

TECHNICAL BULLETIN

Ipe Decking Simple Spans with Snow Load

STRUCTURAL DESIGN INFORMATION - Simple Spans with Snow Load

| SIMPLE SPAN | | | 3010000 | 3010000 | 3010000 | 3010000 | 3010000 | 3010000 | 3010000 |
|-----------------------------------|----|------------|----------|----------|---------|----------|----------|----------|----------|
| MODULUS OF ELASTICITY | | | 3750 | 3750 | 3750 | 3750 | 3750 | 3750 | 3750 |
| BENDING - Allowable | | | 425 | 425 | 425 | 425 | 425 | 425 | 425 |
| SHEAR - Allowable | | | | | | | | | |
| SPECIES | | | IPE | IPE | IPE | IPE | IPE | IPE | IPE |
| WEIGHT PER CUBIC FOOT (lb. | | | 75 | 75 | 75 | 75 | 75 | 75 | 75 |
| DECKING THICKNESS (inches) | | | 0.75 | 0.75 | 0.75 | 1 | 1.5 | 1.5 | 2.5 |
| DECKING SPAN (inches) | | | 12 | 16 | 24 | 36 | 48 | 0 | 72 |
| DEAD LOAD | | | 0.0326 | 0.0326 | 0.0326 | 0.0434 | 0.0651 | 0.0651 | 0.1085 |
| LIVE LOAD/PSF | | 100 | 0.6944 | 0.6944 | 0.6944 | 0.6944 | 0.6944 | 0.6944 | 0.6944 |
| TOTAL LOAD | W | | 0.727 | 0.727 | 0.727 | 0.7378 | 0.7595 | 0.7595 | 0.8030 |
| SHEAR | V | | 4.3620 | 5.8160 | 8.7240 | 13.2813 | 18.2292 | 22.7865 | 28.9063 |
| MAXIMUM MOMENT | M | | 13.0859 | 23.2639 | 52.3438 | 119.5313 | 218.7500 | 341.7696 | 520.3125 |
| AREA | A | | 0.7500 | 0.7500 | 0.7500 | 1.0000 | 1.5000 | 1.5000 | 2.5000 |
| SECTION | S | | 0.0938 | 0.0938 | 0.0938 | 0.1667 | 0.3750 | 0.3750 | 1.0417 |
| INERTIA | I | | 0.0352 | 0.0352 | 0.0352 | 0.0833 | 0.2813 | 0.2813 | 1.3021 |
| | Fb | | 139.5833 | 248.1481 | 558.333 | 717.1875 | 583.3333 | 911.4583 | 499.5000 |
| | Fv | | 8.72040 | 11.6319 | 17.4479 | 19.9219 | 18.2292 | 22.7865 | 17.3438 |
| | | | 0.002 | 0.006 | 0.030 | 0.064 | 0.062 | 0.151 | 0.072 |
| | | | Fb OKAY | Fb OKAY | Fb OKAY | Fb OKAY | Fb OKAY | Fb OKAY | Fb OKAY |
| | | | Fv OKAY | Fv OKAY | Fv OKAY | Fv OKAY | Fv OKAY | Fv OKAY | Fv OKAY |
| | | L/360 | 0.033 | 0.044 | 0.067 | 0.100 | 0.133 | 0.167 | 0.200 |
| | | Deflection | OK | OK | OK | OK | OK | OK | OK |

This deck span calculator is intended to aid in the specification process but does not guarantee fitness for purpose or assume any liability.

Users are responsible for checking local building codes and ensuring compliance with a licensed engineer.