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									
Width, in.	Gauge	Yield ksi	Weight psf	I_{xx} $in^4/ft.$	$I_{xx\ (eff)}$ $in^4/ft.$	S_{xx} in^3/ft	I_{xx} $in^4/ft.$	$I_{xx\ (eff)}$ $in^4/ft.$	S_{xx} in^3/ft	2'	2.5'	3'	3.5	4'	4.5'	5'	5.5'	6'	8'
12	24	50	1.47	0.1935	0.1731	0.1061	0.1232	0.1436	0.1192	296.4	237.1	197.6	169.4	148.2	131.0	106.1	87.7	73.7	41.5
12	22	50	1.875	0.2535	0.2270	0.1344	0.1606	0.1875	0.1585	449.1	359.3	299.4	256.6	210.0	165.9	134.4	111.1	93.3	52.5
16	24	50	1.36	0.1549	0.1370	0.0789	0.0925	0.1106	0.0908	222.3	177.8	148.2	127.0	111.1	98.5	79.8	66.0	55.4	31.2
16	22	50	1.71	0.2040	0.1800	0.1010	0.1210	0.1451	0.1213	337.7	270.2	225.2	193.0	157.8	124.7	101.0	83.5	70.1	39.5
18	24	50	1.28	0.1400	0.1230	0.0708	0.0820	0.0988	0.0809	197.7	158.2	131.8	113.0	98.9	87.4	70.8	58.5	49.2	27.7
18	22	50	1.61	0.1850	0.1620	0.0880	0.1070	0.1296	0.1079	299.6	239.6	199.7	171.2	137.5	108.6	88.0	72.7	61.1	34.4

1. 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.
2. 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.
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)									
				Top in Compression			Bottom in Compression			Inward Load									
Width, in.	Gauge	Yield ksi	Weight psf	I_{xx} $in^4/ft.$	$I_{xx\ (eff)}$ $in^4/ft.$	S_{xx} in^3/ft	I_{xx} $in^4/ft.$	$I_{xx\ (eff)}$ $in^4/ft.$	S_{xx} in^3/ft	2'	2.5'	3'	3.5	4'	4.5'	5'	5.5'	6'	8'
12	24	50	1.47	0.1935	0.1731	0.1061	0.1232	0.1436	0.1192	296.4	237.1	197.6	169.4	148.2	131.0	106.1	87.7	73.7	41.5
12	22	50	1.875	0.2535	0.2270	0.1344	0.1606	0.1875	0.1585	449.1	359.3	299.4	256.6	210.0	165.9	134.4	111.1	93.3	52.5
16	24	50	1.36	0.1549	0.1370	0.0789	0.0925	0.1106	0.0908	222.3	177.8	148.2	127.0	111.1	98.5	79.8	66.0	55.4	31.2
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18	24	50	1.28	0.1400	0.1230	0.0708	0.0820	0.0988	0.0809	197.7	158.2	131.8	113.0	98.9	87.4	70.8	58.5	49.2	27.7
18	22	50	1.61	0.1850	0.1620	0.0880	0.1070	0.1296	0.1079	299.6	239.6	199.7	171.2	137.5	108.6	88.0	72.7	61.1	34.4

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2. 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.
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 consideration is limited by a maximum deflection ratio of **L/120** of span.
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)									
				Top in Compression			Bottom in Compression			Inward Load									
Width, in.	Gauge	Yield ksi	Weight psf	I_{xx} $in^4/ft.$	$I_{xx\ (eff)}$ $in^4/ft.$	S_{xx} in^3/ft	I_{xx} $in^4/ft.$	$I_{xx\ (eff)}$ $in^4/ft.$	S_{xx} in^3/ft	2'	2.5'	3'	3.5	4'	4.5'	5'	5.5'	6'	8'
12	24	50	1.47	0.1935	0.1731	0.1061	0.1232	0.1436	0.1192	296.4	237.1	197.6	169.4	148.2	131.0	106.1	87.7	73.7	41.5
12	22	50	1.875	0.2535	0.2270	0.1344	0.1606	0.1875	0.1585	449.1	359.3	299.4	256.6	210.0	165.9	134.4	111.1	93.3	52.5
16	24	50	1.36	0.1549	0.1370	0.0789	0.0925	0.1106	0.0908	222.3	177.8	148.2	127.0	111.1	98.5	79.8	66.0	55.4	31.2
16	22	50	1.71	0.2040	0.1800	0.1010	0.1210	0.1451	0.1213	337.7	270.2	225.2	193.0	157.8	124.7	101.0	83.5	70.1	39.5
18	24	50	1.28	0.1400	0.1230	0.0708	0.0820	0.0988	0.0809	197.7	158.2	131.8	113.0	98.9	87.4	70.8	58.5	49.2	27.7
18	22	50	1.61	0.1850	0.1620	0.0880	0.1070	0.1296	0.1079	299.6	239.6	199.7	171.2	137.5	108.6	88.0	72.7	61.1	34.4

1. 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.
2. 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.
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 consideration is limited by a maximum deflection ratio of **L/180** of span.
7. Allowable loads do not include a 1/3 stress increase for wind.

TAYLOR METAL PRODUCTS

MS-200 (single 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									
Width, in.	Gauge	Yield ksi	Weight psf	I_{xx} in^4/ft.	$I_{xx\ (eff)}$ in^4/ft.	S_{xx} in^3/ft	I_{xx} in^4/ft.	$I_{xx\ (eff)}$ in^4/ft.	S_{xx} in^3/ft	2'	2.5'	3'	3.5	4'	4.5'	5'	5.5'	6'	8'
12	24	50	1.47	0.2350	0.2100	0.1350	0.1478	0.1731	0.1488	296.4	237.1	197.6	169.4	148.2	131.7	118.6	107.8	93.8	52.7
12	22	50	1.875	0.2868	0.2560	0.1623	0.1821	0.2125	0.1824	296.4	237.1	197.6	169.4	148.2	131.7	118.6	107.8	98.8	63.4
16	24	50	1.36	0.1850	0.1640	0.1020	0.1110	0.1325	0.1100	222.3	177.8	148.2	127.0	111.1	98.8	88.9	80.8	70.8	39.8
16	22	50	1.71	0.2320	0.2050	0.1220	0.1380	0.1653	0.1394	222.3	177.8	148.2	127.0	111.1	98.8	88.9	80.8	74.1	47.7
18	24	50	1.28	0.1670	0.1470	0.0900	0.0990	0.1187	0.0970	197.7	158.2	131.8	113.0	98.9	87.9	79.1	71.9	62.5	35.2
18	22	50	1.61	0.2090	0.1840	0.1080	0.1220	0.1472	0.1236	197.7	158.2	131.8	113.0	98.9	87.9	79.1	71.9	65.9	42.2

1. 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.
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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)									
				Top in Compression			Bottom in Compression			Inward Load									
Width, in.	Gauge	Yield ksi	Weight psf	I_{xx} in^4/ft.	$I_{xx\ (eff)}$ in^4/ft.	S_{xx} in^3/ft	I_{xx} in^4/ft.	$I_{xx\ (eff)}$ in^4/ft.	S_{xx} in^3/ft	2'	2.5'	3'	3.5	4'	4.5'	5'	5.5'	6'	8'
12	24	50	1.47	0.2350	0.2100	0.1350	0.1478	0.1731	0.1488	296.4	237.1	197.6	169.4	148.2	131.7	118.6	107.8	93.8	52.7
12	22	50	1.875	0.2868	0.2560	0.1623	0.1821	0.2125	0.1824	296.4	237.1	197.6	169.4	148.2	131.7	118.6	107.8	98.8	63.4
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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)									
				Top in Compression			Bottom in Compression			Inward Load									
Width, in.	Gauge	Yield ksi	Weight psf	I_{xx} in^4/ft.	$I_{xx\ (eff)}$ in^4/ft.	S_{xx} in^3/ft	I_{xx} in^4/ft.	$I_{xx\ (eff)}$ 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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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.

REGISTERED PROFESSIONAL ENGINEER
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C26786
Exp. 03/31/2019
CIVIL
STATE OF CALIFORNIA
2/15/2018