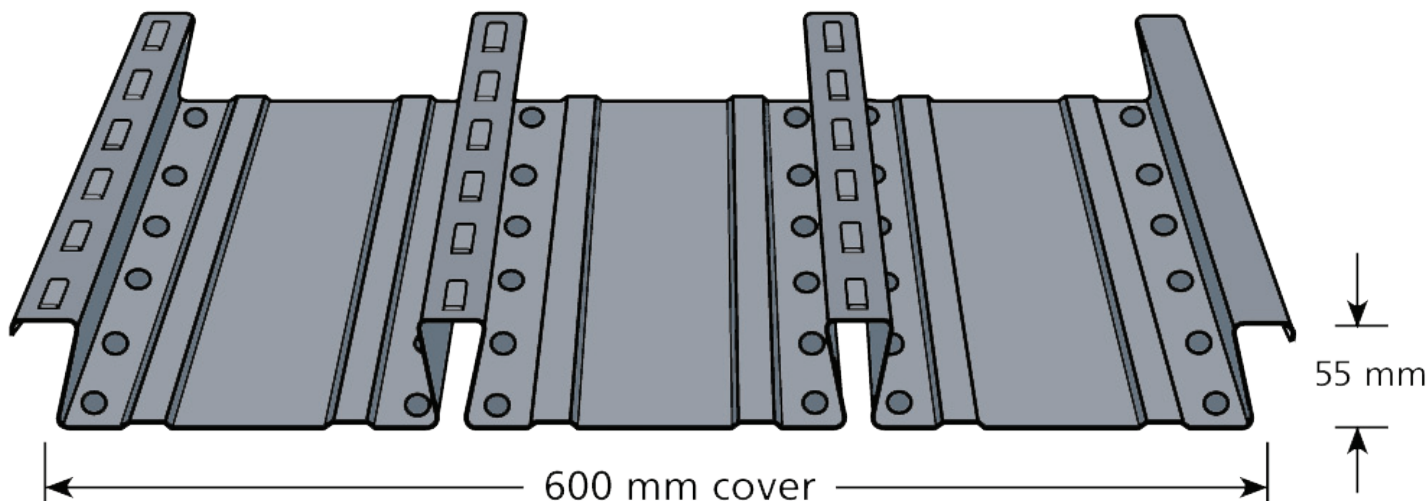




# REV-FLOR 55

**REVOLUTION  
ROOFING**  
STEEL YOURSELF

# INTRODUCING REV-FLOR 55, A TRADITIONAL FLAT PAN STEEL FLOORING PROFILE. THE REV-FLOR 55 IS ONE OF THE STRONGEST STEEL FORMWORK PROFILES ON THE MARKET TODAY!



## REV-FLOR 55 BENEFITS

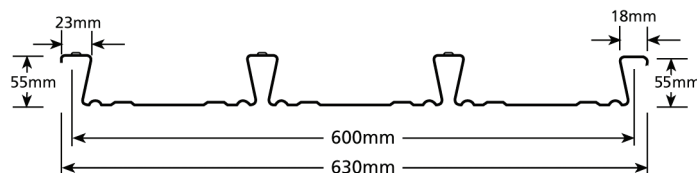
- Minimal temporary propping required
- Less site congestion
- Fast track construction with the new 600mm wide profile
- Greater spanning capabilities resulting in structural/ cost savings
- Savings in labour costs with fast installation
- No stripping of formwork required
- Fantail ribs ensure the profile is stronger than many other flooring profiles

The superior profile of the REV-FLOR 55 provides greater efficiencies and speed of construction ensuring it is the product of choice for multilevel carparks, high rise buildings and shopping centres.

REV-FLOR 55 is available in the 600mm wide 3 pan cover making it the ideal choice for both concrete and steel frame construction.

The embossments of the REV-FLOR 55, and clipping system ensure the profile interlocks with the concrete slab to achieve optimised structural performance. The re-entrant ribs with their fantail design have a depth of 53mm and enter the concrete slab at 200mm centres.

Revolution Roofing also supply a wide range of REV-FLOR 55 accessories.



## MATERIAL SPECIFICATIONS

Revolution Roofing only use 100% BlueScope Steel products.

REV-FLOR 55 is manufactured from DECKFORM, a G550 (550 MPa yield stress) steel with a base metal thickness (BMT) of 0.75mm or 1.00mm. The galvanised coating thickness is a Z350 (350 g/m<sup>2</sup>) in accordance with AS1397.

REV-FLOR 55				
Thickness (mm)	Mass kg/m <sup>2</sup>	Mass kg/m	Yield Strength MPa	Coverage m <sup>2</sup> /t
0.75	10.50	6.20	550	95.24
1.00	13.79	8.14	550	72.52

# REV-FLOR 55 SPANNING TABLES

The Revolution Roofing spanning tables detail the maximum allowable 'centreline to centreline' span between supports after all propping has been removed.

TABLE 1 Single Span - Deflection Limitation L/150						
Concrete Slab Thickness	0.75 BMT			1.00 BMT		
	No. Props Per Slab Span			No. Props Per Slab Span		
	0	1	2	0	1	2
100	2500	4050	4050	2700	4050	4050
110	2400	4450	4450	2650	4450	4450
120	2350	4850	4850	2550	3850	4850
130	2300	5250	5250	2500	5250	5250
140	2250	5400	5700	2450	5700	5700
150	2200	5300	6100	2400	6100	6100
160	2150	5150	6500	2350	6350	6500
170	2100	5050	6900	2300	6250	6900
180	2050	4950	7300	2300	6100	7300
190	2000	4850	7300	2250	6000	7700
200	1950	4750	7150	2200	5900	8100
210	1900	4700	7050	2200	5800	8250
220	1850	4600	6900	2150	5700	8100
230	1800	4500	6800	2100	5600	8000
240	1800	4450	6700	2050	5500	7900
250	1750	4350	6550	2000	5400	7800

TABLE 2 Single Span - Deflection Limitation L/240						
Concrete Slab Thickness	0.75 BMT			1.00 BMT		
	No. Props Per Slab Span			No. Props Per Slab Span		
	0	1	2	0	1	2
100	2150	3850	3850	2350	3850	3850
110	2050	4200	4200	2300	4200	4200
120	1950	4600	4600	2250	4600	4600
130	1900	5000	5000	2150	5000	5000
140	1850	5250	5400	2100	5400	5400
150	1750	5150	5750	2050	5650	5750
160	1700	5000	6150	2000	5550	6150
170	1650	4850	6300	1900	5450	6550
180	1600	4700	6100	1850	5350	6900
190	1550	4550	5900	1800	5250	7050
200	1550	4400	5700	1750	5150	6850
210	1500	4300	5550	1750	5100	6650
220	1450	4150	5400	1700	4950	6450
230	1400	4050	5250	1650	4850	6300
240	1400	3950	5100	1600	4700	6100
250	1350	3850	4950	1600	4600	5950

TABLE 3 Two Spans - Deflection Limitation L/150						
Concrete Slab Thickness	0.75 BMT			1.00 BMT		
	No. Props Per Slab Span			No. Props Per Slab Span		
	0	1	2	0	1	2
100	3000	4650	4650	3600	4650	4650
110	2900	5100	5100	3500	5100	5100
120	2800	5550	5550	3450	5550	5550
130	2750	5550	6000	3350	6000	6000
140	2700	5400	6500	3300	6300	6500
150	2650	5300	6950	3200	6200	6950
160	2550	5150	7400	3150	6050	7400
170	2500	5050	7600	3100	5950	7900
180	2450	4950	7450	3050	5850	8350
190	2400	4850	7300	3000	5750	8650
200	2350	4750	7150	2950	5650	8500
210	2350	4700	7050	2900	5550	8350
220	2300	4600	6900	2850	5500	8250
230	2250	4500	6800	2800	5400	8150
240	2200	4450	6700	2750	5350	8000
250	2150	4350	6550	2700	5250	7900

TABLE 4 Two Spans - Deflection Limitation L/240						
Concrete Slab Thickness	0.75 BMT			1.00 BMT		
	No. Props Per Slab Span			No. Props Per Slab Span		
	0	1	2	0	1	2
100	2850	4400	4400	3150	4400	4400
110	2800	4800	4800	3050	4800	4800
120	2700	5200	5250	3000	5250	5250
130	2650	5050	5700	2900	5550	5700
140	2600	4850	6150	2850	5450	6150
150	2550	4700	6600	2800	5300	6600
160	2500	4500	6750	2750	5200	7050
170	2450	4350	6550	2700	5100	7450
180	2400	4200	6300	2650	5000	7500
190	2350	4100	6100	2600	4850	7250
200	2300	3950	5900	2550	4700	7050
210	2300	3850	5750	2500	4550	6850
220	2250	3700	5550	2500	4450	6650
230	2200	3600	5400	2450	4350	6500
240	2200	3500	5250	2400	4200	6300
250	2150	3450	5100	2400	4100	6150

TABLE 5 Three or More Spans - Deflection Limitation L/150						
Concrete Slab Thickness	0.75 BMT			1.00 BMT		
	No. Props Per Slab Span			No. Props Per Slab Span		
	0	1	2	0	1	2
100	3000	4650	4650	3350	4650	4650
110	2900	5100	5100	3250	5100	5100
120	2800	5550	5550	3150	5550	5550
130	2750	5550	6000	3100	6000	6000
140	2700	5400	6500	3050	6300	6500
150	2650	5300	6950	2950	6150	6950
160	2550	5150	7400	2900	6050	7400
170	2500	5050	7600	2850	5950	7900
180	2450	4950	7450	2800	5800	8350
190	2400	4850	7300	2750	5750	8650
200	2350	4750	7150	2750	5650	8500
210	2350	4700	7050	2700	5550	8350
220	2300	4600	6900	2650	5450	8250
230	2250	4500	6800	2600	5400	8100
240	2200	4450	6700	2600	5300	8000
250	2150	4350	6550	2550	5250	7900

TABLE 6 Three or More Spans - Deflection Limitation L/240						
Concrete Slab Thickness	0.75 BMT			1.00 BMT		
	No. Props Per Slab Span			No. Props Per Slab Span		
	0	1	2	0	1	2
100	2650	4400	4400	2900	4400	4400
110	2600	4800	4800	2800	4800	4800
120	2500	5200	5250	2750	5250	5250
130	2450	5050	5700	2700	5550	5700
140	2400	4850	6150	2650	5400	6150
150	2350	4650	6600	2550	5300	6600
160	2300	4500	6750	2500	5200	7050
170	2250	4350	6500	2500	5100	7450
180	2200	4200	6300	2450	4950	7450
190	2200	4050	6100	2400	4800	7250
200	2150	3900	5900	2350	4650	7050
210	2100	3800	5750	2300	4550	6850
220	2050	3700	5550	2300	4400	6650
230	2000	3600	5400	2250	4300	6500
240	1950	3500	5250	2200	4200	6300
250	1900	3400	5100	2200	4100	6150

## Allowances & Assumptions

In the development of the tables allowance for concrete ponding due to sheet deformation has been included and the concrete density has been assumed to be 2400Kg/m<sup>3</sup>.

The other loadings included in the development of the tables are the dead load resulting from the sheeting and construction live load allowances, which are determined in accordance with Australian Standards AS1170, AS2327 and AS3610.

The tables have been developed on the basis of the mechanical properties of the sheeting alone, consequently the capacity of the composite action has not been considered as a limiting factor in these tables.

It is recommended that an appropriately qualified person design the composite slab to ensure capacity and long-term effects are considered, and that the composite slabs are fit for purpose.

## Depth Ratio

It is considered that a span to depth ratio of 35 for single span slabs and 40 for continuous spanning slabs are appropriate upper bounds for spanning of the slabs to minimise vibrations. These limitations have been considered in the tables generated, with spans limited to an effective span to depth ratio. When this condition governs, the values are ***italicised and highlighted*** in the above tables.

## Concrete Ponding

While concrete ponding due to deflection of the sheeting has been considered, no allowance has been made for mounding of concrete above finished concrete levels.

## Variance

The tables assume that when using two or more spans, the adjacent lengths of spans do not vary by more than 5%.

# INSTALLATION OF THE REV-FLOR 55

## Temporary Propping

When required, temporary propping is used to provide a continuous across the sheet support to prevent settlement and ponding during loading by wet concrete and other construction loads. The continuous across the sheet support is provided by timber or steel beams supported by vertical props. The vertical props (prop bearer) must be no less than 100mm in width.

Temporary propping should be left in place until the concrete slab has achieved sufficient strength.

## Laying Procedure

Place the sheets over the supports by hinging the overlap edge of one sheet over the underlap edge of the previous sheet. Tap the overlapping sheet (female rib) at an angle of approximately 45 degrees to fall in to position and secure it in place.

## Fixing

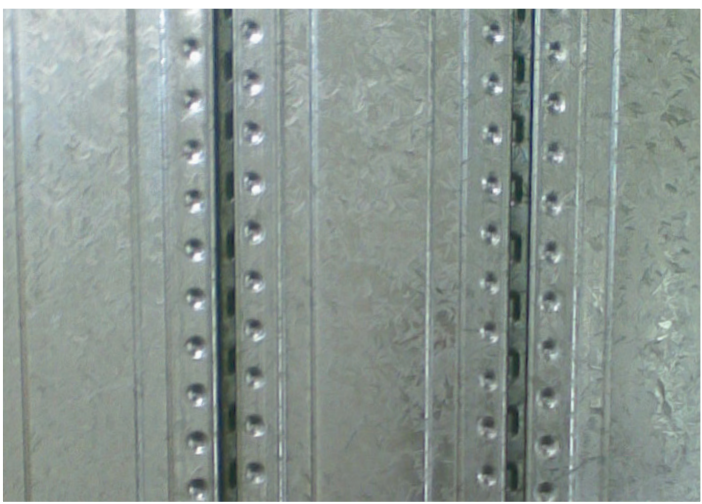
The REV-FLOR 55 deck must be secured to the supporting structure as soon as possible to avoid wind uplift, movement of the sheeting and deflection whilst pouring concrete. It is recommended to use one fastener at every support in each pan when fixing to a steel support. Self Drilling or tapping screws are recommended.

## Support Widths & Overlapping Joints

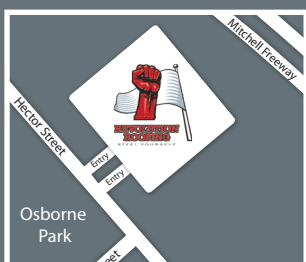
It is assumed that the support widths are 50mm at sheeting ends and 100mm over intermediate supports. Concentrated loading should also be avoided at the sheet overlap joints and unsupported edges.

## REV-FLOR 55 PROFILE VIEWS

Profile View of Underside



Profile View of Topside



**OSBORNE PARK WA**  
55b Hector Street

PO Box 1848, Osborne Park D.C WA 6196

P (08) 9217 9011 F (08) 9204 5564

Open Monday to Friday 7.30am to 5.30pm  
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