

TRUEFRAME™ JOIST

40 PSF LIVE LOAD & 10 PSF DEAD LOAD, L/360 (WET USE)

| | | Deck Joist Spans | | | | | | |
|---------------------------|-------------|---|-------|--------|--------|--------|--------|--------|
| Simple Span: | | 8 ft | 10 ft | 12 ft | 14 ft | 16 ft | 18 ft | 20 ft |
| Simple Span + Cantilever: | | 6'+2' | 8'+2' | 10'+2' | 12'+2' | 14'+2' | 16'+2' | 18'+2' |
| Beam Type | Actual Size | Corresponding Deck Beam Spans (in inches) | | | | | | |
| 2x8 - 2 ply | 3" x 7" | 96 | 89 | 83 | 78 | 74 | 70 | 67 |
| 2x8 - 3 ply | 4.5" x 7" | 127 | 117 | 109 | 102 | 97 | 92 | 88 |
| 2x10 - 2 ply | 3" x 9" | 123 | 114 | 106 | 100 | 94 | 89 | 85 |
| 2x10 - 3 ply | 4.5" x 9" | 162 | 150 | 139 | 131 | 124 | 117 | 112 |
| 2x12 - 2 ply | 3" x 11" | 147 | 136 | 127 | 119 | 112 | 107 | 102 |
| 2x12 - 3 ply | 4.5" x 11" | 193 | 179 | 166 | 156 | 148 | 140 | 134 |

60 PSF LIVE LOAD & 10 PSF DEAD LOAD, L/360 (WET USE)

| | | Deck Joist Spans | | | | | | |
|---------------------------|-------------|---|-------|--------|--------|--------|--------|--------|
| Simple Span: | | 8 ft | 10 ft | 12 ft | 14 ft | 16 ft | 18 ft | 20 ft |
| Simple Span + Cantilever: | | 6'+2' | 8'+2' | 10'+2' | 12'+2' | 14'+2' | 16'+2' | 18'+2' |
| Beam Type | Actual Size | Corresponding Deck Beam Spans (in inches) | | | | | | |
| 2x8 - 2 ply | 3" x 7" | 81 | 75 | 70 | 66 | 62 | 59 | 56 |
| 2x8 - 3 ply | 4.5" x 7" | 107 | 99 | 92 | 86 | 82 | 78 | 74 |
| 2x10 - 2 ply | 3" x 9" | 104 | 96 | 90 | 84 | 79 | 75 | 72 |
| 2x10 - 3 ply | 4.5" x 9" | 137 | 126 | 118 | 111 | 104 | 99 | 95 |
| 2x12 - 2 ply | 3" x 11" | 124 | 115 | 107 | 100 | 95 | 90 | 86 |
| 2x12 - 3 ply | 4.5" x 11" | 163 | 151 | 141 | 132 | 125 | 118 | 113 |

WET USE: Beams will be exposed to weather or moisture, such as uncovered decks or ground-contact applications. Moisture content could exceed 19%.

NOTES:

- TrueFrame Joist and Beams constructed from #1 Grade Southern Yellow Pine
- Beam span calculations are based on simple span and 2ft. cantilever joist configurations.
- Beam depth shall be greater than or equal to depth of joists with a flush beam condition.
- Bearing length must be at least 1.75".
- All tables are based on uniformly distributed loads at normal temperatures.
- Beams require support across their full width.
- TrueFrame Beam plies shall be fastened in accordance with 2024 IRC section R507.5
- Refer to IRC Table R507.2.3 for fastener specifications.
- For reference only. Specific structure design and loading should be by a registered engineer.

