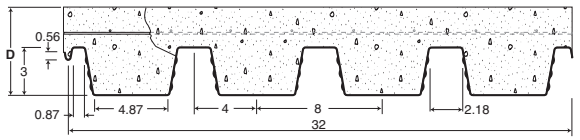
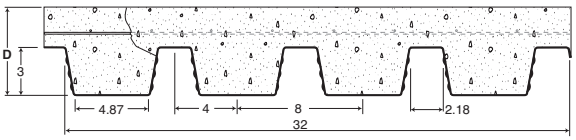
Composite Deck Inverted (Galvanneal) A25 CD75-200/CD75-200 CL



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	0.397	0.375	0.827
0.036	2.48	0.712	33	0.503	0.485	1.01
0.048	3.29	0.950	33	0.724	0.675	1.34
0.060	4.10	1.19	33	0.904	0.862	1.67

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)				
54.2	60.4	66.7	72.9	79.2
Concrete Volume ($yd^3/100ft^2$)				
1.24	1.39	1.54	1.70	1.85

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

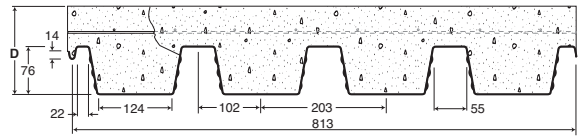
Load Table
Maximum Specified Uniformly Distributed Loads (psf)

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″	209	209	209	236	236	236	264	264	264	291	291	291	319	319	319
	9′-6″	193	193	193	219	219	219	244	244	244	270	270	270	295	295	295
	10′-0″	180	180	180	204	204	204	227	227	227	251	251	251	275	275	275
	10′-6″	168	168	168	190	190	190	213	213	213	235	235	235	257	257	257
	11′-0″	158	158	158	179	179	179	199	199	199	220	220	220	241	241	241
0.036	10′-0″	198	198	198	224	224	224	250	250	250	276	276	276	302	302	302
	10′-6″	183	183	183	207	207	207	232	232	232	256	256	256	280	280	280
	11′-0″	171	171	171	193	193	193	216	216	216	238	238	238	261	261	261
	11′-6″	159	159	159	181	181	181	202	202	202	223	223	223	244	244	244
	12′-0″	150	150	150	169	169	169	189	189	189	209	209	209	228	228	228
0.048	10′-6″	201	201	201	227	227	227	254	254	254	280	280	280	307	307	307
	11′-0″	185	185	185	209	209	209	234	234	234	258	258	258	283	283	283
	11′-6″	171	171	171	194	194	194	216	216	216	239	239	239	261	261	261
	12′-0″	159	159	159	180	180	180	201	201	201	222	222	222	242	242	242
	12′-6″	148	148	148	167	167	167	187	187	187	206	206	206	226	226	226
	13′-0″	138	138	138	156	156	156	174	174	174	193	193	193	211	211	211
	13′-6″	129	129	129	146	146	146	163	163	163	180	180	180	198	198	198
	14′-0″	121	121	121	137	137	137	153	153	153	170	170	170	186	186	186
	14′-6″	114	114	114	129	129	129	145	145	145	160	160	160	175	175	175
0.060	11′-0″	185	185	185	209	209	209	234	234	234	258	258	258	282	282	282
	11′-6″	171	171	171	193	193	193	216	216	216	238	238	238	261	261	261
	12′-0″	158	158	158	179	179	179	200	200	200	221	221	221	242	242	242
	12′-6″	148	148	148	167	167	167	187	187	187	206	206	206	226	226	226
	13′-0″	138	138	138	156	156	156	174	174	174	192	192	192	211	211	211
	13′-6″	129	129	129	146	146	146	163	163	163	180	180	180	197	197	197
	14′-0″	121	121	121	137	137	137	153	153	153	169	169	169	185	185	185
	14′-6″	114	114	114	129	129	129	144	144	144	159	159	159	175	175	175
	15′-0″	108	108	108	122	122	122	136	136	136	150	150	150	165	165	165
	15′-6″	102	102	102	115	115	115	129	129	129	142	142	142	156	156	156

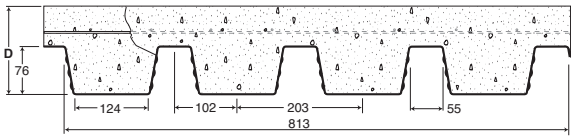
Note:
1 - One shore support required at midspan in shaded areas.
2 - Slab Weight includes steel deck and concrete slab, which has been accounted for in load table.
3 - See Designer Notes - Composite Slab.
4 - See Designer Notes - Web Crippling for important notes regarding Web Crippling design.
5 - For 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 Inverted (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	21.3	20.1	1.13	2.56	2.78	3.01	3.23	3.46
0.914	12.1	1507	230	27.0	26.0	1.37	Concrete Volume (m³/10 m²)				
1.220	16.1	2010	230	38.8	36.2	1.83	1.05	1.15	1.25	1.35	1.45
1.520	20.0	2513	230	48.6	46.3	2.28					

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	11.1	11.1	11.1	12.2	12.2	12.2	13.3	13.3	13.3	14.5	14.5	14.5	15.6	15.6	15.6
	2800	10.0	10.0	10.0	11.0	11.0	11.0	12.0	12.0	12.0	13.0	13.0	13.0	14.0	14.0	14.0
	3000	9.1	9.1	9.1	10.0	10.0	10.0	10.9	10.9	10.9	11.8	11.8	11.8	12.7	12.7	12.7
	3200	8.3	8.3	8.3	9.1	9.1	9.1	10.0	10.0	10.0	10.8	10.8	10.8	11.6	11.6	11.6
	3400	7.6	7.6	7.6	8.4	8.4	8.4	9.2	9.2	9.2	9.9	9.9	9.9	10.7	10.7	10.7
0.914	3000	9.9	9.9	9.9	10.9	10.9	10.9	11.9	11.9	11.9	12.9	12.9	12.9	13.9	13.9	13.9
	3200	8.9	8.9	8.9	9.8	9.8	9.8	10.8	10.8	10.8	11.7	11.7	11.7	12.6	12.6	12.6
	3400	8.2	8.2	8.2	9.0	9.0	9.0	9.8	9.8	9.8	10.6	10.6	10.6	11.4	11.4	11.4
	3500	7.8	7.8	7.8	8.6	8.6	8.6	9.4	9.4	9.4	10.2	10.2	10.2	10.9	10.9	10.9
	3600	7.5	7.5	7.5	8.2	8.2	8.2	9.0	9.0	9.0	9.7	9.7	9.7	10.5	10.5	10.5
1.220	2800	12.6	12.6	12.6	13.8	13.8	13.8	15.1	15.1	15.1	16.4	16.4	16.4	17.6	17.6	17.6
	3000	11.1	11.1	11.1	12.2	12.2	12.2	13.3	13.3	13.3	14.5	14.5	14.5	15.6	15.6	15.6
	3200	9.9	9.9	9.9	10.9	10.9	10.9	11.9	11.9	11.9	12.9	12.9	12.9	13.9	13.9	13.9
	3400	8.9	8.9	8.9	9.8	9.8	9.8	10.7	10.7	10.7	11.6	11.6	11.6	12.5	12.5	12.5
	3500	8.4	8.4	8.4	9.3	9.3	9.3	10.2	10.2	10.2	11.0	11.0	11.0	11.9	11.9	11.9
	3600	8.0	8.0	8.0	8.9	8.9	8.9	9.7	9.7	9.7	10.5	10.5	10.5	11.3	11.3	11.3
	3800	7.3	7.3	7.3	8.1	8.1	8.1	8.8	8.8	8.8	9.5	9.5	9.5	10.3	10.3	10.3
	4000	6.7	6.7	6.7	7.4	7.4	7.4	8.0	8.0	8.0	8.7	8.7	8.7	9.4	9.4	9.4
	4200	6.2	6.2	6.2	6.8	6.8	6.8	7.4	7.4	7.4	8.0	8.0	8.0	8.6	8.6	8.6
	4400	5.7	5.7	5.7	6.3	6.3	6.3	6.8	6.8	6.8	7.4	7.4	7.4	8.0	8.0	8.0
1.520	3400	8.9	8.9	8.9	9.8	9.8	9.8	10.7	10.7	10.7	11.6	11.6	11.6	12.5	12.5	12.5
	3500	8.4	8.4	8.4	9.3	9.3	9.3	10.1	10.1	10.1	11.0	11.0	11.0	11.8	11.8	11.8
	3600	8.0	8.0	8.0	8.8	8.8	8.8	9.7	9.7	9.7	10.5	10.5	10.5	11.3	11.3	11.3
	3800	7.3	7.3	7.3	8.0	8.0	8.0	8.8	8.8	8.8	9.5	9.5	9.5	10.3	10.3	10.3
	4000	6.7	6.7	6.7	7.4	7.4	7.4	8.0	8.0	8.0	8.7	8.7	8.7	9.4	9.4	9.4
	4200	6.1	6.1	6.1	6.8	6.8	6.8	7.4	7.4	7.4	8.0	8.0	8.0	8.6	8.6	8.6
	4400	5.7	5.7	5.7	6.2	6.2	6.2	6.8	6.8	6.8	7.4	7.4	7.4	8.0	8.0	8.0
	4500	5.5	5.5	5.5	6.0	6.0	6.0	6.6	6.6	6.6	7.1	7.1	7.1	7.7	7.7	7.7
	4600	5.3	5.3	5.3	5.8	5.8	5.8	6.3	6.3	6.3	6.8	6.8	6.8	7.4	7.4	7.4
	4800	4.9	4.9	4.9	5.4	5.4	5.4	5.9	5.9	5.9	6.4	6.4	6.4	6.9	6.9	6.9

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.