

INSTALLATION INSTRUCTIONS

for PRISMA Stringers and Bulkheads

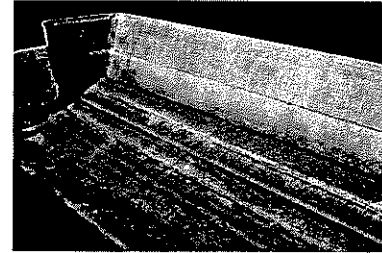


Patterning and fitting for PRISMA stringers

If replacing bad or rotted stringers, replicate the size and position of the stringers installed by the boat manufacturer. Consult with a marine architect or qualified structural boat engineer if you are changing the design.

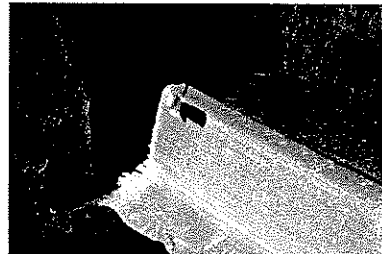
LAYOUT

1. Layout locations of stringers and bulkheads using a broad marker. Stringer locations should bridge strakes in hull. Where possible, locate bulkheads over stringer joints.



AFT STRINGER FITTING

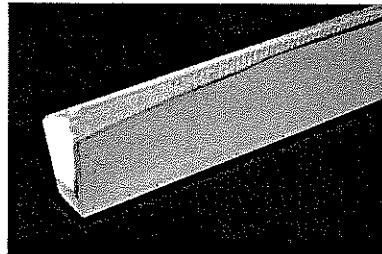
2. Position stringer beam. Using a marker, transcribe transom detail to beam and cut using a hand saw or sharp knife.



FORWARD STRINGER FITTING

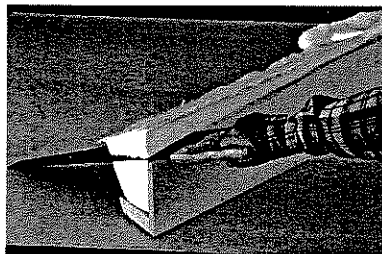
3. Stringer beams can be shaped to the bow transition using a miter box as shown. Pattern the bow transition using a heavy cardboard or door skin and build a simple miter box guide.

Cut away fiberglass of the stringer beams by first scoring the fiberglass with a utility knife and then peeling away.



Finish the shaping of the stringer beam by cutting away the exposed foam with a hand saw.

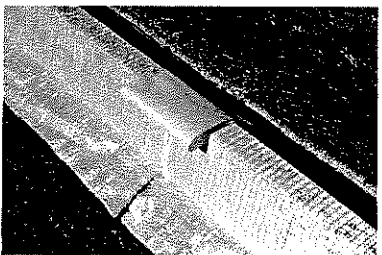
Layout and position all stringer beams before beginning bulkhead and wing pattern making.



JOINING STRINGER BEAM SECTIONS

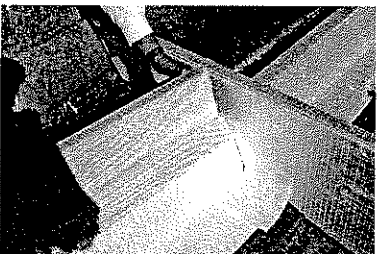
Stringer beams sections can be butt joined and glassed over. A minimum of 5" overlap is recommended.

Where possible position bulkheads over stringer joints.



STACKING OF PRISMA BEAM FOR HEIGHT

PRISMA beams can be stacked for added Stringer height.

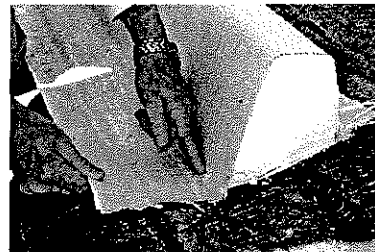


PROPER INSTALLATION IS IMPORTANT

THE UNDERSIDE OF THE STINGER BEAM MUST BE FULLY WET OUT WITH AN APPROVED MARINE GRADE RESIN. THERE SHOULD BE NO GAPS BETWEEN THE HULL AND STRINGER BOTTOM.

ALL STINGER TABS SHOULD BE FULLY EXTENDED. TABS SHOULD NOT BE ALLOWED TO BE UNDER THE STRINGER BEAM.

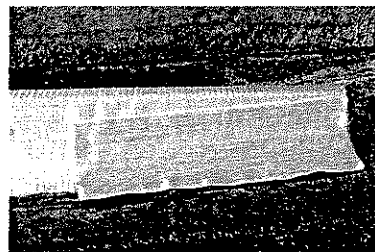
PROPERLY EXTENDED TABS SHOULD FORM A FILLET RADIUS BETWEEN AND HULL AND STRINGER



TABBING IN STRINGER BEAMS

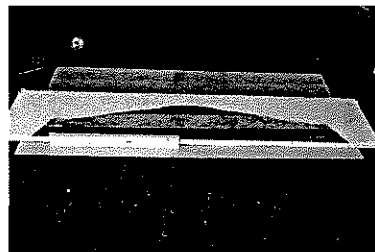
All intersections of the stringer beam and hull must be tabbed. Use multiple tabbing as shown at the transom intersection.

Tabbing material is used in the bow transition area to replace glass previously removed in shaping procedure:

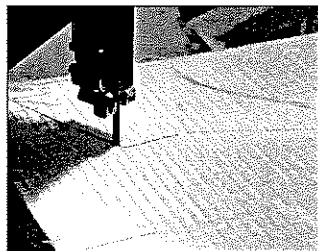
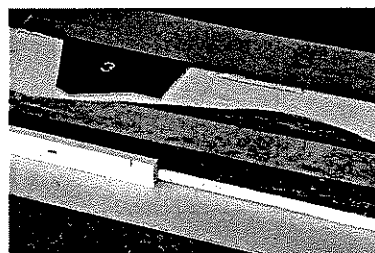


BULKHEAD AND WING FABRICATION

1. Using heavy cardboard or door skin, fabricate bulkhead head patterns and position onto PRISMA bulkhead panel.

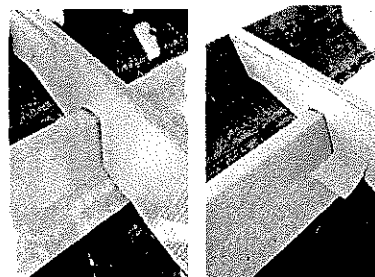


2. Smaller parts can be patterned and laid out on the bulkhead panel to reduce scrap. Transcribe patterns to the bulkhead panel using a marker pen.



3. Cut out bulkheads and small parts using a band saw. Alternatively, the bulkhead panel may be cut by first cutting through the fiberglass with a utility knife and then finishing the cut with a hand saw.

Bulkhead panels can be notched to fit over stringer beams.

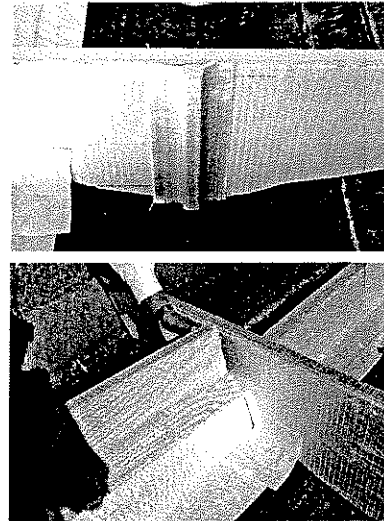


TABBING IN BULKHEADS AND STRINGERS

Double tab **all** intersections of the bulkhead and hull.

ADDITIONAL STIFFENING OF BULKHEADS

Smaller cross section PRISMA beams can be used for additional stiffening of bulkhead panels when required.



GENERAL INSTRUCTIONS

1. Wearing protective clothing and eye protection, **prepare the inner hull laminate surface following the marine resin manufacturer's instructions.** All contact surfaces must be free of contamination which include, but are not limited to, sanding and/or grinding dust, water, oils, greases, and marine fuels. Prepared surfaces must be wide enough to include the stringer tabs. Poor or improper surface preparation can greatly reduce the bond strength between the stringer and the hull and could result in structural failure.
2. Wearing protective clothing, fully saturate the bottom of the PRISMA stringer and stringer tabs with marine resin and firmly press the stringers into place. Eliminate all air bubbles under the stringer tabs using a brush or roller. Finish laminating each stringer section before proceeding to the next section. Check that each stringer section tightly conforms to the hull bottom. If gaps persist, cover the stringer with wax paper, and weight the stringer down until contact with the hull is achieved. All stringer butt joints must have a layer of PRISMA 24 oz. Fiberglass Tape with a minimum of a 5" lap on either side of the butt joint. Improperly laminated stringers and joints can reduce the structural integrity of your craft.
3. Allow installed stringers to fully cure before proceeding to bulkhead installation.

WARNING:

- Improper use of this product could result in hull failure and lead to serious injury.
- Because the forces on a craft's structure are dependent on a many variables, including, but not limited to, intended use (trailer, ocean, river, etc.), maximum speed, and vessel geometry, consult with a marine architect for proper stringer and bulkhead geometry and placement.
- Prior to installing this product, support your boat by the keel and chine and assure that the bottom is not deflected by trailer bunks, rollers, or support blocks. Failure to do so could change the shape of the hull upon the installation of this product and may seriously affect the handling characteristics of the boat.
- Use only with marine resins: WESTSYSTEM Epoxy or equivalent. Proper surface preparation prior to installation is critical to achieving structural integrity. Follow the resin manufacturer's directions.
- Failure to keep PRISMA products dry and clean prior to installation can decrease the performance of this product.
- Use only PRISMA 1010 24 oz. Fiberglass Tape or equivalent for all joining and tabbing of PRISMA products.
- PRISMA products are **not** intended to be used for motor mounts.

Compsys, Inc. makes no express or implied warranty whatsoever with respect to these products including, but not limited to, implied warranties of merchantability and fitness for particular purpose.

PRISMA is a registered trademark of COMPSYS, Inc. Patent Nos. 5,429,066; 5,664,518; 5,800,749; 5,897,818; 5,908,591; 6,004,492; 6,013,213; and others issued and pending

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