

# YODER METAL



## SMART RIB PLUS

- CLASSIC PROFILE
- LIMITED LIFETIME WARRANTY
- SUPERIOR PERFORMANCE
- 28 GAUGE & 26 GAUGE AVAILABLE
- 21 COLORS & 15 TEXTURED COLORS
- PROVEN ENERGY EFFICIENT





# SMART RIB PLUS

## LIFE CYCLE COST

Smart Rib Plus is the best investment for your dollar. Backed by a limited warranty on the color coated panels, Smart Rib Plus is less prone to wind damage and deterioration from the elements than traditional roofing products. The low maintenance and long-lasting beauty make Smart Rib Plus the cost effective alternative.

## ENVIRONMENT

Looking to the future, we all need to be concerned about preserving the environment. Many asphalt and tar based roof systems are not recyclable, which contributes to the growing landfill problems. Steel is 100% recyclable and all of our panels contain recycled steel. Because the Smart Rib Plus is durable and lightweight, it can be retrofitted over existing shingles or built-up roof systems. This eliminates the need to remove or dispose of the existing, non-recyclable roof.

## ACRYLIC COATING

Available on bare only, is a clear organic surface treatment applied over the Galvalume/Galvanized coating. The surface treatment is essentially invisible and provides excellent characteristics to improve the performance and applicability of the unpainted Galvalume/ Galvanized sheet.

Installation is easier and safe since no oils are applied to either the sheet or the forming rolls. Equally impressive is the performance of the material in regards to hand marking and non-uniform darkening when stored at a job site.

## SIPHON GROOVE

Smart Rib Plus is designed with unique siphon groove drain channels that guard against wind, rain and snow—eliminating leaks. The siphon groove on the underlap of the panel interlocks with the overlap of the next panel. This adds strength to the purlin bearing leg. The design permits a free-flow water runoff, channeling out any water that might be forced into the snug fitting lap.



## HARD, HIGH TENSILE STRENGTH STEEL

Smart Rib Plus's hard 28 gauge steel is manufactured to ASTM A792 Grade 80 specifications for a minimum tensile strength of 80,000 psi, allowing Smart Rib Plus to stand up to the most severe weather conditions including ice, driving wind or heavy snow.

## GALVALUME COATING

A heavy, hot-dipped zinc-aluminum coating is applied to the base steel on both the bare and painted products. This coating offers maximum corrosion protection and helps assure low maintenance, durability and edge protection with limited 25-year 6-month warranty.





## FACTS...

### ABOUT METAL PANELS

The two primary components of any steel panel are substrate and coating system. Many combinations of substrate and coating are available. The quality and performance of these two components are critical to the longevity and performance of the panel.

### ABOUT COATINGS:

The coating system, or paint, for metal panels is also an important consideration. The surface panel will constantly be exposed to environmental elements—ultraviolet sun rays, acid rain, dirt, etc. Over time, these environmental conditions will break down the coating, resulting in panel fade and chalk.

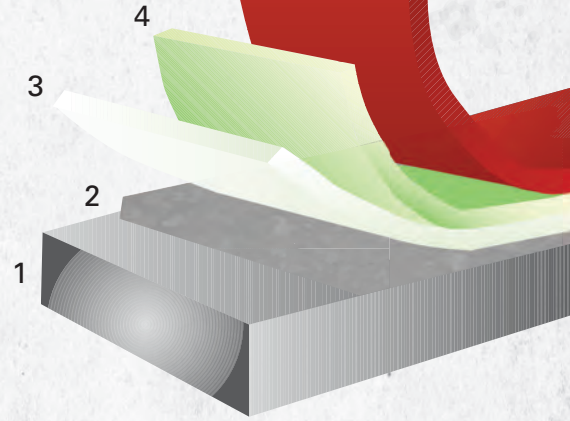
## WIDE VARIETY OF BEAUTIFUL COLORS



Also available in 15 textured colors

## PAINT PROCESS

1. Metal surface is cleaned with hot, heavy-duty alkaline cleanser.
2. The surface is chemically treated with zinc phosphates and chromates to enhance paint adhesion and improve corrosion resistance.
3. The final coat is a rich siliconized polyester paint finish providing durable surface color with a 40-year limited warranty and 21 colors from which to choose.



## COATING PROCESS

1. Base metal core
2. Hot-dipped zinc aluminum coating
3. Complex pre-treatment solution
4. Polyester, pigmented primer
5. Finish coat-siliconized/ polyester

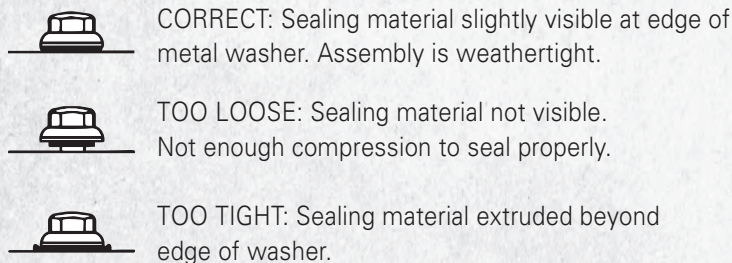
## FASTENERS...

### RECOMMENDED FASTENER LOCATION

- At base eave, ridge and lap: 2" on each side of major ribs.
- At intermediate supports: 2" on one side of major ribs (as shown).
- Standard spacing: 24" o.c.; Maximum spacing: 48" o.c.



### FASTENER SEAL



## FAST AND EASY INSTALLATION



# SMART RIB PLUS

## SECTION PROPERTIES

THICKNESS (Inches including metal coating)			PANEL TOP IN COMPRESSION			PANEL BOTTOM IN COMPRESSION		
Gauge	Weight PSF		lx in4/ft	Sx in3/ft	Ma in-kip/ft	lx in4/ft	Sx in3/ft	Ma in-kip/ft
28	0.0155	.6	0.0099	0.016	0.57	0.0085	0.0149	0.54

## MAXIMUM ALLOWABLE LOADS IN POUNDS PER SQUARE FOOT (LIVE LOADS)

		SIMPLE SPAN			2 SPANS			3 OR MORE SPANS		
Span Feet	Gauge	Stress	Deflection (L/180)	Deflection (L/240)	Stress	Deflection (L/180)	Deflection (L/240)	Stress	Deflection (L/180)	Deflection (L/240)
1.5	28	170	170	170	159	159	159	186	186	186
2.0	28	96	96	83	90	90	90	105	105	105
2.5	28	61	56	42	57	57	57	67	67	67
3.0	28	43	33	24	40	40	40	46	46	46
3.5	28	31	21	15	29	29	29	34	34	31
4.0	28	24	14	10	22	22	22	26	26	21

## MAXIMUM ALLOWABLE LOADS IN POUNDS PER SQUARE FOOT (WIND LOADS)

		SIMPLE SPAN			2 SPANS			3 OR MORE SPANS		
Span Feet	Gauge	Stress	Deflection (L/180)	Deflection (L/240)	Stress	Deflection (L/180)	Deflection (L/240)	Stress	Deflection (L/180)	Deflection (L/240)
1.5	28	227	227	227	212	212	212	248	248	248
2.0	28	128	128	110	120	120	120	139	139	139
2.5	28	82	75	56	76	76	76	89	89	89
3.0	28	57	43	33	53	53	53	62	62	62
3.5	28	42	27	21	39	39	39	46	46	41
4.0	28	32	18	14	30	30	30	35	35	38

## MAXIMUM ALLOWABLE LOADS IN POUNDS PER SQUARE FOOT (UPLIFT)

		SIMPLE SPAN		2 SPANS		3 OR MORE SPANS	
Span Feet	Gauge	Stress		Stress		Stress	
1.5	28	212		227		265	
2.0	28	120		128		149	

**WeatherXL**



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