

SUPERDECK™

Superdeck™ was designed to replace deteriorating wood, concrete and steel bridges. The Superdeck™ performs to HS25-44 load standards™ and is intended for highway traffic. The corrosion resistant deck is 1/5 the weight of traditional concrete deck. It is factory manufactured and shipped to the job site per the engineer's specification. The deck installs very fast and can be connected to steel or concrete girders with shear studs.

FEATURES AND BENEFITS /

- Corrosion Resistant
- Non-Conductive
- Lightweight
- Maintenance Free
- Environmentally Safe
- High Strength
- Structurally Stable
- Electromagnetic Transparency
- Easy Standard Installation Methods
- Panels easily removed
- Elimination of Expensive Labor and Equipment

ANTISKID INFORMATION /

Consult Creative at 888-CPI-PULL (274-7855) for antiskid and wearing surface options.



APPLICATIONS

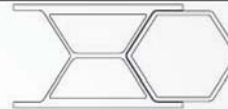
- DECKING FOR WALKWAYS + PLATFORMS
- MARINA DOCK DECKING
- COOLING TOWER DECKING
- PEDESTRIAN BRIDGE DECKS
- VEHICULAR BRIDGES
- COMMERCIAL PIERS

SUPERDECK CP045/CP046

Simple Supported Beam-Single Span



SuperDeck™ CP045/CP046
8" Highway Deck
1500/1525/1625 Series



Imperial

$E_b = 3.50$ Msi $G_b = 0.50$ Msi Characteristic longitudinal compressive strength (F_L^c) = 35,000 psi
 $I_x = 263$ in⁴/ft $S_x = 67.4$ in³/ft Characteristic in-plane shear strength (F_{LT}^v) = 9,000 psi
 $A_w = 8.0$ in²/ft Weight = 23 psf

Allowable Concentrated Load Tables (lb/ft width of panel)							Allowable Uniform Load Tables (lb/ft ²)						
L/D Ratios			Deflection (in)		Max. Service Load	Span (in)	L/D Ratios			Deflection (in)		Max. Service Load	
Span (in)	180	240	360	0.25			0.375	Span (in)	180	240	360		0.25
12	****	****	42392	****	****	48180	12	****	****	****	****	****	48180
18	****	****	39911	****	****	48180	18	****	****	****	****	****	32120
24	****	****	36888	****	****	48180	24	****	****	****	****	****	24090
30	****	****	33615	****	****	48180	30	****	****	****	****	****	19272
36	****	45488	30326	****	****	48180	36	****	****	****	****	****	16060
42	****	40774	27182	****	****	48180	42	****	****	****	****	****	13766
48	****	36418	24279	45523	****	48180	48	****	****	10898	****	****	12045
54	43314	32485	21657	36095	****	48180	54	****	****	8528	****	****	10707
60	38649	28987	19324	28987	43480	48180	60	****	****	6770	****	****	9636
66	34538	25903	17269	23549	35323	48180	66	****	8168	5445	7425	****	8760
72	30934	23200	15467	19334	29001	48180	72	****	6648	4432	5540	****	8030
78	27783	20837	13891	16029	24043	48180	78	7293	5470	3647	4208	6311	7412
84	25029	18772	12515	13409	20113	44933	84	6061	4546	3031	3247	4870	6883
90	22621	16966	11311	11311	16966	41938	90	5084	3813	2542	2542	3813	6424
96	20512	15384	10256	9615	14422	39317	96	4300	3225	2150	2016	3023	6023

Metric

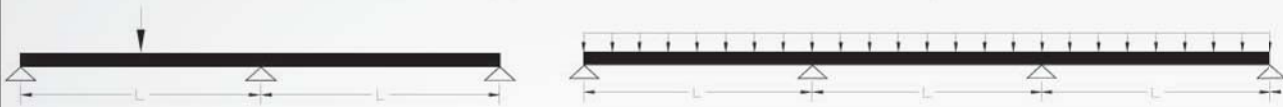
$E_b = 24.1$ Gpa $G_b = 3.4$ Gpa Characteristic longitudinal compressive strength (F_L^c) = 241 Mpa
 $I_x = 3.6E-4$ m⁴/m $S_x = 3.6E-3$ m³/m Characteristic in-plane shear strength (F_{LT}^v) = 62 Mpa
 $A_w = 1.7E-2$ m²/m Weight = 112 kg/m²

Allowable Concentrated Load Tables (kN/m width of panel)							Allowable Uniform Load Tables (kN/m ²)						
L/D Ratios			Deflection (mm)		Max. Service Load	Span (m)	L/D Ratios			Deflection (mm)		Max. Service Load	
Span (m)	180	240	360	6			10	Span (m)	180	240	360		6
0.25	****	****	628.9	****	****	703.1	0.25	****	****	****	****	****	2812.5
0.50	****	****	570.7	****	****	703.1	0.50	****	****	****	****	****	1406.3
0.75	****	****	494.4	****	****	703.1	0.75	****	****	****	****	****	937.5
1.00	****	624.6	416.4	****	****	703.1	1.00	****	****	****	****	****	703.1
1.25	692.5	519.4	346.2	598.3	****	703.1	1.25	****	****	495.9	****	****	562.5
1.50	574.2	430.7	287.1	413.4	689.0	703.1	1.50	****	****	335.9	****	****	468.8
1.75	477.8	358.3	238.9	294.8	491.4	703.1	1.75	****	353.6	235.7	290.9	****	401.8
2.00	400.2	300.2	200.1	216.1	360.2	699.5	2.00	341.1	255.8	170.6	184.2	307.0	351.6
2.25	338.0	253.5	169.0	162.2	270.4	621.8	2.25	253.5	190.1	126.8	121.7	202.8	312.5
2.50	288.0	216.0	144.0	124.4	207.4	559.6	2.50	192.8	144.6	96.4	83.3	138.8	281.3
2.75	247.5	185.6	123.8	97.2	162.0	508.8	2.75	149.7	112.3	74.8	58.8	98.0	255.7
3.00	214.5	160.9	107.2	77.2	128.7	466.4	3.00	118.3	88.7	59.1	42.6	71.0	234.4

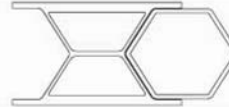
Maximum allowable load is determined by a 2.5 safety factor in flexure and a 3.0 safety factor in shear.

SUPERDECK CP045/CP046

Simple Supported Beam-Continuous Span



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8" Highway Deck
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Imperial

$E_b = 3.50 \text{ Msi}$ $G_b = 0.50 \text{ Msi}$ Characteristic longitudinal compressive strength (F_L^c) = 35,000 psi
 $I_x = 263 \text{ in}^4/\text{ft}$ $S_x = 67.4 \text{ in}^3/\text{ft}$ Characteristic in-plane shear strength (F_{LT}^v) = 9,000 psi
 $A_w = 8.0 \text{ in}^2/\text{ft}$ Weight = 23 psf

Span (in)	Allowable Concentrated Load Tables (lb/ft width of panel)						Span (in)	Allowable Uniform Load Tables (lb/ft ²)					
	L/D Ratios			Deflection (in)				L/D Ratios			Deflection (in)		
	180	240	360	0.25	0.375	Max. Service Load		180	240	360	0.25	0.375	Max. Service Load
12	****	****	****	****	****	40570	12	****	****	****	****	****	40150
18	****	****	****	****	****	40570	18	****	****	****	****	****	26767
24	****	****	38767	****	****	40570	24	****	****	****	****	****	20075
30	****	****	36107	****	****	40570	30	****	****	****	****	****	16060
36	****	****	33313	****	****	40570	36	****	****	****	****	****	13383
42	****	****	30521	****	****	40570	42	****	****	****	****	****	11471
48	****	****	27830	****	****	40570	48	****	****	****	****	****	10038
54	****	37953	25302	****	****	40570	54	****	****	****	****	****	8922
60	****	34455	22970	34455	****	40570	60	****	****	****	****	****	8030
66	****	31270	20846	28427	****	40570	66	****	****	****	****	****	7300
72	37859	28395	18930	23662	35493	40570	72	****	****	6615	****	****	6692
78	34419	25815	17210	19857	29786	40570	78	****	****	5569	****	****	6177
84	31344	23508	15672	16791	25187	40570	84	****	****	4723	5060	****	5736
90	28599	21449	14299	14299	21449	40570	90	****	****	4032	4032	****	5353
96	26151	19613	13075	12258	18387	40570	96	****	****	3465	3248	4872	5019

Metric

$E_b = 24.1 \text{ Gpa}$ $G_b = 3.4 \text{ Gpa}$ Characteristic longitudinal compressive strength (F_L^c) = 241 Mpa
 $I_x = 3.6\text{E-}4 \text{ m}^4/\text{m}$ $S_x = 3.6\text{E-}3 \text{ m}^3/\text{m}$ Characteristic in-plane shear strength (F_{LT}^v) = 62 Mpa
 $A_w = 1.7\text{E-}2 \text{ m}^2/\text{m}$ Weight = 112 kg/m²

Span (m)	Allowable Concentrated Load Tables (kN/m width of panel)						Span (m)	Allowable Uniform Load Tables (kN/m ²)					
	L/D Ratios			Deflection (mm)				L/D Ratios			Deflection (mm)		
	180	240	360	6	10	Max. Service Load		180	240	360	6	10	Max. Service Load
0.25	****	****	****	****	****	592.1	0.25	****	****	****	****	****	2343.8
0.50	****	****	591.1	****	****	592.1	0.50	****	****	****	****	****	1171.9
0.75	****	****	530.1	****	****	592.1	0.75	****	****	****	****	****	781.3
1.00	****	****	463.2	****	****	592.1	1.00	****	****	****	****	****	585.9
1.25	****	****	398.5	****	****	592.1	1.25	****	****	****	****	****	468.8
1.50	****	510.6	340.4	490.1	****	592.1	1.50	****	****	****	****	****	390.6
1.75	580.7	435.5	290.3	358.4	****	592.1	1.75	****	****	****	****	****	334.8
2.00	496.5	372.4	248.2	268.1	446.8	592.1	2.00	****	****	261.2	282.1	****	293.0
2.25	426.4	319.8	213.2	204.7	341.1	592.1	2.25	****	****	200.3	192.3	****	260.4
2.50	368.3	276.2	184.2	159.1	265.2	592.1	2.50	****	234.4	156.3	135.0	225.1	234.4
2.75	320.1	240.1	160.1	125.7	209.5	592.1	2.75	****	185.8	123.9	97.3	162.2	213.1
3.00	280.0	210.0	140.0	100.8	168.0	574.1	3.00	****	149.4	99.6	71.7	119.5	195.3

Maximum allowable load is determined by a 2.5 safety factor in flexure and a 3.0 safety factor in shear.