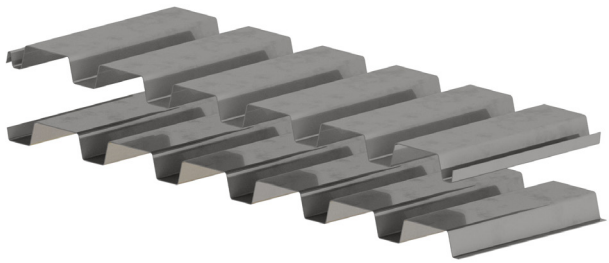
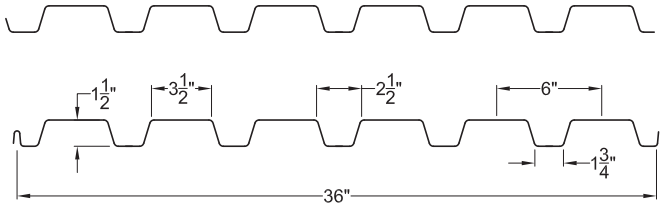
1.5B / 1.5BI / 1.5PLB ROOF DECK

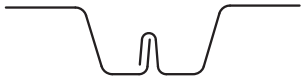
LSD Imperial

- 1½" Deep Roof Deck
- G90 Galvanized or A25 Galvannealed
- 1.5B Nested Deck used with Sidelap Screws
- 1.5BI Interlocking Deck used with TSWs or BPs
- 1.5PLB Interlocking Deck used with PunchLok II System



Approximate Dimensions





Interlocking Sidelap
1.5BI or 1.5PLB

Nested Sidelap
1.5B

Section Properties

Deck Gage	Base Metal Thickness	Deck Weight	Gross Section Properties			Effective Moment of Inertia for Deflection				Effective Section Modulus at F_y		Web Shear Strength
						Moment of Inertia		Uniform Load Only $I_d = (2I_e+I_g)/3$				
	t		A_g	y_b	I_g	I_e+	I_e-	I_d+	I_d-	S_e+	S_e-	$\phi_v V_n$
	(in.)	(psf)	(in²/ft)	(in.)	(in⁴/ft)	(in⁴/ft)	(in⁴/ft)	(in⁴/ft)	(in⁴/ft)	(in³/ft)	(in³/ft)	(plf)
22	0.0299	1.64	0.483	0.892	0.178	0.140	0.173	0.153	0.175	0.167	0.178	3361
20	0.0358	1.99	0.586	0.895	0.216	0.183	0.216	0.194	0.216	0.219	0.228	4059
18	0.0474	2.64	0.777	0.901	0.286	0.266	0.286	0.273	0.286	0.299	0.316	5325
16	0.0598	3.34	0.981	0.907	0.362	0.359	0.362	0.360	0.362	0.386	0.396	6650

Factored Reactions Due to Web Crippling, $\phi_w R_n$, (plf)

Deck Gage	Load Case	One Flange Loading Bearing Length (in.)						Two Flange Loading Bearing Length (in.)					
		1.5	2	2.5	3	3.5	≥4	1.5	2	2.5	3	3.5	≥4
22	End	1113	1223	1320	1408	1489	1525	1078	1161	1235	1301	1362	1389
	Interior	1604	1740	1859	1968	2067	2112	1953	2135	2294	2439	2571	2630
20	End	1588	1740	1874	1995	2106	2151	1629	1749	1855	1950	2038	2073
	Interior	2321	2509	2675	2824	2962	3018	2857	3112	3336	3539	3726	3801
18	End	2659	2899	3111	3303	3479	3536	2935	3135	3311	3470	3617	3664
	Interior	3958	4257	4521	4759	4979	5050	4933	5346	5710	6039	6342	6440
16	End	4074	4425	4733	5012	5269	5331	4744	5046	5313	5554	5775	5828
	Interior	6152	6590	6976	7324	7645	7722	7728	8341	8881	9369	9818	9926

Standard Features

- ASTM A653/A653M SS GR 50 minimum steel with Fy = 50 ksi.
- Standard lengths: 6'-0" to 42'-0"
- ULC Listing
- Tables conform to CAN/CSA S136-12 and meet the guidelines of CSSBI 10M-2013 unless noted otherwise.

Optional Features

- Inquire regarding cost and lead times for:
  - Short cuts < 6'-0
  - Alternative metallic and painted finishes
- PunchLok II System for sidelap connection
- Web Perforated Acoustical versions
- FM Recognition

NUCOR VULCRAFT CANADA, INC.
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1.5B / 1.5BI / 1.5PLB ROOF DECK

LSD
Imperial

Factored and Service Uniform Gravity Loads (psf)

Span	Deck Gage	Criteria	Span													
			4'-0"	4'-6"	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	12'-0"
Single	22	ϕw_n	314	248	200	166	139	118	102	89	78	69	62	55	50	34
		L/240	156	110	80	60	46	36	29	24	20	16	14	12	10	6
	20	ϕw_n	410	323	262	216	182	155	133	116	102	90	80	72	65	45
		L/240	198	139	102	76	59	46	37	30	25	21	17	15	13	7
	18	ϕw_n	561	443	359	296	249	212	183	159	140	124	110	99	89	62
		L/240	280	196	143	108	83	65	52	42	35	29	25	21	18	10
	16	ϕw_n	724	572	463	383	321	274	236	206	181	160	143	128	115	80
		L/240	369	259	189	142	109	86	69	56	46	38	32	28	24	14
Double	22	ϕw_n	323	257	209	173	146	124	107	94	82	73	65	58	53	36
		L/240	323	257	209	166	128	101	81	65	54	45	38	32	28	16
	20	ϕw_n	412	328	267	221	186	159	137	120	105	93	83	75	67	47
		L/240	412	328	267	205	158	124	99	81	67	55	47	40	34	20
	18	ϕw_n	570	454	369	306	258	220	190	166	146	129	116	104	94	65
		L/240	570	454	362	272	209	165	132	107	88	74	62	53	45	26
	16	ϕw_n	715	569	464	385	324	277	239	209	183	163	145	130	118	82
		L/240	715	569	457	344	265	208	167	136	112	93	78	67	57	33
Triple	22	ϕw_n	399	318	259	215	181	155	134	117	103	91	81	73	66	46
		L/240	338	237	173	130	100	79	63	51	42	35	30	25	22	13
	20	ϕw_n	508	405	331	275	232	198	171	149	131	116	104	93	84	58
		L/240	417	293	214	160	124	97	78	63	52	43	37	31	27	15
	18	ϕw_n	701	560	457	380	320	274	237	207	182	161	144	129	117	81
		L/240	554	389	283	213	164	129	103	84	69	58	49	41	35	21
	16	ϕw_n	880	703	574	477	402	344	297	260	229	203	181	163	147	102
		L/240	700	492	358	269	207	163	131	106	87	73	61	52	45	26

Notes: 1) Loads due to L/240 deflection determined using I_d (+/-) based on governing (+/-) moment for span condition.
2) Table does not account for web crippling. Reactions must be checked based on actual span conditions.
3) For loads based on alternate deflection limits, multiply loads shown for L/240 as follows:
L/180 = L/240 x 1.33
L/300 = L/240 x 0.80
L/360 = L/240 x 0.667

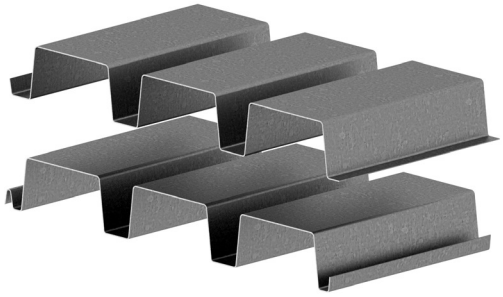
Factored Diaphragm Shear Including Wind Uplift

See Vulcraft Roof Diaphragm Design Tool for diaphragm shear due to seismic or wind, including wind uplift interaction:
www.vulcraft.ca

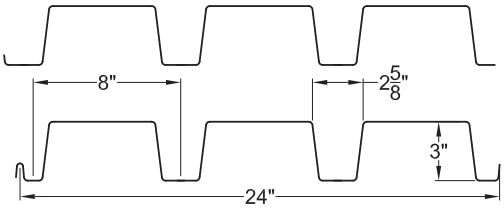
3N / 3NI / 3PLN ROOF DECK

LSD Imperial

- 3" Deep Roof Deck
- G90 Galvanized or A25 Galvannealed
- 3N Nested Deck used with Sidelap Screws
- 3NI Interlocking Deck used with TSWs or BPs
- 3PLN Interlocking Deck used with PunchLok II System



Approximate Dimensions



Interlocking Sidelap
3NI or 3PLN

Nested Sidelap
3N

Section Properties

Deck Gage	Base Metal Thickness	Deck Weight	Gross Section Properties			Effective Moment of Inertia for Deflection				Effective Section Modulus at F_y		Web Shear Strength
						Moment of Inertia		Uniform Load Only $I_d = (2I_e+I_g)/3$				
	t		A_g	y_b	I_g	I_e+	I_e-	I_d+	I_d-	S_e+	S_e-	$\phi_v V_n$
	(in.)	(psf)	(in^2/ft)	(in.)	(in^4/ft)	(in^4/ft)	(in^4/ft)	(in^4/ft)	(in^4/ft)	(in^3/ft)	(in^3/ft)	(plf)
22	0.0299	2.03	0.598	1.888	0.882	0.605	0.849	0.698	0.860	0.346	0.390	3185
20	0.0358	2.47	0.726	1.891	1.071	0.777	1.067	0.875	1.068	0.452	0.522	5136
18	0.0474	3.27	0.962	1.897	1.420	1.136	1.420	1.231	1.420	0.662	0.731	9008
16	0.0598	4.13	1.215	1.903	1.795	1.556	1.795	1.636	1.795	0.863	0.942	11527

Factored Reactions Due to Web Crippling, $\phi_w R_n$, (plf)

Deck Gage	Load Case	One Flange Loading Bearing Length (in.)						Two Flange Loading Bearing Length (in.)					
		2	3	4	5	6	≥8	2	3	4	5	6	≥8
22	End	865	996	1106	1203	1291	1307	753	843	919	987	1047	1059
	Interior	1339	1515	1663	1793	1911	1933	1545	1765	1950	2114	2262	2289
20	End	1243	1425	1578	1713	1836	2003	1160	1293	1406	1505	1594	1717
	Interior	1932	2175	2380	2560	2724	2947	2268	2580	2842	3074	3283	3569
18	End	2095	2387	2632	2849	3044	3392	2135	2363	2556	2726	2879	3152
	Interior	3278	3665	3991	4278	4538	4999	3929	4439	4868	5247	5589	6196
16	End	3221	3649	4010	4328	4616	5126	3495	3846	4142	4403	4639	5058
	Interior	5072	5637	6113	6533	6913	7586	6162	6921	7562	8126	8636	9541

Standard Features

- ASTM A653/A653M SS GR 50 minimum steel with Fy = 50 ksi.
- Standard lengths: 6'-0" to 42'-0"
- ULC Listing
- Tables conform to CAN/CSA S136-12 and meet the guidelines of CSSBI 10M-2013 unless noted otherwise.

Optional Features

- Inquire regarding cost and lead times for:
  - Short cuts < 6'-0
  - Alternative metallic and painted finishes
- PunchLok II System for sidelap connection
- Web Perforated Acoustical versions
- FM Recognition

NUCOR VULCRAFT CANADA, INC.
Better Partners. Better Products. Better Outcomes.

3N / 3NI / 3PLN ROOF DECK

LSD Imperial

Factored and Service Uniform Gravity Loads (psf)

Span	Deck Gage	Criteria	Span													
			8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	15'-0"
Single	22	ϕw_n	162	143	128	115	103	94	85	78	72	66	61	57	53	46
		L/240	89	74	63	53	46	40	34	30	26	23	21	19	17	14
	20	ϕw_n	212	187	167	150	135	123	112	102	94	86	80	74	69	60
		L/240	112	93	79	67	57	50	43	38	33	29	26	23	21	17
	18	ϕw_n	310	275	245	220	198	180	164	150	137	127	117	109	101	88
		L/240	158	131	111	94	81	70	61	53	47	41	37	33	29	24
	16	ϕw_n	404	358	319	286	258	234	213	195	179	165	153	142	132	115
		L/240	209	175	147	125	107	93	81	71	62	55	49	44	39	32
Double	22	ϕw_n	175	156	140	126	114	103	94	86	79	73	68	63	58	51
		L/240	175	156	140	126	114	103	94	86	79	70	62	55	49	40
	20	ϕw_n	238	211	189	170	153	139	127	116	107	99	91	85	79	69
		L/240	238	211	189	170	153	139	127	111	98	86	77	69	61	50
	18	ϕw_n	336	298	266	239	216	196	179	164	151	139	128	119	111	96
		L/240	336	298	266	239	216	194	169	147	130	115	102	91	82	66
	16	ϕw_n	433	384	343	309	279	253	231	211	194	179	166	154	143	124
		L/240	433	384	343	309	279	245	213	186	164	145	129	115	103	84
Triple	22	ϕw_n	216	192	172	155	141	128	117	107	99	91	84	78	73	63
		L/240	208	173	146	124	106	92	80	70	62	54	48	43	39	32
	20	ϕw_n	294	261	234	210	190	173	158	145	133	123	114	105	98	86
		L/240	258	215	181	154	132	114	99	87	76	68	60	54	48	39
	18	ϕw_n	417	370	331	298	269	244	223	204	188	173	160	149	138	120
		L/240	343	286	241	205	176	152	132	116	102	90	80	71	64	52
	16	ϕw_n	537	477	427	384	347	315	287	263	242	223	206	192	178	155
		L/240	434	362	305	259	222	192	167	146	129	114	101	90	81	66

Notes: 1) Loads due to L/240 deflection determined using I_d (+/-) based on governing (+/-) moment for span condition.
2) Table does not account for web crippling. Reactions must be checked based on actual span conditions.
3) For loads based on alternate deflection limits, multiply loads shown for L/240 as follows:
L/180 = L/240 x 1.33
L/300 = L/240 x 0.80
L/360 = L/240 x 0.667

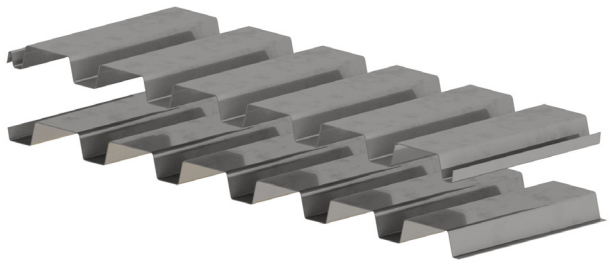
Factored Diaphragm Shear Including Wind Uplift

See Vulcraft Roof Diaphragm Design Tool for diaphragm shear due to seismic or wind, including wind uplift interaction:
www.vulcraft.ca

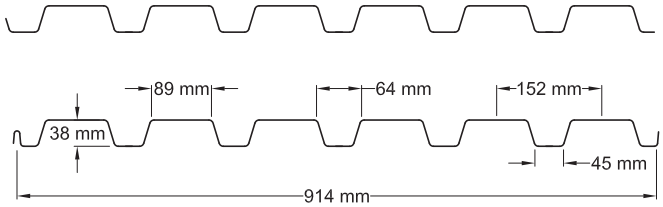
1.5B / 1.5BI / 1.5PLB ROOF DECK

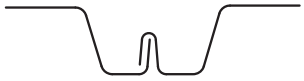
LSD Metric

- 38 mm Deep Roof Deck
- ZF275 Galvanized or ZF075 Galvannealed
- 1.5B Nested Deck used with Sidelap Screws
- 1.5BI Interlocking Deck used with TSWs or BPs
- 1.5PLB Interlocking Deck used with PunchLok II System



Approximate Dimensions





Interlocking Sidelap
1.5BI or 1.5PLB

Nested Sidelap
1.5B

Section Properties

Deck Gage	Base Metal Thickness	Deck Weight	Gross Section Properties			Effective Moment of Inertia for Deflection				Effective Section Modulus at F_y		Web Shear Strength
						Moment of Inertia		Uniform Load Only $I_d = (2I_e+I_g)/3$				
	t		A_g	y_b	I_g	I_e+	I_e-	I_d+	I_d-	S_e+	S_e-	$\phi_v V_n$
	(mm)	(kg/m²)	(mm²/m)	(mm)	(10^6mm⁴/m)	(10^6mm⁴/m)	(10^6mm⁴/m)	(10^6mm⁴/m)	(10^6mm⁴/m)	(10^3mm³/m)	(10^3mm³/m)	(kN/m)
22	0.76	8.01	1022	22.7	0.243	0.191	0.237	0.208	0.239	9.00	9.57	49.1
20	0.91	9.73	1241	22.7	0.295	0.249	0.295	0.264	0.295	11.8	12.2	59.2
18	1.20	12.90	1645	22.9	0.391	0.364	0.391	0.373	0.391	16.1	17.0	77.7
16	1.52	16.29	2077	23.0	0.494	0.491	0.494	0.492	0.494	20.8	21.3	97.1

Factored Reactions Due to Web Crippling, $\phi_w R_n$, (kN/m)

Deck Gage	Load Case	One Flange Loading Bearing Length (mm)						Two Flange Loading Bearing Length (mm)					
		40	50	65	75	90	≥100	40	50	65	75	90	≥100
22	End	16.5	17.8	19.4	20.4	21.8	22.2	15.9	16.9	18.1	18.9	19.9	20.3
	Interior	23.7	25.3	27.3	28.6	30.3	30.8	28.9	31.0	33.7	35.4	37.7	38.4
20	End	23.5	25.3	27.6	29.0	30.9	31.4	24.1	25.4	27.2	28.3	29.8	30.3
	Interior	34.3	36.5	39.3	41.0	43.4	44.0	42.3	45.2	49.1	51.4	54.6	55.5
18	End	39.4	42.1	45.7	47.9	51.0	51.6	43.3	45.6	48.6	50.4	53.0	53.5
	Interior	58.5	61.9	66.4	69.1	72.9	73.7	72.9	77.7	83.9	87.7	92.9	94.0
16	End	60.3	64.3	69.6	72.8	77.2	77.8	69.9	73.4	78.0	80.7	84.6	85.1
	Interior	90.8	95.8	102.4	106.4	112.0	112.7	114.2	121.2	130.5	136.1	143.8	144.9

Standard Features

- ASTM A653/A653M SS GR 50 minimum steel with Fy = 345 MPa (50 ksi).
- Standard lengths: 1.83 m to 12.8 m
- ULC Listing
- Tables conform to CAN/CSA S136-12 and meet the guidelines of CSSBI 10M-2013 unless noted otherwise.

Optional Features

- Inquire regarding cost and lead times for:
  - Short cuts < 1.83 m
  - Alternative metallic and painted finishes
- PunchLok II System for sidelap connection
- Web Perforated Acoustical versions
- FM Recognition

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1.5B / 1.5BI / 1.5PLB ROOF DECK

LSD Metric

Factored and Service Uniform Gravity Loads (kPa)

Span	Deck Gage	Criteria	Span (mm)													
			1200	1350	1500	1650	1800	1950	2100	2250	2400	2550	2700	2850	3000	3600
Single	22	ϕw_n	15.51	12.26	9.91	8.19	6.89	5.84	5.03	4.40	3.88	3.40	3.06	2.73	2.44	1.72
		L/240	7.84	5.51	4.02	3.02	2.32	1.83	1.46	1.19	0.98	0.82	0.69	0.59	0.50	0.29
	20	ϕw_n	20.25	15.99	12.93	10.68	9.00	7.66	6.61	5.75	5.03	4.45	3.97	3.59	3.21	2.25
		L/240	9.96	6.99	5.10	3.83	2.95	2.32	1.86	1.51	1.24	1.04	0.87	0.74	0.64	0.37
	18	ϕw_n	27.72	21.88	17.72	14.65	12.31	10.49	9.05	7.85	6.89	6.13	5.46	4.88	4.40	3.06
		L/240	14.05	9.86	7.19	5.40	4.16	3.27	2.62	2.13	1.76	1.46	1.23	1.05	0.90	0.52
	16	ϕw_n	35.77	28.25	22.89	18.91	15.90	13.55	11.68	10.15	8.91	7.90	7.04	6.32	5.70	3.97
		L/240	18.53	13.01	9.49	7.13	5.49	4.32	3.46	2.81	2.32	1.93	1.63	1.38	1.19	0.69
Double	22	ϕw_n	15.94	12.69	10.34	8.57	7.18	6.13	5.31	4.64	4.07	3.59	3.21	2.87	2.59	1.82
		L/240	15.94	12.69	10.34	8.33	6.42	5.05	4.04	3.29	2.71	2.26	1.90	1.62	1.39	0.80
	20	ϕw_n	20.35	16.18	13.17	10.92	9.19	7.85	6.80	5.94	5.22	4.60	4.12	3.69	3.35	2.30
		L/240	20.35	16.18	13.17	10.29	7.92	6.23	4.99	4.06	3.34	2.79	2.35	2.00	1.71	0.99
	18	ϕw_n	28.11	22.41	18.24	15.13	12.74	10.87	9.38	8.19	7.23	6.42	5.70	5.12	4.64	3.21
		L/240	28.11	22.41	18.17	13.65	10.51	8.27	6.62	5.38	4.44	3.70	3.12	2.65	2.27	1.31
	16	ϕw_n	35.29	28.11	22.89	19.01	15.99	13.69	11.83	10.29	9.05	8.04	7.18	6.46	5.79	4.02
		L/240	35.29	28.11	22.89	17.26	13.29	10.46	8.37	6.81	5.61	4.68	3.94	3.35	2.87	1.66
Triple	22	ϕw_n	19.73	15.70	12.78	10.63	8.95	7.66	6.61	5.75	5.08	4.50	4.02	3.59	3.26	2.25
		L/240	16.97	11.92	8.69	6.53	5.03	3.96	3.17	2.57	2.12	1.77	1.49	1.27	1.09	0.63
	20	ϕw_n	25.09	20.01	16.33	13.55	11.44	9.77	8.43	7.37	6.46	5.75	5.12	4.60	4.17	2.87
		L/240	20.95	14.71	10.73	8.06	6.21	4.88	3.91	3.18	2.62	2.18	1.84	1.56	1.34	0.78
	18	ϕw_n	34.62	27.63	22.55	18.77	15.85	13.55	11.68	10.20	9.00	8.00	7.13	6.42	5.79	4.02
		L/240	27.80	19.52	14.23	10.69	8.24	6.48	5.19	4.22	3.47	2.90	2.44	2.07	1.78	1.03
	16	ϕw_n	43.43	34.71	28.34	23.56	19.87	17.00	14.70	12.83	11.30	10.01	8.95	8.04	7.28	5.03
		L/240	35.15	24.68	18.00	13.52	10.41	8.19	6.56	5.33	4.39	3.66	3.09	2.62	2.25	1.30

Notes: 1) Loads due to L/240 deflection determined using I_d (+/-) based on governing (+/-) moment for span condition.
2) Table does not account for web crippling. Reactions must be checked based on actual span conditions.
3) For loads based on alternate deflection limits, multiply loads shown for L/240 as follows:
L/180 = L/240 x 1.33
L/300 = L/240 x 0.80
L/360 = L/240 x 0.667

Factored Diaphragm Shear Including Wind Uplift

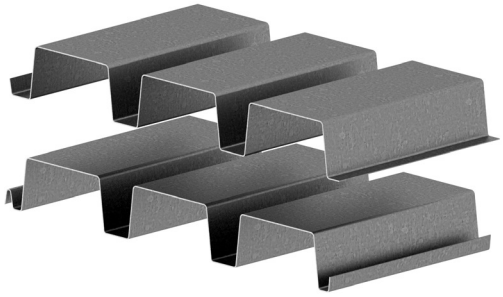
See Vulcraft Roof Diaphragm Design Tool for diaphragm shear due to seismic or wind, including wind uplift interaction:

www.vulcraft.ca

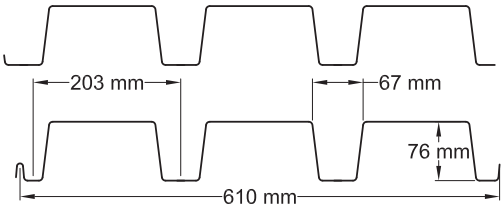
3N / 3NI / 3PLN ROOF DECK

LSD Metric

- 76 mm Deep Roof Deck
- ZF275 Galvanized or ZF075 Galvannealed
- 3N Nested Deck used with Sidelap Screws
- 3NI Interlocking Deck used with TSWs or BPs
- 3PLN Interlocking Deck used with PunchLok II System



Approximate Dimensions



Interlocking Sidelap
3NI or 3PLN

Nested Sidelap
3N

Section Properties

Deck Gage	Base Metal Thickness	Deck Weight	Gross Section Properties			Effective Moment of Inertia for Deflection				Effective Section Modulus at F_y		Web Shear Strength
						Moment of Inertia		Uniform Load Only $I_d = (2I_e+I_g)/3$				
	t		A_g	y_b	I_g	I_e+	I_e-	I_d+	I_d-	S_e+	S_e-	$\phi_v V_n$
	(mm)	(kg/m²)	(mm²/m)	(mm)	(10^6mm⁴/m)	(10^6mm⁴/m)	(10^6mm⁴/m)	(10^6mm⁴/m)	(10^6mm⁴/m)	(10^3mm³/m)	(10^3mm³/m)	(kN/m)
22	0.76	9.92	1265	48.0	1.205	0.827	1.159	0.953	1.174	18.62	20.99	46.5
20	0.91	12.05	1536	48.0	1.463	1.061	1.457	1.195	1.459	24.3	28.1	75.0
18	1.20	15.97	2036	48.2	1.940	1.551	1.940	1.681	1.940	35.6	39.3	131.5
16	1.52	20.16	2571	48.3	2.452	2.125	2.452	2.234	2.452	46.4	50.6	168.2

Factored Reactions Due to Web Crippling, $\phi_w R_n$, (kN/m)

Deck Gage	Load Case	One Flange Loading Bearing Length (mm)						Two Flange Loading Bearing Length (mm)					
		50	75	100	125	150	≥200	50	75	100	125	150	≥200
22	End	12.6	14.4	16.0	17.4	18.7	19.1	10.9	12.2	13.4	14.3	15.2	15.5
	Interior	19.5	22.0	24.1	26.0	27.7	28.2	22.4	25.6	28.3	30.7	32.8	33.4
20	End	18.0	20.7	22.9	24.9	26.6	29.2	16.9	18.8	20.4	21.9	23.1	25.1
	Interior	28.1	31.6	34.6	37.2	39.5	43.0	32.9	37.5	41.3	44.6	47.6	52.1
18	End	30.4	34.6	38.2	41.3	44.2	49.2	31.0	34.3	37.1	39.6	41.8	45.8
	Interior	47.6	53.2	58.0	62.1	65.9	72.6	57.1	64.5	70.7	76.2	81.1	89.9
16	End	46.8	53.0	58.2	62.8	67.0	74.4	50.8	55.9	60.2	64.0	67.4	73.5
	Interior	73.7	81.9	88.8	94.9	100.4	110.1	89.5	100.5	109.8	118.0	125.4	138.5

Standard Features

- ASTM A653/A653M SS GR 50 minimum steel with Fy = 345 MPa (50 ksi).
- Standard lengths: 1.83 m to 12.8 m
- ULC Listing
- Tables conform to CAN/CSA S136-12 and meet the guidelines of CSSBI 10M-2013 unless noted otherwise.

Optional Features

- Inquire regarding cost and lead times for:
  - Short cuts < 1.83 m
  - Alternative metallic and painted finishes
- PunchLok II System for sidelap connection
- Web Perforated Acoustical versions
- FM Recognition

NUCOR VULCRAFT CANADA, INC.
Better Partners. Better Products. Better Outcomes.

3N / 3NI / 3PLN ROOF DECK

LSD Metric

Factored and Service Uniform Gravity Loads (kPa)

Span	Deck Gage	Criteria	Span (mm)													
			2400	2550	2700	2850	3000	3150	3300	3450	3600	3750	3900	4050	4200	4500
Single	22	ϕw_n	8.00	7.09	6.32	5.65	5.12	4.64	4.21	3.88	3.54	3.26	3.02	2.78	2.59	2.25
		L/240	4.49	3.74	3.15	2.68	2.30	1.98	1.73	1.51	1.33	1.18	1.05	0.93	0.84	0.68
	20	ϕw_n	10.44	9.24	8.24	7.42	6.70	6.08	5.51	5.03	4.64	4.26	3.93	3.64	3.40	2.97
		L/240	5.63	4.69	3.95	3.36	2.88	2.49	2.16	1.89	1.67	1.48	1.31	1.17	1.05	0.85
	18	ϕw_n	15.32	13.55	12.11	10.87	9.82	8.91	8.09	7.42	6.80	6.27	5.79	5.36	4.98	4.36
		L/240	7.91	6.60	5.56	4.73	4.05	3.50	3.04	2.66	2.34	2.07	1.84	1.65	1.48	1.20
	16	ϕw_n	19.97	17.67	15.75	14.17	12.78	11.59	10.53	9.67	8.86	8.19	7.57	6.99	6.51	5.65
		L/240	10.52	8.77	7.39	6.28	5.39	4.65	4.05	3.54	3.12	2.76	2.45	2.19	1.96	1.60
Double	22	ϕw_n	8.67	7.71	6.89	6.22	5.60	5.12	4.64	4.26	3.93	3.64	3.35	3.11	2.87	2.54
		L/240	8.67	7.71	6.89	6.22	5.60	5.12	4.64	4.26	3.93	3.49	3.10	2.77	2.48	2.02
	20	ϕw_n	11.73	10.44	9.34	8.38	7.57	6.89	6.27	5.75	5.27	4.88	4.50	4.17	3.88	3.40
		L/240	11.73	10.44	9.34	8.38	7.57	6.89	6.27	5.57	4.90	4.34	3.86	3.44	3.09	2.51
	18	ϕw_n	16.61	14.75	13.17	11.83	10.68	9.72	8.86	8.09	7.42	6.85	6.37	5.89	5.46	4.79
		L/240	16.61	14.75	13.17	11.83	10.68	9.72	8.46	7.41	6.52	5.77	5.13	4.58	4.10	3.34
	16	ϕw_n	21.40	19.01	16.95	15.23	13.79	12.50	11.40	10.44	9.58	8.86	8.19	7.57	7.04	6.13
		L/240	21.40	19.01	16.95	15.23	13.79	12.30	10.70	9.36	8.24	7.29	6.48	5.79	5.19	4.22
Triple	22	ϕw_n	10.63	9.48	8.52	7.66	6.94	6.32	5.79	5.31	4.88	4.50	4.17	3.88	3.59	3.16
		L/240	10.43	8.70	7.33	6.23	5.34	4.61	4.01	3.51	3.09	2.73	2.43	2.17	1.95	1.58
	20	ϕw_n	14.51	12.88	11.54	10.39	9.38	8.52	7.80	7.13	6.56	6.08	5.60	5.22	4.84	4.21
		L/240	12.96	10.81	9.10	7.74	6.64	5.73	4.99	4.36	3.84	3.40	3.02	2.70	2.42	1.97
	18	ϕw_n	20.59	18.29	16.37	14.70	13.31	12.07	11.01	10.10	9.29	8.57	7.90	7.33	6.85	5.94
		L/240	17.23	14.37	12.10	10.29	8.82	7.62	6.63	5.80	5.11	4.52	4.02	3.59	3.22	2.61
	16	ϕw_n	26.53	23.56	21.07	18.96	17.14	15.56	14.22	13.02	11.97	11.01	10.20	9.48	8.81	7.66
		L/240	21.78	18.16	15.30	13.01	11.15	9.63	8.38	7.33	6.45	5.71	5.08	4.53	4.06	3.30

Notes: 1) Loads due to L/240 deflection determined using I_d (+/-) based on governing (+/-) moment for span condition.
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