



2024 MARINE FABRICATORS ASSOCIATION'S TIME STANDARDS MANUAL

The Time Standards Manual was developed in 1996 by the Marine Fabricators Association (MFA), a division of the Advanced Textiles Association, to serve as a benchmark that shop owners can use to set fabrication times, with which they can generate competitive labor costs. The manual is an ongoing project that continues to grow and change in response to the ever-changing marine industry. If you have suggestions for updates or changes, please email barbara.connett@textiles.org and your suggestions will be submitted to the MFA Board of Directors for review and possible inclusion in future editions.

This manual was developed by industry experts and the times stated for each project are averages. Individual times may differ depending on experience and technique. We suggest that each shop log its average project times so that it is able to quote its customers as accurately as possible. This issue of *Marine Fabricator* includes a truncated version of the Time Standards Manual. The complete manual (including 17 projects) is available online both as a pdf and as an interactive app for MFA members. Members can access the Time Standards Manual at marine.textiles.org/mfa-time-standards. Not a member? Joining is easy and offers many benefits! For more details visit marine.textiles.org/membership.



2024 MFA TIME STANDARDS MANUAL

HOW IT WORKS

This manual features exterior categories and upholstery categories. Marine canvas and upholstery is a custom-oriented business, so each product category features a base set of times that changes according to the various sizes of a specific project.

The manual also indicates re-cover estimates on boat tops by classifying frames and tops into separate categories. For a complete frame and top, simply add the times for both categories. For a re-cover job, use the times for the top only.

EXAMPLE PROJECT

The category timetables do not include any of the options listed at the end of each category. Why? The list of times to cover every possible product combination would quickly fill up a dictionary, and then some. To estimate the total time for a custom product, you must add the time from the product table to the times of each of the options at the bottom of the list. See example to the left:

ESTIMATE EXAMPLE

As you can see from this example, the options list is the key to getting accurate total hours for each custom product.

FRAME

1-inch stainless steel frame	
4-bow bimini with a 9-foot beam	3 hrs.
Options: Split mount	0.75 hr.
Dog-leg for one frame	0.5 hr.
TOTAL FRAME HOURS	4.25 hrs.

TOP

4-bow bimini top with 10-foot beam	7 hrs.
Options: Zipper pockets	2 hrs.
2-stay cutout	3 hrs.
2 sailing windows	
2 x 1.50 hours	3 hrs.
Storage boot	1.5 hrs.
TOTAL TOP TIME	16.50 hrs.
TOTAL JOB TIME	20.75 hrs.

*Example based on average of 60" goods

Product

This bimini top on a sailboat requires a split mount to get around the winches. There are two backstays going through the top, the customer wants two sailing windows, and the beam is 9 feet wide. The customer also wants the top to be 96 inches long from front to back. To clear the winches, you also must put a dog-leg in one of the two main bows. Finally, the customer wants a zip-off bimini for easy removal.

According to this manual, the average marine fabricator would require 20.75 hours to complete this project. This total includes the time it takes to complete each of the following tasks:

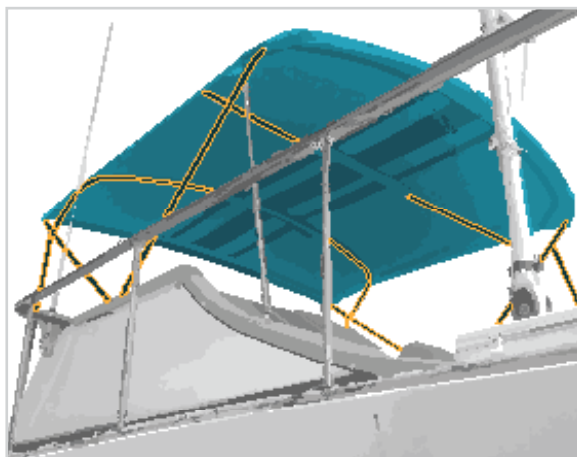
- Give the estimate
- Design the product
- Patterning
- Order the materials
- Receive and pay for the materials
- Bend the frame
- Mount and fit the top
- Cut the top out
- Sew the top
- Install the top
- Bill and collect the money

Considerations Checklist:

These considerations are other product options to take into account when estimating overall time of a custom product. Here are some factors affecting the job time:

- Driving a substantial distance
- Different types of hardware: Common Sense, Lift the Dot, turns, snaps, zippers
- Replacing snaps in boat and installing new hardware
- The material fastener is being drilled into: fiberglass, wood, stainless steel, (stainless steel window), aluminum
- Specialty hardware
- Track installation: Different types of track may take more time
- Track removal: Do you have to remove track?
- Pattern times can vary
- Old versus new design
- Are vents needed?
- Flaps: rain, overlaps, zippers
- Prototyping
- Is there an electrical component involved in the project? Ask boat owner to remove electrical items such as antenna mount, radar mount (not including electrical), before doing the fabrication
- Is the boat going to be on land or in the water? This will change pattern and install.
- Is this a one-or two-person job?

FRAME STRUCTURE



» Bimini

1-INCH STAINLESS FRAME

Beam (In Feet)	7'	9'	10.5'	13.5'
1-frame	1.5 hrs.	1.5 hrs.	1.75 hrs.	2.5 hrs.
2-frame	2 hrs.	2.25 hrs.	2.5 hrs.	4 hrs.
3-frame	2.5 hrs.	2.75 hrs.	3 hrs.	5 hrs.
4-frame	3 hrs.	3.25 hrs.	3.5 hrs.	5 hrs.
5-frame	3.5 hrs.	3.75 hrs.	4 hrs.	6 hrs.

OPTIONS

Rigid supports (one pair)	1 hr.
Through-bolt mounts	0.75 hr.
Severe angle mounts	2 hrs.
Dog-leg frame	0.5 hr.
Split mount	0.75 hr.
Grab rail	0.5 hr.

NOTE: These times include the design, bending, assembly and installation of the frame onto the boat. They do not include any of the options listed, nor do they include any actual fit of the top.

*** SEE CONSIDERATIONS ON PAGE 28.

ATTACHED BIMINI

Beam (In Feet)	7'	9'	10.5'	13.5'
1-frame	4.5 hrs.	5 hrs.	5.5 hrs.	7 hrs.
2-frame	7 hrs.	7 hrs.	9.5 hrs.	12.5 hrs.
3-frame	8 hrs.	8 hrs.	10.5 hrs.	14 hrs.
4-frame	9 hrs.	9.5 hrs.	12 hrs.	16 hrs.

OPTIONS

Beam (In Feet)	7'	9'	10.5'	13.5'
Attachment using Zipper and Keder	1	1.25	1.5	1.75
Straps (one pair)	0.5 hr.			
For odd-shaped arch:	Add 1.5 hrs.			

ZIPPER POCKETS

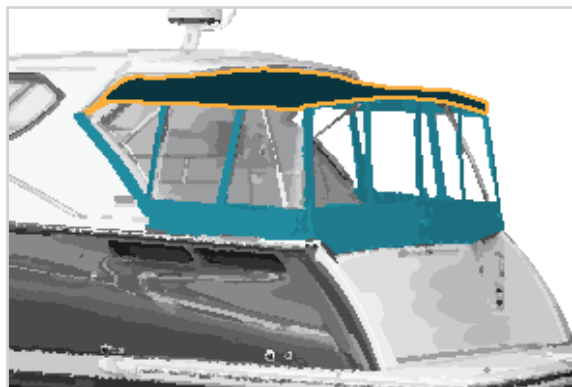
Beam (In Feet)	7'	9'	11'	13+
1-frame	0.5 hr.	0.5 hr.	0.75 hr.	0.75 hr.
2-frame	1 hr.	1 hr.	1.25 hrs.	1.25 hrs.
3-frame	1.5 hrs.	1.5 hrs.	1.75 hrs.	1.75 hrs.

OPTIONS

Zipper Walk-Through	2 hrs.
Front Panel Clear Insert	3 hrs.
Straps (one pair)	0.5 hr.

*** SEE CONSIDERATIONS ON PAGE 28.

NOTE: An attached bimini is any top supported by framework and attached to either the boat, a radar arch or another top at one end. A convertible top is any top supported by framework that attaches to a windshield on the front edge. Times and materials listed are for a base product with no zipper pockets, enclosure zippers, or any options. This does not include convertible tops. These times are for the canvas top only; they do not include manufacturing the frame or installing the frame on the boat.



» Attached Bimini and Enclosure

MOORING / TRAVEL / WINTER COVER



» Mooring Cover



» Travel/Storage Cover



» Winter Cover

Length (In Feet)	9'	15'	18'	21'	24'	27'	30'	30'+
2 widths of fabric	6 hrs.	7 hrs.	8 hrs.	9 hrs.	10 hrs.	11 hrs.	12 hrs.	13 hrs. +
3 widths of fabric	12 hrs.	13 hrs.	14 hrs.	15 hrs.	16 hrs.	17 hrs.	18 hrs.	19 hrs. +
4 widths of fabric	14 hrs.	15 hrs.	16 hrs.	17 hrs.	18 hrs.	19 hrs.	20 hrs.	20 hrs. +

OPTIONS

Length (In Feet)	9'
REINFORCING PATCH	
Small	0.25 hr.
Medium	0.5 hr.
Large	1 hr.

NOTE: Mooring and travel covers cover the entire boat all the way to the rub rail. A mooring cover, however, usually is fastened with fasteners, while a travel cover attaches via a drawstring and tie-downs. The basic times do not include any of the options listed.

CUTOUT

Easy	0.5 hr.
Difficult	1.5 hr.
Mooring pole assembly	0.25 hr.
Pulpit and bow rail	3 hrs.
Bow rail only	2 hrs.
Fitted panel	1.5 hrs.
Tie Straps (per strap)	0.25 hr.

*** SEE CONSIDERATIONS ON PAGE 28.

FLYBRIDGE COVER

Length (In Feet)	6'	9'	12'	15'	18'
8' width	5 hrs.	6.5 hrs.	8 hrs.	9 hrs.	10 hrs.
10' width	6 hrs.	7.5 hrs.	9 hrs.	10.5 hrs.	12 hrs.
15' width	7.5 hrs.	9 hrs.	10.5 hrs.	12 hrs.	14 hrs.
20' width	9 hrs.	10.5 hrs.	12 hrs.	14 hrs.	16 hrs.

OPTIONS

Length (In Feet)	6'	9'	12'	15'	18'
Fitted and Shaped Panels		1.5 hrs.	2.5 hrs.	3 hrs.	4 hrs.
Mooring Pole Assembly		0.25 hr.			

CUTOUT

Easy	0.5 hr.
Medium	1.25 hrs.
Difficult	2.25 hrs.

REINFORCING PATCH

Small	0.25 hr.
Medium	0.5 hr.
Large	1 hr.

VENTURI STYLE

Easy	2 hrs.
Medium	3 hrs.
Difficult	4 hrs.

NOTE: Flybridge covers are storage covers for when the boat is not in use. They cover the entire flybridge and often use the same hardware as an enclosure. These covers can often have more of a complex shape due to railings and windshields. The basic times do not include any of the options listed.

*** SEE CONSIDERATIONS ON PAGE 28.

STANDARD COCKPIT COVER



» Cockpit Cover and Bow Cover



» Accessory Cockpit Cover with Graphics

Length (In Feet)	6'	9'	12'	15'	18'
2 widths of fabric	5 hrs.	6.75 hrs.	7.5 hrs.	8.5 hrs.	9.5 hrs.
3 widths of fabric	6.5 hrs.	8 hrs.	9 hrs.	10 hrs.	11 hrs.

OVER-THE-WINDSHIELD COVER

Length (In Feet)	6'	9'	12'	15'	18'
2 widths of fabric	6.75 hrs.	8.75 hrs.	9.5 hrs.	10.5 hrs.	11.5 hrs.
3 widths of fabric	9 hrs.	10 hrs.	11 hrs.	12 hrs.	13 hrs.

OPTIONS

CUTOUT

Easy	0.25 hr.
Medium	0.5 hr.
Difficult	1.5 hr.

REINFORCING PATCH

Small	0.15 hr.
Medium	0.33 hr.
Large	0.5 hr.

BOW COVERS

Small	3 hrs.
Medium	3.5 hrs.
Large/Xlarge	4 hrs.

*** SEE CONSIDERATIONS ON PAGE 28.

NOTE: This product is divided into two classifications: standard cockpit covers and over-the-windshield covers. The time figures are for a basic product without any of the options listed.

WINDSHIELD COVER

Length (In Feet)	2'	4'	6'	9'	12'	15'
1 width	2 hrs.	2.5 hrs.	3.25 hrs.	4 hrs.	4.75 hrs.	5 hrs.
2 widths	4 hrs.	4.25 hrs.	4.75 hrs.	5.5 hrs.	6.25 hrs.	6.75 hrs.
Each additional seam	0.5 hr.	0.5 hr.	0.5 hr.	0.5 hr.	0.5 hr.	0.5 hr.

OPTIONS

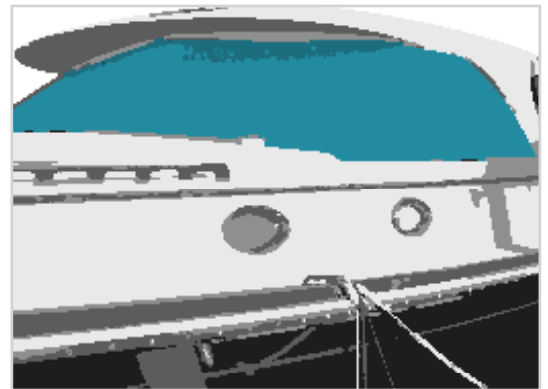
Length (In Feet)	2'	4'	6'	9'	12'	15'
Curved Window	0.5 hr.	0.5 hr.	0.75 hr.	1 hr.	1.25 hr.	1.5 hr.

CUTOUT

	Hours
Easy	0.25 hr.
Medium	0.5 hr.
Difficult	1 hr.

NOTE: The time figures are for a basic cover with none of the options listed.

*** SEE CONSIDERATIONS ON PAGE 28.



» Accessory-Windshield Cover