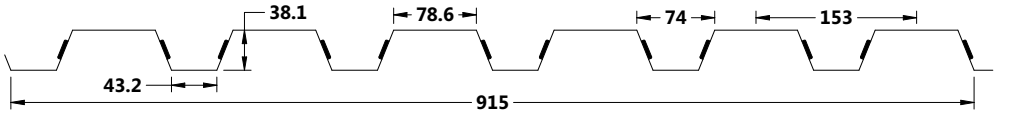
AFCD 15-36 ACCUFORM COMPOSITE FLOOR SLAB - METRIC



(mm)

Steel Deck Section Properties (Per metre of width)							Composite Slab Properties (Per metre of width)				
Base Steel Thickness	Yield Stress	Mass (Z275)	Area Steel	Section Modulus ($x10^3$ mm^3)		Deflection Inertia	Overall Slab Depth, D (mm)				
							100	110	120	130	140
(mm)	(MPa)	(kg/m^2)	(mm^2)	Midspan	Support	($x10^6$ mm^4)	Slab Weight (kPa)				
0.762	275	8.25	1016	9.78	9.84	0.230	1.88	2.11	2.34	2.56	2.79
0.914	275	9.85	1219	12.4	12.5	0.289	Concrete Volume (m^3/10 m^2)				
1.219	275	13.0	1626	16.9	17.5	0.401	0.77	0.87	0.97	1.07	1.17

Maximum Specified Uniformly Distributed Loads (kPa)

Slab Depth, D (mm)		*100*			*110*			*120*			*130*			*140*		
Base Steel	Slab Span	Deck Span			Deck Span			Deck Span			Deck Span			Deck Span		
(mm)	(mm)	*1*	*2*	*3*	*1*	*2*	*3*	*1*	*2*	*3*	*1*	*2*	*3*	*1*	*2*	*3*
	1500	16.9	16.9	16.9	19.0	19.0	19.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
	1600	15.3	15.3	15.3	17.3	17.3	17.3	19.2	19.2	19.2	20.0	20.0	20.0	20.0	20.0	20.0
0.762	**1800**	12.8	12.8	12.8	14.5	14.5	14.5	16.2	16.2	16.2	17.8	17.8	17.8	19.5	19.5	19.5
	2000	11.0	11.0	11.0	12.4	12.4	12.4	13.8	13.8	13.8	15.3	15.3	15.3	16.7	16.7	16.7
	2200	9.6	9.6	9.6	10.8	10.8	10.8	12.1	12.1	12.1	13.3	13.3	13.3	14.6	14.6	14.6
	2400	8.5	8.5	8.5	9.6	9.6	9.6	10.7	10.7	10.7	11.8	11.8	11.8	12.9	12.9	12.9
	2600	7.6	7.6	7.6	8.6	8.6	8.6	9.5	9.5	9.5	10.5	10.5	10.5	11.5	11.5	11.5
	1500	19.8	19.8	19.8	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
	1600	18.1	18.1	18.1	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
0.914	**1800**	15.4	15.4	15.4	17.4	17.4	17.4	19.4	19.4	19.4	20.0	20.0	20.0	20.0	20.0	20.0
	2000	13.3	13.3	13.3	15.0	15.0	15.0	16.8	16.8	16.8	18.5	18.5	18.5	20.0	20.0	20.0
	2200	11.7	11.7	11.7	13.2	13.2	13.2	14.8	14.8	14.8	16.3	16.3	16.3	17.8	17.8	17.8
	2400	10.4	10.4	10.4	11.8	11.8	11.8	13.2	13.2	13.2	14.5	14.5	14.5	15.9	15.9	15.9
	2600	9.4	9.4	9.4	10.6	10.6	10.6	11.9	11.9	11.9	13.1	13.1	13.1	14.3	14.3	14.3
	1500	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
	1600	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
	1800	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
1.219	**2000**	17.9	17.9	17.9	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
	2200	15.9	15.9	15.9	18.0	18.0	18.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
	2400	14.3	14.3	14.3	16.2	16.2	16.2	18.1	18.1	18.1	19.9	19.9	19.9	20.0	20.0	20.0
	2600	13.0	13.0	13.0	14.7	14.7	14.7	16.4	16.4	16.4	18.1	18.1	18.1	19.8	19.8	19.8
	2800	11.9	11.9	11.9	13.5	13.5	13.5	15.0	15.0	15.0	16.6	16.6	16.6	18.1	18.1	18.1
	3000	11.0	11.0	11.0	12.4	12.4	12.4	13.9	13.9	13.9	15.3	15.3	15.3	16.7	16.7	16.7
0.762	**DP**	**81.0**			**108**			**139**			**177**			**220**		
0.914	**DP**	**86.7**			**115**			**149**			**188**			**234**		
1.219	**DP**	**96.9**			**128**			**166**			**210**			**261**		

NOTES: 1. One shore support required at midspan in shaded areas (CSSBI 12M-2024).
2. Slab weight of steel deck and concrete slab has been accounted for in the load table.
3. Shoring was based on **Light Duty** uniform construction live load of ***1 kPa*** .
4. DP = deflection parameter.
5. See composite slab notes and design example.
6. Prepared by Dr. R.M. Schuster, Distinguished Professor Emeritus, University of Waterloo.