



# SOLARSPAN® SPAN TABLES

## FOR WIND REGION B - NON CYCLONIC

### (EXTERNAL ROOF APPLICATIONS ONLY)

#### EPS-FR Core Grade SL 0.42mm hi-tensile / 0.6mm steel skins

##### WIND REGION B

###### Single Span (loaded inwards)

Maximum uniformly distributed load (kPa) for the given span:

| Span (m): | 1.5   | 1.8   | 2.1   | 2.4   | 2.7   | 3.0   | 3.3   | 3.6   | 3.9  | 4.2  | 4.5  | 4.8  | 5.1  | 5.4  | 5.7  | 6.0  | 6.3  | 6.6  | 6.9  | 7.2  | 7.5  | 7.8  | 8.1  | 8.4  | 8.7  | 9.0  | 9.3  | 9.6  | 9.9  |
|-----------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 50 mm     | 4.64  | 3.80  | 3.19  | 2.74  | 2.39  | 2.11  | 1.88  | 1.54  | 1.25 | 1.02 | 0.83 | 0.68 | 0.55 | 0.45 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 75 mm     | 7.17  | 5.90  | 5.00  | 4.32  | 3.79  | 3.37  | 3.03  | 2.74  | 2.27 | 1.90 | 1.60 | 1.35 | 1.15 | 0.98 | 0.83 | 0.71 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 100 mm    | 9.70  | 8.01  | 6.81  | 5.90  | 5.20  | 4.63  | 4.17  | 3.79  | 3.34 | 2.82 | 2.40 | 2.06 | 1.77 | 1.53 | 1.33 | 1.16 | 1.01 | 0.88 | 0.77 | 0.67 | 0.59 | 0.51 | 0.44 | 0.38 | -    | -    | -    | -    | -    |
| 125 mm    | 12.23 | 10.12 | 8.61  | 7.48  | 6.60  | 5.90  | 5.32  | 4.84  | 4.07 | 3.45 | 2.95 | 2.54 | 2.20 | 1.92 | 1.67 | 1.47 | 1.29 | 1.14 | 1.00 | 0.89 | 0.78 | 0.69 | 0.61 | 0.54 | 0.47 | 0.41 | -    | -    | -    |
| 150 mm    | 14.76 | 12.23 | 10.42 | 9.06  | 8.00  | 7.16  | 6.47  | 5.73  | 4.82 | 4.09 | 3.51 | 3.03 | 2.63 | 2.30 | 2.02 | 1.78 | 1.57 | 1.39 | 1.24 | 1.10 | 0.98 | 0.87 | 0.78 | 0.69 | 0.62 | 0.55 | 0.48 | 0.43 | -    |
| 175 mm    | 17.29 | 14.33 | 12.22 | 10.64 | 9.41  | 8.42  | 7.61  | 6.61  | 5.56 | 4.74 | 4.07 | 3.52 | 3.07 | 2.69 | 2.37 | 2.09 | 1.86 | 1.65 | 1.47 | 1.32 | 1.18 | 1.06 | 0.95 | 0.85 | 0.76 | 0.68 | 0.61 | 0.55 | 0.49 |
| 200 mm    | 19.82 | 16.44 | 14.03 | 12.22 | 10.81 | 9.68  | 8.76  | 7.49  | 6.32 | 5.38 | 4.63 | 4.02 | 3.51 | 3.08 | 2.72 | 2.41 | 2.14 | 1.91 | 1.71 | 1.54 | 1.38 | 1.24 | 1.12 | 1.01 | 0.91 | 0.82 | 0.74 | 0.67 | 0.60 |
| 250 mm    | 24.88 | 20.65 | 17.64 | 15.38 | 13.62 | 12.21 | 11.06 | 10.08 | 8.52 | 7.29 | 6.29 | 5.47 | 4.80 | 4.23 | 3.75 | 3.34 | 2.99 | 2.68 | 2.41 | 2.18 | 1.97 | 1.79 | 1.63 | 1.48 | 1.35 | 1.23 | 1.12 | 1.03 | 0.94 |
| 300 mm    | 29.94 | 24.87 | 21.25 | 18.54 | 16.43 | 14.74 | 13.22 | 11.04 | 9.34 | 7.99 | 6.90 | 6.01 | 5.27 | 4.65 | 4.12 | 3.68 | 3.29 | 2.96 | 2.67 | 2.41 | 2.19 | 1.99 | 1.81 | 1.65 | 1.51 | 1.38 | 1.26 | 1.15 | 1.06 |

###### Single Span (loaded outwards)

Maximum uniformly distributed load (kPa) for the given span:

| Span (m): | 1.5   | 1.8   | 2.1   | 2.4   | 2.7   | 3.0  | 3.3  | 3.6  | 3.9  | 4.2  | 4.5  | 4.8  | 5.1  | 5.4  | 5.7  | 6.0  | 6.3  | 6.6  | 6.9  | 7.2  | 7.5  | 7.8  | 8.1  | 8.4  | 8.7  | 9.0  | 9.3  | 9.6  | 9.9  |
|-----------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 50 mm     | 5.16  | 4.32  | 3.71  | 3.26  | 2.91  | 2.39 | 2.00 | 1.69 | 1.45 | 1.27 | 1.12 | 0.99 | 0.89 | 0.80 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 75 mm     | 7.70  | 6.43  | 5.53  | 4.85  | 4.06  | 3.31 | 2.75 | 2.33 | 2.00 | 1.74 | 1.52 | 1.35 | 1.21 | 1.09 | 0.99 | 0.90 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 100 mm    | 10.23 | 8.54  | 7.34  | 6.43  | 5.21  | 4.24 | 3.52 | 2.98 | 2.55 | 2.21 | 1.94 | 1.72 | 1.53 | 1.38 | 1.25 | 1.13 | 1.04 | 0.96 | 0.88 | 0.82 | 0.76 | 0.71 | 0.67 | 0.63 | -    | -    | -    | -    | -    |
| 125 mm    | 12.77 | 10.66 | 9.15  | 8.02  | 6.37  | 5.18 | 4.30 | 3.63 | 3.11 | 2.69 | 2.36 | 2.09 | 1.86 | 1.67 | 1.51 | 1.37 | 1.25 | 1.15 | 1.06 | 0.98 | 0.92 | 0.85 | 0.80 | 0.75 | 0.71 | 0.67 | -    | -    | -    |
| 150 mm    | 15.31 | 12.77 | 10.96 | 9.51  | 7.54  | 6.13 | 5.08 | 4.29 | 3.67 | 3.18 | 2.78 | 2.46 | 2.19 | 1.96 | 1.77 | 1.61 | 1.47 | 1.35 | 1.24 | 1.15 | 1.07 | 1.00 | 0.93 | 0.87 | 0.82 | 0.77 | 0.73 | 0.69 | -    |
| 175 mm    | 17.84 | 14.89 | 12.78 | 10.99 | 8.71  | 7.07 | 5.86 | 4.95 | 4.23 | 3.66 | 3.20 | 2.83 | 2.52 | 2.26 | 2.04 | 1.85 | 1.69 | 1.55 | 1.43 | 1.32 | 1.22 | 1.14 | 1.07 | 1.00 | 0.94 | 0.88 | 0.83 | 0.79 | 0.75 |
| 200 mm    | 19.20 | 16.02 | 13.75 | 12.04 | 9.88  | 8.02 | 6.65 | 5.60 | 4.79 | 4.15 | 3.63 | 3.20 | 2.85 | 2.55 | 2.30 | 2.09 | 1.91 | 1.75 | 1.61 | 1.48 | 1.38 | 1.28 | 1.20 | 1.12 | 1.05 | 0.99 | 0.93 | 0.88 | 0.84 |
| 250 mm    | 19.18 | 16.01 | 13.74 | 12.03 | 10.71 | 9.65 | 8.22 | 6.93 | 5.92 | 5.12 | 4.47 | 3.95 | 3.51 | 3.14 | 2.83 | 2.57 | 2.34 | 2.14 | 1.97 | 1.82 | 1.69 | 1.57 | 1.46 | 1.37 | 1.28 | 1.21 | 1.14 | 1.07 | 1.02 |
| 300 mm    | 19.19 | 16.01 | 13.74 | 12.04 | 10.72 | 9.66 | 8.79 | 8.07 | 7.05 | 6.09 | 5.32 | 4.69 | 4.17 | 3.73 | 3.36 | 3.05 | 2.78 | 2.54 | 2.33 | 2.15 | 1.99 | 1.85 | 1.73 | 1.62 | 1.51 | 1.42 | 1.34 | 1.27 | 1.20 |

###### Double Span (loaded inwards)

Maximum uniformly distributed load (kPa) for the given span:

| Span (m): | 1.5   | 1.8   | 2.1   | 2.4   | 2.7   | 3.0   | 3.3  | 3.6  | 3.9  | 4.2  | 4.5  | 4.8  | 5.1  | 5.4  | 5.7  | 6.0  | 6.3  | 6.6  | 6.9  | 7.2  | 7.5  | 7.8  | 8.1  | 8.4  | 8.7  | 9.0  | 9.3  | 9.6  | 9.9  |
|-----------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 50 mm     | 3.63  | 2.95  | 2.47  | 2.11  | 1.83  | 1.60  | 1.42 | 1.17 | 0.94 | 0.75 | 0.60 | 0.47 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 75 mm     | 5.65  | 4.64  | 3.91  | 3.37  | 2.95  | 2.61  | 2.23 | 1.80 | 1.47 | 1.21 | 1.00 | 0.83 | 0.68 | 0.56 | 0.46 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 100 mm    | 7.67  | 6.32  | 5.36  | 4.63  | 4.07  | 3.62  | 2.99 | 2.44 | 2.02 | 1.68 | 1.41 | 1.18 | 1.00 | 0.84 | 0.71 | 0.60 | 0.51 | 0.42 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 125 mm    | 9.70  | 8.01  | 6.80  | 5.90  | 5.19  | 4.63  | 3.76 | 3.09 | 2.57 | 2.15 | 1.82 | 1.55 | 1.32 | 1.13 | 0.97 | 0.83 | 0.71 | 0.61 | 0.52 | 0.44 | 0.38 | -    | -    | -    | -    | -    | -    | -    | -    |
| 150 mm    | 11.72 | 9.69  | 8.24  | 7.16  | 6.31  | 5.58  | 4.53 | 3.74 | 3.12 | 2.63 | 2.23 | 1.91 | 1.64 | 1.42 | 1.23 | 1.06 | 0.92 | 0.80 | 0.70 | 0.60 | 0.52 | 0.45 | 0.38 | -    | -    | -    | -    | -    | -    |
| 175 mm    | 13.74 | 11.38 | 9.69  | 8.42  | 7.44  | 6.52  | 5.31 | 4.39 | 3.67 | 3.11 | 2.65 | 2.27 | 1.96 | 1.70 | 1.48 | 1.29 | 1.13 | 0.99 | 0.87 | 0.76 | 0.67 | 0.58 | 0.51 | 0.44 | 0.38 | -    | -    | -    | -    |
| 200 mm    | 15.76 | 13.06 | 11.13 | 9.68  | 8.56  | 7.46  | 6.09 | 5.04 | 4.23 | 3.59 | 3.07 | 2.64 | 2.29 | 1.99 | 1.74 | 1.53 | 1.34 | 1.19 | 1.05 | 0.92 | 0.82 | 0.72 | 0.64 | 0.56 | 0.49 | 0.43 | -    | -    | -    |
| 250 mm    | 19.81 | 16.43 | 14.02 | 12.21 | 10.80 | 9.35  | 7.65 | 6.35 | 5.34 | 4.55 | 3.90 | 3.37 | 2.94 | 2.57 | 2.26 | 1.99 | 1.77 | 1.57 | 1.40 | 1.25 | 1.11 | 0.99 | 0.89 | 0.79 | 0.71 | 0.63 | 0.56 | 0.50 | 0.44 |
| 300 mm    | 23.86 | 19.80 | 16.91 | 14.74 | 13.05 | 11.24 | 9.21 | 7.66 | 6.46 | 5.51 | 4.74 | 4.11 | 3.58 | 3.15 | 2.78 | 2.46 | 2.19 | 1.95 | 1.75 | 1.57 | 1.41 | 1.27 | 1.14 | 1.03 | 0.93 | 0.84 | 0.75 | 0.68 | 0.61 |

###### Double Span (loaded outwards)

Maximum uniformly distributed load (kPa) for the given span:

| Span (m): | 1.5  | 1.8  | 2.1  | 2.4  | 2.7  | 3.0  | 3.3  | 3.6  | 3.9  | 4.2  | 4.5  | 4.8  | 5.1  | 5.4  | 5.7  | 6.0  | 6.3  | 6.6  | 6.9  | 7.2  | 7.5  | 7.8  | 8.1  | 8.4  | 8.7  | 9.0  | 9.3  | 9.6  | 9.9  |
|-----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 50 mm     | 4.15 | 3.47 | 2.99 | 2.63 | 2.35 | 2.12 | 1.94 | 1.78 | 1.65 | 1.52 | 1.34 | 1.19 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 75 mm     | 6.18 | 5.16 | 4.44 | 3.90 | 3.47 | 3.14 | 2.86 | 2.63 | 2.44 | 2.27 | 2.04 | 1.83 | 1.64 | 1.48 | 1.34 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 100 mm    | 7.61 | 6.36 | 5.46 | 4.79 | 4.27 | 3.85 | 3.51 | 3.23 | 2.99 | 2.78 | 2.60 | 2.45 | 2.30 | 2.07 | 1.87 | 1.69 | 1.54 | 1.42 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 125 mm    | 7.74 | 6.47 | 5.56 | 4.88 | 4.35 | 3.92 | 3.57 | 3.28 | 3.04 | 2.83 | 2.65 | 2.49 | 2.35 | 2.22 | 2.11 | 2.01 | 1.83 | 1.68 | 1.54 | 1.43 | 1.32 | -    | -    | -    | -    | -    | -    | -    | -    |
| 150 mm    | 7.74 | 6.47 | 5.56 | 4.88 | 4.35 | 3.92 | 3.58 | 3.29 | 3.04 | 2.83 | 2.65 | 2.49 | 2.35 | 2.23 | 2.12 | 2.02 | 1.92 | 1.84 | 1.77 | 1.65 | 1.53 | 1.42 | 1.32 | -    | -    | -    | -    | -    | -    |
| 175 mm    | 7.74 | 6.47 | 5.56 | 4.88 | 4.35 | 3.92 | 3.58 | 3.29 | 3.04 | 2.83 | 2.65 | 2.49 | 2.35 | 2.23 | 2.12 | 2.02 | 1.93 | 1.84 | 1.77 | 1.70 | 1.64 | 1.58 | 1.50 | 1.41 | 1.32 | -    | -    | -    | -    |
| 200 mm    | 7.75 | 6.48 | 5.57 | 4.88 | 4.35 | 3.93 | 3.58 | 3.29 | 3.05 | 2.84 | 2.66 | 2.50 | 2.36 | 2.23 | 2.12 | 2.02 | 1.93 | 1.85 | 1.77 | 1.70 | 1.64 | 1.58 | 1.53 | 1.48 | 1.43 | 1.38 | -    | -    | -    |
| 250 mm    | 7.74 | 6.47 | 5.57 | 4.88 | 4.35 | 3.93 | 3.58 | 3.30 | 3.05 | 2.84 | 2.66 | 2.50 | 2.36 | 2.24 | 2.12 | 2.02 | 1.93 | 1.85 | 1.78 | 1.71 | 1.64 | 1.58 | 1.53 | 1.48 | 1.43 | 1.39 | 1.35 | 1.31 | 1.27 |
| 300 mm    | 7.75 | 6.48 | 5.57 | 4.89 | 4.36 | 3.94 | 3.59 | 3.30 | 3.06 | 2.85 | 2.67 | 2.51 | 2.37 | 2.24 | 2.13 | 2.03 | 1.94 | 1.86 | 1.78 | 1.71 | 1.65 | 1.59 | 1.54 | 1.48 | 1.44 | 1.39 | 1.35 | 1.31 | 1.28 |

##### NOTES

- Pressures specified are for wind gusts only per AS1170.
- Self weight of the panel has been allowed for, plus an allowance of up to 25kg/m2 for light duty fittings (lights, etc.). No other dead loads permitted.
- Non-trafficable maintenance access (concentrated load) of 140kg on any span has been allowed for, in roof pans only. Avoid stepping on the ribs.
- Distributed live load of 0.25kPa has been allowed for (as per AS/NZS 1170.1:2001).
- Deflection limit of span/150 applies, and in accordance with Serviceability Limit State criteria per AS1170.0 - TABLE C1.
- Fixing with 14g tek screws (or equivalent) at each rib are required.
- Min. roof slope of 2 degree applies.
- As a rule of thumb, the allowable overhang is 1/4 of the back span, unless stated otherwise. Allowable side overhang is 300mm.
- This span table applies to non-cyclonic region only.
- SolarLap roof lap jointing system is permitted to be used at the end support of multi-spans with no reduction in tabulated capacity.
- Correct at the time of publishing. Refer Bondor for updates.
- Refer to your certifying engineer for panel selection.
- Refer to [www.bondor.com.au](http://www.bondor.com.au) for your local Bondor branch and representatives.
- Span tables have been developed by Bligh Tanner Consulting Engineers by interpretation of physical testing.