ROOF DECK DESIGN MANUAL

FIRST EDITION

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Errata #1
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Make the following changes to Tables 5.1 and 5.2 for NR 20 deck

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
NR	20	0.0358	0.1274	0.1382	0.1112	0.1184	2197	2340	3302	3516

Table 2 – NR Deck

Table 2.1 1.5 NR ASD Uniform Downward Loads (psf)

Span Cond.	Gage Number	4'-00"	4'-06"	5'-00"	5'-06"	6'-00"	6'-06"	7'-00"	7'-06"	8'-00"	8'-06"	9'-00"
Single	20	92	72	59	48	41	35	30	26	23	20	18

Table 2.2 1.5 NR ASD Uniform Upward Loads (psf)

Span Cond.	Gage Number	4'-00"	4'-06"	5'-00"	5'-06"	6'-00"	6'-06"	7'-00"	7'-06"	8'-00"	8'-06"	9'-00"
Double	20	92	72	59	48	41	35	30	26	23	20	18
Triple	20	114	90	73	61	51	43	37	33	29	25	23

Table 2.3 1.5 NR LRFD Uniform Downward Loads (psf)

Span Cond.	Gage Number	4'-00"	4'-06"	5'-00"	5'-06"	6'-00"	6'-06"	7'-00"	7'-06"	8'-00"	8'-06"	9'-00"
Single	20	138	109	88	73	61	52	45	39	34	30	27

Table 2.4 1.5 NR LRFD Uniform Upward Loads (psf)

Span Cond.	Gage Number	4'-00"	4'-06"	5'-00"	5'-06"	6'-00"	6'-06"	7'-00"	7'-06"	8'-00"	8'-06"	9'-00"
Double	20	138	109	88	73	61	52	45	39	34	30	27
Triple	20	172	136	110	91	76	65	56	49	43	38	34

Table 2.5 1.5 NR Uniform Service Load that Causes L/120 Deflection (psf)

Span Cond.	Gage Number	4'-00"	4'-06"	5'-00"	5'-06"	6'-00"	6'-06"	7'-00"	7'-06"	8'-00"	8'-06"	9'-00"
Single	20	261	184	134	101	77	61	49	40	33	27	23
Double	20	629	442	322	242	186	147	117	95	79	66	55
Triple	20	493	346	252	189	146	115	92	75	62	51	43

Table 2.6 1.5 NR Uniform Service Load that Causes L/180 Deflection (psf)

Span Cond.	Gage Number	4'-00"	4'-06"	5'-00"	5'-06"	6'-00"	6'-06"	7'-00"	7'-06"	8'-00"	8'-06"	9'-00"
Single	20	174	122	89	67	52	41	33	26	22	18	15
Double	20	420	295	215	161	124	98	78	64	52	44	37
Triple	20	328	231	168	126	97	77	61	50	41	34	29

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

Span Cond.	Gage Number	4'-00"	4'-06"	5'-00"	5'-06"	6'-00"	6'-06"	7'-00"	7'-06"	8'-00"	8'-06"	9'-00"
Single	20	131	92	67	50	39	30	24	20	16	14	11
Double	20	315	221	161	121	93	73	59	48	39	33	28
Triple	20	246	173	126	95	73	57	46	37	31	26	22

Table 2.8 1.5 NR Construction Spans

Span Cond.	Gage Number	ASD Span	LRFD Span
Single	20	3'-8"	3'-11"
Double or Triple	20	4'-6"	4'-10"