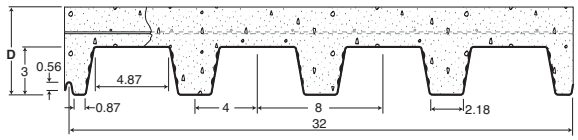
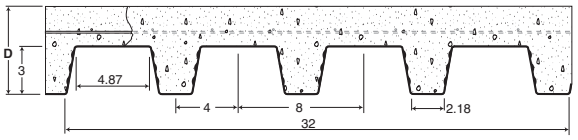
Composite Deck (Galvanneal) A25 CD75-200/CD75-200 CL



CD75-200



CD75-200 CL

ALL DIMENSIONS ARE IN INCHES

Steel Deck Section Properties
(Per Foot of Width)

Base Steel Thickness (in.)	Weight A25 Galvanneal (psf)	Area of Steel (in^2)	Yield Stress (KSI)	Section Modulus (in^3)		Deflection Inertia Midspan (in^4)
				Midspan	Support	
0.030	2.08	0.594	33	0.375	0.397	0.677
0.036	2.48	0.712	33	0.485	0.503	0.880
0.048	3.29	0.950	33	0.675	0.724	1.27
0.060	4.10	1.19	33	0.862	0.904	1.64

Composite Slab Properties
(Per Foot of Width)

Overall Slab Depth, D (in.)				
5.0	5.5	6.0	6.5	7.0
Slab Weight (psf)				
41.5	47.8	54.0	60.3	66.5
Concrete Volume ($yd^3/100ft^2$)				
0.92	1.08	1.23	1.39	1.54

Live Load Factor = 1.5; Importance Factor ($I_{S\text{-}SLS}$) = 0.90; Importance Factor ($I_{S\text{-}ULS}$) = 1.0

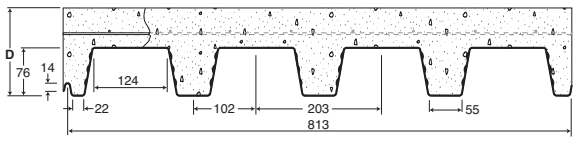
Load Table
Maximum Specified Uniformly Distributed Loads (psf)

Slab Depth, D (in.)		5.0			5.5			6.0			6.5			7.0		
Base Steel (in.)	Span (ft.)	Deck Span			Deck Span			Deck Span			Deck Span			Deck Span		
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
0.030	9′-0″	198	198	198	229	229	229	260	260	260	291	291	291	322	322	322
	9′-6″	182	182	182	210	210	210	239	239	239	268	268	268	296	296	296
	10′-0″	168	168	168	194	194	194	221	221	221	247	247	247	274	274	274
	10′-6″	156	156	156	180	180	180	205	205	205	229	229	229	254	254	254
	11′-0″	143	143	143	168	168	168	191	191	191	214	214	214	237	237	237
0.036	10′-0″	182	182	182	210	210	210	239	239	239	267	267	267	296	296	296
	10′-6″	167	167	167	194	194	194	220	220	220	246	246	246	273	273	273
	11′-0″	155	155	155	179	179	179	204	204	204	228	228	228	253	253	253
	11′-6″	144	144	144	167	167	167	189	189	189	212	212	212	235	235	235
	12′-0″	134	134	134	155	155	155	176	176	176	198	198	198	219	219	219
0.048	10′-6″	185	185	185	214	214	214	243	243	243	272	272	272	301	301	301
	11′-0″	169	169	169	196	196	196	223	223	223	249	249	249	276	276	276
	11′-6″	156	156	156	180	180	180	205	205	205	230	230	230	254	254	254
	12′-0″	144	144	144	167	167	167	190	190	190	212	212	212	235	235	235
	12′-6″	134	134	134	155	155	155	176	176	176	197	197	197	218	218	218
	13′-0″	124	124	124	144	144	144	164	164	164	183	183	183	203	203	203
	13′-6″	116	116	116	134	134	134	153	153	153	171	171	171	189	189	189
	14′-0″	109	109	109	126	126	126	143	143	143	160	160	160	177	177	177
	14′-6″	102	102	102	118	118	118	134	134	134	150	150	150	166	166	166
0.060	11′-0″	169	169	169	196	196	196	223	223	223	249	249	249	276	276	276
	11′-6″	156	156	156	180	180	180	205	205	205	230	230	230	254	254	254
	12′-0″	144	144	144	167	167	167	190	190	190	212	212	212	235	235	235
	12′-6″	134	134	134	155	155	155	176	176	176	197	197	197	218	218	218
	13′-0″	124	124	124	144	144	144	164	164	164	183	183	183	203	203	203
	13′-6″	116	116	116	134	134	134	153	153	153	171	171	171	189	189	189
	14′-0″	109	109	109	126	126	126	143	143	143	160	160	160	177	177	177
	14′-6″	102	102	102	118	118	118	134	134	134	150	150	150	166	166	166
	15′-0″	96	96	96	111	111	111	126	126	126	141	141	141	156	156	156
	15′-6″	90	90	90	104	104	104	119	119	119	133	133	133	147	147	147

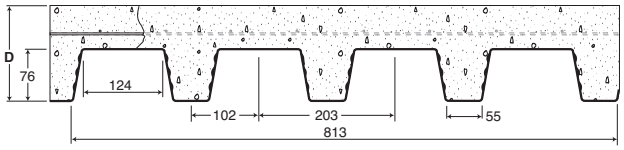
Note:
1 - One shore support required at midspan in shaded areas.
2 - Slab Weight includes steel deck and concrete slab, which has been accounted for in load table.
3 - See Designer Notes - Composite Slab.
4 - See Designer Notes - Web Crippling for important notes regarding Web Crippling design.
5 - For G90 deck material, contact Agway Metals for composite load tables.
6 - Bundled deck produced from either Galvanneal or G90 Galvanized coated steel is susceptible to storage stain when exposed to the elements. This staining is superficial only and is not a valid reason for rejection of this product.

METRIC

CD75-200/CD75-200 CL Composite Deck (Galvanneal) ZF75



CD75-200



CD75-200 CL

ALL DIMENSIONS ARE IN MILLIMETERS

Steel Deck – Section Properties
(Per Metre of Width)

Composite Slab – Properties
(Per Metre of Width)

Base Steel Thickness (mm)	Mass ZF75 Galvanneal (kg/m²)	Area of Steel (mm²)	Yield Stress (Mpa)	Section Modulus (x10³ mm³)		Deflection Inertia Midspan (x10⁶ mm⁴)	Overall Slab Depth, D (mm)				
							130	140	150	160	170
				Midspan	Support		Slab Weight (kPa)				
0.762	10.1	1257	230	20.1	21.3	0.922	1.98	2.21	2.43	2.66	2.88
0.914	12.1	1507	230	26.0	27.0	1.20	Concrete Volume (m³/10 m²)				
1.220	16.1	2010	230	36.2	38.8	1.73	0.79	0.89	0.99	1.09	1.19
1.520	20.0	2513	230	46.3	48.6	2.24					

Live Load Factor = 1.5; Importance Factor ($I_{S\text{-}SLS}$) = 0.90; Importance Factor ($I_{S\text{-}ULS}$) = 1.0

Load Table

Maximum Specified Uniformly Distributed Loads (kPa)

Slab Depth, D (mm)		130			140			150			160			170		
Base Steel (mm)	Span (mm)	Deck Span			Deck Span			Deck Span			Deck Span			Deck Span		
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
0.762	2600	10.7	10.7	10.7	11.9	11.9	11.9	13.2	13.2	13.2	14.5	14.5	14.5	15.8	15.8	15.8
	2800	9.5	9.5	9.5	10.6	10.6	10.6	11.8	11.8	11.8	12.9	12.9	12.9	14.0	14.0	14.0
	3000	8.5	8.5	8.5	9.6	9.6	9.6	10.6	10.6	10.6	11.6	11.6	11.6	12.6	12.6	12.6
	3200	7.7	7.7	7.7	8.6	8.6	8.6	9.6	9.6	9.6	10.5	10.5	10.5	11.4	11.4	11.4
	3400	7.0	7.0	7.0	7.9	7.9	7.9	8.7	8.7	8.7	9.6	9.6	9.6	10.4	10.4	10.4
0.914	3000	9.3	9.3	9.3	10.4	10.4	10.4	11.5	11.5	11.5	12.6	12.6	12.6	13.7	13.7	13.7
	3200	8.3	8.3	8.3	9.3	9.3	9.3	10.3	10.3	10.3	11.3	11.3	11.3	12.3	12.3	12.3
	3400	7.5	7.5	7.5	8.4	8.4	8.4	9.3	9.3	9.3	10.2	10.2	10.2	11.1	11.1	11.1
	3500	7.2	7.2	7.2	8.0	8.0	8.0	8.9	8.9	8.9	9.7	9.7	9.7	10.6	10.6	10.6
	3600	6.8	6.8	6.8	7.7	7.7	7.7	8.5	8.5	8.5	9.3	9.3	9.3	10.1	10.1	10.1
1.220	2800	11.8	11.8	11.8	13.2	13.2	13.2	14.6	14.6	14.6	16.0	16.0	16.0	17.4	17.4	17.4
	3000	10.3	10.3	10.3	11.6	11.6	11.6	12.8	12.8	12.8	14.1	14.1	14.1	15.3	15.3	15.3
	3200	9.2	9.2	9.2	10.3	10.3	10.3	11.4	11.4	11.4	12.5	12.5	12.5	13.6	13.6	13.6
	3400	8.2	8.2	8.2	9.2	9.2	9.2	10.2	10.2	10.2	11.1	11.1	11.1	12.1	12.1	12.1
	3500	7.8	7.8	7.8	8.7	8.7	8.7	9.6	9.6	9.6	10.6	10.6	10.6	11.5	11.5	11.5
	3600	7.4	7.4	7.4	8.3	8.3	8.3	9.1	9.1	9.1	10.0	10.0	10.0	10.9	10.9	10.9
	3800	6.7	6.7	6.7	7.5	7.5	7.5	8.3	8.3	8.3	9.1	9.1	9.1	9.9	9.9	9.9
	4000	6.1	6.1	6.1	6.8	6.8	6.8	7.5	7.5	7.5	8.3	8.3	8.3	9.0	9.0	9.0
	4200	5.6	5.6	5.6	6.2	6.2	6.2	6.9	6.9	6.9	7.5	7.5	7.5	8.2	8.2	8.2
	4400	5.1	5.1	5.1	5.7	5.7	5.7	6.3	6.3	6.3	6.9	6.9	6.9	7.5	7.5	7.5
1.520	3400	8.2	8.2	8.2	9.2	9.2	9.2	10.2	10.2	10.2	11.1	11.1	11.1	12.1	12.1	12.1
	3500	7.8	7.8	7.8	8.7	8.7	8.7	9.6	9.6	9.6	10.6	10.6	10.6	11.5	11.5	11.5
	3600	7.4	7.4	7.4	8.3	8.3	8.3	9.1	9.1	9.1	10.0	10.0	10.0	10.9	10.9	10.9
	3800	6.7	6.7	6.7	7.5	7.5	7.5	8.3	8.3	8.3	9.1	9.1	9.1	9.9	9.9	9.9
	4000	6.1	6.1	6.1	6.8	6.8	6.8	7.5	7.5	7.5	8.3	8.3	8.3	9.0	9.0	9.0
	4200	5.6	5.6	5.6	6.2	6.2	6.2	6.9	6.9	6.9	7.5	7.5	7.5	8.2	8.2	8.2
	4400	5.1	5.1	5.1	5.7	5.7	5.7	6.3	6.3	6.3	6.9	6.9	6.9	7.5	7.5	7.5
	4500	4.9	4.9	4.9	5.5	5.5	5.5	6.1	6.1	6.1	6.6	6.6	6.6	7.2	7.2	7.2
	4600	4.7	4.7	4.7	5.3	5.3	5.3	5.8	5.8	5.8	6.4	6.4	6.4	7.0	7.0	7.0
	4800	4.3	4.3	4.3	4.9	4.9	4.9	5.4	5.4	5.4	5.9	5.9	5.9	6.4	6.4	6.4

Note:
1 - One shore support required at midspan in shaded areas.
2 - Slab Weight includes steel deck and concrete slab, which has been accounted for in load table.
3 - See Designer Notes - Composite Slab.
4 - See Designer Notes - Web Crippling for important notes regarding Web Crippling design.
5 - For Z275 deck material, contact Agway Metals for composite load tables.
6 - Bundled deck produced from either Galvanneal or G90 Galvanized coated steel is susceptible to storage stain when exposed to the elements. This staining is superficial only and is not a valid reason for rejection of this product.