

11/13 • Errors and omissions excepted • © Webasto Thermo & Comfort SE, 2013

For over a century, Webasto has continued to set new technological standards – in both the original equipment sector and the aftermarket. As one of the 100 biggest suppliers in the automotive industry world wide, we develop and produce roof, convertible as well as heating, cooling and ventilation systems. Our products help provide a better atmosphere on the road, more comfort and security, as well as increased efficiency for cars, commercial and special vehicles, motor homes and boats. An outstanding network of production facilities and dealers guarantees high-quality products, installation standards and services worldwide.

Marine Sunroofs

Product Platform & References





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The sky so close – opening new horizons with our roof solutions

Webasto offers a wide range of roof solutions, whether you are looking for a standard roof size with easy installation or a more customizable platform for your individual needs. As our customer you will additionally benefit from our technological leadership and knowledge brought over from our experience in the automotive sunroof industry.

Our standard solutions

Comfortable ready-to-go-platforms.

These are very economical solutions for more light and fresh air on board with a robust and proven construction. Our pre-mounted solution includes all necessary hardware allowing super quick and easy installation.

Compliment your roof with our elegant shading solution.

Together with Oceanair, Webasto has developed an elegant shading solution to compliment their range of large roof systems. Uniquely, this combined blind and flyscreen solution is UV resistant and fully marinated for life on the water.

Webasto engineering services

Add value to your boats and your brand image by developing your own roof system with us.

We create unique, exclusive roof systems that match your exact specifications. Our phased project approach guarantees you limited risks, a possible exit at any stage and of course joint teams and know-how transfer. Take comfort in knowing that you are involved in every stage, and have the opportunity to use our engineering and manufacturing capabilities for high quality results.

A roof solution for every boat

The 20 Series



Economical and robust roof for more light on board

A very economical manual sliding roof for more light and fresh air on board. The roof is fully tested and pre-assembled including all necessary hardware allowing quick and easy installation.

- Standard roof with large opening
- Watertight sealing
- Robust and proven construction
- Manual operation
- Stepless locking system

The 40 Series



Standard electric marine sliding sunroof

This roof platform offers a sleek, low profile design to be able to fit in smaller boats. The roof is electrical operated, extremely quiet, and is delivered fully assembled, tested and ready to be installed.

- Attractive design with safety glass
- Watertight sealing
- Fast and simple installation
- Robust and quality-tested design
- Optional fixed glass panel for panoramic views

The 60 Series



The easy, ready to be mounted solution

This series offers multiple customization options for a perfect fit. The roof is delivered fully tested, pre-assembled and ready-to-be-mounted at the shipyard thus resulting in significant cost saving for the boat builder.

- Customizable roof system
- Watertight sealing
- Robust and proven construction
- Electrical operation
- Smooth automotive style mechanism

The 80 & 120 Series

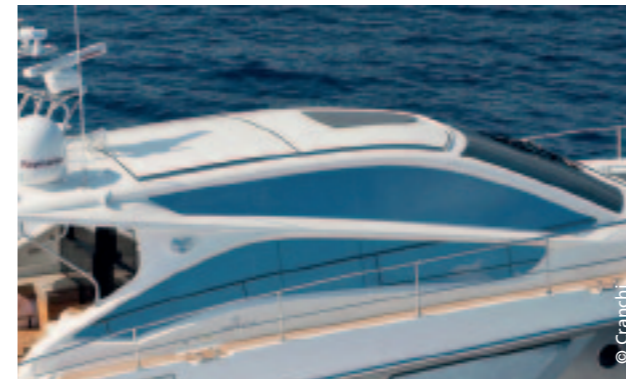


Roof design for extra large glass and composite panels

A completely dedicated roof solution whereby application engineering and a close cooperation with the shipyard is required. The roof is delivered fully tested, pre-assembled and ready-to-be-mounted.

- Fully integrated roof design
- Watertight sealing
- Very large dimensions and opening
- Selection of different panel materials
- Double curved solution is possible

The 150 Series



Exclusive double-curvature roof models

A perfect solution for demanding roof projects. The fully integrated roof consists of a moving and a fixed panel. The panels are fully flush and the double curvature allows extraordinary design possibilities.

- Fully integrated roof design
- Watertight sealing
- Selection of different panel materials
- Extra large dimensions and opening
- Sliding panel is tilting at rear and front side

The Soft Top



Exclusive automotive style folding roof

The Soft Top benefits from the automotive folding roof technology resulting in an elegant and luxury design. The system is available in 3 sizes and the fabric can be offered in various colors.

- Exclusive automotive style folding roof
- 3 Standard sizes or dedicated dimensions
- Various colors for the fabric
- Fabric on the inside and outside
- Smooth automotive style mechanism

20 Series



Roof type
20 Series

Brand and model
Mustang 43

40 Series



Roof type
40 Series
Optional Hercules blind and flyscreen

Brand and model
Grady White 375 Freedom

20 Series



Roof type
20 Series

Brand and model
Mustang 43

40 Series



Roof type
40 Series
Optional Hercules blind and flyscreen

Brand and model
Grady White 375 Freedom

60 Series



Roof type
60 Series
Top mount
Acrylic panel
Anodized frame
Motor cover
Sunblind/flyscreen

Brand and model
Maritimo C53

60 Series



Roof type
60 Series
Flush integrated
Glass panel
Anodized frame
Motor cover
Fixed glass panel in front

Brand and model
Chris Craft Corsair 36 HT

60 Series



Roof type
60 Series
Top mount
Acrylic panel
Anodized frame
Motor cover
Sunblind/flyscreen

Brand and model
Maritimo C53

60 Series



Roof type
60 Series
Flush integrated
Glass panel
Anodized frame
Motor cover
Fixed glass panel in front

Brand and model
Chris Craft Corsair 36 HT

80 Series



Roof type
80 Series
Flush integrated
Glass panel
Square shape
Sun rollo's

Brand and model
Jeanneau NC 11

80 Series



Roof type
80 Series
Flush integrated
GRP panel
D-shape

Brand and model
Prestige 500

80 Series



Roof type
80 Series
Flush integrated
Glass panel
Square shape
Sun rollo's

Brand and model
Jeanneau NC 11

80 Series



Roof type
80 Series
Flush integrated
GRP panel
D-shape

Brand and model
Prestige 500

80 Series



Roof type
80 Series
Flush integrated
GRP panel
D-shape
Double curved

Brand and model
Lazzara LSX 64

80 Series



Roof type
80 Series
Flush integrated
Sandwich panel
D-shape

Brand and model
Linssen Range Cruiser 450

80 Series



Roof type
80 Series
Flush integrated
GRP panel
D-shape
Double curved

Brand and model
Lazzara LSX 64

80 Series



Roof type
80 Series
Flush integrated
Sandwich panel
D-shape

Brand and model
Linssen Range Cruiser 450

120 Series



Roof type

120 Series
Flush integrated
Glass panel
D-shape

Brand and model

Bavaria Virtess 420 Coupé

150 Series



Roof type

150 Series
Flush integrated
GRP panels
D-shape

Brand and model

Cranchi 64 HT

120 Series



Roof type

120 Series
Flush integrated
Glass panel
D-shape

Brand and model

Bavaria Virtess 420 Coupé

150 Series



Roof type

150 Series
Flush integrated
GRP panels
D-shape

Brand and model

Cranchi 64 HT

Soft Top



Roof type
Soft Top
Flush integrated
4 folding
D-shape

Brand and model
Cranchi 56 Soft Top

Soft Top



Roof type
Soft Top
Flush integrated
4 folding
D-shape

Brand and model
Cranchi 56 Soft Top

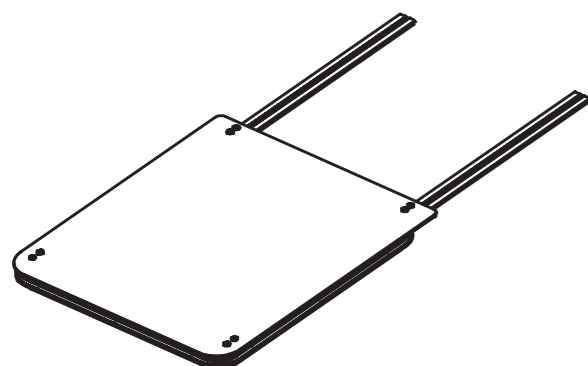


20 Series specifications

One size fits all

Select options

- Sunblind/flyscreen



Note: Electrical version available from 2014

Technical specifications

| | 20 Series |
|--------------------------|--|
| Frame material | Aluminum |
| Panel material | 8 mm tempered safety glass/Grey tinted |
| Sliding rail material | Aluminum |
| Overall dimensions | 1,995 x 1,010 mm |
| Cut-out length (L1) | 1,010 mm |
| Cut-out width (W1) | 955 mm |
| Corner radius (FRC, RCR) | 80 mm |
| Operation mode | Manual, stepless locking |
| Opening dimension | 800 x 800 mm |
| Weight | approx. 45 kg |

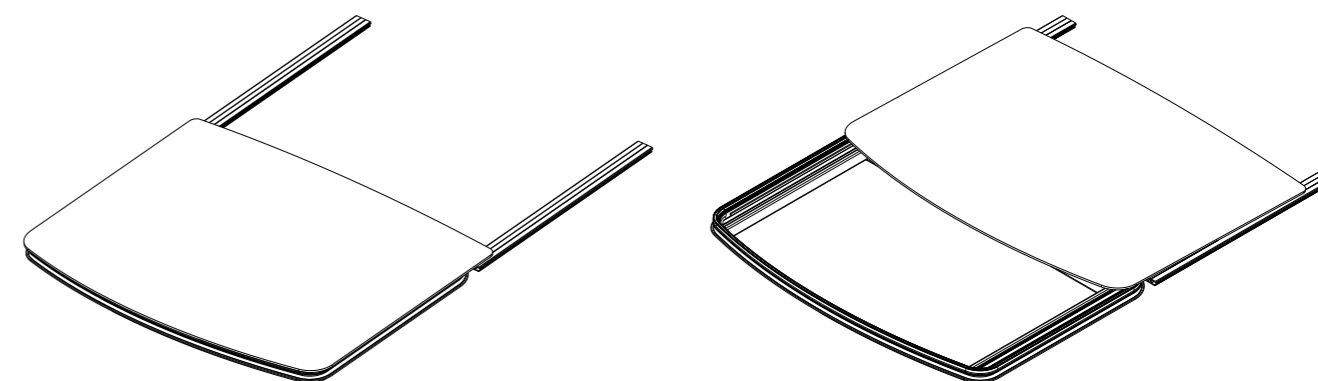
Technical specifications are subject to change without prior notice

40 Series specifications

A perfect fit

Select options

- Fixed panel
- Sunblind/flyscreen
- Motor cover



Technical specifications

| | 40 Series |
|--------------------------|---|
| Frame material | Aluminum |
| Panel material | 8 mm tempered safety glass/Grey tinted |
| Sliding rail material | Aluminum |
| Overall dimensions | 1,665 x 1,379 mm (1,865 x 1,379 with fixed panel) |
| Cut-out length (L1) | 915 mm |
| Cut-out width (W1) | 1,320 mm |
| Corner radius (FRC, RCR) | 80 mm |
| Cross radius (R2) | 7,620 mm |
| Front radius (R3) | 2,032 mm |
| Operation mode | Electrical 12 VDC |
| Opening dimension | 624 x 1,172 mm |
| Weight | approx. 65 kg |

Technical specifications are subject to change without prior notice

60 Series customization possibilities

5 steps to customize your roof

- 1 Select roof type:
 - Top mount
 - Flush integrated
- 2 Define dimensions:
 - Length
 - Width
 - Curvature
- 3 Select panel design:
 - Acrylic
 - Glass
 - Sandwich
- 4 Select frame finish:
 - Anodizing
 - Powder coating
- 5 Select options:
 - Motor cover
 - Fixed panel
 - Sunblind/flyscreen

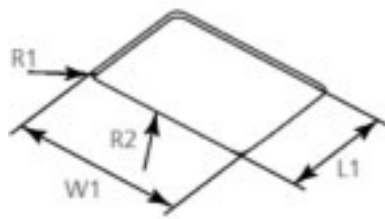
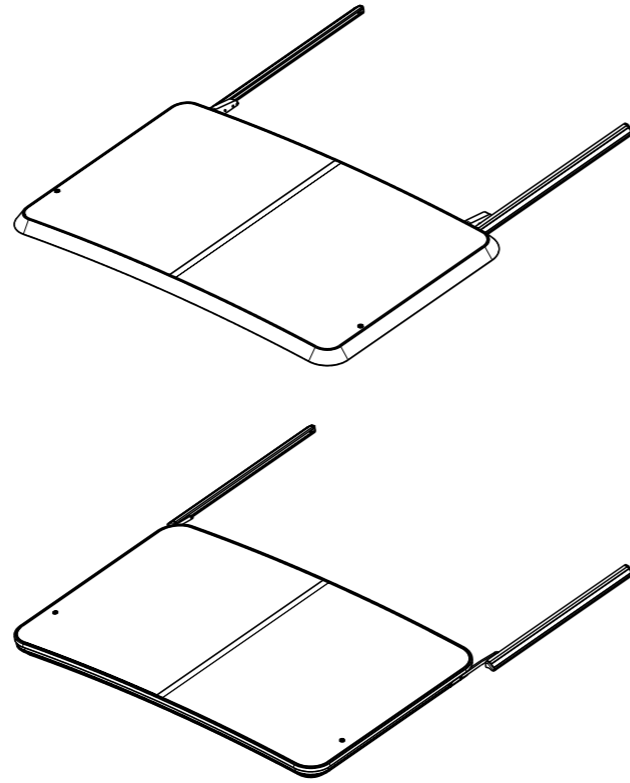


Figure 1

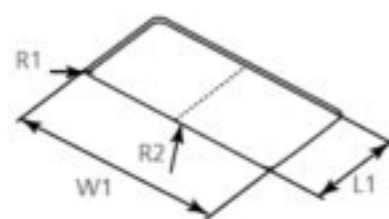


Figure 2

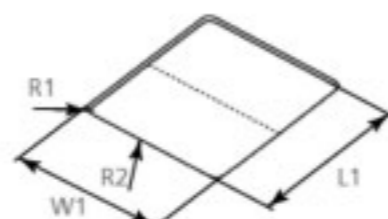


Figure 3

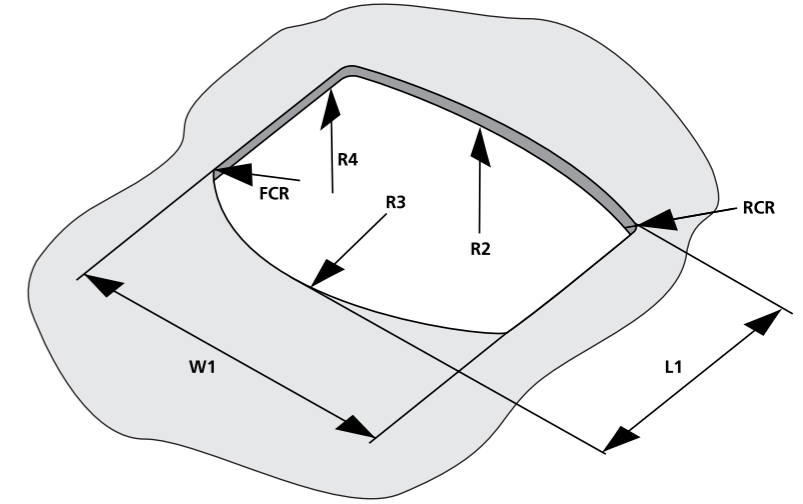
Technical specifications

| Maximum cut-out size dimensions for our customized roofs | | Max. length (L1) (mm) | Max. width (W1) (mm) | Corner curvature (R1) (mm) | Min. cross curvature (R2) (mm) |
|--|---|-----------------------|----------------------|----------------------------|--------------------------------|
| Figure 1 | Roof without cross beam | 1,100 | 1,100 | 80 | 7,500 |
| Figure 2 | Roof with cross beam in sliding direction | 1,100 | 1,800 | 80 | 7,500 |
| Figure 1 | Roof with cross beam perpendicular to sliding direction | 1,500 | 1,100 | 80 | 7,500 |

80/120 Series customization possibilities

5 steps to customize your roof

- 1 Select panel design:
 - Glass
 - GRP
 - Sandwich
- 2 Select roof shape:
 - Square
 - D-shape
- 3 Define dimensions:
 - Length
 - Width
 - Curvatures
- 4 Select design:
 - Glass color
 - Frame color
- 5 Select options:
 - Fixed panel
 - Sunblind/flyscreen
 - 24 VDC (12 VDC is standard)



Technical specifications

| Dimension code | Description | Glass | GRP | Sandwich |
|----------------|-----------------------|------------------|------------------|------------------|
| W1 | Maximum width | 2,750 | 2,750 | 2,750 |
| L1 | Maximum length | 1,900 | 2,400 | 1,900 |
| R2 | Minimum cross radius | 7,500 | 7,500 | 7,500 |
| R3 | Minimum front radius | 2,500 | 2,500 | 2,500 |
| R4 | Minimum length radius | N.A. | 5,000 | N.A. |
| FCR | Front corner radius | Mitred or R = 80 | Mitred or R = 80 | Mitred or R = 80 |
| RCR | Rear corner radius | Mitred or R = 80 | Mitred or R = 80 | Mitred or R = 80 |

Remark: All dimensions are in mm

Maximum dimension of glass and GRP panel is defined by maximum weight of 80/120 kg

Glass panel and Sandwich panel only have a cross radius (single bended)

Glass panel and Sandwich panel have fixed radius of: 7,500; 10,000; 15,000; 30,000 mm

150 Series II customization possibilities

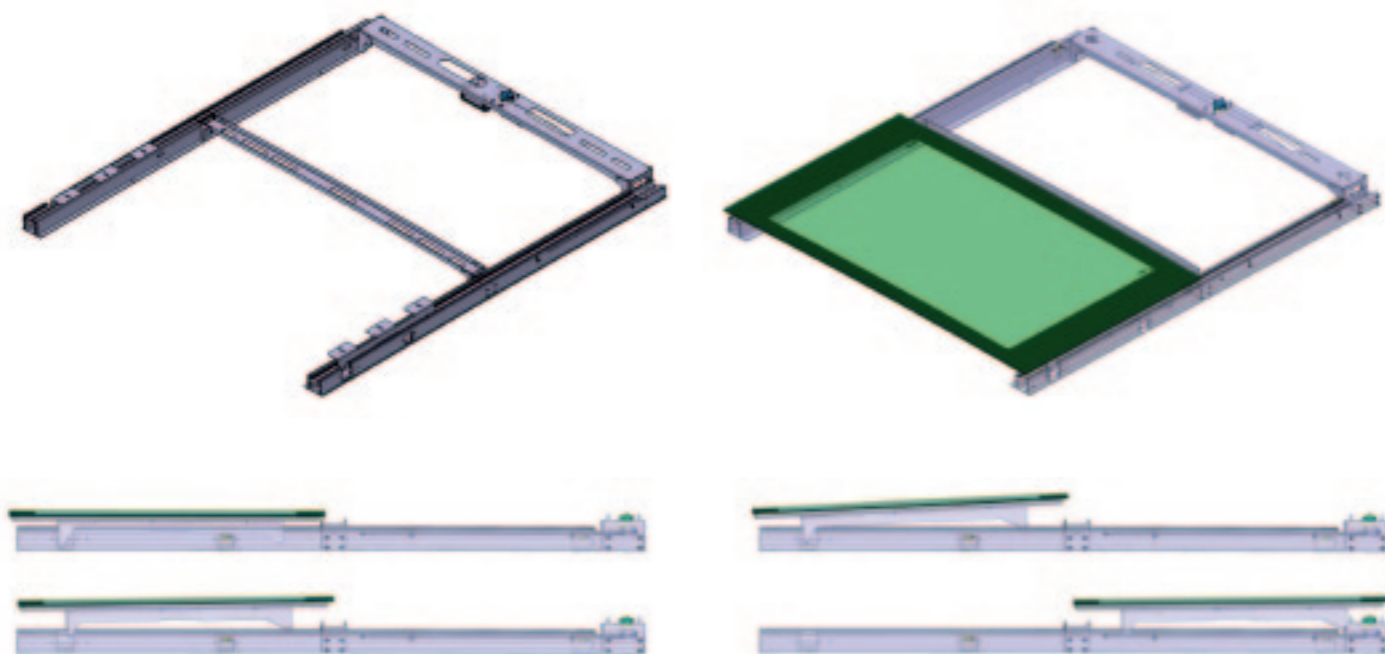
Full flush & extra large solution

- 1 Select panel design:
 - Glass
 - GRP
 - Sandwich

- 2 Define dimensions:
 - Length (total system app. 4,000 mm)
 - Width (total system app. 2,500 mm)
 - Curvatures

- 3 Technical specifications:
 - Frame Stainless steel construction. Laser cut & welded
 - Seal Inside seal fixed to GRP Hard Top for 100% water tightness
 - Mechanism Tilting and sliding mechanism fixed to frame parts. Mechanism is including fixation brackets for the panel

 - Drive system 24 VDC motor fixed onto the frame part and connected to mechanism
 - Panel Front and rear panel
 - Manual override Special key to operate the roof manually (e.g. in case of power failure)

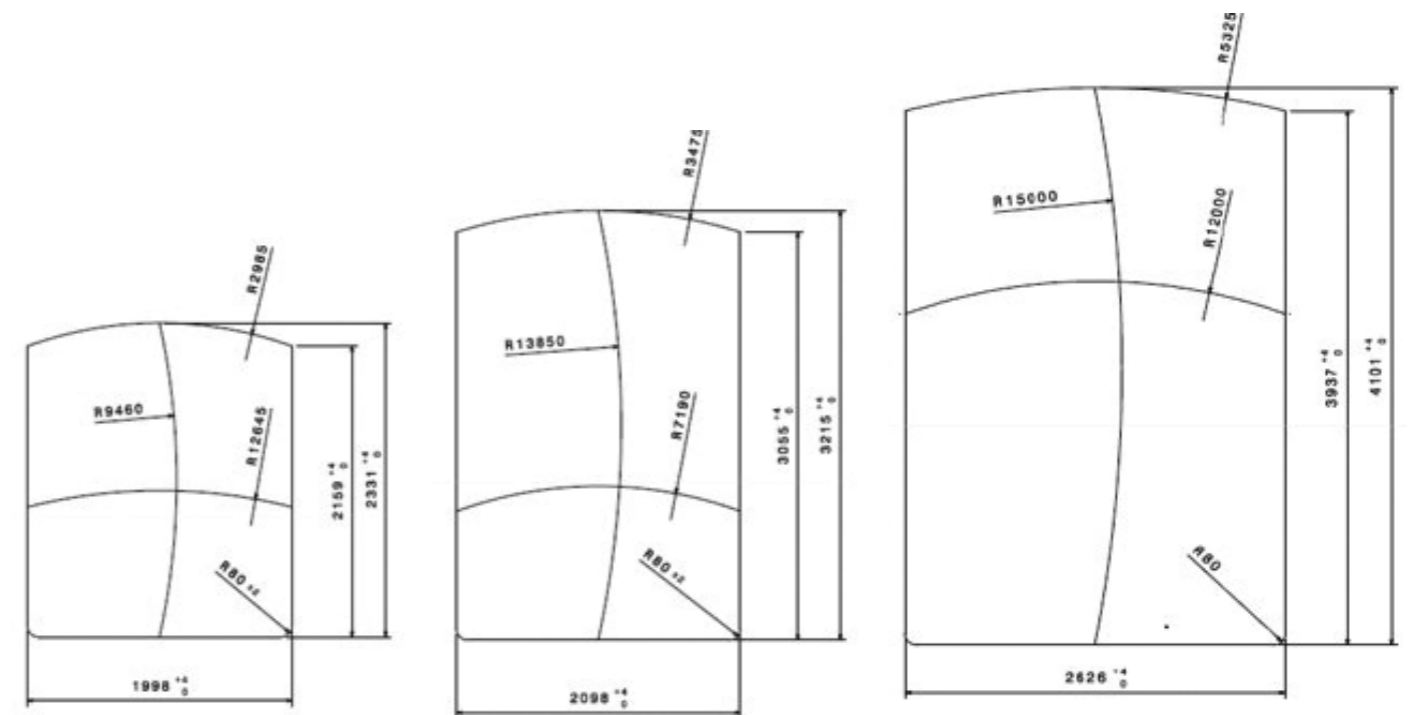


Soft Top specifications

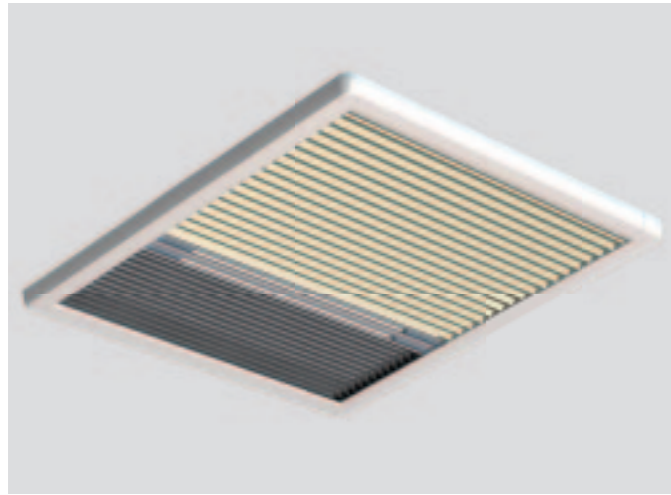
3 standard sizes

- 1 Standard sizes:
 - 2 Fold
 - 3 Fold
 - 4 Fold

- 2 Customization possibilities:
 - Within the above 3 standard sizes it is possible to change width, front-, cross- and length-curvature. The overall length is directly related to the amount of folds and the front curvature and width.
 - Color of inside and outside fabric



The finishing touch – Custom Roof Blinds



Sky screen pleated for 20 Series

- Perfect fit: Dedicated dimension for 20-Series and available in 2 colours.
- Integrated flyscreen: Allows for cabin ventilation whilst keeping the insects out.
- UV protection: Essential overhead shading from direct sunlight, providing energy efficient light and temperature control.
- Quick and easy to install: Pre-assembled, surface mount, robust aluminium frame with concealed mounting holes.

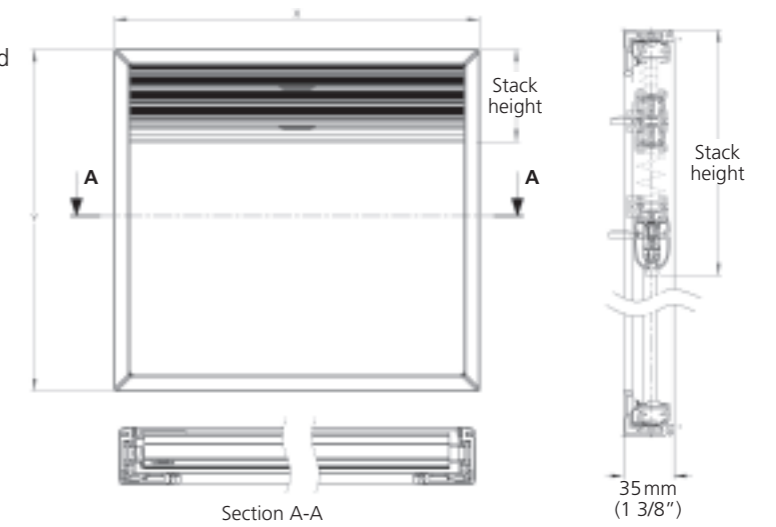
Hercules blind

- Robust: Use of intermediate bars leaves for a cordless and safe open aperture.
- Large dimensions: Designed to complement Webasto's wide range of roof systems.
- Integrated flyscreen: Allows for cabin ventilation whilst keeping the insects out.
- UV protection: Essential overhead shading from direct sunlight, providing energy efficient light and temperature control.
- Fully customizable: System is offered in various configuration possibilities and colours.
- Quick and easy to install: Full frame system, pre-assembled before installation.

Hercules blind customization possibilities

Three steps to customize your blind

- 1 Select frame design:
 - Blind & flyscreen – Double ended
 - Blind & flyscreen – Single ended
 - Blind only – Single ended
 - Flyscreen only – Single ended
- 2 Select fabric colour:
 - White
 - Ivory
 - Straw
 - Beige
- 3 Define dimensions:
 - Drop (max. 2,800 mm)
 - Width (max. 2,400 mm)
 - Curvature (min. 7,500 mm)



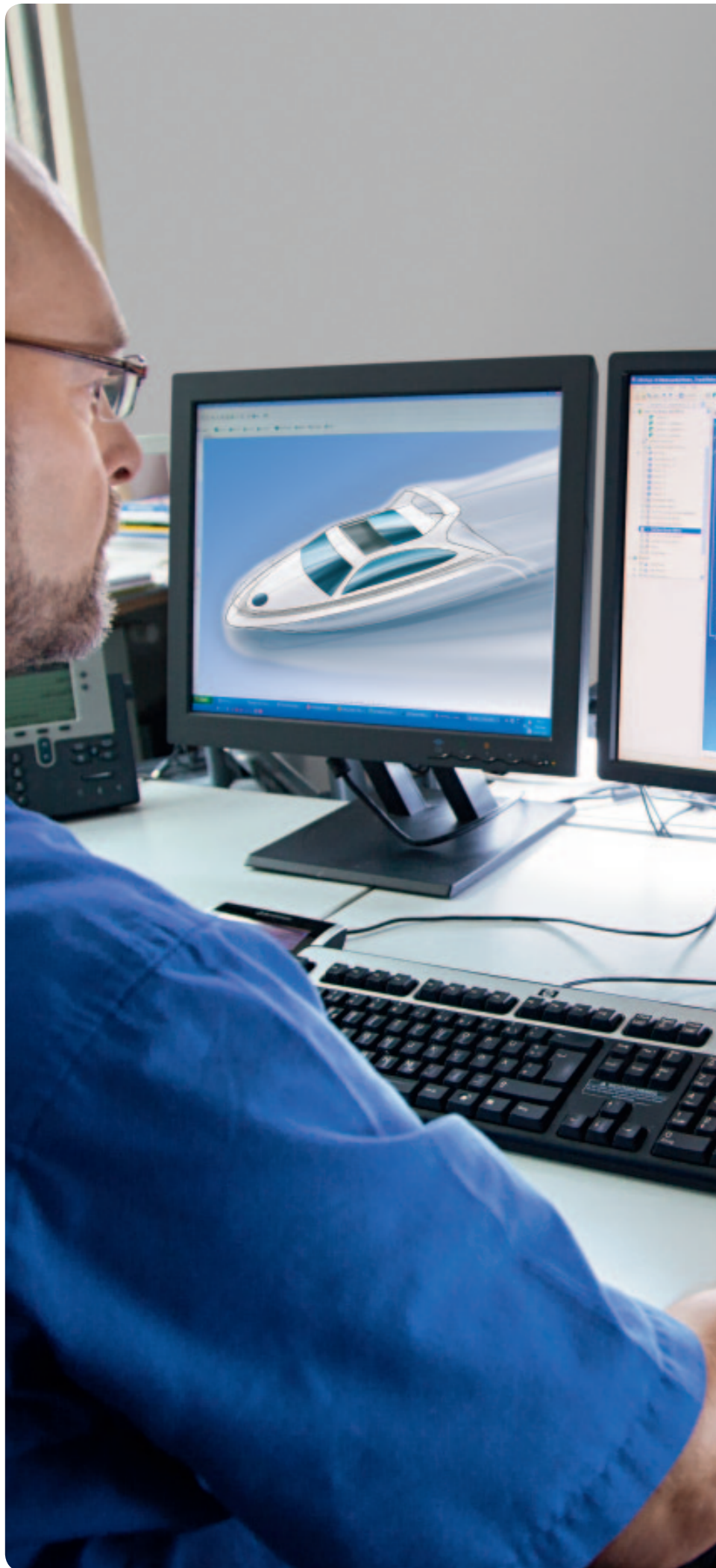
D-shape solutions

- In case a rectangular shape is not feasible in the interior design a dedicated D-shape solution can be offered.
- The fabric types and colours of a D-shape solution are the same as for the rectangular version.
- The exact shape and dimensions of a D-shape solution will be defined during the application development.
- A D-shape solution requires a much earlier boat design consideration of the stowage area.

A joint development by Webasto and

OCEANair

Elegance : Engineered



Marine engineering services

Completely tailor-made solutions

Webasto has 30 years' experience in advanced automotive roof systems which we apply to marine: kinematics, advanced materials, water management and sealing systems. We turn your ideas into reality and guarantee high quality and outstanding product know-how. Phased project approach and joint teams enable know-how transfer to your engineers.

Add value to your boat and brand image

- Unique, exclusive roof systems to match your exact specifications
- Phased project approach: limited risk, possible exit at any stage
- Joint teams and know-how transfer
- Customer involved at every stage
- Opportunity to use Webasto engineering skills and manufacturing capabilities for high quality results

The success of our projects is based on three fundamental elements

- **Product visualization:** Translate ideas into visual concepts. Phased project approach allows frequent evaluation and limits the customers' risk.
- **Product development:** Translate visual into technical concept. Joint teams require strong customer involvement (marketing, R&D, manufacturing).
- **Product validation:** Prepare drawing package for suppliers and assembly. Highly valuable know-how transfer ensures best outcome of the project investments at every stage.

Marine technical services

When our service is as boundless as your freedom: That's Feel the Drive

Service

- We ensure a global network with over 50 locations throughout the world via our subsidiaries, representatives and authorized service network
- We guarantee an international warranty and customer support based on our commissionings
- We offer global trainings and technical guidelines
- We guarantee a fast availability of spare parts
- We are at your location with our dedicated marine service team

Quality

- We benefit from the high automotive standards and related advanced technologies
- We deliver personalized solutions for individual customer needs
- We provide fully tested, pre-assembled and ready-to-be-mounted solutions
- We supply added-value accessories
- Our solutions are highly engineered

Competence

- Our teams are made up of marine specialists and technical experts
- We can support our customers with any kind of commissioning
- Our innovations are the result of open communications and close partnership with our customers



Some of our references

| Brand | Model | Brand | Model | Brand | Model |
|-------------------|-------------------|---------------------|---------------------|--------------------|-----------------------|
| Absolute Yachts | 43STY | Double You | Motoryacht | Mulder Shipyards | Favorite |
| Absolute Yachts | 40STY | Dura Vermeer | Motoryacht | Muritz Yachts | M-Cruiser |
| Absolute Yachts | 53STY | Euro Boat | Motoryacht | Muritz Yachts | M-Classic |
| Activa Marine | Motoryacht | Excellent Yachts | Excellent 1200 | Mustang | 43 Sports Cruiser |
| Agantur Yachting | 14,90 M Trawler | Frisian Cruiser | 39' OCAC | Mustang | 50 |
| Altena Marine | Altena Kotter | Grady White | 375 Freedom | Nautitech | CAT 54' |
| Antares | Motoryacht | Grand Banks | Eastbay 46 | Noblesse Yachts | Bellamare 50' |
| Aquanaut | Motoryacht | Grand Banks | Eastbay 50 | NoLimit Ships | Motoryacht |
| Aquastar | Aquastar 38' | Hanse Yachts | Fjord 40 | Nordic Ocean Craft | 38HT |
| Arcoa Yachts | Mystic 60 | Hettinga | Motoryacht | Nordstar | NS37 |
| Arcoa Yachts | Sword 52 | Hindelopen | Motoryacht | Pacific Shipyard | Prestige |
| Astilleros del EO | Fishing Cruise | Hofstra | Motoryacht | Peters ShipYards | Motoryacht |
| Azimut | 40S | Holterman | 53 Marington | Piculjan | RAB 830 |
| Azimut | Magellano | Holterman | 53 Kadoester | Piper Boats | Dutch Barge |
| B vd Hoven | Exclusive | Intrepid Powerboats | Sportscruiser | Pollard | Coastliner 1080 |
| Bavaria Yachtbau | Sport 39 HT | Jachtbouw2000 | Motoryacht | Portofino | Motoryacht |
| Bavaria Yachtbau | Sport 44 HT | Jeanneau | NC-9 | Pacific Shipyard | Pearl |
| Bavaria Yachtbau | Virtess 420 Coupé | Jeanneau | NC-11 | Primatist | B41 |
| Bendie | Motoryacht | Jeanneau | NC-14 | Privateer Yachts | Elegance |
| Bleu Fily | Motoryacht | Jeanneau | Prestige 500S | Proficiat | Motoryacht |
| Blue Martin | ST48 | Jeanneau | Prestige 550S | Rancraft | Express Cruiser |
| Bodewes | Motoryacht | Jeanneau | Prestige 60S | Rodman Polyships | R31 Sports cruiser |
| Bonsink | Motoryacht | Jetten Yachting | 44 Sedan | Riviera | 565 SUV |
| Bootwerk | Motoryacht | Jongert | Motoryacht | Riviera | 50 Enclosed Flybridge |
| Cantieri Estensi | Motoryacht | JW Bendie | Impressive 1800 | Sabre Yachts | 48 Salon Express |
| Cheoy Lee | Motoryacht | Kampers | Motoryacht | SeaWay | Greenline 40 |
| Contest | 52MC | Lazzara | 64 LSX | Silver Boats | Condor Star Cabin |
| Cranchi | Sixty 4 | Linden Jachtbouw | Linden Kotter 20.00 | Sinnautic | Commercial vessel |
| Cranchi | Fifty 6 softtop | Linssen | RC 450 Sedan | SK Jachtbouw | SK Pilot |
| De Alm | Alm Kotter | Madera | Rib | Steeler Yachts | Motoryacht |
| De Boarnstream | Motoryacht | Main Cat | Catamaran | Targa boats | Targa |
| De Boldert Heeg | Motoryacht | Maritimo | M Range | Thomasz Yachts | Tristan 50 Hardtop |
| De Drait Yachting | Motoryacht | Maritimo | 440 | S2 Yachts | Zeelander 44 |
| Delta powerboats | D80IPS | Maritimo | 470 | Trusty Boats | Trusty 28' |
| Delta powerboats | D54IPS | Maritimo | 500 | Wally Europe | Sportscruiser |
| Delta powerboats | D34SW | Maritimo | C53 | Westwood Marine | Motoryacht C390 |
| Delta powerboats | D29SW | Maritimo | C60 | Yanmar | X39 Express Cruiser |

New Mustang: 43 Sports Cruiser

<http://www.youtube.com/watch?v=n6JHJ7hpdUM>

The New Flagship of Freedom: The Grady-White FREEDOM 375

<http://www.youtube.com/watch?v=ijtmyxNNOLk>

Maritimo Gold Coast: 550 Offshore Convertible

<http://www.youtube.com/watch?v=4mz3aoJmiml>

NC 14: New Jeanneau powerboat 2013

<http://www.youtube.com/watch?v=rwrpRL-zm1E>

Delta 54: Motor Boat & Yachting

<http://www.youtube.com/watch?v=5-aHbREnuhQ>

Prestige 500S: 2011 Motoryacht Features/Layout Review – By BoatTest.com

<http://www.youtube.com/watch?v=RuODaSlAP4Y>

Azimut 40S: iboats.com

<http://www.youtube.com/watch?v=vfPnqW3Cfok>

BAVARIA: VIRTESS 420 Coupé – On Board with Product Manager (English)

http://www.youtube.com/watch?v=valUMLY7_L4

