# **Bimini Sun-Top**

The space-saving, foldable Bimini sun-top from Mate USA provides protection and cooling shade while maintaining ventilation, visibility and



U.S. Patent

free movement onboard. The lightweight Bimini is easily set into place with a choice of mounting options. Locking joints on the Bimini's frame enable it to fold quickly into a compact package, complete with a storage bag. Despite its average weight of just 13 lbs., the Bimini is engineered to withstand speeds up to 33 knots.

WEB

# FOLDABLE BIMINI SUN-TOP

- 3 arches
- Aluminium white powder painted tubing
- 0,78" tube diameter
- Waterproof
- Storage boot
- Foldable box
- 33 kts max. speed of use
- 5 years warranty
- 13 lbs average weight

**AVAILABLE COLORS** 







# **INCLUDED ACCESSORIES**



#### **OPTIONAL ACCESSORIES**



**140-010-025** Optional inflatable boat attachment



**140-010-030** Rail mount nylon hinge as option



**140-010-002** Flat/side optional fitting







| DESCRIPTION                 | CODE                                  | LENGHT | HEIGHT | COLOR      | UNIT  |          |
|-----------------------------|---------------------------------------|--------|--------|------------|-------|----------|
| Bimini High Serie meas. 89" | T110-015-020-N/W (N = Navy W = White) | 69"    | 53"    | navy/white | piece | PATENTED |
| Bimini High Serie meas. 60" | T110-020-005-N/W (N = Navy W = White) | 69"    | 53"    | navy/white | piece | PATENTED |
| Bimini High Serie meas. 67" | T110-020-010-N/W (N = Navy W = White) | 69"    | 53"    | navy/white | piece | PATENTED |
| Bimini High Serie meas. 73" | T110-020-012-N/W (N = Navy W = White) | 69"    | 53"    | navy/white | piece | PATENTED |
| Bimini High Serie meas. 79" | T110-020-015-N/W (N = Navy W = White) | 69"    | 53"    | navy/white | piece | PATENTED |

#### Why testing sun-tops inside the wind tunnel?

The idea of testing boat sun-tops originates as completion of the LIFE-TIME GUARANTEE which covers our sun-tops, and from the curiosity to prove in practise the result of an engineering and realization evolution achieved by Tessilmare in this specific field. Technical tests on fabrics have been performed by specialized textile laboratories; traction test, capability to tear and to fatigue to the several components tests have been carried out inside our company. Practical tests have been executed on boats of different sizes and at high speeds. As completion to the above it was needed, or better, it made us curious to get to know how Tessilmare sun-tops would "behaved" at extreme conditions surely not reproduceable in the practical use.

All sun-tops are made up on an average of 40 components; Tessilmare wanted to verify which of these components would give in or altered and at which speed the sun-top would collapsed. In which way the collapse would have taken place, if suddenly and therefore potentially dangerous for the user or if progressively.

What above has been partially confirmed during the test inside the Wind Tunnel, both statically and dynamically: over 66/72 ft/sec. a compression of the top cover in the front and a considerable aerodynamic lift in the back take place. At higher speeds a sudden stall took place causing a clear compression of the top cover which thus compressed the frame of the sun-top towards the bottom allowing thus a further increase of the speed in full safety conditions. Thanks to this compression there will not be the risk that the suntop could "fly away" from the boat.

At a speed of 54 kts/h a sun-top 9.8 ft. width and approx. 9 square mts. surface starts with an aerodynamic lift of approx. 440 lbs. to an estimated compression of 176/220 lbs.



The sun-top structure goes down towards the boat deck without the frame suffers any deformations.

Thanks to these tests we can confirm that an average speed of 33 kts/h (which is considered a high cruising speed) does not weigh on a bigsize sun-top. The max. speeds reached inside the Wind Tunnel have been of 65 kts/h for suntops till 7.2 ft. width and 54 kts/h for sun-tops till 9.8 ft. width.

Collapse speed has not been reached.







ENGINEERED BY Rezzonico Massimo MADE BY Tessilmare



Fast and easy to install, Radial is the PVC fender profile with no rivals. Differently from all the profiles available on the market, Radial can be fitted cold in just few steps. The soft part is supplied in coils cut upon request (according to the boat perimeter), to avoid waste and unaesthetic interruptions. Furthermore it is produced in the same colour of the boats gelcoat, to better satisfy customers needs.

> A LOT OF SAVING IN CONSTRUCTION TIME



COLD FITTING IN JUST FEW STEPS

# **NO NEED TO PRE-HEAT**





How to bend: visit our video channel www.youtube.com/tessilmare



#### **ADVANTAGE**

- no aesthetical interruption
- saving in transportation costs
- more easiness in replacing the profile
- saving 2/3 of assembling time

Very high bending adaptability







#### JUNCTION

**BENDING** 

Elegant and convenient PVC and steel matching top and end caps will give the finishing touch to transoms and to the boat sizes.

Perfect hull adhesion very high aesthetic value



## TRADITIONAL SYSTEMS



imperfect junctions

bending deformation

lack of hull adhesion

unsightly bolting

# **Radial fitting phases**

## **RIGID TRACK INSTALLATION**

Cold screwing or riveting the rigid track without any special tool. The track bends perfectly in the three boat directions, installation is quick and easy.

Track hand bending, no need to heat up the profile.





# SOFT PROFILE INSTALLATION

The soft pvc profile is installed cold, no need for any special tool or preheating.

The track bends perfectly in any direction all around the boat and there is no waste or unsightly joint.







# END CAP INSTALLATION

Cutting the profile.

Installation of PVC or stainless steel end and top caps.







RADIAL

## **Kits of RADIAL**



| DESCRIPTION   | CODE                    | HEIGHT              | COLOR                         | UNIT      |
|---------------|-------------------------|---------------------|-------------------------------|-----------|
| KIT Radial 30 | T130-141-004            | 1-1/8"              | -B1 = black -W1 = white       | kit       |
| the Kl        | T includes: 46' soft ru | brail + 7 bars semi | rigid tracks + 2 end caps + 1 | joint cap |
| KIT Radial 40 | T130-140-110            | 1-5/8"              | -B1 = black -W1 = white       | kit       |
| the Ki        | T includes: 52' soft ru | brail + 8 bars semi | rigid tracks + 2 end caps + 1 | joint cap |
| KIT Radial 52 | T130-140-115            | 2-1/8"              | -B1 = black -W1 = white       | kit       |
| the KIT       | includes: 72' soft rub  | rail + 11 bars semi | rigid tracks + 2 end caps + 1 | joint cap |

## **RADIAL** by the foot



STANDARD COLORS



COLORS BY REQUEST





| DESCRIPTION            | CODE         | HEIGHT | COLOR                 | UNIT |
|------------------------|--------------|--------|-----------------------|------|
| Rigid Track Radial 30  | T130-141-006 |        |                       | ft   |
| Soft Insert Radial 30  | T130-141-007 | 1-1/8" | -B = black -W = white | ft   |
| Rigid Track Radial 40  | T130-141-011 |        |                       | ft   |
| Soft Insert Radial 40  | T130-141-012 | 1-5/8" | -B = black -W = white | ft   |
| Rigid Track Radial 52  | T130-141-016 |        |                       | ft   |
| Soft Insert Radial 52  | T130-141-017 | 2-1/8" | -B = black -W = white | ft   |
| Rigid Track Radial 65  | T130-141-021 |        |                       | ft   |
| Soft Insert Radial 65  | T130-141-022 | 2-1/2" | -B = black -W = white | ft   |
| Rigid Track Radial 80  | T130-141-026 |        |                       | ft   |
| Soft Insert Radial 80  | T130-141-027 | 3-1/8" | -B = black -W = white | ft   |
| Rigid Track Radial 100 | T130-141-031 |        |                       | ft   |
| Soft Insert Radial 100 | T130-141-032 | 3-7/8" | -B = black -W = white | ft   |

# **RADIAL fittings**

| DESCRIPTION             | CODE         |              | UNIT   |
|-------------------------|--------------|--------------|--------|
| S/S Joint Cap Radial 40 | T130-500-610 |              | n.     |
| S/S Joint Cap Radial 52 | T130-500-620 |              | n.     |
| S/S Joint Cap Radial 65 | T130-500-630 |              | n.     |
| S/S Joint Cap Radial 80 | T130-500-640 |              | n.     |
| S/S End Cap Radial 30   | T130-500-500 |              | n.     |
| S/S End Cap Radial 40   | T130-500-510 |              | n.     |
| S/S End Cap Radial 52   | T130-500-520 |              | n.     |
| S/S End Cap Radial 65   | T130-500-530 |              | n.     |
| S/S End Cap Radial 80   | T130-500-580 | right + left | couple |



#### Sphæra the new frontier of fender profiles

Sphaera is the revolutionary fender profile, made of stainless steel co-extruded with rigid and shockproof vinyl chloride. Thanks to the innovative structural system, Sphaera is the first fender profile which combines high technical performance, with good quality aesthetical finishes.

pat. Pend.

This definitely places Sphaera on a higher level, compared to all the traditional systems normally used in the nautical field.

#### STAINLESS STEEL **316 L**

- Ultra Light increases boat performances
- Ultra Strong like extruded stainless steel profiles
- Easy bendable
- 4 sizes 4 part numbers



Sphaera was born from the Italian skill and creativity: three working steps to develop a highly resistant profile, with the best aesthetical result.



How to bend: visit our video channel www.youtube.com/tessilmare







Sphæra



WERLIT NERLIE



The infilling of Duralene, characterizes the stainless steel profile high level of adaptability to the shapes of the hull, avoiding any bends deformation and very difficult bending operations.

#### BASE

The PVC base, supplied in rolls cut to size, is the optimal solution to the unaesthetic joints of the rigid tracks typical of some traditional systems.



#### JUNCTION AND END CAP

The joint cap keeps the bars duly aligned, avoiding the drilling of the ends, so that the screws can be put all at the same distance.



#### TRADITIONAL SYSTEMS



bending deformation

profile flattening

bars junction

profile misalignment

multiple drillings



# Sphæra

# **PVC BASE INSTALLATION**

The PVC base is placed on the boat with paper tape. The base is cut to size to avoid waste and breaks.





# 2 s/s I

# S/S BAR INSTALLATION

Steel bars are pre-drilled and are secured together with the base with steel screws. Bow and stern bends are created directly on the boat, that works as bending template.

We recommend the use of a wood template only in presence of very sharp and difficult boat side bends.







# TOP AND END CAPS INSTALLATION

Well-designed and functional top caps successfully cover the gaps at joints and keep the bars perfectly aligned and avoid the two-screw unaesthetic look.

Elegant stainless steel end caps give the boat the finishing touch.







# Sphæra

Kits of SPHÆRA



| DESCRIPTION   | CODE                  | Total<br>HEIGHT    | Base<br>HEIGHT    | Code COLOR                    | UNIT     |
|---|-----------------------|--------------------|-------------------|-------------------------------|----------|
| KIT Sphæra 25   | T130-130-225          | 1"                 | 1-5/8"            | -B1 = black -W1 = white       | kit      |
|   | The KIT includes      | : 50' pvc base +   | 5 S/S bars 1" x 9 | 9.8 FT ea. + 2 end caps + 5 j | oint cap |
| KIT Sphæra 25   | T130-130-225          | 1"                 | 1-5/8"            | -B2 = black -W2 = white       | kit      |
|   | The KIT includes      | : 70' pvc base + ' | 7 S/S bars 1" x 9 | 9.8 FT ea. + 2 end caps + 7 j | oint cap |
| KIT Sphæra 35   | T130-130-230          | 1-3/8"             | 2"                | -B1 = black -W1 = white       | kit      |
|   | The KIT includes: 50' | pvc base + 5 S/S   | 5 bars 1-3/8" x 9 | 9.8 FT ea. + 2 end caps + 5 j | oint cap |
| KIT Sphæra 35   | T130-130-230          | 1-3/8"             | 2"                | -B2 = black -W2 = white       | kit      |
|   | The KIT includes: 70' | pvc base + 7 S/S   | 5 bars 1-3/8" x 9 | 9.8 FT ea. + 2 end caps + 7 j | oint cap |
| KIT Sphæra 35   | T130-130-230          | 1-3/8"             | 2"                | -B3 = black -W3 = white       | kit      |
| The KIT includes: 100' pvc base + 10 S/S bars 1-3/8" x 9.8 FT ea. + 2 end caps + 10 joint cap |                       |                    |                   |                               |          |

# SPHÆRA by the bar



| DESCRIPTION       | CODE           | SIZES           | UNIT |
|-------------------|----------------|-----------------|------|
| S/S Bar Sphæra 25 | T130-130-125-3 | 1" x 9.8 ft     | bar  |
| S/S Bar Sphæra 35 | T130-130-135-3 | 1-3/8" x 9.8 ft | bar  |
| S/S Bar Sphæra 50 | T130-130-150-3 | 2" x 9.8 ft     | bar  |
| S/S Bar Sphæra 65 | T130-130-165-3 | 2.1/2" x 9.8 ft | bar  |

SPHÆRA by the foot



| DESCRIPTION            | CODE         | HEIGHT | COLOR   | UNIT |
|------------------------|--------------|--------|---|------|
| PVC Base for Sphæra 25 | T130-130-040 | 1-5/8" | $-\mathbf{B} = \text{black} -\mathbf{W} = \text{white}$ | ft   |
| PVC Base for Sphæra 35 | T130-130-050 | 2"     | -B = black -W = white                                   | ft   |
| PVC Base for Sphæra 50 | T130-130-070 | 2-3/4" | $-\mathbf{B} = \text{black} -\mathbf{W} = \text{white}$ | ft   |
| PVC Base for Sphæra 65 | T130-130-090 | 3-1/2" | $-\mathbf{B} = \text{black} -\mathbf{W} = \text{white}$ | ft   |

| SPHÆRA | fittings |
|--------|----------|
|--------|----------|







| DESCRIPTION                 | CODE         |                           | UNIT |  |
|-----------------------------|--------------|---------------------------|------|--|
| S/S Joint Cap for Sphæra 25 | T130-500-125 |                           | n.   |  |
| S/S Joint Cap for Sphæra 35 | T130-500-135 |                           | n.   |  |
| S/S Joint Cap for Sphæra 50 | T130-500-150 |                           | n.   |  |
| S/S Joint Cap for Sphæra 65 | T130-500-165 |                           | n.   |  |
| S/S End Cap for Sphæra 25   | T130-500-625 | mounted whithout PVC BASE | n.   |  |
| S/S End Cap for Sphæra 35   | T130-500-635 | mounted whithout PVC BASE | n.   |  |
| S/S End Cap for Sphæra 50   | T130-500-650 | mounted whithout PVC BASE | n.   |  |
| S/S End Cap for Sphæra 65   | T130-500-665 | mounted whithout PVC BASE | n.   |  |
| Kit End Cap for Sphæra 25   | T130-500-725 | mounted whith PVC BASE    | kit  |  |
| Kit End Cap for Sphæra 35   | T130-500-735 | mounted whith PVC BASE    | kit  |  |
| Kit End Cap for Sphæra 50   | T130-500-750 | mounted whith PVC BASE    | kit  |  |
| Kit End Cap for Sphæra 65   | T130-500-765 | mounted whith PVC BASE    | kit  |  |

ENGINEERED BY Rezzonico Massimo MADE BY Tessilmare



Bumper is the first fender profile that better represents the perfect alliance between lightness and power. Conceived with a triple structure of PVC, whose "architectures" create wide inner air gaps, Bumper reaches a capability of absorbing impacts, which has never been reached before.

# STRONG BUT LIGHT



# bumper

Bumper is supplied in coils, size upon request, to avoid junctions and failings. It can be easily installed, thanks to its own modularity: both base profiles are fixed to the hull through a stainless steel bar, while the top profile can be fitted by pressure.

#### BUMPER OWN FEATURES MAKE IT PARTICULARLY SUITABLE FOR:

- Yachts
- Tenders
- Working boats
- Military boats
- Docks and piers protection

| DESCRIPTION          | CODE           | HEIGHT | COLOR | UNIT |          |
|----------------------|----------------|--------|-------|------|----------|
| Bumper 125           | T130-110-125-W | 4-7/8" | white | ft   | PATENTED |
| Bumper series 3 pcs  | Т130-110-125-В | 4-7/8" | black | ft   | PATENTED |
| Steel Bar for Bumper | T130-110-170   |        |       | ft   |          |



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