



Span/Load Tables

The difference is...



www.rlsd.com

Steel Decking Product Range

the original:

Holorib



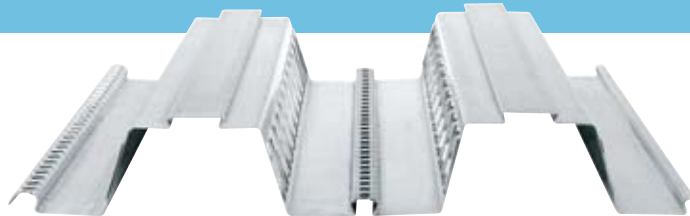
less concrete

Ribdeck E60



longer spans

Ribdeck 80



shallow slabs
efficient designs

Ribdeck AL



Holorib

- Re-entrant profile.
- Available in the UK since 1972.
- The UK's most widely specified steel decking profile.
- Simple to detail and install.
- Virtually continuous plain soffit finish.
- Excellent load carrying capacity on the finished slab.
- Use Holorib for its great versatility and strength.

Ribdeck 80

- Trapezoidal profile.
- Longer unpropped spans.
- Excellent bond to the concrete for greater load carrying capacity.
- Use Ribdeck 80 to reduce the number of steel members in a frame.

Ribdeck E60

- Trapezoidal profile.
- Fast to install – 1.0m cover width.
- Designed to minimise concrete volume.
- Use Ribdeck E60 to reduce the overall cost of a floor slab.

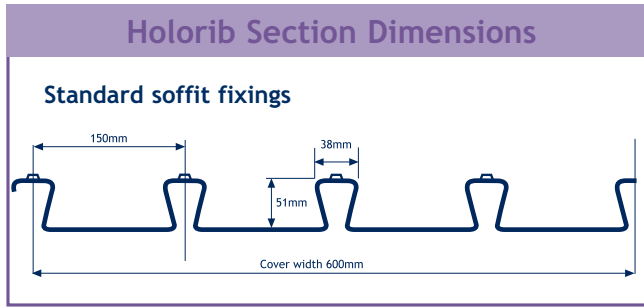
Ribdeck AL

- Trapezoidal profile.
- Shallowest slabs to satisfy fire insulation requirements.
- Use Ribdeck AL to minimise ribbed soffit slab depth.

Registered trademarks:

Ribdeck and Deskspan are registered trademarks throughout Europe. Holorib is a registered trademark in the UK, ROI, Gibraltar, Norway and Sweden and Superib (the same profile as Holorib) is registered in all other Western European countries.

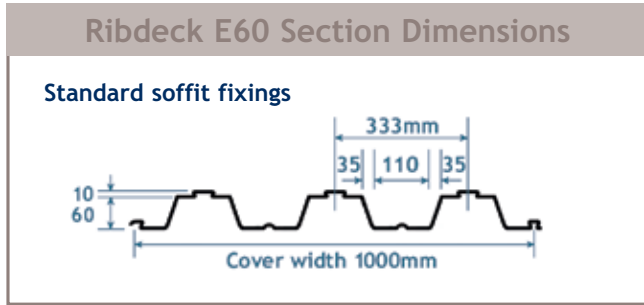
Section properties and notes to tables



Holorib Section Properties (per metre width)

| Gauge mm | Self Weight | | Area mm ² | Inertia cm ⁴ | Y _{NA} mm |
|-------------|-------------------|-------------------|-------------------------|----------------------------|-----------------------|
| | kg/m ² | kN/m ² | | | |
| 0.9 | 12.8 | 0.126 | 1,597 | 64.4 | 16.7 |
| 1.0 | 14.3 | 0.140 | 1,780 | 72.0 | 16.7 |
| 1.2 | 17.1 | 0.168 | 2,145 | 87.2 | 16.8 |

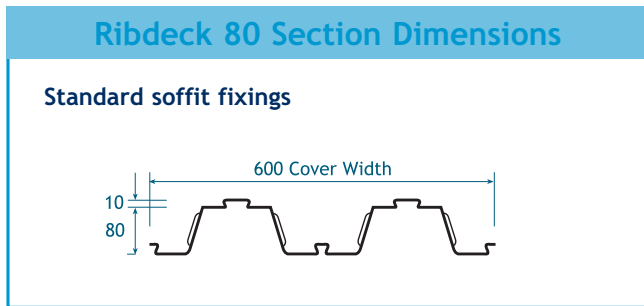
Concrete volume figures in the span/load tables that follow are based on constant slab thickness. To take account of deflection of the decking profile it is recommended that the volume of concrete will equate to: Overall slab depth – 9mm for voids + span/250. An additional allowance may also be required to allow for deflections within the supporting structure (refer to building design engineer).



Ribdeck E60 Section Properties (per metre width)

| Gauge mm | Self Weight | | Area mm ² | Inertia cm ⁴ | Y _{NA} mm |
|-------------|-------------------|-------------------|-------------------------|----------------------------|-----------------------|
| | kg/m ² | kN/m ² | | | |
| 0.9 | 9.3 | 0.091 | 1,140 | 80.4 | 37.1 |
| 1.0 | 10.3 | 0.101 | 1,273 | 89.8 | 37.2 |
| 1.2 | 12.3 | 0.121 | 1,538 | 108.7 | 37.2 |

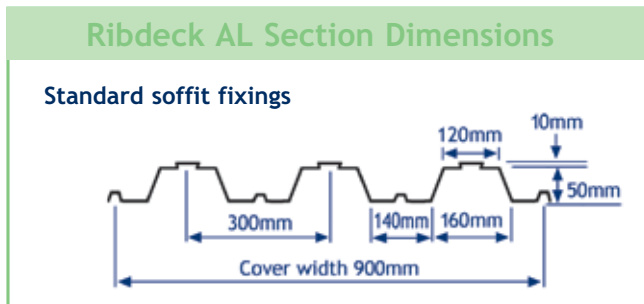
Concrete volume figures in the span/load tables that follow are based on constant slab thickness. To take account of deflection of the decking profile it is recommended that the volume of concrete will equate to: Overall slab depth – 36mm for voids + span/250. An additional allowance may also be required to allow for deflections within the supporting structure (refer to building design engineer).



Ribdeck 80 Section Properties (per metre width)

| Gauge mm | Self Weight | | Area mm ² | Inertia cm ⁴ | Y _{NA} mm |
|-------------|-------------------|-------------------|-------------------------|----------------------------|-----------------------|
| | kg/m ² | kN/m ² | | | |
| 0.9 | 11.1 | 0.109 | 1,375 | 167.5 | 40.7 |
| 1.0 | 12.3 | 0.121 | 1,533 | 186.7 | 40.7 |
| 1.2 | 14.8 | 0.145 | 1,848 | 224.8 | 40.7 |

Concrete volume figures in the span/load tables that follow are based on constant slab thickness. To take account of deflection of the decking profile it is recommended that the volume of concrete will equate to: Overall slab depth – 42mm for voids + span/250. An additional allowance may also be required to allow for deflections within the supporting structure (refer to building design engineer).



Ribdeck AL Section Properties (per metre width)

| Gauge mm | Self Weight | | Area mm ² | Inertia cm ⁴ | Y _{NA} mm |
|-------------|-------------------|-------------------|-------------------------|----------------------------|-----------------------|
| | kg/m ² | kN/m ² | | | |
| 0.9 | 9.5 | 0.093 | 1,171 | 67.4 | 28.0 |
| 1.0 | 10.5 | 0.103 | 1,301 | 75.2 | 28.0 |
| 1.2 | 12.6 | 0.124 | 1,570 | 90.9 | 28.0 |

Concrete volume figures in the span/load tables that follow are based on constant slab thickness. To take account of deflection of the decking profile it is recommended that the volume of concrete will equate to: Overall slab depth – 25mm for voids + span/250. An additional allowance may also be required to allow for deflections within the supporting structure (refer to building design engineer).

In pages 4-11 The performance of each product is given in terms of span/load and simplified fire design tables.




Span/load tables

- Spans shown assume clear span + 100mm to the centreline of supports.
- Designs are fully in accordance with BS 5950: Parts 4 & 6.
- The dead weight of the slab has been included in the development of the spans shown. However, consideration should be given to finishes, partitions, walls, etc. when reading from the table.
- Based upon concrete densities at wet stage: normal weight concrete 2400 kg/m³, lightweight concrete 1900 kg/m³.
- A span to depth ratio limit of 35:1 for normal weight concrete and 30:1 for lightweight concrete is generally used. Where isolated single spans occur, these should be reduced to 30:1 and 25:1 respectively.
- Maximum deflection in the direction of span of the decking is limited to span/130 after taking account of ponding.
- Construction stage design includes an allowance of 1.5kN/m² for construction loading.
- Composite slabs are designed as simply supported irrespective of the deck support configuration. A minimum crack control and distribution mesh is required in accordance with clauses 6.7, 6.8 and 6.9 of BS5950: Part 4. Alternatively the use of synthetic fibre reinforcement may be deemed acceptable after reference to the relevant design tables and consultation with the structural design engineers.
- S350 decking is manufactured from material meeting the specification: BS EN 10326-S350GD+Z275-N-A-C. It has guaranteed minimum yield strength of 350 N/mm².

Simplified fire design tables

- Tables are applicable for any construction where the mesh may act in tension over a supporting beam or wall (negative bending). This includes end bay conditions i.e. the **concrete slab** is continuous over more than one span.
- Loads shown are unfactored working loads and should include all imposed live and dead loads, excluding only the self-weight of the slab.
- An ultimate load factor of 1.0 is assumed throughout.
- indicates that the area of mesh is less than the minimum for crack control recommended in BS5950: Part 4
- Mesh should satisfy the minimum elongation requirement given in BS4449: 1988.
- For conditions outside the scope of the simplified tables, including all isolated spans, consult SCI publication 56 (2nd edition) or RLSD's Deckspan software.
- Tables are based on the thinnest gauge of decking available in each product range. Improved performance with thicker gauges may be checked for using RLSD's Deckspan software.

Holorib - Normal weight concrete

| Span/load table | | | Normal weight concrete | | | | | | | | | | | | |
|----------------------|---|-----------------|---|--------------|------|------|------|--------------|------|------|------|--------------|------|------|------|
| | Support Condition | Slab Depth (mm) | Concrete Volume (m ³ /m ²) | 0.9 Gauge | | | | 1.0 Gauge | | | | 1.2 Gauge | | | |
| | | | | Imposed Load | | | | Imposed Load | | | | Imposed Load | | | |
| | | | | FW | 5.0 | 6.7 | 10.0 | FW | 5.0 | 6.7 | 10.0 | FW | 5.0 | 6.7 | 10.0 |
| Single - Unpropped |  | 100 | 0.092 | 3.05 | 3.05 | 3.05 | 2.95 | 3.25 | 3.25 | 3.25 | 2.99 | 3.44 | 3.44 | 3.44 | 3.07 |
| | | 120 | 0.112 | 2.88 | 2.88 | 2.88 | 2.88 | 3.09 | 3.09 | 3.09 | 3.09 | 3.27 | 3.27 | 3.27 | 3.27 |
| | | 130 | 0.122 | 2.80 | 2.80 | 2.80 | 2.80 | 3.02 | 3.02 | 3.02 | 3.02 | 3.20 | 3.20 | 3.20 | 3.20 |
| | | 150 | 0.142 | 2.67 | 2.67 | 2.67 | 2.67 | 2.89 | 2.89 | 2.89 | 2.89 | 3.07 | 3.07 | 3.07 | 3.07 |
| | | 175 | 0.167 | 2.52 | 2.52 | 2.52 | 2.52 | 2.75 | 2.75 | 2.75 | 2.75 | 2.93 | 2.93 | 2.93 | 2.93 |
| | | 200 | 0.192 | 2.40 | 2.40 | 2.40 | 2.40 | 2.61 | 2.61 | 2.61 | 2.61 | 2.82 | 2.82 | 2.82 | 2.82 |
| Multiple - Unpropped |  | 100 | 0.092 | 3.36 | 3.36 | 3.36 | 2.95 | 3.53 | 3.53 | 3.53 | 2.99 | 3.50 | 3.50 | 3.50 | 3.07 |
| | | 120 | 0.112 | 3.19 | 3.19 | 3.19 | 3.19 | 3.35 | 3.35 | 3.35 | 3.35 | 3.66 | 3.66 | 3.66 | 3.59 |
| | | 130 | 0.122 | 3.12 | 3.12 | 3.12 | 3.12 | 3.28 | 3.28 | 3.28 | 3.28 | 3.58 | 3.58 | 3.58 | 3.58 |
| | | 150 | 0.142 | 2.99 | 2.99 | 2.99 | 2.99 | 3.14 | 3.14 | 3.14 | 3.14 | 3.44 | 3.44 | 3.44 | 3.44 |
| | | 175 | 0.167 | 2.85 | 2.85 | 2.85 | 2.85 | 3.00 | 3.00 | 3.00 | 3.00 | 3.29 | 3.29 | 3.29 | 3.29 |
| | | 200 | 0.192 | 2.74 | 2.74 | 2.74 | 2.74 | 2.89 | 2.89 | 2.89 | 2.89 | 3.16 | 3.16 | 3.16 | 3.16 |
| Multiple - Propped |  | 100 | 0.092 | 3.50 | 3.50 | 3.39 | 2.85 | 3.50 | 3.50 | 3.50 | 2.99 | 3.50 | 3.50 | 3.50 | 3.07 |
| | | 120 | 0.112 | 4.20 | 4.15 | 3.69 | 3.12 | 4.20 | 4.20 | 4.13 | 3.48 | 4.20 | 4.20 | 4.20 | 3.59 |
| | | 130 | 0.122 | 4.55 | 4.30 | 3.84 | 3.25 | 4.55 | 4.55 | 4.29 | 3.63 | 4.55 | 4.55 | 4.55 | 3.85 |
| | | 150 | 0.142 | 5.25 | 4.58 | 4.10 | 3.48 | 5.25 | 5.11 | 4.58 | 3.89 | 5.25 | 5.25 | 5.25 | 4.38 |
| | | 175 | 0.167 | 5.66 | 4.87 | 4.39 | 3.75 | 5.96 | 5.43 | 4.90 | 4.19 | 6.13 | 6.13 | 5.90 | 5.02 |
| | | 200 | 0.192 | 5.43 | 5.12 | 4.64 | 3.98 | 5.72 | 5.70 | 5.17 | 4.45 | 6.27 | 6.27 | 6.23 | 5.37 |
| 250 | 0.242 | 5.07 | 5.07 | 5.05 | 4.38 | 5.34 | 5.34 | 5.34 | 4.89 | 5.85 | 5.85 | 5.85 | 5.85 | | |

| Simplified fire design table | | | Normal weight concrete | | | | | | | | |
|------------------------------|-----------------|--|------------------------|------|------|------|------|------|------|------|--|
| Fire Rating (Hrs) | Slab Depth (mm) | Span (m) for given Imposed Load (kN/m ²) | | | | | | | | | |
| | | A142 | | | A193 | | | A252 | | | |
| | | 5.0 | 6.7 | 10.0 | 5.0 | 6.7 | 10.0 | 5.0 | 6.7 | 10.0 | |
| 1.0 | 100 | 3.36 | 3.36 | 2.95 | 3.36 | 3.36 | 2.95 | 3.36 | 3.36 | 2.95 | |
| | 120 | 3.19 | 3.19 | 3.19 | 3.19 | 3.19 | 3.19 | 3.19 | 3.19 | 3.19 | |
| | 130 | 3.12 | 3.12 | 3.12 | 3.12 | 3.12 | 3.12 | 3.12 | 3.12 | 3.12 | |
| | 150 | 2.99 | 2.99 | 2.99 | 2.99 | 2.99 | 2.99 | 2.99 | 2.99 | 2.99 | |
| | 175 | - | - | - | 2.85 | 2.85 | 2.85 | 2.85 | 2.85 | 2.85 | |
| | 200 | - | - | - | 2.74 | 2.74 | 2.74 | 2.74 | 2.74 | 2.74 | |
| | 250 | - | - | - | - | - | - | 2.52 | 2.52 | 2.52 | |
| 1.5 | 110 | 3.27 | 3.12 | 2.70 | 3.27 | 3.27 | 2.90 | 3.27 | 3.27 | 3.11 | |
| | 120 | 3.19 | 3.19 | 2.81 | 3.19 | 3.19 | 3.03 | 3.19 | 3.19 | 3.19 | |
| | 130 | 3.12 | 3.12 | 2.92 | 3.12 | 3.12 | 3.12 | 3.12 | 3.12 | 3.12 | |
| | 150 | 2.99 | 2.99 | 2.99 | 2.99 | 2.99 | 2.99 | 2.99 | 2.99 | 2.99 | |
| | 175 | - | - | - | 2.85 | 2.85 | 2.85 | 2.85 | 2.85 | 2.85 | |
| | 200 | - | - | - | 2.74 | 2.74 | 2.74 | 2.74 | 2.74 | 2.74 | |
| | 250 | - | - | - | - | - | - | 2.52 | 2.52 | 2.52 | |
| 2.0 | 125 | 3.05 | 2.78 | 2.42 | 3.15 | 3.06 | 2.66 | 3.15 | 3.15 | 2.90 | |
| | 130 | 3.11 | 2.83 | 2.47 | 3.12 | 3.12 | 2.71 | 3.12 | 3.12 | 2.96 | |
| | 150 | 2.99 | 2.99 | 2.62 | 2.99 | 2.99 | 2.89 | 2.99 | 2.99 | 2.99 | |
| | 175 | - | - | - | 2.85 | 2.85 | 2.85 | 2.85 | 2.85 | 2.85 | |
| | 200 | - | - | - | 2.74 | 2.74 | 2.74 | 2.74 | 2.74 | 2.74 | |
| | 250 | - | - | - | - | - | - | 2.52 | 2.52 | 2.52 | |

Refer to page 3 for notes on the use of these tables

the original:

Holorib

Holorib - Lightweight concrete

| Span/load table | | | Lightweight concrete | | | | | | | | | | | | |
|----------------------|-------------------|-----------------|---|--------------|------|------|------|--------------|------|------|------|--------------|------|------|------|
| | Support Condition | Slab Depth (mm) | Concrete Volume (m ³ /m ²) | 0.9 Gauge | | | | 1.0 Gauge | | | | 1.2 Gauge | | | |
| | | | | Imposed Load | | | | Imposed Load | | | | Imposed Load | | | |
| | | | | FW | 5.0 | 6.7 | 10.0 | FW | 5.0 | 6.7 | 10.0 | FW | 5.0 | 6.7 | 10.0 |
| Single - Unpropped | | 100 | 0.092 | 3.00 | 3.00 | 3.00 | 2.77 | 3.00 | 3.00 | 3.00 | 2.81 | 3.00 | 3.00 | 3.00 | 2.88 |
| | | 120 | 0.112 | 3.10 | 3.10 | 3.10 | 3.10 | 3.31 | 3.31 | 3.31 | 3.28 | 3.50 | 3.50 | 3.50 | 3.36 |
| | | 130 | 0.122 | 3.03 | 3.03 | 3.03 | 3.03 | 3.24 | 3.24 | 3.24 | 3.24 | 3.43 | 3.43 | 3.43 | 3.43 |
| | | 150 | 0.142 | 2.90 | 2.90 | 2.90 | 2.90 | 3.11 | 3.11 | 3.11 | 3.11 | 3.29 | 3.29 | 3.29 | 3.29 |
| | | 175 | 0.167 | 2.75 | 2.75 | 2.75 | 2.75 | 2.97 | 2.97 | 2.97 | 2.97 | 3.15 | 3.15 | 3.15 | 3.15 |
| | | 200 | 0.192 | 2.62 | 2.62 | 2.62 | 2.62 | 2.85 | 2.85 | 2.85 | 2.85 | 3.03 | 3.03 | 3.03 | 3.03 |
| | | 250 | 0.242 | 2.41 | 2.41 | 2.41 | 2.41 | 2.63 | 2.63 | 2.63 | 2.63 | 2.83 | 2.83 | 2.83 | 2.83 |
| Multiple - Unpropped | | 100 | 0.092 | 3.00 | 3.00 | 3.00 | 2.77 | 3.00 | 3.00 | 3.00 | 2.81 | 3.00 | 3.00 | 3.00 | 2.88 |
| | | 120 | 0.112 | 3.42 | 3.42 | 3.42 | 3.23 | 3.60 | 3.60 | 3.60 | 3.28 | 3.60 | 3.60 | 3.60 | 3.36 |
| | | 130 | 0.122 | 3.34 | 3.34 | 3.34 | 3.34 | 3.52 | 3.52 | 3.52 | 3.52 | 3.84 | 3.84 | 3.84 | 3.61 |
| | | 150 | 0.142 | 3.21 | 3.21 | 3.21 | 3.21 | 3.38 | 3.38 | 3.38 | 3.38 | 3.69 | 3.69 | 3.69 | 3.69 |
| | | 175 | 0.167 | 3.07 | 3.07 | 3.07 | 3.07 | 3.23 | 3.23 | 3.23 | 3.23 | 3.53 | 3.53 | 3.53 | 3.53 |
| | | 200 | 0.192 | 2.95 | 2.95 | 2.95 | 2.95 | 3.10 | 3.10 | 3.10 | 3.10 | 3.40 | 3.40 | 3.40 | 3.40 |
| | | 250 | 0.242 | 2.75 | 2.75 | 2.75 | 2.75 | 2.90 | 2.90 | 2.90 | 2.90 | 3.18 | 3.18 | 3.18 | 3.18 |
| Multiple - Propped | | 100 | 0.092 | 3.00 | 3.00 | 3.00 | 2.77 | 3.00 | 3.00 | 3.00 | 2.81 | 3.00 | 3.00 | 3.00 | 2.88 |
| | | 120 | 0.112 | 3.60 | 3.60 | 3.60 | 3.16 | 3.60 | 3.60 | 3.60 | 3.28 | 3.60 | 3.60 | 3.60 | 3.36 |
| | | 130 | 0.122 | 3.90 | 3.90 | 3.90 | 3.30 | 3.90 | 3.90 | 3.90 | 3.52 | 3.90 | 3.90 | 3.90 | 3.61 |
| | | 150 | 0.142 | 4.50 | 4.50 | 4.21 | 3.55 | 4.50 | 4.50 | 4.50 | 3.97 | 4.50 | 4.50 | 4.50 | 4.11 |
| | | 175 | 0.167 | 5.25 | 5.06 | 4.52 | 3.83 | 5.25 | 5.25 | 5.05 | 4.28 | 5.25 | 5.25 | 5.25 | 4.72 |
| | | 200 | 0.192 | 5.84 | 5.34 | 4.79 | 4.08 | 6.00 | 5.95 | 5.35 | 4.56 | 6.00 | 6.00 | 6.00 | 5.33 |
| | | 250 | 0.242 | 5.46 | 5.46 | 5.25 | 4.51 | 5.75 | 5.75 | 5.75 | 5.04 | 6.30 | 6.30 | 6.30 | 6.08 |

| Simplified fire design table | | | Lightweight concrete | | | | | | | | |
|------------------------------|-----------------|--|----------------------|------|------|------|------|------|------|------|--|
| Fire Rating (Hrs) | Slab Depth (mm) | Span (m) for given Imposed Load (kN/m ²) | | | | | | | | | |
| | | A142 | | | A193 | | | A252 | | | |
| | | 5.0 | 6.7 | 10.0 | 5.0 | 6.7 | 10.0 | 5.0 | 6.7 | 10.0 | |
| 1.0 | 100 | 3.00 | 3.00 | 2.77 | 3.00 | 3.00 | 2.77 | 3.00 | 3.00 | 2.77 | |
| | 120 | 3.42 | 3.42 | 3.23 | 3.42 | 3.42 | 3.23 | 3.42 | 3.42 | 3.23 | |
| | 130 | 3.34 | 3.34 | 3.34 | 3.34 | 3.34 | 3.34 | 3.34 | 3.34 | 3.34 | |
| | 150 | 3.21 | 3.21 | 3.21 | 3.21 | 3.21 | 3.21 | 3.21 | 3.21 | 3.21 | |
| | 175 | - | - | - | 3.07 | 3.07 | 3.07 | 3.07 | 3.07 | 3.07 | |
| | 200 | - | - | - | 2.95 | 2.95 | 2.95 | 2.95 | 2.95 | 2.95 | |
| | 250 | - | - | - | - | - | - | 2.75 | 2.75 | 2.75 | |
| 1.5 | 105 | 3.15 | 3.15 | 2.73 | 3.15 | 3.15 | 2.88 | 3.15 | 3.15 | 2.88 | |
| | 120 | 3.42 | 3.40 | 2.92 | 3.42 | 3.42 | 3.16 | 3.42 | 3.42 | 3.23 | |
| | 130 | 3.34 | 3.34 | 3.04 | 3.34 | 3.34 | 3.28 | 3.34 | 3.34 | 3.34 | |
| | 150 | 3.21 | 3.21 | 3.18 | 3.21 | 3.21 | 3.21 | 3.21 | 3.21 | 3.21 | |
| | 175 | - | - | - | 3.07 | 3.07 | 3.07 | 3.07 | 3.07 | 3.07 | |
| | 200 | - | - | - | 2.95 | 2.95 | 2.95 | 2.95 | 2.95 | 2.95 | |
| | 250 | - | - | - | - | - | - | 2.75 | 2.75 | 2.75 | |
| 2.0 | 115 | 3.17 | 2.86 | 2.46 | 3.45 | 3.17 | 2.72 | 3.45 | 3.45 | 2.98 | |
| | 120 | 3.23 | 2.92 | 2.51 | 3.42 | 3.23 | 2.78 | 3.42 | 3.42 | 3.05 | |
| | 130 | 3.34 | 3.03 | 2.61 | 3.34 | 3.34 | 2.89 | 3.34 | 3.34 | 3.17 | |
| | 150 | 3.21 | 3.17 | 2.75 | 3.21 | 3.21 | 3.04 | 3.21 | 3.21 | 3.21 | |
| | 175 | - | - | - | 3.07 | 3.07 | 3.07 | 3.07 | 3.07 | 3.07 | |
| | 200 | - | - | - | 2.95 | 2.95 | 2.95 | 2.95 | 2.95 | 2.95 | |
| | 250 | - | - | - | - | - | - | 2.75 | 2.75 | 2.75 | |

Refer to page 3 for notes on the use of these tables



Ribdeck E60 - Normal weight concrete

| Span/load table | | | Normal weight concrete | | | | | | | | | | | | |
|----------------------|-------------------|-----------------|---|--------------|------|------|------|--------------|------|------|------|--------------|------|------|------|
| | Support Condition | Slab Depth (mm) | Concrete Volume (m ³ /m ²) | 0.9 Gauge | | | | 1.0 Gauge | | | | 1.2 Gauge | | | |
| | | | | Imposed Load | | | | Imposed Load | | | | Imposed Load | | | |
| | | | | FW | 5.0 | 6.7 | 10.0 | FW | 5.0 | 6.7 | 10.0 | FW | 5.0 | 6.7 | 10.0 |
| Single - Unpropped | | 130 | 0.094 | 2.74 | 2.74 | 2.74 | 2.59 | 3.10 | 3.10 | 3.10 | 2.76 | 3.44 | 3.44 | 3.44 | 3.06 |
| | | 140 | 0.104 | 2.68 | 2.68 | 2.68 | 2.68 | 3.03 | 3.03 | 3.03 | 2.91 | 3.36 | 3.36 | 3.36 | 3.25 |
| | | 150 | 0.114 | 2.62 | 2.62 | 2.62 | 2.62 | 2.96 | 2.96 | 2.96 | 2.96 | 3.29 | 3.29 | 3.29 | 3.29 |
| | | 160 | 0.124 | 2.57 | 2.57 | 2.57 | 2.57 | 2.90 | 2.90 | 2.90 | 2.90 | 3.23 | 3.23 | 3.23 | 3.23 |
| | | 175 | 0.139 | 2.49 | 2.49 | 2.49 | 2.49 | 2.82 | 2.82 | 2.82 | 2.82 | 3.14 | 3.14 | 3.14 | 3.14 |
| | | 200 | 0.164 | 2.39 | 2.39 | 2.39 | 2.39 | 2.71 | 2.71 | 2.71 | 2.71 | 3.01 | 3.01 | 3.01 | 3.01 |
| | | 250 | 0.214 | 2.22 | 2.22 | 2.22 | 2.22 | 2.52 | 2.52 | 2.52 | 2.52 | 2.81 | 2.81 | 2.81 | 2.81 |
| Multiple - Unpropped | | 130 | 0.094 | 3.31 | 3.31 | 3.22 | 2.59 | 3.67 | 3.67 | 3.47 | 2.76 | 4.00 | 4.00 | 3.93 | 3.06 |
| | | 140 | 0.104 | 3.22 | 3.22 | 3.22 | 2.72 | 3.58 | 3.58 | 3.58 | 2.91 | 3.90 | 3.90 | 3.90 | 3.25 |
| | | 150 | 0.114 | 3.14 | 3.14 | 3.14 | 2.87 | 3.49 | 3.49 | 3.49 | 3.07 | 3.81 | 3.81 | 3.81 | 3.45 |
| | | 160 | 0.124 | 3.07 | 3.07 | 3.07 | 3.00 | 3.41 | 3.41 | 3.41 | 3.23 | 3.72 | 3.72 | 3.72 | 3.64 |
| | | 175 | 0.139 | 2.96 | 2.96 | 2.96 | 2.96 | 3.30 | 3.30 | 3.30 | 3.30 | 3.61 | 3.61 | 3.61 | 3.61 |
| | | 200 | 0.164 | 2.79 | 2.79 | 2.79 | 2.79 | 3.14 | 3.14 | 3.14 | 3.14 | 3.45 | 3.45 | 3.45 | 3.45 |
| | | 250 | 0.214 | 2.53 | 2.53 | 2.53 | 2.53 | 2.87 | 2.87 | 2.87 | 2.87 | 3.19 | 3.19 | 3.19 | 3.19 |
| Multiple - Propped | | 130 | 0.094 | 4.55 | 3.35 | 2.93 | 2.43 | 4.55 | 3.61 | 3.14 | 2.58 | 4.55 | 4.10 | 3.53 | 2.85 |
| | | 140 | 0.104 | 4.90 | 3.49 | 3.07 | 2.54 | 4.90 | 3.78 | 3.30 | 2.71 | 4.90 | 4.32 | 3.72 | 3.00 |
| | | 150 | 0.114 | 5.25 | 3.64 | 3.20 | 2.66 | 5.25 | 3.95 | 3.45 | 2.84 | 5.25 | 4.52 | 3.90 | 3.16 |
| | | 160 | 0.124 | 5.60 | 3.78 | 3.32 | 2.77 | 5.60 | 4.10 | 3.59 | 2.96 | 5.60 | 4.72 | 4.08 | 3.31 |
| | | 175 | 0.139 | 5.88 | 3.96 | 3.50 | 2.92 | 6.13 | 4.32 | 3.79 | 3.13 | 6.13 | 5.00 | 4.33 | 3.52 |
| | | 200 | 0.164 | 5.59 | 4.24 | 3.76 | 3.15 | 6.23 | 4.64 | 4.09 | 3.40 | 6.50 | 5.40 | 4.71 | 3.84 |
| | | 250 | 0.214 | 5.11 | 4.70 | 4.21 | 3.56 | 5.71 | 5.17 | 4.60 | 3.86 | 6.16 | 6.07 | 5.35 | 4.41 |

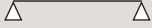


| Simplified fire design table | | | Normal weight concrete | | | | | | | | |
|------------------------------|-----------------|--|------------------------|------|------|------|------|------|------|------|--|
| Fire Rating (Hrs) | Slab Depth (mm) | Span (m) for given Imposed Load (kN/m ²) | | | | | | | | | |
| | | A142 | | | A193 | | | A252 | | | |
| | | 5.0 | 6.7 | 10.0 | 5.0 | 6.7 | 10.0 | 5.0 | 6.7 | 10.0 | |
| 1.0 | 130 | 3.31 | 3.22 | 2.59 | 3.31 | 3.22 | 2.59 | 3.31 | 3.22 | 2.59 | |
| | 140 | 3.22 | 3.22 | 2.72 | 3.22 | 3.22 | 2.72 | 3.22 | 3.22 | 2.72 | |
| | 150 | 3.14 | 3.14 | 2.87 | 3.14 | 3.14 | 2.87 | 3.14 | 3.14 | 2.87 | |
| | 160 | 3.07 | 3.07 | 3.00 | 3.07 | 3.07 | 3.00 | 3.07 | 3.07 | 3.00 | |
| | 175 | 2.96 | 2.96 | 2.96 | 2.96 | 2.96 | 2.96 | 2.96 | 2.96 | 2.96 | |
| | 200 | - | - | - | 2.79 | 2.79 | 2.79 | 2.79 | 2.79 | 2.79 | |
| | 250 | - | - | - | - | - | - | 2.53 | 2.53 | 2.53 | |
| 1.5 | 140 | 3.22 | 3.02 | 2.61 | 3.22 | 3.22 | 2.72 | 3.22 | 3.22 | 2.72 | |
| | 150 | 3.14 | 3.14 | 2.74 | 3.14 | 3.14 | 2.87 | 3.14 | 3.14 | 2.87 | |
| | 160 | 3.07 | 3.07 | 2.81 | 3.07 | 3.07 | 3.00 | 3.07 | 3.07 | 3.00 | |
| | 175 | 2.96 | 2.96 | 2.88 | 2.96 | 2.96 | 2.96 | 2.96 | 2.96 | 2.96 | |
| | 200 | - | - | - | 2.79 | 2.79 | 2.79 | 2.79 | 2.79 | 2.79 | |
| 250 | - | - | - | - | - | - | 2.53 | 2.53 | 2.53 | | |
| 2.0 | 150 | 3.08 | 2.81 | 2.44 | 3.14 | 3.13 | 2.72 | 3.14 | 3.14 | 2.87 | |
| | 160 | 3.07 | 2.92 | 2.55 | 3.07 | 3.07 | 2.84 | 3.07 | 3.07 | 3.00 | |
| | 175 | 2.96 | 2.96 | 2.61 | 2.96 | 2.96 | 2.91 | 2.96 | 2.96 | 2.96 | |
| | 200 | - | - | - | 2.79 | 2.79 | 2.79 | 2.79 | 2.79 | 2.79 | |
| | 250 | - | - | - | - | - | - | 2.53 | 2.53 | 2.53 | |

Refer to page 3 for notes on the use of these tables

less concrete

Ribdeck E60

Ribdeck E60 - Lightweight concrete

| Span/load table | | | Lightweight concrete | | | | | | | | | | | | |
|----------------------|---|-----------------|---|--------------|------|------|------|--------------|------|------|------|--------------|------|------|------|
| | Support Condition | Slab Depth (mm) | Concrete Volume (m ³ /m ²) | 0.9 Gauge | | | | 1.0 Gauge | | | | 1.2 Gauge | | | |
| | | | | Imposed Load | | | | Imposed Load | | | | Imposed Load | | | |
| | | | | FW | 5.0 | 6.7 | 10.0 | FW | 5.0 | 6.7 | 10.0 | FW | 5.0 | 6.7 | 10.0 |
| Single - Unpropped |  | 120 | 0.094 | 2.98 | 2.98 | 2.98 | 2.44 | 3.36 | 3.36 | 3.26 | 2.60 | 3.60 | 3.60 | 3.59 | 2.86 |
| | | 130 | 0.104 | 2.91 | 2.91 | 2.91 | 2.59 | 3.28 | 3.28 | 3.28 | 2.76 | 3.64 | 3.64 | 3.64 | 3.06 |
| | | 140 | 0.114 | 2.84 | 2.84 | 2.84 | 2.72 | 3.21 | 3.21 | 3.21 | 2.91 | 3.57 | 3.57 | 3.57 | 3.25 |
| | | 150 | 0.124 | 2.78 | 2.78 | 2.78 | 2.78 | 3.15 | 3.15 | 3.15 | 3.07 | 3.50 | 3.50 | 3.50 | 3.45 |
| | | 175 | 0.139 | 2.66 | 2.66 | 2.66 | 2.66 | 3.01 | 3.01 | 3.01 | 3.01 | 3.34 | 3.34 | 3.34 | 3.34 |
| | | 200 | 0.164 | 2.55 | 2.55 | 2.55 | 2.55 | 2.89 | 2.89 | 2.89 | 2.89 | 3.21 | 3.21 | 3.21 | 3.21 |
| | | 250 | 0.214 | 2.38 | 2.38 | 2.38 | 2.38 | 2.69 | 2.69 | 2.69 | 2.69 | 3.00 | 3.00 | 3.00 | 3.00 |
| Multiple - Unpropped |  | 120 | 0.094 | 3.61 | 3.57 | 3.03 | 2.44 | 3.60 | 3.60 | 3.26 | 2.60 | 3.60 | 3.60 | 3.59 | 2.86 |
| | | 130 | 0.104 | 3.52 | 3.52 | 3.22 | 2.59 | 3.90 | 3.90 | 3.47 | 2.76 | 3.90 | 3.90 | 3.87 | 3.06 |
| | | 140 | 0.114 | 3.44 | 3.44 | 3.40 | 2.72 | 3.82 | 3.82 | 3.68 | 2.91 | 4.18 | 4.18 | 4.14 | 3.25 |
| | | 150 | 0.124 | 3.36 | 3.36 | 3.36 | 2.87 | 3.73 | 3.73 | 3.73 | 3.07 | 4.08 | 4.08 | 4.08 | 3.45 |
| | | 175 | 0.139 | 3.19 | 3.19 | 3.19 | 3.19 | 3.55 | 3.55 | 3.55 | 3.45 | 3.88 | 3.88 | 3.88 | 3.88 |
| | | 200 | 0.164 | 3.04 | 3.04 | 3.04 | 3.04 | 3.39 | 3.39 | 3.39 | 3.39 | 3.70 | 3.70 | 3.70 | 3.70 |
| | | 250 | 0.214 | 2.77 | 2.77 | 2.77 | 2.77 | 3.12 | 3.12 | 3.12 | 3.12 | 3.43 | 3.43 | 3.43 | 3.43 |
| Multiple - Propped |  | 120 | 0.094 | 3.60 | 3.26 | 2.84 | 2.33 | 3.60 | 3.52 | 3.04 | 2.48 | 3.60 | 3.60 | 3.40 | 2.73 |
| | | 130 | 0.104 | 3.90 | 3.43 | 2.99 | 2.46 | 3.90 | 3.71 | 3.21 | 2.62 | 3.90 | 3.90 | 3.61 | 2.89 |
| | | 140 | 0.114 | 4.20 | 3.59 | 3.13 | 2.58 | 4.20 | 3.90 | 3.37 | 2.75 | 4.20 | 4.20 | 3.81 | 3.05 |
| | | 150 | 0.124 | 4.50 | 3.75 | 3.27 | 2.70 | 4.50 | 4.08 | 3.53 | 2.89 | 4.50 | 4.50 | 4.01 | 3.22 |
| | | 175 | 0.139 | 5.25 | 4.11 | 3.60 | 2.98 | 5.25 | 4.49 | 3.90 | 3.20 | 5.25 | 5.21 | 4.47 | 3.60 |
| | | 200 | 0.164 | 6.03 | 4.42 | 3.89 | 3.23 | 6.00 | 4.85 | 4.23 | 3.48 | 6.00 | 5.67 | 4.89 | 3.94 |
| | | 250 | 0.214 | 5.55 | 4.94 | 4.38 | 3.66 | 6.19 | 5.46 | 4.80 | 3.98 | 6.50 | 6.45 | 5.61 | 4.56 |

| Simplified fire design table | | | Lightweight concrete | | | | | | | | |
|------------------------------|-----------------|--|----------------------|------|------|------|------|------|------|------|--|
| Fire Rating (Hrs) | Slab Depth (mm) | Span (m) for given Imposed Load (kN/m ²) | | | | | | | | | |
| | | A142 | | | A193 | | | A252 | | | |
| | | 5.0 | 6.7 | 10.0 | 5.0 | 6.7 | 10.0 | 5.0 | 6.7 | 10.0 | |
| 1.0 | 120 | 3.57 | 3.03 | 2.44 | 3.57 | 3.03 | 2.44 | 3.57 | 3.03 | 2.44 | |
| | 130 | 3.52 | 3.22 | 2.59 | 3.52 | 3.22 | 2.59 | 3.52 | 3.22 | 2.59 | |
| | 140 | 3.44 | 3.40 | 2.72 | 3.44 | 3.40 | 2.72 | 3.44 | 3.40 | 2.72 | |
| | 150 | 3.36 | 3.36 | 2.87 | 3.36 | 3.36 | 2.87 | 3.36 | 3.36 | 2.87 | |
| | 175 | 3.19 | 3.19 | 3.19 | 3.19 | 3.19 | 3.19 | 3.19 | 3.19 | 3.19 | |
| | 200 | - | - | - | 3.04 | 3.04 | 3.04 | 3.04 | 3.04 | 3.04 | |
| | 250 | - | - | - | - | - | - | 2.77 | 2.77 | 2.77 | |
| 1.5 | 130 | 3.42 | 3.08 | 2.59 | 3.52 | 3.22 | 2.59 | 3.52 | 3.22 | 2.59 | |
| | 140 | 3.44 | 3.25 | 2.72 | 3.44 | 3.40 | 2.72 | 3.44 | 3.40 | 2.72 | |
| | 150 | 3.36 | 3.31 | 2.85 | 3.36 | 3.36 | 2.87 | 3.36 | 3.36 | 2.87 | |
| | 175 | 3.19 | 3.19 | 2.98 | 3.19 | 3.19 | 3.19 | 3.19 | 3.19 | 3.19 | |
| | 200 | - | - | - | 3.04 | 3.04 | 3.04 | 3.04 | 3.04 | 3.04 | |
| 250 | - | - | - | - | - | - | 2.77 | 2.77 | 2.77 | | |
| 2.0 | 140 | 3.26 | 2.95 | 2.53 | 3.44 | 3.29 | 2.72 | 3.44 | 3.40 | 2.72 | |
| | 150 | 3.36 | 3.05 | 2.63 | 3.36 | 3.36 | 2.87 | 3.36 | 3.36 | 2.87 | |
| | 175 | 3.19 | 3.16 | 2.74 | 3.19 | 3.19 | 3.07 | 3.19 | 3.19 | 3.19 | |
| | 200 | - | - | - | 3.04 | 3.04 | 3.04 | 3.04 | 3.04 | 3.04 | |
| | 250 | - | - | - | - | - | - | 2.77 | 2.77 | 2.77 | |

Refer to page 3 for notes on the use of these tables



Ribdeck 80 - Normal weight concrete

| Span/load table | | | Normal weight concrete | | | | | | | | | | | | |
|----------------------|-------------------|-----------------|---|--------------|------|------|------|--------------|------|------|------|--------------|------|------|------|
| | Support Condition | Slab Depth (mm) | Concrete Volume (m ³ /m ²) | 0.9 Gauge | | | | 1.0 Gauge | | | | 1.2 Gauge | | | |
| | | | | Imposed Load | | | | Imposed Load | | | | Imposed Load | | | |
| | | | | FW | 5.0 | 6.7 | 10.0 | FW | 5.0 | 6.7 | 10.0 | FW | 5.0 | 6.7 | 10.0 |
| Single - Unpropped | | 140 | 0.098 | 3.73 | 3.73 | 3.73 | 3.51 | 4.11 | 4.11 | 4.11 | 3.56 | 4.28 | 4.28 | 4.28 | 3.67 |
| | | 150 | 0.108 | 3.63 | 3.63 | 3.63 | 3.63 | 4.01 | 4.01 | 4.01 | 3.79 | 4.20 | 4.20 | 4.20 | 3.90 |
| | | 160 | 0.118 | 3.55 | 3.55 | 3.55 | 3.55 | 3.92 | 3.92 | 3.92 | 3.92 | 4.12 | 4.12 | 4.12 | 4.12 |
| | | 170 | 0.128 | 3.47 | 3.47 | 3.47 | 3.47 | 3.83 | 3.83 | 3.83 | 3.83 | 4.05 | 4.05 | 4.05 | 4.05 |
| | | 175 | 0.133 | 3.43 | 3.43 | 3.43 | 3.43 | 3.79 | 3.79 | 3.79 | 3.79 | 4.02 | 4.02 | 4.02 | 4.02 |
| | | 200 | 0.158 | 3.26 | 3.26 | 3.26 | 3.26 | 3.61 | 3.61 | 3.61 | 3.61 | 3.86 | 3.86 | 3.86 | 3.86 |
| Multiple - Unpropped | | 140 | 0.098 | 4.01 | 4.01 | 4.01 | 3.51 | 4.47 | 4.47 | 4.47 | 3.56 | 4.90 | 4.90 | 4.68 | 3.67 |
| | | 150 | 0.108 | 3.91 | 3.91 | 3.91 | 3.73 | 4.36 | 4.36 | 4.36 | 3.79 | 5.09 | 5.09 | 4.99 | 3.90 |
| | | 160 | 0.118 | 3.82 | 3.82 | 3.82 | 3.82 | 4.26 | 4.26 | 4.26 | 4.03 | 4.98 | 4.98 | 4.98 | 4.14 |
| | | 170 | 0.128 | 3.73 | 3.73 | 3.73 | 3.73 | 4.17 | 4.17 | 4.17 | 4.17 | 4.87 | 4.87 | 4.87 | 4.38 |
| | | 175 | 0.133 | 3.69 | 3.69 | 3.69 | 3.69 | 4.12 | 4.12 | 4.12 | 4.12 | 4.82 | 4.82 | 4.82 | 4.50 |
| | | 200 | 0.158 | 3.50 | 3.50 | 3.50 | 3.50 | 3.92 | 3.92 | 3.92 | 3.92 | 4.60 | 4.60 | 4.60 | 4.60 |
| Multiple - Propped | | 140 | 0.098 | 4.90 | 4.74 | 4.33 | 3.51 | 4.90 | 4.81 | 4.39 | 3.56 | 4.90 | 4.90 | 4.51 | 3.67 |
| | | 150 | 0.108 | 5.25 | 5.04 | 4.61 | 3.73 | 5.25 | 5.11 | 4.67 | 3.79 | 5.25 | 5.24 | 4.79 | 3.90 |
| | | 160 | 0.118 | 5.60 | 5.34 | 4.88 | 3.97 | 5.60 | 5.41 | 4.95 | 4.03 | 5.60 | 5.55 | 5.08 | 4.14 |
| | | 170 | 0.128 | 5.95 | 5.64 | 5.16 | 4.20 | 5.95 | 5.72 | 5.23 | 4.26 | 5.95 | 5.86 | 5.36 | 4.38 |
| | | 175 | 0.133 | 6.13 | 5.79 | 5.26 | 4.31 | 6.13 | 5.87 | 5.37 | 4.38 | 6.13 | 6.02 | 5.50 | 4.50 |
| | | 200 | 0.158 | 6.50 | 6.17 | 5.64 | 4.90 | 6.50 | 6.46 | 5.91 | 4.97 | 6.50 | 6.50 | 6.22 | 5.10 |
| 250 | 0.208 | 6.37 | 6.37 | 6.22 | 5.48 | 6.50 | 6.50 | 6.50 | 5.75 | 6.50 | 6.50 | 6.50 | 6.15 | | |




| Simplified fire design table | | | Normal weight concrete | | | | | | | | | | | |
|------------------------------|-----------------|--|------------------------|------|------|------|------|------|------|------|------|------|------|------|
| Fire Rating (Hrs) | Slab Depth (mm) | Span (m) for given Imposed Load (kN/m ²) | | | | | | | | | | | | |
| | | A142 | | | A193 | | | A252 | | | A393 | | | |
| | | 5.0 | 6.7 | 10.0 | 5.0 | 6.7 | 10.0 | 5.0 | 6.7 | 10.0 | 5.0 | 6.7 | 10.0 | |
| Normal weight concrete | 1.0 | 140 | 3.65 | 3.31 | 2.86 | 3.91 | 3.55 | 3.06 | 4.01 | 3.79 | 3.27 | 4.01 | 4.01 | 3.51 |
| | | 150 | 3.84 | 3.49 | 3.02 | 3.91 | 3.75 | 3.25 | 3.91 | 3.91 | 3.48 | 3.91 | 3.91 | 3.73 |
| | | 160 | 3.82 | 3.64 | 3.16 | 3.82 | 3.82 | 3.41 | 3.82 | 3.82 | 3.65 | 3.82 | 3.82 | 3.82 |
| | | 170 | 3.73 | 3.71 | 3.23 | 3.73 | 3.73 | 3.49 | 3.73 | 3.73 | 3.73 | 3.73 | 3.73 | 3.73 |
| | | 175 | 3.69 | 3.69 | 3.26 | 3.69 | 3.69 | 3.52 | 3.69 | 3.69 | 3.69 | 3.69 | 3.69 | 3.69 |
| | | 200 | - | - | - | 3.50 | 3.50 | 3.50 | 3.50 | 3.50 | 3.50 | 3.50 | 3.50 | 3.50 |
| | | 250 | - | - | - | - | - | - | 3.20 | 3.20 | 3.20 | 3.20 | 3.20 | 3.20 |
| 1.5 | 150 | 3.31 | 3.01 | 2.61 | 3.60 | 3.27 | 2.83 | 3.89 | 3.54 | 3.06 | 3.91 | 3.91 | 3.51 | |
| | 160 | 3.47 | 3.17 | 2.75 | 3.79 | 3.45 | 3.00 | 3.82 | 3.74 | 3.25 | 3.82 | 3.82 | 3.74 | |
| | 170 | 3.61 | 3.30 | 2.87 | 3.73 | 3.60 | 3.14 | 3.73 | 3.73 | 3.41 | 3.73 | 3.73 | 3.73 | |
| | 175 | 3.65 | 3.34 | 2.91 | 3.69 | 3.65 | 3.18 | 3.69 | 3.69 | 3.46 | 3.69 | 3.69 | 3.69 | |
| | 200 | - | - | - | 3.50 | 3.50 | 3.31 | 3.50 | 3.50 | 3.50 | 3.50 | 3.50 | 3.50 | |
| 250 | - | - | - | - | - | - | 3.20 | 3.20 | 3.20 | 3.20 | 3.20 | 3.20 | | |
| 2.0 | 160 | 3.04 | 2.77 | 2.42 | 3.37 | 3.07 | 2.67 | 3.70 | 3.37 | 2.93 | 3.82 | 3.82 | 3.42 | |
| | 170 | 3.18 | 2.91 | 2.54 | 3.53 | 3.23 | 2.81 | 3.73 | 3.55 | 3.09 | 3.73 | 3.73 | 3.62 | |
| | 175 | 3.24 | 2.97 | 2.59 | 3.60 | 3.30 | 2.88 | 3.69 | 3.62 | 3.16 | 3.69 | 3.69 | 3.69 | |
| | 200 | - | - | - | 3.50 | 3.43 | 3.02 | 3.50 | 3.50 | 3.32 | 3.50 | 3.50 | 3.50 | |
| 250 | - | - | - | - | - | - | 3.20 | 3.20 | 3.20 | 3.20 | 3.20 | 3.20 | | |

Refer to page 3 for notes on the use of these tables

longer spans

Ribdeck 80

Ribdeck 80 - Lightweight concrete

| Span/load table | | | Lightweight concrete | | | | | | | | | | | | |
|----------------------|---|-----------------|---|--------------|------|------|------|--------------|------|------|------|--------------|------|------|------|
| | Support Condition | Slab Depth (mm) | Concrete Volume (m ³ /m ²) | 0.9 Gauge | | | | 1.0 Gauge | | | | 1.2 Gauge | | | |
| | | | | Imposed Load | | | | Imposed Load | | | | Imposed Load | | | |
| | | | | FW | 5.0 | 6.7 | 10.0 | FW | 5.0 | 6.7 | 10.0 | FW | 5.0 | 6.7 | 10.0 |
| Single - Unpropped |  | 130 | 0.098 | 3.90 | 3.90 | 3.89 | 3.10 | 3.90 | 3.90 | 3.90 | 3.16 | 3.90 | 3.90 | 3.90 | 3.26 |
| | | 140 | 0.108 | 3.97 | 3.97 | 3.97 | 3.30 | 4.20 | 4.20 | 4.20 | 3.36 | 4.20 | 4.20 | 4.20 | 3.46 |
| | | 150 | 0.118 | 3.88 | 3.88 | 3.88 | 3.51 | 4.28 | 4.28 | 4.28 | 3.57 | 4.44 | 4.44 | 4.44 | 3.67 |
| | | 160 | 0.128 | 3.80 | 3.80 | 3.80 | 3.73 | 4.19 | 4.19 | 4.19 | 3.79 | 4.36 | 4.36 | 4.36 | 3.89 |
| | | 175 | 0.133 | 3.68 | 3.68 | 3.68 | 3.68 | 4.07 | 4.07 | 4.07 | 4.07 | 4.25 | 4.25 | 4.25 | 4.23 |
| | | 200 | 0.158 | 3.51 | 3.51 | 3.51 | 3.51 | 3.88 | 3.88 | 3.88 | 3.88 | 4.10 | 4.10 | 4.10 | 4.10 |
| | | 250 | 0.208 | 3.23 | 3.23 | 3.23 | 3.23 | 3.58 | 3.58 | 3.58 | 3.58 | 3.85 | 3.85 | 3.85 | 3.85 |
| Multiple - Unpropped |  | 130 | 0.098 | 3.90 | 3.90 | 3.89 | 3.10 | 3.90 | 3.90 | 3.90 | 3.16 | 3.90 | 3.90 | 3.90 | 3.26 |
| | | 140 | 0.108 | 4.20 | 4.20 | 4.15 | 3.30 | 4.20 | 4.20 | 4.20 | 3.36 | 4.20 | 4.20 | 4.20 | 3.46 |
| | | 150 | 0.118 | 4.18 | 4.18 | 4.18 | 3.51 | 4.50 | 4.50 | 4.49 | 3.57 | 4.50 | 4.50 | 4.50 | 3.67 |
| | | 160 | 0.128 | 4.09 | 4.09 | 4.09 | 3.73 | 4.56 | 4.56 | 4.56 | 3.79 | 4.80 | 4.80 | 4.80 | 3.89 |
| | | 175 | 0.133 | 3.96 | 3.96 | 3.96 | 3.96 | 4.43 | 4.43 | 4.43 | 4.11 | 5.18 | 5.18 | 5.18 | 4.23 |
| | | 200 | 0.158 | 3.77 | 3.77 | 3.77 | 3.77 | 4.22 | 4.22 | 4.22 | 4.22 | 4.95 | 4.95 | 4.95 | 4.79 |
| | | 250 | 0.208 | 3.47 | 3.47 | 3.47 | 3.47 | 3.89 | 3.89 | 3.89 | 3.89 | 4.58 | 4.58 | 4.58 | 4.58 |
| Multiple - Propped |  | 130 | 0.098 | 3.90 | 3.90 | 3.80 | 3.10 | 3.90 | 3.90 | 3.86 | 3.16 | 3.90 | 3.90 | 3.90 | 3.26 |
| | | 140 | 0.108 | 4.20 | 4.20 | 4.04 | 3.30 | 4.20 | 4.20 | 4.11 | 3.36 | 4.20 | 4.20 | 4.20 | 3.46 |
| | | 150 | 0.118 | 4.50 | 4.50 | 4.30 | 3.51 | 4.50 | 4.50 | 4.37 | 3.57 | 4.50 | 4.50 | 4.49 | 3.67 |
| | | 160 | 0.128 | 4.80 | 4.80 | 4.56 | 3.73 | 4.80 | 4.80 | 4.63 | 3.79 | 4.80 | 4.80 | 4.75 | 3.89 |
| | | 175 | 0.133 | 5.25 | 5.25 | 4.95 | 4.05 | 5.25 | 5.25 | 5.02 | 4.11 | 5.25 | 5.25 | 5.15 | 4.23 |
| | | 200 | 0.158 | 6.00 | 6.00 | 5.59 | 4.59 | 6.00 | 6.00 | 5.67 | 4.66 | 6.00 | 6.00 | 5.82 | 4.79 |
| | | 250 | 0.208 | 6.50 | 6.50 | 6.50 | 5.67 | 6.50 | 6.50 | 6.50 | 5.76 | 6.50 | 6.50 | 6.50 | 5.91 |

| Simplified fire design table | | | Lightweight concrete | | | | | | | | | | | |
|------------------------------|-------------------|-----------------|--|------|------|------|------|------|------|------|------|------|------|------|
| | Fire Rating (Hrs) | Slab Depth (mm) | Span (m) for given Imposed Load (kN/m ²) | | | | | | | | | | | |
| | | | A142 | | | A193 | | | A252 | | | A393 | | |
| | | | 5.0 | 6.7 | 10.0 | 5.0 | 6.7 | 10.0 | 5.0 | 6.7 | 10.0 | 5.0 | 6.7 | 10.0 |
| Normal weight concrete | 1.0 | 130 | 3.62 | 3.25 | 2.78 | 3.87 | 3.48 | 2.98 | 3.90 | 3.72 | 3.10 | 3.90 | 3.89 | 3.10 |
| | | 140 | 3.85 | 3.47 | 2.98 | 4.15 | 3.73 | 3.20 | 4.20 | 4.00 | 3.30 | 4.20 | 4.15 | 3.30 |
| | | 150 | 4.04 | 3.65 | 3.14 | 4.18 | 3.94 | 3.38 | 4.18 | 4.18 | 3.51 | 4.18 | 4.18 | 3.51 |
| | | 160 | 4.09 | 3.78 | 3.26 | 4.09 | 4.09 | 3.52 | 4.09 | 4.09 | 3.73 | 4.09 | 4.09 | 3.73 |
| | | 175 | 3.96 | 3.89 | 3.36 | 3.96 | 3.96 | 3.63 | 3.96 | 3.96 | 3.90 | 3.96 | 3.96 | 3.96 |
| | | 200 | - | - | - | 3.77 | 3.77 | 3.77 | 3.77 | 3.77 | 3.77 | 3.77 | 3.77 | 3.77 |
| | | 250 | - | - | - | - | - | - | 3.47 | 3.47 | 3.47 | 3.47 | 3.47 | 3.47 |
| | 1.5 | 140 | 3.37 | 3.04 | 2.61 | 3.68 | 3.31 | 2.84 | 3.99 | 3.59 | 3.08 | 4.20 | 4.13 | 3.30 |
| | | 150 | 3.59 | 3.24 | 2.79 | 3.93 | 3.55 | 3.05 | 4.18 | 3.85 | 3.31 | 4.18 | 4.18 | 3.51 |
| | | 160 | 3.76 | 3.40 | 2.93 | 4.09 | 3.73 | 3.21 | 4.09 | 4.06 | 3.50 | 4.09 | 4.09 | 3.73 |
| | | 175 | 3.84 | 3.49 | 3.02 | 3.96 | 3.82 | 3.31 | 3.96 | 3.96 | 3.60 | 3.96 | 3.96 | 3.96 |
| | | 200 | - | - | - | 3.77 | 3.77 | 3.44 | 3.77 | 3.77 | 3.74 | 3.77 | 3.77 | 3.77 |
| | 250 | - | - | - | - | - | - | 3.47 | 3.47 | 3.47 | 3.47 | 3.47 | 3.47 | |
| | 2.0 | 150 | 3.18 | 2.87 | 2.47 | 3.53 | 3.19 | 2.75 | 3.89 | 3.51 | 3.02 | 4.18 | 4.12 | 3.51 |
| | | 160 | 3.37 | 3.05 | 2.63 | 3.75 | 3.39 | 2.93 | 4.09 | 3.74 | 3.22 | 4.09 | 4.09 | 3.73 |
| | | 175 | 3.49 | 3.17 | 2.74 | 3.89 | 3.54 | 3.06 | 3.96 | 3.90 | 3.37 | 3.96 | 3.96 | 3.96 |
| | | 200 | - | - | - | 3.77 | 3.64 | 3.17 | 3.77 | 3.77 | 3.49 | 3.77 | 3.77 | 3.77 |
| | | 250 | - | - | - | - | - | - | 3.47 | 3.47 | 3.47 | 3.47 | 3.47 | 3.47 |

Refer to page 3 for notes on the use of these tables



Ribdeck AL - Normal weight concrete

| Span/load table | | | Normal weight concrete | | | | | | | | | | | | |
|----------------------|-------------------|-----------------|---|--------------|------|------|------|--------------|------|------|------|--------------|------|------|------|
| | Support Condition | Slab Depth (mm) | Concrete Volume (m ³ /m ²) | 0.9 Gauge | | | | 1.0 Gauge | | | | 1.2 Gauge | | | |
| | | | | Imposed Load | | | | Imposed Load | | | | Imposed Load | | | |
| | | | | FW | 5.0 | 6.7 | 10.0 | FW | 5.0 | 6.7 | 10.0 | FW | 5.0 | 6.7 | 10.0 |
| Single - Unpropped | | 120 | 0.095 | 2.96 | 2.96 | 2.96 | 2.95 | 3.06 | 3.06 | 3.06 | 3.06 | 3.23 | 3.23 | 3.23 | 3.20 |
| | | 130 | 0.105 | 2.88 | 2.88 | 2.88 | 2.88 | 2.98 | 2.98 | 2.98 | 2.98 | 3.15 | 3.15 | 3.15 | 3.15 |
| | | 140 | 0.115 | 2.81 | 2.81 | 2.81 | 2.81 | 2.90 | 2.90 | 2.90 | 2.90 | 3.07 | 3.07 | 3.07 | 3.07 |
| | | 150 | 0.125 | 2.75 | 2.75 | 2.75 | 2.75 | 2.84 | 2.84 | 2.84 | 2.84 | 3.00 | 3.00 | 3.00 | 3.00 |
| | | 175 | 0.150 | 2.61 | 2.61 | 2.61 | 2.61 | 2.70 | 2.70 | 2.70 | 2.70 | 2.85 | 2.85 | 2.85 | 2.85 |
| | | 200 | 0.175 | 2.49 | 2.49 | 2.49 | 2.49 | 2.58 | 2.58 | 2.58 | 2.58 | 2.73 | 2.73 | 2.73 | 2.73 |
| | | 250 | 0.225 | 2.31 | 2.31 | 2.31 | 2.31 | 2.39 | 2.39 | 2.39 | 2.39 | 2.53 | 2.53 | 2.53 | 2.53 |
| Multiple - Unpropped | | 120 | 0.095 | 3.27 | 3.27 | 3.27 | 2.95 | 3.53 | 3.53 | 3.53 | 3.08 | 3.81 | 3.81 | 3.81 | 3.20 |
| | | 130 | 0.105 | 3.19 | 3.19 | 3.19 | 3.14 | 3.44 | 3.44 | 3.44 | 3.27 | 3.71 | 3.71 | 3.71 | 3.44 |
| | | 140 | 0.115 | 3.12 | 3.12 | 3.12 | 3.12 | 3.36 | 3.36 | 3.36 | 3.36 | 3.62 | 3.62 | 3.62 | 3.62 |
| | | 150 | 0.125 | 3.05 | 3.05 | 3.05 | 3.05 | 3.28 | 3.28 | 3.28 | 3.28 | 3.54 | 3.54 | 3.54 | 3.54 |
| | | 175 | 0.150 | 2.88 | 2.88 | 2.88 | 2.88 | 3.12 | 3.12 | 3.12 | 3.12 | 3.37 | 3.37 | 3.37 | 3.37 |
| | | 200 | 0.175 | 2.73 | 2.73 | 2.73 | 2.73 | 2.99 | 2.99 | 2.99 | 2.99 | 3.23 | 3.23 | 3.23 | 3.23 |
| | | 250 | 0.225 | 2.48 | 2.48 | 2.48 | 2.48 | 2.76 | 2.76 | 2.76 | 2.76 | 3.00 | 3.00 | 3.00 | 3.00 |
| Multiple - Propped | | 120 | 0.095 | 4.20 | 3.94 | 3.40 | 2.75 | 4.20 | 4.10 | 3.53 | 2.87 | 4.20 | 4.20 | 3.80 | 3.10 |
| | | 130 | 0.105 | 4.55 | 4.14 | 3.57 | 2.90 | 4.55 | 4.30 | 3.72 | 3.02 | 4.55 | 4.55 | 3.99 | 3.26 |
| | | 140 | 0.115 | 4.90 | 4.34 | 3.75 | 3.05 | 4.90 | 4.50 | 3.90 | 3.17 | 4.90 | 4.82 | 4.19 | 3.42 |
| | | 150 | 0.125 | 5.25 | 4.52 | 3.92 | 3.19 | 5.25 | 4.69 | 4.07 | 3.32 | 5.25 | 5.02 | 4.37 | 3.58 |
| | | 175 | 0.150 | 5.73 | 4.94 | 4.30 | 3.52 | 6.13 | 5.12 | 4.47 | 3.66 | 6.13 | 5.47 | 4.79 | 3.93 |
| | | 200 | 0.175 | 5.47 | 5.30 | 4.65 | 3.82 | 5.92 | 5.49 | 4.82 | 3.97 | 6.40 | 5.86 | 5.16 | 4.26 |
| | | 250 | 0.225 | 5.03 | 5.03 | 5.03 | 4.34 | 5.49 | 5.49 | 5.41 | 4.51 | 5.95 | 5.95 | 5.78 | 4.83 |



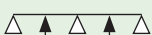
| Simplified fire design table | | | Normal weight concrete | | | | | | | | |
|------------------------------|-----------------|--|------------------------|------|------|------|------|------|------|------|------|
| Fire Rating (Hrs) | Slab Depth (mm) | Span (m) for given Imposed Load (kN/m ²) | | | | | | | | | |
| | | A142 | | | A193 | | | A252 | | | |
| | | 5.0 | 6.7 | 10.0 | 5.0 | 6.7 | 10.0 | 5.0 | 6.7 | 10.0 | |
| Normal weight concrete | 1.0 | 120 | 3.27 | 3.23 | 2.79 | 3.27 | 3.27 | 2.95 | 3.27 | 3.27 | 2.95 |
| | | 130 | 3.19 | 3.19 | 2.93 | 3.19 | 3.19 | 3.14 | 3.19 | 3.19 | 3.14 |
| | | 140 | 3.12 | 3.12 | 3.01 | 3.12 | 3.12 | 3.12 | 3.12 | 3.12 | 3.12 |
| | | 150 | 3.05 | 3.05 | 3.05 | 3.05 | 3.05 | 3.05 | 3.05 | 3.05 | 3.05 |
| | | 175 | - | - | - | 2.88 | 2.88 | 2.88 | 2.88 | 2.88 | 2.88 |
| | | 200 | - | - | - | 2.73 | 2.73 | 2.73 | 2.73 | 2.73 | 2.73 |
| | | 250 | - | - | - | - | - | - | 2.48 | 2.48 | 2.48 |
| 1.5 | 130 | 3.19 | 2.96 | 2.57 | 3.19 | 3.19 | 2.80 | 3.19 | 3.19 | 3.04 | |
| | 140 | 3.12 | 3.10 | 2.69 | 3.12 | 3.12 | 2.94 | 3.12 | 3.12 | 3.12 | |
| | 150 | 3.05 | 3.05 | 2.75 | 3.05 | 3.05 | 3.02 | 3.05 | 3.05 | 3.05 | |
| | 175 | - | - | - | 2.88 | 2.88 | 2.88 | 2.88 | 2.88 | 2.88 | |
| | 200 | - | - | - | 2.73 | 2.73 | 2.73 | 2.73 | 2.73 | 2.73 | |
| 250 | - | - | - | - | - | - | 2.48 | 2.48 | 2.48 | | |
| 2.0 | 140 | 3.01 | 2.74 | 2.38 | 3.12 | 3.05 | 2.65 | 3.12 | 3.12 | 2.90 | |
| | 150 | 3.05 | 2.85 | 2.49 | 3.05 | 3.05 | 2.76 | 3.05 | 3.05 | 3.04 | |
| | 175 | - | - | - | 2.88 | 2.88 | 2.88 | 2.88 | 2.88 | 2.88 | |
| | 200 | - | - | - | 2.73 | 2.73 | 2.73 | 2.73 | 2.73 | 2.73 | |
| 250 | - | - | - | - | - | - | 2.48 | 2.48 | 2.48 | | |

Refer to page 3 for notes on the use of these tables

shallow slabs
efficient designs

Ribdeck AL

Ribdeck AL - Lightweight concrete

| Span/load table | | | Lightweight concrete | | | | | | | | | | | | |
|----------------------|---|-----------------|---|--------------|------|------|------|--------------|------|------|------|--------------|------|------|------|
| | Support Condition | Slab Depth (mm) | Concrete Volume (m ³ /m ²) | 0.9 Gauge | | | | 1.0 Gauge | | | | 1.2 Gauge | | | |
| | | | | Imposed Load | | | | Imposed Load | | | | Imposed Load | | | |
| | | | | FW | 5.0 | 6.7 | 10.0 | FW | 5.0 | 6.7 | 10.0 | FW | 5.0 | 6.7 | 10.0 |
| Single - Unpropped |  | 110 | 0.095 | 3.27 | 3.27 | 3.27 | 2.67 | 3.30 | 3.30 | 3.30 | 2.72 | 3.30 | 3.30 | 3.30 | 2.80 |
| | | 120 | 0.105 | 3.18 | 3.18 | 3.18 | 2.88 | 3.28 | 3.28 | 3.28 | 2.93 | 3.46 | 3.46 | 3.46 | 3.01 |
| | | 130 | 0.115 | 3.09 | 3.09 | 3.09 | 3.09 | 3.19 | 3.19 | 3.19 | 3.15 | 3.37 | 3.37 | 3.37 | 3.23 |
| | | 150 | 0.125 | 2.95 | 2.95 | 2.95 | 2.95 | 3.05 | 3.05 | 3.05 | 3.05 | 3.22 | 3.22 | 3.22 | 3.22 |
| | | 175 | 0.150 | 2.80 | 2.80 | 2.80 | 2.80 | 2.90 | 2.90 | 2.90 | 2.90 | 3.06 | 3.06 | 3.06 | 3.06 |
| | | 200 | 0.175 | 2.68 | 2.68 | 2.68 | 2.68 | 2.77 | 2.77 | 2.77 | 2.77 | 2.93 | 2.93 | 2.93 | 2.93 |
| Multiple - Unpropped |  | 110 | 0.095 | 3.30 | 3.30 | 3.30 | 2.67 | 3.30 | 3.30 | 3.30 | 2.72 | 3.30 | 3.30 | 3.30 | 2.80 |
| | | 120 | 0.105 | 3.49 | 3.49 | 3.49 | 2.88 | 3.60 | 3.60 | 3.60 | 2.93 | 3.60 | 3.60 | 3.60 | 3.01 |
| | | 130 | 0.115 | 3.41 | 3.41 | 3.41 | 3.10 | 3.69 | 3.69 | 3.69 | 3.15 | 3.90 | 3.90 | 3.90 | 3.23 |
| | | 150 | 0.125 | 3.27 | 3.27 | 3.27 | 3.27 | 3.53 | 3.53 | 3.53 | 3.53 | 3.81 | 3.81 | 3.81 | 3.70 |
| | | 175 | 0.150 | 3.11 | 3.11 | 3.11 | 3.11 | 3.35 | 3.35 | 3.35 | 3.35 | 3.62 | 3.62 | 3.62 | 3.62 |
| | | 200 | 0.175 | 2.97 | 2.97 | 2.97 | 2.97 | 3.21 | 3.21 | 3.21 | 3.21 | 3.47 | 3.47 | 3.47 | 3.47 |
| Multiple - Propped |  | 110 | 0.095 | 3.30 | 3.30 | 3.27 | 2.63 | 3.30 | 3.30 | 3.30 | 2.72 | 3.30 | 3.30 | 3.30 | 2.80 |
| | | 120 | 0.105 | 3.60 | 3.60 | 3.47 | 2.79 | 3.60 | 3.60 | 3.60 | 2.91 | 3.60 | 3.60 | 3.60 | 3.01 |
| | | 130 | 0.115 | 3.90 | 3.90 | 3.66 | 2.95 | 3.90 | 3.90 | 3.81 | 3.07 | 3.90 | 3.90 | 3.90 | 3.23 |
| | | 150 | 0.125 | 4.50 | 4.50 | 4.04 | 3.25 | 4.50 | 4.50 | 4.19 | 3.39 | 4.50 | 4.50 | 4.50 | 3.65 |
| | | 175 | 0.150 | 5.25 | 5.17 | 4.46 | 3.60 | 5.25 | 5.25 | 4.62 | 3.75 | 5.25 | 5.25 | 4.95 | 4.03 |
| | | 200 | 0.175 | 5.90 | 5.58 | 4.83 | 3.92 | 6.00 | 5.78 | 5.01 | 4.08 | 6.00 | 6.00 | 5.36 | 4.38 |
| 250 | 0.225 | 5.46 | 5.46 | 5.46 | 4.49 | 5.92 | 5.92 | 5.69 | 4.66 | 6.41 | 6.41 | 6.06 | 4.99 | | |

| Simplified fire design table | | | Lightweight concrete | | | | | | | | |
|------------------------------|-----------------|--|----------------------|------|------|------|------|------|------|------|------|
| Fire Rating (Hrs) | Slab Depth (mm) | Span (m) for given Imposed Load (kN/m ²) | | | | | | | | | |
| | | A142 | | | A193 | | | A252 | | | |
| | | 5.0 | 6.7 | 10.0 | 5.0 | 6.7 | 10.0 | 5.0 | 6.7 | 10.0 | |
| Lightweight concrete | 1.0 | 110 | 3.30 | 3.18 | 2.67 | 3.30 | 3.30 | 2.67 | 3.30 | 3.30 | 2.67 |
| | | 120 | 3.49 | 3.37 | 2.88 | 3.49 | 3.49 | 2.88 | 3.49 | 3.49 | 2.88 |
| | | 130 | 3.41 | 3.41 | 3.01 | 3.41 | 3.41 | 3.10 | 3.41 | 3.41 | 3.10 |
| | | 150 | 3.27 | 3.27 | 3.15 | 3.27 | 3.27 | 3.27 | 3.27 | 3.27 | 3.27 |
| | | 175 | - | - | - | 3.11 | 3.11 | 3.11 | 3.11 | 3.11 | 3.11 |
| | | 200 | - | - | - | 2.97 | 2.97 | 2.97 | 2.97 | 2.97 | 2.97 |
| | | 250 | - | - | - | - | - | - | 2.72 | 2.72 | 2.72 |
| 1.5 | 120 | 3.35 | 3.01 | 2.58 | 3.49 | 3.31 | 2.83 | 3.49 | 3.49 | 2.88 | |
| | 130 | 3.41 | 3.17 | 2.73 | 3.41 | 3.41 | 3.00 | 3.41 | 3.41 | 3.10 | |
| | 150 | 3.27 | 3.27 | 2.85 | 3.27 | 3.27 | 3.13 | 3.27 | 3.27 | 3.27 | |
| | 175 | - | - | - | 3.11 | 3.11 | 3.11 | 3.11 | 3.11 | 3.11 | |
| | 200 | - | - | - | 2.97 | 2.97 | 2.97 | 2.97 | 2.97 | 2.97 | |
| 250 | - | - | - | - | - | - | 2.72 | 2.72 | 2.72 | | |
| 2.0 | 130 | 3.18 | 2.87 | 2.47 | 3.41 | 3.20 | 2.75 | 3.41 | 3.41 | 3.03 | |
| | 150 | 3.27 | 3.02 | 2.61 | 3.27 | 3.27 | 2.91 | 3.27 | 3.27 | 3.22 | |
| | 175 | - | - | - | 3.11 | 3.11 | 3.03 | 3.11 | 3.11 | 3.11 | |
| | 200 | - | - | - | 2.97 | 2.97 | 2.97 | 2.97 | 2.97 | 2.97 | |
| 250 | - | - | - | - | - | - | 2.72 | 2.72 | 2.72 | | |

Refer to page 3 for notes on the use of these tables





Richard Lees Steel Decking Ltd

Moor Farm Road West, The Airfield, Ashbourne,
Derbyshire, DE6 1HD, UK.

Tel: +44 (0) 1335 300 999 Fax: +44 (0) 1335 300 888

www.rlsd.com Email: rlsd.decks@skanska.co.uk

Content copyright Richard Lees Steel Decking Ltd and liable to change without notice.

Trademarks acknowledged.

SL1

