TAYLOR METAL PRODUCTS

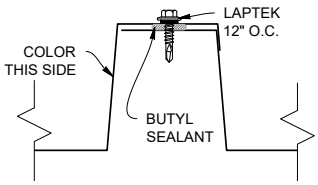
Long Span Series

TMP 3-8-24 Roof & Wall Panel Technical Data Resource

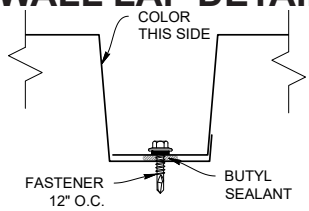
ICC EVALUATION SERVICE®

ICC-ES EVALUATION REPORT #5045 with CBC-CRC Supplement (Coming 2024 siding only)

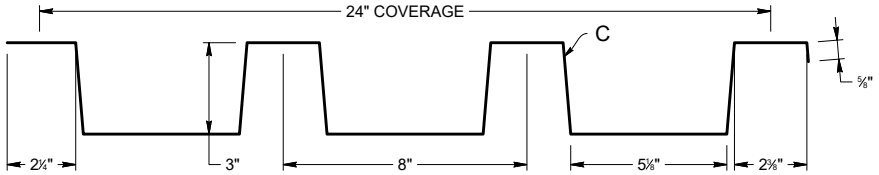
ROOF LAP DETAIL



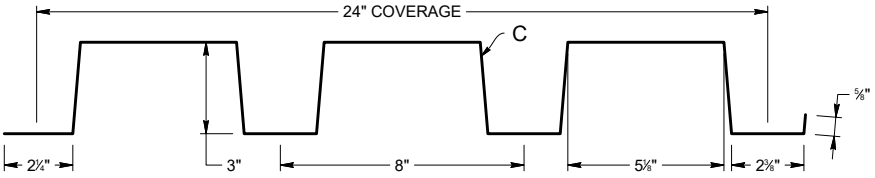
WALL LAP DETAIL



ROOF PROFILE



WALL PROFILE



KEY FEATURES

- 24, 22 Tru-Gauge™ and .032” Aluminum
- Custom 20 & 18 Tru-Gauge™ and .040” Aluminum (please inquire)
- 1:12 minimum pitch recommended when installed with butyl sealant
- Custom lengths 2’ to 20’ 10”
- Standard trim, custom trim and accessory packages available
- Color matched neoprene washered screws
- Roof and Vertical or Horizontal Wall application
- Manufactured in Salem OR, Sacramento CA, and Riverside CA
- OverEZee™ Retro-fit systems available

TESTING

- ICC-ESR #5045 with CBC-CRC Supplement (Coming 2024 siding only)
- ASTM E1680 - Air infiltration (roof)
- ASTM E1646 - Water infiltration (roof)
- ASTM E1592 - 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

TMP 3-8-24	WIDTH	24 GA STEEL	22 GA STEEL	.032 ALUM	.040 ALUM
THICKNESS		0.0236”	0.0285”	0.032”	0.040”
WEIGHT/LINFT	24”	3.485 LBS	4.209 LBS	1.651 LBS	2.064 LBS
WEIGHT/LSQFT	24”	1.743 LBS	2.104 LBS	0.826 LBS	1.032 LBS

ASTM E 1680/E283 Air Penetration	ASTM E 1646/E331 Water Penetration
25 PSF<0.01 CFM/ft²-PASS	50 PSF - PASS

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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			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	1'	1.5'	2'	2.5'	3'	3.5'	4'	4.5'	5'
24	24	50	1.70	0.4370	0.4310	0.1990	0.4190	0.4240	0.2240	195.0	178.8	162.5	146.3	130.0	113.8	97.5	81.3	65.0
24	22	50	2.01	0.5780	0.5710	0.2760	0.5560	0.5620	0.3190	195.0	178.8	162.5	146.3	130.0	113.8	97.5	81.3	65.0
24	20	33	2.46	0.8620	0.8330	0.4480	0.7620	0.7910	0.4620	195.0	178.8	162.5	146.3	130.0	113.8	97.5	81.3	65.0
24	18	33	3.18	1.1950	1.1580	0.6400	1.0700	1.1060	0.6830	195.0	178.8	162.5	146.3	130.0	113.8	97.5	81.3	65.0

1. Theoretical section properties for still panels have been calculated per AISI S100 Specifications for Design of Cold-Formed Steel Structural Members.
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

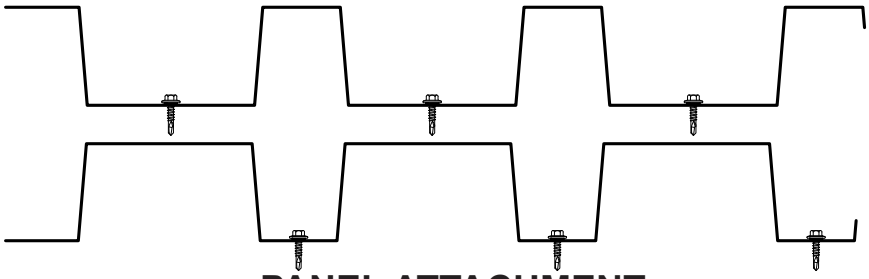
				SECTION PROPERTIES						ALLOWABLE UNIFORM LOADS, psf For various clip spacings (i.e. span values)									
				Top In Compression			Bottom in Compression			Positive Load									
Width, in.	Gauge	Yield ksi	Weight psf	I_{xx} $in^4/ft.$	$I_{xx\ (eff)}$ $in^4/ft.$	S_{xx} in^3/ft	I_{xx} $in^4/ft.$	$I_{xx\ (eff)}$ $in^4/ft.$	S_{xx} in^3/ft	1'	2'	3'	4'	5'	6'	7'	8'	9'	10'
24	24	50	1.70	0.4370	0.4310	0.1990	0.4190	0.4240	0.2240	1016.4	508.2	338.8	254.1	199.0	138.2	101.5	77.7	61.4	49.8
24	22	50	2.01	0.5780	0.5710	0.2760	0.5560	0.5620	0.3190	1370.9	685.5	457.0	342.7	274.2	191.7	140.8	107.8	85.2	69.0
24	20	33	2.46	0.8620	0.8330	0.4480	0.7620	0.7910	0.4620	1293.6	646.8	431.2	323.4	258.7	207.4	152.4	116.7	92.2	74.7
24	18	33	3.18	1.1950	1.1580	0.6400	1.0700	1.1060	0.6830	2075.5	1037.7	691.8	518.9	415.1	296.3	217.7	166.7	131.7	106.7
24	0.032"	19	0.83	1.0160	1.0160	0.5632	1.0160	1.0160	0.7980	162.7	81.4	54.2	40.7	32.6	26.9	19.7	15.1	11.9	
24	0.040"	19	1.03	1.2600	1.2600	0.7290	1.2600	1.2600	0.9870	250.9	125.5	83.6	62.7	50.2	41.8	32.0	24.5	19.4	15.7
24	0.050"	19	1.28	1.5600	1.5600	0.9030	1.5600	1.5600	1.2240	382.7	191.4	127.6	95.7	76.6	63.8	49.5	37.9	29.9	24.2

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.

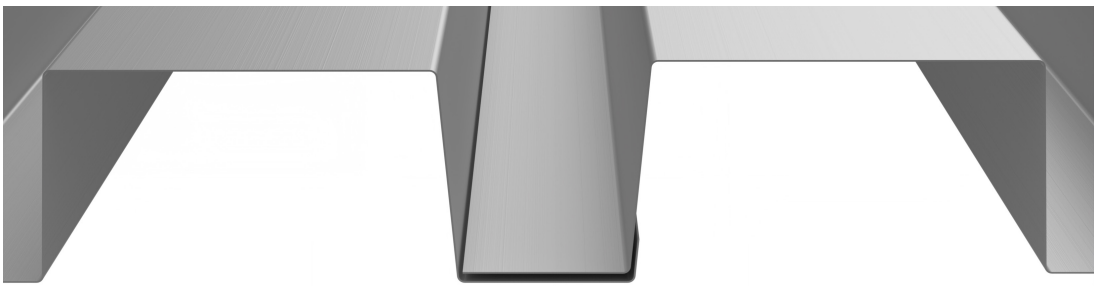
FASTENER DIAGRAM

Roof

Wall



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.

Rev. Date 08-24