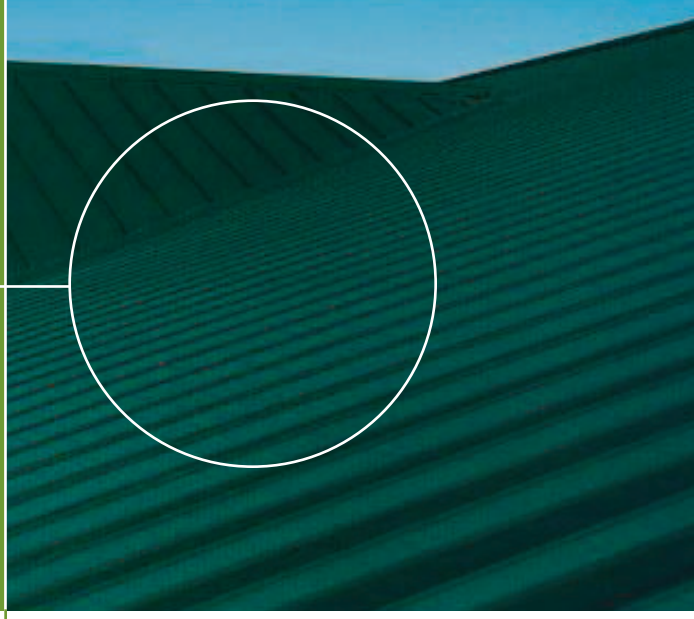
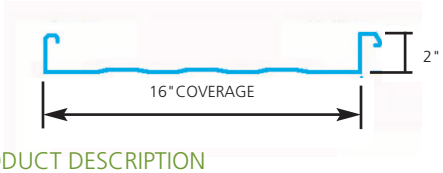
BattenLok®HS/CRP16



	FEATURE	BENEFIT
1	Fewer exposed fasteners (80% less) than traditional side lap panels	Superior weathertightness and enhanced appearance.
2	Roof runs without end lap panels may be erected from either direction.	Facilitates installation.
3	Air infiltration and water penetration tests under ASTM E283 and E331 methods performed on side lap panels	Specifiers prefer minimal air infiltration and water penetration
4	UL 90	Reduced insurance costs
5	Panel has striations and embossing available.	Minimizes oil canning
6	Standard factory applied mastic applied to inside of female leg	Ensures watertight fit and facilitates installation
7	Swaged end laps	Facilitates installation and enhances appearance
8	Vertical leg	Superior transition to hip, valleys and roof openings
9	Allows architectural design flexibility	Creates economical weather-tight designed buildings
10	Roof to wall transition.	Provides a trimless eave
11	Tall or short floating clips or fixed clips are available	Allows for better roof expansion and contraction, improves weathertightness and provides for variations in insulation thicknesses.
12	Thermal blocks	Improved energy efficiency
13	Panels are available in Signature® 200 and 300 Energy Star® paint.	25-year finish warranty.



PRODUCT DESCRIPTION

Description:
A unique feature of this panel is a vertical leg that is a side joint that is mechanically seamed with an electric seamer for a weathertight finish. This panel features concealed clips and easy to handle 16" wide panels custom cut to the desired length. This panel can be installed directly over purlins or bar joists.

Gauge:
24 (Standard) with 22 Gauge available on request

Lengths:
Maximum 55' (Standard), other lengths are available as special requests

Dimensions:
16’ wide by 2” high (other widths available as special order)

Panel Attachment:
A choice of concealed fastening clips is available for this panel system including UL rated clips. Low and High clips are available which are fixed or floating. Floating clips accommodate thermal movement.

Finish:
Galvalume Plus® and Signature® Series.

Usage:
This panel is a structural panel that spans up to five feet on purlins, or can be used as an architectural panel over solid deck. This flat part of the panel is designed with striations or striations with pencil ribs as an option to minimize oil-canning. It is in compliance with many industry codes.

Limitations:
Recommended for roof slopes of 1/2:12 or greater. Oil canning is not a reason for rejection. Panel does not brace secondary.

Ceco Building Systems
an NCI Company

BattenLok®HS/CRP16

ALLOWABLE UNIFORM LOADS IN POUNDS PER SQUARE FOOT

24 GAUGE (FY = 50 KSI)

SPAN TYPE	LOAD TYPE	SPAN IN FEET						
		2.5	3.0	3.5	4.0	4.5	5.0	5.5
SINGLE	LIVE	162.0	135.0	115.7	101.3	90.0	74.0	61.1
2-SPAN	LIVE	162.0	128.1	94.1	72.1	56.9	46.1	38.1
3-SPAN	LIVE	162.0	135.0	115.7	90.1	71.2	57.6	47.6
4-SPAN	LIVE	162.0	135.0	109.8	84.1	66.5	53.8	44.5

22 GAUGE (FY = 50 KSI)

SPAN TYPE	LOAD TYPE	SPAN IN FEET						
		2.5	3.0	3.5	4.0	4.5	5.0	5.5
SINGLE	LIVE	233.4	194.5	166.7	145.9	123.0	99.7	82.4
2-SPAN	LIVE	233.4	184.6	135.6	103.8	82.1	66.5	54.9
3-SPAN	LIVE	233.4	194.5	166.7	129.8	102.6	83.1	68.7
4-SPAN	LIVE	233.4	194.5	158.3	121.2	95.8	77.6	64.1

SECTION PROPERTIES

			NEGATIVE BENDING			POSITIVE BENDING		
PANEL GAUGE	**Fy** (ksi)	**WEIGHT** (psf)	**Ixe** ($in.^4/ft.$)	**Sxe** ($in.^3/ft.$)	**Maxo** (kip-in.)	**Ixe** ($in.^4/ft.$)	**Sxe** ($in.^3/ft.$)	**Maxo** (kip-in.)
24	50	1.29	0.0644	0.0578	1.7294	0.1517	0.0926	2.7736
22	50	1.65	0.0902	0.0832	2.4923	0.2033	0.1248	3.7370

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NOTES:

1 Allowable loads are based on uniform span lengths and Fy = 50 ksi.

2 LIVE LOAD is limited by bending, shear, combined shear and bending.

3 Above loads consider a maximum deflection ratio of L/180.

4 The weight of the panel has not been deducted from the allowable loads.

5 THE ABOVE LOADS ARE NOT FOR USE WHEN DESIGNING PANELS TO RESIST WIND UPLIFT.

6 Please contact manufacturer or manufacturer's website for most current allowable wind uplift loads.

7 The use of any field seaming machine other than that provided by the manufacturer may damage the panels, void all warranties and will void all data.

NOTES:

1 All calculations for the properties of **BattenLok®HS/CRP16** panels are calculated in accordance with the 2001 edition of the *North American Specification For Design of Cold-Formed Steel Structural Members*.

2 **Ixe** is for deflection determination.

3 **Sxe** is for bending.

4 **Maxo** is allowable bending moment.

5 All values are for one foot of panel width.

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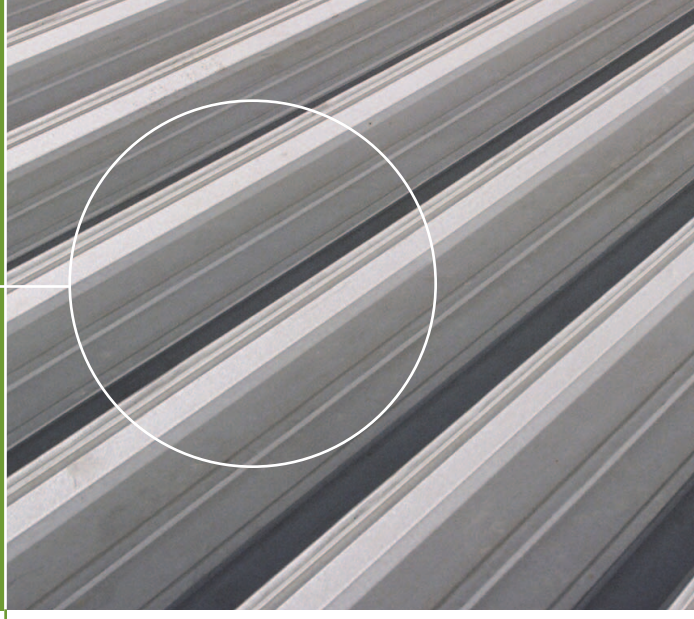
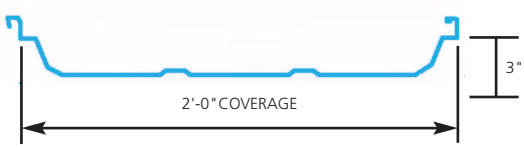
BLOK 0409-10M

Double-Lok®/CXP



	FEATURE	BENEFIT
1	Panel penetration is eliminated over the entire building envelope other than at the end laps and panel ends which are connected by a compression joint.	Assurance of a weathertight building envelope
2	Factory notched at both ends with pre-punched holes	Field installation efficiency is maximized with installation allowed from either end of building or on both sides simultaneously.
3	End laps feature a 16 gauge backup plate with pre-punched holes.	Allows solid connection at end laps plus proper fastener spacing. Pre-punched holes improve installation; assure proper panel placement.
4	Fewer exposed fasteners (by 80%) than traditional side lap panels	Increased weathertightness
5	Air infiltration and water penetration tests under ASTM E283 and E331 methods performed on side lap panels	Assures specifiers of minimal air infiltration and water penetration
6	Signature® 300 paint system	25-year finish warranty.
7	Tall or short clips	Maximizes insulation systems options including 1" thermal spacers at the purlins
8	Panel side laps feature a factory applied sealant.	Facilitates weathertight construction and ease of installation
9	UL 90 and FM rated	Lower insurance costs
10	Optional product and weathertightness warranties	Adds to customer confidence



PRODUCT DESCRIPTION

Description:
A metal standing seam roofing product attached to sub-framing using a variety of concealed, interlocking clips that provide for minimum panel penetrations. This panel can be used on new construction as well as retrofit on existing structures. This panel design provides a high degree of weathertightness.

Gauge:
24 (Standard) with 22 gauge available on request

Lengths:
55' maximum is standard but longer lengths available by special request

Dimensions:
24", 18" and 12" wide by 3" deep

Fasteners:
Concealed fastening system with floating clips. The clips are available as floating or fixed. Two different clip heights are available to allow for insulation.

Finish:
Galvalume Plus® and Signature® Series.

Usage:
New and retrofit applications.

Limitations:
Panel does not brace secondary. Recommended for roof slopes of 1/4:12 or greater. When using the fixed clip we recommend for double slope buildings 200' wide or less and single slope buildings 100' wide or less. (May vary upon extreme weather conditions.) Oil-canning is not a reason for rejection.

Ceco Building Systems
an NCI Company

Double-Lok®/CXP

ALLOWABLE UNIFORM LOADS IN POUNDS PER SQUARE FOOT

24 GAUGE (FY = 50 KSI)

SPAN TYPE	LOAD TYPE	SPAN IN FEET						
		2.5	3.0	3.5	4.0	4.5	5.0	5.5
SINGLE	LIVE	204.0	170.0	145.7	127.5	113.3	102.0	86.2
2-SPAN	LIVE	204.0	170.0	145.7	123.4	97.5	79.0	65.3
3-SPAN	LIVE	204.0	170.0	145.7	127.5	113.3	98.7	81.6
4-SPAN	LIVE	204.0	170.0	145.7	127.5	113.3	92.2	76.2

22 GAUGE (FY = 50 KSI)

SPAN TYPE	LOAD TYPE	SPAN IN FEET						
		2.5	3.0	3.5	4.0	4.5	5.0	5.5
SINGLE	LIVE	296.9	247.5	212.1	185.6	165.0	136.3	112.7
2-SPAN	LIVE	296.9	247.5	212.1	173.9	137.4	111.3	92.0
3-SPAN	LIVE	296.9	247.5	212.1	185.6	165.0	139.1	115.0
4-SPAN	LIVE	296.9	247.5	212.1	185.6	160.4	129.9	107.4

SECTION PROPERTIES

			NEGATIVE BENDING			POSITIVE BENDING		
PANEL GAUGE	**Fy** (ksi)	**WEIGHT** (psf)	**Ixe** ($in.^4/ft.$)	**Sxe** ($in.^3/ft.$)	**Maxo** (kip-in.)	**Ixe** ($in.^4/ft.$)	**Sxe** ($in.^3/ft.$)	**Maxo** (kip-in.)
24	50	1.23	0.1507	0.0989	2.9619	0.3224	0.1307	3.9132
22	50	1.56	0.2059	0.1394	4.1747	0.4205	0.1708	5.112

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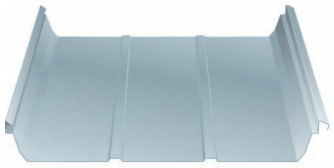
NOTES:

1. Allowable loads are based on uniform span lengths and Fy = 50 ksi.
2. LIVE LOAD is limited by bending, shear, combined shear and bending.
3. Above loads consider a maximum deflection ratio of L/180.
4. The weight of the panel has not been deducted from the allowable loads.
5. THE ABOVE LOADS ARE NOT FOR USE WHEN DESIGNING PANELS TO RESIST WIND UPLIFT.
6. Please contact manufacturer or manufacturer's website for most current allowable wind uplift loads.
7. The use of any field seaming equipment or accessories including but not limited to clips, fasteners, and support plates (eave, backup, rake, etc.) other than those provided by the manufacturer may damage the panels, void all warranties and will void all data.

NOTES:

1. All calculations for the properties of **Double-Lok®/CXP** panels are calculated in accordance with the 2001 edition of the *North American Specification For Design of Cold-Formed Steel Structural Members*.
2. **Ixe** is for deflection determination.
3. **Sxe** is for bending.
4. **Maxo** is allowable bending moment.
5. All values are for one foot of panel width.



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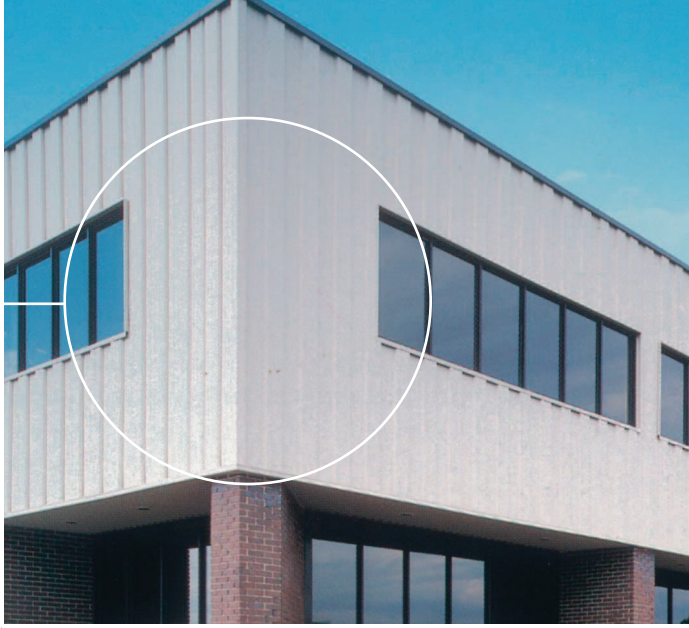
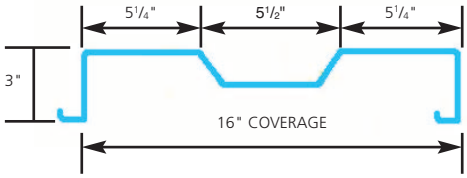
DLOK 0409-10M

ShadowRib™/CWP



FEATURE	BENEFIT
1 Concealed fastener panel	1 Enchances architectural application
2 Signature® 200 Series	2 25-year finish warranty
3 Signature® 300 option	3 25-year premium paint finish warranty, ultimate resistance to chalking and color changes
4 Continuous eave-to-sill panel exceeds 40'0" length	4 Enhances appearance by eliminating end laps and improves ease of installation.
5 Optional embossed texture	5 Embossing the metal reduces glare and the potential for oil-canning
6 Fire rating	6 Panels carry a UL "Class A" fire rating.
7 Various wall applications	7 The panel can be aplied to light guage framing, purlins, girts, structural steel and joist.
8 Greater panel span	8 In many instances, the panel can span from floor to ceiling without interior support.
9 3" deep wall cavity	9 Ready for application of a variety of insulation methods into the 3" cavity.



PRODUCT DESCRIPTION

Description:
ShadowRib™/CWP combines aesthetics, economics and function to bring definition to metal structures. ShadowRib™/CWP is a proven performer and a versatile tool to the designer.

Gauge:
24 and 22 (22 gauge minimum quantity may be required).

Lengths:
Maximum recommended 40'-0"

Finish:
Galvalume Plus® and Signature® Series

Fasteners:
Concealed fastening system. Panels may be secured to the structure from outside the building with the ShadowRib™/CWP concealed clip, or from inside the building with an expansion fastener. Both are positive fastening methods that create a secure interlock between panel and structure.

Dimensions:
16" wide by 3" high.

Usage:
The ShadowRib™/CWP panel can be used for walls, fascias and equipment screens. Apply the panel over light gauge framing, purlins, girts, structural steel and joists.

Ceco Building Systems
an NCI Company

ShadowRib™/CWP

ALLOWABLE UNIFORM LOADS IN POUNDS PER SQUARE FOOT

24 GAUGE (FY = 50 KSI)

SPAN TYPE	LOAD TYPE	SPAN IN FEET					
		6.0	8.0	10.0	12.0	14.0	16.0
SINGLE	POSITIVE WIND LOAD	113.3	63.7	40.8	28.3	20.8	15.9
	NEGATIVE WIND LOAD	111.9	63.0	40.3	28.0	20.6	15.7
2-SPAN	POSITIVE WIND LOAD	111.9	63.0	40.3	28.0	20.6	15.7
	NEGATIVE WIND LOAD	113.3	63.7	40.8	28.3	20.8	15.9
3-SPAN	POSITIVE WIND LOAD	139.9	78.7	50.4	35.0	25.7	19.7
	NEGATIVE WIND LOAD	141.6	79.6	51.0	35.4	26.0	19.9
4-SPAN	POSITIVE WIND LOAD	130.6	73.5	47.0	32.7	24.0	18.4
	NEGATIVE WIND LOAD	132.2	74.4	47.6	33.0	24.3	18.6

22 GAUGE (FY = 50 KSI)

SPAN TYPE	LOAD TYPE	SPAN IN FEET					
		6.0	8.0	10.0	12.0	14.0	16.0
SINGLE	POSITIVE WIND LOAD	162.4	91.3	58.5	40.6	29.8	22.8
	NEGATIVE WIND LOAD	149.5	84.1	53.8	37.4	27.5	21.0
2-SPAN	POSITIVE WIND LOAD	149.5	84.1	53.8	37.4	27.5	21.0
	NEGATIVE WIND LOAD	162.4	91.3	58.5	40.6	29.8	22.8
3-SPAN	POSITIVE WIND LOAD	186.8	105.1	67.3	46.7	34.3	26.3
	NEGATIVE WIND LOAD	203.0	114.2	73.1	50.7	37.3	28.5
4-SPAN	POSITIVE WIND LOAD	174.4	98.1	62.8	43.6	32.0	24.5
	NEGATIVE WIND LOAD	189.5	106.6	68.2	47.4	34.8	26.6

SECTION PROPERTIES

			NEGATIVE BENDING			POSITIVE BENDING		
PANEL GAUGE	**Fy** (ksi)	**WEIGHT** (psf)	**Ixe** ($in.^4/ft.$)	**Sxe** ($in.^3/ft.$)	**Maxo** (kip-in.)	**Ixe** ($in.^4/ft.$)	**Sxe** ($in.^3/ft.$)	**Maxo** (kip-in.)
24	50	1.54	0.2336	0.1765	4.5324	0.3226	0.1532	4.5867
22	50	1.97	0.3240	0.2541	6.0528	0.4496	0.2197	6.5759

* Fy is 80-ksi reduced to 60-ksi in accordance with the 2001 edition of the North American Specification For Design Of Cold-Formed Steel Structural Members - A2.3.2.

NOTES:

1 Allowable loads are based on uniform span lengths.

2 LIVE LOAD is limited by bending, shear, combined shear and bending and web crippling.

3 NEGATIVE WIND LOAD has been increased by 33.333% and does not consider fastener pull-out or pull-over.

4 Panel weight has not been deducted from the allowable loads.

NOTES:

1 All calculations for the properties of **ShadowRib™/CWP** panels are calculated in accordance with the 2001 edition of the *North American Specification For Design of Cold-Formed Steel Structural Members*.

2 **Ixe** is for deflection determination.

3 **Sxe** is for bending.

4 **Maxo** is allowable bending moment.

5 All values are for one foot of panel width.

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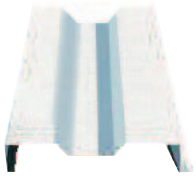

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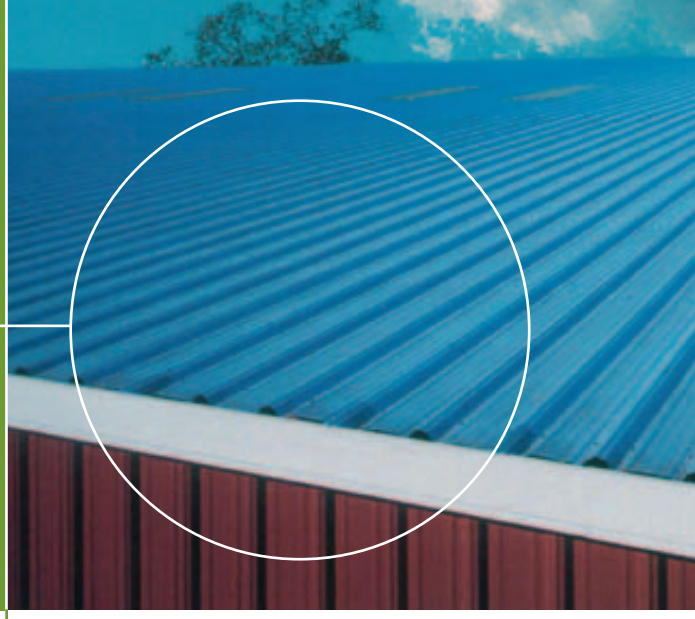
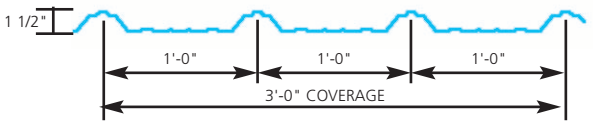
SHADOWRIB 0409-10M

MAPROOF/WALL



	FEATURE	BENEFIT
1	36-inch coverage	Ease of installation
2	Purlin bearing leg	The extended sheet width to the purlin provides greater strength in the lap of sheet along with the raised flute minimizes water penetration
3	1 1/2 inch deep corrugation	Deepest in the market
4	UL 90 with 6-inch blanket insulation	Energy savings
5	Use as roof or wall panel	Versatile
6	Signature® 200 panel finish	25-year finish warranty on walls
7	Signature® 300 panel finish	25-year premium paint finish warranty, ultimate resistance to chalking and color changes (Energy Star® compliant)
8	50 ksi yield steel	Strong enough to support the most stringent loads but flexible enough to make most flashings
9	24 or 26 gauge	Multiple gauge offerings to satisfy most building/code requirements
10	Light transmitting panels	Profile light transmitting panels to aid in natural lighting for energy consumption
11	Diaphragm action	When positively anchored to the slab and or roof secondary, the panel configuration allows maximum diaphragm capabilities



PRODUCT DESCRIPTION

Description:
The MAP roof and wall panel has been one of the most dependable panels in the metal building industry for approximately 50 years. Panel coverage is 36 inches, and the panel is available in GALVALUME® or painted. This panel features 1 1/2 inch deep major ribs at 12 inches on centers and two intermediate minor stiffening ribs as well as two pencil ribs in each flat.

Gauge:
26 gauge (Standard) or 24

Lengths:
Recommended 45'-0" maximum

Dimensions:
36"wide and 1 1/2" high

Finish:
Galvalume Plus® and Signature® Series.

Usage:
The MAP ribbed roof and wall panel system is an economical lapped seam panel system that has the strength and durability to satisfy the design requirements of all the major building codes, even meeting Dade County approval. Many commercial, community and agricultural buildings have both the MAP roof and walls as their covering systems.

Ceco Building Systems
an NCI Company

MAPROOF/WALL

ALLOWABLE UNIFORM LOADS IN POUNDS PER SQUARE FOOT

26 GAUGE 3' WIDE

SPAN FEET	**ROOF*** ALLOWABLE LOAD (psf)		SPAN FEET	**WALL** ALLOWABLE LOAD (psf)	
	WIND SUCTION	GRAVITY (LIVE)		WIND SUCTION	GRAVITY (LIVE)
2	141	192	2	141	192
3	94	116	3	94	116
4	72	69	4	72	69
5	57	45	5	57	45
5.5	49	39	6	41	33
			7	30	29

24 GAUGE 3' WIDE

SPAN FEET	**ROOF*** ALLOWABLE LOAD (psf)		SPAN FEET	**WALL** ALLOWABLE LOAD (psf)	
	WIND SUCTION	GRAVITY (LIVE)		WIND SUCTION	GRAVITY (LIVE)
2	188	251	2	188	209
3	125	156	3	125	159
4	94	93	4	94	89
5	75	61	5	75	57
5.5	62	48	6	54	39
			7	40	28

**Allowable loads include the weight of the panel. Weight of panel in table is per square foot of coverage.*

SECTION PROPERTIES

				TOP IN COMPRESSION		BOTTOM IN COMPRESSION	
PANEL GAUGE	**t** (in)	**Fy** (ksi)	**WEIGHT** (psf)	**Ixe** ($in.^4/ft.$)	**Sxe** ($in.^3/ft.$)	**Ixe** ($in.^4/ft.$)	**Sxe** ($in.^3/ft.$)
26	1.0176	50	0.94	0.0627	0.0583	0.0392	0.0488
24	0.0234	50	1.23	0.0823	0.0774	0.0549	0.0660

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NOTES:

1 Section properties of Panel are calculated in accordance with 2001 Edition of the "North American Specifications for Design of Cold-Formed Steel Structural Members."

2 Capacities are based on a continuous three-equal-span condition. Three-span capacities can be conservatively converted to single-span and two-span capacities by multiplying with 0.53 and 0.80, respectively.

3 Wind Suction Capacities are based on consideration for Flexure, Shear, Combined Bending and Shear and Screw Pull Out or Pull Over Capacities.

4 Gravity (Live) Load Capacities are based on consideration for Flexure, Shear, Combined Bending and Shear, Web Crippling and Deflection Limitation.

5 Web Crippling Capacities are calculated as per 2001 Edition of the "North American Specifications for Design of Cold-Formed Steel Structural Members," Section C3.4.

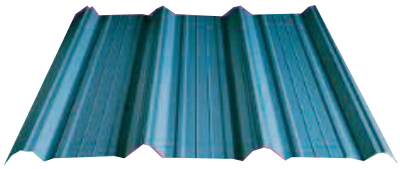
6 Shear Strength of Panels is calculated as per AISI 2001, Section C3.2.

7 Combined Bending and Shear Strength of Panels is calculated as per AISI 2001, Section C3.3.

8 Screw Capacities are calculated as per AISI 2001, Section E4.4.1 and E4.4.2.

9 Panel weight includes 0.05 psf for screws, clips and other attachments.

10 Pressure Capacities are restricted to Deflection Limitation of Span/180.



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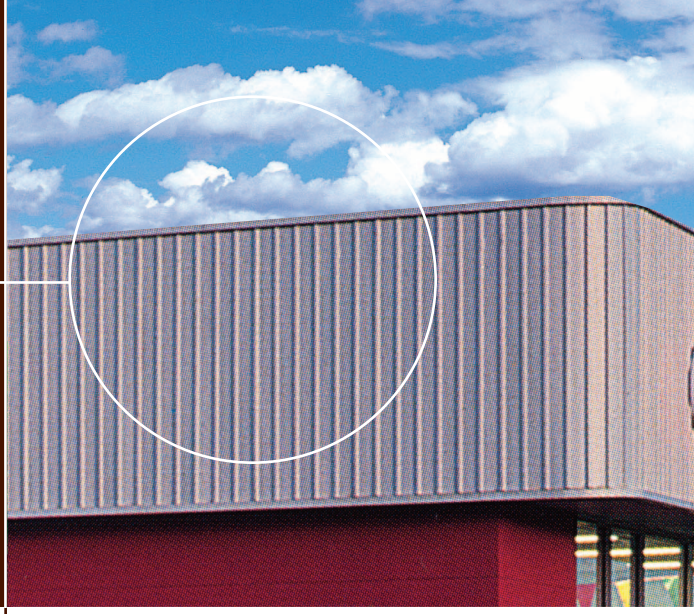
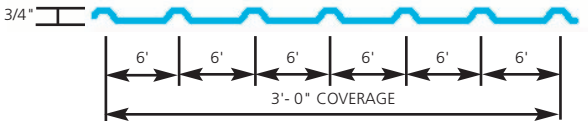
PBU/MIP



	FEATURE		BENEFIT
1	Reverse rolled profile ribs	1	Places color on the reverse side of the panel and yields a flat profile appearance with fasteners recessed in flutes.
2	Galvalume Plus®	2	20-year warranty
3	Signature® 300 option	3	Premium paint finish with 25-year warranty, ultimate resistance to color changes and chalk.
4	Continuous eave to sill until panel exceeds 40’0” length	4	Attractive with no end laps and ease of installation
5	Face fastener	5	Yields diaphragm capabilities and girt stability
6	Fire rating	6	Panel carries a UL “Class A” fire rating.



PRODUCT DESCRIPTION

Description:
This utility panel with ribs 6” on centers is especially useful for liners, partitions, soffits, etc., because of its shallower 3/4” deep ribs relative ease of installation.

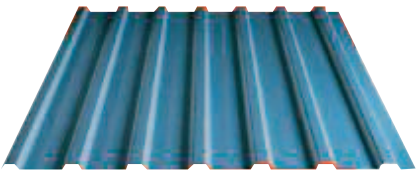
Gauge:
26 and 22

Lengths:
Maximum recommended 40'-0". Longer lengths available on special order.

Dimensions:
36" wide by 3/4" deep

Finish:
Galvalume Plus® and Signature® Series.

Usage:
Wall panel, liner panel, partition panel, soffit panel and facade panel face.



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ALLOWABLE UNIFORM LOADS IN POUNDS PER SQUARE FOOT

26 GAUGE (FY = 60 KSI)

SPAN TYPE	LOAD TYPE	SPAN IN FEET						
		3.0	4.0	5.0	6.0	7.0	8.0	9.0
SINGLE	NEGATIVE WIND LOAD	92.5	52.0	33.3	23.1	17.0	13.0	10.3
	LIVE LOAD/DEFLECTION	75.8	32.0	16.4	9.5	6.0	4.0	2.8
2-SPAN	NEGATIVE WIND LOAD	108.6	61.1	39.1	27.2	20.0	15.3	12.1
	LIVE LOAD/DEFLECTION	92.5	52.0	33.3	22.8	14.4	9.6	6.8
3-SPAN	NEGATIVE WIND LOAD	135.8	76.4	48.9	33.9	24.9	19.1	15.1
	LIVE LOAD/DEFLECTION	115.6	60.3	30.9	17.9	11.3	7.5	5.3
4-SPAN	NEGATIVE WIND LOAD	126.8	71.3	45.6	31.7	23.3	17.8	14.1
	LIVE LOAD/DEFLECTION	108.0	60.7	32.8	19.0	11.9	8.0	5.6

24 GAUGE (FY = 50 KSI)

SPAN TYPE	LOAD TYPE	SPAN IN FEET						
		3.0	4.0	5.0	6.0	7.0	8.0	9.0
SINGLE	NEGATIVE WIND LOAD	109.6	61.7	39.5	27.4	20.1	15.4	12.2
	LIVE LOAD/DEFLECTION	100.4	42.3	21.7	12.5	7.9	5.3	3.7
2-SPAN	NEGATIVE WIND LOAD	123.1	69.2	44.3	30.8	22.6	17.3	13.7
	LIVE LOAD/DEFLECTION	109.6	61.7	39.5	27.4	19.0	12.7	9.0
3-SPAN	NEGATIVE WIND LOAD	153.9	86.6	55.4	38.5	28.3	21.6	17.1
	LIVE LOAD/DEFLECTION	137.0	77.1	40.9	23.7	14.9	10.0	7.0
4-SPAN	NEGATIVE WIND LOAD	143.7	80.8	51.7	35.9	26.4	20.2	16.0
	LIVE LOAD/DEFLECTION	127.9	72.0	43.4	25.1	15.8	10.6	7.4

SECTION PROPERTIES

			NEGATIVE BENDING			POSITIVE BENDING		
PANEL GAUGE	**Fy** (ksi)	**WEIGHT** (psf)	**Ixe** ($in.^4/ft.$)	**Sxe** ($in.^3/ft.$)	**Maxo** (kip-in.)	**Ixe** ($in.^4/ft.$)	**Sxe** ($in.^3/ft.$)	**Maxo** (kip-in.)
26	60*	0.94	0.0304	0.0514	1.848	0.0371	0.0374	1.3456
24	50	1.14	0.0214	0.0494	1.4796	0.031	0.0555	1.6618

* Fy is 80-ksi reduced to 60-ksi in accordance with the 2001 edition of the North American Specification For Design Of Cold-Formed Steel Structural Members - A2.3.2.

GALVALUME® is a registered trademark of BIEC International, Inc.
Signature® is a registered trademark of the NCI Group.

NOTES:

1 Allowable loads are based on uniform span lengths and Fy = 50 and 60 ksi.

2 LIVE LOAD is limited by bending, shear, combined shear and bending and web crippling.

3 NEGATIVE WIND LOAD does not contain a 33.333% increase and does not consider fastener pull-out or pull-over.

4 Above loads consider a maximum deflection ratio of L/180.

5 The weight of the panel has not been deducted from the allowable loads.

6 The use of any accessories other than those provided by the manufacturer may damage panels, void all warranties and will void all data.

NOTES:

1 All calculations for the properties of **PBU/MIP** panels are calculated in accordance with the 2001 edition of the *North American Specification For Design of Cold-Formed Steel Structural Members*.

2 **Ixe** is for deflection determination.

3 **Sxe** is for bending.

4 **Maxo** is allowable bending moment.

5 All values are for one foot of panel width.

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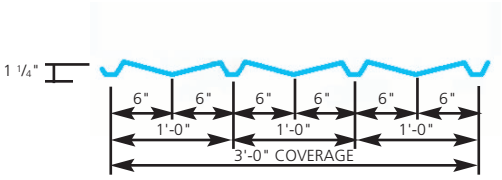
PBU 0409-10M

PBA/MSP

FEATURE	BENEFIT
1 Semi-concealed fastener panel	1 Attractive architectural application
2 Continuous eave to sill until exceeds 40’-0” length	2 Eliminating end laps improves appearance and enhances ease of installation.
3 Signature® 200 series	3 25-year finish warranty
4 Signature® 300 option	4 25-year limited warranty premium paint finish provides ultimate resistance to color changes and chalk.
5 Optional embossed texture	5 Embossing the metal reduces glare and the potential for oil-canning.
6 Fire rating	6 The panel carries a UL “Class A” fire rating.



PRODUCT DESCRIPTION

Description:
The Architectural “PBA/MSP” panel for side walls produces a decorative smooth shadow line, creating a distinctive architectural effect with semi-concealed fasteners. Ribs are 1 1/4" deep and major corrugations spaced 12" on center. The net coverage of panel is 3'-0".

Gauge:
26 and 24

Lengths:
Maximum recommended 45'-0". Longer lengths available on special order

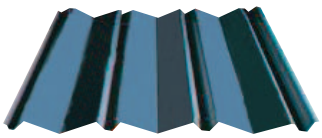
Dimensions:
36" wide by 1 1/4" deep

Fasteners:
Standard coated, CAD plated or zinc-aluminum cast head fastener

Finish:
Galvalume Plus® and Signature® Series

Usage:
Wall panel, liner panel and facade panel face

Limitations:
Installation may be difficult with very thick insulation.



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ALLOWABLE UNIFORM LOADS IN POUNDS PER SQUARE FOOT

26 GAUGE (FY = 60 KSI)

SPAN TYPE	LOAD TYPE	SPAN IN FEET						
		3.0	4.0	5.0	6.0	7.0	8.0	9.0
SINGLE	NEGATIVE WIND LOAD	85.6	48.2	30.8	21.4	15.7	12.0	9.5
	LIVE LOAD/DEFLECTION	54.4	22.9	11.7	6.8	4.3	2.9	2.0
2-SPAN	NEGATIVE WIND LOAD	75.2	42.3	27.1	18.8	13.8	10.6	8.4
	LIVE LOAD/DEFLECTION	72.9	41.5	26.8	16.4	10.3	6.9	4.9
3-SPAN	NEGATIVE WIND LOAD	94.0	52.9	33.8	23.5	17.3	13.2	10.4
	LIVE LOAD/DEFLECTION	89.9	43.3	22.2	12.8	8.1	5.4	3.8
4-SPAN	NEGATIVE WIND LOAD	87.8	49.4	31.6	21.9	16.1	12.3	9.8
	LIVE LOAD/DEFLECTION	84.3	46.0	23.5	13.6	8.6	5.7	4.0

24 GAUGE (FY = 50 KSI)

SPAN TYPE	LOAD TYPE	SPAN IN FEET						
		3.0	4.0	5.0	6.0	7.0	8.0	9.0
SINGLE	NEGATIVE WIND LOAD	95.7	53.8	34.4	23.9	17.6	13.5	10.6
	LIVE LOAD/DEFLECTION	71.9	30.3	15.5	9.0	5.7	3.8	2.7
2-SPAN	NEGATIVE WIND LOAD	84.5	47.5	30.4	21.1	15.5	11.9	9.4
	LIVE LOAD/DEFLECTION	81.3	46.5	30.0	20.9	13.6	9.1	6.4
3-SPAN	NEGATIVE WIND LOAD	105.6	59.4	38.0	26.4	19.4	14.8	11.7
	LIVE LOAD/DEFLECTION	100.1	57.2	29.3	17.0	10.7	7.2	5.0
4-SPAN	NEGATIVE WIND LOAD	98.6	55.5	35.5	24.6	18.1	13.9	11.0
	LIVE LOAD/DEFLECTION	93.9	53.9	31.1	18.0	11.3	7.6	5.3

SECTION PROPERTIES

			NEGATIVE BENDING			POSITIVE BENDING		
PANEL GAUGE	**Fy** (ksi)	**WEIGHT** (psf)	**Ixe** ($in.^4/ft.$)	**Sxe** ($in.^3/ft.$)	**Maxo** (kip-in.)	**Ixe** ($in.^4/ft.$)	**Sxe** ($in.^3/ft.$)	**Maxo** (kip-in.)
26	60*	0.94	0.0219	0.0322	1.1562	0.0168	0.0283	1.0154
24	50	1.14	0.029	0.0431	1.2915	0.0222	0.0381	1.1404

* Fy is 80-ksi reduced to 60-ksi in accordance with the 2001 edition of the North American Specification For Design of Cold-Formed Steel Structural Members - A2.3.2.

NOTES:

1 Allowable loads are based on uniform span lengths and Fy = 50 and 60 ksi.

2 LIVE LOAD is limited by bending, shear, combined shear and bending and web crippling.

3 NEGATIVE WIND LOAD does not contain a 33.333% increase and does not consider fastener pull-out or pull-over.

4 Above loads consider a maximum deflection ratio of L/180.

5 The weight of the panel has not been deducted from the allowable loads.

6 The use of any accessories other than those provided by the manufacturer may damage panels, void all warranties and will void all data.

NOTES:

1 All calculations for the properties of **PBA/MSP** panels are calculated in accordance with the 2001 edition of the *North American Specification For Design of Cold-Formed Steel Structural Members*.

2 **Ixe** is for deflection determination.

3 **Sxe** is for bending.

4 **Maxo** is allowable bending moment.

5 All values are for one foot of panel width.

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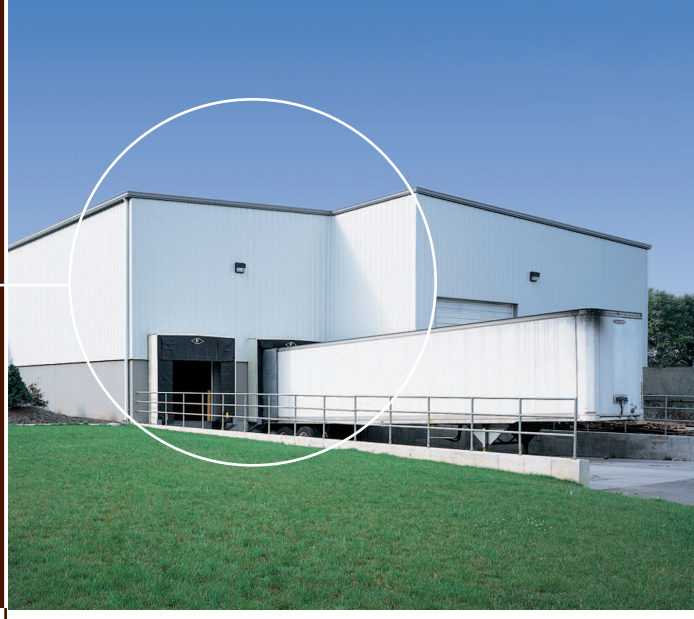
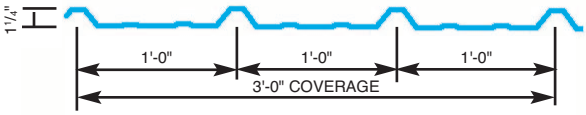
100% of the energy used to manufacture LOE was generated with Green-e certified renewable energy.

PBA 0409-10M

PBR/MVW



FEATURE	BENEFIT
1 Reverse rolled profile	1 The panel can serve as an alternate wall panel by putting the paint finish on the under side.
2 Purlin bearing leg	2 An additional leg is rolled on one side of lap rib to facilitate installation
3 Installation may start at either end	3 Flexible installation
4 Economical profile	4 Cost effective
5 36" coverage	5 Ease of installation
6 Wind uplift rating	6 The panel qualifies for UL90 in multiple construction numbers.
7 Diaphragm action	7 The panel configuration enhances diaphragm capabilities for purlin stability.
8 Light transmitting panels	8 Profile light transmitting panels are available for the MVW/PBR panel.
9 Finish warranty	9 Used with long-life fasteners this panel has a 25-year warranty.



PRODUCT DESCRIPTION

Description:
This panel is used for the roof and walls. The "PBR" panel's deep ribs create an even-shadowed appearance. The area between the ribs is reinforced.

Gauge:
26 and 24.

Lengths:
45' maximum is standard, but longer lengths are available as special requests.

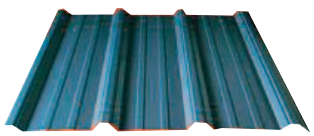
Dimensions:
36" coverage x 1 1/4" deep

Fasteners:
Standard coated, CAD plated or zinc-aluminum cast head screw

Finish:
Galvalume Plus® and Signature® Series.

Usage:
Roof, wall, liner, mansard and soffit panel applications

Limitations:
1/2:12 pitch or greater. Not designed for coverage over bar joist.



Ceco Building Systems
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ALLOWABLE UNIFORM LOADS IN POUNDS PER SQUARE FOOT

26 GAUGE (FY = 60 KSI)

SPAN TYPE	LOAD TYPE	SPAN IN FEET						
		3.0	4.0	5.0	6.0	7.0	8.0	9.0
SINGLE	NEGATIVE WIND LOAD	136.0	76.5	49.0	34.0	25.0	19.1	15.1
	LIVE LOAD/DEFLECTION	99.1	50.4	25.8	14.9	9.4	6.3	4.4
2-SPAN	NEGATIVE WIND LOAD	99.1	55.7	35.7	24.8	18.2	13.9	11.0
	LIVE LOAD/DEFLECTION	87.3	54.6	35.2	24.5	18.1	13.9	10.7
3-SPAN	NEGATIVE WIND LOAD	123.8	69.7	44.6	31.0	22.7	17.4	13.8
	LIVE LOAD/DEFLECTION	99.2	67.7	43.8	28.2	17.7	11.9	8.3
4-SPAN	NEGATIVE WIND LOAD	115.6	65.0	41.6	28.9	21.2	16.3	12.8
	LIVE LOAD/DEFLECTION	95.5	63.4	40.9	28.6	18.8	12.6	8.9

24 GAUGE (FY = 60 KSI)

SPAN TYPE	LOAD TYPE	SPAN IN FEET						
		3.0	4.0	5.0	6.0	7.0	8.0	9.0
SINGLE	NEGATIVE WIND LOAD	162.6	91.5	58.5	40.7	29.9	22.9	18.1
	LIVE LOAD/DEFLECTION	115.5	65.0	35.4	20.5	12.9	8.6	6.1
2-SPAN	NEGATIVE WIND LOAD	115.5	65.0	41.6	28.9	21.2	16.2	12.8
	LIVE LOAD/DEFLECTION	109.4	64.2	41.3	28.7	21.1	16.2	12.8
3-SPAN	NEGATIVE WIND LOAD	144.4	81.2	52.0	36.1	26.5	20.3	16.0
	LIVE LOAD/DEFLECTION	124.3	79.8	51.4	35.8	26.4	16.3	11.4
4-SPAN	NEGATIVE WIND LOAD	134.8	75.8	48.5	33.7	24.8	19.0	15.0
	LIVE LOAD/DEFLECTION	119.6	74.7	48.1	33.5	24.6	17.3	12.2

SECTION PROPERTIES

			NEGATIVE BENDING			POSITIVE BENDING		
PANEL GAUGE	**Fy** (ksi)	**WEIGHT** (psf)	**Ixe** ($in.^4/ft.$)	**Sxe** ($in.^3/ft.$)	**Maxo** (kip-in.)	**Ixe** ($in.^4/ft.$)	**Sxe** ($in.^3/ft.$)	**Maxo** (kip-in.)
29	60*	0.75	0.0219	0.0357	1.2835	0.0242	0.0234	0.8423
26	60*	0.94	0.0302	0.0511	1.8366	0.0369	0.0372	1.3373
24	50	1.14	0.0404	0.0733	2.1953	0.0506	0.0521	1.5594

* Fy is 80-ksi reduced to 60-ksi in accordance with the 2001 edition of the North American Specification For Design Of Cold-Formed Steel Structural Members - A2.3.2.

GALVALUME® is a registered trademark of BIEC International, Inc.
Signature® is a registered trademark of the NCI Group.

NOTES:

1 Allowable loads are based on uniform span lengths and Fy = 50 and 60 ksi.

2 LIVE LOAD is limited by bending, shear, combined shear and bending and web crippling.

3 NEGATIVE WIND LOAD does not contain a 33.333% increase and does not consider fastener pull-out or pull-over.

4 Above loads consider a maximum deflection ratio of L/180.

5 The weight of the panel has not been deducted from the allowable loads.

6 The use of any accessories other than those provided by the manufacturer may damage panels, void all warranties and will void all data.

NOTES:

1 All calculations for the properties of **PBR/MVW** panels are calculated in accordance with the 2001 edition of the *North American Specification For Design Of Cold-Formed Steel Structural Members*.

2 **Ixe** is for deflection determination.

3 **Sxe** is for bending.

4 **Maxo** is allowable bending moment.

5 All values are for one foot of panel width.

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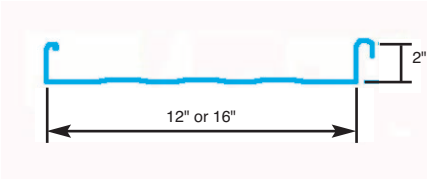
http://www.cecobuildings.com

PBR 0409-10M

SuperLok®/Side Lap mechanically seamed

	FEATURE	BENEFIT
1	For installation over purlins or bar joists	Maximizes flexibility
2	Factory notched for end laps	May be installed in both directions or simultaneously
3	Clip allows 2" panel movement	Provides for expansion and contraction
4	Sealant is factory applied	Reduces labor, enhances system life
5	Optional limited weathertightness warranty is available.	Customer assurance of quality and long life
6	UL 90 qualified for wind uplift ratings under four types of construction, including open framing, composite and solid deck methods	May qualify for reduced insurance rates
7	Metal closures	Longer life
8	Machine seamed	Meets stringent code requirements such as Factory Mutual.
9	Factory Mutual approved	This panel is Factory Mutual approved to satisfy stringent code requirements and is ICBO approved.
10	Concealed fastener	These clips hold the panels firmly in place without unsightly exposed fasteners. Each clip system offers the ability to accommodate thermal movement.
11	South Florida approved	This panel meets or exceeds the design requirements for appliction in South Florida.



PRODUCT DESCRIPTION

Description:
The SuperLok® standing seam roof system blends the aesthetics of an architectural panel with the strength of a structural panel. This panel has earned uplift ratings that are the highest in the industry. This panel is Factory Mutual approved to satisfy stringent code requirements and is ICBO approved.

Gauge:
24 gauge (Standard)

Lengths:
Recommended 55'-0" maximum

Dimensions:
12" or 16" wide and 2" high

Fasteners:
A choice of concealed fastening clips is available for this panel system including UL rating clips. Concealed fastening system.

Finish:
Galvalume Plus® and Signature® Series

Usage:
SuperLok® is a field seamed panel that combines a slim rib with exceptional uplift resistance. This system was designed to be installed over open framing, 5/8" plywood, or a composite roof assembly may be used as alternate substructures.

Limitations:
Recommended for roof slopes of 1/2:12 or greater. Oil canning is not a reason for rejection.

Ceco Building Systems
an NCI Company

SuperLok®/Side Lap mechanically seamed

ALLOWABLE UNIFORM LOADS IN POUNDS PER SQUARE FOOT

24 GAUGE (FY = 50 KSI)

SPAN TYPE	LOAD TYPE	SPAN IN FEET						
		2.5	3.0	3.5	4.0	4.5	5.0	5.5
SINGLE	LIVE	162.0	135.0	115.7	97.1	76.7	62.1	51.4
2-SPAN	LIVE	162.0	119.2	87.6	67.1	53.0	42.9	35.5
3-SPAN	LIVE	162.0	135.0	109.5	83.8	66.2	53.7	44.3
4-SPAN	LIVE	162.0	135.0	102.2	78.3	61.8	50.1	41.4

22 GAUGE (FY = 50 KSI)

SPAN TYPE	LOAD TYPE	SPAN IN FEET						
		2.5	3.0	3.5	4.0	4.5	5.0	5.5
SINGLE	LIVE	233.4	194.5	166.7	132.4	104.6	84.7	70.0
2-SPAN	LIVE	233.4	172.8	126.9	97.2	76.8	62.2	51.4
3-SPAN	LIVE	233.4	194.5	158.7	121.5	96.0	77.7	64.3
4-SPAN	LIVE	233.4	194.5	148.1	113.4	89.6	72.6	60.0

NOTES:

1 Allowable loads are based on uniform span lengths and Fy = 50 ksi.

2 LIVE LOAD is limited by bending, shear, combined shear and bending.

3 Above loads consider a maximum deflection ratio of L/180.

4 The weight of the panel has not been deducted from the allowable loads.

5 THE ABOVE LOADS ARE NOT FOR USE WHEN DESIGNING PANELS TO RESIST WIND UPLIFT.

6 Please contact manufacturer or manufacturer's website for most current allowable wind uplift loads.

7 The use of any field seaming machine other than that provided by the manufacturer may damage the panels, void all warranties and will void all data.

SECTION PROPERTIES

			NEGATIVE BENDING			POSITIVE BENDING		
PANEL GAUGE	**Fy** (ksi)	**WEIGHT** (psf)	**Ixe** ($in.^4/ft.$)	**Sxe** ($in.^3/ft.$)	**Maxo** (kip-in.)	**Ixe** ($in.^4/ft.$)	**Sxe** ($in.^3/ft.$)	**Maxo** (kip-in.)
24	50	1.38	0.0574	0.0538	1.6096	0.1324	0.0779	2.3301
22	50	1.72	0.0801	0.0779	2.3324	0.1787	0.1061	3.1772

NOTES:

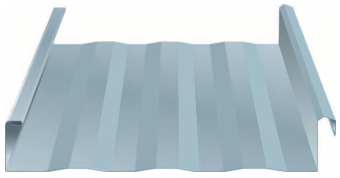
1 All calculations for the properties of **SuperLok®** panels are calculated in accordance with the 2001 edition of the *North American Specification For Design of Cold-Formed Steel Structural Members*.

2 **Ixe** is for deflection determination.

3 **Sxe** is for bending.

4 **Maxo** is allowable bending moment.

5 All values are for one foot of panel width.



The data contained herein is for the expressed use of customers and design professionals. Along with this data, it is recommended that the design professional have a copy of the most current version of the *North American Specification For Design of Cold-Formed Steel Structural Members* published by the American Iron and Steel Institute to facilitate design. This specification contains the design criteria for cold-formed steel components. Along with the specification, the designer should reference the most current building code applicable to the project jobsite in order to determine environmental loads. If further information or guidance regarding cold-formed design practices is desired, please contact the manufacturer.

Ceco Building Systems
an NCI Company

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