CORRUGATED METALS, INC. Est. 1887
6550 Revlon Drive
Belvidere, IL 61008

Phone (815) 323-1310
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B-Deck Load Tables

Table 1 – Section Properties and Flexural Resistance

							ASD (Ω = 1.67)		LRFD (Φ = 0.90)	
Profile	Gage Number	Design Thickness (inches)	I_p (inch^4)	I_n (inch^4)	S_p (inch^3)	S_n (inch^3)	M_p/Ω inch-lbs	M_n/Ω inch-lbs	ΦM_p inch-lbs	ΦM_n inch-lbs
WR	22	0.0295	0.1333	0.1667	0.1712	0.1779	4100	4262	6162	6406
WR	20	0.0358	0.1733	0.2100	0.2279	0.2296	5459	5499	8206	8266
WR	18	0.0474	0.2567	0.2833	0.3093	0.3153	7409	7553	11136	11352
WR	16	0.0598	0.3467	0.3700	0.4083	0.4133	9780	9900	14700	14880

Table 1 Notes:

1. Strength and section properties are calculated assuming F_y = 40 ksi and F_u = 50 ksi.
2. All section properties and ASD and LRFD flexural strengths are calculated in accordance with ANSI/SDI RD-2017, Section 2.4.A.1.
3. p = Property in positive bending; n = Property in negative bending.
4. All properties are per foot of panel width.

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Table 2 – WR Deck

Table 2.1 1.5 WR ASD Uniform Downward Loads (psf)

Span Cond.	Gage Number	5'-00"	5'-06"	6'-00"	6'-06"	7'-00"	7'-06"	8'-00"	8'-06"	9'-00"	9'-06"	10'-00"
Single	22	109	90	76	65	56	49	43	38	34	30	27
	20	146	120	101	86	74	65	57	50	45	40	36
	18	198	163	137	117	101	88	77	68	61	55	49
	16	261	216	181	154	133	116	102	90	80	72	65
Double	22	114	94	79	67	58	51	44	39	35	31	28
	20	147	121	102	87	75	65	57	51	45	41	37
	18	201	166	140	119	103	90	79	70	62	56	50
	16	264	218	183	156	135	117	103	91	81	73	66
Triple	22	142	117	99	84	72	63	55	49	44	39	36
	20	183	151	127	108	94	81	72	63	57	51	46
	18	252	208	175	149	128	112	98	87	78	70	63
	16	330	273	229	195	168	147	129	114	102	91	83

Table 2 – WR Deck

Table 2.7 1.5 WR Uniform Service Load that Causes L/240 Deflection (psf)

Span Cond.	Gage Number	5'-00"	5'-06"	6'-00"	6'-06"	7'-00"	7'-06"	8'-00"	8'-06"	9'-00"	9'-06"	10'-00"
Single	22	70	53	41	32	26	21	17	14	12	10	9
	20	91	68	53	41	33	27	22	19	16	13	11
	18	135	101	78	61	49	40	33	27	23	20	17
	16	182	137	105	83	66	54	44	37	31	27	23
Double	22	169	127	98	77	61	50	41	34	29	25	21
	20	219	165	127	100	80	65	54	45	38	32	27
	18	325	244	188	148	118	96	79	66	56	47	41
	16	438	329	254	200	160	130	107	89	75	64	55

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Triple	22	132	99	76	60	48	39	32	27	23	19	16
	20	172	129	99	78	63	51	42	35	29	25	21
	18	254	191	147	116	93	75	62	52	44	37	32
	16	343	258	199	156	125	102	84	70	59	50	43

Table 2.8 1.5 WR Construction Spans
(ANSI/SDI RD-2017 Section 2.4.A.3 and 2.4.A.4)

Span Cond.	Gage Number	ASD Span	LRFD Span
Single	22	6’-10”	7’-04”
	20	9’-01”	9’-09”
	18	12’-04”	13’-03”
	16	16’-04”	17’-06”
Double or Triple	22	8’-05”	9’-00”
	20	11’-02”	12’-00”
	18	15’-02”	16’-04"
	16	20’-01”	21’-06”

Table 2 Notes: Minimum exterior bearing length is 1.50 inches. Minimum interior bearing length is 3.00 inches.

Approved by Ken Carlton 11/5/19