

# LOW RIB

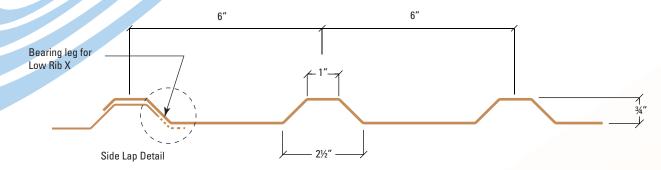


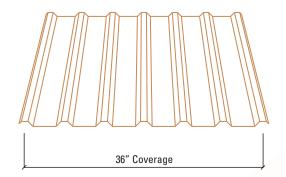
# WHIRLWIND BUILDING COMPONENTS

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# **LOW RIB**





LOW RIB DESIGN PROPERTIES						
			TOP IN COMPRESSION		BOTTOM IN COMPRESSION	
PANEL GAUGE	F <sub>y</sub> (KSI)	F <sub>b</sub> (KSI)	I <sub>x</sub> (In⁴-Ft)	M <sub>a</sub> (Kip-In/Ft)	I <sub>x</sub> (In⁴-Ft)	M <sub>a</sub> (Kip-In/Ft)
26	80*	0.83	0.0187	1.2567	0.0127	1.1100
24	50	1.08	0.0273	1.5553	0.0187	1.4417

<sup>\*</sup> Fy is 80-ksi reduced to 60-ksi in accordance with the 2007 edition of the North American Specification For Design Of Cold-Formed Steel Structural Members - A2.3.2.

### NOTES:

- All section properties are calculated in accordance with the 2007 edition of the North American Specification For Design Of Cold-Formed Steel Structural Members.
- 2. Ix is for deflection determination.
- 3. Mx is allowable bending moment.

### **MATERIALS**

Unless otherwise specified, the exposed surfaces of all panels shall be either clear acrylic coated or factory painted GALVALUME®. GALVALUME® is a zincaluminum alloy coating that is applied to the base steel material. Acrylic coated GALVALUME® shall have a Coating Class AZ55 (0.55 ounces (combined total of both sides) per square foot). Factory painted GALVALUME® shall have a minimum Coating Class AZ50 (0.50 ounces (combined total of both sides) per square foot). GALVALUME® coated steel for panels shall conform to ASTM A792, Structural Quality. The 26 gauge panel shall conform to Grade 80 (80 ksi minimum yield strength); the 24 gauge panel shall conform to Grade 50 (50 ksi minimum yield strength). All material shall be ordered to a minimum decimal thickness. Minimum ordered thickness for coated steel products always includes the thickness of the coating.

### PAINTED FINISH

All painted GALVALUME® shall be factory coated by a firm which coats coil products exclusively. The coater shall be responsible for ensuring color consistency, paint film hardness, and paint film thickness. Each side of the GALVALUME® will be coated with 0.2 mils baked-on primer before the color coating. The 26 gauge panel shall receive a baked-on silicone polyester finish coat on the exposed side. The 24 gauge panel shall receive a KYNAR 500® Fluoropolymer finish coat on the exposed side. Thickness of the finish coat will be a nominal 1.0 mils (including the

primer coat). A baked-on straight polyester wash coat will be applied on the non-exposed side. Thickness of the wash coat will be a nominal 0.5 mils (including the primer coat).

## LIMITED MATERIAL WARRANTY

Specific conditions concerning each finish shall be covered in detail on the written warranty issued, on request, with each order. Minimum roof slope - 1:12. GALVALUME® panels shall have a twenty-five year limited warranty providing that GALVALUME® panels will not rupture, fail structurally, or perforate within a period twenty-five years after shipment due to exposure to normal atmospheric corrosion. The clear acrylic finish does not carry a warranty. The 26 gauge factory coated GALVALUME® panel shall have a thirty-year limited color finish warranty from peeling and cracking, and a twenty-five year limited color finish warranty from excessive chalking and color change (fading). The 24 gauge factory coated GALVALUME® panel shall have a thirty-year limited color finish warranty from excessive chalking and color change (fading), peeling and cracking. The wash coat does not carry a warranty.

- UL CONSTRUCTION NO. 39
- UL 580 UP-LIFT TESTED
  CLASS 90 RATED
- UL 2218 HAIL IMPACT RESISTANT TESTED INCLINED: UNLIMITED IMPACT: CLASS 4

### **PANFIS**

Panel coverage will be 36" to the weather. Maximum panel length shall be 40'-0". Where endlaps are required, they shall be a minimum of 6" and shall occur at a purlin or girt. Panels shall be furnished square cut. Wall panels must not rest on the concrete foundation; the panel must sit 1/8" above the concrete. A roof installed as listed in UL Construction No. 39 shall meet the requirements of Underwriters Laboratories standard UL 580 Class 90 for uplift resistance. All installations shall be in accordance with standard industry practices. Before securing, all laps of roof panels shall be sealed with a continuous ribbon of tape sealant. A closure strip shall be installed at the eave. Panels shall be secured to intermediate framing members with sheet metal screws at a maximum spacing of 12" on center. At endlaps, the maximum screw spacing shall be 6" on center. Sheet metal stitch screws at a maximum of 20" on center shall be installed at sidelaps.