TAYLOR METAL PRODUCTS

MS-200 (single lock) ROOF PANEL

SECTION PROPERTIES								ALLOWABLE UNIFORM LOADS, psf For various clip spacings (i.e. span values)									
Gauge	Width, in.	Yield ksi	Weight psf	Top in Compression		Bottom in Compression		Inward Load									
				I_{xx} $in^4/ft.$	S_{xx} in^3/ft	I_{xx} $in^4/ft.$	S_{xx} in^3/ft	2'	2.5'	3'	3.5	4'	4.5'	5'	5.5'	6'	8'
0.032	12	19	0.700	0.3290	0.2102	0.3290	0.6599	182.9	117.0	81.3	59.7	45.7	36.1	29.3	24.2	20.3	11.4
0.040	12	19	0.855	0.4050	0.2582	0.4050	0.8133	283.0	181.1	125.8	92.4	70.7	55.9	45.3	37.4	31.4	17.7
0.032	16	19	0.640	0.2660	0.1610	0.2660	0.6450	133.0	85.1	59.1	43.4	33.3	26.3	21.3	17.6	14.8	8.3
0.040	16	19	0.790	0.3270	0.1980	0.3270	0.7940	206.8	132.3	91.9	57.5	51.7	40.8	33.1	27.3	23.0	12.9
0.032	18	19	0.620	0.2420	0.1430	0.2420	0.1430	116.8	74.7	51.9	38.1	29.2	23.1	18.7	15.4	13.0	7.3
0.040	18	19	0.760	0.2970	0.1764	0.2970	0.7840	181.3	116.0	80.6	59.2	45.3	35.8	29.0	24.0	20.1	11.3

1. 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.
2. 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.
3. Allowable load does not address panel weight, fasteners, connection strength or support material.
4. Allowable load includes web crippling.
5. Load/Span values are based on theoretical computations and not load testing.
6. Deflection is not considered.
7. Allowable loads do not include a 1/3 stress increase for wind.

SECTION PROPERTIES								ALLOWABLE UNIFORM LOADS, psf For various clip spacings (i.e. span values)									
Gauge	Width, in.	Yield ksi	Weight psf	Top in Compression		Bottom in Compression		Inward Load									
				I_{xx} $in^4/ft.$	S_{xx} in^3/ft	I_{xx} $in^4/ft.$	S_{xx} in^3/ft	2'	2.5'	3'	3.5	4'	4.5'	5'	5.5'	6'	8'
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0.040	12	19	0.855	0.4050	0.2582	0.4050	0.8133	283.0	181.1	125.8	92.4	70.7	55.9	45.3	37.4	31.4	17.7
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4. Allowable load includes web crippling.
5. Load/Span values are based on theoretical computations and not load testing.
6. Deflection consideration is limited by a maximum deflection ratio of L/120.
7. Allowable loads do not include a 1/3 stress increase for wind.

SECTION PROPERTIES								ALLOWABLE UNIFORM LOADS, psf For various clip spacings (i.e. span values)									
Width, in.	Gauge	Yield ksi	Weight psf	Top in Compression		Bottom in Compression		Inward Load									
				I_{xx} $in^4/ft.$	S_{xx} in^3/ft	I_{xx} $in^4/ft.$	S_{xx} in^3/ft	2'	2.5'	3'	3.5	4'	4.5'	5'	5.5'	6'	8'
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0.040	12	19	0.855	0.4050	0.2582	0.4050	0.8133	283.0	181.1	125.8	92.4	70.7	55.9	45.3	37.4	31.4	17.7
0.032	16	19	0.640	0.2660	0.1610	0.2660	0.6450	133.0	85.1	59.1	43.4	33.3	26.3	21.3	17.6	14.8	8.3
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4. Allowable load includes web crippling.
5. Load/Span values are based on theoretical computations and not load testing.
6. Deflection consideration is limited by a maximum deflection ratio of L/180.
7. Allowable loads do not include a 1/3 stress increase for wind.

STRUCTURAL ONLY

CHANDER P. NANGIA
STATE OF WASHINGTON
7/25/2018
16493
REGISTERED
PROFESSIONAL ENGINEER

EXPIRES 09-16-2018

TAYLOR METAL PRODUCTS

MS-200 (double lock) ROOF PANEL

SECTION PROPERTIES								ALLOWABLE UNIFORM LOADS, psf For various clip spacings (i.e. span values)									
				Top in Compression		Bottom in Compression		Inward Load									
Gauge	Width, in.	Yield ksi	Weight psf	I_{xx} $in^4/ft.$	S_{xx} in^3/ft	I_{xx} $in^4/ft.$	S_{xx} in^3/ft	2'	2.5'	3'	3.5	4'	4.5'	5'	5.5'	6'	8'
0.032	12	19	0.700	0.2810	0.1767	0.2810	0.5885	163.1	104.4	72.5	53.3	40.8	32.2	26.1	21.6	18.1	10.2
0.040	12	19	0.855	0.3460	0.2178	0.3460	0.7260	252.6	161.7	112.3	82.5	63.2	49.9	40.4	33.4	28.1	15.8
0.032	16	19	0.640	0.2280	0.1360	0.2280	0.5760	118.8	76.0	52.8	38.8	29.7	23.5	19.0	15.7	13.2	7.4
0.040	16	19	0.790	0.2810	0.1680	0.2810	0.7100	184.9	118.3	82.2	60.4	46.2	36.5	29.6	24.5	20.5	11.6
0.032	18	19	0.620	0.2070	0.1220	0.2070	0.5696	104.4	66.8	46.4	34.1	26.1	20.6	16.7	13.8	11.6	6.5
0.040	18	19	0.760	0.2560	0.1510	0.2560	0.7010	162.1	103.8	72.1	52.9	40.5	32.0	25.9	21.4	18.0	10.1

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