

HIBOND 80 LOAD SPAN TABLES

Maximum formwork and composite floor slab spans are presented for composite floor slab thickness between 150mm and 230mm for a range of live load, superimposed dead load combinations and mesh reinforcing arrangements to achieve a Fire Resistance Rating (FRR) of 60 minutes.

The following notes apply to the load tables in this section.

- 1) Span: L is the span measured centre to centre between permanent supports.
- 2) The design superimposed load combination is $G_{SD} + Q$ must not be greater than the superimposed loads given in the tables.
- 3) Some values shown in the end/internal span tables are less than corresponding values given in the single span tables. The situation arises as combined effects limit.
- 4) Linear interpolation is permitted between intermediate composite floor slab thicknesses.
- 5) Tables for propped spans are based on 1 row of continuous temporary propping at mid-span.

Formwork

- a. 150mm support width and a 100mm wide prop width is assumed.
- b. For unpropped construction - one layer of mesh in top of the composite floor slab with a concrete cover of 25mm and a minimum cross-sectional area of $252\text{mm}^2/\text{m}$ width. For propped construction refer section 3.2.2.2.
- c. Imposed construction loads are to AS/NZS 2327:2017.
- d. Normal weight concrete: wet density = $2400\text{kg}/\text{m}^3$.
- e. Construction stage deflection span/130 or 30mm (ponding has been taken into account).
- f. The design span of the formwork relates closely to the site installation. If the Hibond 80 sheet is designed as an end span or internal span, the minimum nominal steel decking sheet length for construction should be noted clearly in the design documentation to ensure that appropriate steel decking sheet lengths are used by the installer to achieve the span type selected. Refer Flooring Installation 3.6.

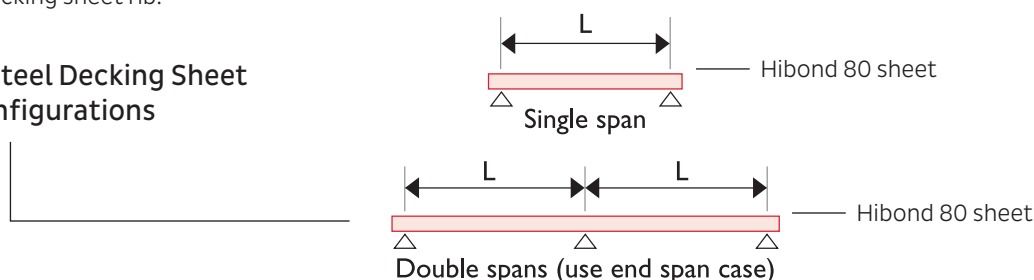
Composite Floor Slab

- a. Normal weight concrete: dry density $2350\text{kg}/\text{m}^3$. Modular ratio = 10; Dynamic modular ratio = 38.
- b. Composite floor slab moment resistance based on partial connection method with an assumed characteristic shear bond value of $\tau_{u,Rk} = 0.107\text{MPa}$.
- c. Composite stage deflection limits: Imposed load, span/350 or 20mm; Total load, span/250 or 30mm:
- d. Vibration : Natural frequency limit of 5.0Hz based on the cracked dynamic second moment of area using the dead loads plus 10% of the imposed loads (the proportion of imposed loads that may be considered to be permanent).
- e. The composite floor slab is assumed to be acting as simply supported spans in the tables.

Fire

- a. Mesh requirements for composite floor slabs enclosed within a building (see minimum concrete cover above) have been provided to achieve a FRR of 60 minutes (in conjunction with bottom reinforcing bars where required).
- b. A superimposed dead load (G_{SD}) of 0.5kPa only has been used for all fire rating combinations.
- c. FRR of 90 and 120 minutes can be achieved with the additional of extra reinforcement mesh and bottom reinforcing bars by using the Hibond 80 Composite Design Software. Other situations or concrete covers require specific design.
- d. Allowance for extra 10mm concrete thickness for unpropped conditions.
- e. Live load factor $\psi_L = 0.4$.
- f. Reinforcement is grade 500 to AS/NZS4671, assumed continuous.
- g. Moment capacity determined in accordance with NZS3101.
- h. Minimum cover to bottom reinforcing bars is 25mm to the bottom of the steel decking sheet and 40mm to the side of the steel decking sheet rib.

Typical Steel Decking Sheet Span Configurations



0.75mm Hibond 80 - Constructed as Unpropped Single Span Formwork, FRR 60

| Slab Depth (mm) | Concrete Volume (m ³ /m ²) | Dry Slab Weight (kPa) | Maximum Composite Floor Single Span (limited by formwork capacity) (m) | Minimum Crack Control D500 Mesh (for slab enclosed within a building) | Maximum Superimposed Load (G _{sdl} + Q) (kPa) |
|-----------------|---|-----------------------|--|---|--|
| 150 | 0.11 | 2.63 | 3.51 | SE82 | 5.5 |
| 160 | 0.12 | 2.86 | 3.43 | SE82 | 5.5 |
| 170 | 0.13 | 3.09 | 3.35 | SE82 | 5.5 |
| 180 | 0.14 | 3.32 | 3.28 | SE92 | 5.5 |
| 190 | 0.15 | 3.55 | 3.22 | SE92 | 5.5 |
| 200 | 0.16 | 3.78 | 3.16 | SE92 | 5.5 |
| 210 | 0.17 | 4.01 | 3.10 | SE92 | 5.5 |
| 220 | 0.18 | 4.24 | 3.05 | SE92 | 5.5 |
| 230 | 0.19 | 4.47 | 3.00 | SE72 x 2 | 5.5 |

0.75mm Hibond 80 - Constructed as Unpropped Double Span Formwork, FRR 60

| Slab Depth (mm) | Concrete Volume (m ³ /m ²) | Dry Slab Weight (kPa) | Maximum Composite Floor End and Internal Spans (limited by formwork capacity) (m) | Minimum Crack Control D500 Mesh (for slab enclosed within a building) | Maximum Superimposed Load (G _{sdl} + Q) (kPa) |
|-----------------|---|-----------------------|---|---|--|
| 150 | 0.11 | 2.63 | 3.45 | SE82 | 5.5 |
| 160 | 0.12 | 2.86 | 3.34 | SE82 | 5.5 |
| 170 | 0.13 | 3.09 | 3.23 | SE82 | 5.5 |
| 180 | 0.14 | 3.32 | 3.14 | SE92 | 5.5 |
| 190 | 0.15 | 3.55 | 3.04 | SE92 | 5.5 |
| 200 | 0.16 | 3.78 | 2.96 | SE92 | 5.5 |
| 210 | 0.17 | 4.01 | 2.88 | SE92 | 5.5 |
| 220 | 0.18 | 4.24 | 2.80 | SE92 | 5.5 |
| 230 | 0.19 | 4.47 | 2.73 | SE72 x 2 | 5.5 |

0.75mm Hibond 80 - Constructed as Propped Single Span Formwork, FRR 60

| Slab Depth (mm) | Concrete Volume (m ³ /m ²) | Dry Slab Weight (kPa) | | Superimposed Live Load, Q (kPa) | | | |
|-----------------|---|-----------------------|---|--|------------------------------|------------------------------|------------------------------|
| | | | | 1.5 | 2.5 | 3 | 5 |
| | | | | Superimposed Dead Load ¹ , G _{SDL} (kPa) | | | |
| | | | | 0.8 | 0.1 | 0.8 | 0.5 |
| 150 | 0.11 | 2.63 | Maximum Span³ (m) | 5.16 | 5.11 | 4.86 | 4.51 |
| | | | Crack Control Steel ² Fire Reinforcement ⁴ | SE92 HD12, 2nd Pan | SE92 HD12, 2nd Pan | SE92 HD12, 2nd Pan | SE92 HD12, 2nd Pan |
| 160 | 0.12 | 2.86 | Maximum Span³ (m) | 5.16 | 5.11 | 4.88 | 4.54 |
| | | | Crack Control Steel ² Fire Reinforcement ⁴ | SE72 x 2 HD12, 2nd Pan | SE72 x 2 HD12, 2nd Pan | SE72 x 2 HD12, 2nd Pan | SE72 x 2 HD12, 2nd Pan |
| 170 | 0.13 | 3.09 | Maximum Span³ (m) | 5.16 | 5.11 | 4.89 | 4.57 |
| | | | Crack Control Steel ² Fire Reinforcement ⁴ | SE72 x 2 HD12, 2nd Pan | SE72 x 2 HD12, 2nd Pan | SE72 x 2 HD12, 2nd Pan | SE72 x 2 HD12, 2nd Pan |
| 180 | 0.14 | 3.32 | Maximum Span³ (m) | 5.00 | 5.03 | 4.90 | 4.59 |
| | | | Crack Control Steel ² Fire Reinforcement ⁴ | SE62 + SE92 HD10, 3rd Pan | SE62 + SE92 HD12, 3rd Pan | SE62 + SE92 HD12, 3rd Pan | SE62 + SE92 HD12, 3rd Pan |
| 190 | 0.15 | 3.55 | Maximum Span³ (m) | 4.98 | 5.03 | 4.91 | 4.60 |
| | | | Crack Control Steel ² Fire Reinforcement ⁴ | SE62 + SE92 HD10, 3rd Pan | SE62 + SE92 HD12, 3rd Pan | SE62 + SE92 HD12, 3rd Pan | SE62 + SE92 HD12, 3rd Pan |
| 200 | 0.16 | 3.78 | Maximum Span³ (m) | 4.93 | 4.79 | 4.70 | 4.65 |
| | | | Crack Control Steel ² Fire Reinforcement ⁴ | SE82 x 2 HD10, 3rd Pan | SE82 x 2 HD10, 3rd Pan | SE82 x 2 HD10, 3rd Pan | SE82 x 2 HD12, 2nd Pan |
| 210 | 0.17 | 4.01 | Maximum Span³ (m) | 4.80 | 4.78 | 4.70 | 4.63 |
| | | | Crack Control Steel ² Fire Reinforcement ⁴ | SE82 + SE92 HD10, 3rd Pan | SE82 + SE92 HD10, 3rd Pan | SE82 + SE92 HD10, 3rd Pan | SE82 + SE92 HD12, 3rd Pan |
| 220 | 0.18 | 4.24 | Maximum Span³ (m) | 4.66 | 4.66 | 4.66 | 4.42 |
| | | | Crack Control Steel ² Fire Reinforcement ⁴ | SE82 + SE92 HD10, 3rd Pan | SE82 + SE92 HD10, 3rd Pan | SE82 + SE92 HD10, 3rd Pan | SE82 + SE92 HD10, 3rd Pan |
| 230 | 0.19 | 4.47 | Maximum Span³ (m) | 4.54 | 4.54 | 4.54 | 4.54 |
| | | | Crack Control Steel ² Fire Reinforcement ⁴ | SE92 x 2 HD10, 3rd Pan | SE92 x 2 HD10, 3rd Pan | SE92 x 2 HD10, 3rd Pan | SE92 x 2 HD10, 3rd Pan |

0.75mm Hibond 80 - Constructed as Propped Double Span Formwork, FRR 60

| Slab Depth (mm) | Concrete Volume (m ³ /m ²) | Dry Slab Weight (kPa) | Minimum Crack Control D500 Mesh ² | Superimposed Live Load, Q (kPa) | | | |
|-----------------|---|-----------------------|--|---|------|------|------|
| | | | | 1.5 | 2.5 | 3 | 5 |
| | | | | Superimposed Dead Load ¹ , G _{SDL} (kPa) | | | |
| | | | | 0.8 | 0.1 | 0.8 | 0.5 |
| | | | | Maximum Composite Floor End and Internal Spans ³ (m) | | | |
| 150 | 0.11 | 2.63 | SE92 | 5.16 | 5.11 | 4.86 | 4.51 |
| 160 | 0.12 | 2.86 | SE72 x 2 | 5.16 | 5.11 | 4.88 | 4.54 |
| 170 | 0.13 | 3.09 | SE72 x 2 | 5.16 | 5.11 | 4.89 | 4.57 |
| 180 | 0.14 | 3.32 | SE62 + SE92 | 5.16 | 5.11 | 4.90 | 4.60 |
| 190 | 0.15 | 3.55 | SE62 + SE92 | 5.09 | 5.09 | 4.91 | 4.62 |
| 200 | 0.16 | 3.78 | SE82 x 2 | 4.93 | 4.93 | 4.92 | 4.65 |
| 210 | 0.17 | 4.01 | SE82 + SE92 | 4.80 | 4.80 | 4.80 | 4.67 |
| 220 | 0.18 | 4.24 | SE82 + SE92 | 4.66 | 4.66 | 4.66 | 4.66 |
| 230 | 0.19 | 4.47 | SE92 x 2 | 4.54 | 4.54 | 4.54 | 4.54 |

Notes:

1. Superimposed Dead Load for Fire Rating assumes only 0.5 KPa for all load combinations.
2. Crack control steel is the minimum D500 Mesh required for a composite floor slab enclosed within a building.
3. One row of continuous propping is required at mid-span.
4. Fire reinforcement is comprised of bottom ductile reinforcing bars in the steel decking sheet pans.

0.95mm Hibond 80 - Constructed as Unpropped Single Span Formwork, FRR 60

| Slab Depth (mm) | Concrete Volume (m ³ /m ²) | Dry Slab Weight (kPa) | Maximum Composite Floor Single Span (limited by formwork capacity) (m) | Minimum Crack Control D500 Mesh (for slab enclosed within a building) | Maximum Superimposed Load (G _{sdl} + Q) (kPa) |
|-----------------|---|-----------------------|--|---|--|
| 150 | 0.11 | 2.65 | 3.58 | SE82 | 5.5 |
| 160 | 0.12 | 2.88 | 3.50 | SE82 | 5.5 |
| 170 | 0.13 | 3.11 | 3.42 | SE82 | 5.5 |
| 180 | 0.14 | 3.34 | 3.35 | SE92 | 5.5 |
| 190 | 0.15 | 3.57 | 3.29 | SE92 | 5.5 |
| 200 | 0.16 | 3.81 | 3.23 | SE92 | 5.5 |
| 210 | 0.17 | 4.04 | 3.17 | SE92 | 5.5 |
| 220 | 0.18 | 4.27 | 3.12 | SE92 | 5.5 |
| 230 | 0.19 | 4.50 | 3.07 | SE72 x 2 | 5.5 |

0.95mm Hibond 80 - Constructed as Unpropped Double Span Formwork, FRR 60

| Slab Depth (mm) | Concrete Volume (m ³ /m ²) | Dry Slab Weight (kPa) | Maximum Composite Floor End and Internal Spans (limited by formwork capacity) (m) | Minimum Crack Control D500 Mesh (for slab enclosed within a building) | Maximum Superimposed Load (G _{sdl} + Q) (kPa) |
|-----------------|---|-----------------------|---|---|--|
| 150 | 0.11 | 2.65 | 4.13 | SE82 | 5.5 |
| 160 | 0.12 | 2.88 | 4.01 | SE82 | 5.5 |
| 170 | 0.13 | 3.11 | 3.90 | SE82 | 5.5 |
| 180 | 0.14 | 3.34 | 3.79 | SE92 | 5.5 |
| 190 | 0.15 | 3.57 | 3.69 | SE92 | 5.5 |
| 200 | 0.16 | 3.81 | 3.59 | SE92 | 5.5 |
| 210 | 0.17 | 4.04 | 3.51 | SE92 | 5.5 |
| 220 | 0.18 | 4.27 | 3.43 | SE92 | 5.5 |
| 230 | 0.19 | 4.50 | 3.35 | SE72 x 2 | 5.5 |

0.95mm Hibond 80 - Constructed as Propped Single Span Formwork, FRR 60

| Slab Depth (mm) | Concrete Volume (m ³ /m ²) | Dry Slab Weight (kPa) | | Superimposed Live Load, Q (kPa) | | | |
|-----------------|---|-----------------------|---|--|------------------------------|------------------------------|------------------------------|
| | | | | 1.5 | 2.5 | 3 | 5 |
| | | | | Superimposed Dead Load ¹ , G _{SDL} (kPa) | | | |
| | | | | 0.8 | 0.1 | 0.8 | 0.5 |
| 150 | 0.11 | 2.65 | Maximum Span³ (m) | 5.42 | 5.37 | 5.15 | 4.72 |
| | | | Crack Control Steel ² Fire Reinforcement ⁴ | SE92 HD12, 2nd Pan | SE92 HD16, 3rd Pan | SE92 HD12, 2nd Pan | SE92 HD12, 2nd Pan |
| 160 | 0.12 | 2.88 | Maximum Span³ (m) | 5.41 | 5.36 | 5.15 | 4.85 |
| | | | Crack Control Steel ² Fire Reinforcement ⁴ | SE72 x 2 HD12, 2nd Pan | SE72 x 2 HD16, 3rd Pan | SE72 x 2 HD12, 2nd Pan | SE72 x 2 HD16, 3rd Pan |
| 170 | 0.13 | 3.11 | Maximum Span³ (m) | 5.40 | 5.35 | 5.16 | 4.86 |
| | | | Crack Control Steel ² Fire Reinforcement ⁴ | SE72 x 2 HD12, 2nd Pan | SE72 x 2 HD16, 3rd Pan | SE72 x 2 HD12, 2nd Pan | SE72 x 2 HD12, 2nd Pan |
| 180 | 0.14 | 3.34 | Maximum Span³ (m) | 5.39 | 5.34 | 5.16 | 4.88 |
| | | | Crack Control Steel ² Fire Reinforcement ⁴ | SE62 + SE92 HD12, 3rd Pan | SE62 + SE92 HD12, 2nd Pan | SE62 + SE92 HD12, 2nd Pan | SE62 + SE92 HD12, 2nd Pan |
| 190 | 0.15 | 3.57 | Maximum Span³ (m) | 5.38 | 5.34 | 5.16 | 4.89 |
| | | | Crack Control Steel ² Fire Reinforcement ⁴ | SE62 + SE92 HD12, 3rd Pan | SE62 + SE92 HD12, 2nd Pan | SE62 + SE92 HD12, 2nd Pan | SE62 + SE92 HD12, 2nd Pan |
| 200 | 0.16 | 3.81 | Maximum Span³ (m) | 5.37 | 5.33 | 5.16 | 4.91 |
| | | | Crack Control Steel ² Fire Reinforcement ⁴ | SE82 x 2 HD12, 3rd Pan | SE82 x 2 HD12, 2nd Pan | SE82 x 2 HD12, 2nd Pan | SE82 x 2 HD12, 2nd Pan |
| 210 | 0.17 | 4.04 | Maximum Span³ (m) | 5.36 | 5.33 | 5.16 | 4.92 |
| | | | Crack Control Steel ² Fire Reinforcement ⁴ | SE82 + SE92 HD12, 3rd Pan | SE82 + SE92 HD12, 2nd Pan | SE82 + SE92 HD12, 2nd Pan | SE82 + SE92 HD12, 2nd Pan |
| 220 | 0.18 | 4.27 | Maximum Span³ (m) | 5.36 | 5.32 | 5.16 | 4.93 |
| | | | Crack Control Steel ² Fire Reinforcement ⁴ | SE82 + SE92 HD12, 3rd Pan | SE82 + SE92 HD12, 2nd Pan | SE82 + SE92 HD12, 3rd Pan | SE82 + SE92 HD12, 2nd Pan |
| 230 | 0.19 | 4.50 | Maximum Span³ (m) | 5.35 | 5.32 | 5.17 | 4.94 |
| | | | Crack Control Steel ² Fire Reinforcement ⁴ | SE92 x 2 HD10, 3rd Pan | SE92 x 2 HD12, 3rd Pan | SE92 x 2 HD12, 3rd Pan | SE92 x 2 HD12, 3rd Pan |

0.95mm Hibond 80 - Constructed as Propped Double Span Formwork, FRR 60

| Slab Depth (mm) | Concrete Volume (m ³ /m ²) | Dry Slab Weight (kPa) | Minimum Crack Control D500 Mesh ² | Superimposed Live Load, Q (kPa) | | | |
|-----------------|---|-----------------------|--|---|------|------|------|
| | | | | 1.5 | 2.5 | 3 | 5 |
| | | | | Superimposed Dead Load ¹ , G _{SDL} (kPa) | | | |
| | | | | 0.8 | 0.1 | 0.8 | 0.5 |
| | | | | Maximum Composite Floor End and Internal Spans ³ (m) | | | |
| 150 | 0.11 | 2.65 | SE92 | 5.42 | 5.37 | 5.15 | 4.72 |
| 160 | 0.12 | 2.88 | SE72 x 2 | 5.41 | 5.36 | 5.15 | 4.85 |
| 170 | 0.13 | 3.11 | SE72 x 2 | 5.40 | 5.35 | 5.16 | 4.86 |
| 180 | 0.14 | 3.34 | SE62 + SE92 | 5.39 | 5.34 | 5.16 | 4.88 |
| 190 | 0.15 | 3.57 | SE62 + SE92 | 5.38 | 5.34 | 5.16 | 4.89 |
| 200 | 0.16 | 3.81 | SE82 x 2 | 5.37 | 5.33 | 5.16 | 4.91 |
| 210 | 0.17 | 4.04 | SE82 + SE92 | 5.36 | 5.33 | 5.16 | 4.92 |
| 220 | 0.18 | 4.27 | SE82 + SE92 | 5.36 | 5.32 | 5.16 | 4.93 |
| 230 | 0.19 | 4.50 | SE92 x 2 | 5.35 | 5.32 | 5.17 | 4.94 |

Notes:

1. Superimposed Dead Load for Fire Rating assumes only 0.5 kPa for all load combinations.
2. Crack control steel is the minimum D500 Mesh required for a composite floor slab enclosed within a building.
3. One row of continuous propping is required at mid-span.
4. Fire reinforcement is comprised of bottom ductile reinforcing bars in the steel decking sheet pans.

1.05mm Hibond 80 - Constructed as Unpropped Single Span Formwork, FRR 60

| Slab Depth (mm) | Concrete Volume (m ³ /m ²) | Dry Slab Weight (kPa) | Maximum Composite Floor Single Span (limited by formwork capacity) (m) | Minimum Crack Control D500 Mesh (for slab enclosed within a building) | Maximum Superimposed Load (G _{sdl} + Q) (kPa) |
|-----------------|---|-----------------------|--|---|--|
| 150 | 0.11 | 2.66 | 3.59 | SE82 | 5.5 |
| 160 | 0.12 | 2.90 | 3.51 | SE82 | 5.5 |
| 170 | 0.13 | 3.13 | 3.43 | SE82 | 5.5 |
| 180 | 0.14 | 3.36 | 3.36 | SE92 | 5.5 |
| 190 | 0.15 | 3.59 | 3.30 | SE92 | 5.5 |
| 200 | 0.16 | 3.82 | 3.24 | SE92 | 5.5 |
| 210 | 0.17 | 4.05 | 3.18 | SE92 | 5.5 |
| 220 | 0.18 | 4.28 | 3.13 | SE92 | 5.5 |
| 230 | 0.19 | 4.51 | 3.08 | SE72 x 2 | 5.5 |

1.05mm Hibond 80 - Constructed as Unpropped Double Span Formwork, FRR 60

| Slab Depth (mm) | Concrete Volume (m ³ /m ²) | Dry Slab Weight (kPa) | Maximum Composite Floor End and Internal Spans (limited by formwork capacity) (m) | Minimum Crack Control D500 Mesh (for slab enclosed within a building) | Maximum Superimposed Load (G _{sdl} + Q) (kPa) |
|-----------------|---|-----------------------|---|---|--|
| 150 | 0.11 | 2.66 | 4.48 | SE82 | 5.5 |
| 160 | 0.12 | 2.90 | 4.38 | SE82 | 5.5 |
| 170 | 0.13 | 3.13 | 4.26 | SE82 | 5.5 |
| 180 | 0.14 | 3.36 | 4.16 | SE92 | 5.5 |
| 190 | 0.15 | 3.59 | 4.06 | SE92 | 5.5 |
| 200 | 0.16 | 3.82 | 3.97 | SE92 | 5.5 |
| 210 | 0.17 | 4.05 | 3.89 | SE92 | 5.5 |
| 220 | 0.18 | 4.28 | 3.79 | SE92 | 5.5 |
| 230 | 0.19 | 4.51 | 3.72 | SE72 x 2 | 5.5 |

1.05mm Hibond 80 - Constructed as Propped Single Span Formwork, FRR 60

| Slab Depth (mm) | Concrete Volume (m ³ /m ²) | Dry Slab Weight (kPa) | | Superimposed Live Load, Q (kPa) | | | |
|-----------------|---|-----------------------|-------------------------------------|--|---------------|---------------|----------------|
| | | | | 1.5 | 2.5 | 3 | 5 |
| | | | | Superimposed Dead Load ¹ , G _{SDL} (kPa) | | | |
| | | | | 0.8 | 0.1 | 0.8 | 0.5 |
| 150 | 0.11 | 2.66 | Maximum Span³ (m) | 5.32 | 5.32 | 5.15 | 4.72 |
| | | | Crack Control Steel ² | SE92 | SE92 | SE92 | SE92 |
| | | | Fire Reinforcement ⁴ | HD12, 3rd Pan | HD12, 2nd Pan | HD12, 2nd Pan | HD16, 2nd Pan |
| 160 | 0.12 | 2.90 | Maximum Span³ (m) | 5.42 | 5.37 | 5.16 | 4.85 |
| | | | Crack Control Steel ² | SE72 x 2 | SE72 x 2 | SE72 x 2 | SE72 x 2 |
| | | | Fire Reinforcement ⁴ | HD12, 3rd Pan | HD12, 2nd Pan | HD12, 2nd Pan | HD16, 2nd Pan |
| 170 | 0.13 | 3.13 | Maximum Span³ (m) | 5.41 | 5.36 | 5.16 | 4.87 |
| | | | Crack Control Steel ² | SE72 x 2 | SE72 x 2 | SE72 x 2 | SE72 x 2 |
| | | | Fire Reinforcement ⁴ | HD12, 3rd Pan | HD12, 2nd Pan | HD12, 2nd Pan | HD10 Every Pan |
| 180 | 0.14 | 3.36 | Maximum Span³ (m) | 5.40 | 5.35 | 5.17 | 4.89 |
| | | | Crack Control Steel ² | SE62 + SE92 | SE62 + SE92 | SE62 + SE92 | SE62 + SE92 |
| | | | Fire Reinforcement ⁴ | HD10, 3rd Pan | HD12, 3rd Pan | HD12, 3rd Pan | HD16, 3rd Pan |
| 190 | 0.15 | 3.59 | Maximum Span³ (m) | 5.39 | 5.35 | 5.17 | 4.90 |
| | | | Crack Control Steel ² | SE62 + SE92 | SE62 + SE92 | SE62 + SE92 | SE62 + SE92 |
| | | | Fire Reinforcement ⁴ | HD10, 3rd Pan | HD12, 3rd Pan | HD12, 3rd Pan | HD16, 3rd Pan |
| 200 | 0.16 | 3.82 | Maximum Span³ (m) | 5.38 | 5.34 | 5.17 | 4.91 |
| | | | Crack Control Steel ² | SE82 x 2 | SE82 x 2 | SE82 x 2 | SE82 x 2 |
| | | | Fire Reinforcement ⁴ | HD10, 3rd Pan | HD12, 3rd Pan | HD12, 3rd Pan | HD16, 3rd Pan |
| 210 | 0.17 | 4.05 | Maximum Span³ (m) | 5.37 | 5.33 | 5.17 | 4.92 |
| | | | Crack Control Steel ² | SE82 + SE92 | SE82 + SE92 | SE82 + SE92 | SE82 + SE92 |
| | | | Fire Reinforcement ⁴ | HD10, 3rd Pan | HD12, 3rd Pan | HD12, 3rd Pan | HD12, 2nd Pan |
| 220 | 0.18 | 4.28 | Maximum Span³ (m) | 5.37 | 5.33 | 5.17 | 4.94 |
| | | | Crack Control Steel ² | SE82 + SE92 | SE82 + SE92 | SE82 + SE92 | SE82 + SE92 |
| | | | Fire Reinforcement ⁴ | HD10, 3rd Pan | HD12, 3rd Pan | HD12, 3rd Pan | HD12, 2nd Pan |
| 230 | 0.19 | 4.51 | Maximum Span³ (m) | 5.36 | 5.32 | 5.17 | 4.95 |
| | | | Crack Control Steel ² | SE92 x 2 | SE92 x 2 | SE92 x 2 | SE92 x 2 |
| | | | Fire Reinforcement ⁴ | HD10, 3rd Pan | HD10, 3rd Pan | HD12, 3rd Pan | HD12, 2nd Pan |

1.05mm Hibond 80 - Constructed as Propped Double Span Formwork, FRR 60

| Slab Depth (mm) | Concrete Volume (m ³ /m ²) | Dry Slab Weight (kPa) | Minimum Crack Control D500 Mesh ² | Superimposed Live Load, Q (kPa) | | | |
|-----------------|---|-----------------------|--|---|------|------|------|
| | | | | 1.5 | 2.5 | 3 | 5 |
| | | | | Superimposed Dead Load ¹ , G _{SDL} (kPa) | | | |
| | | | | 0.8 | 0.1 | 0.8 | 0.5 |
| | | | | Maximum Composite Floor End and Internal Spans ³ (m) | | | |
| 150 | 0.11 | 2.66 | SE92 | 5.43 | 5.38 | 5.15 | 4.72 |
| 160 | 0.12 | 2.90 | SE72 x 2 | 5.42 | 5.37 | 5.16 | 4.85 |
| 170 | 0.13 | 3.13 | SE72 x 2 | 5.41 | 5.36 | 5.16 | 4.87 |
| 180 | 0.14 | 3.36 | SE62 + SE92 | 5.40 | 5.35 | 5.17 | 4.89 |
| 190 | 0.15 | 3.59 | SE62 + SE92 | 5.39 | 5.35 | 5.17 | 4.90 |
| 200 | 0.16 | 3.82 | SE82 x 2 | 5.38 | 5.34 | 5.17 | 4.91 |
| 210 | 0.17 | 4.05 | SE82 + SE92 | 5.37 | 5.33 | 5.17 | 4.93 |
| 220 | 0.18 | 4.28 | SE82 + SE92 | 5.37 | 5.33 | 5.17 | 4.94 |
| 230 | 0.19 | 4.51 | SE92 x 2 | 5.36 | 5.32 | 5.17 | 4.95 |

Notes:

1. Superimposed Dead Load for Fire Rating assumes only 0.5 kPa for all load combinations.
2. Crack control steel is the minimum D500 Mesh required for a composite floor slab enclosed within a building.
3. One row of continuous propping is required at mid-span.
4. Fire reinforcement is comprised of bottom ductile reinforcing bars in the steel decking sheet pans.

1.15mm Hibond 80 - Constructed as Unpropped Single Span Formwork, FRR 60

| Slab Depth (mm) | Concrete Volume (m ³ /m ²) | Dry Slab Weight (kPa) | Maximum Composite Floor Single Span (limited by formwork capacity) (m) | Minimum Crack Control D500 Mesh (for slab enclosed within a building) | Maximum Superimposed Load (G _{sdl} + Q) (kPa) |
|-----------------|---|-----------------------|--|---|--|
| 150 | 0.11 | 2.68 | 3.80 | SE82 | 5.5 |
| 160 | 0.12 | 2.91 | 3.71 | SE82 | 5.5 |
| 170 | 0.13 | 3.14 | 3.63 | SE82 | 5.5 |
| 180 | 0.14 | 3.37 | 3.56 | SE92 | 5.5 |
| 190 | 0.15 | 3.60 | 3.49 | SE92 | 5.5 |
| 200 | 0.16 | 3.83 | 3.43 | SE92 | 5.5 |
| 210 | 0.17 | 4.06 | 3.37 | SE92 | 5.5 |
| 220 | 0.18 | 4.29 | 3.32 | SE92 | 5.5 |
| 230 | 0.19 | 4.52 | 3.26 | SE72 x 2 | 5.5 |

1.15mm Hibond 80 - Constructed as Unpropped Double Span Formwork, FRR 60

| Slab Depth (mm) | Concrete Volume (m ³ /m ²) | Dry Slab Weight (kPa) | Maximum Composite Floor End and Internal Spans (limited by formwork capacity) (m) | Minimum Crack Control D500 Mesh (for slab enclosed within a building) | Maximum Superimposed Load (G _{sdl} + Q) (kPa) |
|-----------------|---|-----------------------|---|---|--|
| 150 | 0.11 | 2.68 | 4.75 | SE82 | 5.5 |
| 160 | 0.12 | 2.91 | 4.67 | SE82 | 5.5 |
| 170 | 0.13 | 3.14 | 4.59 | SE82 | 5.5 |
| 180 | 0.14 | 3.37 | 4.52 | SE92 | 5.5 |
| 190 | 0.15 | 3.60 | 4.45 | SE92 | 5.5 |
| 200 | 0.16 | 3.83 | 4.39 | SE92 | 5.5 |
| 210 | 0.17 | 4.06 | 4.32 | SE92 | 5.5 |
| 220 | 0.18 | 4.29 | 4.23 | SE92 | 5.5 |
| 230 | 0.19 | 4.52 | 4.15 | SE72 x 2 | 5.5 |

1.15mm Hibond 80 - Constructed as Propped Single Span Formwork, FRR 60

| Slab Depth (mm) | Concrete Volume (m ³ /m ²) | Dry Slab Weight (kPa) | | Superimposed Live Load, Q (kPa) | | | |
|-----------------|---|-----------------------|-------------------------------------|--|---------------|---------------|---------------|
| | | | | 1.5 | 2.5 | 3 | 5 |
| | | | | Superimposed Dead Load ¹ , G _{SDL} (kPa) | | | |
| | | | | 0.8 | 0.1 | 0.8 | 0.5 |
| 150 | 0.11 | 2.68 | Maximum Span³ (m) | 5.65 | 5.58 | 5.29 | 4.81 |
| | | | Crack Control Steel ² | SE92 | SE92 | SE92 | SE92 |
| | | | Fire Reinforcement ⁴ | HD12, 2nd Pan | HD16, 3rd Pan | HD12, 2nd Pan | HD12, 2nd Pan |
| 160 | 0.12 | 2.91 | Maximum Span³ (m) | 5.64 | 5.59 | 5.37 | 5.05 |
| | | | Crack Control Steel ² | SE72 x 2 | SE72 x 2 | SE72 x 2 | SE72 x 2 |
| | | | Fire Reinforcement ⁴ | HD12, 2nd Pan | HD16, 3rd Pan | HD16, 3rd Pan | HD16, 3rd Pan |
| 170 | 0.13 | 3.14 | Maximum Span³ (m) | 5.63 | 5.58 | 5.37 | 5.06 |
| | | | Crack Control Steel ² | SE72 x 2 | SE72 x 2 | SE72 x 2 | SE72 x 2 |
| | | | Fire Reinforcement ⁴ | HD12, 2nd Pan | HD16, 3rd Pan | HD12, 2nd Pan | HD16, 3rd Pan |
| 180 | 0.14 | 3.37 | Maximum Span³ (m) | 5.62 | 5.57 | 5.37 | 5.08 |
| | | | Crack Control Steel ² | SE62 + SE92 | SE62 + SE92 | SE62 + SE92 | SE62 + SE92 |
| | | | Fire Reinforcement ⁴ | HD12, 2nd Pan | HD12, 2nd Pan | HD12, 2nd Pan | HD12, 2nd Pan |
| 190 | 0.15 | 3.60 | Maximum Span³ (m) | 5.58 | 5.56 | 5.37 | 5.09 |
| | | | Crack Control Steel ² | SE62 + SE92 | SE62 + SE92 | SE62 + SE92 | SE62 + SE92 |
| | | | Fire Reinforcement ⁴ | HD12, 3rd Pan | HD12, 2nd Pan | HD12, 2nd Pan | HD12, 2nd Pan |
| 200 | 0.16 | 3.83 | Maximum Span³ (m) | 5.58 | 5.55 | 5.37 | 5.10 |
| | | | Crack Control Steel ² | SE82 x 2 | SE82 x 2 | SE82 x 2 | SE82 x 2 |
| | | | Fire Reinforcement ⁴ | HD12, 3rd Pan | HD12, 2nd Pan | HD12, 2nd Pan | HD12, 2nd Pan |
| 210 | 0.17 | 4.06 | Maximum Span³ (m) | 5.59 | 5.55 | 5.37 | 5.11 |
| | | | Crack Control Steel ² | SE82 + SE92 | SE82 + SE92 | SE82 + SE92 | SE82 + SE92 |
| | | | Fire Reinforcement ⁴ | HD12, 3rd Pan | HD12, 2nd Pan | HD12, 2nd Pan | HD12, 2nd Pan |
| 220 | 0.18 | 4.29 | Maximum Span³ (m) | 5.58 | 5.54 | 5.37 | 5.12 |
| | | | Crack Control Steel ² | SE82 + SE92 | SE82 + SE92 | SE82 + SE92 | SE82 + SE92 |
| | | | Fire Reinforcement ⁴ | HD12, 3rd Pan | HD12, 2nd Pan | HD12, 2nd Pan | HD12, 2nd Pan |
| 230 | 0.19 | 4.52 | Maximum Span³ (m) | 5.57 | 5.53 | 5.37 | 5.13 |
| | | | Crack Control Steel ² | SE92 x 2 | SE92 x 2 | SE92 x 2 | SE92 x 2 |
| | | | Fire Reinforcement ⁴ | HD12, 3rd Pan | HD12, 3rd Pan | HD12, 3rd Pan | HD12, 2nd Pan |

1.15mm Hibond 80 - Constructed as Propped Double Span Formwork, FRR 60

| Slab Depth (mm) | Concrete Volume (m ³ /m ²) | Dry Slab Weight (kPa) | Minimum Crack Control D500 Mesh ² | Superimposed Live Load, Q (kPa) | | | |
|-----------------|---|-----------------------|--|---|------|------|------|
| | | | | 1.5 | 2.5 | 3 | 5 |
| | | | | Superimposed Dead Load ¹ , G _{SDL} (kPa) | | | |
| | | | | 0.8 | 0.1 | 0.8 | 0.5 |
| | | | | Maximum Composite Floor End and Internal Spans ³ (m) | | | |
| 150 | 0.11 | 2.68 | SE92 | 5.65 | 5.58 | 5.29 | 4.81 |
| 160 | 0.12 | 2.91 | SE72 x 2 | 5.64 | 5.59 | 5.37 | 5.05 |
| 170 | 0.13 | 3.14 | SE72 x 2 | 5.63 | 5.58 | 5.37 | 5.06 |
| 180 | 0.14 | 3.37 | SE62 + SE92 | 5.62 | 5.57 | 5.37 | 5.08 |
| 190 | 0.15 | 3.60 | SE62 + SE92 | 5.61 | 5.56 | 5.37 | 5.09 |
| 200 | 0.16 | 3.83 | SE82 x 2 | 5.60 | 5.55 | 5.37 | 5.10 |
| 210 | 0.17 | 4.06 | SE82 + SE92 | 5.59 | 5.55 | 5.37 | 5.11 |
| 220 | 0.18 | 4.29 | SE82 + SE92 | 5.58 | 5.54 | 5.37 | 5.12 |
| 230 | 0.19 | 4.52 | SE92 x 2 | 5.57 | 5.53 | 5.37 | 5.13 |

Notes:

1. Superimposed Dead Load for Fire Rating assumes only 0.5 kPa for all load combinations.
2. Crack control steel is the minimum D500 Mesh required for a composite floor slab enclosed within a building.
3. One row of continuous propping is required at mid-span.
4. Fire reinforcement is comprised of bottom ductile reinforcing bars in the steel decking sheet pans.