CBC STEEL BUILDINGS

SS24

PANEL SPECIFICATIONS

PRODUCT NAME
SS24 Roof system for new roofing or retrofit roofing.

MANUFACTURER
CBC Steel Buildings
1700 E. Louise Avenue
Lathrop, CA 95330
Phone: 209-983-0910

PRODUCT DESCRIPTION
Basic Use: For roofing new buildings or reroofing existing ones of any construction type. Specially designed roof panels are secured to the structural system with concealed clips. A mechanical seaming tool locks the seam securely to insure against leaks. Sliding clips provide for thermal expansion along the slope. SS24 panels have 2" high (3" high with seam) by 4-3/4" wide ribs on 24" centers. Net width coverage of each panel is 2', and panels are available in standard lengths up to 45'. Longer lengths are available upon request.

Materials: SS24 panels are 24 or 22 gage 50,000 psi steel. Exterior finish is either AZ50 aluminum-zinc alloy-coated, pre-painted G90 zinc-coated (galvanized) or pre-painted AZ50 aluminum-zinc alloy-coated. Pre-painted panels have CBC's Premier Pacific Kynar 500 Finish.

The SS24 clip is a two part assembly. The tab portions are 2-1/2" wide, die formed of SAE 1050 high carbon spring steel and heat treated to Rockwell 45C to 50C with fluorocarbon coating for corrosion resistance, or 301 stainless steel. The base portion of the clip is 2-1/4" or 3-1/4" (for thermal blocks) in height. It is die formed from 12 gage, zinc-coated (galvanized) steel. Total expansion capability of the clip assembly is 2-1/2".

SS24 sidelaps have factory applied mastic, Sika Sika Caulk 501 or equal. Its composition is 91% solids by weight. Service temperature range is -60ºF to +250ºF. The material meets or surpasses requirements of Federal Specification TT-C-1796A, Type I, Class A.

Endlaps, roof flashing laps, ridges and eave closures are sealed with tape mastic, Sika Sika Tape TC-95 or equal. The material is non-staining, non-corrosive, non-toxic and non-volatile. Composition is 100% solid ethylene propylene copolymer tape. Service temperature is -60ºF to +212ºF. The material meets or surpasses Federal Specification TT-C-1796A, Type II, Class B. Caulk: Eaves, endlaps, ridge and eave closures are sealed with non-skinning butyl caulk, Sika, Sika Caulk 501 or equal. Its composition is 91% solids by weight. Service temperature range is -60°F to +250°F. The material meets or surpasses requirements of Federal Specification TT-C-1796A, Type I, Class A.

All gutter and downspout joints, and roof accessories are sealed with polyurethane caulk, Sika SikaFlex 219LM or equal. It meets or surpasses Federal Specification TT-S-00230C, Type II, Class A.

SS24 roof panel fasteners shall be No. 12 x 1-1/4" self-drilling carbon steel screws with an assembled EPDM bond seal washer hex head.

SS24 panel clips are attached to the purlins with self-drilling carbon steel No. 12 hex head, cadmium or zinc plated screws.

TECHNICAL DATA
The SS24 panel has received a Class 90 Wind Uplift rating by Underwriters Laboratories when tested in accordance with test procedure UL 580. This panel has also been tested in accordance with Air Infiltration, ASTM E1680 and Water Penetration, ASTM E1646. This panel has received a Class A fire rating when tested in accordance with test procedure ASTM E108.

INSTALLATION
Panels are joined at the sidelap with an interlocking seam standing one inch above the major rib. Panel sidelaps are seamed by a special mechanical seaming tool. Sidelap sealer is factory applied. Roof systems are installed by CBC Authorized Builders. Installation may be incorporated with a light gage structural system.

AVAILABILITY
For availability, contact
Estimating Department
CBC Steel Buildings
Phone: 209-983-0910

WARRANTY
Twenty-year material, and thirty five-year paint finish warranties are available. Twenty-year weathertightness warranties can be ordered.

MAINTENANCE
Only normal routine maintenance is required over the life of the panels.

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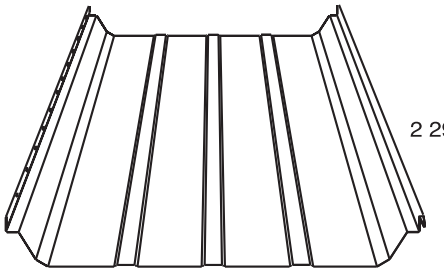
PRODUCT NOTES

A certain amount of waviness called "oilcanning" may exist in this panel. Minor waviness of the panel is not sufficient cause for rejection, because oilcanning does not affect the structural integrity of the panel.

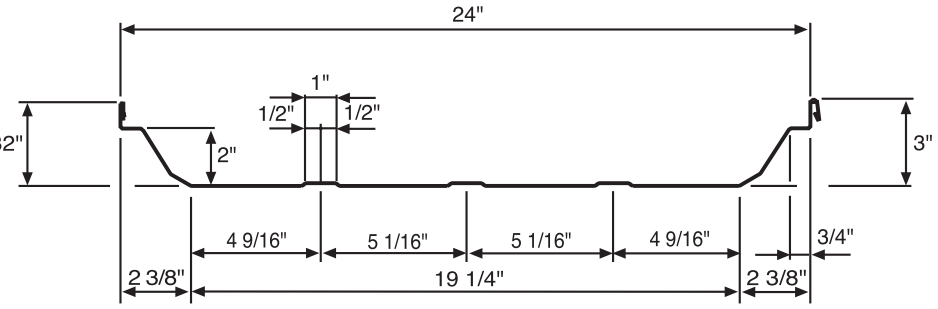
Standing Seam Panels in general are known for their tendency to rumble in high winds if insulation is not used. SS24 is no different. Under no circumstances should SS24 be used without blanket insulation between the panel and the purlin/bar joist.

NOTE: R-19 maximum insulation suggested with Thermo Spacer. R-12 maximum insulation suggested without Thermo Spacer.

CBC Steel Buildings reserves the right to revise all standard specifications and information.



PANEL PROFILE



CROSS SECTION

Engineering Properties of CBC's SS24 Panel								
	Base Metal Thickness (Inches)	Total Thickness (Inches)	Panel Weight Square Ft.	Top In Compression		Bottom In Compression		Fb ksi
				Ix In4/ft.	Sx In3/ft.	Ix In4/ft.	Sx In3/ft.	
24 Gage	0.0224	0.0242	1.20	0.121	0.076	0.122	0.077	30
22 Gage	0.030	0.0318	1.59	0.165	0.105	0.178	0.107	30

	Number of Spans	Maximum Total Uniform Load in PSF				
		L = 3'-0"	3'-4"	4'-0"	4'-6"	5'-0"
24 Gage Steel	1	169	137	95	75	61
	2	171	139	96	76	62
	3	214	173	120	95	77
	4	200	162	112	89	72
22 Gage Steel	1	233	189	131	104	84
	2	238	193	134	106	86
	3	297	241	167	132	107
	4	278	225	156	123	100

1. Section properties have been calculated in accordance with the 1996 AISI specification for the design of cold-formed steel structural members.
2. Minimum yield strength of steel is 50,000 psi.
3. Steel panels are either aluminum-zinc alloy or G-90 coated. The base metal thickness shown is the minimum design thickness and was used in determining section properties.
4. For loads shown, deflections are less than L/150.
5. For wind loads the tabulated values can be multiplied by 1.33.