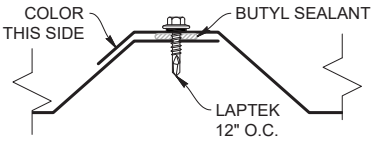
TAYLOR METAL PRODUCTS

HR-34™ CA
Roof & Wall Panel Technical Data Resource

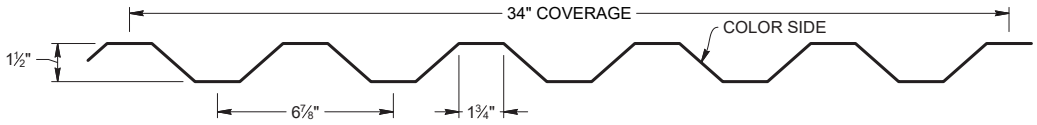
ICC EVALUATION SERVICE®

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

LAP DETAIL



ROOF & WALL PROFILE



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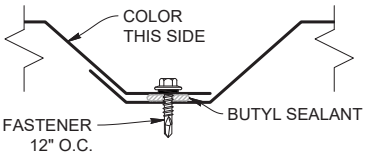
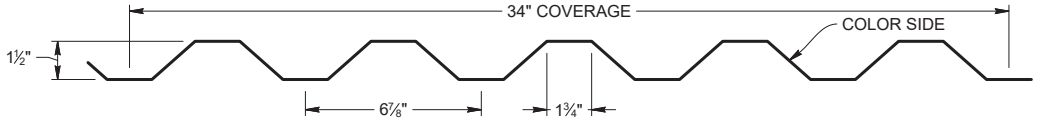


OPTIONAL WALL PROFILE



KEY FEATURES

- 26, 24 and 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 1’ to 45’ (*For longer length panels, please inquire*)
- 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
- Structural panel that will span up to 6’
- Manufactured in Riverside CA
- 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. 137, 244
- 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

HR-34 (CA)	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	34”	2.777 LBS	3.450 LBS	4.166 LBS	1.635 LBS	2.043 LBS
WEIGHT/LSQFT	34”	0.980 LBS	1.218 LBS	1.470 LBS	0.577 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
Intertek Test Result M3026.01-901-44	
Intertek Test Result M3026.01-901-44	
STRUCTURAL TESTING ASTM E1592 AND E330	
Intertek Test Result M2748.04-301-44 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			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'
34	26	80	0.96	0.0702	0.0694	0.0699	0.0675	0.0683	0.0830	87.5	80.4	73.3	66.3	59.2	52.1	45.0
34	24	50	1.18	0.1060	0.1067	0.1233	0.1085	0.1078	0.1337	100.0	90.8	81.7	72.5	63.3	54.2	45.0
34	22	50	1.46	0.1307	0.1317	0.1539	0.1343	0.1333	0.1681	100.0	90.8	81.7	72.5	63.3	54.2	45.0
34	20	33	1.76	0.1767	0.1777	0.2140	0.1802	0.1792	0.2200	105.O	9S.8	86.7	77.5	68.3	59.2	50.0
34	0.032"	19	0.52	0.1690	0.1690	0.2390	0.1690	0.1690	0.2070	112.5	100.8	89.7	78.5	67.3	56.2	45.0
34	0.040"	19	0.65	0.2120	0.2120	0.2970	0.2120	0.2120	0.2570	100.0	90.0	80.0	70.0	60.0	50.0	40.0

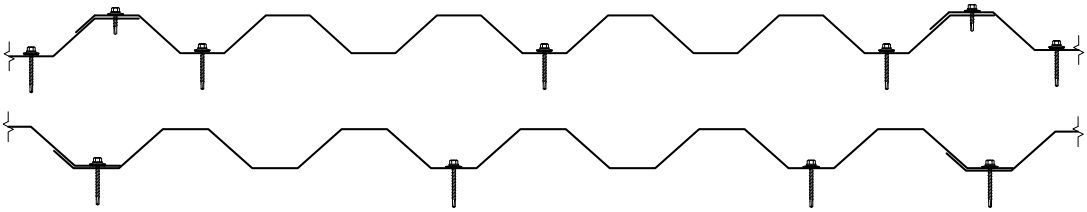
1. Theoretical section properties for still panels have been calculated per AISI S100 Specifications for Design of Cold-Formed Steel Structural Members. Intertek M2748.04-301-44 R0
2. Charted Load/Span values are based on ASTM E1592-05, divided by a 2.00 Factor-of-Safety.
3. Minimum recommended substrate (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

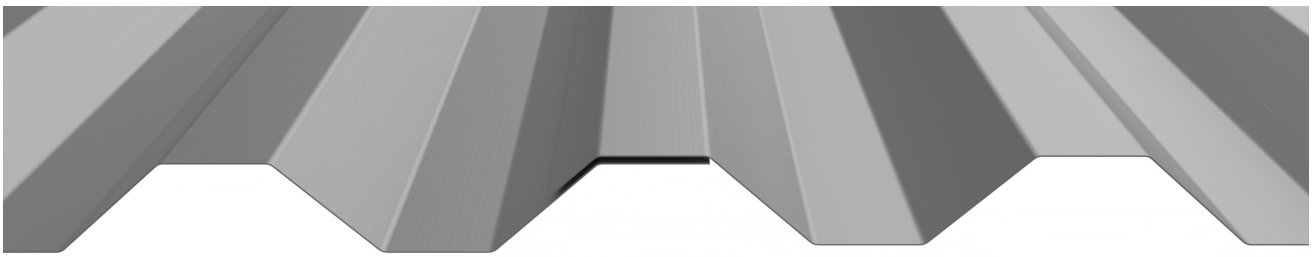
				SECTION PROPERTIES						ALLOWABLE UNIFORM LOADS, psf For various clip spacings (i.e. span values)									
				Top in Compression			Bottom in Compression			Positive Load									
Width, in.	Gauge	Yield ksi	Weight psf	I_{xx} $in^4/ft.$	$I_{xx\ (eff)}$ $in^4/ft.$	S_{xx} in^3/ft	I_{xx} $in^4/ft.$	$I_{xx\ (eff)}$ $in^4/ft.$	S_{xx} in^3/ft	2'	2.5'	3'	3.5'	4'	4.5'	5'	5.5'	6'	8'
34	26	80	0.96	0.0702	0.0694	0.0699	0.0675	0.0683	0.0830	234.6	187.6	156.4	134.0	117.3	104.2	93.8	85.3	77.7	43.7
34	24	50	1.18	0.1060	0.1067	0.1233	0.1085	0.1078	0.1337	243.6	194.9	162.4	139.2	121.8	108.3	97.5	88.6	81.2	48.2
34	22	50	1.46	0.1307	0.1317	0.1539	0.1343	0.1333	0.1681	318.2	254.6	212.1	181.8	159.1	141.4	127.3	115.7	106.1	60.1
34	20	33	1.76	0.1767	0.1777	0.2140	0.1802	0.1792	0.2200	380.0	304.0	253.3	217.1	190.0	168.9	142.7	117.9	99.1	55.7
34	0.032"	19	0.52	0.1690	0.1690	0.2390	0.1690	0.1690	0.2070	63.2	50.6	42.1	36.1	31.6	28.1	25.3	229.0	21.1	
34	0.040"	19	0.65	0.2120	0.2120	0.2970	0.2120	0.2120	0.2570	98.6	78.9	65.8	56.4	49.3	43.8	39.5	35.9	32.9	24.7

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



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 WITH 5 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'
34	26	80	0.96	0.0702	0.0694	0.0699	0.0675	0.0683	0.0830	175.0	157.5	140.0	122.5	105.0	87.5	70.0
34	24	50	1.18	0.1060	0.1067	0.1233	0.1085	0.1078	0.1337	200.0	180.0	160.0	140.0	120.0	100.0	80.0
34	22	50	1.46	0.1307	0.1317	0.1539	0.1343	0.1333	0.1681	200.0	178.3	156.7	135.0	113.3	91.7	70.0
34	20	33	1.76	0.1767	0.1777	0.2140	0.1802	0.1792	0.2200	200.0	179.2	158.3	137.5	116.7	95.8	75.0
34	0.032"	19	0.52	0.1690	0.1690	0.2390	0.1690	0.1690	0.2070	120.0	108.3	96.7	85.0	73.3	61.7	50.0
34	0.040"	19	0.65	0.2120	0.2120	0.2970	0.2120	0.2120	0.2570	200.0	177.1	154.2	131.3	108.3	85.4	62.5

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   C. METAL DECK - 22ga (design thickness 0.0283")

POSITIVE LOAD CHART WITH 5 SCREWS

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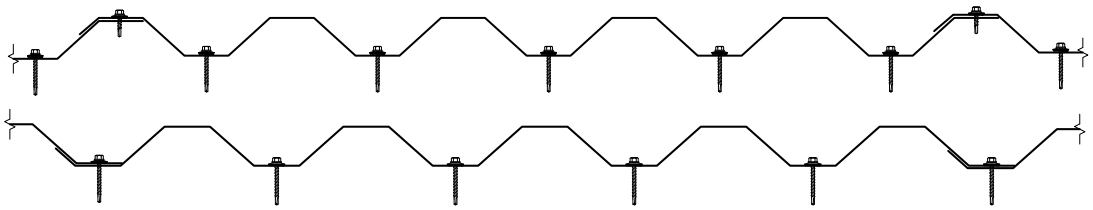

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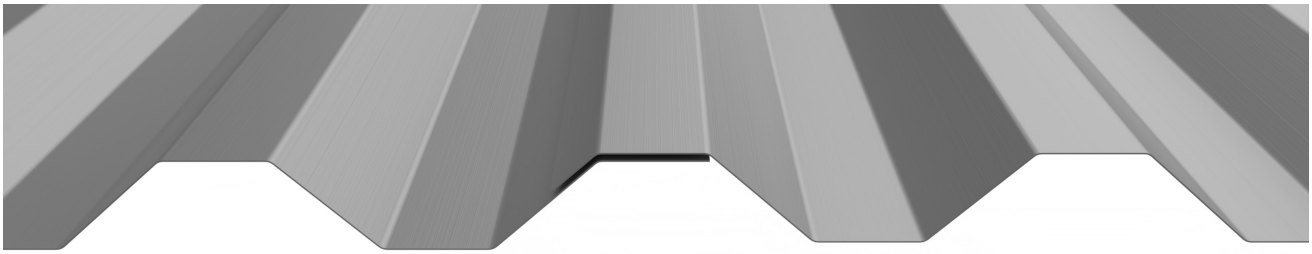

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Rev. Date 08-24