Metal Sales Manufacturing Corporation

This specification data sheet is provided by Metal Sales Manufacturing Corporation as a technical support tool incident to the sale of its Concealed Fastened Wall Panel products. Contact Metal Sales for more information on these and other products. Telephone: 800.406.7387 metsales.us.com

Section 07 42 13 - METAL WALL PANELS

1. PRODUCT NAMES

2. MANUFACTURER
Metal Sales Manufacturing Corporation
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3. PRODUCT DESCRIPTION
Basic Use
For more than 55 years, Metal Sales has earned a reputation as the premier provider of metal building components and accessories. Metal Sales maintains the industry’s largest professional sales and service team, supported by 21 branches located throughout the United States and offers a full line of high quality metal roof and wall panels for agricultural, commercial, architectural, industrial and residential projects of every shape and size for both new construction and retrofit applications. Metal Sales is dedicated to leading the metal building component industry, by setting new standards for operating efficiency, product design, active service management and lasting value.

Manufacturer Memberships and Affiliations
CRRC - Cool Roof Rating Council
MCA - Metal Construction Association
CSI - Construction Specifications Institute
NRCA - National Roofing Contractors Association
ILFI - International Living Future Institute
ENERGY STAR® Partner
4. TECHNICAL DATA

Applicable Standards


● ASTM D 2244 - Standard Practice for Calculation of Color Tolerances and Color Differences from Instrumentally Measured Color Coordinates.


Underwriters Laboratories (UL):


Physical Properties:

Test reports are available to design professionals upon request.

Note: Industry designation for material thickness is moving away from “gauge” to decimal thickness in inches. Metal Sales recommends use of a minimum thickness requirement of 0.0236-inch (0.60-mm) instead of 24 gauge and 0.0296-inch (0.75-mm) instead of 22 gauge. Select AZ50 for painted material or AZ55 for unpainted material. Grade 50 applies to 24 and 22 gauge material.


► Panel Coverage: 12 inches (304.8 mm) or 16 inches (406.4 mm).
► Panel Depth: 1 inch (25.4 mm) or 1.5 inches (38.1 mm).
► Attachment: Concealed clip.
► Material: Aluminum-zinc alloy-coated steel sheet, ASTM A 792, AZ50 or AZ55 coating designation, structural quality, Grade 50, 0.0236-inch (0.60-mm) or 0.0296-inch (0.75-mm) minimum thickness.
► Application: Designed for application over open framing or solid substrate.
► Rib Configuration: Box.
► Perforation: Optional.
► Surface Finish: PVDF (Kynar 500), Multi-pass Kynar 500, Marblique, Plastisol or Weathering Steel.
► Color: Select from manufacturer’s standard colors.

Environmental Considerations

Construction metals generally are readily recyclable at the end of their service life. The raw materials used in manufacture of metal wall panels also come from recycled sources. Pre-consumer and post-consumer recycled content varies. Consult with manufacturer for more information.

Fire Performance

Flame-Spread Index: 25 or less (Class A). Smoke-Developed Index: 450 or less.

5. INSTALLATION

Handling and Storage

Handle and store product according to Metal Sales recommendations. Deliver materials in manufacturer’s original, unopened, undamaged containers with identification labels intact. Store materials above ground, under waterproof covering, protected from exposure to harmful weather conditions and at temperature and humidity conditions recommended by manufacturer. Provide proper ventilation of metal panel system to prevent condensation build-up between each panel and trim or flashing component. Tilt stack to drain in wet conditions. Remove strippable plastic film before storage under high-heat conditions. Store products in manufacturer’s unopened packaging until just prior to installation. Exercise caution in unloading and handling metal panel system to prevent bending, warping, twisting and surface damage.

Typical Assemblies

- Wood sheathing on stud framing with moisture barrier
- Wood sheathing on girder framing with moisture barrier
- Metal deck on framing with rigid insulation and moisture barrier

Preparation

Install substrate boards over deck and sheathing over entire surface using recommended fasteners. Anchor metal panels to supports according to metal panel manufacturer’s recommendations. Ensure panel supports are plumb and in-plane. Limit in-plane variance to no more than a total of 1/4” on 10'-0”.

Underlayment Installation

Install self-adhering sheet underlayment and felt underlayment as required. Install flashing in com-
Metals with requirements in Division 07 Section “Sheet Metal Flashing and Trim” and Metal Sales recommendations.

**Thermal Insulation Installation**
Install polyethylene vapor retarder if required. Install blanket insulation if required, in compliance with installation requirements in Division 07 Section “Thermal Insulation” requirements. Install blanket insulation if required, in compliance with installation requirements in Division 07 Section “Thermal Insulation.”

**Metal Wall Panel Installation**
Verify that site conditions are acceptable for installation. Do not proceed with installation until unacceptable conditions are corrected. Comply with panel manufacturer’s installation instructions including but not limited to special techniques, interface with other work and integration of systems. Fasten metal wall panels to supports with concealed clips at each side-seam joint location, spacing and using proper fasteners as recommended by panel manufacturer. Comply with installation tolerances as required.

**Accessory Installation**
Install accessories using techniques recommended by manufacturer and which will assure positive anchorage to building and weather tight mounting. Provide for thermal movement. Coordinate installation with flashings and other components. For Flashing and Trim, comply with performance requirements, manufacturer’s written installation instructions and the SMACNA “Architectural Sheet Metal Manual.” Provide concealed fasteners where possible, and install units to true level and plumb. Install work with moisture barrier, laps, joints and seams that will be permanently watertight.

**Field Quality Control**
If requested by Owner, provide manufacturer’s field service consisting of product use recommendations and periodic site visits for inspection of product installation in accordance with manufacturer’s instructions.

**Precautions, Cleaning and Protection**
Touch-up paint is used to cover and protect unexpected scratches on the paint finish that may occur during installation of panel. Touch-up paint will not weather as well or at the same rate as the original system. Test in an area that will not be noticeable. Metallic paint colors are available at an additional charge. Minor differences in color and appearance are normal and to be expected. To minimize possible differences in appearance, an entire project should be painted at one time, from one batch of paint, using the same application equipment. Additionally, fabricated panels, flat sheet and flashings should be oriented in the same direction. After installation remove temporary coverings and protection of adjacent work areas. Repair or replace any installed products that have been damaged. Clean installed panels in accordance with manufacturer’s instructions prior to Owner’s acceptance. Remove and lawfully dispose of construction debris from Project site. Protect installed product and finish surfaces from damage during construction.

**Building Codes**
Current data on building code requirements and product compliance may be obtained from Metal Sales technical support specialists. Installation must comply with the requirements of authority having jurisdiction.

**6. AVAILABILITY AND COST**

**Availability**
Metal Sales products are nationally distributed and supported from 21 convenient locations nationwide, including Alaska. Manufacturer has the ability to ship worldwide. Contact manufacturer for information on local availability.

**Cost**
Budget installed cost information may be obtained from a local Metal Sales distributor or directly from the manufacturer.

**7. WARRANTY**

**Weather Tightness Warranty**
Metal Sales Weather Tightness Warranties are available in several forms. Request sample warranty documents from manufacturer for review and editing assistance. Metal Sales warranty excludes failure due to physical damage and surface deterioration due to exposure to salt air environments. Warranty Period is optionally 5, 10 or 20 years.

- Type 2 Warranty: Trim and side-lap warranty, with dollar limit.
- Type 4 Warranty: Trim and side-lap warranty, with no dollar limit.

**Paint Finish Warranty**
Metal Sales’ standard PVDF (Kynar 500®) Fluorocarbon System Warranty for film integrity, chalk rating and fade rating in which manufacturer agrees to repair or replace panels that show evidence of deterioration within specified warranty period. Deterioration shall include, but is not limited to, color fading of more than 5 Hunter units when tested according to ASTM D 2244, chalking in excess of a No. 8 rating when tested according to ASTM D 4214 or cracking, checking, peeling or failure of paint to adhere to bare metal. Warranty Period for film integrity is 45 years and for chalk and fade rating is 35 years. Metal Sales warranty excludes surface deterioration due to physical damage and exposure to salt air environments.

**8. MAINTENANCE**
No specific maintenance is required for properly installed Metal Sales concealed-fastened wall panel products. Periodic inspection to verify system integrity, drainage functionality and repair of storm damage is advised.

**9. TECHNICAL SERVICES**
Technical assistance, including more detailed information, product literature, test results, project lists, assistance in preparing project specifications and arrangements for application supervision, is available by contacting Metal Sales.

**10. FILING SYSTEMS**
Additional product information is available from the manufacturer upon request.