

Holorib

Span/Load table - Normal weight concrete

Support Condition	Slab Depth (mm)	Concrete Volume (m ³ /m ²)	Maximum Permissible Spans (m)											
			0.9mm GAUGE IMPOSED LOAD (kN/m ²)				1.0mm GAUGE IMPOSED LOAD (kN/m ²)				1.2mm GAUGE IMPOSED LOAD (kN/m ²)			
			*	5.0	6.7	10.0	*	5.0	6.7	10.0	*	5.0	6.7	10.0
SINGLE	100	0.092	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
	120	0.112	2.88	2.88	2.88	2.88	3.09	3.09	3.09	3.09	3.27	3.27	3.27	3.27
	130	0.122	2.80	2.80	2.80	2.80	3.01	3.01	3.01	3.01	3.20	3.20	3.20	3.20
	150	0.142	2.67	2.67	2.67	2.67	2.89	2.89	2.89	2.89	3.07	3.07	3.07	3.07
	175	0.167	2.52	2.52	2.52	2.52	2.75	2.75	2.75	2.75	2.93	2.93	2.93	2.93
	200	0.192	2.40	2.40	2.40	2.40	2.61	2.61	2.61	2.61	2.81	2.81	2.81	2.81
MULTIPLE	100	0.092	3.36	3.36	3.36	3.24	3.50	3.50	3.50	3.36	3.50	3.50	3.50	3.44
	120	0.112	3.19	3.19	3.19	3.19	3.35	3.35	3.35	3.35	3.66	3.66	3.66	3.66
	130	0.122	3.11	3.11	3.11	3.11	3.28	3.28	3.28	3.28	3.58	3.58	3.58	3.58
	150	0.142	2.99	2.99	2.99	2.99	3.14	3.14	3.14	3.14	3.44	3.44	3.44	3.44
	175	0.167	2.85	2.85	2.85	2.85	3.00	3.00	3.00	3.00	3.29	3.29	3.29	3.29
	200	0.192	2.74	2.74	2.74	2.74	2.89	2.89	2.89	2.89	3.16	3.16	3.16	3.16
PROPPED	100	0.092	3.50	3.50	3.39	2.85	3.50	3.50	3.50	3.18	3.50	3.50	3.50	3.44
	120	0.112	4.20	4.15	3.69	3.12	4.20	4.20	4.13	3.48	4.20	4.20	4.20	4.03
	130	0.122	4.55	4.30	3.84	3.25	4.55	4.55	4.29	3.63	4.55	4.55	4.55	4.33
	150	0.142	5.25	4.58	4.10	3.48	5.25	5.11	4.58	3.89	5.25	5.25	5.25	4.71
	175	0.167	5.65	4.87	4.39	3.75	5.96	5.43	4.90	4.19	6.13	6.13	5.90	5.06
	200	0.192	5.43	5.12	4.64	3.98	5.72	5.70	5.17	4.45	6.27	6.27	6.27	5.37

Section Dimensions



Holorib

Span/Load table - Light weight concrete

Support Condition	Slab Depth (mm)	Concrete Volume (m ³ /m ²)	Maximum Permissible Spans (m)											
			0.9mm GAUGE IMPOSED LOAD (kN/m ²)				1.0mm GAUGE IMPOSED LOAD (kN/m ²)				1.2mm GAUGE IMPOSED LOAD (kN/m ²)			
			*	5.0	6.7	10.0	*	5.0	6.7	10.0	*	5.0	6.7	10.0
SINGLE	100	0.092	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50
	120	0.112	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
	130	0.122	3.03	3.03	3.03	3.03	3.24	3.24	3.24	3.24	3.25	3.25	3.25	3.25
	150	0.142	2.90	2.90	2.90	2.90	3.10	3.10	3.10	3.10	3.29	3.29	3.29	3.29
	175	0.167	2.75	2.75	2.75	2.75	2.97	2.97	2.97	2.97	3.15	3.15	3.15	3.15
	200	0.192	2.62	2.62	2.62	2.62	2.85	2.85	2.85	2.85	3.02	3.02	3.02	3.02
MULTIPLE	100	0.092	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
	120	0.112	3.42	3.42	3.42	3.34	3.60	3.60	3.60	3.60	3.60	3.60	3.60	3.60
	130	0.122	3.34	3.34	3.34	3.34	3.52	3.52	3.52	3.52	3.84	3.84	3.84	3.84
	150	0.142	3.21	3.21	3.21	3.21	3.38	3.38	3.38	3.38	3.69	3.69	3.69	3.69
	175	0.167	3.07	3.07	3.07	3.07	3.23	3.23	3.23	3.23	3.53	3.53	3.53	3.53
	200	0.192	2.95	2.95	2.95	2.95	3.10	3.10	3.10	3.10	3.40	3.40	3.40	3.40
PROPPED	100	0.092	3.00	3.00	3.00	2.88	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
	120	0.112	3.60	3.60	3.60	3.16	3.60	3.60	3.60	3.54	3.60	3.60	3.60	3.60
	130	0.122	3.90	3.90	3.90	3.30	3.90	3.90	3.90	3.69	3.90	3.90	3.90	3.90
	150	0.142	4.50	4.50	4.21	3.55	4.50	4.50	4.50	3.97	4.50	4.50	4.50	4.50
	175	0.167	5.25	5.06	4.52	3.83	5.25	5.25	5.05	4.28	5.25	5.25	5.25	5.17
	200	0.192	5.84	5.34	4.79	4.08	6.00	5.95	5.35	4.56	6.00	6.00	6.00	5.51

Holorib Section Properties (per metre width)

Gauge mm	Self Weight		Area mm ²	Inertia cm ⁴	Y _{NA} mm
	kg/m ²	kN/m ²			
0.9	12.8	0.126	1,597	64.4	16.7
1.0	14.3	0.140	1,780	72.0	16.7
1.2	17.1	0.168	2,145	87.2	16.8

Notes: applicable to span/load tables

1. Spans shown assume clear span +100mm to the centreline of supports.
2. Designs are fully in accordance with BS 5950: Parts 4 & 6.
3. The dead weight of the slab has been included in the development of the spans shown. However, consideration should be given to finishes, partitions, walls, etc. when reading from the table.

4. Based upon concrete densities at wet stage: normal weight concrete 2400 kg/m³, lightweight concrete 1900 kg/m³.
5. Concrete volumes: Figures shown in the tables are nominal values based on constant slab thickness. As with all steel decks, an allowance should be made for the deflected form of the soffit when ordering concrete and, as guidance, we suggest that the estimated volume of concrete equates to: Overall slab depth - 8mm for voids + span/250.
6. A span to depth ratio limit of 35:1 for normal weight concrete and 30:1 for light weight concrete is generally used. Where isolated single spans occur, these ratios are reduced to 30:1 and 25:1 respectively.
7. Maximum deflections are limited to span/130 after taking account of ponding.
8. Construction stage design includes an allowance of 1.5kN/m² for construction loading.
9. Composite slabs are designed as simply supported irrespective of the deck support configuration. A minimum crack control and distribution mesh is required over the supports in accordance with clauses 6.7, 6.8 and 6.9 of BS5950: Part 4.
10. S350 decking is manufactured from material meeting the specification: BS EN 10147-S350GD+Z275-N-A-C, i.e. yield strength = 350 N/mm²