | | | |
|-------------------------------------|--|-----------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| | 0' - 0" 0.0 | 1' - 0" 30.5 | 2' - 0" 61.0 | 3' - 0" 91.4 | 4' - 0" 121.9 | 5' - 0" 152.4 | 6' - 0" 182.9 | 7' - 0" 213.4 | 8' - 0" 243.8 | 9' - 0" 274.3 | 10' - 0" 304.8 | 11' - 0" 335.3 | 12' - 0" 365.8 | 13' - 0" 396.2 | 14' - 0" 426.7 | 15' - 0" 457.2 |
| 0' - 0" 0.0 | | 30' - 2" | 23' - 11" | 20' - 10" | 18' - 10" | 17' - 5" | 16' - 3" | 15' - 3" | 14' - 5" | 13' - 9" | 13' - 2" | 12' - 8" | 12' - 2" | 11' - 9" | 11' - 4" | 11' - 0" |
| 0' - 6" 15.2 | | 23' - 11" | 20' - 10" | 18' - 10" | 17' - 5" | 16' - 3" | 15' - 3" | 14' - 5" | 13' - 9" | 13' - 2" | 12' - 8" | 12' - 2" | 11' - 9" | 11' - 4" | 11' - 0" | 10' - 8" |
| 1' - 0" 30.5 | | | 18' - 10" | 17' - 5" | 16' - 3" | 15' - 3" | 14' - 5" | 13' - 9" | 13' - 2" | 12' - 8" | 12' - 2" | 11' - 9" | 11' - 4" | 11' - 0" | 10' - 8" | 10' - 4" |
| 1' - 6" 45.7 | | | | 16' - 3" | 15' - 3" | 14' - 5" | 13' - 9" | 13' - 2" | 12' - 8" | 12' - 2" | 11' - 9" | 11' - 4" | 11' - 0" | 10' - 8" | 10' - 4" | 10' - 1" |
| 2' - 0" 61.0 | | | | | 14' - 5" | 13' - 9" | 13' - 2" | 12' - 8" | 12' - 2" | 11' - 9" | 11' - 4" | 11' - 0" | 10' - 8" | 10' - 4" | 10' - 1" | 9' - 10" |
| 2' - 6" 76.2 | | | | | | 13' - 2" | 12' - 8" | 12' - 2" | 11' - 9" | 11' - 4" | 11' - 0" | 10' - 8" | 10' - 4" | 10' - 1" | 9' - 10" | 9' - 7" |
| 3' - 0" 91.4 | | | | | | | 12' - 2" | 11' - 9" | 11' - 4" | 11' - 0" | 10' - 8" | 10' - 4" | 10' - 1" | 9' - 10" | 9' - 7" | 9' - 4" |
| 3' - 6" 106.7 | | | | | | | | 11' - 4" | 11' - 0" | 10' - 8" | 10' - 4" | 10' - 1" | 9' - 10" | 9' - 7" | 9' - 4" | 9' - 1" |
| 4' - 0" 121.9 | | | | | | | | | 10' - 8" | 10' - 4" | 10' - 1" | 9' - 10" | 9' - 7" | 9' - 4" | 9' - 1" | 8' - 11" |

MAXIMUM BOX BEAM SPAN (DOUBLE BOX BEAM BETWEEN POSTS)

| CANTILEVER LENGTH (FEET/CENTIMETER) | JOIST SPAN (LEDGER TO BOX BEAM) (FEET / CENTIMETERS) | | | | | | | | | | | | | | | |
|-------------------------------------|--|-----------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| | 0' - 0" 0.0 | 1' - 0" 30.5 | 2' - 0" 61.0 | 3' - 0" 91.4 | 4' - 0" 121.9 | 5' - 0" 152.4 | 6' - 0" 182.9 | 7' - 0" 213.4 | 8' - 0" 243.8 | 9' - 0" 274.3 | 10' - 0" 304.8 | 11' - 0" 335.3 | 12' - 0" 365.8 | 13' - 0" 396.2 | 14' - 0" 426.7 | 15' - 0" 457.2 |
| 0' - 0" 0.0 | | 38' - 10" | 30' - 9" | 26' - 11" | 24' - 5" | 22' - 8" | 21' - 4" | 20' - 3" | 19' - 5" | 18' - 8" | 18' - 0" | 17' - 5" | 16' - 11" | 16' - 6" | 16' - 1" | 15' - 8" |
| 0' - 6" 15.2 | | 30' - 9" | 26' - 11" | 24' - 5" | 22' - 8" | 21' - 4" | 20' - 3" | 19' - 5" | 18' - 8" | 18' - 0" | 17' - 5" | 16' - 11" | 16' - 6" | 16' - 1" | 15' - 8" | 15' - 4" |
| 1' - 0" 30.5 | | | 24' - 5" | 22' - 8" | 21' - 4" | 20' - 3" | 19' - 5" | 18' - 8" | 18' - 0" | 17' - 5" | 16' - 11" | 16' - 6" | 16' - 1" | 15' - 8" | 15' - 4" | 15' - 1" |
| 1' - 6" 45.7 | | | | 21' - 4" | 20' - 3" | 19' - 5" | 18' - 8" | 18' - 0" | 17' - 5" | 16' - 11" | 16' - 6" | 16' - 1" | 15' - 8" | 15' - 4" | 15' - 1" | 14' - 9" |
| 2' - 0" 61.0 | | | | | 19' - 5" | 18' - 8" | 18' - 0" | 17' - 5" | 16' - 11" | 16' - 6" | 16' - 1" | 15' - 8" | 15' - 4" | 15' - 1" | 14' - 9" | 14' - 5" |
| 2' - 6" 76.2 | | | | | | 18' - 0" | 17' - 5" | 16' - 11" | 16' - 6" | 16' - 1" | 15' - 8" | 15' - 4" | 15' - 1" | 14' - 9" | 14' - 5" | 14' - 1" |
| 3' - 0" 91.4 | | | | | | | 16' - 11" | 16' - 6" | 16' - 1" | 15' - 8" | 15' - 4" | 15' - 1" | 14' - 9" | 14' - 5" | 14' - 1" | 13' - 9" |
| 3' - 6" 106.7 | | | | | | | | 16' - 1" | 15' - 8" | 15' - 4" | 15' - 1" | 14' - 9" | 14' - 5" | 14' - 1" | 13' - 9" | 13' - 5" |
| 4' - 0" 121.9 | | | | | | | | | 15' - 4" | 15' - 1" | 14' - 9" | 14' - 5" | 14' - 1" | 13' - 9" | 13' - 5" | 13' - 1" |

NOTES:

- All loads and load combinations are determined using ASCE 7-05. DL=Dead Load, LL=Live Load, SL=Snow Load. When LL<SL, the total load (TL) is 1.2DL+1.6SL+0.5LL, otherwise TL=1.2DL+1.6LL+0.5LL.
- Loads used to produce the tables above are as follows: DL=10psf, LL=40psf, SL=0psf.
- Deflection limits for joists are determined using IBC-2009 Section R505, Steel Floor Framing.
 - Joists - Live load deflection is limited to L/480, total deflection is limited to L/240, where L is the span length.
 - Box Beams - Live load deflection is limited to L/360, total deflection is limited to L/240, where L is the span length
- Grey areas in tables indicate instances where the joists do not backspan twice the cantilever distance or where the maximum joist span is exceeded.
- Grey areas are established based on 12 in. O.C. joist capacity.
- A partial list of section properties for each member is provided in the Trex Elevations Deck Framing / Inspection Details Table.
- Joist and box beam capacity are determined with AISI-S100-07 (LRFD).
- Joist yield stress is assumed as 33ksi.
- Box beam yield stress is assumed as 50ksi.
- Meets or exceeds the requirements of NBCC, BBBC or OBC.
- Span Charts are valid for Part 9 Buildings only.



TREX ELEVATIONSTM SPAN CHART

TABLE E-75 RESIDENTIAL

75 PSF TOTAL LOAD

Table Instructions: Enter the table with a joist span and cantilever length, then read the maximum allowable box beam span.

| JOIST SPAN LIMITS (FEET / CENTIMETERS) | | | | | | | |
|---|--|----------|------------------------|---|--|----------|----------|
| 12" JOIST SPACING O.C. | | | 16" JOIST SPACING O.C. | | | | |
| MAXIMUM JOIST SPAN (LEDGER TO BOX BEAM) | | 14' - 0" | 426.7 cm | MAXIMUM JOIST SPAN (LEDGER TO BOX BEAM) | | 12' - 0" | 365.8 cm |
| MAXIMUM CANTILEVER LENGTH | | 4' - 0" | 198.1 cm | MAXIMUM CANTILEVER LENGTH | | 4' - 0" | 167.6 cm |

(Single Trex 1 5/8" Joist)

(Single Trex 1 5/8" Joist)

MAXIMUM BOX BEAM SPAN (SINGLE BOX BEAM BETWEEN POSTS)

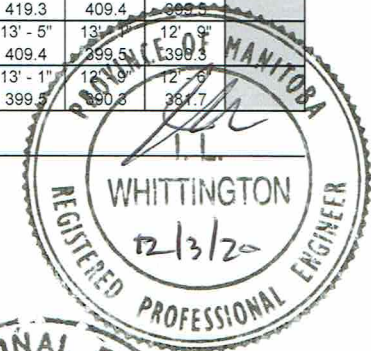
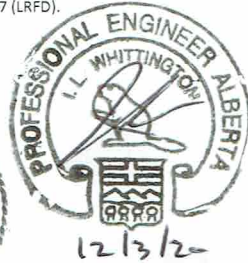
| | | JOIST SPAN (LEDGER TO BOX BEAM) (FEET / CENTIMETERS) | | | | | | | | | | | | | | | |
|-------------------------------------|------------------|--|-----------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| | | 0' - 0" 0.0 | 1' - 0" 30.5 | 2' - 0" 61.0 | 3' - 0" 91.4 | 4' - 0" 121.9 | 5' - 0" 152.4 | 6' - 0" 182.9 | 7' - 0" 213.4 | 8' - 0" 243.8 | 9' - 0" 274.3 | 10' - 0" 304.8 | 11' - 0" 335.3 | 12' - 0" 365.8 | 13' - 0" 396.2 | 14' - 0" 426.7 | 15' - 0" 457.2 |
| CANTILEVER LENGTH (FEET/CENTIMETER) | 0' - 0" 0.0 | | 28' - 7" | 22' - 8" | 19' - 10" | 17' - 10" | 16' - 5" | 15' - 3" | 14' - 4" | 13' - 7" | 12' - 11" | 12' - 4" | 11' - 10" | 11' - 4" | 10' - 11" | 10' - 7" | |
| | 0' - 6" 15.2 | | 872.1 | 692.2 | 604.6 | 545.6 | 501.5 | 466.8 | 438.5 | 414.7 | 394.3 | 376.6 | 360.9 | 347.0 | 334.4 | 323.1 | 312.7 |
| | 1' - 0" 30.5 | | | 17' - 10" | 16' - 5" | 15' - 3" | 14' - 4" | 13' - 7" | 12' - 11" | 12' - 4" | 11' - 10" | 11' - 4" | 10' - 11" | 10' - 7" | 10' - 3" | 9' - 11" | 9' - 7" |
| | 1' - 6" 45.7 | | | | 15' - 3" | 14' - 4" | 13' - 7" | 12' - 11" | 12' - 4" | 11' - 10" | 11' - 4" | 10' - 11" | 10' - 7" | 10' - 3" | 9' - 11" | 9' - 7" | 9' - 4" |
| | 2' - 0" 61.0 | | | | | 13' - 7" | 12' - 11" | 12' - 4" | 11' - 10" | 11' - 4" | 10' - 11" | 10' - 7" | 10' - 3" | 9' - 11" | 9' - 7" | 9' - 4" | 9' - 1" |
| | 2' - 6" 76.2 | | | | | | 12' - 4" | 11' - 10" | 11' - 4" | 10' - 11" | 10' - 7" | 10' - 3" | 9' - 11" | 9' - 7" | 9' - 4" | 9' - 1" | 8' - 10" |
| | 3' - 0" 91.4 | | | | | | | 11' - 4" | 10' - 11" | 10' - 7" | 10' - 3" | 9' - 11" | 9' - 7" | 9' - 4" | 9' - 1" | 8' - 10" | 8' - 7" |
| | 3' - 6" 106.7 | | | | | | | | 10' - 7" | 10' - 3" | 9' - 11" | 9' - 7" | 9' - 4" | 9' - 1" | 8' - 10" | 8' - 7" | 8' - 4" |
| | 4' - 0" 121.9 | | | | | | | | | 9' - 11" | 9' - 7" | 9' - 4" | 9' - 1" | 8' - 10" | 8' - 7" | 8' - 4" | 8' - 1" |

MAXIMUM BOX BEAM SPAN (DOUBLE BOX BEAM BETWEEN POSTS)

| | | JOIST SPAN (LEDGER TO BOX BEAM) (FEET / CENTIMETERS) | | | | | | | | | | | | | | | |
|-------------------------------------|------------------|--|-----------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| | | 0' - 0" 0.0 | 1' - 0" 30.5 | 2' - 0" 61.0 | 3' - 0" 91.4 | 4' - 0" 121.9 | 5' - 0" 152.4 | 6' - 0" 182.9 | 7' - 0" 213.4 | 8' - 0" 243.8 | 9' - 0" 274.3 | 10' - 0" 304.8 | 11' - 0" 335.3 | 12' - 0" 365.8 | 13' - 0" 396.2 | 14' - 0" 426.7 | 15' - 0" 457.2 |
| CANTILEVER LENGTH (FEET/CENTIMETER) | 0' - 0" 0.0 | | 36' - 0" | 28' - 7" | 24' - 11" | 22' - 8" | 21' - 1" | 19' - 10" | 18' - 10" | 18' - 0" | 17' - 3" | 16' - 8" | 16' - 2" | 15' - 8" | 15' - 4" | 14' - 11" | 14' - 11" |
| | 0' - 6" 15.2 | | 1098.9 | 872.2 | 762.0 | 692.3 | 642.7 | 604.8 | 574.5 | 549.5 | 528.3 | 510.1 | 494.1 | 480.0 | 467.4 | 456.0 | 445.6 |
| | 1' - 0" 30.5 | | | 22' - 8" | 21' - 1" | 19' - 10" | 18' - 10" | 18' - 0" | 17' - 3" | 16' - 8" | 16' - 2" | 15' - 8" | 15' - 4" | 14' - 11" | 14' - 7" | 14' - 3" | 14' - 0" |
| | 1' - 6" 45.7 | | | | 19' - 10" | 18' - 10" | 18' - 0" | 17' - 3" | 16' - 8" | 16' - 2" | 15' - 8" | 15' - 4" | 14' - 11" | 14' - 7" | 14' - 3" | 14' - 0" | 13' - 9" |
| | 2' - 0" 61.0 | | | | | 18' - 10" | 17' - 3" | 16' - 8" | 16' - 2" | 15' - 8" | 15' - 4" | 14' - 11" | 14' - 7" | 14' - 3" | 14' - 0" | 13' - 9" | 13' - 5" |
| | 2' - 6" 76.2 | | | | | | 16' - 8" | 16' - 2" | 15' - 8" | 15' - 4" | 14' - 11" | 14' - 7" | 14' - 3" | 14' - 0" | 13' - 9" | 13' - 5" | 13' - 1" |
| | 3' - 0" 91.4 | | | | | | | 15' - 8" | 15' - 4" | 14' - 11" | 14' - 7" | 14' - 3" | 14' - 0" | 13' - 9" | 13' - 5" | 13' - 1" | 12' - 9" |
| | 3' - 6" 106.7 | | | | | | | | 14' - 11" | 14' - 7" | 14' - 3" | 14' - 0" | 13' - 9" | 13' - 5" | 13' - 1" | 12' - 9" | 12' - 5" |
| | 4' - 0" 121.9 | | | | | | | | | 14' - 3" | 14' - 0" | 13' - 9" | 13' - 5" | 13' - 1" | 12' - 9" | 12' - 5" | 12' - 1" |

NOTES:

- All loads and load combinations are determined using ASCE 7-05. DL=Dead Load, LL=Live Load, SL=Snow Load. When LL<SL, the total load (TL) is 1.2DL+1.6SL+0.5LL, otherwise TL=1.2DL+1.6LL+0.5SL.
- Loads used to produce the tables above are as follows: DL=10psf, LL=40psf, SL=25psf.
- Deflection limits for joists are determined using IBC-2009 Section R505, Steel Floor Framing. Joists - Live load deflection is limited to L/480, total deflection is limited to L/240, where L is the span length. Box Beams - Live load deflection is limited to L/360, total deflection is limited to L/240, where L is the span length.
- Grey areas in tables indicate instances where the joists do not backspan twice the cantilever distance or where the maximum joist span is exceeded.
- Grey areas are established based on 12 in. O.C. joist capacity.
- A partial list of section properties for each member is provided in the Trex Elevations Deck Framing / Inspection Details Table.
- Joist and box beam capacity are determined with AISI-S100-07 (LRFD).
- Joist yield stress is assumed as 33ksi.
- Box beam yield stress is assumed as 50ksi.
- Meets or exceeds the requirements of NBCC, BBBC or OBC.
- Span Charts are valid for Part 9 Buildings only.



TREX ELEVATIONSTM SPAN CHART

TABLE E-100 RESIDENTIAL

100 PSF TOTAL LOAD

Table Instructions: Enter the table with a joist span and cantilever length, then read the maximum allowable box beam span.

| JOIST SPAN LIMITS (FEET / CENTIMETERS) | | | | | |
|---|----------|----------|---|----------|----------|
| 12" JOIST SPACING O.C. | | | 16" JOIST SPACING O.C. | | |
| MAXIMUM JOIST SPAN (LEDGER TO BOX BEAM) | 12' - 0" | 365.8 cm | MAXIMUM JOIST SPAN (LEDGER TO BOX BEAM) | 11' - 0" | 335.3 cm |
| MAXIMUM CANTILEVER LENGTH | 4' - 0" | 167.6 cm | MAXIMUM CANTILEVER LENGTH | 3' - 0" | 137.2 cm |

(Single Trex 1 5/8" Joist)

(Single Trex 1 5/8" Joist)

MAXIMUM BOX BEAM SPAN (SINGLE BOX BEAM BETWEEN POSTS)

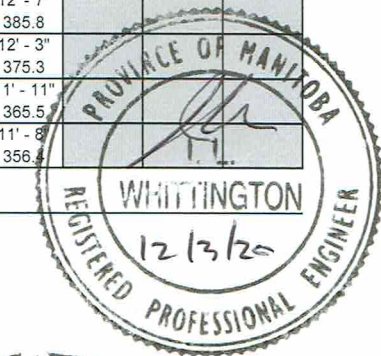
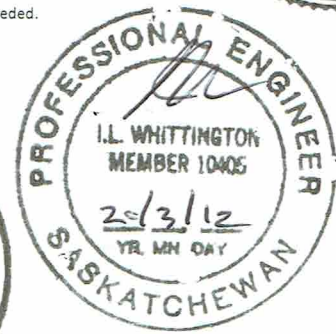
| CANTILEVER LENGTH (FEET/CENTIMETER) | JOIST SPAN (LEDGER TO BOX BEAM) (FEET / CENTIMETERS) | JOIST SPAN (LEDGER TO BOX BEAM) (FEET / CENTIMETERS) | | | | | | | | | | | | | | | |
|-------------------------------------|--|--|-----------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| | | 0' - 0" 0.0 | 1' - 0" 30.5 | 2' - 0" 61.0 | 3' - 0" 91.4 | 4' - 0" 121.9 | 5' - 0" 152.4 | 6' - 0" 182.9 | 7' - 0" 213.4 | 8' - 0" 243.8 | 9' - 0" 274.3 | 10' - 0" 304.8 | 11' - 0" 335.3 | 12' - 0" 365.8 | 13' - 0" 396.2 | 14' - 0" 426.7 | 15' - 0" 457.2 |
| 0' - 0" 0.0 | | | 25' - 11" | 20' - 7" | 18' - 0" | 16' - 4" | 14' - 11" | 13' - 10" | 13' - 0" | 12' - 3" | 11' - 7" | 11' - 1" | 10' - 7" | 10' - 2" | | | |
| 0' - 6" 15.2 | | | 792.4 | 628.9 | 549.4 | 499.1 | 456.9 | 423.9 | 397.0 | 374.5 | 355.3 | 338.6 | 323.9 | 310.8 | | | |
| 1' - 0" 30.5 | | | 628.9 | 549.4 | 499.1 | 456.9 | 423.9 | 397.0 | 374.5 | 355.3 | 338.6 | 323.9 | 310.8 | 299.1 | | | |
| 1' - 6" 45.7 | | | | 16' - 4" | 14' - 11" | 13' - 10" | 13' - 0" | 12' - 3" | 11' - 7" | 11' - 1" | 10' - 7" | 10' - 2" | 9' - 9" | 9' - 5" | 9' - 1" | | |
| 2' - 0" 61.0 | | | | | 13' - 10" | 13' - 0" | 12' - 3" | 11' - 7" | 11' - 1" | 10' - 7" | 10' - 2" | 9' - 9" | 9' - 5" | 9' - 1" | 8' - 10" | 8' - 10" | 8' - 10" |
| 2' - 6" 76.2 | | | | | | 12' - 3" | 11' - 7" | 11' - 1" | 10' - 7" | 10' - 2" | 9' - 9" | 9' - 5" | 9' - 1" | 8' - 10" | 8' - 6" | 8' - 6" | 8' - 6" |
| 3' - 0" 91.4 | | | | | | | 11' - 1" | 10' - 7" | 10' - 2" | 9' - 9" | 9' - 5" | 9' - 1" | 8' - 10" | 8' - 6" | 8' - 3" | 8' - 3" | 8' - 3" |
| 3' - 6" 106.7 | | | | | | | | 10' - 2" | 9' - 9" | 9' - 5" | 9' - 1" | 8' - 10" | 8' - 6" | 8' - 3" | 8' - 1" | 8' - 1" | 8' - 1" |
| 4' - 0" 121.9 | | | | | | | | | 10' - 2" | 9' - 9" | 9' - 5" | 9' - 1" | 8' - 10" | 8' - 6" | 8' - 3" | 8' - 1" | 8' - 1" |

MAXIMUM BOX BEAM SPAN (DOUBLE BOX BEAM BETWEEN POSTS)

| CANTILEVER LENGTH (FEET/CENTIMETER) | JOIST SPAN (LEDGER TO BOX BEAM) (FEET / CENTIMETERS) | JOIST SPAN (LEDGER TO BOX BEAM) (FEET / CENTIMETERS) | | | | | | | | | | | | | | | |
|-------------------------------------|--|--|-----------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| | | 0' - 0" 0.0 | 1' - 0" 30.5 | 2' - 0" 61.0 | 3' - 0" 91.4 | 4' - 0" 121.9 | 5' - 0" 152.4 | 6' - 0" 182.9 | 7' - 0" 213.4 | 8' - 0" 243.8 | 9' - 0" 274.3 | 10' - 0" 304.8 | 11' - 0" 335.3 | 12' - 0" 365.8 | 13' - 0" 396.2 | 14' - 0" 426.7 | 15' - 0" 457.2 |
| 0' - 0" 0.0 | | | 32' - 9" | 25' - 11" | 22' - 8" | 20' - 7" | 19' - 11" | 18' - 0" | 17' - 11" | 16' - 4" | 15' - 8" | 15' - 2" | 14' - 8" | 14' - 3" | | | |
| 0' - 6" 15.2 | | | 998.5 | 792.5 | 692.3 | 629.0 | 583.9 | 549.5 | 521.9 | 499.2 | 480.0 | 463.4 | 448.9 | 436.1 | 424.6 | | |
| 1' - 0" 30.5 | | | 792.5 | 692.3 | 629.0 | 583.9 | 549.5 | 521.9 | 499.2 | 480.0 | 463.4 | 448.9 | 436.1 | 424.6 | 414.3 | | |
| 1' - 6" 45.7 | | | | 20' - 7" | 19' - 1" | 18' - 0" | 17' - 11" | 16' - 4" | 15' - 8" | 15' - 2" | 14' - 8" | 14' - 3" | 13' - 11" | 13' - 7" | 13' - 3" | | |
| 2' - 0" 61.0 | | | | | 18' - 0" | 17' - 11" | 16' - 4" | 15' - 8" | 15' - 2" | 14' - 8" | 14' - 3" | 13' - 11" | 13' - 7" | 13' - 3" | 12' - 11" | 12' - 7" | 12' - 7" |
| 2' - 6" 76.2 | | | | | 16' - 4" | 15' - 8" | 15' - 2" | 14' - 8" | 14' - 3" | 13' - 11" | 13' - 7" | 13' - 3" | 12' - 11" | 12' - 7" | 12' - 3" | 12' - 3" | 12' - 3" |
| 3' - 0" 91.4 | | | | | | 15' - 2" | 14' - 8" | 14' - 3" | 13' - 11" | 13' - 7" | 13' - 3" | 12' - 11" | 12' - 7" | 12' - 3" | 11' - 11" | 11' - 11" | 11' - 11" |
| 3' - 6" 106.7 | | | | | | | 14' - 3" | 13' - 11" | 13' - 7" | 13' - 3" | 12' - 11" | 12' - 7" | 12' - 3" | 11' - 11" | 11' - 7" | 11' - 7" | 11' - 7" |
| 4' - 0" 121.9 | | | | | | | | 14' - 3" | 13' - 11" | 13' - 7" | 13' - 3" | 12' - 11" | 12' - 7" | 12' - 3" | 11' - 11" | 11' - 7" | 11' - 7" |

NOTES:

- All loads and load combinations are determined using ASCE 7-05. DL=Dead Load, LL=Live Load, SL=Snow Load. When LL<SL, the total load (TL) is 1.2DL+1.6SL+0.5LL, otherwise TL=1.2DL+1.6LL+0.5SL.
- Loads used to produce the tables above are as follows: DL=10psf, LL=40psf, SL=50psf.
- Deflection limits for joists are determined using IBC-2009 Section R505, Steel Floor Framing. Joists - Live load deflection is limited to L/480, total deflection is limited to L/240, where L is the span length. Box Beams - Live load deflection is limited to L/360, total deflection is limited to L/240, where L is the span length.
- Grey areas in tables indicate instances where the joists do not backspan twice the cantilever distance or where the maximum joist span is exceeded.
- Grey areas are established based on 12 in. O.C. joist capacity.
- A partial list of section properties for each member is provided in the Trex Elevations Deck Framing / Inspection Details Table.
- Joist and box beam capacity are determined with AISI-S100-07 (LRFD).
- Joist yield stress is assumed as 33ksi.
- Box beam yield stress is assumed as 50ksi.
- Meets or exceeds the requirements of NBCC, BBBC or OBC.
- Span Charts are valid for Part 9 Buildings only.



TREX ELEVATIONSTM SPAN CHART

TABLE E-125 RESIDENTIAL

125 PSF TOTAL LOAD

Table Instructions: Enter the table with a joist span and cantilever length, then read the maximum allowable box beam span.

| JOIST SPAN LIMITS (FEET / CENTIMETERS) | | | | | |
|---|----------|----------|---|---------|----------|
| 12" JOIST SPACING O.C. | | | 16" JOIST SPACING O.C. | | |
| MAXIMUM JOIST SPAN (LEDGER TO BOX BEAM) | 10' - 0" | 304.8 cm | MAXIMUM JOIST SPAN (LEDGER TO BOX BEAM) | 9' - 0" | 274.3 cm |
| MAXIMUM CANTILEVER LENGTH | 3' - 0" | 137.2 cm | MAXIMUM CANTILEVER LENGTH | 2' - 0" | 106.7 cm |

(Single Trex 1 5/8" Joist)

(Single Trex 1 5/8" Joist)

MAXIMUM BOX BEAM SPAN (SINGLE BOX BEAM BETWEEN POSTS)

| CANTILEVER LENGTH (FEET/CENTIMETER) | JOIST SPAN (LEDGER TO BOX BEAM) (FEET / CENTIMETERS) | | | | | | | | | | | | | | | |
|-------------------------------------|--|--------------------|--------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| | 0' - 0" 0.0 | 1' - 0" 30.5 | 2' - 0" 61.0 | 3' - 0" 91.4 | 4' - 0" 121.9 | 5' - 0" 152.4 | 6' - 0" 182.9 | 7' - 0" 213.4 | 8' - 0" 243.8 | 9' - 0" 274.3 | 10' - 0" 304.8 | 11' - 0" 335.3 | 12' - 0" 365.8 | 13' - 0" 396.2 | 14' - 0" 426.7 | 15' - 0" 457.2 |
| 0' - 0" 0.0 | | 23' - 11" 729.7 | 18' - 10" 576.6 | 16' - 3" 495.7 | 14' - 5" 441.9 | 13' - 2" 402.4 | 12' - 2" 371.6 | 11' - 4" 346.7 | 10' - 8" 325.9 | 10' - 1" 308.2 | 9' - 7" 292.8 | 9' - 1" 279.3 | 8' - 7" 267.3 | | | |
| 0' - 6" 15.2 | | 18' - 10" 576.6 | 16' - 3" 495.7 | 14' - 5" 441.9 | 13' - 2" 402.4 | 12' - 2" 371.6 | 11' - 4" 346.7 | 10' - 8" 325.9 | 10' - 1" 308.2 | 9' - 7" 292.8 | 9' - 1" 279.3 | 8' - 7" 267.3 | 8' - 1" 256.5 | | | |
| 1' - 0" 30.5 | | | 14' - 5" 441.9 | 13' - 2" 402.4 | 12' - 2" 371.6 | 11' - 4" 346.7 | 10' - 8" 325.9 | 10' - 1" 308.2 | 9' - 7" 292.8 | 9' - 1" 279.3 | 8' - 9" 267.3 | 8' - 3" 256.5 | 7' - 10" 246.7 | | | |
| 1' - 6" 45.7 | | | | 12' - 2" 371.6 | 11' - 4" 346.7 | 10' - 8" 325.9 | 10' - 1" 308.2 | 9' - 7" 292.8 | 9' - 1" 279.3 | 8' - 9" 267.3 | 8' - 3" 256.5 | 7' - 10" 246.7 | 7' - 4" 229.6 | | | |
| 2' - 0" 61.0 | | | | | 10' - 8" 325.9 | 10' - 1" 308.2 | 9' - 7" 292.8 | 9' - 1" 279.3 | 8' - 9" 267.3 | 8' - 3" 256.5 | 7' - 10" 246.7 | 7' - 4" 229.6 | 6' - 11" 213.4 | | | |
| 2' - 6" 76.2 | | | | | | 9' - 7" 292.8 | 9' - 1" 279.3 | 8' - 9" 267.3 | 8' - 3" 256.5 | 7' - 10" 246.7 | 7' - 4" 229.6 | 6' - 11" 213.4 | 6' - 5" 198.1 | | | |
| 3' - 0" 91.4 | | | | | | | 8' - 9" 267.3 | 8' - 3" 256.5 | 7' - 10" 246.7 | 7' - 4" 229.6 | 6' - 11" 213.4 | 6' - 5" 198.1 | 5' - 11" 182.9 | | | |
| 3' - 6" 106.7 | | | | | | | | 8' - 3" 256.5 | 7' - 10" 246.7 | 7' - 4" 229.6 | 6' - 11" 213.4 | 6' - 5" 198.1 | 5' - 11" 182.9 | 5' - 5" 171.6 | | |
| 4' - 0" 121.9 | | | | | | | | | 7' - 10" 246.7 | 7' - 4" 229.6 | 6' - 11" 213.4 | 6' - 5" 198.1 | 5' - 11" 182.9 | 5' - 5" 171.6 | 5' - 0" 152.4 | |

MAXIMUM BOX BEAM SPAN (DOUBLE BOX BEAM BETWEEN POSTS)

| CANTILEVER LENGTH (FEET/CENTIMETER) | JOIST SPAN (LEDGER TO BOX BEAM) (FEET / CENTIMETERS) | | | | | | | | | | | | | | | |
|-------------------------------------|--|-------------------|-------------------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|--------------------|
| | 0' - 0" 0.0 | 1' - 0" 30.5 | 2' - 0" 61.0 | 3' - 0" 91.4 | 4' - 0" 121.9 | 5' - 0" 152.4 | 6' - 0" 182.9 | 7' - 0" 213.4 | 8' - 0" 243.8 | 9' - 0" 274.3 | 10' - 0" 304.8 | 11' - 0" 335.3 | 12' - 0" 365.8 | 13' - 0" 396.2 | 14' - 0" 426.7 | 15' - 0" 457.2 |
| 0' - 0" 0.0 | | 30' - 4" 926.9 | 24' - 1" 735.7 | 21' - 1" 642.7 | 19' - 1" 583.9 | 17' - 9" 542.0 | 17' - 9" 510.1 | 16' - 8" 484.5 | 15' - 10" 463.4 | 15' - 2" 445.6 | 14' - 7" 429.2 | 14' - 0" 410.5 | 13' - 5" 393.8 | 12' - 11" 379.0 | 12' - 5" 365.5 | 11' - 11" 353.3 |
| 0' - 6" 15.2 | | 24' - 1" 735.7 | 21' - 1" 642.7 | 19' - 1" 583.9 | 17' - 9" 542.0 | 16' - 8" 510.1 | 15' - 10" 484.5 | 15' - 2" 463.4 | 14' - 7" 445.6 | 14' - 0" 429.2 | 13' - 5" 410.5 | 12' - 11" 393.8 | 12' - 5" 379.0 | 11' - 11" 365.5 | 11' - 7" 353.3 | 11' - 1" 342.1 |
| 1' - 0" 30.5 | | | 19' - 1" 583.9 | 17' - 9" 542.0 | 16' - 8" 510.1 | 15' - 10" 484.5 | 15' - 2" 463.4 | 14' - 7" 445.6 | 14' - 0" 429.2 | 13' - 5" 410.5 | 12' - 11" 393.8 | 12' - 5" 379.0 | 11' - 11" 365.5 | 11' - 7" 353.3 | 11' - 1" 342.1 | 10' - 7" 327.8 |
| 1' - 6" 45.7 | | | | 16' - 8" 510.1 | 15' - 10" 484.5 | 15' - 2" 463.4 | 14' - 7" 445.6 | 14' - 0" 429.2 | 13' - 5" 410.5 | 12' - 11" 393.8 | 12' - 5" 379.0 | 11' - 11" 365.5 | 11' - 7" 353.3 | 11' - 1" 342.1 | 10' - 7" 327.8 | 10' - 1" 308.2 |
| 2' - 0" 61.0 | | | | | 15' - 2" 463.4 | 14' - 7" 445.6 | 14' - 0" 429.2 | 13' - 5" 410.5 | 12' - 11" 393.8 | 12' - 5" 379.0 | 11' - 11" 365.5 | 11' - 7" 353.3 | 11' - 1" 342.1 | 10' - 7" 327.8 | 10' - 1" 308.2 | 9' - 7" 292.8 |
| 2' - 6" 76.2 | | | | | | 14' - 0" 429.2 | 13' - 5" 410.5 | 12' - 11" 393.8 | 12' - 5" 379.0 | 11' - 11" 365.5 | 11' - 7" 353.3 | 11' - 1" 342.1 | 10' - 7" 327.8 | 10' - 1" 308.2 | 9' - 7" 292.8 | 9' - 1" 279.3 |
| 3' - 0" 91.4 | | | | | | | 12' - 11" 393.8 | 12' - 5" 379.0 | 11' - 11" 365.5 | 11' - 7" 353.3 | 11' - 1" 342.1 | 10' - 7" 327.8 | 10' - 1" 308.2 | 9' - 7" 292.8 | 9' - 1" 279.3 | 8' - 7" 267.3 |
| 3' - 6" 106.7 | | | | | | | | 12' - 5" 379.0 | 11' - 11" 365.5 | 11' - 7" 353.3 | 11' - 1" 342.1 | 10' - 7" 327.8 | 10' - 1" 308.2 | 9' - 7" 292.8 | 9' - 1" 279.3 | 8' - 7" 267.3 |
| 4' - 0" 121.9 | | | | | | | | | 11' - 11" 365.5 | 11' - 7" 353.3 | 11' - 1" 342.1 | 10' - 7" 327.8 | 10' - 1" 308.2 | 9' - 7" 292.8 | 9' - 1" 279.3 | 8' - 7" 267.3 |

NOTES:

- All loads and load combinations are determined using ASCE 7-05. DL=Dead Load, LL=Live Load, SL=Snow Load. When $LL < SL$, the total load (TL) is $1.2DL + 1.6SL + 0.5LL$, otherwise $TL = 1.2DL + 1.6LL + 0.5SL$.
- Loads used to produce the tables above are as follows: DL=10psf, LL=40psf, SL=75psf.
- Deflection limits for joists are determined using IBC-2009 Section R505, Steel Floor Framing. Joists - Live load deflection is limited to $L/480$, total deflection is limited to $L/240$, where L is the span length. Box Beams - Live load deflection is limited to $L/360$, total deflection is limited to $L/240$, where L is the span length.
- Grey areas in tables indicate instances where the joists do not backspan twice the cantilever distance or where the maximum joist span is exceeded.
- Grey areas are established based on 12 in. O.C. joist capacity.
- A partial list of section properties for each member is provided in the Trex Elevations Deck Framing / Inspection Details Table.
- Joist and box beam capacity are determined with AISI-S100-07 (LRFD).
- Joist yield stress is assumed as 33ksi.
- Box beam yield stress is assumed as 50ksi.
- Meets or exceeds the requirements of NBCC, BBBC or OBC.
- Span Charts are valid for Part 9 Buildings only.



TREX ELEVATIONSTM SPAN CHART

TABLE E-150 RESIDENTIAL

150 PSF TOTAL LOAD

Table Instructions: Enter the table with a joist span and cantilever length, then read the maximum allowable box beam span.

| JOIST SPAN LIMITS (FEET / CENTIMETERS) | | | | | |
|---|---------|----------|---|---------|----------|
| 12" JOIST SPACING O.C. | | | 16" JOIST SPACING O.C. | | |
| MAXIMUM JOIST SPAN (LEDGER TO BOX BEAM) | 9' - 0" | 274.3 cm | MAXIMUM JOIST SPAN (LEDGER TO BOX BEAM) | 8' - 0" | 243.8 cm |
| MAXIMUM CANTILEVER LENGTH | 2' - 6" | 121.9 cm | MAXIMUM CANTILEVER LENGTH | 1' - 6" | 91.4 cm |

(Single Trex 1 5/8" Joist)

(Single Trex 1 5/8" Joist)

MAXIMUM BOX BEAM SPAN (SINGLE BOX BEAM BETWEEN POSTS)

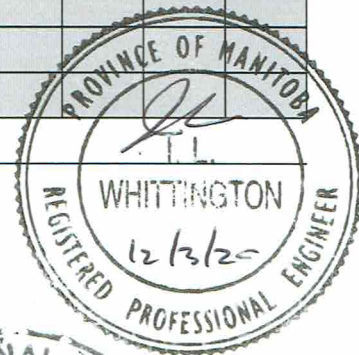
| CANTILEVER LENGTH (FEET/CENTIMETER) | JOIST SPAN (LEDGER TO BOX BEAM) (FEET / CENTIMETERS) | | | | | | | | | | | | | | | |
|-------------------------------------|--|-------------------|-------------------|--------------------|--------------------|--------------------|--------------------|-------------------|------------------|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| | 0' - 0" 0.0 | 1' - 0" 30.5 | 2' - 0" 61.0 | 3' - 0" 91.4 | 4' - 0" 121.9 | 5' - 0" 152.4 | 6' - 0" 182.9 | 7' - 0" 213.4 | 8' - 0" 243.8 | 9' - 0" 274.3 | 10' - 0" 304.8 | 11' - 0" 335.3 | 12' - 0" 365.8 | 13' - 0" 396.2 | 14' - 0" 426.7 | 15' - 0" 457.2 |
| 0' - 0" 0.0 | | 22' - 1" 674.5 | 17' - 4" 529.3 | 14' - 9" 451.7 | 13' - 1" 400.5 | 11' - 10" 363.2 | 10' - 11" 334.2 | 10' - 2" 310.8 | 9' - 6" 291.3 | 9' - 0" 274.7 | | | | | | |
| 0' - 6" 15.2 | | 17' - 4" 529.3 | 14' - 9" 451.7 | 13' - 1" 400.5 | 11' - 10" 363.2 | 10' - 11" 334.2 | 10' - 2" 310.8 | 9' - 6" 291.3 | 9' - 0" 274.7 | 8' - 6" 260.3 | | | | | | |
| 1' - 0" 30.5 | | | 13' - 1" 400.5 | 11' - 10" 363.2 | 10' - 11" 334.2 | 10' - 2" 310.8 | 9' - 6" 291.3 | 9' - 0" 274.7 | 8' - 6" 260.3 | 8' - 1" 247.7 | | | | | | |
| 1' - 6" 45.7 | | | | 10' - 11" 334.2 | 10' - 2" 310.8 | 9' - 6" 291.3 | 9' - 0" 274.7 | 8' - 6" 260.3 | 8' - 1" 247.7 | 7' - 9" 236.4 | | | | | | |
| 2' - 0" 61.0 | | | | | 9' - 6" 291.3 | 9' - 0" 274.7 | 8' - 6" 260.3 | 8' - 1" 247.7 | 7' - 9" 236.4 | 7' - 5" 226.3 | | | | | | |
| 2' - 6" 76.2 | | | | | | 8' - 6" 260.3 | 8' - 1" 247.7 | 7' - 9" 236.4 | 7' - 5" 226.3 | 7' - 1" 217.2 | | | | | | |
| 3' - 0" 91.4 | | | | | | | | | | | | | | | | |
| 3' - 6" 106.7 | | | | | | | | | | | | | | | | |
| 4' - 0" 121.9 | | | | | | | | | | | | | | | | |

MAXIMUM BOX BEAM SPAN (DOUBLE BOX BEAM BETWEEN POSTS)

| CANTILEVER LENGTH (FEET/CENTIMETER) | JOIST SPAN (LEDGER TO BOX BEAM) (FEET / CENTIMETERS) | | | | | | | | | | | | | | | |
|-------------------------------------|--|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| | 0' - 0" 0.0 | 1' - 0" 30.5 | 2' - 0" 61.0 | 3' - 0" 91.4 | 4' - 0" 121.9 | 5' - 0" 152.4 | 6' - 0" 182.9 | 7' - 0" 213.4 | 8' - 0" 243.8 | 9' - 0" 274.3 | 10' - 0" 304.8 | 11' - 0" 335.3 | 12' - 0" 365.8 | 13' - 0" 396.2 | 14' - 0" 426.7 | 15' - 0" 457.2 |
| 0' - 0" 0.0 | | 28' - 7" 872.2 | 22' - 8" 692.3 | 19' - 10" 604.8 | 18' - 0" 549.5 | 16' - 8" 510.1 | 15' - 8" 480.0 | 14' - 10" 454.3 | 14' - 0" 427.1 | 13' - 3" 404.1 | | | | | | |
| 0' - 6" 15.2 | | 22' - 8" 692.3 | 19' - 10" 604.8 | 18' - 0" 549.5 | 16' - 8" 510.1 | 15' - 8" 480.0 | 14' - 10" 454.3 | 14' - 0" 427.1 | 13' - 3" 404.1 | 12' - 7" 384.3 | | | | | | |
| 1' - 0" 30.5 | | | 18' - 0" 549.5 | 16' - 8" 510.1 | 15' - 8" 480.0 | 14' - 10" 454.3 | 14' - 0" 427.1 | 13' - 3" 404.1 | 12' - 7" 384.3 | 12' - 0" 366.9 | | | | | | |
| 1' - 6" 45.7 | | | | 15' - 8" 480.0 | 14' - 10" 454.3 | 14' - 0" 427.1 | 13' - 3" 404.1 | 12' - 7" 384.3 | 12' - 0" 366.9 | 11' - 6" 351.5 | | | | | | |
| 2' - 0" 61.0 | | | | | 14' - 0" 427.1 | 13' - 3" 404.1 | 12' - 7" 384.3 | 12' - 0" 366.9 | 11' - 6" 351.5 | 11' - 0" 337.7 | | | | | | |
| 2' - 6" 76.2 | | | | | | 12' - 7" 384.3 | 12' - 0" 366.9 | 11' - 6" 351.5 | 11' - 0" 337.7 | 10' - 8" 325.3 | | | | | | |
| 3' - 0" 91.4 | | | | | | | | | | | | | | | | |
| 3' - 6" 106.7 | | | | | | | | | | | | | | | | |
| 4' - 0" 121.9 | | | | | | | | | | | | | | | | |

NOTES:

- All loads and load combinations are determined using ASCE 7-05. DL=Dead Load, LL=Live Load, SL=Snow Load. When LL<SL, the total load (TL) is 1.2DL+1.6SL+0.5LL, otherwise TL=1.2DL+1.6LL+0.5SL.
- Loads used to produce the tables above are as follows: DL=10psf, LL=40psf, SL=100psf.
- Deflection limits for joists are determined using IBC-2009 Section R505, Steel Floor Framing. Joists - Live load deflection is limited to L/480, total deflection is limited to L/240, where L is the span length. Box Beams - Live load deflection is limited to L/360, total deflection is limited to L/240, where L is the span length.
- Grey areas in tables indicate instances where the joists do not backspan twice the cantilever distance or where the maximum joist span is exceeded.
- Grey areas are established based on 12 in. O.C. joist capacity.
- A partial list of section properties for each member is provided in the Trex Elevations Deck Framing / Inspection Details Table.
- Joist and box beam capacity are determined with AISI-S100-07 (LRFD).
- Joist yield stress is assumed as 33ksi.
- Box beam yield stress is assumed as 50ksi.
- Meets or exceeds the requirements of NBCC, BBBC or OBC.
- Span Charts are valid for Part 9 Buildings only.



TREX ELEVATIONSTM SPAN CHART

TABLE E-200 RESIDENTIAL

200 PSF TOTAL LOAD

Table Instructions: Enter the table with a joist span and cantilever length, then read the maximum allowable box beam span.

| JOIST SPAN LIMITS (FEET / CENTIMETERS) | | | | | |
|---|---------|----------|---|---------|----------|
| 12" JOIST SPACING O.C. | | | 16" JOIST SPACING O.C. | | |
| MAXIMUM JOIST SPAN (LEDGER TO BOX BEAM) | 8' - 0" | 243.8 cm | MAXIMUM JOIST SPAN (LEDGER TO BOX BEAM) | 7' - 0" | 213.4 cm |
| MAXIMUM CANTILEVER LENGTH | 1' - 0" | 91.4 cm | MAXIMUM CANTILEVER LENGTH | 0' - 6" | 61.0 cm |

(Single Trex 1 5/8" Joist)

(Single Trex 1 5/8" Joist)

MAXIMUM BOX BEAM SPAN (SINGLE BOX BEAM BETWEEN POSTS)

| CANTILEVER LENGTH (FEET/CENTIMETER) | JOIST SPAN (LEDGER TO BOX BEAM) (FEET / CENTIMETERS) | | | | | | | | | | | | | | | |
|-------------------------------------|--|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| | 0' - 0" 0.0 | 1' - 0" 30.5 | 2' - 0" 61.0 | 3' - 0" 91.4 | 4' - 0" 121.9 | 5' - 0" 152.4 | 6' - 0" 182.9 | 7' - 0" 213.4 | 8' - 0" 243.8 | 9' - 0" 274.3 | 10' - 0" 304.8 | 11' - 0" 335.3 | 12' - 0" 365.8 | 13' - 0" 396.2 | 14' - 0" 426.7 | 15' - 0" 457.2 |
| 0' - 0" 0.0 | | 19' - 8" 599.6 | 15' - 2" 462.3 | 12' - 9" 390.2 | 11' - 3" 343.2 | 10' - 1" 309.1 | 9' - 3" 282.7 | 8' - 6" 261.5 | 7' - 11" 243.8 | | | | | | | |
| 0' - 6" 15.2 | | 15' - 2" 462.3 | 12' - 9" 390.2 | 11' - 3" 343.2 | 10' - 1" 309.1 | 9' - 3" 282.7 | 8' - 6" 261.5 | 7' - 11" 243.8 | 7' - 6" 228.8 | | | | | | | |
| 1' - 0" 30.5 | | | 11' - 3" 343.2 | 10' - 1" 309.1 | 9' - 3" 282.7 | 8' - 6" 261.5 | 7' - 11" 243.8 | 7' - 6" 228.8 | 7' - 0" 215.7 | | | | | | | |
| 1' - 6" 45.7 | | | | | | | | | | | | | | | | |
| 2' - 0" 61.0 | | | | | | | | | | | | | | | | |
| 2' - 6" 76.2 | | | | | | | | | | | | | | | | |
| 3' - 0" 91.4 | | | | | | | | | | | | | | | | |
| 3' - 6" 106.7 | | | | | | | | | | | | | | | | |
| 4' - 0" 121.9 | | | | | | | | | | | | | | | | |

MAXIMUM BOX BEAM SPAN (DOUBLE BOX BEAM BETWEEN POSTS)

| CANTILEVER LENGTH (FEET/CENTIMETER) | JOIST SPAN (LEDGER TO BOX BEAM) (FEET / CENTIMETERS) | | | | | | | | | | | | | | | |
|-------------------------------------|--|--------------------|-------------------|-------------------|-------------------|-------------------|--------------------|--------------------|--------------------|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| | 0' - 0" 0.0 | 1' - 0" 30.5 | 2' - 0" 61.0 | 3' - 0" 91.4 | 4' - 0" 121.9 | 5' - 0" 152.4 | 6' - 0" 182.9 | 7' - 0" 213.4 | 8' - 0" 243.8 | 9' - 0" 274.3 | 10' - 0" 304.8 | 11' - 0" 335.3 | 12' - 0" 365.8 | 13' - 0" 396.2 | 14' - 0" 426.7 | 15' - 0" 457.2 |
| 0' - 0" 0.0 | | 25' - 11" 792.5 | 20' - 7" 629.0 | 18' - 0" 549.5 | 16' - 4" 499.2 | 14' - 9" 451.9 | 13' - 7" 415.2 | 12' - 7" 385.8 | 11' - 10" 361.5 | | | | | | | |
| 0' - 6" 15.2 | | 20' - 7" 629.0 | 18' - 0" 549.5 | 16' - 4" 499.2 | 14' - 9" 451.9 | 13' - 7" 415.2 | 12' - 7" 385.8 | 11' - 10" 361.5 | 11' - 2" 341.0 | | | | | | | |
| 1' - 0" 30.5 | | | 16' - 4" 499.2 | 14' - 9" 451.9 | 13' - 7" 415.2 | 12' - 7" 385.8 | 11' - 10" 361.5 | 11' - 2" 341.0 | 10' - 7" 323.3 | | | | | | | |
| 1' - 6" 45.7 | | | | | | | | | | | | | | | | |
| 2' - 0" 61.0 | | | | | | | | | | | | | | | | |
| 2' - 6" 76.2 | | | | | | | | | | | | | | | | |
| 3' - 0" 91.4 | | | | | | | | | | | | | | | | |
| 3' - 6" 106.7 | | | | | | | | | | | | | | | | |
| 4' - 0" 121.9 | | | | | | | | | | | | | | | | |

NOTES:

- All loads and load combinations are determined using ASCE 7-05. DL=Dead Load, LL=Live Load, SL=Snow Load. When LL<SL, the total load (TL) is 1.2DL+1.6SL+0.5LL, otherwise TL=1.2DL+1.6LL+0.5SL.
- Loads used to produce the tables above are as follows: DL=10psf, LL=40psf, SL=150psf.
- Deflection limits for joists are determined using IBC-2009 Section R505, Steel Floor Framing. Joists - Live load deflection is limited to L/480, total deflection is limited to L/240, where L is the span length. Box Beams - Live load deflection is limited to L/360, total deflection is limited to L/240, where L is the span length.
- Grey areas in tables indicate instances where the joists do not backspan twice the cantilever distance or where the maximum joist span is exceeded.
- Grey areas are established based on 12 in. O.C. joist capacity.
- A partial list of section properties for each member is provided in the Trex Elevation Deck Framing / Inspection Details Table.
- Joist and box beam capacity are determined with AISI-S100-07 (LRFD).
- Joist yield stress is assumed as 33ksi.
- Box beam yield stress is assumed as 50ksi.
- Meets or exceeds the requirements of NBCC, BBBC or OBC.
- Span Charts are valid for Part 9 Buildings only.

