



EHD DECK

1-5/16" high x 4-9/16" pitch x 32" wide

SECTION PROPERTIES $f_y = 80$ ksi

GAGE	I_p (in ⁴)	I_n (in ⁴)	S_p (in ³)	S_n (in ³)
26	0.066	0.063	0.090	0.090
24	0.091	0.088	0.128	0.129
22	0.113	0.110	0.166	0.164
20	0.137	0.134	0.202	0.200

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h	3.5"			4"			4.5"			5"			5.5"			6"								
Wc	34.4			40.4			46.4			52.4			58.5			64.6								
Ac	34.1			40.1			46.1			52.1			58.1			64.1								
WWF	6 x 6 * w2.1w2.1	6 x 6 * w2.9w2.9	4 x 4 w2.9w2.9	6 x 6 * w2.1w2.1	6 x 6 * w2.9w2.9	4 x 4 w2.9w2.9	6 x 6 * w2.1w2.1	6 x 6 * w2.9w2.9	4 x 4 w2.9w2.9	6 x 6 * w2.9w2.9	4 x 4 * w2.9w2.9	4 x 4 w4.0w4.0	6 x 6 * w2.9w2.9	4 x 4 * w2.9w2.9	4 x 4 w4.0w4.0	6 x 6 * w2.9w2.9	4 x 4 * w2.9w2.9	4 x 4 w4.0w4.0						
Awwf	0.042	0.058	0.087	0.042	0.058	0.087	0.042	0.058	0.087	0.058	0.087	0.12	0.058	0.087	0.12	0.058	0.087	0.12						
Dwwf	0.162	0.192	0.192	0.162	0.192	0.192	0.162	0.192	0.192	0.192	0.192	0.225	0.192	0.192	0.225	0.192	0.192	0.225						
MAXIMUM ALLOWABLE UNIFORM LIVE LOADS, (psf)																								
L																								
3'-0"	271	362	400	346	400	400	400	400	400	400	400	400	400	400	400	400	400	400						
3'-6"	199	266	393	254	342	400	308	400	400	400	400	400	400	400	400	400	400	400						
4'-0"	153	204	301	194	261	387	236	319	400	377	400	400	400	400	400	400	400	400						
4'-6"	121	161	238	154	207	306	187	252	374	298	400	400	343	400	400	389	400	400						
5'-0"	98	130	193	124	167	248	151	204	303	241	358	400	278	400	400	315	400	400						
5'-6"	81	108	159	103	138	205	125	169	251	199	296	398	230	342	400	260	388	400						
6'-0"	68	91	134	86	116	172	105	142	211	167	249	335	193	287	388	219	326	400						
6'-6"	40	62	105	53	83	139	67	104	172	124	206	291	145	239	339	165	272	387						
7'-0"				74	99	147	89	121	179	143	212	285	164	245	330	186	277	375						
7'-6"				40	66	113	51	83	141	99	169	242	116	197	282	133	224	322						
8'-0"							77	104	155	123	183	246	142	211	285	161	239	324						
8'-6"							39	66	116	80	140	203	94	163	237	107	186	270						
										107	159	214	124	184	248	140	208	282						
										64	116	171	75	136	200	87	155	229						
													109	162	218	123	183	248						
													60	113	170	70	130	195						
																109	162	219						
																56	109	166						
MAXIMUM UNSHORED CONSTRUCTION CLEAR SPANS																								
GAGE	26	24	22	20	26	24	22	20	26	24	22	20	26	24	22	20	26	24	22	20				
1span	4'-1"	5'-3"	6'-3"	6'-10"	3'-11"	5'-0"	5'-11"	6'-6"	3'-9"	4'-9"	5'-8"	6'-3"	3'-7"	4'-7"	5'-5"	6'-0"	3'-6"	4'-5"	5'-2"	5'-9"	3'-5"	4'-3"	5'-0"	5'-7"
2span	5'-5"	7'-0"	8'-4"	9'-2"	5'-2"	6'-8"	7'-11"	8'-9"	5'-0"	6'-4"	7'-7"	8'-4"	4'-10"	6'-1"	7'-3"	8'-0"	4'-8"	5'-11"	7'-0"	7'-8"	4'-6"	5'-8"	6'-9"	7'-5"
3span	5'-6"	7'-1"	8'-0"	8'-6"	5'-3"	6'-9"	7'-7"	8'-1"	5'-1"	6'-5"	7'-3"	7'-9"	4'-10"	6'-2"	7'-0"	7'-5"	4'-9"	6'-0"	6'-9"	7'-2"	4'-7"	5'-9"	6'-6"	6'-11"
cantilever	1'-6"	2'-0"	2'-6"	2'-11"	1'-5"	2'-0"	2'-5"	2'-10"	1'-5"	1'-11"	2'-4"	2'-9"	1'-5"	1'-11"	2'-3"	2'-8"	1'-4"	1'-10"	2'-3"	2'-7"	1'-4"	1'-10"	2'-2"	2'-6"
cy/100sf	0.88			1.03			1.19			1.34			1.49			1.65								

3'-0"	271	← maximum allowable live load (psf) with galvanized deck
243	← maximum allowable live load (psf) with uncoated deck	
	clear span	

- I_p** Moment of inertia of deck for positive bending
- I_n** Moment of inertia of deck for negative bending
- S_p** Section modulus of deck for positive bending
- S_n** Section modulus of deck for negative bending

- h** Total height of concrete slab
- Wc** Weight of concrete (neglecting deflection)
- Ac** Gross area of concrete available to resist shear
- WWF** Spacing and size of Weld Wire Fabric
- *** Does not meet ACI requirements (.0018Ac min.)
- Awwf** Nominal area of Weld Wire Fabric
- Dwwf** Nominal diameter of Weld Wire Fabric
- L** Span length; clear distance of deck between supports
- f_c** 3000 psi

The section property table is based on AISI's Cold Formed Steel Design Manual, 1996 Edition. Venting is available up to 1-1/2% if specified. The live loads and unshored clear spans are based on SDI's Composite Deck Design Handbook, March 1997, the Design Manual for Composite Decks, Form Decks, Roof Decks and Cellular Deck Floor Systems with Electrical Distribution, Pub No. 29, and ACI 318-95

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