Allsouth Pre-Engineered Components
985 Technology Drive
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Phone (334) 699-8394
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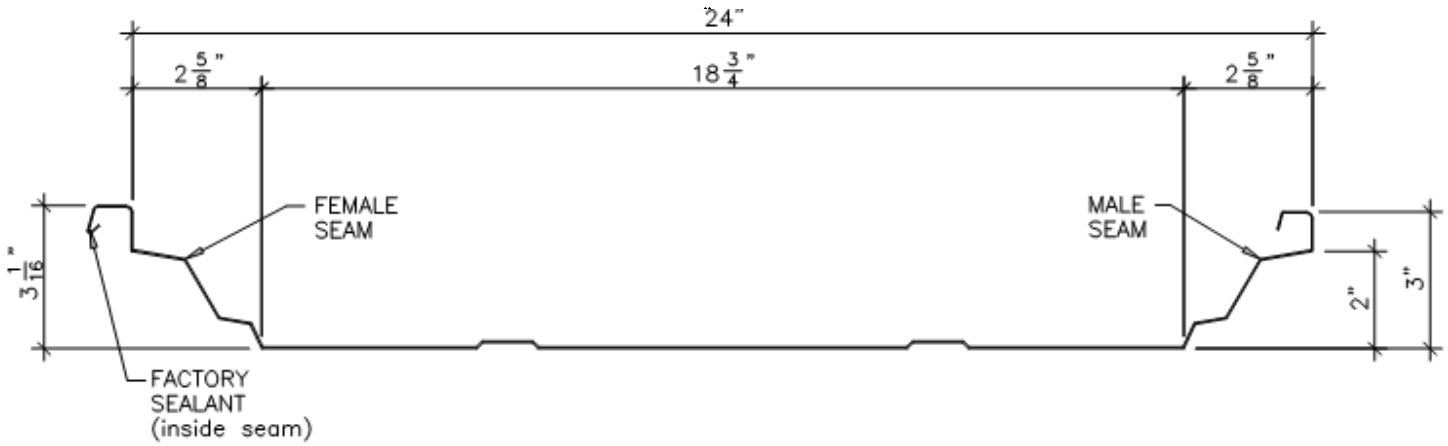
TS-324 Panel



Section Properties

Gauge	Thickness in.	Weight psf	Yield Stress ksi	AllowableShear kips/ft	Top in Compression (Positive Bending)			Bottom in Compression (Negative Bending)		
					Ixx in4/ft	Sxx in3/ft	Ma in.kips/ft	Ixx in4/ft	Sxx in3/ft	Ma in.kips/ft
24	0.0221	1.133	50.0	0.84	0.3620	0.1517	4.541	0.1520	0.0924	2.766
22	0.0275	1.406	50.0	1.16	0.4475	0.1875	5.626	0.1965	0.1235	3.698

Notes on Section Properties:

* Section properties and allowables are calculated in accordance with North American Specification for the Design of Cold-Formed Steel Structural Members (2001 Edition & 2004 Supplement)
* I +/- is for deflection determination, S +/- is for bending determination & Ma is allowable bending moment.
* Ma is allowable bending moment and Va is allowable shear.
* All values are for one foot of panel width.
* Minimum deliverable bare steel thickness should not be less than 0.95 of design thickness.

Web Crippling:

24 gauge: Allowable intermediate bearing at 2.5" = 0.189 kips/ft
Allowable end bearing at 2.5" = 0.065 kips/ft

22 gauge: Allowable intermediate bearing at 2.5" = 0.280 kips/ft
Allowable end bearing at 2.5" = 0.097 kips/ft

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Allowable Gravity Loads

All loads in pounds / SF

Gauge	Span Condition		Span (ft)							
			2.0	2.5	3.0	3.5	4.0	4.5	5.0	6.0
24	SS	Stress	756.8	484.3	336.3	247.1	189.2	149.5	121.1	84.1
		L/180	3955.2	2025.1	1171.9	738.0	494.4	347.2	253.1	146.5
	DS	Stress	379.9	258.5	186.2	140.1	109.0	87.1	71.1	49.9
		L/180	9519.4	4873.9	2820.6	1776.2	1189.9	835.7	609.2	352.6
	TS	Stress	424.4	292.2	212.2	160.5	125.3	100.4	82.2	57.9
		L/180	7463.7	3821.4	2211.5	1392.7	933.0	655.3	477.7	276.4

Gauge	Span Condition		Span (ft)							
			2.0	2.5	3.0	3.5	4.0	4.5	5.0	6.0
22	SS	Stress	937.6	600.1	416.7	306.1	234.4	185.2	150.0	104.2
		L/180	4889.4	2503.3	1448.7	912.3	611.2	429.2	312.9	181.1
	DS	Stress	513.0	348.1	250.3	188.1	146.2	116.7	95.3	66.8
		L/180	11767.7	6025.1	3486.7	2195.7	1471.0	1033.1	753.1	435.8
	TS	Stress	574.1	394.1	285.6	215.7	168.2	134.7	110.2	77.5
		L/180	9226.6	4724.0	2733.8	1721.6	1153.3	810.0	590.5	341.7

Notes on Load Table:

* Allowable load based on stress is the smallest load due to bending, shear and combined bending and shear.
* Allowable load based on deflection limit cannot exceed allowable load based on stress.
* These loads are for panel strength. Frames, purlins, clips, fasteners and all supports must be designed to resist all loads imposed on the panel.
* Allowable uplift loads based on stress have not been increased by 33.33 % for wind uplift.
* Allowable loads for deflection are based on deflection limitation of span/180.
* For roof panels, self weight of the panel has to be deducted from the allowable inward load to arrive at the actual 'live load' carrying capacity of the panel.
* SS = Simple span, DS = Double Span and TS = Three or more spans

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TS-234 Panel

Allowable Wind Uplift Loads - 24 Gage Material 50 ksi

All loads in pounds / SF

Installed with MPS 600 Series Clip and DI Seamer

RollLok Seam Test Report: C1672-1

Span	1592 Test Ultimate Load	1592 Design Load	COE Design Load
2.0	104.0	61.1	63.0
2.5		55.6	57.8
3.0		47.2	49.1
3.5		40.4	42.0
4.0		35.4	36.8
4.5		31.4	32.6
5.0	48.5	28.3	29.4

TripleLok Seam Test Report: C1672-2

Span	1592 Test Ultimate Load	1592 Design Load	COE Design Load
2.0	145.6	85.5	88.2
2.5		78.4	80.8
3.0		71.3	73.6
3.5		61.1	63.0
4.0		53.5	55.2
4.5		47.6	49.1
5.0	72.8	42.8	44.1

QuadLok Seam Test Report: C1672-3

Span	1592 Test Ultimate Load	1592 Design Load	COE Design Load
2.0	185.5	108.8	112.4
2.5		99.7	103.0
3.0		89.8	92.8
3.5		77.0	79.6
4.0		67.4	69.6
4.5		59.9	61.9
5.0	91.9	53.9	55.7

Notes:
1. The above tabulated loads are generated from certified ASTM E-1592 testing using BRS's MPS 600 series clips and Developmental Industries seamers. ***These design loads are not valid with other clips or seamers.***
2. Intermediate design loads are interpolated from ultimate test loads.
3. Design loads contain a safety factors calculated per AISI.
4. COE design load contains a 1.65 safety factor per COE 07416 Specification.
5. These load capacities are for the panel itself. Frames, purlins, clips, fasteners, and all supports must be designed to resist all loads imposed by the panel.
6. Allowable wind uplift loads have not been increased by 33% as allowed by some codes when wind load controls.
7. This material is subject to change without notice. Contact Building Research Systems for most current values.
8. MPS 600 Series Clips: MPS 602, 602-3, 603, 603-3, 604, 604-3, 605, 605-3

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TS-234 Panel

Allowable Wind Uplift Loads - 22 Gage Material 50 ksi

All loads in pounds / SF

RollLok Seam Test Report: C739

Span	1592 Test Ultimate Load	1592 Design Load	COE Design Load
2.5	114.4	57.2	69.3
3.0		52.5	63.6
3.5		47.8	57.9
4.0		42.3	51.3
4.5		37.6	45.6
5.0	67.6	33.8	41.0

TripleLok Seam Test Report: C596

Span	1592 Test Ultimate Load	1592 Design Load	COE Design Load
2.5	119.6	59.8	72.3
3.0		55.6	67.4
3.5		51.5	62.4
4.0		47.3	57.3
4.5		43.2	52.4
5.0	78.0	39.0	47.3

Notes:
1. The above tabulated loads are generated from certified ASTM E-1592 testing.
2. Intermediate design loads are interpolated from ultimate test loads.
3. Design loads contain a safety factor of 2.0 calculated per AISI.
4. COE design load contains a 1.65 safety factor per COE 07416 Specification.
5. These load capacities are for the panel itself. Frames, purlins, clips, fasteners, and all supports must be designed to resist all loads imposed by the panel.
6. Allowable wind uplift loads have not been increased by 33% as allowed by some codes when wind load controls.
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TS-234 Panel

Allowable Wind Uplift Loads - 24 Gage Material 50 ksi

All loads in pounds / SF

Installed with BA-602-8 or BA-603-8 Clip and DI Seamer

TripleLok Seam Test Report: Interpolated

Span	1592 Test Ultimate Load	1592 Design Load	COE Design Load
2.0	180.5	106.0	109.4
2.5		97.0	100.1
3.0		86.4	89.1
3.5		74.1	76.4
4.0		64.8	66.8
4.5		57.6	59.4
5.0	88.4	51.9	53.6

QuadLok Seam Test Report: Interpolated

Span	1592 Test Ultimate Load	1592 Design Load	COE Design Load
2.0	246.7	144.8	149.5
2.5		132.2	136.4
3.0		114.4	118.0
3.5		98.1	101.2
4.0		85.8	88.5
4.5		76.3	78.7
5.0	117.0	68.7	70.9

Notes:
1. The above tabulated loads are generated from certified ASTM E-1592 testing using BRS's BA 602-8 and BA 603-8 clips and Developmental Industries seamers. ***These design loads are not valid with other clips or seamers.***
2. Intermediate design loads are interpolated from ultimate test loads.
3. Design loads contain a safety factors calculated per AISI.
4. COE design load contains a 1.65 safety factor per COE 07416 Specification.
5. These load capacities are for the panel itself. Frames, purlins, clips, fasteners, and all supports must be designed to resist all loads imposed by the panel.
6. Allowable wind uplift loads have not been increased by 33% as allowed by some codes when wind load controls.
7. This material is subject to change without notice. Contact Building Research Systems for most current values.

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TS-234 Panel

Allowable Wind Uplift Loads - 24 Gage Material 50 ksi

All loads in pounds / SF

Installed with BA-602-12 or BA-603-12 Clip and DI Seamer

TripleLok Seam Test Report: Interpolated

Span	1592 Test Ultimate Load	1592 Design Load	COE Design Load
2.0	217.6	127.8	131.9
2.5		116.8	120.5
3.0		102.6	105.8
3.5		87.9	90.7
4.0		76.9	79.3
4.5		68.4	70.6
5.0	105.0	61.5	63.6

QuadLok Seam Test Report: C1417-2

Span	1592 Test Ultimate Load	1592 Design Load	COE Design Load
2.0	312	183.3	189.1
2.5		166.8	172.1
3.0		140.7	145.1
3.5		120.6	124.4
4.0		105.5	108.9
4.5		93.8	96.8
5.0	143.8	84.4	87.2

Notes:
1. The above tabulated loads are generated from certified ASTM E-1592 testing using BRS's BA 602-12 and BA 603-12 clips and Developmental Industries seamers. ***These design loads are not valid with other clips or seamers.***
2. Intermediate design loads are interpolated from ultimate test loads.
3. Design loads contain a safety factors calculated per AISI.
4. COE design load contains a 1.65 safety factor per COE 07416 Specification.
5. These load capacities are for the panel itself. Frames, purlins, clips, fasteners, and all supports must be designed to resist all loads imposed by the panel.
6. Allowable wind uplift loads have not been increased by 33% as allowed by some codes when wind load controls.
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TS-234 Panel

Allowable Wind Uplift Loads - 24 Gage Material 50 ksi

All loads in pounds / SF

Installed with BA-602-16 or BA-603-16 Clip and DI Seamer

TripleLok Seam Test Report: C1417-1

Span	1592 Test Ultimate Load	1592 Design Load	COE Design Load
2.0	254.8	149.7	154.4
2.5		136.6	140.9
3.0		118.7	122.4
3.5		101.7	104.9
4.0		89.0	91.8
4.5		79.1	81.6
5.0	121.7	71.2	73.8

QuadLok Seam

Span	1592 Test Ultimate Load	1592 Design Load	COE Design Load
2.0			
2.5			
3.0			
3.5			
4.0			
4.5			
5.0			

Notes:
1. The above tabulated loads are generated from certified ASTM E-1592 testing using BRS's BA 602-16 and BA 603-16 clips and Developmental Industries seamers. ***These design loads are not valid with other clips or seamers.***
2. Intermediate design loads are interpolated from ultimate test loads.
3. Design loads contain a safety factors calculated per AISI.
4. COE design load contains a 1.65 safety factor per COE 07416 Specification.
5. These load capacities are for the panel itself. Frames, purlins, clips, fasteners, and all supports must be designed to resist all loads imposed by the panel.
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