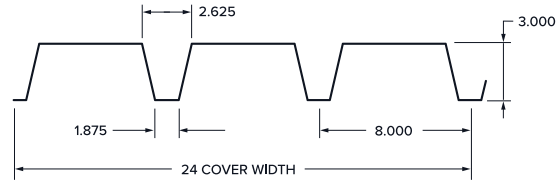


3" Curve-Dek® (ND)

PROPERTIES

Gage	Thickness (in)	Cover (in)	Weight (psf)
20	0.0358	24	2.47
18	0.0474		3.27



- Radii as low as 100'-0"
- Galvanized sheet steel with continuous lengths up to 36'-0".

ASD

SECTION PROPERTIES

DESIGN STRENGTHS

Gage	F _y (ksi)	I _D 1 Span (in ⁴ /ft)	I _D 2+ Span (in ⁴ /ft)	I _p (in ⁴ /ft)	I _n (in ⁴ /ft)	S _p (in ³ /ft)	S _n (in ³ /ft)	M _{n,p} /Ω (in-lb/ft)	M _{n,n} /Ω (in-lb/ft)	V _n /Ω (lb/ft)	*R _{be} /Ω (lb/ft)	*R _{bi} /Ω (lb/ft)
20	40	0.928	1.043	0.868	1.040	0.477	0.563	11413	13484	3585	668	1325
18	40	1.297	1.386	1.253	1.386	0.683	0.752	16356	18023	5620	1131	2232

- Notes:**
1. Section properties are calculated in accordance with the AISI S100-16.
 2. Web crippling design strengths* are based on minimum bearing lengths of 1 1/2" for end bearing and 3" for interior bearing.

ALLOWABLE UNIFORM LOADS AND MAXIMUM CONSTRUCTION SPANS

Span Condition	Gage	Allowable Uniform Total Load (psf) / Load that Produces L/240 Deflection (psf)										SDI Max. Constr. Span (ctr / ctr)
		Center to Center Span (ft - in)										
		8 - 0	10 - 0	11 - 0	12 - 0	13 - 0	14 - 0	15 - 0	16 - 0	18 - 0	20 - 0	
Single	20	119 / 119	76 / 61	63 / 46	53 / 35	45 / 28	39 / 22	34 / 18	30 / 15	23 / 10	-	17 - 2
	18	170 / 166	109 / 85	90 / 64	76 / 49	65 / 39	56 / 31	48 / 25	43 / 21	34 / 15	27 / 11	22 - 11
Double	20	133 / 322	89 / 165	74 / 124	62 / 95	53 / 75	46 / 60	40 / 49	35 / 40	28 / 28	-	20 - 10
	18	185 / 428	119 / 219	99 / 165	83 / 127	71 / 100	61 / 80	53 / 65	47 / 53	37 / 38	30 / 27	27 - 8
Triple	20	151 / 252	110 / 129	92 / 97	77 / 75	66 / 59	57 / 47	50 / 38	-	-	-	21 - 2
	18	230 / 335	148 / 171	123 / 129	103 / 99	88 / 78	76 / 62	66 / 51	-	-	-	28 - 0

- Notes:**
3. Allowable Uniform Loads and maximum construction spans shown are based on the following criteria:
 - ANSI/SDI RD-2017 Standard for Steel Roof Deck
 - Minimum bearing lengths of 1 1/2" for end bearing and 3" for interior bearing. Check web crippling if minimums are not met.
 4. Maximum construction spans shown include a check for deck self-weight plus a nominal 200 lbs. concentrated load supported by a one foot section of deck per SDI criteria which exceeds the IBC requirement of a 300 lbs. roof maintenance load distributed over an area of 2 1/2 feet by 2 1/2 feet per Section 1607.4 and Table 1607.1.
 5. "Load that Produces L/240 Deflection" values shown in RED exceed the "Allowable Uniform Total Load". These loads may be used to determine the deck capacity under deflection limits more stringent than L/240. In no case shall the "Allowable Uniform Total Load" be exceeded.
 6. See website at www.newmill.com for Factory Mutual approved deck types and maximum FM construction spans.

MAXIMUM CANTILEVER SPANS

Gage	F _y (ksi)	Back-Span Condition		
		Single	Double	Triple
20	40	4 - 10	4 - 10	4 - 4
18	40	5 - 10	5 - 11	4 - 4

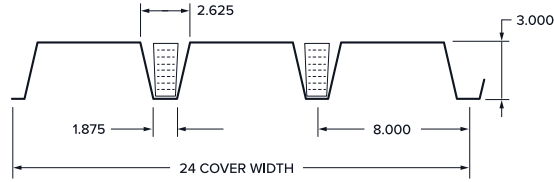
Notes:

7. Maximum cantilever spans shown are based on the following criteria:
 - ANSI/SDI RD-2017 Standard for Steel Roof Deck
 - Adjacent span assumed to be at least 3 times longer than the cantilever and no greater than the maximum design or construction spans shown in table above
 - Bearing width at perimeter support assumed to be 3" minimum
 - Design total uniform load of 45 psf in conjunction with a 100 lb. concentrated load.

3" Curve-Dek® Acoustical (NDA)

PROPERTIES

Gage	Thickness (in)	Cover (in)	Weight (psf)
20	0.0358	24	2.21
18	0.0474		2.92



- Radii as low as 100'-0"
- Galvanized sheet steel with continuous lengths up to 36'-0".

ASD

SECTION PROPERTIES

DESIGN STRENGTHS

Gage	F _y (ksi)	I _D 1 Span (in ⁴ /ft)	I _D 2+ Span (in ⁴ /ft)	I _p (in ⁴ /ft)	I _n (in ⁴ /ft)	S _p (in ³ /ft)	S _n (in ³ /ft)	Mn,p/Ω (in-lb/ft)	Mn,n/Ω (in-lb/ft)	Vn/Ω (lb/ft)	*Rbe/Ω (lb/ft)	*Rbi/Ω (lb/ft)
20	40	0.867	0.978	0.809	0.975	0.437	0.522	10456	12503	2525	399	807
18	40	1.217	1.301	1.175	1.301	0.631	0.699	15107	16738	3952	752	1507

- Notes:**
1. Section properties are calculated in accordance with the AISI S100-16, with perforation modifiers.
 2. Web crippling design strengths* are based on minimum bearing lengths of 1 1/2" for end bearing and 3" for interior bearing.

ALLOWABLE UNIFORM LOADS AND MAXIMUM CONSTRUCTION SPANS

Span Condition	Gage	Allowable Uniform Total Load (psf) / Load that Produces L/240 Deflection (psf)										SDI Max. Constr. Span (ctr / ctr)
		Center to Center Span (ft - in)										
		8 - 0	10 - 0	11 - 0	12 - 0	13 - 0	14 - 0	15 - 0	16 - 0	18 - 0	20 - 0	
Single	20	100 / 111	70 / 57	58 / 43	48 / 33	41 / 26	36 / 21	31 / 17	27 / 14	-	-	16 - 0
	18	157 / 156	101 / 80	83 / 60	70 / 46	60 / 36	51 / 29	45 / 24	39 / 19	31 / 14	25 / 10	21 - 8
Double	20	81 / 302	65 / 155	59 / 116	54 / 89	49 / 70	42 / 56	37 / 46	32 / 38	26 / 26	-	19 - 5
	18	151 / 402	110 / 206	91 / 154	77 / 119	65 / 94	56 / 75	49 / 61	43 / 50	34 / 35	28 / 26	26 - 3
Triple	20	92 / 236	73 / 121	67 / 91	61 / 70	56 / 55	52 / 44	46 / 36	-	-	-	19 - 9
	18	171 / 314	136 / 161	113 / 121	95 / 93	81 / 73	70 / 59	61 / 48	-	-	-	26 - 7

- Notes:**
3. Allowable Uniform Loads and maximum construction spans shown are based on the following criteria:
 - ANSI/SDI RD-2017 Standard for Steel Roof Deck
 - Minimum bearing lengths of 1 1/2" for end bearing and 3" for interior bearing. Check web crippling if minimums are not met.
 4. Maximum construction spans shown include a check for deck self-weight plus a nominal 200 lbs. concentrated load supported by a one foot section of deck per SDI criteria which exceeds the IBC requirement of a 300 lbs. roof maintenance load distributed over an area of 2 1/2 feet by 2 1/2 feet per Section 1607.4 and Table 1607.1.
 5. "Load that Produces L/240 Deflection" values shown in RED exceed the "Allowable Uniform Total Load". These loads may be used to determine the deck capacity under deflection limits more stringent than L/240. In no case shall the "Allowable Uniform Total Load" be exceeded.
 6. See website at www.newmill.com for Factory Mutual approved deck types and maximum FM construction spans.

MAXIMUM CANTILEVER SPANS

Gage	F _y (ksi)	Back-Span Condition		
		Single	Double	Triple
20	40	4 - 6	4 - 6	4 - 4
18	40	5 - 9	5 - 10	4 - 4

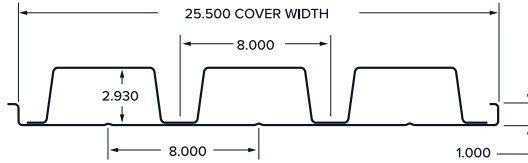
Notes:

7. Maximum cantilever spans shown are based on the following criteria:
 - ANSI/SDI RD-2017 Standard for Steel Roof Deck
 - Adjacent span assumed to be at least 3 times longer than the cantilever and no greater than the maximum design or construction spans shown in table above
 - Bearing width at perimeter support assumed to be 3" minimum
 - Design total uniform load of 45 psf in conjunction with a 100 lb. concentrated load.

3" Curve-Dek® Cellular (NDC)

PROPERTIES

Gage (Hat/Pan)	Thickness (in)	Cover (in)	Weight (psf)
20/20	0.0358/0.0358	25.5	3.82
20/18	0.0358/0.0474		4.33
18/20	0.0474/0.0358		4.53
18/18	0.0474/0.0474		5.05



ASD

SECTION PROPERTIES

DESIGN STRENGTHS

Gage	F _y (ksi)	I _D 1 Span (in ⁴ /ft)	I _D 2+ Span (in ⁴ /ft)	I _p (in ⁴ /ft)	I _n (in ⁴ /ft)	S _p (in ³ /ft)	S _n (in ³ /ft)	M _{n,p} /Ω (in-lb/ft)	M _{n,n} /Ω (in-lb/ft)	V _n /Ω (lb/ft)	*R _{be} /Ω (lb/ft)	*R _{bi} /Ω (lb/ft)
20/20	40	1.500	1.500	1.345	1.256	0.512	0.674	12255	16154	2946	670	1324
20/18	40	1.624	1.692	1.449	1.552	0.540	0.915	12925	21908	2946	670	1324
18/20	40	1.960	1.960	1.840	1.565	0.770	0.834	18455	19986	4699	1132	2228
18/18	40	2.133	2.133	1.996	1.849	0.789	1.100	18891	26352	4699	1132	2228

- Notes:**
- Section properties are calculated in accordance with the AISI S100-16 w/ S3.
 - Web crippling design strengths* are based on minimum bearing lengths of 1 1/2" for end bearing and 3" for interior bearing.

ALLOWABLE UNIFORM LOADS AND MAXIMUM CONSTRUCTION SPANS

Span Condition	Gage	Allowable Uniform Total Load (psf) / Load that Produces L/240 Deflection (psf)										SDI Max. Constr. Span (ctr / ctr)
		Center to Center Span (ft - in)										
		8 - 0	10 - 0	11 - 0	12 - 0	13 - 0	14 - 0	15 - 0	16 - 0	18 - 0	20 - 0	
Single	20/20	128 / 192	82 / 98	68 / 74	57 / 57	48 / 45	42 / 36	36 / 29	32 / 24	25 / 17	-	17 - 6
	20/18	122 / 208	86 / 106	71 / 80	60 / 62	51 / 48	44 / 39	38 / 32	34 / 26	27 / 18	-	18 - 0
	18/20	164 / 158	114 / 128	102 / 97	85 / 74	73 / 58	63 / 47	55 / 38	48 / 31	38 / 22	31 / 16	24 - 1
	18/18	197 / 273	126 / 140	104 / 105	87 / 81	75 / 64	64 / 51	56 / 41	49 / 34	39 / 24	31 / 17	24 - 1
Double	20/20	124 / 302	80 / 155	66 / 116	56 / 90	47 / 70	41 / 56	36 / 70	33 / 58	27 / 41	-	21 - 1
	20/18	124 / 302	80 / 155	71 / 201	65 / 155	60 / 122	56 / 97	52 / 79	49 / 65	43 / 46	36 / 33	21 - 8
	18/20	174 / 405	112 / 207	92 / 156	78 / 120	70 / 141	65 / 113	59 / 92	52 / 76	41 / 53	33 / 39	28 - 11
	18/18	174 / 405	126 / 337	115 / 253	105 / 195	97 / 153	88 / 123	77 / 100	68 / 82	54 / 58	44 / 42	28 - 10
Triple	20/20	150 / 237	100 / 121	82 / 91	69 / 70	59 / 55	51 / 44	45 / 36	-	-	-	21 - 5
	20/18	150 / 237	100 / 121	82 / 91	69 / 70	62 / 95	58 / 76	54 / 62	-	-	-	22 - 0
	18/20	218 / 317	139 / 162	115 / 122	97 / 94	83 / 74	71 / 59	63 / 72	-	-	-	29 - 3
	18/18	218 / 317	139 / 162	119 / 198	109 / 153	101 / 120	94 / 96	87 / 78	-	-	-	29 - 2

- Notes:**
- Allowable Uniform Loads and maximum construction spans shown are based on the following criteria:
 - ANSI/SDI SD-2022 Standard for Steel Roof Deck
 - Minimum bearing lengths of 1 1/2" for end bearing and 3" for interior bearing. Check web crippling if minimums are not met.
 - Maximum construction spans shown include a check for deck self-weight plus a nominal 200 lbs. concentrated load supported by a one foot section of deck per SDI criteria which exceeds the IBC requirement of a 300 lbs. roof maintenance load distributed over an area of 2 1/2 feet by 2 1/2 feet per Section 1607.4 and Table 1607.1.
 - "Load that Produces L/240 Deflection" values shown in RED exceed the "Allowable Uniform Total Load". These loads may be used to determine the deck capacity under deflection limits more stringent than L/240. In no case shall the "Allowable Uniform Total Load" be exceeded.
 - See website at www.newmill.com for Factory Mutual approved deck types and maximum FM construction spans.

MAXIMUM CANTILEVER SPANS

Gage	F _y (ksi)	Back-Span Condition		
		Single	Double	Triple
20/20	40	4 - 5	4 - 5	4 - 4
20/18	40	4 - 5	4 - 5	4 - 4
18/20	40	5 - 9	5 - 10	4 - 4
18/18	40	6 - 4	5 - 11	4 - 4

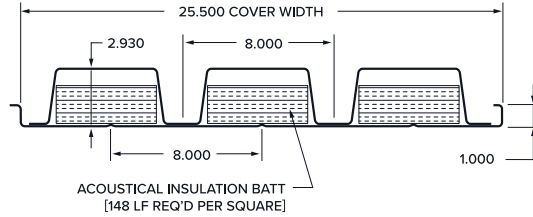
Notes:

- Maximum cantilever spans shown are based on the following criteria:
 - ANSI/SDI SD-2022 Standard for Steel Roof Deck
 - Adjacent span assumed to be at least 3 times longer than the cantilever and no greater than the maximum design or construction spans shown in table above
 - Bearing width at perimeter support assumed to be 3" minimum
 - Design total uniform load of 45 psf in conjunction with a 100 lb. concentrated load.

3" Curve-Dek® Cellular Acoustical (NDCA)

PROPERTIES

Gage (Hat/Pan)	Thickness (in)	Cover (in)	Weight (psf)
20/20	0.0358/0.0358	25.5	3.67
20/18	0.0358/0.0474		4.14
18/20	0.0474/0.0358		4.39
18/18	0.0474/0.0474		4.85



ASD

SECTION PROPERTIES

DESIGN STRENGTHS

Gage	F _y (ksi)	I _D 1 Span (in ⁴ /ft)	I _D 2+ Span (in ⁴ /ft)	I _p (in ⁴ /ft)	I _n (in ⁴ /ft)	S _p (in ³ /ft)	S _n (in ³ /ft)	M _{n,p} /Ω (in-lb/ft)	M _{n,n} /Ω (in-lb/ft)	V _n /Ω (lb/ft)	*R _{be} /Ω (lb/ft)	*R _{bi} /Ω (lb/ft)
20/20	40	1.402	1.402	1.262	1.256	0.516	0.674	12349	16154	2946	670	1324
20/18	40	1.521	1.623	1.363	1.516	0.512	0.914	12259	21893	2946	670	1324
18/20	40	1.828	1.828	1.721	1.565	0.756	0.834	18097	19986	4699	1132	2228
18/18	40	1.989	1.989	1.867	1.816	0.774	1.100	18537	26352	4699	1132	2228

- Notes:**
- Section properties are calculated in accordance with the AISI S100-16 w/ S3, with perforation modifiers applied in accordance with SDI white paper "Perforated Metal Deck Design with Commentary".
 - Web crippling design strengths* are based on minimum bearing lengths of 1 1/2" for end bearing and 3" for interior bearing.

ALLOWABLE UNIFORM LOADS AND MAXIMUM CONSTRUCTION SPANS

Span Condition	Gage	Allowable Uniform Total Load (psf) / Load that Produces L/240 Deflection (psf)										SDI Max. Constr. Span (ctr / ctr)
		Center to Center Span (ft - in)										
		8 - 0	10 - 0	11 - 0	12 - 0	13 - 0	14 - 0	15 - 0	16 - 0	18 - 0	20 - 0	
Single	20/20	129 / 179	82 / 92	68 / 69	57 / 53	49 / 42	42 / 33	37 / 27	32 / 22	25 / 16	-	17 - 8
	20/18	128 / 195	82 / 100	68 / 75	57 / 58	48 / 45	42 / 36	36 / 30	32 / 24	25 / 17	-	17 - 3
	18/20	164 / 158	121 / 120	100 / 90	84 / 69	71 / 55	62 / 44	54 / 36	47 / 29	37 / 21	30 / 15	23 - 10
	18/18	193 / 255	124 / 130	102 / 98	86 / 75	73 / 59	63 / 48	55 / 39	48 / 32	38 / 22	31 / 16	23 - 11
Double	20/20	124 / 302	80 / 155	66 / 116	56 / 90	47 / 70	42 / 81	37 / 66	34 / 54	28 / 38	-	21 - 4
	20/18	124 / 302	82 / 257	75 / 193	69 / 148	63 / 117	59 / 93	55 / 76	52 / 63	44 / 44	36 / 32	20 - 10
	18/20	174 / 405	112 / 207	92 / 156	82 / 167	76 / 132	67 / 105	59 / 86	52 / 71	41 / 50	33 / 36	28 - 7
	18/18	174 / 405	135 / 314	123 / 236	113 / 182	102 / 143	88 / 115	77 / 93	68 / 77	54 / 54	44 / 39	28 - 7
Triple	20/20	150 / 237	100 / 121	82 / 91	69 / 70	59 / 55	51 / 44	45 / 36	-	-	-	21 - 8
	20/18	150 / 237	100 / 121	82 / 91	72 / 116	66 / 91	61 / 73	57 / 59	-	-	-	21 - 2
	18/20	218 / 317	139 / 162	115 / 122	97 / 94	83 / 74	74 / 82	69 / 67	-	-	-	29 - 0
	18/18	218 / 317	141 / 246	128 / 185	117 / 142	108 / 112	99 / 90	86 / 73	-	-	-	29 - 0

- Notes:**
- Allowable Uniform Loads and maximum construction spans shown are based on the following criteria:
 - ANSI/SDI SD-2022 Standard for Steel Roof Deck
 - Minimum bearing lengths of 1 1/2" for end bearing and 3" for interior bearing. Check web crippling if minimums are not met.
 - Maximum construction spans shown include a check for deck self-weight plus a nominal 200 lbs. concentrated load supported by a one foot section of deck per SDI criteria which exceeds the IBC requirement of a 300 lbs. roof maintenance load distributed over an area of 2 1/2 feet by 2 1/2 feet per Section 1607.4 and Table 1607.1.
 - "Load that Produces L/240 Deflection" values shown in RED exceed the "Allowable Uniform Total Load". These loads may be used to determine the deck capacity under deflection limits more stringent than L/240. In no case shall the "Allowable Uniform Total Load" be exceeded.
 - See website at www.newmill.com for Factory Mutual approved deck types and maximum FM construction spans.

MAXIMUM CANTILEVER SPANS

Gage	F _y (ksi)	Back-Span Condition		
		Single	Double	Triple
20/20	40	4 - 5	4 - 5	4 - 4
20/18	40	4 - 5	4 - 5	4 - 4
18/20	40	5 - 9	5 - 10	4 - 4
18/18	40	6 - 3	5 - 11	4 - 4

Notes:

- Maximum cantilever spans shown are based on the following criteria:
 - ANSI/SDI SD-2022 Standard for Steel Roof Deck
 - Adjacent span assumed to be at least 3 times longer than the cantilever and no greater than the maximum design or construction spans shown in table above
 - Bearing width at perimeter support assumed to be 3" minimum
 - Design total uniform load of 45 psf in conjunction with a 100 lb. concentrated load.