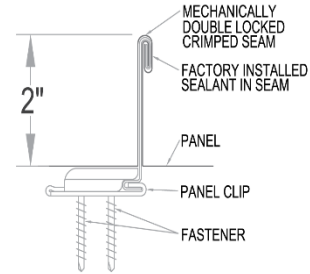
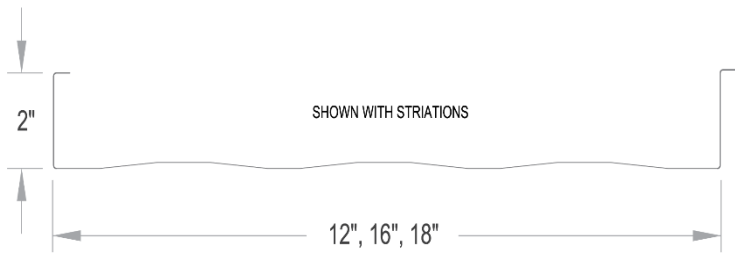




DOUBLE-LOCK DL20 STEEL



180 Deflection

SECTION PROPERTIES							ALLOWABLE UNIFORM LOADS, psf (single span)						
Ga.	Width in.	Yield ksi	Weight psf	Top in Compression			Inward Load						
				I_{xx} in ⁴ /ft.	I_{xx} (eff) in ⁴ /ft.	S_{xx} in ³ /ft.	2.5'	3.0'	3.5'	4.0'	4.5'	5.0'	5.5'
24	12	50	1.47	0.1816	0.1525	0.0774	247.7	172.0	126.4	96.8	76.4	61.9	51.2
22	12	50	1.88	0.2249	0.1890	0.1007	322.2	223.8	164.4	125.9	99.5	80.6	66.6
24	16	50	1.36	0.1450	0.1206	0.0583	186.6	129.6	95.2	72.9	57.6	46.6	38.6
22	16	50	1.71	0.1800	0.1500	0.0760	243.2	168.9	124.1	95.0	75.1	60.8	50.3
24	17.625	50	1.28	0.2940	0.2240	0.0517	165.4	114.9	84.4	64.6	51.1	41.4	34.2
22	17.625	50	1.61	0.1630	0.1360	0.0674	215.7	149.8	110.0	94.3	66.6	53.9	44.6

SECTION PROPERTIES							ALLOWABLE UNIFORM LOADS, psf (two equal spans)						
Ga.	Width in.	Yield ksi	Weight psf	Top in Compression			Inward Load						
				I_{xx} in ⁴ /ft.	I_{xx} (eff) in ⁴ /ft.	S_{xx} in ³ /ft.	2.5'	3.0'	3.5'	4.0'	4.5'	5.0'	5.5'
24	12	50	1.47	0.1816	0.1525	0.0774	247.7	172.0	126.4	96.8	76.4	61.9	51.2
22	12	50	1.88	0.2249	0.1890	0.1007	322.2	223.8	164.4	125.9	99.5	80.6	66.6
24	16	50	1.36	0.1450	0.1206	0.0583	186.6	129.6	95.2	72.9	57.6	46.6	38.6
22	16	50	1.71	0.1800	0.1500	0.0760	243.2	168.9	124.1	95.0	75.1	60.8	50.3
24	17.625	50	1.28	0.2940	0.2240	0.0517	165.4	114.9	84.4	64.6	51.1	41.4	34.2
22	17.625	50	1.61	0.1630	0.1360	0.0674	215.7	149.8	110.0	94.3	66.6	53.9	44.6

SECTION PROPERTIES							ALLOWABLE UNIFORM LOADS, psf (three equal spans)						
Ga.	Width in.	Yield ksi	Weight psf	Top in Compression			Inward Load						
				I_{xx} in ⁴ /ft.	I_{xx} (eff) in ⁴ /ft.	S_{xx} in ³ /ft.	2.5'	3.0'	3.5'	4.0'	4.5'	5.0'	5.5'
24	12	50	1.47	0.1816	0.1525	0.0774	309.6	215.0	158.0	120.9	95.6	77.4	64.0
22	12	50	1.88	0.2249	0.1890	0.1007	402.8	279.7	205.5	157.3	124.3	100.7	83.2
24	16	50	1.36	0.1450	0.1206	0.0583	186.6	129.6	95.2	72.9	57.6	46.6	38.6
22	16	50	1.71	0.1800	0.1500	0.0760	304.0	211.0	155.1	118.8	93.8	76.0	62.8
24	17.625	50	1.28	0.2940	0.2240	0.0517	206.8	143.6	105.5	80.8	63.8	51.7	42.7
22	17.625	50	1.61	0.1630	0.1360	0.0674	269.6	187.2	137.6	105.3	83.2	67.4	55.7



DOUBLE-LOCK DL20 STEEL

240 Deflection

SECTION PROPERTIES							ALLOWABLE UNIFORM LOADS, psf (single span)						
Ga.	Width in.	Yield ksi	Weight psf	Top in Compression			Inward Load						
				I_{xx} in ⁴ /ft.	I_{xx} (eff) in ⁴ /ft.	S_{xx} in ³ /ft	2.5'	3.0'	3.5'	4.0'	4.5'	5.0'	5.5'
24	12	50	1.47	0.1816	0.1525	0.0774	247.7	172.0	126.4	96.8	76.4	61.9	51.2
22	12	50	1.88	0.2249	0.1890	0.1007	322.2	223.8	164.4	125.9	99.5	80.6	66.6
24	16	50	1.36	0.1450	0.1206	0.0583	186.6	129.6	95.2	72.9	57.6	46.6	38.6
22	16	50	1.71	0.1800	0.1500	0.0760	243.2	168.9	124.1	95.0	75.1	60.8	50.3
24	17.625	50	1.28	0.2940	0.2240	0.0517	165.4	114.9	84.4	64.6	51.1	41.4	34.2
22	17.625	50	1.61	0.1630	0.1360	0.0674	215.7	149.8	110.0	94.3	66.6	53.9	44.6

SECTION PROPERTIES							ALLOWABLE UNIFORM LOADS, psf (two equal spans)						
Ga.	Width in.	Yield ksi	Weight psf	Top in Compression			Inward Load						
				I_{xx} in ⁴ /ft.	I_{xx} (eff) in ⁴ /ft.	S_{xx} in ³ /ft	2.5'	3.0'	3.5'	4.0'	4.5'	5.0'	5.5'
24	12	50	1.47	0.1816	0.1525	0.0774	247.7	172.0	126.4	96.8	76.4	61.9	51.2
22	12	50	1.88	0.2249	0.1890	0.1007	322.2	223.8	164.4	125.9	99.5	80.6	66.6
24	16	50	1.36	0.1450	0.1206	0.0583	186.6	129.6	95.2	72.9	57.6	46.6	38.6
22	16	50	1.71	0.1800	0.1500	0.0760	243.2	168.9	124.1	95.0	75.1	60.8	50.3
24	17.625	50	1.28	0.2940	0.2240	0.0517	165.4	114.9	84.4	64.6	51.1	41.4	34.2
22	17.625	50	1.61	0.1630	0.1360	0.0674	215.7	149.8	110.0	94.3	66.6	53.9	44.6

SECTION PROPERTIES							ALLOWABLE UNIFORM LOADS, psf (three equal spans)						
Ga.	Width in.	Yield ksi	Weight psf	Top in Compression			Inward Load						
				I_{xx} in ⁴ /ft.	I_{xx} (eff) in ⁴ /ft.	S_{xx} in ³ /ft	2.5'	3.0'	3.5'	4.0'	4.5'	5.0'	5.5'
24	12	50	1.47	0.1816	0.1525	0.0774	309.6	215.0	158.0	120.9	95.6	77.4	64.0
22	12	50	1.88	0.2249	0.1890	0.1007	402.8	279.7	205.5	157.3	124.3	100.7	83.2
24	16	50	1.36	0.1450	0.1206	0.0583	186.6	129.6	95.2	72.9	57.6	46.6	38.6
22	16	50	1.71	0.1800	0.1500	0.0760	304.0	211.0	155.1	118.8	93.8	76.0	62.8
24	17.625	50	1.28	0.2940	0.2240	0.0517	206.8	143.6	105.5	80.8	63.8	51.7	42.7
22	17.625	50	1.61	0.1630	0.1360	0.0674	269.6	187.2	137.6	105.3	83.2	67.4	55.7

NOTES:

- Theoretical section properties have been calculated per AISI 2012 North American Specification for the Design of Cold-Formed Steel Structural Member.
 I_{xx} and S_{xx} are effective section properties for deflection and bending.
- Allowable load is calculated in accordance with AISI 2012 specifications considering bending, shear, combined bending and shear and deflection. Allowable load considers a 3 or more equal span condition.
- Allowable load does not address web crippling, fasteners, connection strength or support material.
- Panel weight is not considered.
- Load/Span values are based on theoretical computations and not load testing.
- Deflection consideration is limited by a maximum deflection ratio of $L/180$ or $L/240$ of span.
- Allowable loads do not include a $1/3$ stress increase for wind.