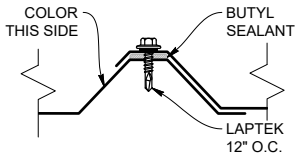
TAYLOR METAL PRODUCTS

Marion R™
Roof & Wall Panel Technical Data Resource

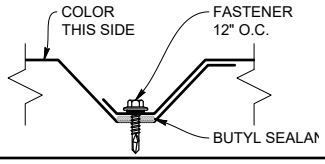
ICC EVALUATION SERVICE®

ICC-ES EVALUATION REPORT #5045 AND #5046 with CBC-CRC Supplement

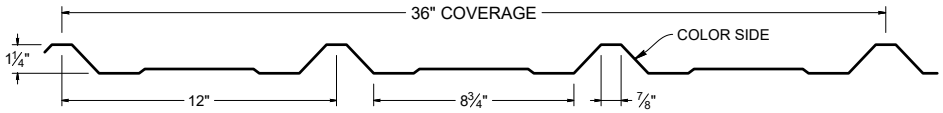
LAP DETAIL



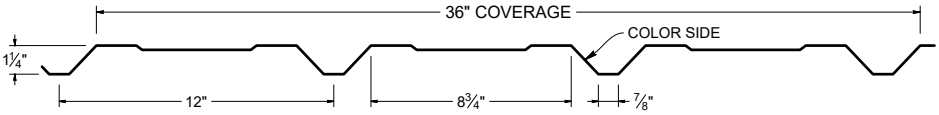
LAP DETAIL



ROOF & WALL PROFILE



OPTIONAL WALL PROFILE



KEY FEATURES

- Manufactured in Salem, OR
- 26, 24 and 22 Tru-Gauge™ and .032” Aluminum
- 1:12 minimum pitch recommended when installed with butyl sealant
- Custom lengths 1’ to 45’ (*For longer length panels, please inquire*)
- Aluminum recommended within 1000 ft of salt water (*not required)*
- Long length flashings available up to 20’ 11”
- Standard trim, custom trim and accessory packages available
- Color matched neoprene washered screws
- Roof and Vertical or Horizontal Wall application
- Perforated options available (*please inquire*)
- Fiberglass & Polycarbonate panels available to match profile
- OverEZee™ retro-fit systems available

TESTING

- ICC-ESR #5045 & #5046 with CBC-CRC Supplement
- Code compliance UL Evaluation Report UL ER #25913-01. Construction No. 30,54,79,104,112,161, 167,184,542
- UL 580 Class 90 - Wind Uplift
- UL 790 Class A (ASTM E108) - Fire rated
- UL 2218 Class 4 - Impact (hail) rated
- ASTM E1680 - Air infiltration (roof)
- ASTM E1646 - Water infiltration (roof)
- ASTM E1592 - Negative structural uniform static air pressure
- ASTM E330 - Positive structural uniform static air pressure
- ASTM E331 - Water infiltration (wall)
- ASTM E283 - Air infiltration (wall)
- ASTM A653/A924 - G90 Galvanized
- ASTM A792 - ZINCALUME®/Galvalume® AZ-50/55
- ASTM B209 - Aluminum Substrate

WEIGHT CHART

MARION “R”	WIDTH	26 GA STEEL	24 GA STEEL	22 GA STEEL	.032 ALUM	.040 ALUM
THICKNESS		0.019”	0.0236”	0.0285”	0.032”	0.040”
WEIGHT/LINFT	36”	2.777 LBS	3.472 LBS	4.193 LBS	1.645 LBS	2.043 LBS
WEIGHT/LSQFT	36”	0.926 LBS	1.157 LBS	1.398 LBS	0.548 LBS	0.721 LBS

ASTM E 1680/E283 Air Penetration	ASTM E 1646/E331 Water Penetration
25 PSF<0.01 CFM/ft²-PASS	50 PSF - Pass
STRUCTURAL TESTING ASTM E1592 AND E330 (PBR testing)	
Intertek Test Result M2748.02-301-44 R0	

TAYLOR METAL PRODUCTS

NEGATIVE LOAD CHART WITH 3 SCREWS

				SECTION PROPERTIES						ALLOWABLE UNIFORM LOADS, psf For various clip spacings (i.e. span values)											
				Top in Compression			Bottom in Compression			Inward Load (Negative)						Outward Load (Positive)					
Gauge	Width, in.	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	3'	4'	5'	6'	7'	8'	3'	4'	5'	6'	7'	8'
26	36	80	0.85	0.0453	0.0399	0.0448	0.0267	0.0321	0.0391	130.3	73.3	46.9	32.6	23.9	18.3	149.3	84.0	53.8	37.3	27.4	21.0
24	36	50	1.19	0.0633	0.0555	0.0639	0.0363	0.0441	0.0553	153.6	86.4	55.3	38.4	28.2	21.6	177.5	99.8	63.9	44.4	32.6	25.0
22	36	50	1.51	0.0867	0.0761	0.0989	0.0500	0.0606	0.0751	208.6	117.3	75.1	52.2	38.3	29.3	274.7	154.5	98.9	68.7	50.5	38.6

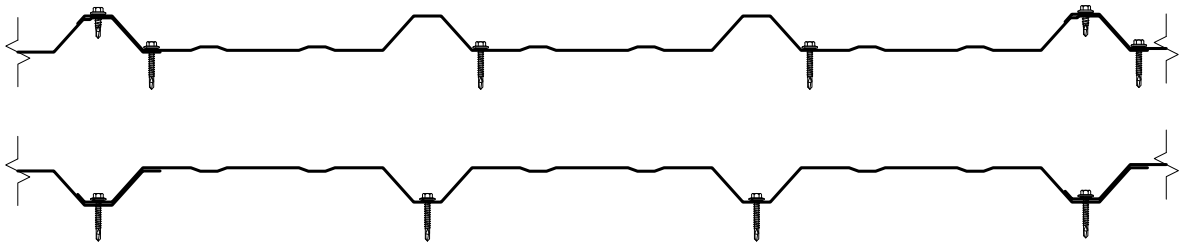
1. Theoretical section properties for still panels have been calculated per AISI S100 Specifications for Design of Cold-Formed Steel Structural Members. Intertek M7269.01-301-44 R0
2. Charted Load/Span values are based on ASTM E1592-05, divided by a 2.00 Factor-of-Safety.
3. Minimum recommended substrate (structure) recommendations:
   A. Open-Framing (i.e. purlins)-16ga (design thickness 0.0566")
   B. Plywood/OSB-15/32" or thicker is recommended to assure an effective degree of fastener thread engagement.
   C. METAL DECK - 22ga (design thickness 0.0283")

POSITIVE LOAD CHART WITH 3 SCREWS

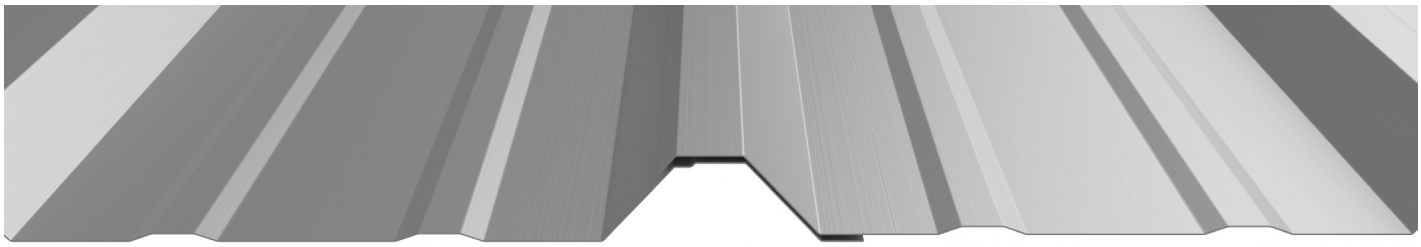
				SECTION PROPERTIES						ALLOWABLE UNIFORM LOADS, psf For various clip spacings (i.e. span values)									
				Top in Compression			Bottom in Compression			Positive Load									
Width, in.	Gauge	Yield ksi	Weight psf	I_{xx} $in^4/ft.$	$I_{xx\ (eff)}$ $in^4/ft.$	S_{xx} in^3/ft	I_{xx} $in^4/ft.$	$I_{xx\ (eff)}$ $in^4/ft.$	S_{xx} in^3/ft	2'	2.5'	3'	3.5	4'	4.5'	5'	5.5'	6'	8'
36	26	80	0.85	0.0453	0.0399	0.0448	0.0267	0.0321	0.0391	192.3	153.8	128.2	109.9	96.1	77.2	62.6	51.7	43.4	24.4
36	24	50	1.19	0.0633	0.0555	0.0639	0.0363	0.0441	0.0553	191.4	153.1	127.6	109.4	86.4	68.3	55.3	45.7	38.4	21.6
36	22	50	1.51	0.0867	0.0761	0.0989	0.0500	0.0606	0.0751	306.4	245.1	204.2	153.3	117.3	92.7	75.1	62.1	52.2	29.3
36	0.032"	19	0.52	0.0967	0.0967	0.0990	0.0967	0.0967	0.3023	40.4	32.3	26.9	23.1	20.2	17.9	16.2	14.7	13.5	10.1

1. Theoretical section properties for Steel panel shave been calculated per 2020 AISI S100 North America Specifications for the Design of Cold-Formed Steel Structural Member.
2. Allowable loads for Steel panels are calculated in accordance with 2020 AISI S100 specifications considering bending , shear, combined bending and shear and deflection. Allowable load considers a 3 or more equal span condition.
3. When panels are installed over solid or closely fitted sheathing, the capacity is limited to the capacity of the underlying sheathing.

FASTENER DIAGRAM (NOT TESTED)



PANEL ATTACHMENT



Fastener Notes:

- When possible, lap panels away from prevailing wind direction.
- 15/32" OSB: #14 GP Neoprene Washered fastener. Screws should be long enough to penetrate through the bottom of the plywood by 3/8".
- 15/32" Plywood: #14 GP Neoprene Washered fastener. Screws should be long enough to penetrate through the bottom of the plywood by 3/8".
- Dimensional lumber: #10 GP. Screws should penetrate the lumber 1".
- 16GA (or less) steel furring: #12 Fastener with DP-1
- Sidelaps fasten with #14 LapTek screws.
- All trim screws used for roof or wall applications should have EPDM sealing washers.
- Fastener spacing is based on project specific structural requirements. Consulant a licensed engineer.

TAYLOR METAL PRODUCTS

NEGATIVE LOAD CHART 6 SCREWS

				SECTION PROPERTIES						ALLOWABLE UNIFORM LOADS, psf For various clip spacings (i.e. span values)						
				Top in Compression			Bottom in Compression			Negative 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'
36	26	80	0.85	0.0453	0.0399	0.0448	0.0267	0.0321	0.0391	100.0	92.5	85.0	77.5	70.0	62.5	55.0
36	24	50	1.19	0.0633	0.0555	0.0639	0.0363	0.0441	0.0553	175.0	156.7	138.3	120.0	101.7	83.3	65.0
36	22	50	1.51	0.0867	0.0761	0.0989	0.0500	0.0606	0.0751	200.0	178.3	156.7	135.0	113.3	91.7	70.0
36	0.032"	19	0.52	0.0967	0.0967	0.0990	0.0967	0.0967	0.3023	187.5	165.5	143.3	121.3	99.2	77.1	55.0

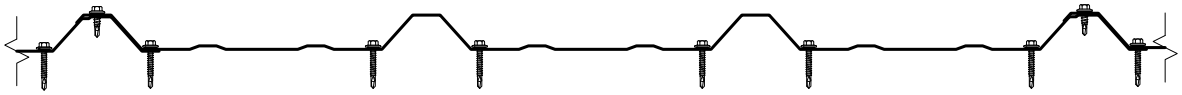
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POSITIVE LOAD CHART WITH 6 SCREWS

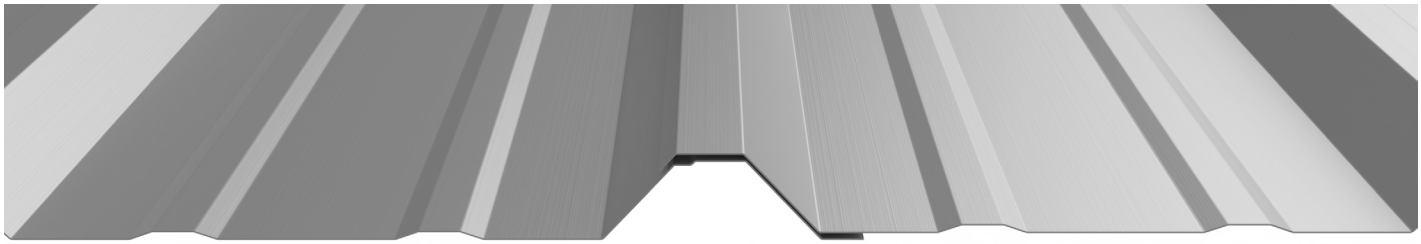
				SECTION PROPERTIES						ALLOWABLE UNIFORM LOADS, psf For various clip spacings (i.e. span values)									
				Top in Compression			Bottom in Compression			Positive Load									
Width, in.	Gauge	Yield ksi	Weight psf	I_{xx} $in^4/ft.$	$I_{xx\ (eff)}$ $in^4/ft.$	S_{xx} in^3/ft	I_{xx} $in^4/ft.$	$I_{xx\ (eff)}$ $in^4/ft.$	S_{xx} in^3/ft	2'	2.5'	3'	3.5	4'	4.5'	5'	5.5'	6'	8'
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Rev. Date 10-26