



## ALUMINUM FLAT PANEL COVER SYSTEMS

Pleasant Mount Welding, Inc.'s Aluminum Flat Panel Covers are an attractive and structurally sound alternative to traditional aluminum diamond plate cover systems. Utilizing custom aluminum extrusions, we can create either fixed panel cover systems or hinged panel cover systems for many different applications. The unique design of the hinged panel covers allows any individual panel on a cover system to become a fully opening access hatch. This allows for total access to the tank below.



■ PMWI ■ 45 Dundaff Street, Carbondale, PA 18407 ■ (570) 282-6164 ■ [www.pmwi.net](http://www.pmwi.net) ■

Reservoir Tank  
Covers

Clarifier Covers

Sludge Holding  
Tank Covers

Bio-tower Covers

Storage Vessel  
Covers

Odor Control

Protection

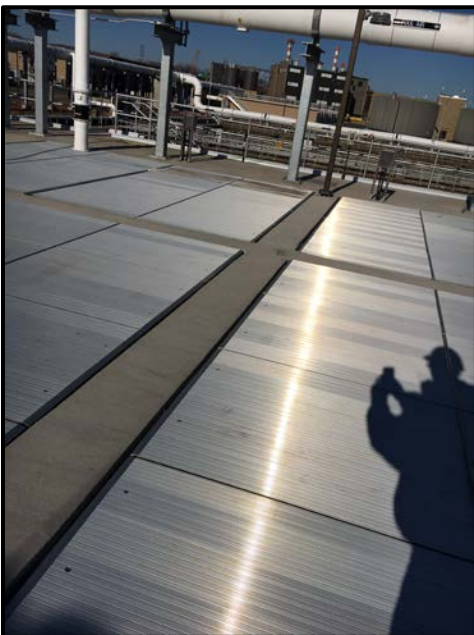
PLEASANT MOUNT  
WELDING, INC.

45 Dundaff Street,  
Carbondale PA 18407  
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At Pleasant Mount Welding, Inc., we create innovative aluminum cover systems that offer cost-effective, long term solutions for architectural, municipal, and industrial storage applications. Our flat panel cover systems are widely used in the water and wastewater industries due to their chemical resistance, minimal lifetime maintenance requirements, and low construction cost. Every PMWI aluminum cover is custom designed to meet the specific requirements of each project and engineering for any snow, wind, and suspended load capacities. The modular structural design allows us to construct covers of any size required on projects of this type. Pleasant Mount Welding, Inc.'s competitive advantage is our quality reputation, unmatched experience, and the fact that we are the complete package - we design, engineer, detail, and fabricate all of our covers in-house.



## **WATER & WASTEWATER FACILITY APPLICATIONS**

- Great for odor control applications
- Easily customized to conform around penetrations or equipment
- Substantially air tight enclosure
- Reduced air volume for reduced air filtration costs – save energy
- Hinged panels are great for access to large areas below the covers
- Flat panel covers are perfect for heavy foot traffic or frequent access to equipment

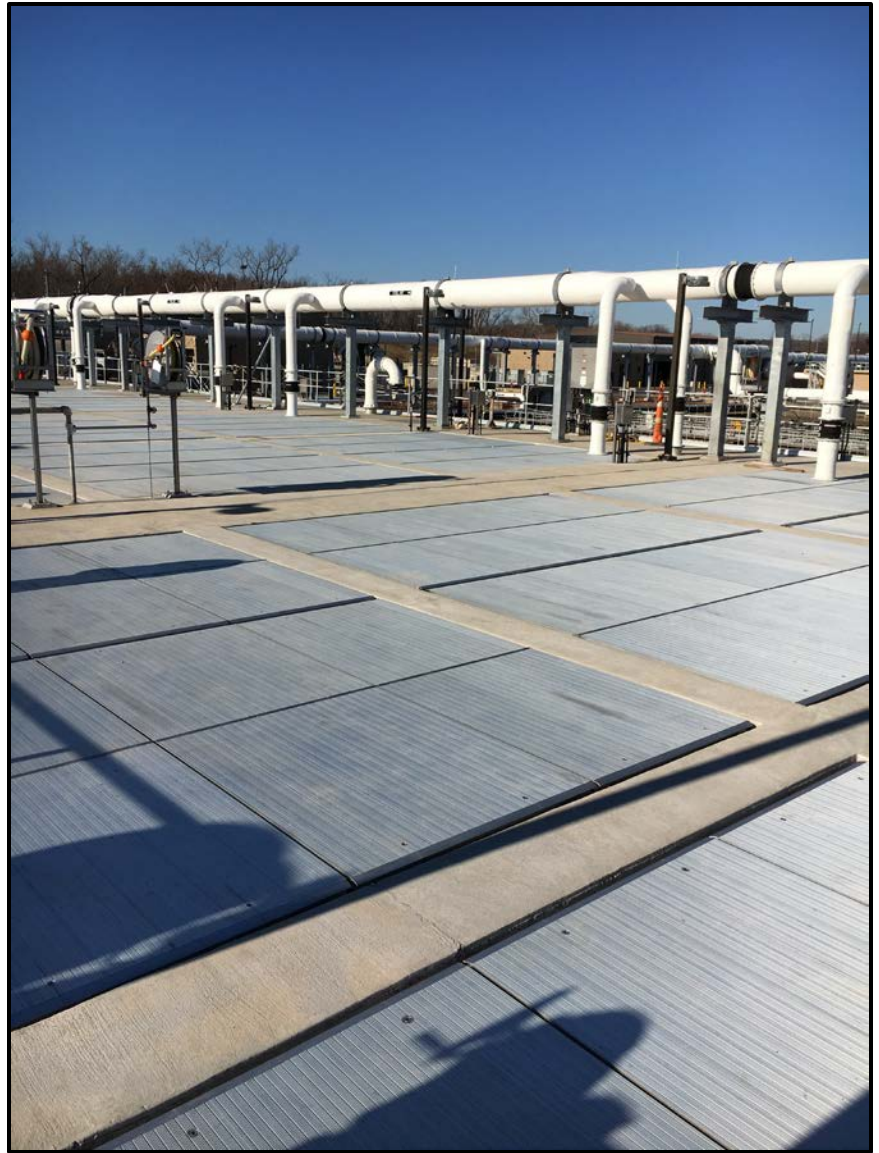


## PMWI FLAT COVER FEATURES

- Removable (hinged or fixed) panels
- Gasketed panels
- Reduced air volume
- Slip Resistance Striations
- Low deflection
- Lifting handles
- Slam locks with keys

## WATER & WASTEWATER RESERVOIR COVERS

The public’s growing concern of clean water is pushing governments to implement legislation regarding water quality and municipal practices for protecting our environment. Storage facilities are being required to cover finished water reservoirs to help keep out contaminants. Our team of specialized engineers are experienced in creating custom solutions for covering clarifiers, reservoirs, sludge holding tanks, and many more storage facilities with our innovative aluminum covers. Our custom hinges allow for easy access to weirs, basins, blowers and any other equipment that is below the covers. This provides odor control and a safe working environment for plant operators. PMWI aluminum covers require little to no lifetime maintenance, reducing plant preservation costs and saves energy. Our covers are durable and strong enough to handle large loading requirements, allowing for safe navigation throughout the plant.



Aluminum Flat Panel Cover System Plank Grating Load Table

Grating Depth	Ped. Span, Inches	Approx. Weight lbs/sqft	Sec. Prop. Sx* (in <sup>3</sup> )	Clear Span (Direction of Bearing Bar)												
				Ix* (in <sup>4</sup> )	2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"	5'-6"	6'- 0"	6'-6"	7'-0"	8'-0"
1-1/2"	68	3.65	1.003	U	2005	1283	891	654	501	396	320	265	222	189	163	125
				Du	0.077	0.121	0.174	0.236	0.309	0.391	0.482	0.584	0.693	0.812	0.942	1.233
			0.934	C	2005	1604	1336	1145	1002	891	802	729	668	617	572	501
				Dc	0.062	0.097	0.139	0.189	0.247	0.313	0.386	0.467	0.556	0.653	0.756	0.988

Loads and deflections shown are theoretical and based on static loading. Deflection: Spans and loads to the right of the bold line exceed 1/4" deflection for uniform load of 100 psf which provides safe pedestrian comfort.

# ALUMINUM FLAT PANEL COVER SYSTEM SPECIFICATIONS

## General

This specification is for aluminum flat panel cover systems composed of hinged and/or fixed panels and the associated beams/shelf angles as manufactured by Pleasant Mount Welding, Inc. (Carbondale, Pennsylvania).

## Engineering & Action Submittals

Shop Drawings: The contractor shall submit the shop drawings to the Engineer of Record (EOR) for approval for the fabrication of all aluminum flat panel cover systems based on construction drawings of current issue. The drawings shall be approved and released to the shop before fabrication of the panels. Include plans, sections, shop details, and connections as required by the contract documents.

## Manufacturer

Pleasant Mount Welding, Inc.  
45 Dundaff Street, Carbondale, Pennsylvania 18407  
Phone: (570) 282-6164 Fax: (570) 282-7917  
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## Performance & Design

Skid Resistance: The aluminum flat panel cover systems shall have a non-skid surface and no exposed area of the cover system wider than one inch shall be without striations/non-skid surface. The Pleasant Mount Welding, Inc. aluminum cover's plank grating (decking) is ribbed with concave and convex striations to prevent slipping and to assist in the removal of water off the covers' surface. This surface shall not be achieved by the use of paint, adhesive tapes, sand blasting, or any other means other than the extruded process.

Chemical Resistance: The aluminum flat panels shall be composed entirely of 6061-T6 corrosion resistant aluminum extrusions. A replaceable Neoprene seal shall isolate the cover perimeter from the concrete and/or between every panel to ensure a significantly air-tight enclosure.

Configuration: The aluminum flat panel cover systems shall be composed of beams and panels. Uplift of each panel shall be resisted with the use of quarter turn slam latch(s). Latch keys shall be provided by the panel Manufacturer. The weight of an individual panel shall not exceed 150 pounds. Each hinged panel can be easily removed or replaced via removing the bolt anchors of the "T-extrusion" to the beam underneath without disruption of adjacent panels.

## Materials

Aluminum: All extrusions that make up Pleasant Mount Welding, Inc.'s aluminum flat panel cover systems are alloy 6061-T6, of sufficient section modulus and moment of inertia to withstand the design loads. No carbon steel components shall be used.

Fasteners: All fasteners between aluminum components shall be stainless steel. Beams and shelf angles shall be fastened to concrete using stainless steel drill in place anchor bolts.

## Workmanship

The quality of the workmanship, fabrication, and shop connections shall be in accordance with the latest edition of ANSI/AWS D1.2 Structural Welding Code – Aluminum.

## Environmental Considerations

All aluminum used in these flat panel cover systems are presumed to be recyclable upon demolition.

## Maintenance

All aluminum flat panel cover systems are maintenance-free, with no painting required.