

**WINDSHIELDS
WINDOWS
DOORS**

**American
Marine**



2005 / 2006

Since 1968, American Marine Products has been providing high quality windshields and windows to boat builders and boat owners. Our company philosophy has been steadfast and simple: **Provide our customers with strong and durable products that offer long-lasting service.** And with that philosophy comes our

37 Years of Quality Marine Products

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commitment to provide outstanding customer service and continuous product improvement. These simple goals have served us well through the years, and we believe that they are even more important today. We at American Marine Products are dedicated to supporting you. You can discover this dedication for yourself by letting us serve your marine product needs.

Windows and windshields manufactured for the marine industry are individually designed to OEM specifications for specific boat models. This guide presents some of the many types of products manufactured by American Marine Products which are routinely fabricated to meet customer specifications. Information is presented about each product type, including specific features, dimensions, options, suitability for use, and ordering information. It is our hope that it will be an aid to you in specifying the product you need.

Our engineering staff is accustomed to early involvement in the design of a new boat. We work in partnership with the designer to determine the best window or windshield product for the boat. In this manner you can be assured of attaining the optimum design. Ultimately this means success for you and long-lasting value for the boat owner.

For those involved in boat repair and refurbishment, we have allocated a portion of our capacity to fabrication of custom windows and windshields. Please see the back cover of this guide for more information concerning custom fabrication.

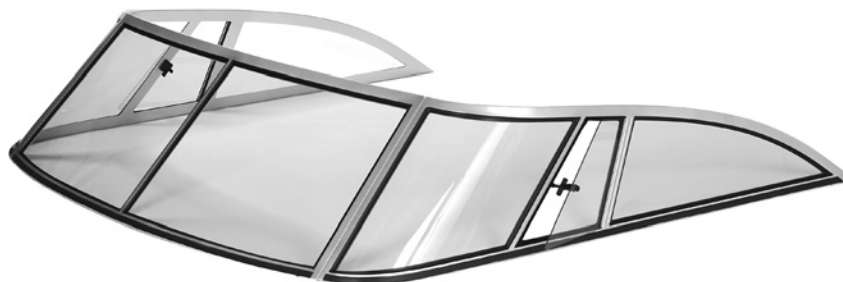
We invite you to call and discuss your needs. And we look forward to working with you.

Bluewater Windshields

The **Bluewater** line of curved windshields provides the boat designer the ability to create unique boat styles which are critically important in today's marketplace. Every windshield is custom designed to fit the customer's deck, satisfying even the most difficult requirements. Unlike standard windshields, an American Marine custom windshield will enhance and complement the styling and functionality of the boat, setting it apart from the others. Existing boat models can be more economically converted to curved windshields using the custom windshield approach rather than retooling the deck to fit a standard windshield.



Wing Vent with
T-Handle Latch



The framing system of the American Marine curved windshield is fully welded, which provides strength and durability not found in mechanically framed windshields. This construction technique allows for the use of front opening vents or side wing vents not available in many curved windshields. Boats designed for use in temperate climates can thus have the advantage of opening vents to increase cockpit air flow.

There are many windshield options to choose from

GLAZING

All welded windshield frames will accept either 3/16" or 1/4" thick glass. Large or forward-facing sections are glazed with 1/4" glass, while smaller sections utilize 3/16". In addition to the standard tempered safety glass, acrylic may be specified. Curved sections are typically glazed with acrylics. Optional bent tempered safety glass may be specified for frames of constant radius.

DECK ATTACHMENT

Curved windshields incorporate a screw channel in the sill, providing for fast and secure mounting from above the deck with screws. The channels are then closed with a vinyl cover to protect the fasteners and provide a finished look.

WIRE CHANNELS

American Marine has several optional headers which incorporate a wire channel for use in routing wires across the top of the frame to wiper motors and running lights. Wire channels can also be

placed in the vertical posts for best wire feed location from below the deck. These channels are closed with a flush vinyl cover providing a neat finished look to the installation.

OPENING VENTS

Top hinged opening front vents or push-out side vents are available in both the curved and the conventional windshield lines. Vents may be actuated with manual adjusters or with an electric actuator.

HANDRAILS

Solid 1" diameter aluminum handrails may be attached to the top of the wings to provide a secure handhold when moving about the boat. When long wings are required, handrails also improve wing stiffness. Handrails are normally mounted on the outside of the wing, but may also be mounted inside as cockpit hand-grabs.

Bluewater Windshields

The conventional **Bluewater** welded windshield is appropriate for traditional boats requiring economical protection from wind and water. This line of custom designed windshields provides great adaptability to deck configurations which exhibit crown, camber or pitch in the side coaming. The aluminum extrusions utilized in the frames are generally heavier than most and are fully welded in the corners to provide great strength and durability, which means greater value to both the boat builder and the boat owner.

The standard 3/4" thick American Marine framing system is supported by several types of headbars,

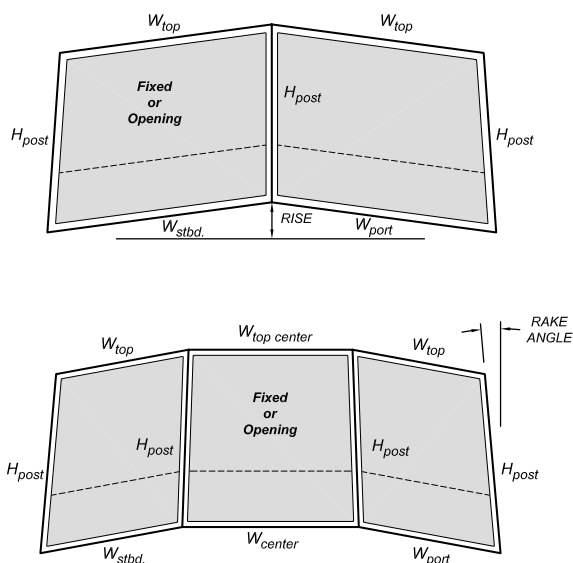


sills, posts, hinges and mullions to satisfy every possible design requirement. Opening front vents, push-out side vents, handrails, and wire channels are available.

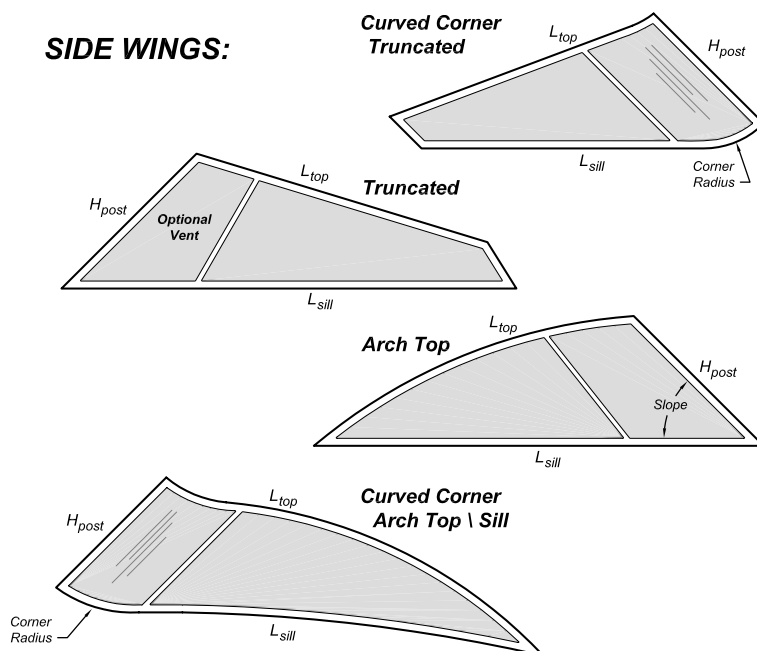
The American Marine windshield framing system is exceptionally versatile. Some of the many designs found in use today include 3 section center console windshields with handrails, 4 section cockpit and cuddy cabin windshields, 5 section windshields with center front vents, and multi-section flybridge windscreens for larger yachts. The possibilities are limited only by the designer's imagination.

Some Common Windshield Configurations . . .

FRONTS:



SIDE WINGS:



Available Finishes -

Windshield and window frames can be provided in a variety of finishes. The finishes available include clear anodize, polyurethane paint, or polyester powder coat paint. The powder coat finish provides a hard, durable surface in a semi-gloss texture. Powder coating is available in black or white only. Surface damage may be difficult to repair.

Polyurethane paints, such as Awlgrip™ or Imron™, provide chemical resistance and a high gloss surface finish. Most are field repairable and touch-ups can be buffed smooth and blended-in with the original coating. Any color on the standard color charts may be selected. Polyurethane paints are to be used above the waterline only, and cannot be continuously in contact with wet coverings or continuously immersed in water.

A clear anodize finish provides the longest-lived finish. This electro-chemical conversion of the aluminum surface provides a finish that strongly resists corrosion and allows the aluminum frames to remain bright.

	Clear	Black	White	Standard Colors	Custom Colors
Anodize	●				
Powder Coat		●	●		● (Note 1)
Awlgrip™ Polyurethane		●	●	●	●
Imron™ Polyurethane		●	●	●	●

(Note 1): Track White, Gloss White, Ivory or Bronze only

Glass Tint Choices -

Safety glass and acrylic plastic are available in various color tints which are helpful in reducing eye strain from solar reflection off the water. These tints are embedded in the glass or acrylic itself, and are not applied as surface films. Tints reduce both the amount of visible light and the ultra-violet rays which penetrate through the windows. Blocking some of the visible and UV light can help prevent interior surface damage and heat build-up, but it also reduces night vision. The American Boat and Yacht Council recommends that tints should not reduce visible light transmittance to less than 70% through windows which are used for piloting. However, for windows not used for piloting or navigation, low light transmission can be very desirable. Always consider the safety ramification when selecting a tint.

	Clear	Green	Bronze	Gray	Dark Gray
% Light Transmission (1/4" Thick)	88%	77%	55%	44%	14%
Tempered Safety Glass					
3/16 Thk.	●	●	●	●	
1/4	●	●	●	●	●
3/8	●		●	●	
Acrylic Plastic					
3/16	●	●	●	●	●
1/4	●	●	●	●	●
3/8	●	●	●	●	●

Other Available Products
(View on the website)

Fixed Windows

8000 Series

8100 Series

Sliding Windows

8000 Series

8100 Series

Hinged Windows

8000 Series

8100 Series

CUSTOM FABRICATION

American Marine's primary business is the design and manufacture of windows and windshields for production boat builders. However, a part of our capacity is devoted to custom window and windshield fabrication for the smaller builder, the repair yard, or the individual boat owner. Our custom fabrication service yields the same high quality products as those we manufacture in production quantities.

PRICING

With relatively little information from you, we can estimate the cost to fabricate custom windows, windshields or doors to your specifications. To obtain a price estimate, you should provide information as to the type of window, windshield or door, its shape and dimensions, the finish and glass tint desired. Options such as screens and trim rings should also be indicated. You can use pages 6, 13 and 22 of this publication as a guide and checklist. If you have questions regarding the specifying of your desired product, please call us for assistance.

Final pricing is subject to review of your submitted templates, drawings, or other specifications. When all of the required information is received, we will confirm the price and delivery of your custom product. Prices include cartoning for shipment unless indicated otherwise. Crating is often required to protect large units during shipment. There is an additional charge for crating.

TEMPLATES, DRAWINGS, and SPECIFICATIONS

To assure properly fitting custom windows and doors, it is very important that you provide adequate size and shape information. We suggest that a template of plywood, masonite, door skin, or heavy paper be made to fit inside the window or door opening, or to indicate the overall perimeter. Label all templates with your name, the window or door type, the position on the boat, the orientation (top, bottom, forward, aft, left or right hinged, etc.), whether cut-out or overall size, location of any mullions, vents, sliding elements, glass type, finish, etc. In lieu of a template, an accurately dimensioned and labeled drawing can provide the necessary information.

Windshields require more detailed measurements, as these are three-dimensional products. Not all windshield styles are appropriate for welded construction. Curved windshields require detailed templates and deck landing area measurements. In most cases expensive bending dies are required to achieve the required curves. The resulting cost is normally prohibitive for single custom windshield orders. For conventional windshields (flat panels) you may request a Windshield Measurement Worksheet that will aid you in taking the measurements needed to specify your windshield.

PAYMENT AND DELIVERY

All custom fabricated orders require a 50% deposit at the time of order. Final payment can be arranged prior to shipment or will be collected on delivery (COD). Unless you specify otherwise, we will arrange to ship your product the best way, considering the overall size and weight of the order. Cartoning and crating are required to adequately protect most orders. Shipment is FOB our factory, and you pay all freight and COD charges. Motor freight shipments require a commercial shipping address.

LIMITED WARRANTY

American Marine Products, Inc. warrants its products, in normal usage, to be free of defects in materials and workmanship for a period of one year from purchase by the original purchasing party, subject to the following conditions and limitations:

A. American Marine's liability shall be limited to the repair or replacement of the goods or parts defective in materials or workmanship.

B. American Marine shall, at its sole discretion, decide the proper method of correcting the defect.

C. American Marine shall not be liable for defects in the product finish due to:

1. Failure by the owner or user to properly clean and maintain the product according to the boat manufacturer or installer of the product.
2. Perforation of the finish by drilling, tapping, or attachment of surface mounted hardware to the product.
3. Failure by the owner or user to keep drainage holes free and open to discharge standing water which leads to corrosion and/or separation of the finish.

D. Warranty claims for products that are purchased and installed by:

1. The boat manufacturer should be addressed to the boat manufacturer.
2. A boatyard or tradesperson should be addressed to that party.
3. The boat owner should be addressed to American Marine.

E. All warranty claims must be made in writing.

This warranty is American Marine Products, Inc.'s only expressed warranty. No implied warranty, including without limitation, the implied warranty of merchantability and fitness for a particular purpose, is hereby provided. American Marine Products, Inc. shall not be liable for any personal injury or property damage beyond the defective product warranty hereinabove extended, for loss of use of the product or the boat, nor for any other incidental or consequential damages, costs or expenses.

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GENERAL INFORMATION

(for OEM Customers)

ORDERING: Please indicate your American Marine product number when placing orders. We require a hard copy purchase order, and your purchase order number or the name of the person placing the order. Most of our products are custom made to OEM specifications. As such, they cannot be returned for credit. Canceled orders are subject to cancellation charges.

PRICES are subject to change. You will be notified of any price change as it occurs, or upon placing a new order. Prices are FOB our factory in Pompano Beach, Florida, unless otherwise indicated.

LEAD-TIME AND DELIVERY: Lead times vary with the type of product, the finish, and the quantity ordered. Please allow adequate lead time when ordering. A delivery commitment will be made when your order is placed.

TERMS AND CONDITIONS: Net 30 day terms are granted to customers on open account. New and non-credit customers are shipped on a COD basis. In some cases, an advance deposit may be required. COD shipments sent COMPANY CHECK ACCEPTABLE are subject to our prior approval. To apply for an open account, request and complete our credit application. You will be notified within three weeks of your account status.

NEW PRODUCTS: American Marine will prototype and tool new products to meet customer's specifications. Most products require tooling, including master sets, templates, fixtures, dies, molds, etc. Prototype and tooling costs are charged where applicable, and depend upon product complexity.

DESIGNS AND SPECIFICATIONS are subject to improvement and change. Customer approval will be requested for significant changes.

SHIPPING: You should indicate specific shipping instructions when placing orders. Otherwise, we will use our judgment in selecting the carrier and routing. Special crating for extra protection is available at additional cost.

DAMAGE OR LOSS IN SHIPMENT: We ship FOB our factory, meaning that the goods transfer to the purchaser at the shipping point. You should thoroughly inspect the goods upon receipt. If there is damage you must advise the delivering carrier in writing no more than 15 days after delivery, and request that the carrier make an inspection. Retain all shipping containers and packing materials for their inspection. Repair or replacement shall be at the expense of the carrier.

RETURNS: A return material authorization must be obtained from American Marine prior to returning product for repair or replacement. Return shipment must be in accordance with our shipping instructions. Products must be properly packaged to prevent further damage and returned in exactly the same condition as received.