

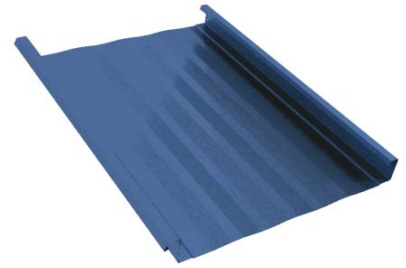


STEEL BUILDINGS, INC.

WEATHER LOK 16

1. PRODUCT NAME

Whirlwind Building Components
Architectural Standing Seam Roof System
Weather Lok 16



2. MANUFACTURER

Whirlwind Building Components

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Houston, TX 77075
Phone: (800) 324-9992
Fax: (832) 553-4700

2175 Sweetwater Industrial Blvd.
Lithia Springs, GA 30122
Phone: (800) 363-8142
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Claremore, OK 74017
Phone: (877) 875-0077
Fax: (918) 343-7114

500 Whirlwind Drive
Freeport, MN 58331
Phone: (888) 836-7203
Fax: (320) 836-7201

3. PRODUCT DESCRIPTION

Basic Use:

For roofing new buildings or re-roofing existing buildings of any type. Panels are attached to the sub-structure with concealed clips that allow for thermal movement of the panels. The panels are machine-joined at the edges with a mechanically locked standing seam electric field seamer to prevent leaks. Panels are available with a Class 90 UL uplift rating.

The panels are produced with 2" high major ribs at 16" centers. The panels come with striations and standard in lengths up to 45'-0".



Materials:

Standard panel material

- 24 gauge steel coated both sides with a layer of (Galvalume®) aluminum-zinc alloy (approximately 55% aluminum and 45% zinc) applied by the continuous hot-dip method. Triple spot test per ASTM A-792.

- Trinar 500 colored panels are Galvalume® based material. The exterior is given a finish coat of 70% minimum Kynar 500 PVF formulation, applied over a properly treated and primed surface. The exterior coat is 0.75 mils minimum thickness. The total exterior film thickness including primer is 0.90 to 1.10 mils thick. The interior finish is a pigmented polyester backer or water base primer.

Clip Material

- Clips are die formed with a 22 gauge galvanized steel top section and a 16 gauge Galvanized steel base. The clip base has 2 holes to accommodate attachment to the substrate.

Flashing Material

- The flashing material is the same gauge, color and finish as the panel.

Panel Mastic

- Panel side laps have a factory applied acrylic sealant Acryl-R or equivalent containing 75% solids (pigmented).
- Panel endlaps, ridge, gable and eave sealers are butyl-based pressure sensitive tape mastic that is non staining, non-corrosive, non-volatile and non-toxic. The tape is 100% polyisobutylene-isoprene (butyl rubber)

meeting the performance requirements of Federal Specification TT-C-1796A. Service temperature is from -40° to +180° F.

- All gutter joints, downspout joints, rake, eave and ridge flashing laps are sealed with Schnee-Morehead SM7100 or equivalent, meeting or exceeding the test requirements of TT-S-00230C, Type II, Class A.

Fasteners

- Fasteners for connecting clips to wood are #12 x 1" Type A wood grips with a hex head (2 per clip).



Corporate Head Quarters

8234 Hansen Road,
Houston, TX 77075
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www.WhirlwindSteel.com

WEATHER LOK - 16 DESIGN PROPERTIES

PANEL GAUGE	Fy (KSI)	WEIGHT (PSF)	TOP IN COMPRESSION		BOTTOM IN COMPRESSION	
			Ix (In4/Ft)	Ma (Kip-In/Ft)	Ix (In4/Ft)	Ma (Kip-In/Ft)
24	50	1.23	0.1478	2.7134	0.1553	2.8852
22	50	1.56	0.1950	3.6264	0.1950	3.6264

NOTES:

1. All section properties are calculated in accordance with the 2001 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.

- Fasteners for connecting clips to purlins are #14 x 1 1/4" hex head self drillers (2 per clip).

Light Gauge Structural System: Basic Use

Light gauge structural steel secondary framing components for the roofing system including studs, eave struts, cees and zee sections also runners for structural supports at desired roof pitches.

Composition and Materials

Studs, cee and zee sections, eave struts and runners are a minimum of 16 gauge steel. All material comes standard with a shop applied red oxide primer. All steel meets or exceeds the requirements of ASTM A 1011 and has minimum yields of 55,000 psi.

4. TECHNICAL DATA

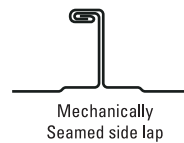
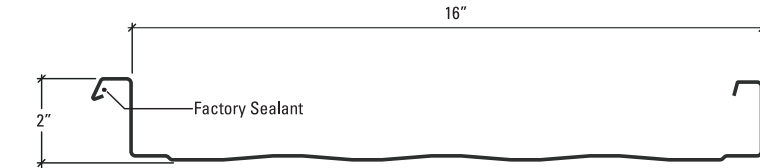
Physical Properties:

Paint Spectacular

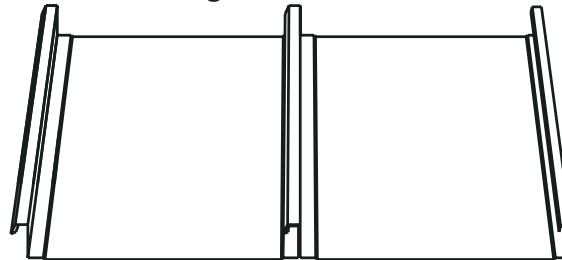
- Specular Gloss (60° Head): ASTM D 523 - 25% to 40%.
- Pencil Hardness: ASTM D 3363 - HB.
- Bend Adhesion: ASTM D4145 - 1T - no loss of adhesion.
- Impact Adhesion: ASTM D 2794 - 5/8" steel ball - Impact of 80 inch-pounds - no loss of adhesion.
- Cross Hatch Adhesion: ASTM D 3359-no loss of adhesion.

Paint System Field Performance

- Film integrity: 35 years with no blistering, peeling or cracking.
- Chalk Resistance: ASTM D 4214-3000 hours-Weatherometer-rat-ing no greater than #8.
- Color Change: ASTM D 2244-30000 hours-Weatherometer no more than 2 NBS units.



Weather Lok-16 Mechanically Seamed Standing Seam Roof Panel



Two Panels Shown Above

5. INSTALLATION

Minimum roof slope to be no less than 1/2:12. Panels are joined at the side-laps with an interlocking seam standing 2" above the roof plane. Sidelaps have factory applied mastic sealer and are seamed by a special seaming machine. Installation is in conjunction with light gauge structural framing or a solid substrate.

6. AVAILABILITY AND COST

Whirlwind Building Components
8234 Hansen Road
Houston, TX 77075
Phone: (800) 324-9992

7. WARRANTY

Available warranties include 25 year material and 20 year weather tightness, providing for repair or stoppage of any leaks caused by normal wear and tear. Paint finish warranties up to 35 years also are available.

8. MAINTENANCE

Only normal routine maintenance is required. Roofs should be inspected yearly and gutters cleaned as needed.

9. TECHNICAL SERVICES

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Website: www.WhirlwindSteel.com

10. FILING SYSTEMS

Galvalume® is a registered trademark of BIEC International, Inc.

Kynar 500® is a registered trademark of Elf Autochem North America, Inc.

