

ComFlor 80

From our shallow composite profile range

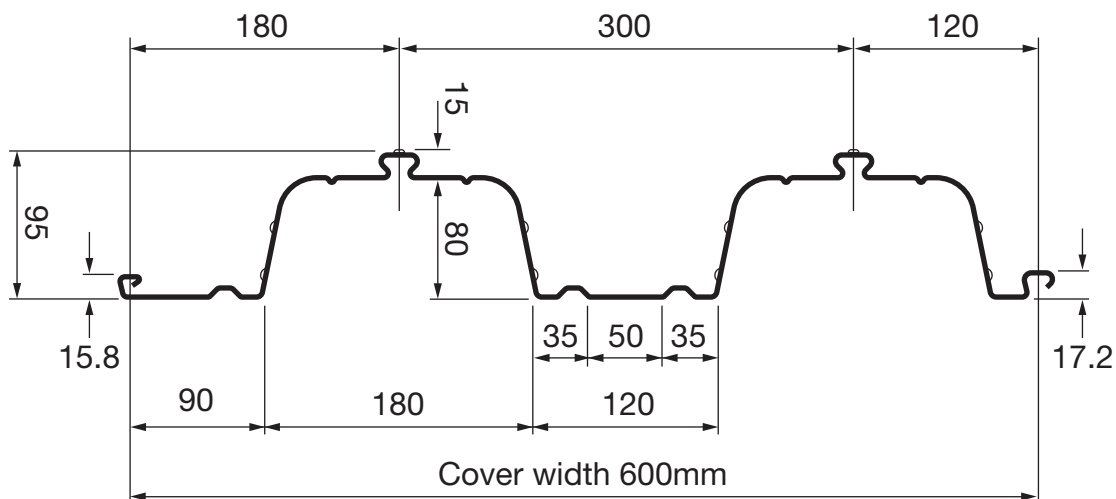
ComFlor 80 is the first of the next generation of profiled steel composite decks; it is the only 80mm profile utilising the higher grade 440 steel.

The large corner curvature detail provides a very efficient profile in conjunction with the higher grade of steel, ensures typical unpropped spans of 4.4m simply supported and in the continuous condition, spans of 5m can be achieved.

The large spans achievable means less structural steel thus cost saving in the overall construction cost, and more scope for Architects & Engineers in their design process.

Due to the profile geometry the following is achieved;

- ✔ **Excellent concrete usage**
very economical compared to other similar decks.
- ✔ **Improved manual handling**
due to cover width of 600mm reduces sheet weight.
- ✔ **Superb composite action**
between the beam & concrete due to the stud being positioned exactly in the centre of the trough which ensures the correct concrete cover to the stud and hence, develop the full design capacity of the stud. The central location of the stud also eliminates the need for site checking to ensure the stud positioning has been properly carried out.



ComFlor 80 Span table - Normal Weight Concrete

Props	Span	Fire Rating	Slab Depth (mm)	Mesh Type	Bar No	MAXIMUM SPAN (m) Deck Thickness (mm)					
						0.9			1.2		
						Total Applied Load (kN/m ²)					
						3.5	5.0	10.0	3.5	5.0	10.0
No Temporary props	Simple span	1 hr	150	A142	0	3.70	3.22	2.41	4.10	3.57	2.67
		1 hr	160	A252	0	4.08	3.90	2.75	4.36	4.28	2.99
		1.5 hr	160	A252	0	3.75	3.17	2.35	3.92	3.36	2.51
	slab & deck	2 hr	170	A393	0	4.00	3.46	2.42	4.29	3.41	2.48
		1 hr	150	A193	0	4.16	-	-	4.44	-	-
		1 hr	150	A142	1	4.16	4.16	4.16	4.44	4.44	4.44
	Double span slab & deck	1 hr	150	A142	0	4.29	3.85	2.94	4.70	4.10	3.10
		1.5 hr	160	A252	0	4.10	3.94	2.98	4.68	4.07	3.10
		2 hr	170	A393	0	3.97	3.92	2.93	4.55	3.93	2.98
		1 hr	150	A193	0	4.28	4.28	-	5.06	-	-
		1 hr	150	A142	1	4.28	4.28	4.28	5.06	5.08	-

Quick Reference Tables: All spans are shown in metres and are based on supported unpropped conditions.

The load/span table above shows typical spanning condition for the ComFlor 80 profile. For variations of slab depth, loading conditions (including point loads), support conditions and the use of lightweight concrete we recommend the use of the Comdek software, available from Tegral.

Spans: Spans are measured centre to centre of support, support width is 150mm in tables.

Construction Load: of 1.5kN/m² is taken into account in accordance with BS5950: Part 4 no allowance has been made for heaping of concrete during the casting of the slab.

Deflection: Construction stage L/130 or 30mm (ponding has been taken into account).

Fire Insulation: the minimum slab thickness indicated in each table satisfies the fire insulation requirements of BS5950: Part 8.