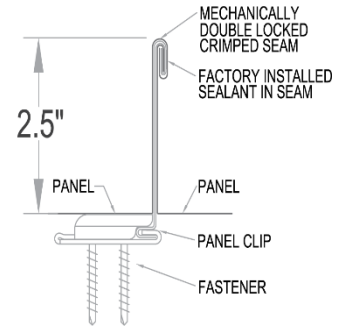
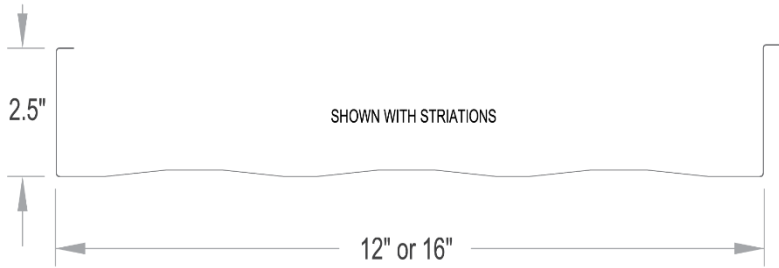




DOUBLE-LOCK DL20 ALUMINUM



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'
0.032	12	19	0.700	0.2610	0.2610	0.5794	82.2	57.1	41.9	32.1	25.4	20.6	17.0
0.040	12	19	0.855	0.3200	0.3200	0.7133	127.1	88.2	64.8	49.6	39.2	31.8	26.3
0.032	16	19	0.640	0.2110	0.2110	0.5670	59.9	41.6	30.6	23.4	18.5	15.0	12.4
0.040	16	19	0.790	0.2590	0.2590	0.6950	92.7	64.4	47.3	36.2	28.6	23.2	19.2
0.032	17.625	19	0.620	0.1910	0.1910	0.5480	51.4	35.7	26.2	20.1	15.9	12.9	10.6
0.040	17.625	19	0.760	0.2350	0.2350	0.6730	79.7	55.3	40.7	31.1	24.6	19.9	16.5

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'
0.032	12	19	0.700	0.2610	0.2610	0.5794	82.2	57.1	41.9	32.1	25.4	20.6	17.0
0.040	12	19	0.855	0.3200	0.3200	0.7133	127.1	88.2	64.8	49.6	39.2	31.8	26.3
0.032	16	19	0.640	0.2110	0.2110	0.5670	59.9	41.6	30.6	23.4	18.5	15.0	12.4
0.040	16	19	0.790	0.2590	0.2590	0.6950	92.7	64.4	47.3	36.2	28.6	23.2	19.2
0.032	17.625	19	0.620	0.1910	0.1910	0.5480	51.4	35.7	26.2	20.1	15.9	12.9	10.6
0.040	17.625	19	0.760	0.2350	0.2350	0.6730	79.7	55.3	40.7	31.1	24.6	19.9	16.5

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'
0.032	12	19	0.700	0.2610	0.2610	0.5794	102.8	71.4	52.4	40.1	31.7	25.7	21.2
0.040	12	19	0.855	0.3200	0.3200	0.7133	158.8	110.3	81.0	62.0	49.0	39.7	32.8
0.032	16	19	0.640	0.2110	0.2110	0.5670	74.8	52.0	38.2	29.2	23.1	18.7	15.5
0.040	16	19	0.790	0.2590	0.2590	0.6950	115.8	80.4	59.1	45.3	35.8	29.0	23.9
0.032	17.625	19	0.620	0.1910	0.1910	0.5480	64.3	44.7	32.8	25.1	19.9	16.1	13.3
0.040	17.625	19	0.760	0.2350	0.2350	0.6730	99.6	69.2	50.8	38.9	30.7	24.9	20.6



DOUBLE-LOCK DL20 ALUMINUM

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'
0.032	12	19	0.700	0.2610	0.2610	0.5794	82.2	57.1	41.9	32.1	25.4	20.6	17.0
0.040	12	19	0.855	0.3200	0.3200	0.7133	127.1	88.2	64.8	49.6	39.2	31.8	26.3
0.032	16	19	0.640	0.2110	0.2110	0.5670	59.9	41.6	30.6	23.4	18.5	15.0	12.4
0.040	16	19	0.790	0.2590	0.2590	0.6950	92.7	64.4	47.3	36.2	28.6	23.2	19.2
0.032	17.625	19	0.620	0.1910	0.1910	0.5480	51.4	35.7	26.2	20.1	15.9	12.9	10.6
0.040	17.625	19	0.760	0.2350	0.2350	0.6730	79.7	55.3	40.7	31.1	24.6	19.9	16.5

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'
0.032	12	19	0.700	0.2610	0.2610	0.5794	82.2	57.1	41.9	32.1	25.4	20.6	17.0
0.040	12	19	0.855	0.3200	0.3200	0.7133	127.1	88.2	64.8	49.6	39.2	31.8	26.3
0.032	16	19	0.640	0.2110	0.2110	0.5670	59.9	41.6	30.6	23.4	18.5	15.0	12.4
0.040	16	19	0.790	0.2590	0.2590	0.6950	92.7	64.4	47.3	36.2	28.6	23.2	19.2
0.032	17.625	19	0.620	0.1910	0.1910	0.5480	51.4	35.7	26.2	20.1	15.9	12.9	10.6
0.040	17.625	19	0.760	0.2350	0.2350	0.6730	79.7	55.3	40.7	31.1	24.6	19.9	16.5

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'
0.032	12	19	0.700	0.2610	0.2610	0.5794	102.8	71.4	52.4	40.1	31.7	25.7	21.2
0.040	12	19	0.855	0.3200	0.3200	0.7133	158.8	110.3	81.0	62.0	49.0	39.7	32.8
0.032	16	19	0.640	0.2110	0.2110	0.5670	74.8	52.0	38.2	29.2	23.1	18.7	15.5
0.040	16	19	0.790	0.2590	0.2590	0.6950	115.8	80.4	59.1	45.3	35.8	29.0	23.9
0.032	17.625	19	0.620	0.1910	0.1910	0.5480	64.3	44.7	32.8	25.1	19.9	16.1	13.3
0.040	17.625	19	0.760	0.2350	0.2350	0.6730	99.6	69.2	50.8	38.9	30.7	24.9	20.6

NOTES:

- Theoretical section properties have been calculated per the latest edition of the Aluminum Association's Design Manual.
 I_{xx} and S_{xx} are effective section properties for deflection and bending.
- Allowable load is calculated in accordance with the latest edition of the Aluminum Association's Design Manual considering bending, shear, combined bending and shear and deflection. Allowable load considers a 3 or more equal span condition.
- Allowable load does not address panel weight, fasteners, connection strength or support material.
- Allowable load includes web crippling.
- 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.