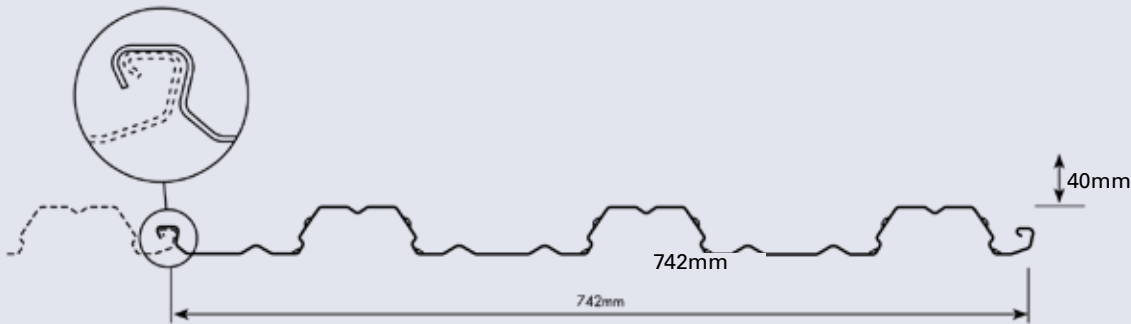




KingFlor[®] KF70[®]

Features and Benefits



Fielders KF70® is a revolutionary steel formwork solution suitable for composite concrete slabs in concrete and steel-framed construction. KF70® is the answer to increased market demand for a lightweight profile capable of large spans. The KF70® profile displaces 26mm of concrete from the total slab depth to achieve a lightweight slab. This represents a significant saving in concrete costs, supporting framework and foundation loads.

KF70® Features and Benefits

Feature	Benefit
SquashCut™ ends	No end caps needed. Also provides rigid and secure platform during construction
Unique off-set lap	Enables shear studs to be placed centrally in the pan in the most optimal position
Large unpropped spans	Less propping congestion and easy access to the underside of the slab
Dovetail rib provides a simple hanger solution	Quick to install
Wide 742mm cover	Economic and easy suspension of services from an insert in the dovetail rib
Strong re-entrant features	KF70® gives a strong and reliable shear bond performance making strong composite slabs

Concrete Savings

KF70® effectively saves 26mm of concrete off the overall slab depth by concrete volume when compared to conventional concrete slabs. This represents a significant saving in concrete costs, supporting framework and foundation loads.

KF70® Material Specifications

KF70® is manufactured from G550 (550 MPa Yield Stress) steel with a Base Metal Thickness (BMT) of 0.75mm and 1.00mm. A thickness of 0.60mm BMT is also available upon request, subject to stock availability and order quantities. The galvanised coating thickness is a Z350 (350 g/m²) in accordance with AS 1397:2001.

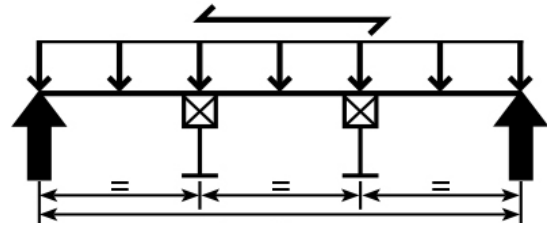
Material Properties	0.75 BMT	1.00 BMT
Mass Area – Average mass of fitted deck per plan area (kg/m ²)	8.97	11.78
Mass Linear – Mass of individual length (kg/m)	5.38	7.07
Zinc Coating (g/m ²) (Z350)	350	350
Yield Strength (MPa)	550	550

KF70[®] Temporary Propping Tables

KF70[®] Equally Spaced Props – Single Spans

Maximum Spans (mm) for Deflection L/240

L/240



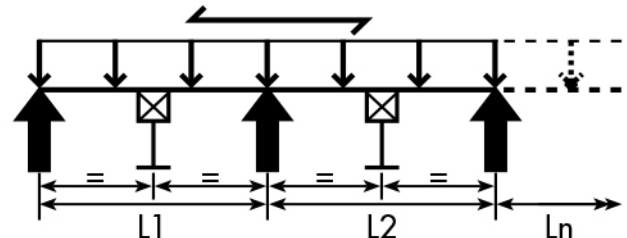
L = Span

Dcs (mm)	Unpropped		1 Row of Props		2 Rows of Props	
	0.75 BMT	1.00 BMT	0.75 BMT	1.00 BMT	0.75 BMT	1.00 BMT
120	2,500	2,700	[6,550]	[7,100]	[9,100]	[9,850]
130	2,400	2,600	[6,400]	[6,900]	[8,850]	[9,550]
140	2,350	2,550	[6,200]	[6,700]	[8,650]	[9,300]
150	2,300	2,500	[6,050]	[6,550]	[8,400]	[9,100]
160	2,250	2,400	[5,950]	[6,400]	[8,250]	[8,900]
170	2,200	2,350	5,800	[6,250]	[8,050]	[8,700]
180	2,150	2,350	5,700	6,150	[7,900]	[8,500]
190	2,100	2,300	5,600	6,050	[7,750]	[8,350]
200	2,100	2,250	5,500	5,900	[7,600]	[8,200]
210	2,050	2,200	5,400	5,800	[7,500]	[8,100]
220	2,000	2,150	5,300	5,750	7,350	[7,950]
230	2,000	2,150	5,200	5,650	7,250	7,850
240	1,950	2,100	5,150	5,550	7,150	7,700
250	1,900	2,100	5,050	5,500	7,050	7,600

KF70[®] Equally Spaced Props – Two or More Spans

Maximum Spans (mm) for Deflection L/240

L/240



L = Span

Dcs (mm)	Unpropped		1 Row of Props		2 Rows of Props	
	0.75 BMT	1.00 BMT	0.75 BMT	1.00 BMT	0.75 BMT	1.00 BMT
120	3,000	3,250	[6,200]	[6,700]	[9,100]	[9,850]
130	2,950	3,150	[6,050]	[6,500]	[8,850]	[9,550]
140	2,850	3,100	[5,850]	[6,350]	[8,650]	[9,300]
150	2,800	3,000	5,750	[6,200]	[8,400]	[9,100]
160	2,750	2,950	5,600	6,050	[8,250]	[8,900]
170	2,650	2,900	5,500	5,900	[8,050]	[8,700]
180	2,600	2,800	5,350	5,800	[8,000]	[8,500]
190	2,550	2,750	5,250	5,700	[7,900]	[8,350]
200	2,500	2,700	5,150	5,600	7,750	[8,200]
210	2,500	2,650	5,100	5,500	7,650	[8,100]
220	2,450	2,650	5,000	5,400	7,500	[8,000]
230	2,400	2,600	4,950	5,350	7,400	8,000
240	2,350	2,550	4,850	5,250	7,300	7,900
250	2,350	2,500	4,800	5,200	7,200	7,800

KF70[®] Temporary Propping Tables

KF70[®] Frame Propping - 1200mm Frame Size

Maximum Spans (mm) for Deflection L/240

Dcs (mm)	1 Frame		2 Frame	
	0.75 BMT	1.00 BMT	0.75 BMT	1.00 BMT
120	[6,500]	[6,900]	[10,350]	[11,100]
130	[6,400]	[6,800]	[10,200]	[10,800]
140	[6,200]	[6,700]	[10,050]	[10,650]
150	[6,100]	[6,500]	[9,900]	[10,500]
160	[6,000]	[6,400]	[9,750]	[10,350]
170	5,900	[6,300]	[9,600]	[10,200]
180	5,900	6,200	[9,450]	[10,050]
190	5,800	6,200	[9,300]	[9,900]
200	5,700	6,100	[9,150]	[9,750]
210	5,600	6,000	[9,150]	[9,600]
220	5,600	5,900	[9,000]	[9,600]
230	5,500	5,900	[8,850]	[9,450]
240	5,400	5,800	[8,850]	[9,300]
250	5,400	5,700	8,700	[9,300]

KF70[®] Frame Propping - 1500mm Frame Size

Maximum Spans (mm) for Deflection L/240

Dcs (mm)	1 Frame		2 Frame	
	0.75 BMT	1.00 BMT	0.75 BMT	1.00 BMT
120	[6,800]	[7,200]	[10,950]	[11,550]
130	[6,600]	[7,100]	[10,800]	[11,400]
140	[6,500]	[6,900]	[10,650]	[11,250]
150	[6,400]	[6,800]	[10,500]	[11,100]
160	[6,300]	[6,700]	[10,350]	[10,950]
170	[6,200]	[6,600]	[10,200]	[10,800]
180	6,200	[6,500]	[10,050]	[10,650]
190	6,100	6,400	[9,900]	[10,500]
200	6,000	6,400	[9,750]	[10,350]
210	5,900	6,300	[9,750]	[10,200]
220	5,900	6,200	[9,600]	[10,200]
230	5,800	6,200	[9,600]	[10,050]
240	5,800	6,100	[9,450]	[9,900]
250	5,700	6,000	[9,300]	[9,900]

Temporary Propping Tables Notes

- The tables above denote maximum allowable centreline to centreline span in millimetres between permanent supports after temporary propping is removed.
- The practical limit for span to slab depth ratio is considered to be 35 for single span slabs, or 40 for continuous slabs. Values above these limits have been listed in brackets "[]". The use of the results in brackets must be confirmed with the structural engineer or a Fielders representative as the long term serviceability and composite performance of the resulting concrete slab may not be suitable for the project application.
- Allowance has been made for ponding of wet concrete due to decking deflection, density 2400kg/m³.
- Loading is considered in accordance with AS 1170.0:2002, AS 2327.1:2003, AS 3610:1995 with a Stage III construction live load allowance of 1.0kPa in accordance with AS 2327.1:2003 Appendix F.
- The requirements for Stage II & IV material stacking loads in accordance with AS 2327.1:2003 Appendix F are assumed to be zero.
- It is recommended that an experienced structural engineer design the composite slab to ensure sufficient capacity to meet strength and long term deflection requirements.
- The temporary propping tables have been prepared for a span/240 deflection criteria. A span/240 deflection is generally considered aesthetically satisfactory for exposed soffits.
- These tables are based upon effective section properties of the sheeting calculated in accordance to AS 4600:2005.
- Care must be exercised when placing concrete to avoid mounding.
- Wide ply strips, of 300 mm wide, shall be provided to prevent any concentrated loads being applied to the sheeting, particularly for exposed soffits, to avoid direct point loading of the sheet overlap ribs and unsupported edges of the sheeting.
- When using the table for two or more spans the adjacent spans should not differ in length by more than 5%.
- A maximum sheet length of 12m has been considered.
- A minimum bearing width of the permanent support has been considered to be 50mm.
- Fielders recommend a gauge of 1.00 mm BMT for exposed soffits in propped applications to avoid creasing of steel decking. Please contact your local KingFlor[®] representative for further information.





fielders.com.au | 1800 182 255

