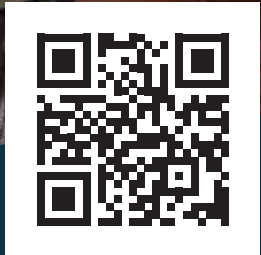
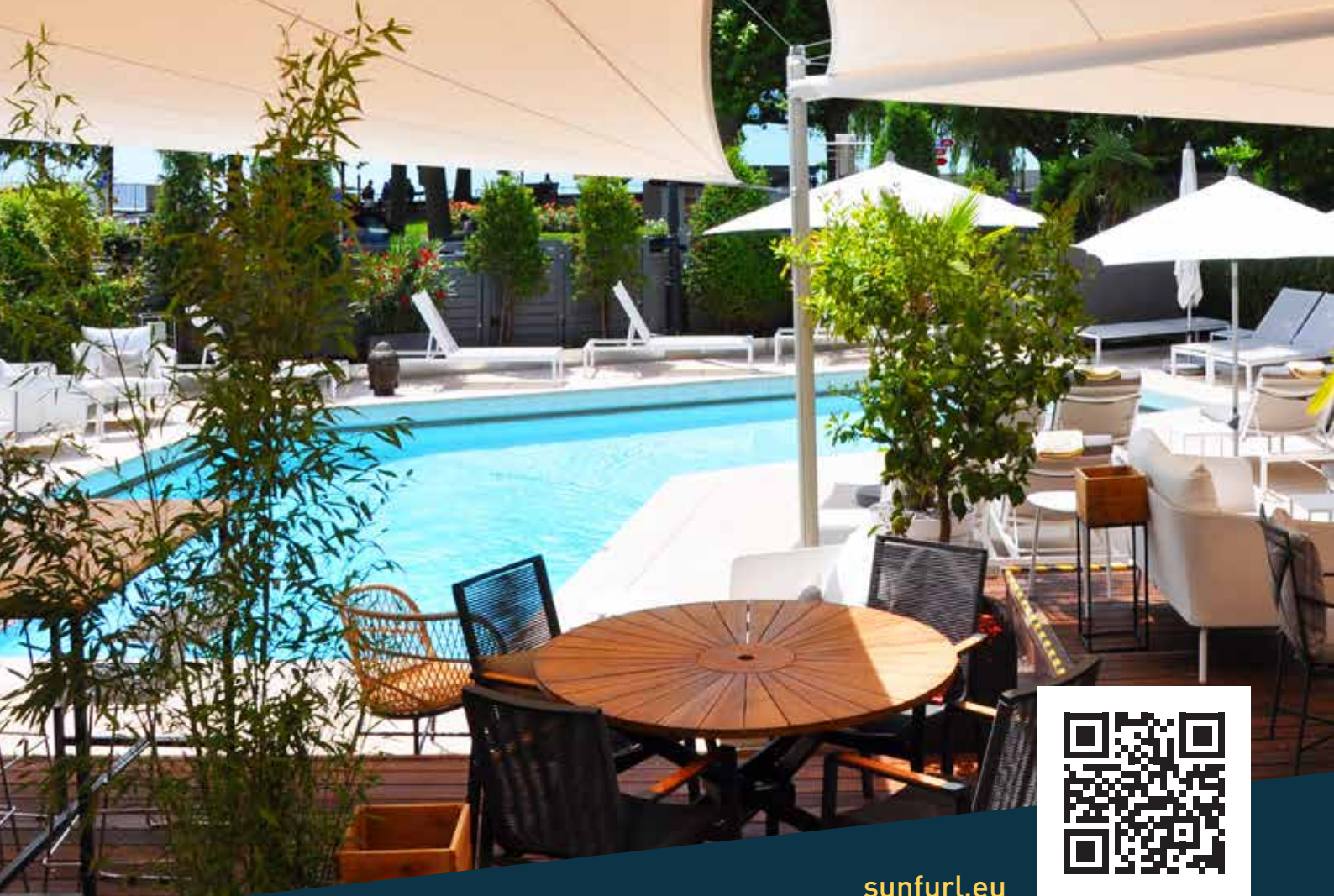


# Exclusive Sun Sails

*from the yachting experts*



[sunfurl.eu](https://sunfurl.eu)

## Sun Sail Highlights 2024

Experience the possibilities of high-quality sun sails



Spirit Yachts | Spirit 52 | Anthony Morris

#### **Imprint**

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[www.sunfurl.eu](http://www.sunfurl.eu)

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# *Individual* *high quality* **Sun Sails**

**Over 50 years of experience  
in yachting**

**Over 20 years of experience  
with shade sails**

**Proven technology from  
water sports**

### **Innovative sun sails in sailmaker quality**

BARTELS has been producing furling and reefing systems for sailing yachts from well-known shipyards around the world for over 50 years. We have been successfully using this experience for more than 20 years for the development and production of our SunFurl sun sail systems.

Our offer ranges from simple systems, in which the sun sail is manually furled in and out between a jib furler and a swivel, to electrically operated systems with wind monitors and radio control.

SunFurl sun sails are individually planned and made from high quality materials by experienced sail makers. With all sun sails you can enjoy sun protection with a feel-good atmosphere for you, your family and your guests.

### **Flexible solutions for beautiful shade**

Whether you are looking for sun protection for the outdoor area of a restaurant or would like to shade a private terrace or balcony: BARTELS offers you high-quality sun protection with its SunFurl sun sails. Our shading solutions conjure up maritime flair on your terrace.

For gastronomy, we offer individually planned sun protection, rain protection and privacy protection for areas of up to 100 m<sup>2</sup> with just four fasteners. Sun sails offer more sun protection than an awning or parasol can. They can be furled up manually or electrically, or they can be tightly clamped.

Fixed systems, in combination with a mesh fabric sail (SolMesh 340), offer the ideal solution for day-care centers and schools.

**"We are tied to the ocean. And when we go back to the sea, whether it is to sail or to watch - we are going back from whence we came."**

JF Kennedy

Spirit Yachts | Spirit 100

# **Proven technology from sailing**

From decades of experience in the design and manufacture of jib furling and reefing systems for sailing yachts, we developed the idea for furlable sun sails.

Furling system on a sailboat



**Technology from sailing: designed for the highest loads**

World-renowned shipyards, such as the English shipyard Spirit Yachts, based in Ipswich on the east coast of England, have been relying on the experience of BARTELS in the field of furling and reefing systems for high-end sailing yachts for decades.

We have been using this experience for more than 20 years to manufacture our SunFurl sun sail systems, and we use the same ocean-going components in our SunFurl sun sails. With the aesthetic and individual sun sails in the best technical quality, you can get that high seas feeling in your garden!



Furling system for a sun sail Type RM

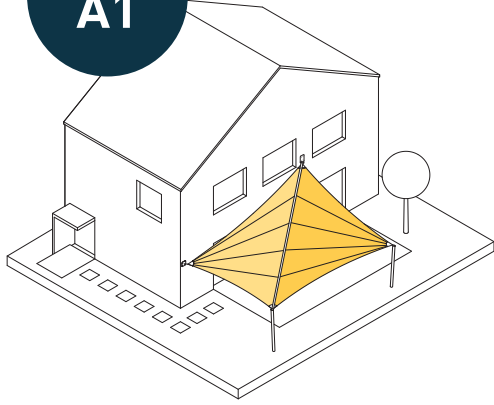
# Arrangement variants

Typ  
**WING**



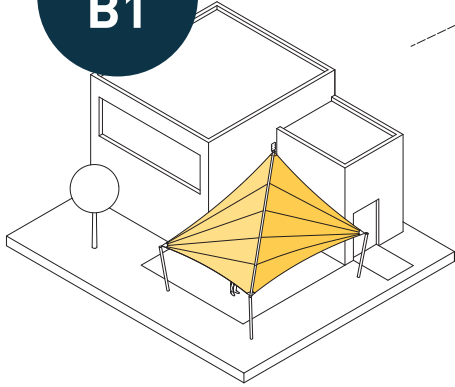
**New**

Variant  
**A1**



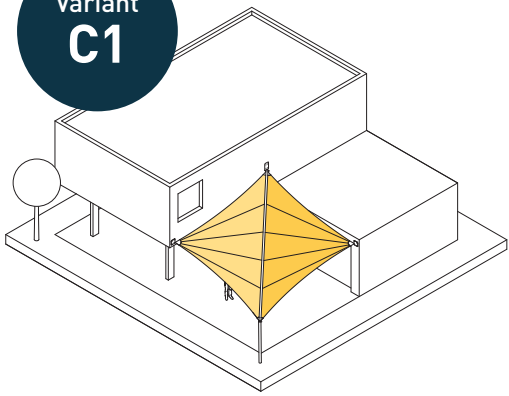
Fixation  
2 x Wall  
2 x Mast

Variant  
**B1**



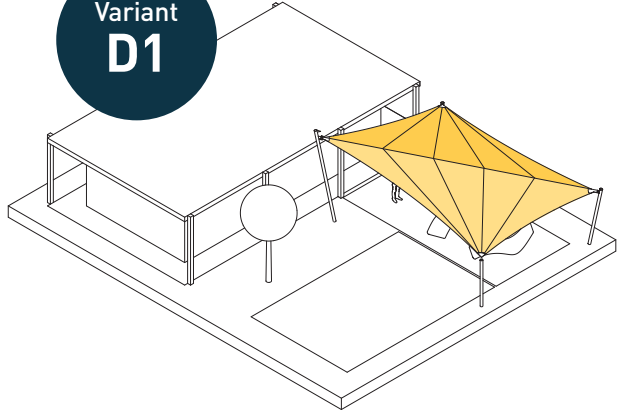
Fixation  
1 x Wall  
3 x Mast

Variant  
**C1**



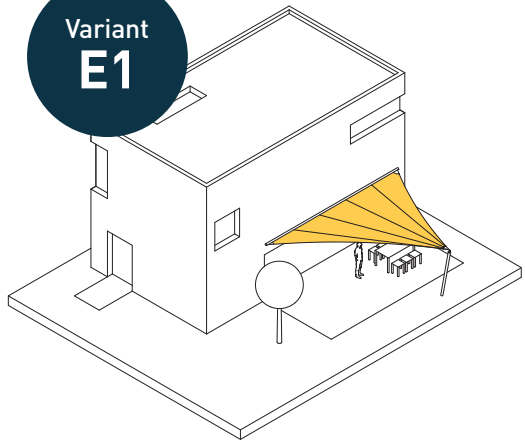
Fixation  
3 x Wall  
1 x Mast

Variant  
**D1**



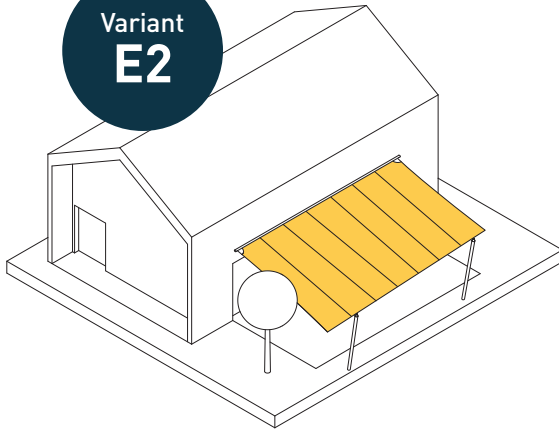
Fixation  
0 x Wall  
4 x Mast

Variant  
**E1**



Fixation  
Furling axis parallel wall  
1 x Mast

Variant  
**E2**



Fixation  
Furling axis parallel wall  
2 x Mast



# Overview matrix systems

SunFurl systems are available in different versions with different properties. Drive, tensioning technology, sail area and materials are the distinguishing features.

The matrix on this page will help you with the selection so that you can quickly find the system variant that best suits your individual needs.

	Page	Drive	Tensioning Technology	Max Sail area	Material Masts	Sail cloth	Characteristics
<b>RE RES</b>	10-19	electric 230V	Spring	100 m <sup>2</sup> 100 m <sup>2</sup> 50 m <sup>2</sup>	VA Ø 102 AL Ø 102 AL Ø 86	HS270 Soltis 86	Weather control Automatic mode Comfort and security Large sail areas
<b>RM</b>	20-27	manually	Winch	60 m <sup>2</sup> 45 m <sup>2</sup>	VA Ø 76 AL Ø 76	HS270 SolMesh 370	3D sail geometry Maritime flair High fabric tension Stainless steel poles
<b>RM-light</b>	28-35	manually	2:1 Tackle	35 m <sup>2</sup> 50 m <sup>2</sup>	AL Ø 76 AL Ø 86	HS270 SolMesh 370	3D sail geometry Maritime flair Easy construction Inexpensive
<b>RM-MAX</b>	28-43	manually	Winch	75 m <sup>2</sup>	AL Ø 102	HS270 SolMesh 370	3D sail geometry Maritime flair High fabric tension Large sail areas
<b>FX FX-KiTa</b>	44-51	fix	4:1 Tackle	25 m <sup>2</sup> 40 m <sup>2</sup>	AL Ø 86 AL Ø 102	HS270 Soltis 86 SolMesh 370	3D sail geometry Easy construction Inexpensive KiTa I schools
<b>WING</b>	52-59	electric 230V	Spring	24 m <sup>2</sup>	VA Ø 102	HS270 Soltis 86	Weather control Automatic mode Comfort and security only one mast
<b>RE large area shading</b>	60-67	electric 230V	Spring	any	AL Ø 86 AL Ø 102 VA Ø 102	HS270 Soltis 86	Any sail area Coupled Systems Automated operation Public areas

# *SunFurl* *Sun Sails*

**Type RE / RES**



## Maximum ease of use, maximum safety

Wind and sun sensors ensure fully automatic control of the sail system and ensure the highest level of safety, even when you're not there. Individual operation is carried out conveniently using a hand-held radio transmitter. Sudden loads, such as strong gusts of wind, are weathered out by the sun sail, which is always under tension. If the set load limits are exceeded, the system furls up automatically. Sail areas of up to 100 m<sup>2</sup> can be easily realized with this system.

# Electric furlable sun sails

Type RE / RES

Furling Axis

Ø 86 mm Aluminum (up to 9 m)

Ø 102 mm Aluminum (up to 14 m)

Masts Ø 102 mm

Stainless steel or Aluminium

Sails made from  
HydroSol 270

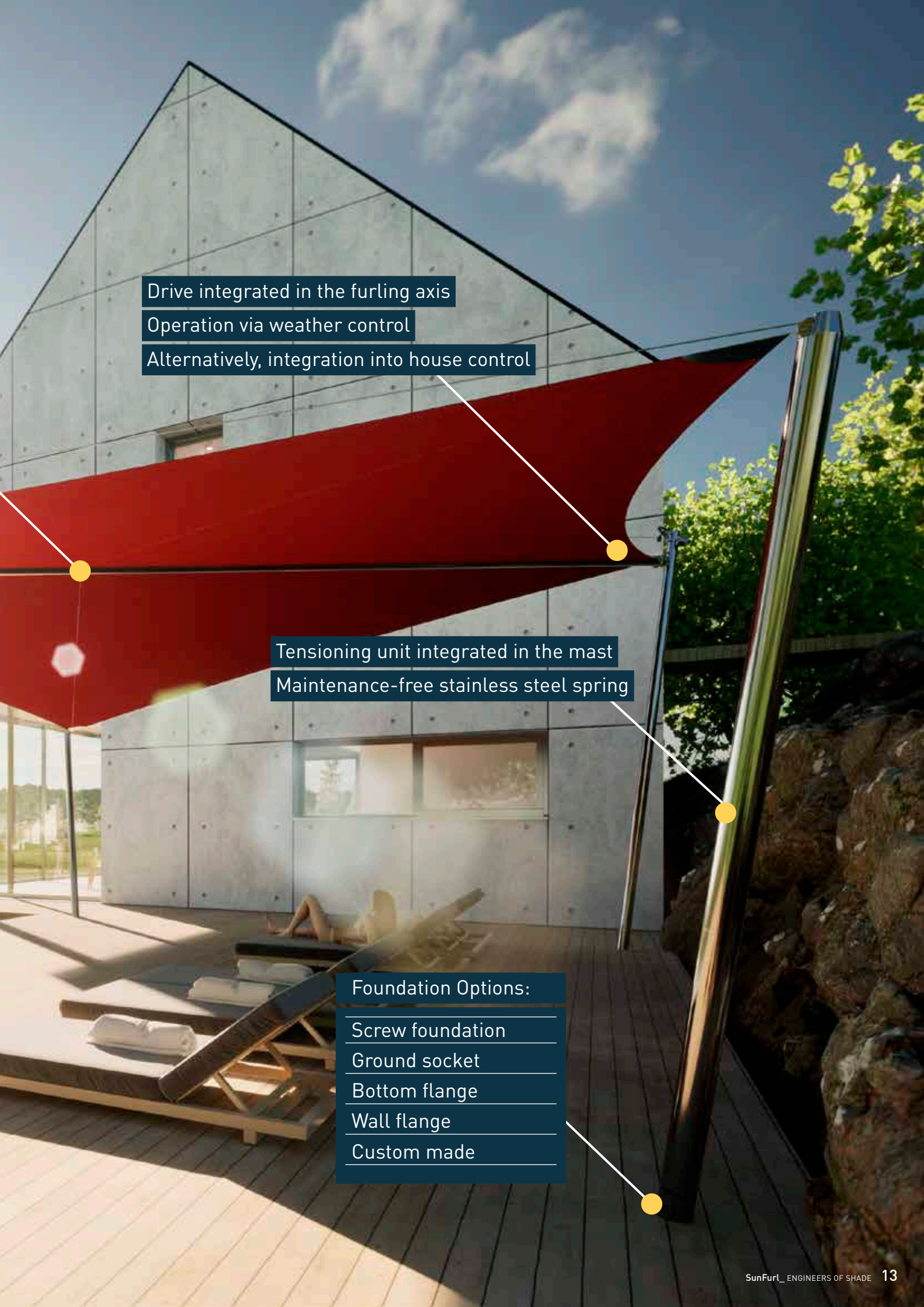
High fabric tension when unfurled

Low fabric tension when furled up

Equilibrium of moments on the drive

Both sails always under the same tension

Only one tensioning unit required (stainless steel spring)



Drive integrated in the furling axis

Operation via weather control

Alternatively, integration into house control

Tensioning unit integrated in the mast

Maintenance-free stainless steel spring

Foundation Options:

Screw foundation

Ground socket

Bottom flange

Wall flange

Custom made



Architect  
house  
RE-B1

# Advantages Examples

Electrically furlable sun sail system (automatic and manual operation)

Weather control unit (wind, rain, sun, temperature)

Comfort and safety

Large sail areas realizable

Systems can be combined in rows and areas

Tensioning technology with robust and maintenance-free stainless steel spring

High sail tension / good wind stability / good rainwater drainage

Corner  
Terrace  
Powder coating

RES-B1



Overlapping  
arrangement  
of sails

RE-B1

# Type RE

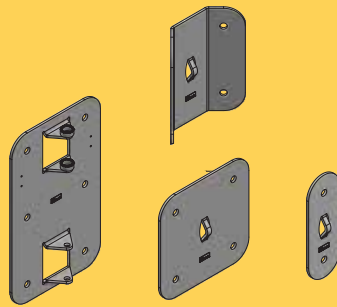
## Components and options

Sail area  
up to 100 m<sup>2</sup>  
Furling axis  
length  
up to 14 m

Safety and comfort are the top priorities with this electrically furlable sun sail system. Both sails have the same fabric tension. The tension of the fabric is high when it is furled out, while the tension of the fabric and lines is reduced when it is furled up. The operation is fully automatic due to the weather control. Sail areas of up to 100 m<sup>2</sup> can be easily realized. A multiple arrangement in a row or area is easily feasible. The system can be integrated into an existing building control system.

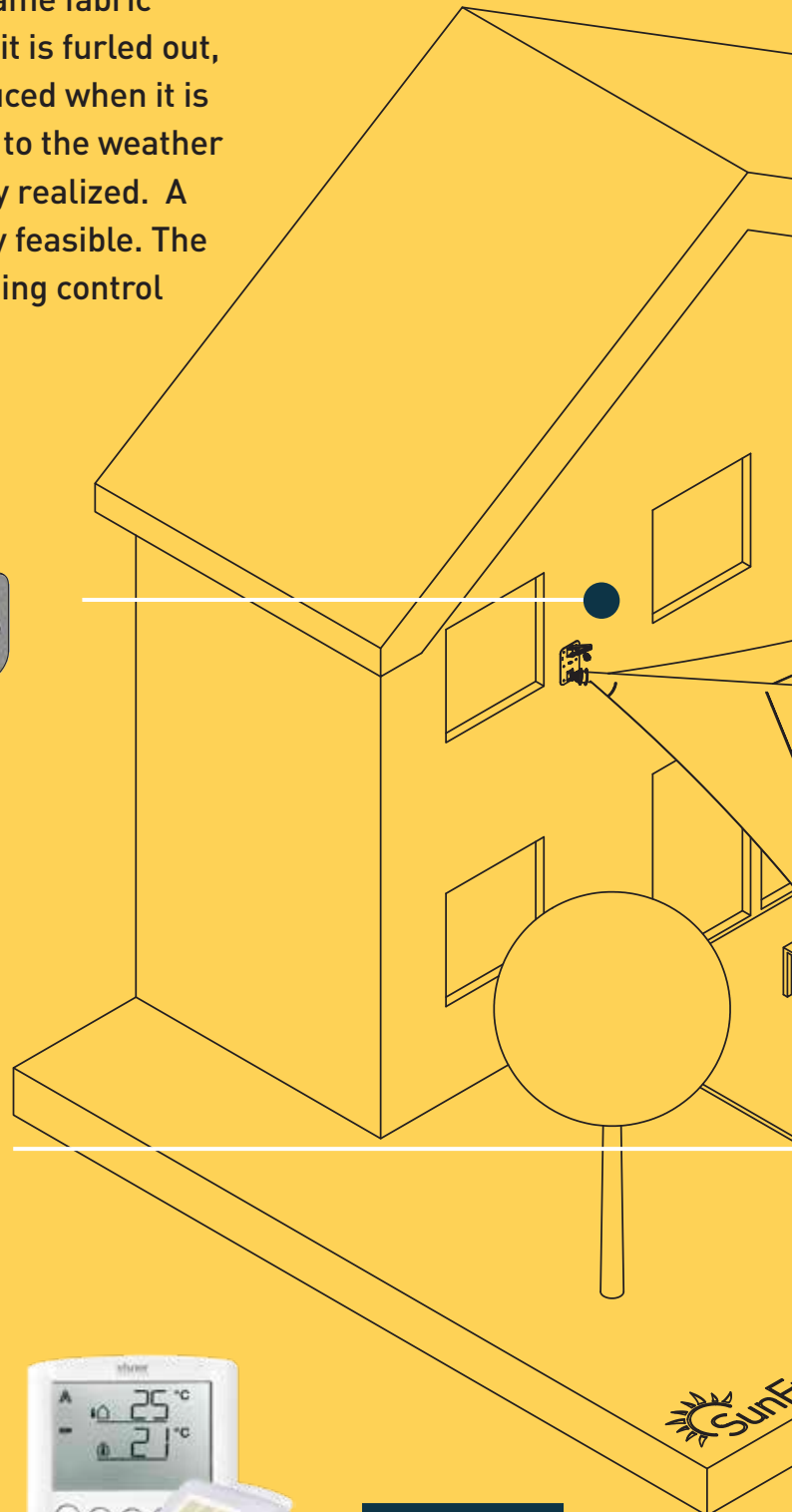
### Wall panels

- Furling axis on the house wall
- Rope deflection on house wall
- Material stainless steel / e-polished
- Dimensions:
  - W x H 380 x 230 mm
  - W x H 230 x 230 mm
  - W x H 230 x 80 mm
- Special variants



### Mast sail extension

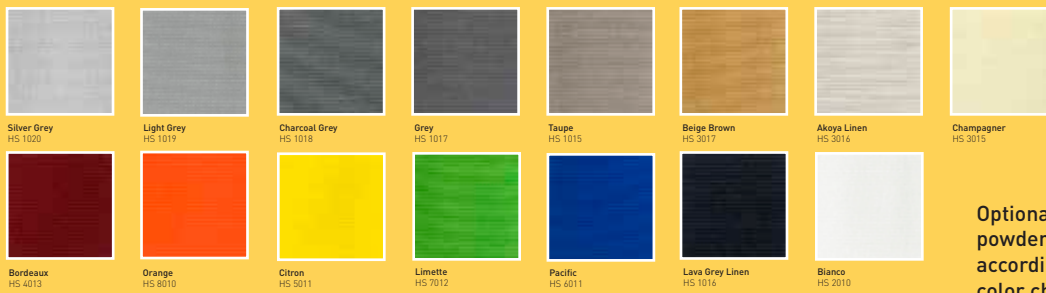
- Diameter / material:
  - Ø 102 mm / stainless steel
  - Ø 86 mm / aluminum system mast
  - Ø 102 mm / aluminum system mast
- Lengths in 250 mm grid up to 5 m
- Height adjustment via pulley or winch or electrically (EHV)
- Sail tension automatically via stainless steel spring (inside the mast)



### Weather control

- Wind, rain, sun, temperature
- Manual or automatic mode
- Alternatively, integration into any home control system is possible





Optionally all parts powder-coated according to RAL color chart

### Sailcloth HS270

Colors according to color chart

Polyester fabric made from solution dyed yarn with a fluorocarbon impregnation

UV stabilized / oil and dirt repellent / antifungal

High tear strength and high kink-resistance

High lightfastness

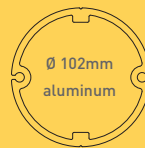
SPF > 50



SunFurl RE / RES deflection block stainless steel Ø 45 mm



Furling axis RE Ø 102 mm motor side with coil disc and articulated connection

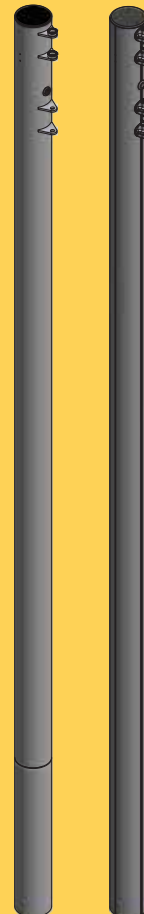


### Furling axis

Furling axis made of segmented aluminum profile (silver anodised surface) with integrated 230 V drive

Ø 86 mm up to 9 m length (3 m elements)

Ø 102 mm up to 14 m length (4 m elements)



### Mast furling axis

Ø 102 mm / stainless steel

Ø 86 mm / aluminum

Ø 102 mm aluminum

Lengths in 250 mm increments up to 5 m

Tensioning unit can be integrated in the counter bearing mast

### Mast attachments / foundations

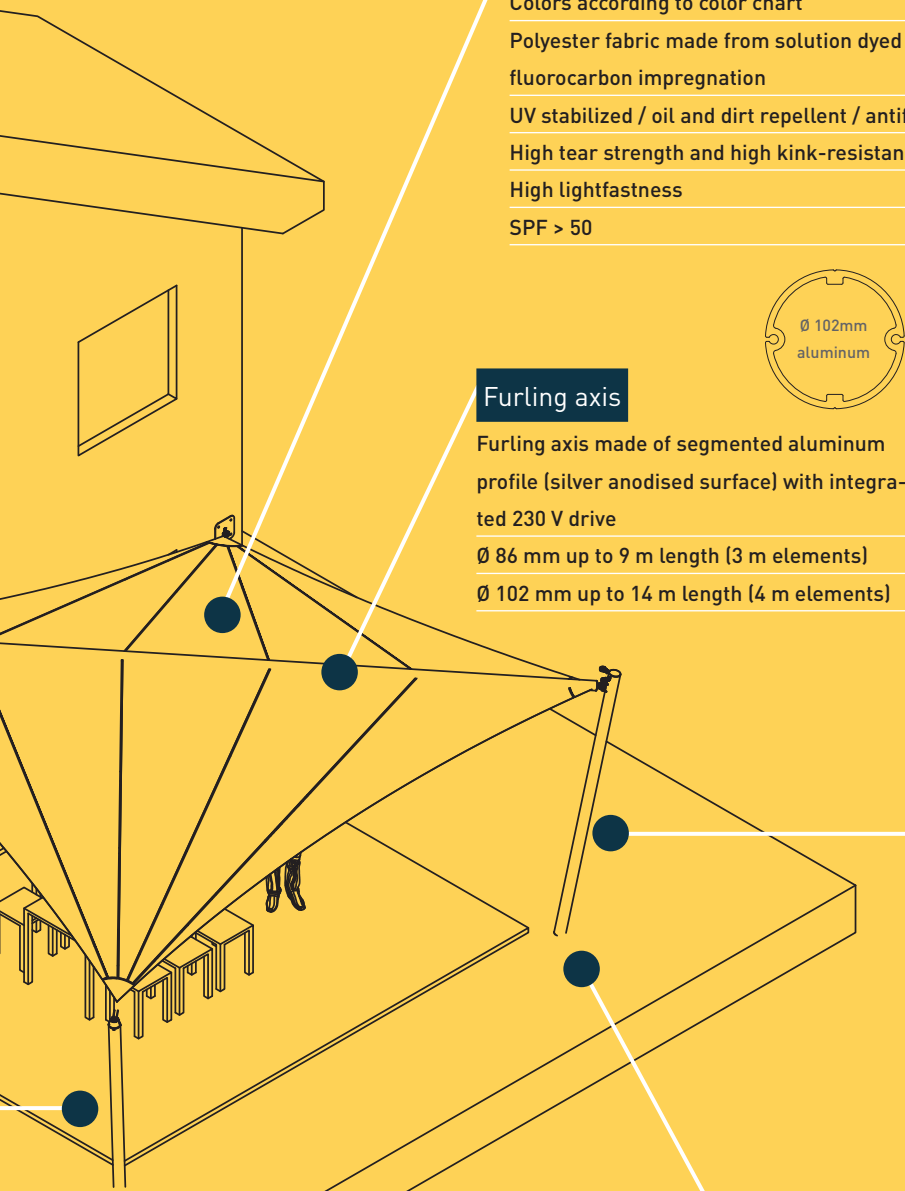
Screw foundation (hot-dip galvanized steel)

Ground sleeve (stainless steel)

Flange foot (hot-dip galvanized steel)

Wall flanges (stainless steel)

Special flanges (steel, stainless steel, aluminium)



furl.eu



# Type RES (E2)

Sail area up to 60 m<sup>2</sup>  
Furling axis length up to 8 m

## Components and options

Minimal ropes and high fabric tension are combined in this system. Only one pull rope leads to the mast. Arrangements as E1 and E2 variants are particularly advantageous. Fully automatic operation thanks to weather control. Safety and comfort come first also on this system. Sail areas up to 60 m<sup>2</sup> can be easily implemented. Integration into the building control is possible.



Furling axis parallel to the house wall between two wall panels



### Wall panels

Connection of the furling axis to the house wall

Material stainless steel / e-polished

Dimensions:

WxH 230 x 80 mm

Special variants



Ø 102mm  
aluminum



Ø 86mm  
aluminum

### Mast sail extension

Diameter / material:

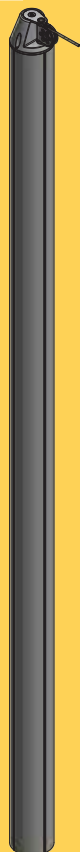
Ø 86 mm / aluminum system mast

Ø 102 mm / aluminum system mast

Lengths in 250 mm grid up to 5 m

Height adjustment via pulley or winch or electrically (EHV)

Sail tension and line storage is automatic via a gas spring (inside the mast)

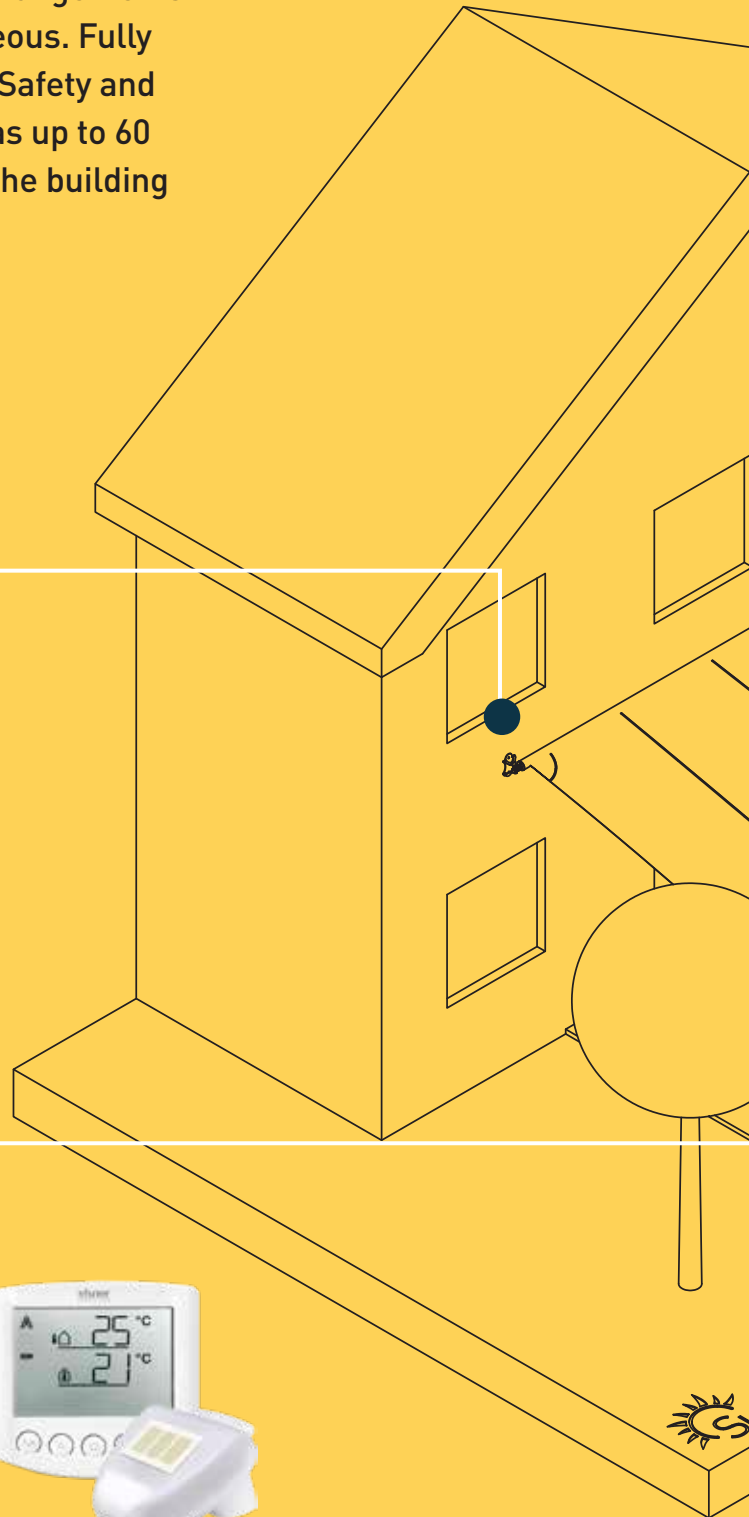


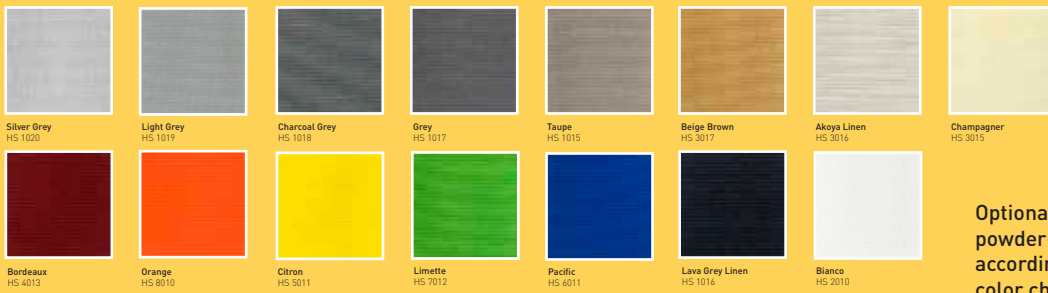
### Weather control

Wind, rain, sun, temperature

Manual or automatic mode

Alternatively, integration into any home control system is possible





Optionally all parts powder-coated according to RAL color chart

### Sailcloth HS270

Colors according to color chart

Polyester fabric made from solution dyed yarn with a fluorocarbon impregnation

UV stabilized / oil and dirt repellent / antifungal

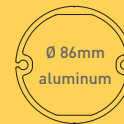
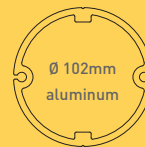
High tear strength and high kink-resistance

High lightfastness

SPF > 50



SunFurl RE / RES deflection block stainless steel Ø 45 mm



Furling axis RES Ø 102mm motor side with articulated connection

### Furling axis

Furling axis made of segmented aluminum profile with integrated 230V drive (surface silver anodized)

When mounted horizontally on a wall (E1 and E2 arrangement), the reduced furling axis Ø 86 mm up to a length of 6 m Ø 102 mm up to a length of 8 m apply

### Height adjustment sail options

The sail can be lowered on the masts via a height adjustment in order to follow the course of the sun or to define the rainwater drainage.

Tackle (4 or 8 time), a winch system or an electric version (EHV) are available. The EHV can be conveniently operated via the sun sail control display.

### Mast attachments / foundations

Screw foundation (hot-dip galvanized steel)

Ground sleeve (stainless steel)

Flange foot (hot-dip galvanized steel)

Wall flanges (stainless steel)

Special flanges (steel, stainless steel, aluminium)



unFurl.eu

# *SunFurl* *Sun Sail*

## **Type RM**



# Properties like a 3D fixed sail, but still furlable

The SunFurl RM system is the perfect symbiosis of a fixed seasonal sail and a sun sail that can be furled up manually. The high surface tension makes this type of system very wind-stable. This means that an RM system can remain opened throughout the summer season, it only has to be furled up in strong winds and thunderstorms. With this type of system, three fastening points can be adjusted in height. This allows you to align the sun sail so that it always creates the desired shade, even when the sun is low in the sky. Depending on the system type, sail areas of up to 60 m<sup>2</sup> can be effortlessly implemented.

## **Firm and nicely tensed!**

Due to the large pre-tensioning forces, the sail is taut and wrinkle-free. With a sufficiently planned incline, the sail can easily be used as rain protection. All SunFurl shade sails are manufactured by highly skilled sail makers. This enables us to offer you sailcloths of exceptionally high quality.

## **Assembly & disassembly in just 15 minutes**

During the winter months, the system can be completely dismantled in just a few simple steps. The sail, which is rolled up dry, is rolled up as a ring and stowed away in the winter protection bag, including the furling axis and all ropes, protected. The poles can be pulled out of the ground sleeves and stored in the garage, for example. Only the inconspicuous wall plates and ground sleeves remain permanently installed.

# Manually furlable sun sails

Type RM

Wall plates  
stainless steel

sails made  
from HS270

Masts  $\varnothing$  76 mm  
Stainless steel or aluminium  
With winch and height adjustment

Tension furling axis and sail  
decentralized via winches

Tightly stretched cloth for highest wind stability  
and good rainwater drain

Dynamic 3D geometry is formed

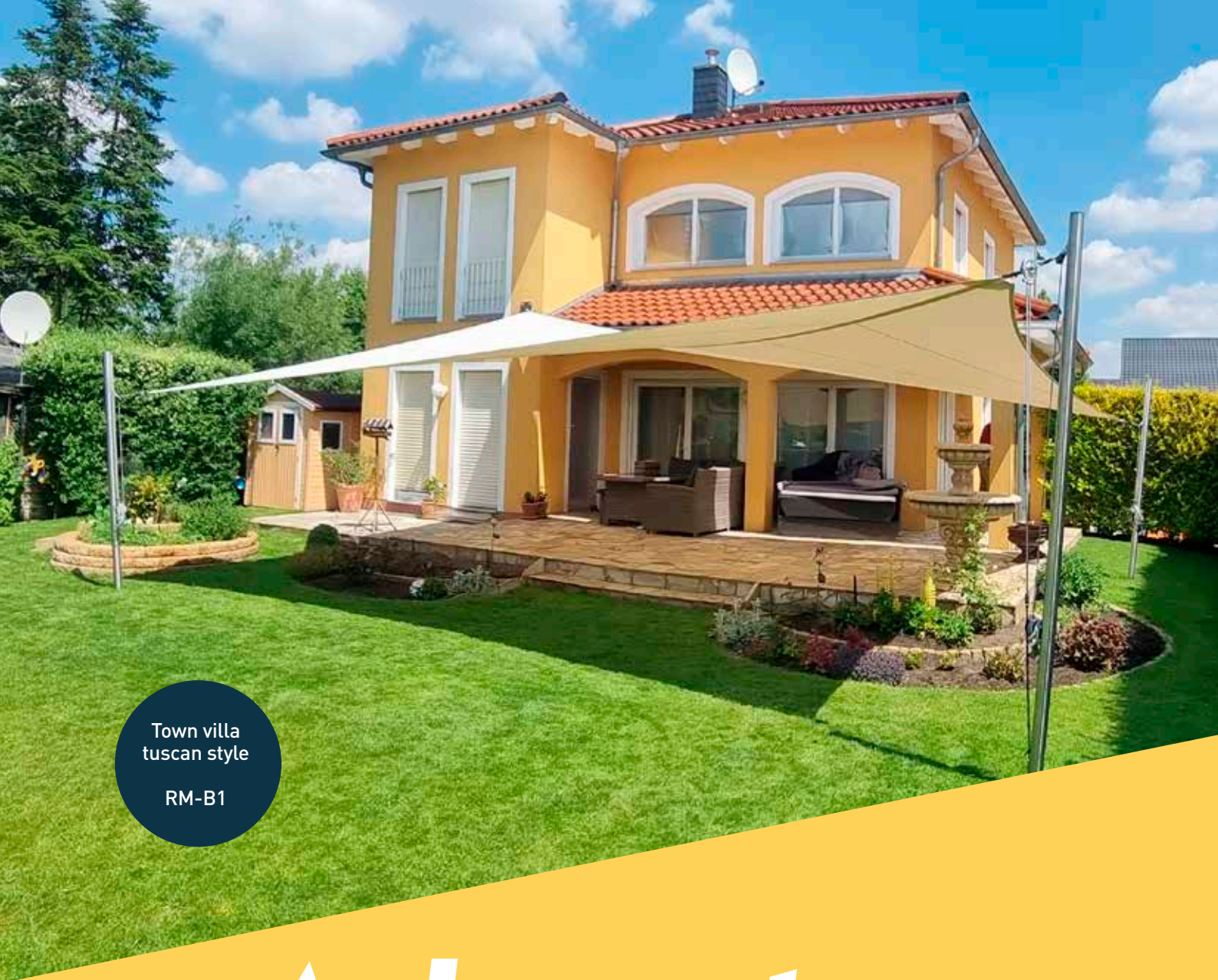
Furling axis and drive unit  
from the BARTELS yachting programm

Flexible furling axis between jib furler and swivel

Wall plate stainless steel  
with winch  
(optionally with height adjustment)

Foundation Options:

- Screw foundation
- Ground socket
- Bottom flange
- Wall flange
- Custom made



Town villa  
tuscan style

RM-B1

# Advantages Examples

Manually furlable sun sail

---

Dynamic 3D sail geometry

---

Maritime flair (furling axis, winches, ropes, sails)

---

Flexible axis (easy assembly and disassembly)

---

High surface tension (winches)

---

High wind stability / good rainwater drainage

---

Height adjustment on furling axis and sail extension possible

---



Design-garden  
RM-B1



Architect  
building  
RM-B1

# Type RM

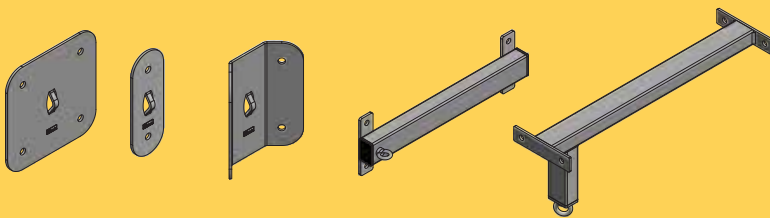
Sail area  
up to 60 m<sup>2</sup>

Furling axis  
length up  
to 10 m

## Components and options

The RM system is equipped with numerous components from the BARTELS yachting programm. Robust stainless steel masts and a lot of fabric tension give the system high wind stability and good rainwater drainage. The axis and sail are tensioned using winches. The pronounced three-dimensional shape of the sail is a distinctive feature of the RM system. Sail areas up to 60 m<sup>2</sup> can be easily implemented.

Pure maritime feeling in your garden!



### Wall plate with eyelet

Connection swivel to house wall

Connection rope deflection to the  
house wall

Material stainless steel / e-polished

Dimensions:

WxH 230 x 230 mm

WxH 230 x 80 mm

WxH 230 x 230 mm (90° / inside  
corner)

Special variants for rafter or stand  
attachment



### Mast sail extension

Ø 76 mm / stainless steel

Ø 76 mm / aluminium

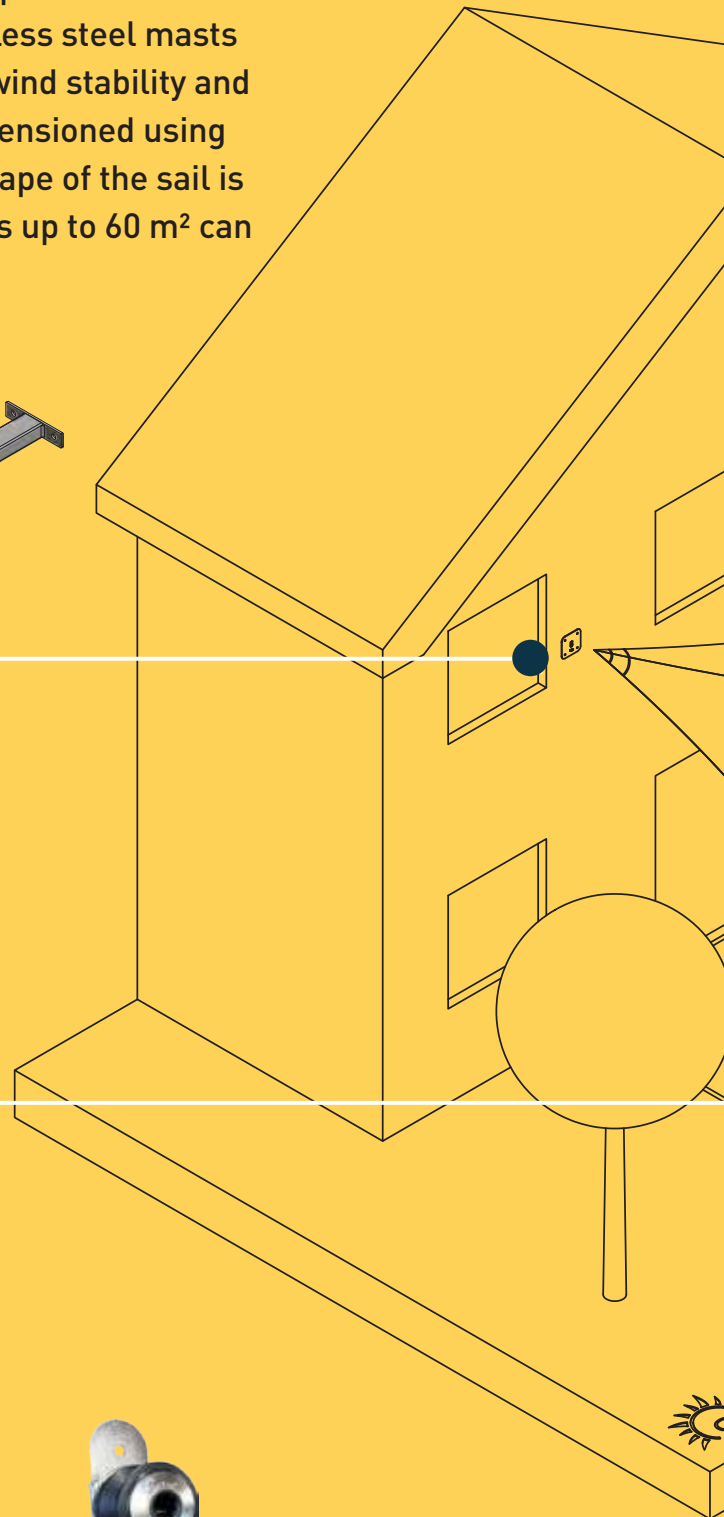
Lengths: L 2.500 mm L 3.000 mm  
L 3.500 mm

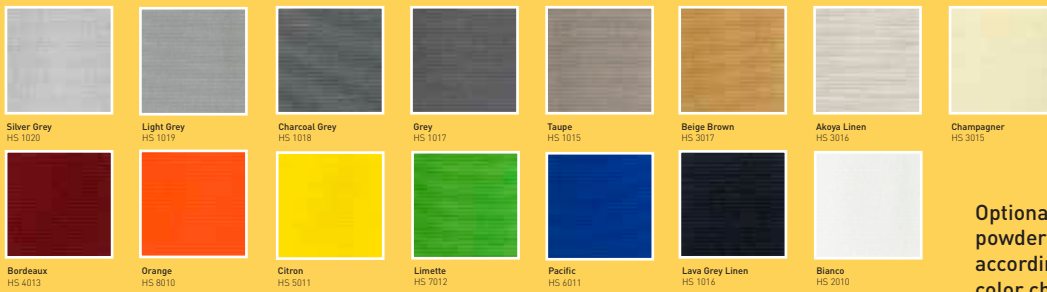
height adjustment via rail with  
slide L 1.350 mm

Sail tension via winch



SunFurl RM deflection block  
Ø 40 mm / Ø 56 mm





Optionally all parts powder-coated according to RAL color chart

## Sailcloth HS270

Colors according to color chart

Polyester fabric made from solution dyed yarn with a fluoro-carbon impregnation

UV stabilized / oil and dirt repellent / antifungal

High tear strength and high kink-resistance

High lightfastness

SPF > 50

## Furling axis

Furling system from the BARTELS yachting programm (size II)

Flexible axis that can be stowed in a sail bag together with the sail (incl. furler, swivel and all ropes).



## Mast winding axis

Ø 76 mm / stainless steel

Ø 76 mm / aluminium

Lengths:

L 2.500 mm

L 3.000 mm

L 3.500 mm

Height adjustment via rail with slide L 1.350 mm

Tension furling axis via winch



## Mast attachments / foundations

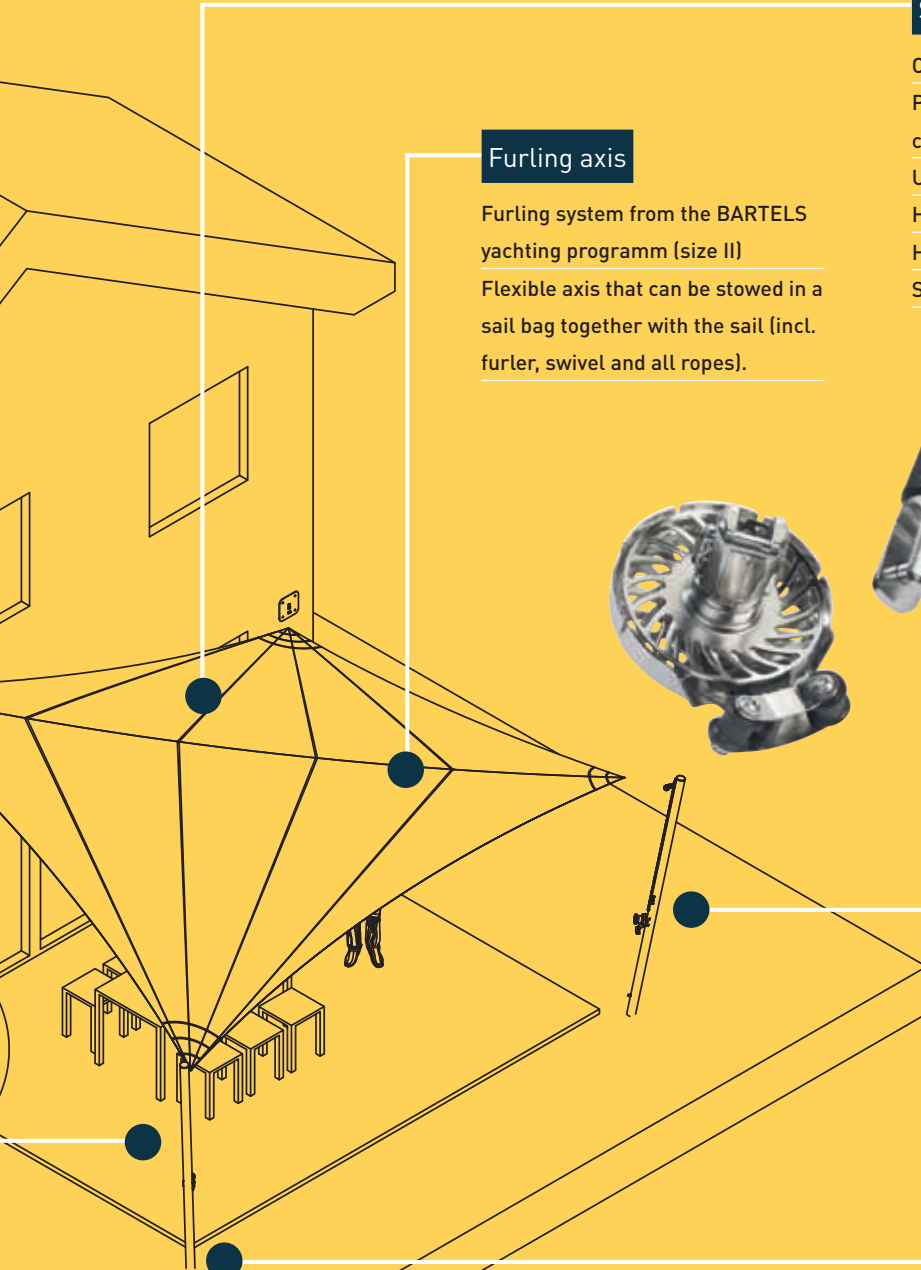
Screw foundation (hot-dip galvanized steel)

Ground sleeve (stainless steel)

Flange foot (hot-dip galvanized steel)

Wall flanges (stainless steel)

Special flanges (steel, stainless steel, aluminium)



# *SunFurl* *Sun Sail*

## Type RM light



# Lightweight furlable awning system

The SunFurl RM-light system is a lighter variant of the RM system, suitable for shading areas up to 35 m<sup>2</sup>. The furling axis and the masts are slightly lighter. The sail is tensioned via a 2:1 tackle. With this type of system, three fastening points can be adjusted in height. This allows you to align the sun sail so that it always creates the desired shade, even when the sun is low in the sky. Depending on the system type, sail areas of up to 35 m<sup>2</sup> can be realised.

## **Smooth and wrinkle free!**

Due to the large pre-tensioning forces, the sail is taut and wrinkle-free. With sufficient height differences the sail can be used as rain protection. All SunFurl shade sails are made by professional sail makers. This enables us to offer you sailcloths of exceptionally high quality.

## **Assembly & disassembly in just 15 minutes**

During the winter months, the system can be completely dismantled in just a few simple steps. The sail, which is rolled up dry, is rolled up as a ring and stowed away in the winter protection bag, including the furling axis and all ropes, protected. The poles can be pulled out of the ground sleeves and stored in the garage, for example. Only the inconspicuous wall plates and ground sleeves remain permanently installed.

# Manually furlable sun sails

Type RM-light

Wall plates  
stainless steel

Tensioning technology 1:2 tackle  
Simple operation / high power

Sails made from:  
HydroSol 270 or  
SolMesh 340

Masts  
Ø 76 mm aluminum system mast

Furling axis and drive unit  
from the BARTELS yachting programm  
Flexible axis between jib furler and swivel

Height adjustment at all attachment points  
possible (via eyelets or rail)

Foundation Options:

- Screw foundation
- Ground socket
- Bottom flange
- Wall flange
- Custom made



RM light  
Version as E2  
system

# Advantages

# Examples

Dynamic 3D sail geometry

---

Manually furlable

---

Simple / easy construction

---

Ø 76 mm aluminum system mast

---

Inexpensive

---



Country house terrace

RM-light A1



Townhouse terrace

RM-light A1

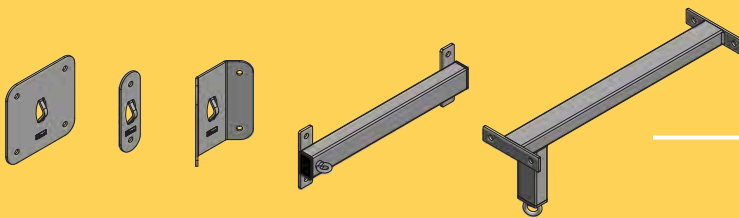
# Type RM light

Sail area  
up to 35 m<sup>2</sup>

Furling axis length  
up to 8 m

## Components and options

The lighter variant of the proven RM system for sail areas up to 35 m<sup>2</sup>. All the properties of the large system can also be found here: height adjustment, furling axis from the BARTELS yachting program, attachment options and HS270 sails. The tension of the axis and the sail is generated by a 2-fold tackle. With a suitable height arrangement of the attachment points, the RM-light system also forms a attractive three-dimensional sail area.



### Wall plate with eyelet

Connection swivel to house wall

Connection rope deflection to the house wall

Tensioning pull-out lines on the house wall

Material stainless steel / e-polished

Dimensions:

W x H 175 x 175 mm

W x H 175 x 50 mm

W x H 175 x 175 mm (90° / inside corner)

Special variants for rafter or stand attachment



### Mast sail extension

Ø 76 mm / aluminum

Lengths:

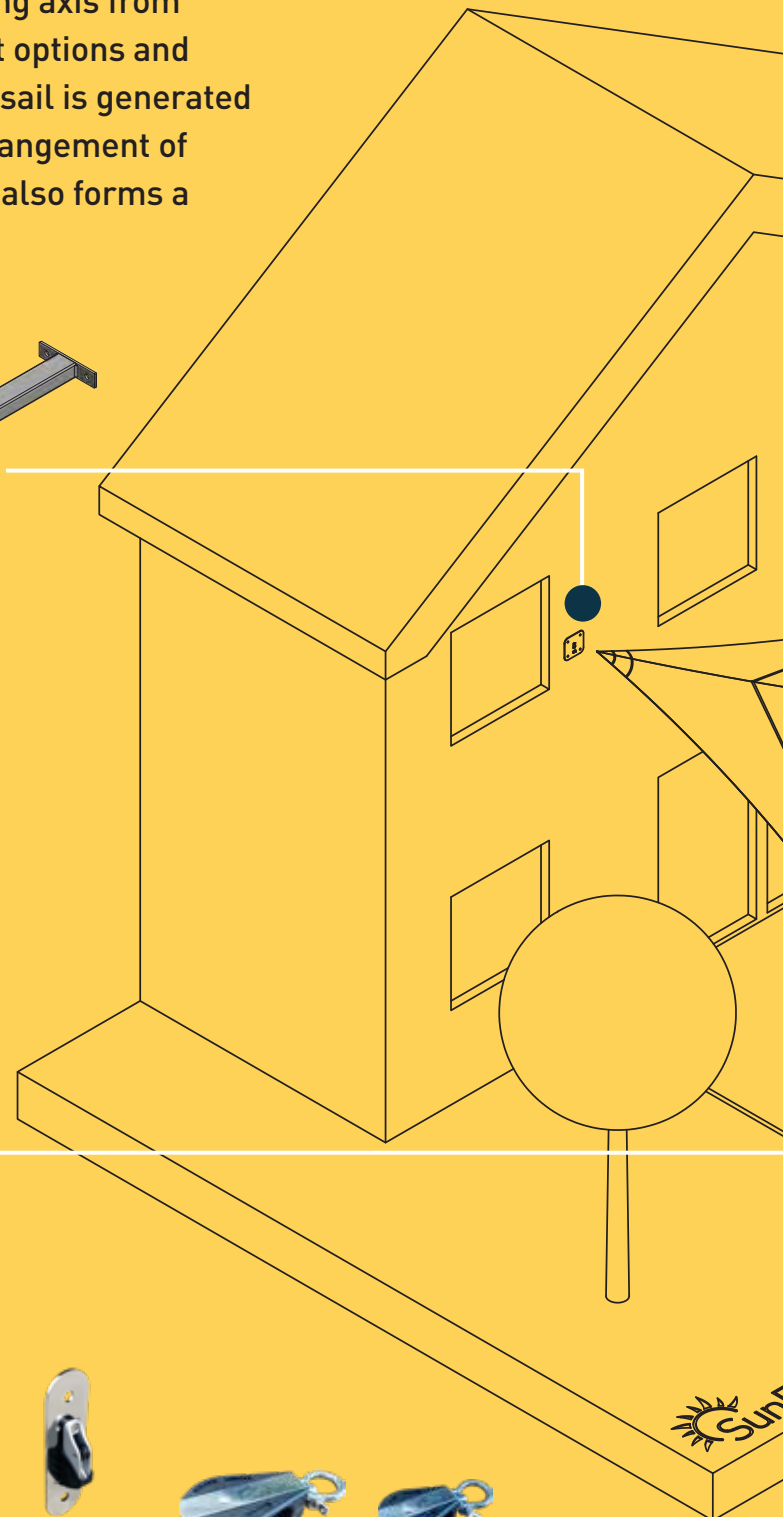
L 2.500 mm

L 3.000 mm

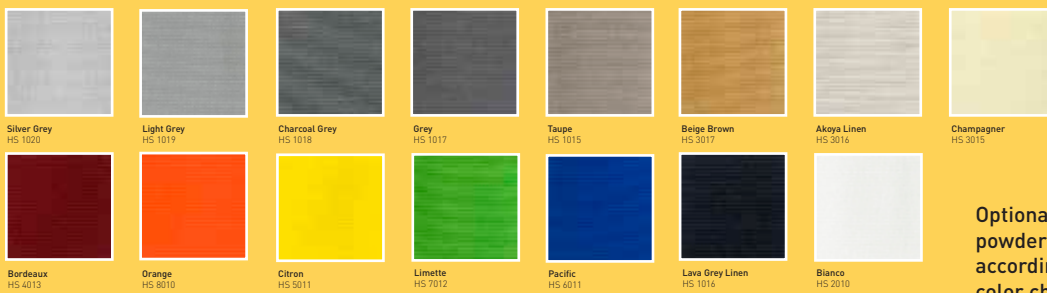
L 3.500 mm

Height adjustment via rail with  
slide L 1.350 mm

Sail tension via 2:1 tackle



SunFurl RM deflection block  
Ø 40 mm / Ø 28 mm



Optionally all parts powder-coated according to RAL color chart

## Sailcloth HS270

Colors according to color chart

Polyester fabric made from solution dyed yarn with a fluorocarbon impregnation

UV stabilized / oil and dirt repellent / antifungal

High tear strength and high kink-resistance

High lightfastness

SPF > 50

## winding axis

Furling system from the BARTELS yachting program (size I)

Flexible axis that can be stowed in a sail bag together with the sail (incl. furler, swivel and all ropes).



## Mast furling axis

Ø 76 mm / aluminum

Lengths:

L 2.500 mm

L 3.000 mm

L 3.500 mm

Height adjustment via rail with slide

L 1.350 mm

Sail tension 2:1 tackle



## Mast attachments / foundations

Screw foundation (hot-dip galvanized steel)

Ground sleeve (stainless steel)

Flange foot (hot-dip galvanized steel)

Wall flanges (stainless steel)

Special flanges (steel, stainless steel, aluminium)



# *SunFurl* *Sun Sail* Type RM-MAX



# Large manual furlable sun sail system

The RM-MAX system is the all-rounder for medium and large sail areas up to 75 m<sup>2</sup>. The furling axis and the masts are particularly stable. The sail is tensioned using winches. With this type of system, three fastening points can be adjusted in height. This allows you to align the sun sail so that it creates the desired shade at any time of the day, even when the sun is low in the sky.

## **Firmly stretched and wrinkle-free!**

All SunFurl sun sails are of exceptionally high quality, as they are made by professional sail makers who always work with high quality and very durable materials. Due to the large pre-tensioning forces, the sail is taut and wrinkle-free. With a sufficiently planned incline, the sail can be used as rain protection.

## **Assembly & disassembly in just 15 minutes**

During the winter months, the system can be completely dismantled in just a few simple steps. The sail, which is rolled up dry, is rolled up as a ring and stowed away in the winter protection bag, including the furling axis and all ropes, protected. The poles can be pulled out of the ground sleeves and stored in the garage, for example. Only the inconspicuous wall plates and ground sleeves remain permanently installed.

Furling axis and drive unit  
from the BARTELS yachting program  
Flexible axis between jib furler and swivel

Sail made from:  
HydroSol 270 or  
SolMesh 340

Wall plate stainless steel  
With winch  
With height adjustment (optional)

Masts  
Ø 102 mm aluminum system mast  
With winch  
With height adjustment

# Manually furlable sun sails

Type RM-MAX

Height adjustment at all Attachment points (furling axis or sail extension) possible

Tension furling axis and sail decentralized via winches

## Foundation Options:

- Screw foundation
- Ground socket
- Bottom flange
- Wall flange
- Custom made



Terrace  
corner  
arrangement

RM-MAX B1

# Advantages

# Examples

Dynamic 3D sail geometry

Maritime flair (furling axis, winches, ropes, sails)

Flexible axis (easy assembly and disassembly)

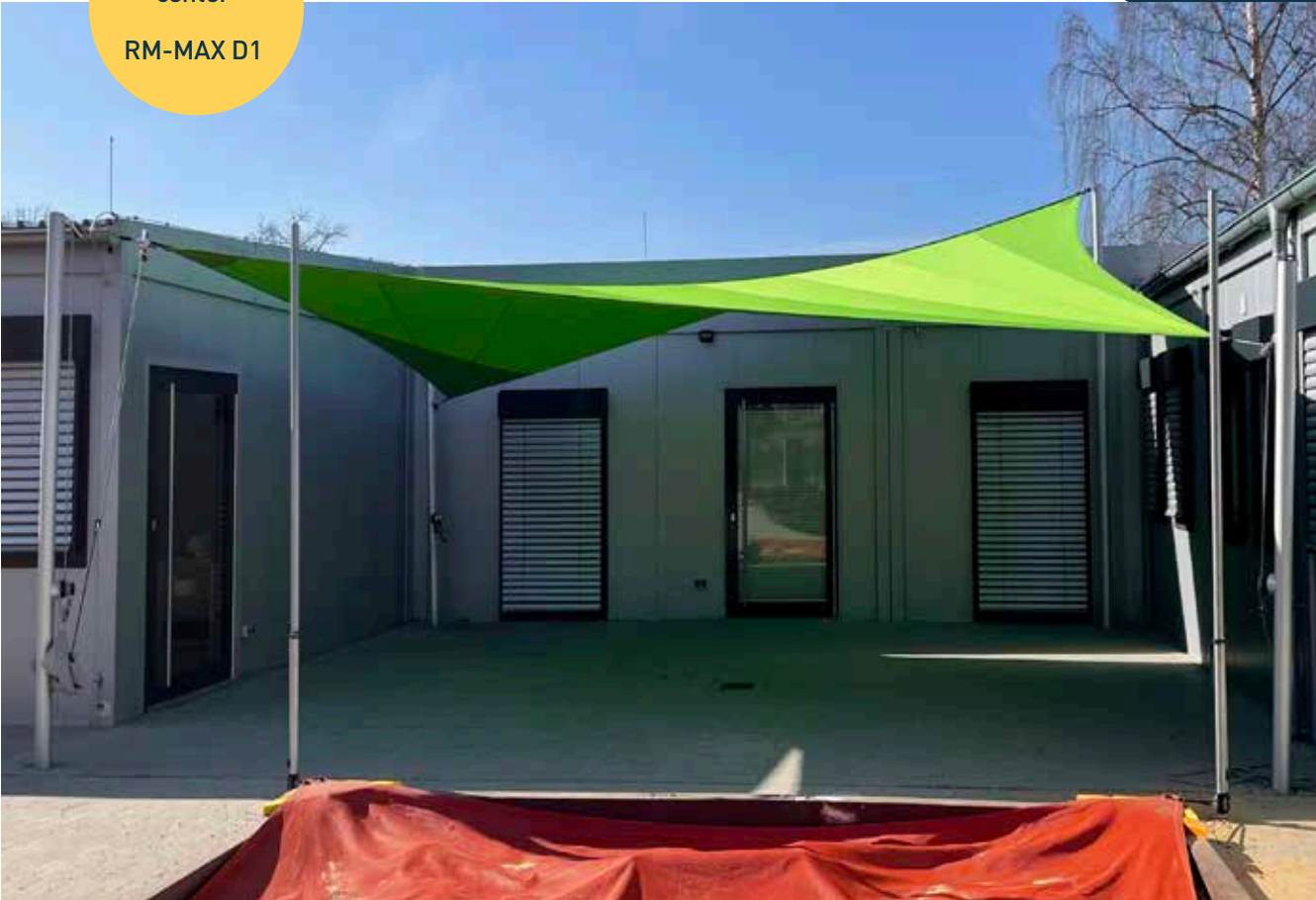
High surface tension (winches)

High wind stability / good rainwater drainage

Height adjustment on furling axis and sail extension possible



Day-care center  
RM-MAX D1



Residential building  
RM-MAX A1

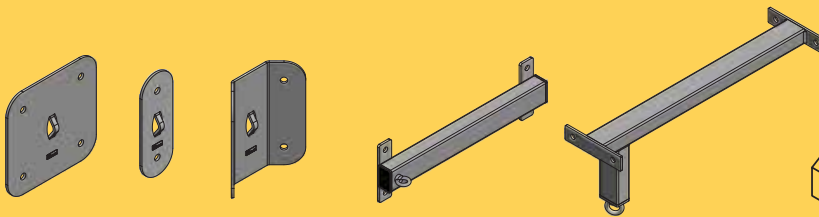
# Type RM-MAX

Sail area  
up to 75 m<sup>2</sup>

Furling axis  
length  
up to 12 m

## Components and options

The great all-rounder for medium and large sail areas up to 75 m<sup>2</sup>. The robust aluminum masts are designed with internal reinforcements. The flexible axis and sail are tensioned using winches. The winch platforms are elegantly shaped onto the mast tube. With a suitable height arrangement of the attachment points, the RM-MAX system forms a distinctive three-dimensional sail surface.



### Wall plate with eyelet

Connection swivel to house wall

Connection rope deflection to the house wall

Wall plate with winch

Material stainless steel / e-polished

Dimensions:

W x H 230 x 230 mm

W x H 230 x 80 mm

W x H 230 x 230 mm (90° / inside corner)

Special variants for rafter or stand attachment



### Mast sail extension

Ø 102 mm / aluminium

Lengths: L 2,500 mm L 3,000 mm L  
3,500 mm

Height adjustment via rail with slide L

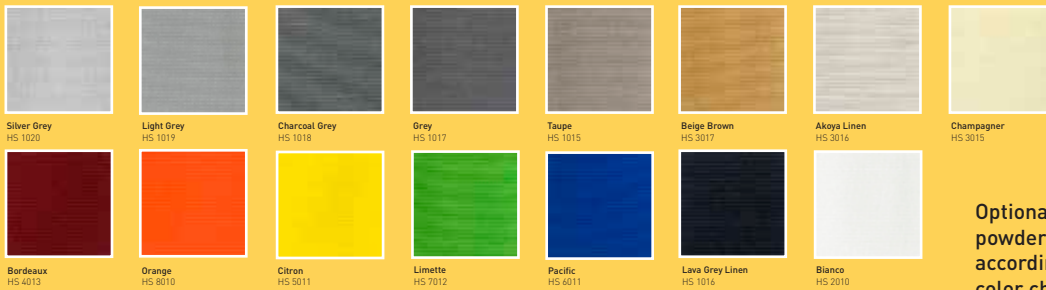
1,350 mm

Sail tension via winch

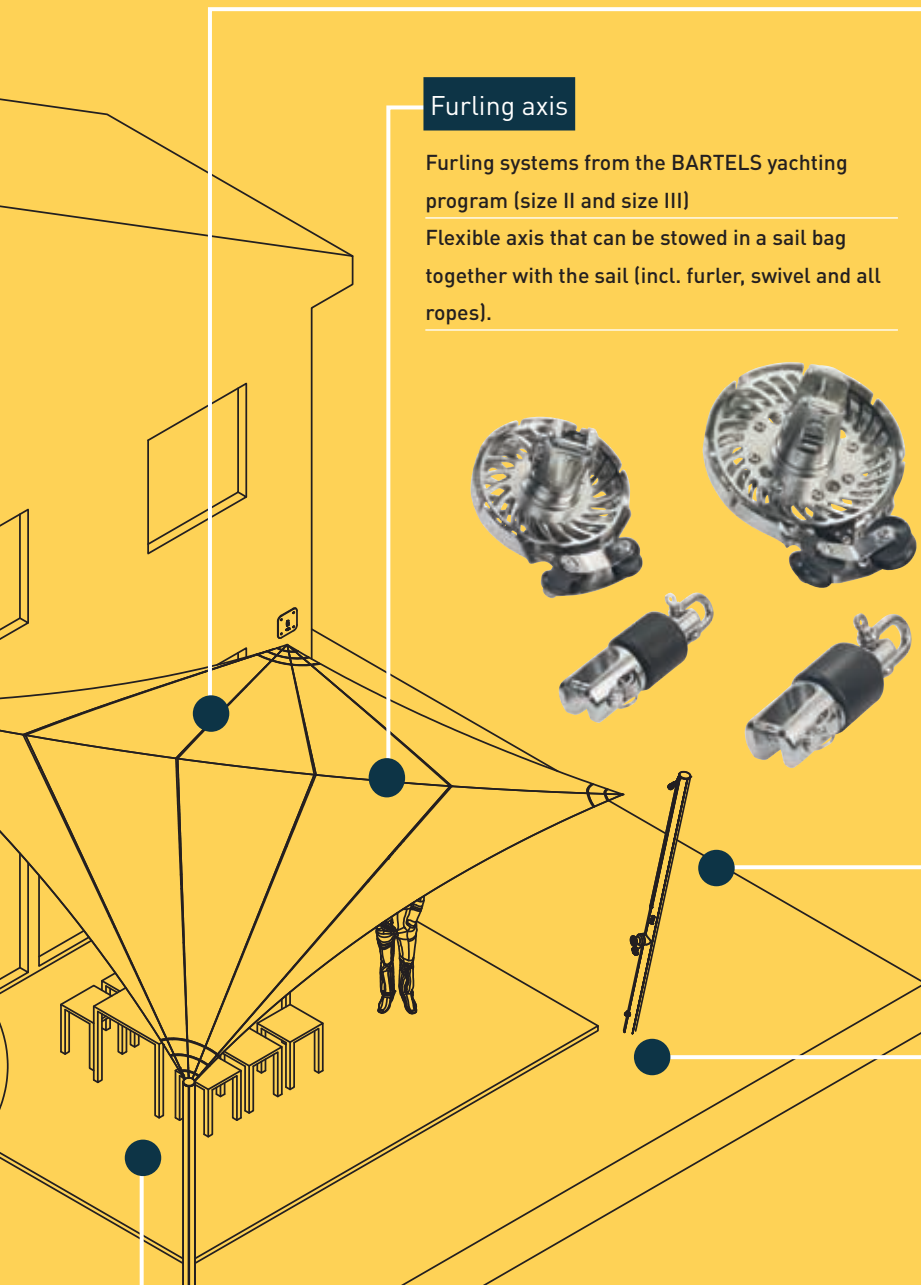
locking mechanism (optional)



SunFurl RM deflection block  
Ø 40 mm / Ø 57 mm

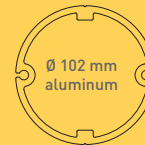


Optionally all parts powder-coated according to RAL color chart



### Furling axis

Furling systems from the BARTELS yachting program (size II and size III)  
Flexible axis that can be stowed in a sail bag together with the sail (incl. furler, swivel and all ropes).



### Sailcloth HS270

- Colors according to color chart
- Polyester fabric made from solution dyed yarn with a fluorocarbon impregnation
- UV stabilized / oil and dirt repellent / antifungal
- High tear strength and high kink-resistance
- High lightfastness
- SPF > 50

### Mast furling axis

- Ø 102 mm / aluminium
- Lengths:
  - L 2.500 mm
  - L 3.000 mm
  - L 3.500 mm
- Height adjustment via rail with slide
  - L 1.350 mm
- Tension of the furling axis via winch locking mechanism (optional)



### Mast attachments / foundations

- Screw foundation (hot-dip galvanized steel)
- Ground socket (stainless steel)
- Flange foot (hot-dip galvanized steel)
- Wall flanges (stainless steel)
- Special flanges (steel, stainless steel, aluminium)



# SunFurl Sun Sail

Type FX / FX-KiT



# Individual planning and variety of shapes

Individual planning and variety of shapes are standard with the tightly braced SunFurl sun sails. The shape is very free, because three, four or more attachment points can be planned and manufactured according to the situation. In addition, SunFurl FX systems enable an exciting 3D architecture.

## **Wind stability and water drainage**

Due to the large differences in height and the high pre-tensioning by tackles, the FX sails offer maximum stability in wind and good rainwater drainage with a sufficiently planned gradient.

## **Assembly & disassembly in just 15 minutes**

During the winter months, the system can be completely dismantled in just a few simple steps. The sail is folded dry and stowed in the winter protection bag, including the tensioning units. The masts can be pulled out of the ground sleeves and stored in the garage, for example. Only the wall plates and ground sleeves remain permanently installed.

# Fix tensioned sun sails

Type FX

Masts Ø 100  
Aluminum system mast  
Internal reinforcement

Tensioning via 4-fold tackle  
Protected with Velcro pocket



Sail made from:  
HydroSol 270 or SolMesh 340  
High UV protection  
No heat build-up below the sail

- Foundation Options:
- Screw foundation
  - Ground socket
  - Bottom flange
  - Wall flange
  - Custom made





Garden  
seating area

SF-FX-D1

# Advantages

# Examples

Flexible dimensions (not limited by a furling axis)

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Dynamic 3D sail geometry

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Simple, inexpensive construction

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Ideal for kindergarten and school (in combination with SolMesh 340)

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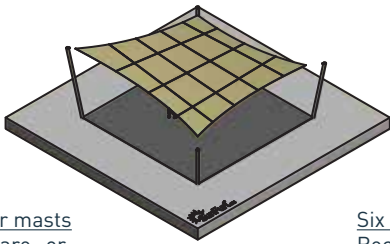


Sandbox shading

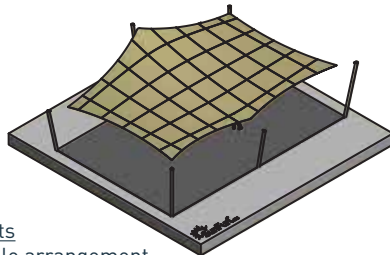
SF-FX-D1



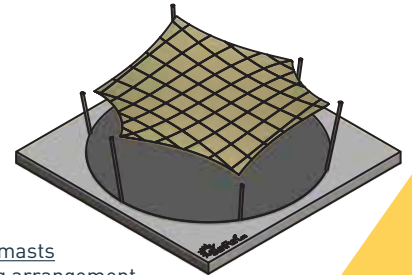
Popular arrangement variants for KiTa Systems



Four masts  
Square- or  
Rectangle arrangement  
up to 40m<sup>2</sup> sail area



Six masts  
Rectangle arrangement  
up to 60m<sup>2</sup> sail area



Six masts  
Ring arrangement  
up to 60m<sup>2</sup> sail area



Playground  
Pool area

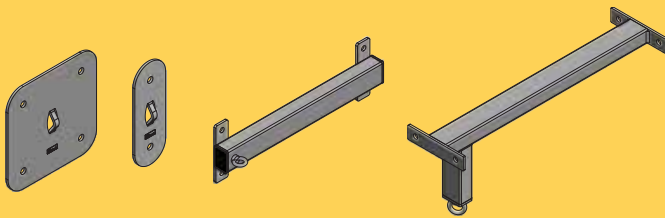
SF-FX-D1

# Type FX

Sail area  
up to 40 m<sup>2</sup>

## Components and options

In the area of playgrounds and schools, tightly braced sun sails are often planned. A sail made of mesh fabric is usually used, as this meets the highest demands for UV and sun protection. It is also permeable to air, so there is no heat build-up under the sail. The sails are stretched taut over 4-way tackle. When planning enough height differences, a dynamic three-dimensional sail surface is created. An aesthetic design element for playgrounds or schoolyards. Sail areas up to 40 m<sup>2</sup> are easily possible.



### Wall plate with eyelet

Connection sail extension to house wall

Material stainless steel / e-polished

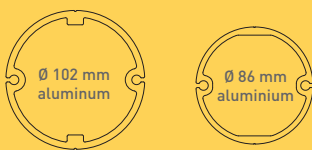
Dimensions:

WxH 230 x 230 mm

WxH 230 x 80 mm

WxH 230 x 230 mm (90° / inside corner)

Special variants for rafter or stand attachment



### Mast sail extension

Ø 102 mm / aluminum

Ø 86 mm / aluminum

Lengths:

L 2.500 mm

L 3.000 mm

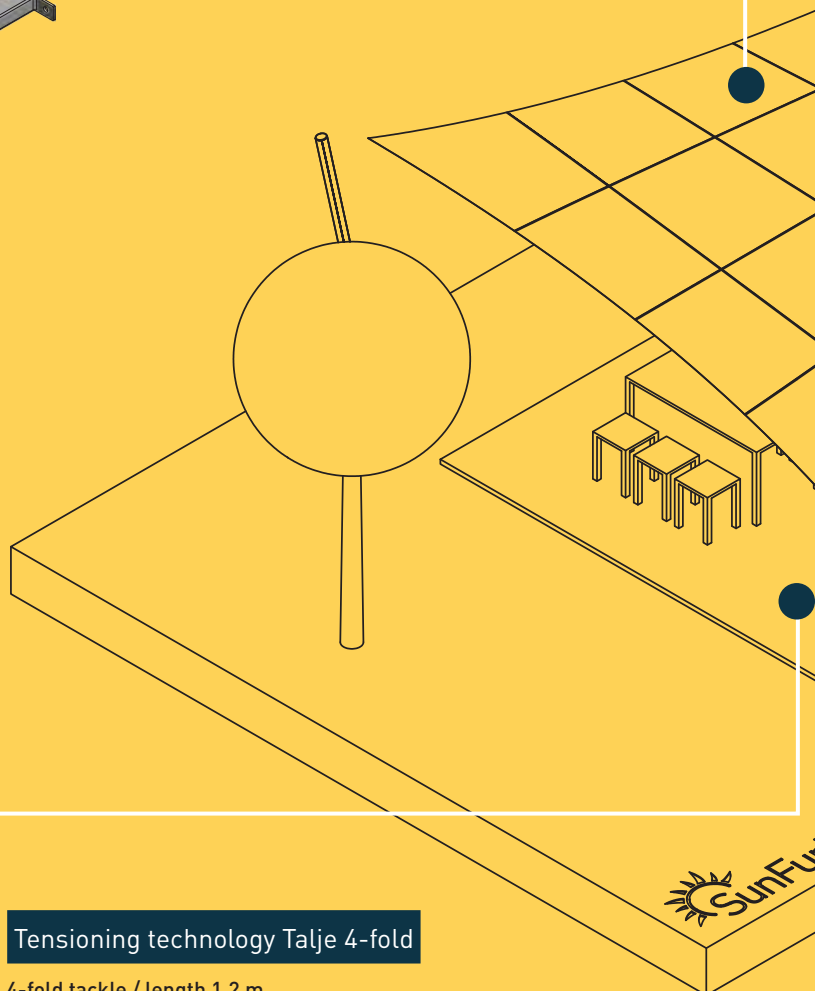
L 3.500 mm

Height adjustment via 2-3 eyelets on the mast

Optional height adjustment via rail with slide

L 1.350 mm

Sail tension over 4-fold tackle



### Tensioning technology Talje 4-fold

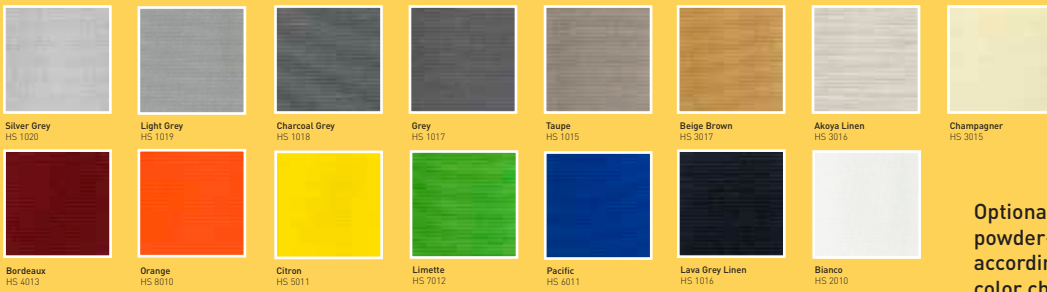
4-fold tackle / length 1.2 m

Snap hooks on both sides

Easy assembly and disassembly of the sail

Height adjustment possible via snap hooks





Optionally all parts powder-coated according to RAL color chart

### Sailcloth HS 270

Colors according to color chart

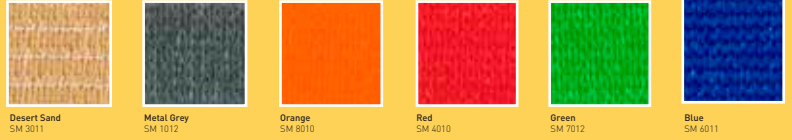
Polyester fabric made from solution dyed yarn with a fluorocarbon impregnation

UV stabilized / oil and dirt repellent / antifungal

High tear strength and high kink-resistance

High lightfastness

SPF > 50



### SolMesh 340 sail fabric

Color desert-sand (perfect for daycare / school)

Mesh fabric made from UV resistant flax and HDPE yarn

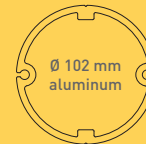
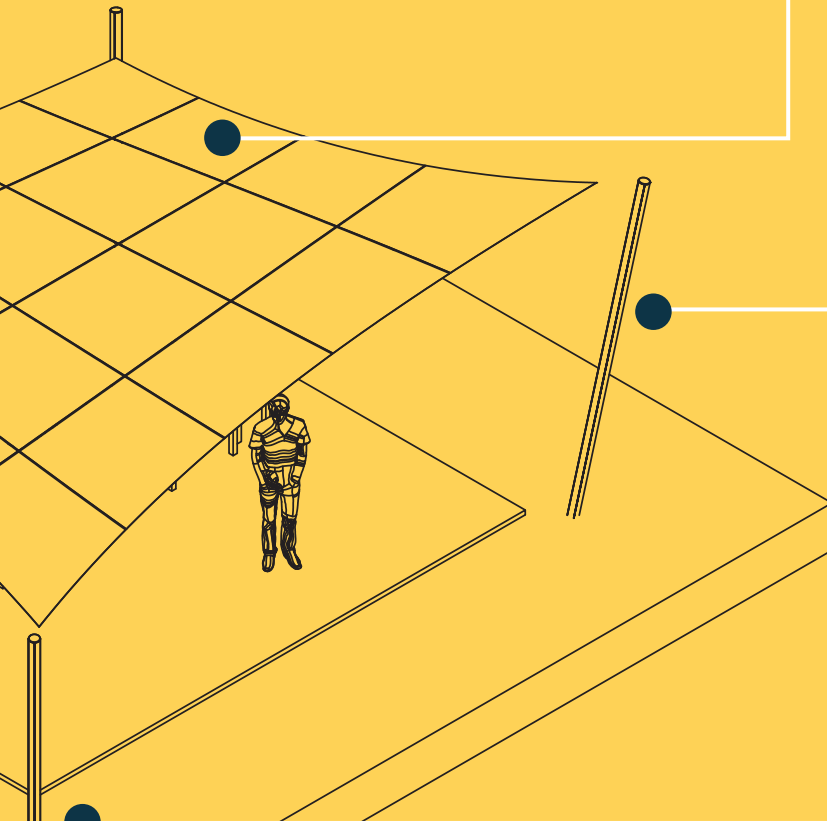
Greenguard and Oeko-Tex certificate, PVC and lead free

High lightfastness

Highly stable mesh fabric

Reduces UV rays > 90%

Reduces sun rays > 77%



### Mast sail extension

Ø 102 mm / aluminum

Ø 86 mm / aluminum

Lengths:

L 2.500 mm

L 3.000 mm

L 3.500 mm

Height adjustment via rail with slide

L 1.350 mm

Height adjustment via 2-3 eyelets on the mast

Sail tension via 4-fold tackle



### Mast mounts / foundations

Screw foundation (hot-dip galvanized steel)

ground socket (stainless steel)

Flange foot (hot-dip galvanized steel)

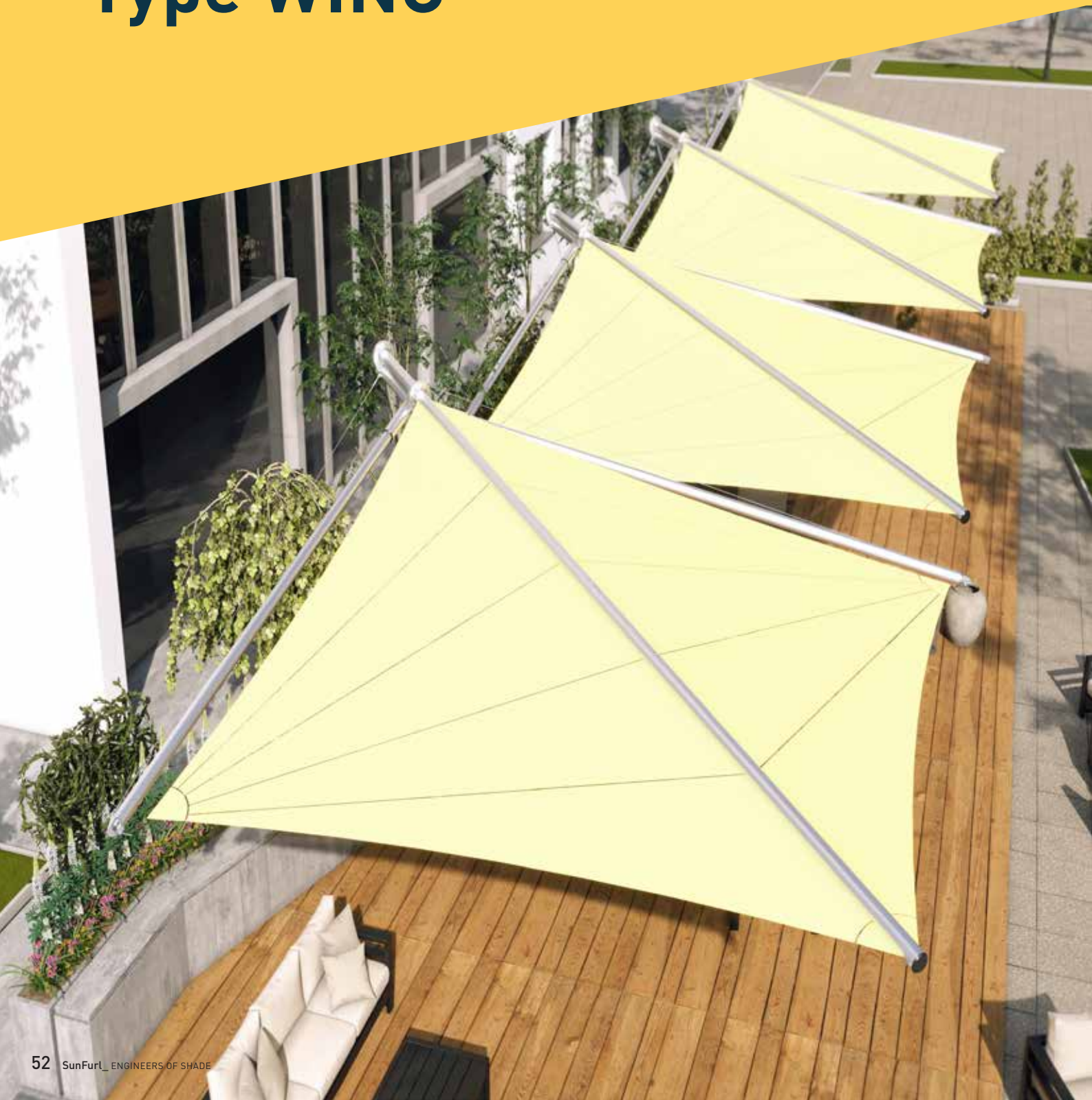
parapet flanges (stainless steel)

Special flanges (steel, stainless steel, aluminium)



# *SunFurl* *Parasol sail*

## **Type WING**



# **Think outside the parasol**

Discover the revolution in shading: Our WING with just one mast outside the shade area offers automatic, electric furling comfort and enables unobstructed views of mountains, lakes and sea. The benefits of an umbrella merge with the aesthetics of awnings, in a uniquely practical and sustainable system. Experience shadows in a new dimension.

## **Wind stability and water drainage**

The WING impresses with its high wind stability and at the same time ensures protection from the rain thanks to an optimal slope for safe water drainage.

## **Automated operation**

The WING is ideal for public areas as no operator is required to furl it in or out. Fully automatic operation through weather control makes it perfect for restaurants, bars and roof terraces.

Furling axis D102  
with integrated 230V drive  
powder-coated aluminum

Tensioning technology  
Integrated in arm profiles D86

Weather control  
Automatic operation  
No operating personnel required

LED spots  
indirect lighting  
the seats under the  
Sailing

Central mast  
stainless steel  
powder coat

Foundation options  
Screw foundation  
Ground sleeve  
floor flange  
Custom made

Electric  
furlable  
parasol-sail  
WING



Sails made from:  
HydroSol 270 or  
Soltis86 (mesh fabric)

Arrangement in rows or areas  
minimum number of masts  
harmonious picture  
automated operation

at D102  
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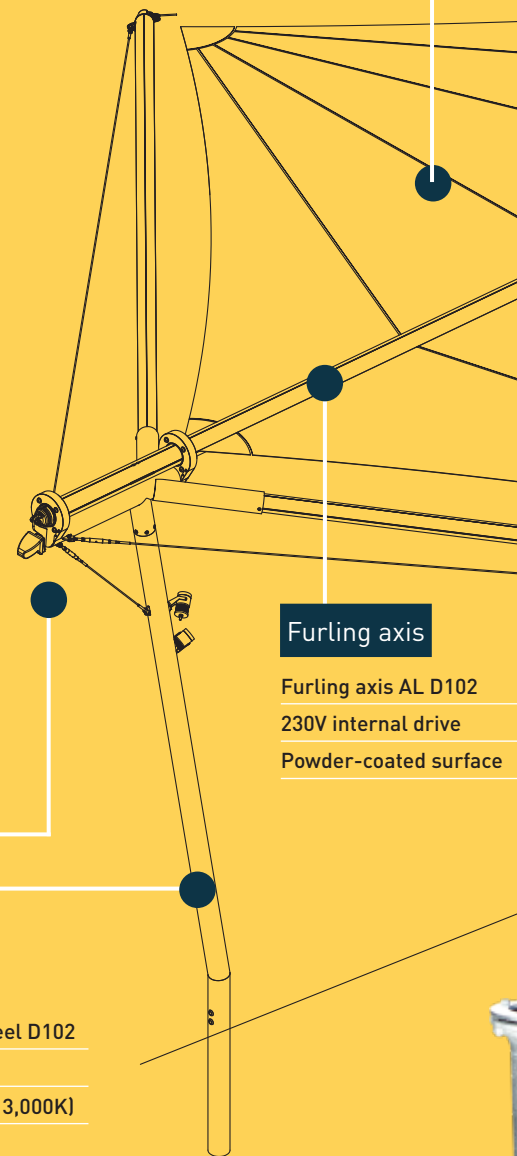
# Type WING

## Components and options

Experience shade enjoyment at the highest level with the WING – the innovative umbrella sail that combines the best features of sun sails and parasols. Thanks to its unique construction, the WING only requires a support outside the shaded area, giving you unrestricted views of the mountains, lake and beach, without any annoying masts in your field of vision.

The intelligent placement of the support allows tables and chairs to be easily arranged within the shaded area. Fully automatic operation using weather sensors ensures that you don't have to worry about anything - no operating personnel are required to control the unrolling and retracting. The seamless integration into your home control opens up completely new options for comfort control.

With a generous standard size of 4.5 x 4.5m and the flexible arrangement of the WING in any number, it is perfect for outdoor catering. The powder-coated visible surfaces in your individual RAL color also add stylish accents. Immerse yourself in the world of modern shade with the WING.



### Furling axis

Furling axis AL D102  
230V internal drive  
Powder-coated surface

### Weather control

Wind, rain, sun, temperature  
Manual or automatic mode  
Alternatively, integration into any home control system possible



### Mast

Mast tube made of stainless steel D102  
Surface powder-coated in RAL  
Option LED spots (230V / 10W / 3,000K)

### Mast fastenings / Foundations

Ground screw (hot-dip galvanized steel)  
Ground sleeve (hot-dip galvanized steel)  
Flange base on the mast tube (hot-dip galvanized steel)  
Flat roof installation part (hot-dip galvanized steel)  
Special flanges on request





## Sail fabric HS 270

Colors according to color chart

Polyester fabric made from solution-dyed yarn with fluoro-carbon impregnation

UV-stabilized / oil and dirt repellent / antifungal

high tear strength and high kink resistance

high light fastness

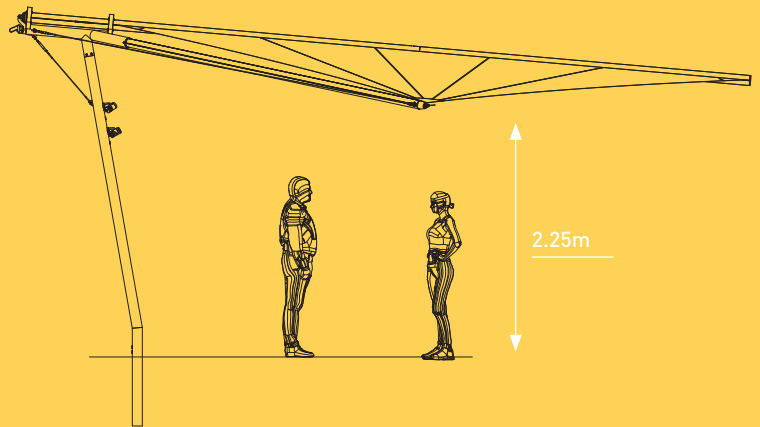
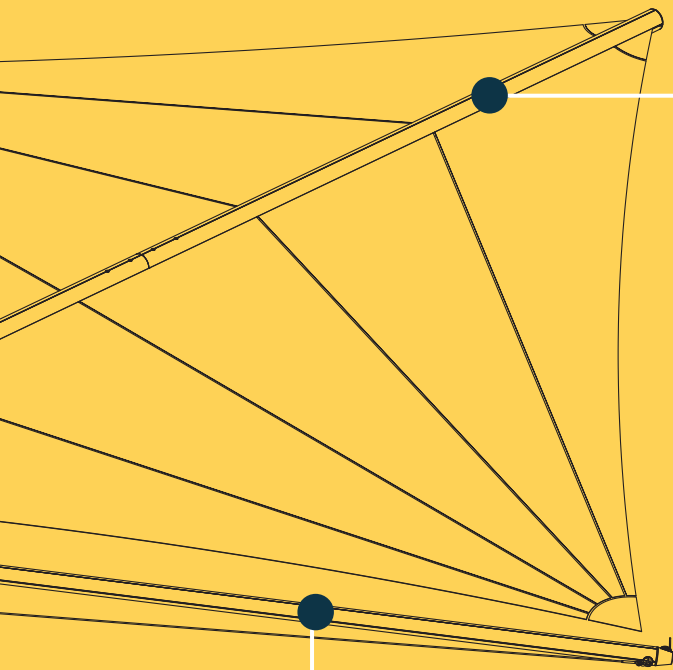
Sun protection factor > 50

## Surfaces powder-coated

All surfaces are powder-coated as standard in RAL 7016 (anthracite gray)

Optional coating according to RAL color chart

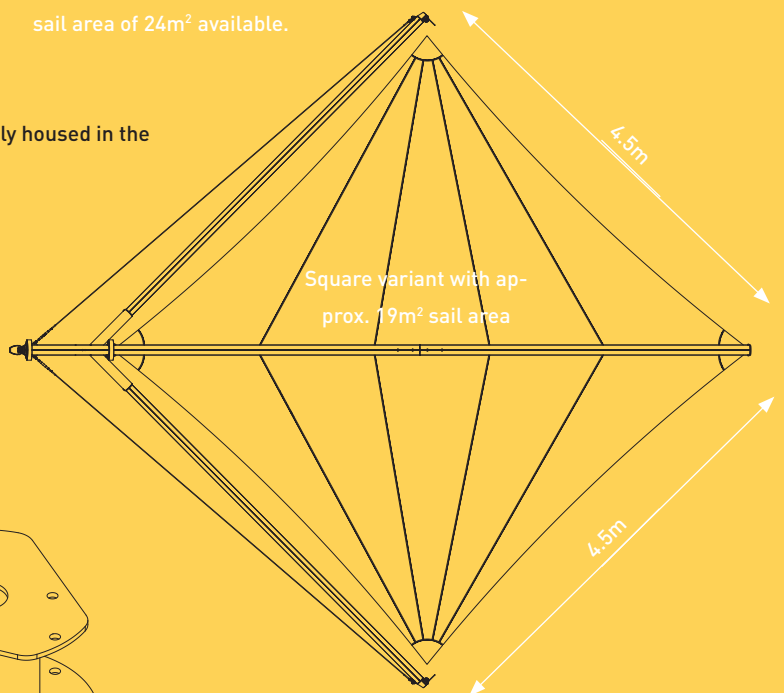
Mast tube, extension arms, winding axle



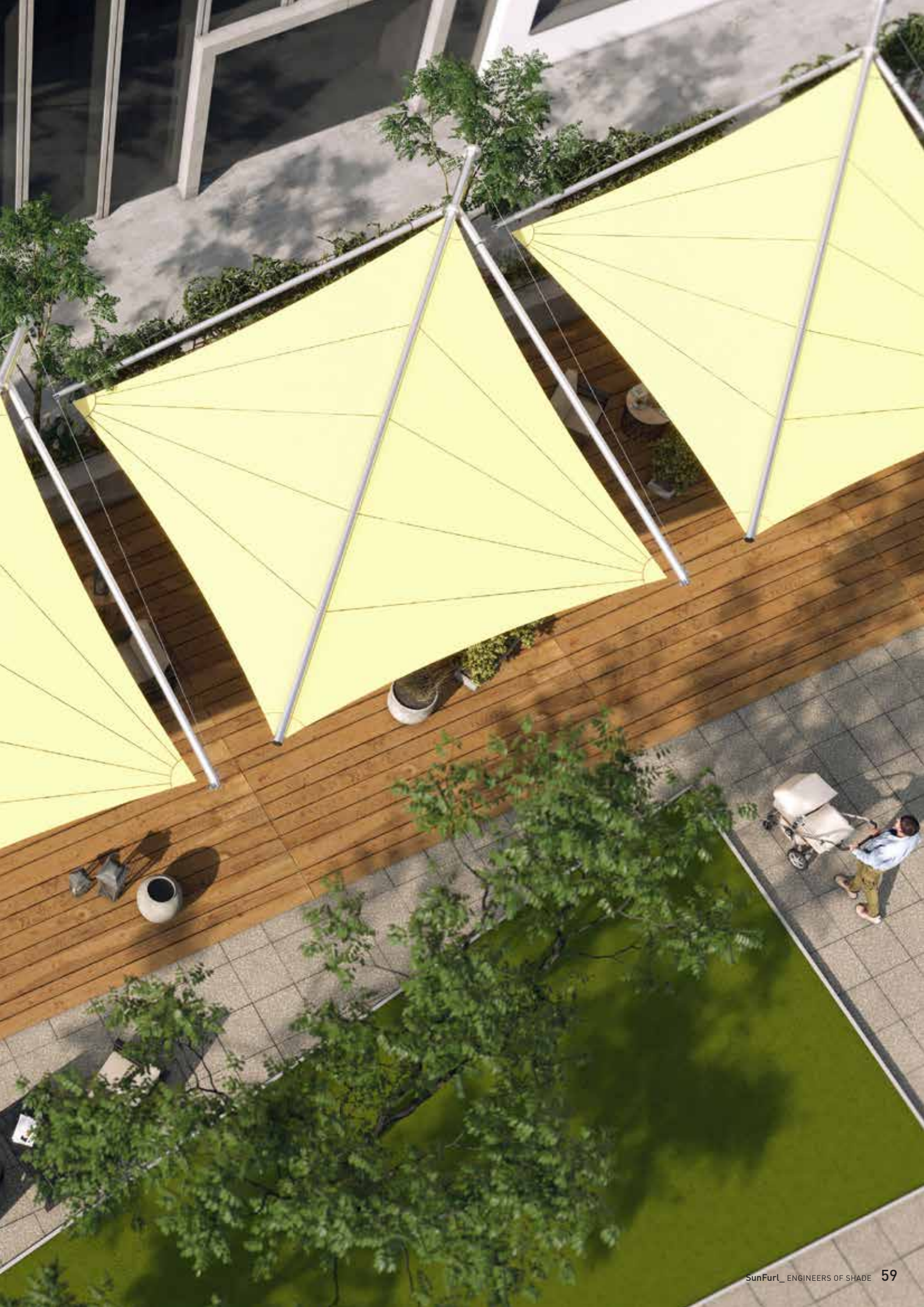
Other sizes / geometries up to a sail area of 24m<sup>2</sup> available.

## Tensioning technology

The tensioning techniques are discreetly housed in the arms of the WING.







# Large area shading

## Combined RE systems



## RE systems in row or area arrangement

For the shading of large areas, such as the outdoor areas of restaurants and event areas, systems can be arranged in rows or in areas. Masts can be used multiple times by adjacent systems.

The arrangement as an electrical RE system is advantageous, since only a minimum of tensioning units and masts is required here. The systems can be operated individually, in groups or all at the same time via the weather control display. The automatic mode of the weather control ensures safe operation without the need for operating personnel. The optimal solution for large shading tasks in publicly accessible areas.



# Large area shading

combined  
RE systems

Minimum number of wall panels  
through multiple use

Free space under t  
No masts within th

Any arrangement in a row or area is possible

Large area shading e.g. B. 16 x 8 m or z. B. 16 x 16 m

Safe, automated operation without operators

Ideal for restaurants, event areas, schools, day-care centers, public areas



Minimum number of poles  
through multiple use

Minimum number of foundations  
through multiple use

the sun sails  
the shaded area



In-line  
arrangement

4 x RE

# Advantages

## Examples

Large area shading for gastronomy, school, day-care centers, public area

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Fully automatic operation via weather control or house control

---

No operator required

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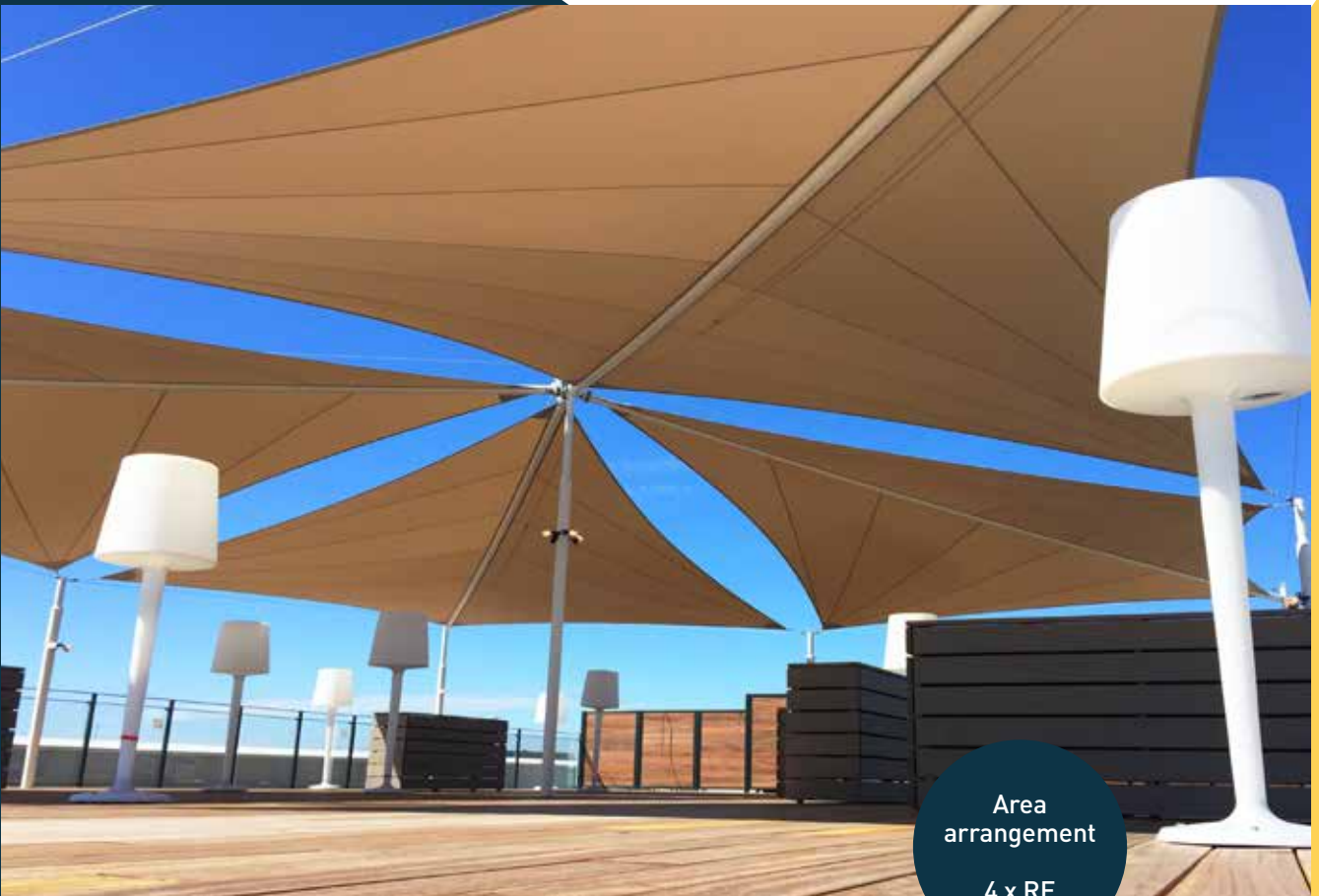
Low maintenance

---



In-line  
arrangement

2 x RE



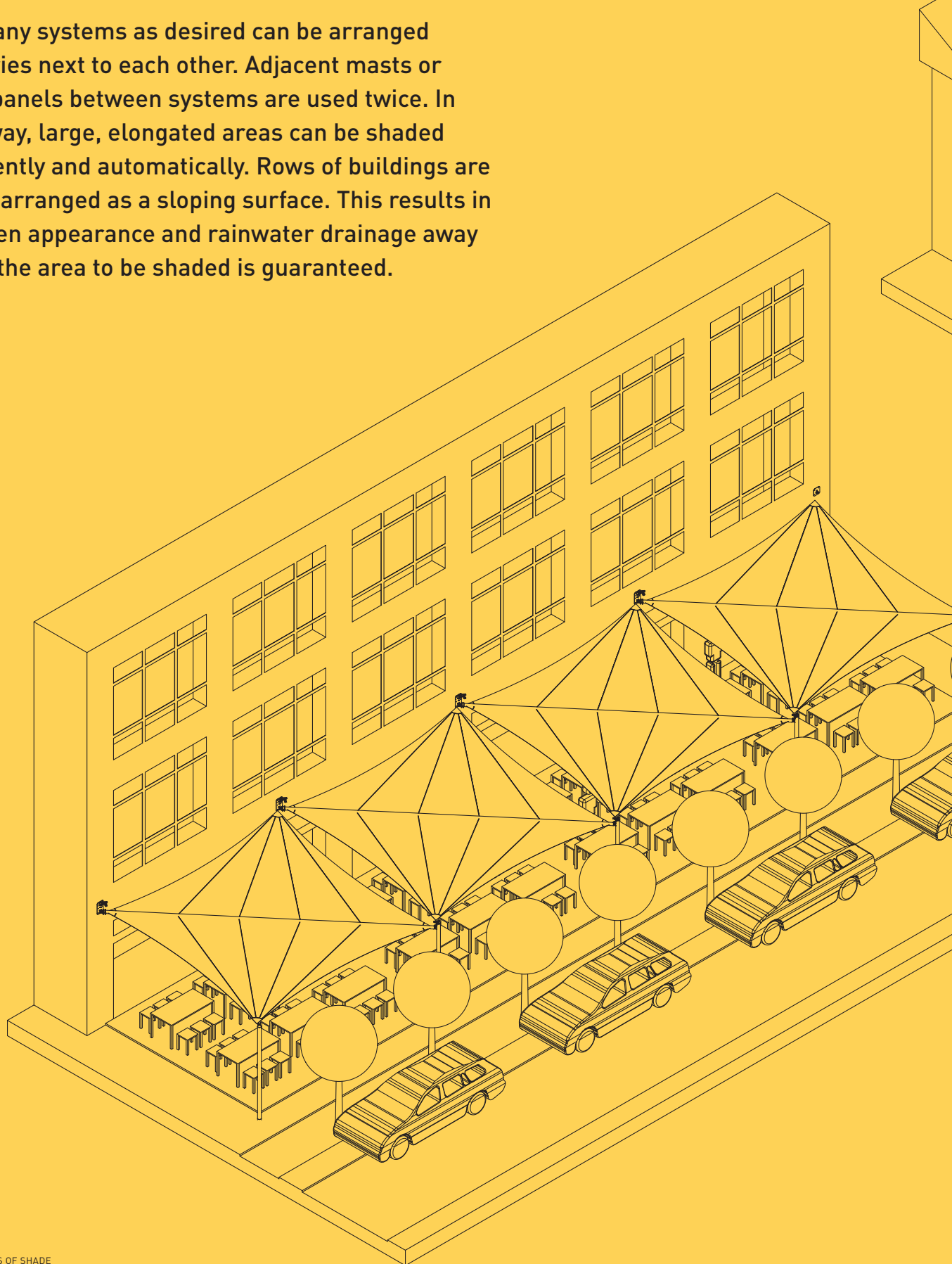
Area  
arrangement

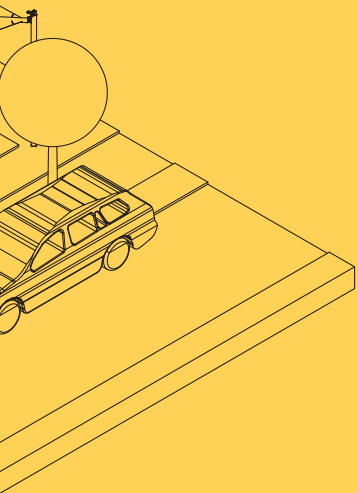
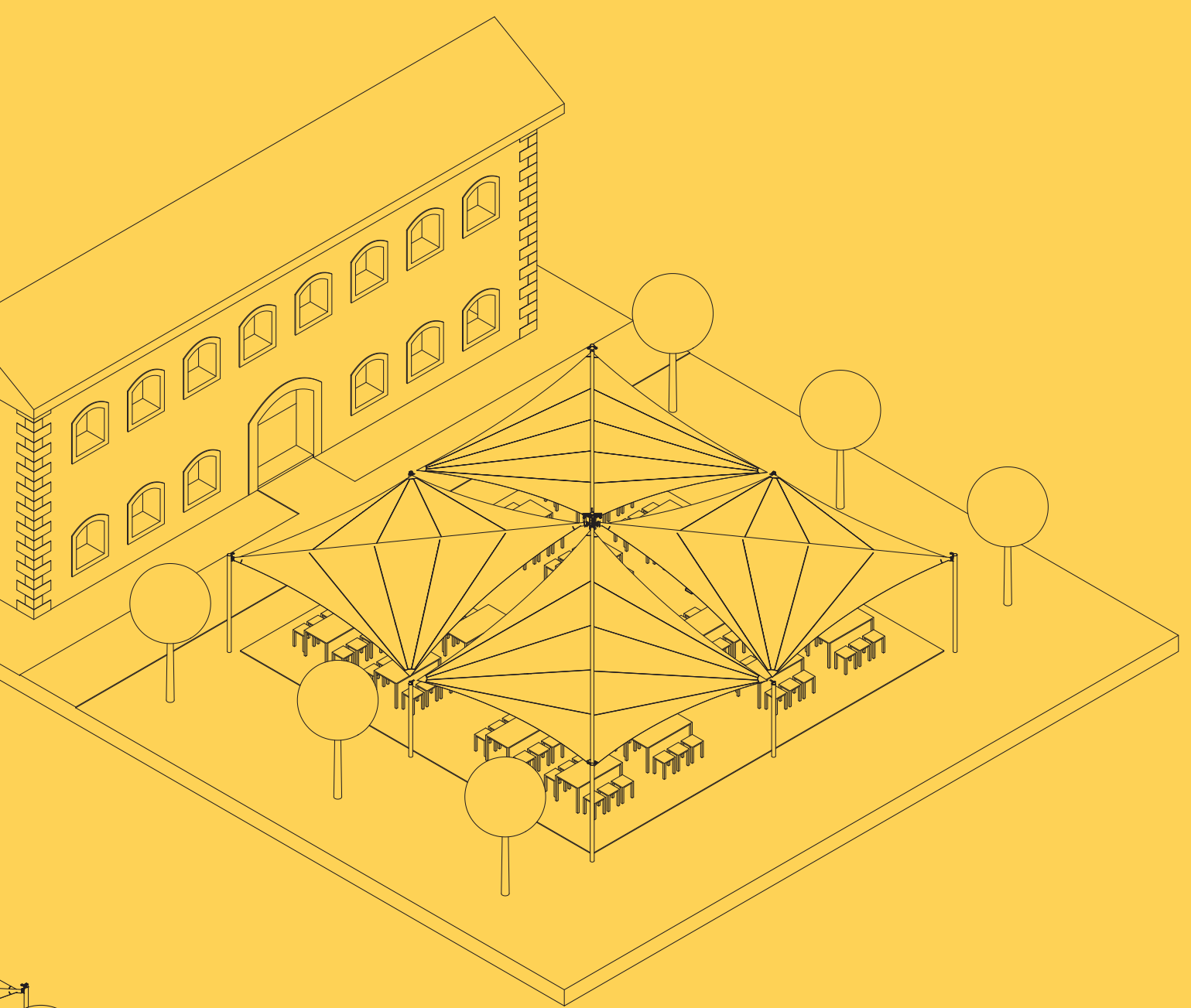
4 x RE

# Type RE combined (row and area)

## Row arrangement

As many systems as desired can be arranged in series next to each other. Adjacent masts or wall panels between systems are used twice. In this way, large, elongated areas can be shaded efficiently and automatically. Rows of buildings are often arranged as a sloping surface. This results in an even appearance and rainwater drainage away from the area to be shaded is guaranteed.





### Area arrangement

Any number of systems can be arranged in a area. Adjacent masts between systems are used twice. In this way, large areas can be shaded effectively and automatically. Area arrangements are often set up as a 2 x 2 system, since the heights can be advantageously determined with this arrangement. This results in an even pattern and rainwater drainage away from the area to be shaded is ensured.



# Summery color variety

## Awning fabric HydroSol 270

### Technical specifications

100% opaque

Easy cleaning

High color brilliance

UV protection 50+

UVA / UVB protection 99%

Spin-dyed, resulting in high color fastness

Closed fabric structure

Exceptionally high UV resistance

Very high tear resistance

Increased water column through Hydro  
Finish

High kink resistance

Fabric weight 270 g/m<sup>2</sup>

Twice the breaking load compared to con-  
ventional acrylic fabrics

# Fabric and colors

For the production of our SunFurl sun sails we use the proven and tested fabric HydroSol 270. With a weight of 270g / m<sup>2</sup> it is extremely light for a sun sail fabric. It also offers very high UV resistance, enormous tear resistance and high UV protection. In addition, an increased water column through the hydro finish. HydroSol 270 offers all the properties that one could wish for in a sun sail fabric!

We recommend the use of SolMesh 340 mesh fabric for daycare sails. This offers maximum UV protection and is also permeable to air to avoid heat build-up.



Beige Brown  
HS 3017



Champagner  
HS 3015



Bianco  
HS 2010



Desert Sand  
SM 3011  
*(other SolMesh 340 colors see page 51)*



Bordeaux  
HS 4013



Akoya Linen  
HS 3016



Orange  
HS 8010



Taupe  
HS 1015



Citron  
HS 5011



Silver Grey  
HS 1020



Limette  
HS 7012



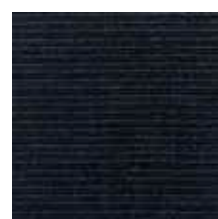
Light Grey  
HS 1019



Pacific  
HS 6011



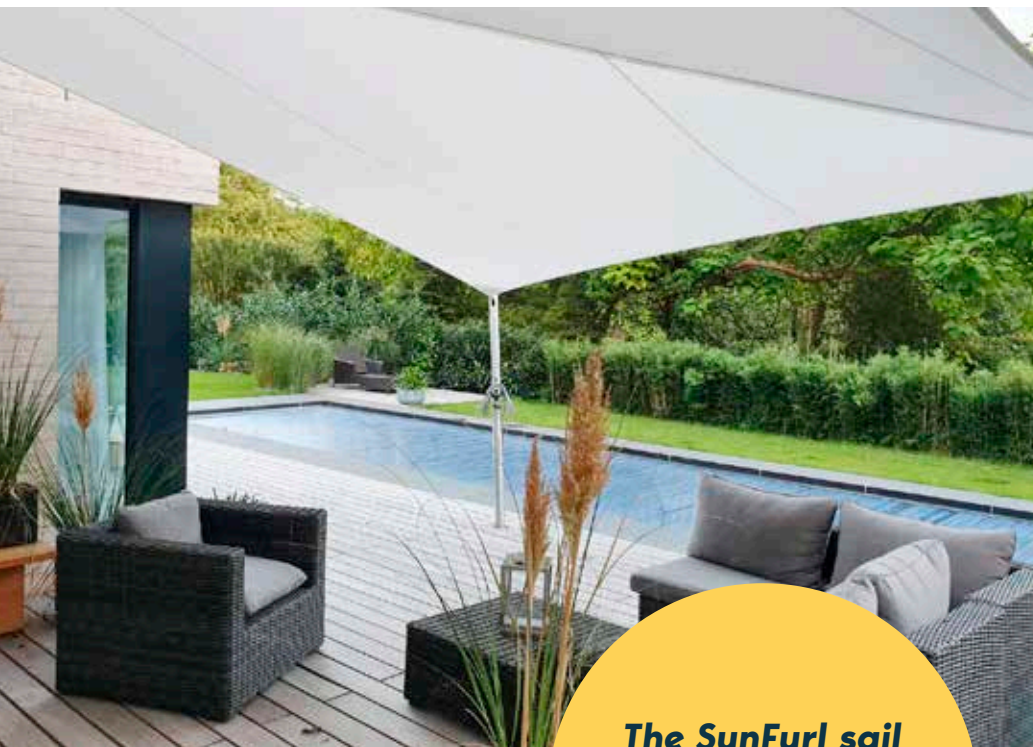
Charcoal Grey  
HS 1018



Lava Grey Linen  
HS 1016



Grey  
HS 1017



**The SunFurl sail offers us sun protection with privacy.**



# Manufacturing & Origin

For more than 50 years, the name BARTELS has stood for high-quality nautical products that sailors all over the world rely on. Our products prove their worth in heavy weather and under stressful regatta conditions, which place extreme demands on material and crew.

SunFurl® is a registered trademark of BARTELS GmbH. For more than 20 years, SunFurl sun sails have been providing perfect protection on terraces, balconies and open spaces against sun and rain - with technically sophisticated high-tech sails.

The BARTELS team in Markdorf includes engineers and technicians: Master in development and production.

## Good ideas and a strong team!



Quality management according to DIN ISO 9001:2015  
[www.tuvsud.com/ms-zert](http://www.tuvsud.com/ms-zert)



Certified welding company  
DIN EN 15085-2 CL1

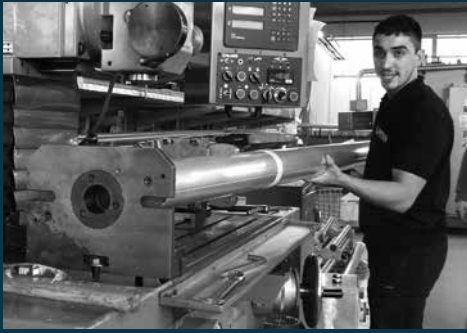


The green dot: We participate in the packaging recycling Duales System Deutschland GmbH



We are an IHK training company. We train young professionals in our company. We help to reduce the shortage of skilled workers and create jobs.

# Impressions from the production



The BARTELS team develops and produces itself. Material knowledge and precision are of great importance.



## Safety, functionality and design come first.



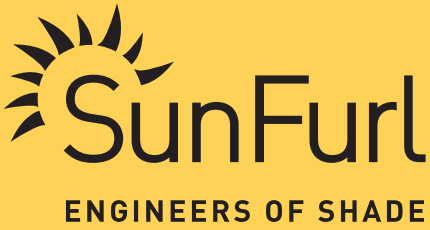
High-quality workmanship with sturdy edge straps, reinforcements on the extensions, stainless steel round rings and use of Tenara yarn



Exact CNC laser cutting



SunFurl sun sails are handcrafted by experienced sailmakers



SunFurl® resellers in your area

