

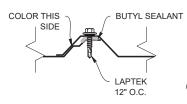
GR-7 TM Roof & Wall Panel Technical Data Resource

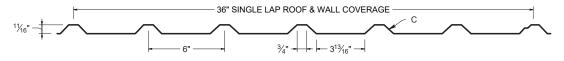


ICC-ES EVALUATION REPORT #5045 AND #5046 with CBC-CRC Supplement coming 2024

LAP DETAIL

ROOF & WALL PROFILE





GR-7™ manufactured in 29 gauge does not include a purlin bearing leg on the underlap rib.

KEY FEATURES

- 29, 26, 24 and 22 Tru-Gauge[™] and Rusteel Plus and .032" Aluminum
- 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
- Perforated options available (please inquire)
- Fiberglass panels available to match profile
- Manufactured in Salem OR and Riverside CA
- OverEZee[™] retro-fit systems available

TESTING

- Code compliance UL Evaluation Report UL ER #25913-01. Construction No. 137, 244
- UL 790 Class A (ASTM E108) Fire rated
- UL 2218 Class 4 Impact (hail) rated
- ASTM A653/A924 G90 Galvanized
- ASTM A792 Zincalume/Galvalume AZ-50/55
- ASTM E1680 Air infiltration (roof)
- ASTM E1646 Water infiltration (roof)
- ASTM E331 Water infiltration (wall)
- ASTM E283 Air infiltration (wall)

WEIGHT CHART

GR-7	WIDTH	29 GA STEEL	26 GA STEEL	24 GA STEEL	22 GA STEEL	.032 ALUM	.040 ALUM
THICKNESS		0.0136"	0.019"	0.0236"	0.0285"	0.032"	0.040"
WEIGHT/LINFT	36"	1.89 LBS	2.713 LBS	3.37 LBS	4.069 LBS	1.597 LBS	1.996 LBS
WEIGHT/LSQFT	36"	0.63 LBS	0.904 LBS	1.123 LBS	1.356 LBS	0.532 LBS	0.665 LBS

ASTM E 1680/E283	ASTM E 1646/E331
Air Penetration	Water Penetration
25 PSF<0.01 CFM/ft ² -PASS	50 PSF - Pass



POSITIVE & NEGATIVE LOAD CHART

SECTION PROPERTIES									ALLOWABLE UNIFORM LOADS, psf For various clip spacings (i.e. span values)																	
			Top II	n Compre	ssion	Bottom in Compression			Inward Load (Negative)									Outward Load (Positive)								
Gauge	Width, in.	. Yield ksi	Weight psf	l _{xx} in ⁴ /ft.	I _{xx (eff)} in ⁴ /ft.	S _{xx} in ³ /ft	l _{xx} in ⁴ /ft.	I _{xx (eff)} in ⁴ /ft.	S _{xx} in ³ /ft	2.5'	3'	3.5	4'	4.5'	5'	5.5'	6'	2.5'	3'	3.5'	4'	4.5'	5'	5.5'	6'	
29	36	80	0.67	0.0093	0.0083	0.0180	0.0060	0.0070	0.0170	108.8	75.6	55.5	42.5	33.6	27.2	22.5	18.9	115.2	80.0	58.8	45.0	35.6	28.8	23.8	20.0	
26	36	80	1.02	0.0143	0.0127	0.0289	0.0087	0.0103	0.0257	164.5	114.2	83.9	64.3	50.8	41.1	34.0	28.6	185.0	128.4	94.4	72.3	57.1	46.2	38.2	32.1	
24	36	50	1.14	0.0203	0.0185	0.0414	0.0140	0.0158	0.0363	145.2	100.8	74.1	56.7	44.8	36.3	30.0	25.2	165.6	115.0	84.5	64.7	51.1	41.4	34.2	28.8	
22	36	50	1.42	0.0267	0.0248	0.0516	0.0200	0.0219	0.0469	187.6	130.3	95.7	73.3	57.9	46.9	38.8	32.6	206.4	143.3	105.3	80.6	63.7	51.6	42.6	35.8	

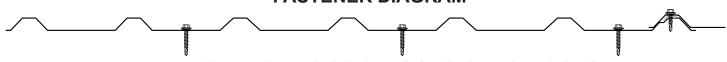
- 1. Theoretical section properties have been calculated per AISI 2012 North American Specifications for Design of Cold-Formed Steel Structural Members.
- 2. Allowable load is calculated in accordance with AISI 2012 specifications considering bending, shear, combined bending and shear and deflection. Allowable load considers a 3 or more equal span condition.
- 3. Allowable load does not address web crippling, fasteners, connection strength or support material.
- 4. Panel weight is not considered.
- 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.

POSITIVE & NEGATIVE LOAD CHART

SECTION PROPERTIES								ALLOWABLE UNIFORM LOADS, psf For various clip spacings (i.e. span values)																			
			Top I	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	2.5'	3'	3.5'	4'	4.5'	5'	5.5'	6'	2.5'	3'	3.5'	4'	4.5'	5'	5.5'	6'		
29	36	80	0.67	0.0093	0.0083	0.0180	0.0060	0.0070	0.0170	108.8	75.6	51.2	34.3	24.1	17.6	13.2	10.2	115.2	67.9	42.7	28.6	20.1	14.7	11.0	8.5		
26	36	80	1.02	0.0143	0.0127	0.0289	0.0087	0.0103	0.0257	164.5	114.2	78.0	52.3	36.7	26.8	20.1	15.5	173.6	100.5	63.3	42.4	29.8	21.7	16.3	12.6		
24	36	50	1.14	0.0203	0.0185	0.0414	0.0140	0.0158	0.0363	145.2	100.8	74.1	56.7	44.8	36.3	29.3	22.6	165.6	115.0	84.5	64.7	45.7	33.3	25.0	19.3		
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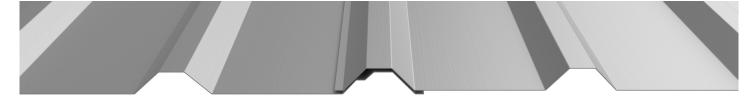
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- 4. Panel weight is not considered.
- 5. Load/Span values are based on theoretical computations and not load testing.
- 6. Deflection consideration is limited by a maximum deflection ratio of L/120 of span.
- 7. Allowable loads do not include a 1/3 stress increase for wind.

FASTENER DIAGRAM



29 gauge does not include the purlin bearing leg on the underlap rib

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.

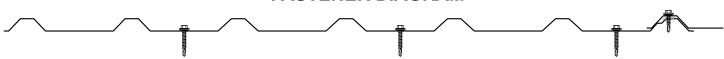


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Gauge		. Yield ksi		I _{xx} in ⁴ /ft.	I _{xx (eff)} in ⁴ /ft.	S _{xx} in ³ /ft	l _{xx} in ⁴ /ft.	I _{xx (eff)} in ⁴ /ft.	S _{xx} in ³ /ft	2.5'	3'	3.5'	4'	4.5'	5'	5.5'	6'	2.5'	3'	3.5'	4'	4.5'	5'	5.5'	6'		
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22	36	50	1.42	0.0267	0.0248	0.0516	0.0200	0.0219	0.0469	187.6	130.3	95.7	68.0	47.8	34.8	26.2	20.2	206.4	143.4	89.7	60.1	42.2	30.8	23.1	17.8		

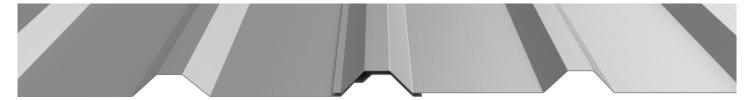
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