



# DIY Shade Sail Installation Guide



**DISCLAIMER:** All information provided here is a general guide only. Installation of shade sails can vary depending on many factors including but not limited to, fixing points, wind conditions, the area you live in and soil type. Whilst every attempt has been made to ensure the accuracy of the information provided, we recommend your shade sail be installed by suitably capable and qualified persons.

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# Planning for your Shade Sail Installation

**When deciding on the most suitable location for your shade sail, it's important to consider the following:**

- Strength of existing structures intended as fixing points
- Ability to install suitable fixing points such as posts
- Location of barbecues, electrical/ telephone cables, water pipes
- Sun direction and wind speed and direction
- Size of the shade sail
- Your local councils relevant building regulations

## Getting your Measurements correct

Once you have established the most suitable location for your shade sail, getting the measurements correct is crucial.

Measure the area you wish your shade sail to cover from fixing point to fixing point to determine the size of shade you will require. The shade sail needs to be smaller than the overall measured area to allow for material stretch, fixing accessories (d-shackles, snap hooks) and turnbuckles for tensioning. If you purchase a shade sail which is exactly the same size as the area you wish to cover, you will be unable to tension the shade correctly, which will lead to sagging, flapping and water pooling. As a rough guide allow 30cm to 40cm from each corner point depending on the fixing and tensioning accessories you are using.

If you have pre-existing fixing points which are suitably strong enough to support the shade sail, but are very high or a distance from the area you wish to cover, steel wire rope or chain is available to assist in adding length to your fixing points. If this is the case, calculate how far you will extend the fixing points out to, including turnbuckles for tensioning and then take your measurements for your shade sail from here.

Shade sails can be erected in many ways and it is important to ensure they are at differing heights for your fixing points as you do not want your shade sail to lay flat. A twist in your shade sail can be more aesthetically pleasing to the eye, will reduce sagging in the middle, can be tightened more effectively and will allow water to run off more efficiently and avoid pooling.



We have a wide range of prefabricated shade sails available in rectangle, square, triangle and right angle. Several smaller shade sails may look better than a larger sail and elevated at different heights the shade sails can be very visually appealing. We have a wide range of colours and sizes to mix and match.

Take into account the height and direction of the sun, as you want to provide the maximum shade for your area. This will help you figure out where the high and low points should be placed.

We are unable to make custom shade sails.

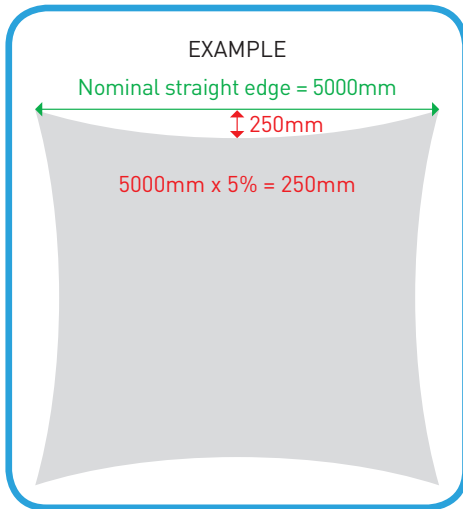
Once you have measured out the area you wish to cover please visit our website for our full range of shapes, sizes and colours

Please consult our accessories guide and checklist for further information on measurements of fixing and tensioning accessories to assist you further.



# Planning for your Shade Sail Installation

## How our Shade Sails are made



Many people ask why shade sails are curved around the edges and also why their shade sail is not 'true' to measurement across the centre point – here we will briefly explain why.

All shade sails are manufactured with curved edges so that tensioning can be applied evenly across the entire surface of the shade sail. If the shade sail was a square piece of fabric with no curved edges, there would be no way to apply even tension across the entire surface of the fabric.

On a rectangle or square shade sail the curved edges are less imposing than on a triangular shade sail. Yes, you will lose overall coverage but without the curved edges the shade sail will not tension correctly. Typically a shade sail is made with a curved edge of

between 5-8%. For example, if you had a shade sail with a length of 5 metres you would lose 250mm of coverage at the deepest point in the curve.

**IMPORTANT – Measurements are not taken from the centre curvature points. Measurements are taken from buckle to buckle in a straight line around the shade sail. Please take into consideration the curvature when ordering as you will lose a little in the middle section of the shade sail.**

# Accessories information

**6mm, 8mm, 10mm, 12mm refers to the thickness of the accessories, you can view the measurements on our accessories checklist or website.**



## Turnbuckle Hook Hook

Turnbuckles are used for adjusting the tension or to give extra length when installing your shade sail. You can hook this turnbuckle straight into your shade sail and then into your fixing point.

It is always best to use your turnbuckle at its greatest length so you have room to adjust the tensioning as required.

Size available 8mm



## Pad Eye Rectangle

Especially designed to be anchored to brick walls for a secure fixing point over individual bricks.

Sizes available 8mm, 10mm

Larger sizes can spread your weight bearing load over a wider area.



## Turnbuckle Hook Eye

Turnbuckles are used for adjusting the tension or to give extra length when installing your shade sail. Attach the eye to your fixing point with a D shackle or snap hook for a stronger connection and use the hook end to attach to your shade sail.

It's always best to use your turnbuckle at its greatest length so you have room to adjust then tensioning as required.

Sizes available 8mm



## D Shackle

D Shackles are used to attach or extend in shade sail application.

Sizes available 6mm, 8mm



## Turnbuckle Rigging Bottle Screw

Rigging bottle screws are the strongest configuration of turnbuckles. Fitted with spring clips which prevent the pins from coming loose overtime, they also conceal the threads within the pipe for a streamline look.

Its always best to use your turnbuckle at its greatest length so you have room to adjust then tensioning as required. Designed to attach to a wide range of accessories such as pad eyes, wire rope, snap hooks, eyebolts & D shackles.

Sizes available 6mm & 8mm



## Twisted D Shackle

Twisted D Shackles can offer more maneuverability when installing your shade sail and are used to attach or extend your shade sail. Particularly useful when your fixing point is horizontal not vertical.

Size 8mm short and long available



## Eye Bolt

Eyebolts are generally used for steel or timber posts. Different lengths available depending on your application. Depending on your requirements a Turnbuckles, D Shackles & Snap Hooks can be used to attach the shade sail to the eyebolt.

Sizes available 8mm, 10mm, 12mm



## Bow Shackle

Bow Shackles are used to attach or extend in shade sail installation.

Sizes available 8mm



## Pad Eye Diamond

Especially designed to be anchored to brick walls for a secure fixing point over individual bricks. Used in conjunction with Turnbuckles, D Shackles & Snap Hooks to attach your shade sail.

Sizes available 8mm, 9mm

Larger sizes can spread your weight bearing load over a wider area.



## Snap Hook

Snap Hooks are used to extend or attach in shade sail installation.

Size available 8mm



## Pad Eye Oblong

Especially designed to be anchored to brick walls for a secure fixing point over individual bricks.

Sizes available 8mm, 9mm

Larger sizes can spread your weight bearing load over a wider area.



## Diamond Shackle Plate

Extra heavy duty wall plate, especially designed to be anchored to brick walls for a secure fixing point over individual bricks.

# Accessories information



## Wall Plate Diamond Galvanised

Extra heavy duty wall plate available in two sizes 100 x 100mm and 150 x 150mm Diagonal Galvanised steel (fixing point is set at a diagonal).

Especially designed to spread load over a wide area increasing the pull out strength. Stainless steel also available at an additional cost.



## Corner Brackets internal

Internal corner brackets give you the option to create a fixing point in a 90° corner crevice.



## Wall Plate Horizontal Galvanised

Extra heavy duty wall plate available in two sizes 100 x 100mm and 150 x 150mm Horizontal Galvanised steel (fixing point is set as horizontal).

Especially designed to spread load over a wide area increasing the pull out strength. Stainless steel also available at an additional cost.



## Corner Brackets external

External corner brackets give you the option to create a fixing point in a 90° external corner fixing point.



## Wire Rope

4.0mm Wire Rope – sold by 1 Metre lengths, including 2 x rope grips.

Wire rope can be used to give you extra length. You can easily loop the ends of the wire and secure it with a rope grip, which are easily tightened with a small spanner.



## Rafter Bracket Assembly

The Rafter bracket assembly 16mm with M16 Eye nut give you the ability to secure a fixing point on to a roof. Backing plates for the rafter bracket can be purchased additionally.



## Medium Chain

6mm – 1 Metre Chain is made from high quality AISI 316 marine grade stainless steel and designed for general purpose and shade sail applications.



## Dektite Flashing

Dektite flashing tubes are designed to be used with the rafter brackets assembly and provides a waterproof sealed finish for metal roofs.



## Fascia Brackets

Fascia bracket are used to give adding support to fascia, they are angled at 20 degree. Available in Left and Right 20 degree fascia angles.



## Fascia Rafter Bracket 12mm

This Rafter/Fascia bracket assembly with 12mm thread & 12M Eye nut have been designed to create a fixing point at the fascia or on an exposed rafter. Backing plates for the fascia rafter bracket can be purchased additionally.

The information we have provided is a general guide for what to use in DIY shade installation. We are not able give qualified building advice on fixing points or structural information. If you feel that you need to get further advice you get information from a qualified handy man or builder.

## Accessories Checklist

- Please note - To ensure ruler prints to scale set to 100% when printing.

Code	Turnbuckles Electropolished - 316 High quality marine grade stainless steel	
6MM		
<input type="checkbox"/> ODS-HE06	6mm Turnbuckle Hook Eye   Length 155mm min - 220mm max	
<input type="checkbox"/> ODS-HH06	6mm Turnbuckle Hook Hook   Length 170mm min - 220mm max	
<input type="checkbox"/> ODS-EE06	6mm Turnbuckle Eye Eye   Length 156mm min - 215mm max	
	above for use with 6mm shackles	
8MM		
<input type="checkbox"/> ODS-HE08	8mm Turnbuckle Hook Eye   Length 210mm min - 295mm max	
<input type="checkbox"/> ODS-EE08	8mm Turnbuckle Eye Eye   Length 210mm min - 295mm max	
<input type="checkbox"/> ODS-HH08	8mm Turnbuckle Hook Hook   Length 210mm min - 290mm max	
	above for use with 8mm shackles or 8mm snap spring hooks	
10MM		
<input type="checkbox"/> ODS-HH10	10mm Turnbuckle Hook Hook   Length 255mm min - 350mm max	
<input type="checkbox"/> ODS-HE10	10mm Turnbuckle Hook Eye   Length 255mm min - 360mm max	
<input type="checkbox"/> ODS-EE10	10mm Turnbuckle Eye Eye   Length 255mm min - 350mm max	
<input type="checkbox"/>		
	Rigging Screw Turnbuckles - 316 High quality marine grade stainless steel	
<input type="checkbox"/> ODS-RSJJ06	6mm Turnbuckle Rigging Screw Jaw Jaw   Length 148 min - 233 max	
<input type="checkbox"/> ODS-RSJJ08	8mm Turnbuckle Rigging Screw Jaw Jaw   Length 178mm min - 276 max	
<input type="checkbox"/> ODS-RSJJ10	10mm Turnbuckle Rigging bottle screw min 220mm - 230mm max	
	above for use with 8mm, 10mm shackles & 8mm snap spring hooks	
	Eyebolts/Eye Nut Bolts - 316 High Quality marine grade stainless steel	
	(Eyebolts come in 8mm, 10mm, 12mm this is the thickness of the eyebolt. Collared eyebolts fit flush with a square pole.)	
	EyeBolt Measurements (L = Thread, L1 = Neck, L2 = Overall Length) Measurements (L = Thread, L1 = Overall Length)	
M8		
<input type="checkbox"/> ODS-08035304	Eyebolt M8 8mm   L = 25, L1 = 35, L2 = 74 (304)	
<input type="checkbox"/> ODS-08060	Eyebolt M8 8mm   L = 55, L1 = 60, L2 = 92	
<input type="checkbox"/> ODS-08080	Eyebolt M8 8mm   L = 70, L1 = 80, L2 = 133	
<input type="checkbox"/> ODS-08100	Eyebolt M8 8mm   L = 90, L1 = 100, L2 = 132	
<input type="checkbox"/> ODS-08120	Eyebolt M8 8mm   L = 110, L1 = 120, L2 = 153	
<input type="checkbox"/> ODS-DN08	Dome Nut 8mm	
M10		
<input type="checkbox"/> ODS-10060	Eyebolt M10 10mm   L = 55, L1 = 60, L2 = 104	
<input type="checkbox"/> ODS-10080	Eyebolt M10 10mm   L = 70, L1 = 80, L2 = 123	
<input type="checkbox"/> ODS-10120	Eyebolt M10 10mm   L = 110, L1 = 120, L2 = 163	
<input type="checkbox"/> ODS-10150	Eyebolt M10 10mm   L = 125, L1 = 150, L2 = 195	
<input type="checkbox"/> ODS-10170	Eyebolt M10 10mm   L = 160, L1 = 170, L2 = 212	
<input type="checkbox"/> ODS-ENB10100	Eye Nut Bolt M10 10mm   L = 100, L1 = 150 (with collar)	
<input type="checkbox"/> ODS-ENB10120	Eye Nut Bolt M10 10mm   L = 120, L1 = 165 (with collar)	
<input type="checkbox"/> ODS-ENB10160	Eye Nut Bolt M10 10mm   L = 160, L1 = 210 (with collar)	
<input type="checkbox"/> ODS-ENB10200	Eye Nut Bolt M10 10mm   L = 200, L1 = 250 (with collar)	
<input type="checkbox"/> ODS-DN10	Dome Nut 10mm	

# Accessories Checklist

• Please note - To ensure ruler prints to scale set to 100% when printing.

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	<b>M12</b>		
<input type="checkbox"/>	ODS-12120	Eyebolt M12 12mm   L = 110, L1 = 120, L2 =170	  
<input type="checkbox"/>	ODS-12185	Eyebolt M12 12mm   L = 145, L1 = 185, L2 = 235	
<input type="checkbox"/>	ODS-ENB12100	Eye Nut Bolt M12 10mm   L = 100, L1 = 160 <b>(with collar)</b>	
<input type="checkbox"/>	ODS-ENB12150	Eye Nut Bolt M12 10mm   L = 150, L1 = 210 <b>(with collar)</b>	
<input type="checkbox"/>	ODS-ENB12200	Eye Nut Bolt M12 10mm   L = 200, L1 = 260 <b>(with collar)</b>	
<input type="checkbox"/>	ODS-DN12	Dome Nut 12mm	
		Above 12mm eyebolts are not suitable with 6mm shackles or 8mm snap hooks	
		<b>Welded Screw Eye / Eye Nut Screw (with collar)</b>	
		<b>Measurements (L2 = Thread, L = Neck, L1 = Overall Length)</b>	
	<b>M6</b>		
<input type="checkbox"/>	ODS-06060	Eye Nut Screw M6 8mm   L = 60, L1 = 93, L2 = 35 <b>(with collar)</b>	
<input type="checkbox"/>	ODS-ENS08080	Eye Nut Screw M8 8mm   L = 80, L1 = 121 L2 = 48 <b>(with collar)</b>	
<input type="checkbox"/>	ODS-ENS10080	Eye Nut Screw M10 10mm   L = 80 L1 = 132 = 48 <b>(with collar)</b>	
<input type="checkbox"/>	ODS-WSE08080	Welded Screw Eye M8 8mm   L = 80, L1 = 116, L2 = 55	
<input type="checkbox"/>	ODS-WSE08130	Welded Screw Eye M8 8mm   L = 130, L1 = 165, L2 = 67	
<input type="checkbox"/>			
<input type="checkbox"/>			
<input type="checkbox"/>			
	<b>M10</b>		
<input type="checkbox"/>	ODS-WSE10060	Welded Screw Eye M10 10mm   L = 60 L1 = 106 L2 = 50	
<input type="checkbox"/>	ODS-WSE10080	Welded Screw Eye M10 10mm   L = 80 L1 = 125 L2 = 55	
<input type="checkbox"/>	ODS-WSE10100	Welded Screw Eye M10 10mm   L = 100 L1 = 143 L2 = 65	
<input type="checkbox"/>	ODS-WSE10130	Welded Screw Eye M10 10mm   L = 130 L1 = 175 L2 = 70	
<input type="checkbox"/>	ODS-WSE10150	Welded Screw Eye M10 10mm   L = 150 L1 = 193 L2 = 90	
	<b>M12</b>		
<input type="checkbox"/>	ODS-ENS12100	Eye Nut Screw M12 12mm   L = 100, L1 = 165, L2 = 62 <b>(with collar)</b>	
<input type="checkbox"/>	ODS-ENS12140	Eye Nut Screw M12 12mm   L = 140, L1 = 205, L2 = 85 <b>(with collar)</b>	
<input type="checkbox"/>	ODS-ENS12160	Eye Nut Screw M12 12mm   L = 160, L1 = 225, L2 = 98 <b>(with collar)</b>	
<input type="checkbox"/>			
<input type="checkbox"/>			
<input type="checkbox"/>			
		<b>Eye Bolt with Collar</b>	
<input type="checkbox"/>	ODS-08	Eyebolt M8 8mm   L = 18mm L1 = 50mm <b>(with collar)</b>	
<input type="checkbox"/>	ODS-10	Eyebolt M10 10mm   L = 18mm L1 = 63mm <b>(with collar)</b>	
<input type="checkbox"/>	ODS-12	Eyebolt M12 12mm   L = 20mm L1 = 75mm <b>(with collar)</b>	
		<b>Pad Eyes 304 stainless steel &amp; Wall Plates</b>	
<input type="checkbox"/>	ODS-DEP060	Pad Eye Diamond 6mm   Length 67mm, Width 48mm, Height 18mm	 
<input type="checkbox"/>	ODS-DEP080	Pad Eye Diamond 8mm   Length 80mm, Width 48mm, Height 30mm	
<input type="checkbox"/>	ODS-DEP090	Pad Eye Diamond 9mm   Length 89mm, Width 57mm, Height 23mm	
<input type="checkbox"/>	ODS-DEP100	Pad Eye Diamond 10mm   Length 100mm, Width 60mm, Height 26mm	
<input type="checkbox"/>	ODS-REP06	Pad Eye Rectangle 6mm   Length 40mm, Width 34mm, Height 23mm	
<input type="checkbox"/>	ODS-REP08	Pad Eye Rectangle 8mm   Length 50mm, Width 39mm, Height 29mm	
<input type="checkbox"/>	ODS-REP10	Pad Eye Rectangle 10mm   Length 60mm, Width 38mm, Height 38mm	









































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## Accessories Checklist

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	ODS-OEP08	Pad Eye Oblong 8mm   Height 31mm Width 25mm length 81mm	
	ODS-OEP09	Pad Eye Oblong 9mm   Height 33mm Width 32mm length 100mm	
	ODSDD	Pad Eye Diamond Wall Plate Extra large   180mm x 110mm (316 stainless steel)	
	ODS100H	Wall plate galvanized horizontal   100mm x 100mm (galvanised)	
	ODS150H	Wall plate galvanized horizontal   150mm x 150mm (galvanised)	
	ODS100D	Wall plate galvanized diagonal   100mm x 100mm (galvanised)	
	ODS150D	Wall plate galvanized diagonal   150mm x 150mm (galvanised)	
	ODS100HStainless	Wall plate Stainless Steel horizontal   100mm x 100mm (Stainless Steel)	
	ODS150HStainless	Wall plate Stainless Steel horizontal   150mm x 150mm (Stainless Steel)	
		<b>Pad eyes and wall plates are available in different sizes. The standard size is 8mm but larger ones may be suitable if you have a large shade sail or need better structural support as the large size will distribute the load over a wider area.</b>	
		<b>Fixing and extending 316 Marine grade stainless steel (Cast and Forged)</b>	
	ODS-FDS06	Dee Shackle 6mm Forged   Length 36mm, Width 22mm, Opening 13mm	
	ODS-FDS08	Dee Shackle 8mm Forged   Length 48mm, Width 29mm, Opening 17mm	
	ODS-FDS10	Dee Shackle 10mm Forged   Length 60mm, Width 36mm, Opening 21mm	
	ODS-CLDS08	Dee Shackle 8mm (long) - Length 79mm Width 30mm Opening 16mm	
	ODS-CLDS10	Dee Shackle 10mm (long) - Length 99 width 40 opening 23mm	
	ODS-CTDS06	Cast Twist Shackle 6mm   Length 47mm, Width 22mm, Opening 12mm	
	ODS-CTDS08	Cast Twist Shackle 8mm   Length 59mm, Width 30mm, Opening 16mm	
	ODS-CTS10	Cast Twist shackle 10mm   Length 69mm, Width 46mm, Opening 20mm	
	ODS-CLTDS06	Twist shackle 6mm (long)   Length 60mm, Width 33mm, Opening 12mm	
	ODS-CLTDS08	Twist shackle 8mm (long)   Length 83mm width 64mm Opening 17mm	
	ODS-CLTDST10	Twist shackle 10mm (long)   Length 100mm, Width 76mm, Opening 19mm	
	ODS-FBS06	Forged Bow Shackle 6mm   Length 46mm, Width 21mm, Opening 12mm	
	ODS-FBS08	Forged Bow Shackle 8mm   Length 56mm, Width 26mm, Opening 16mm	
	ODS-FBS10	Forged Bow Shackle 10mm   Length 70mm, Width 34mm, Opening 21mm	
	ODS-FBS12	Forged Bow Shackle 12mm   Length 88mm, Width 40mm, Opening 25mm	
	ODS-SH06	Snap Hook 6mm   Length 60mm width 30mm	
	ODS-SH08	Snap hook 8mm   length 80mm width 40mm	
	ODS-SH10	Snap Hook 10mm   Length 100mm Width 59mm	
	ODS-W4	Wire 4mm includes 2 rope grips sold by the metre (7x19 strand rope)	
	THIMBLES4MM	Thimbles 4mm	
	ODS-4WRG	Rope Grip 4mm	

## Accessories Checklist

- Please note - To ensure ruler prints to scale set to 100% when printing.

		<b>Chain High quality marine grade stainless steel</b>	
		Sold by the metre	
<input type="checkbox"/>	ODS-304-04M	Chain 4mm 304 stainless steel	
<input type="checkbox"/>	ODS-316-04M	Chain 4mm 316 stainless steel	
		above not suitable for use with 8mm shackles or snap hooks, use 6mm d shackles	
<input type="checkbox"/>	ODS-304-06M	Chain 6mm 304 stainless steel	
<input type="checkbox"/>	ODS-316-06M	Chain 6mm 316 stainless steel	
		above suitable for use with 8mm & 10mm accessories	
		<b>Fascia and Rafter brackets - Galvanised Steel</b>	
<input type="checkbox"/>	FB-R or FB-L	Fascia bracket Right or Left - 280mm x 110mm	
<input type="checkbox"/>	FB-90	Fascia bracket 90° - 300mm x 100mm	
<input type="checkbox"/>	ODS-RB1	Rafter bracket 16mm assembly M16 nut 210mm x 75mm Rod extends 290mm	
		8mm or 10mm shackles (excluding snap spring hook) can be used with M16 rafter brackets	
<input type="checkbox"/>	ODS-RB2	(backing plate) for Rafter16mm assembly	
			
<input type="checkbox"/>	ODS-RB250	Rafter bracket 20mm assembly M20 nut 300mm x 75mm Rod extends 350mm	
		10mm d shackle can be used with M20 rafter bracket	
<input type="checkbox"/>	ODS-RB5	Corrugated Rafter Bracket	
	ODS-10	Eyebolt M10 10mm   L = 18mm L1 = 63mm <b>(with collar)</b>	
<input type="checkbox"/>	ODS-RB3	Fascia bracket assembly 12mm thread includes M12 eye nut	
		above use with 8mm shackles (excluding snap spring hook)	
<input type="checkbox"/>	ODS-RB4	(backing plate) for fascia12mm 20mm rafter bracket	
<input type="checkbox"/>	ODS-INT100GAL	Corner Internal bracket 100mm X 100mm Galvanised	
<input type="checkbox"/>	ODS-INT100SS	Corner Internal bracket 100mm X 100mm Stainless Steel	
<input type="checkbox"/>	ODS-EXT100GAL	Corner External bracket 100mm X 100mm Galvanised	
<input type="checkbox"/>	ODS-EXT100SS	Corner External bracket 100mm X 100mm Stainless Steel	
<input type="checkbox"/>	ODS-INT250GAL	Corner Internal bracket 250mm X 250mm Galvanised	
<input type="checkbox"/>	ODS-INT250SS	Corner Internal bracket 250mm X 250mm Stainless Steel	
<input type="checkbox"/>	ODS-EXT250GAL	Corner External bracket 250mm X 250mm Galvanised	
<input type="checkbox"/>	ODS-EXT250SS	Corner External bracket 250mm X 250mm Stainless Steel	
		above corner brackets can be used with 8mm shackles (excluding snap spring hook)	
<input type="checkbox"/>	ODS-DEK99BLACK	Dektite Flashing 0-35mm suitable for aluminium roofs (BLACK)	
<input type="checkbox"/>	ODS-DEK99GREY	Dektite Flashing 0-35mm suitable for aluminium roofs (GREY)	
<input type="checkbox"/>	ODS-DEK135BLACK	Dektite Flashing 5-55mm suitable for aluminium roofs (BLACK)	
<input type="checkbox"/>	ODS-DEK100B	Dektite Flashing suitable for tiled roofs	
<input type="checkbox"/>	ODSDEKABB	Dektite Flashing suitable for tiled roofs	
<input type="checkbox"/>	ODS-STUD150	Stud Wall Bracket 150mm x 40mm Galvanised	

**(Please note if you are unsure of the structural support you will need for installation of your shade sail please consult a qualified person for advise)**

[www.theshadesailshop.com.au](http://www.theshadesailshop.com.au)

**2/165 Blackwall Road Woy Woy 2256 NSW 02 4326 1813**

**The Shade Sail Shop ABN 49 142 056 586**

# Fixing Points

Once you have identified the location for your shade sail, it is important to determine the most suitable fixing points for the corners and how you want to install your shade sail. Shade sails can be erected in many ways and you can create a great look when elevations change from corner to corner.

Your shade sail needs to be anchored to stable and sturdy fixing points. You may have pre-existing fixing points or are looking at installing posts, either way, before installation you will need to check your fixing points are structurally sound and are strong enough to withstand the weight of the shade sail and take into account instances of high winds and poor weather. Your shade sail will be under considerable tension and fixing points need to be strong.

If you are using an existing fascia, it is recommended to use a fascia support which will reinforce the overhangs of rafters or trusses and provide a stronger connection between the two and improve the overall strength. We have a range of fascia supports to assist.

If you have not installed your fixing points we recommend that you purchase your shade sail first to avoid any mistakes before the fixing points are installed.

Having fixing points at differing heights is recommended, as this will help in tensioning your shade sail, reduce sagging, flapping and help with water runoff as well as looking great!

To assist you, we have a wide range of accessories available for structural strengthening, tensioning and extending lengths of fixing points. Check out our accessories guide and website for more details

If you are unsure of your requirements please consult a handy man or qualified builder.

Examples of pre-existing fixing points:

- Pergola
- Fence post
- Fascia or rafter
- Structurally sound brick walls

## Timber or Steel Posts?

Square or round galvanised steel posts, 100 x 100mm diameter, with a minimum thickness of 4mm are advised for larger sails, due to their strength. Your local hardware store or steel fabricator should be able to provide these for you.

Timber posts are generally only recommended for smaller sized shade sails. Use round or square treated timber posts with a minimum diameter of 125mm and consult your local hardware store for the appropriate class of timber to use for your region.

# Fixing Points

## Installing your posts

Prior to installation, check with local authorities for any relevant building regulations which may exist and check the local utility companies for any underground services prior to digging holes for the support posts.

Set your sail out on the ground in the position where it will eventually be installed and if using turnbuckles, wind the turnbuckles out to their full extension. Mark out on the ground the ends of the turnbuckles or other tensioning device you are using. This is the position of your posts.

It is recommended to set your posts on a slight angle, approximately 2°- 5° away from the shade sail, this way when you set your tension the posts have room to flex in slightly without looking as though your posts are slanting inwards.

Footings range in size according to the height of the posts. In general however, it's recommended that posts are embedded in footings which are 900mm to 1800mm deep and 300mm to 500mm in diameter with one third of the total length of the posts embedded in the ground, with the remaining two thirds above the ground.

Take into account where your fixing points (eyebolts) will be on your posts, and ensure these are approximately 40mm from the top of the posts.

**IMPORTANT – check the area you are digging is free of cables and pipes**

Dig footings with the centre of the footing measured as the approximate location point of the sail.

**Soft Ground** – If installing your posts into soft ground, first line the footings with 100mm of concrete and allow to set. Alternatively place a concrete paver in the footings. Add a gravel bed of around 100mm, position the post in the footing remembering to allow for the 2°- 5° of lean and fill footings with the required amount of concrete.

**Firm Ground** – If installing your posts into firmer ground, line the footings with a gravel bed around your posts, allow for the 2°-5° lean away from the centre of the shade sails position and fill the footings with the required amount of concrete.

## Concreting

It is recommended to use concrete with a minimum of 20Mpa. This may vary depending on conditions, so please consult your hardware store for more information. Always mix concrete to manufacturers specifications.

Pour the concrete into the footings on top of the gravel bed and pack down well. The top of your concrete surface should be sloping away from the posts to assist with water drainage.

Concrete should be left for 48 hours to set properly and bracing may be necessary depending on the height and weight of your posts.

As you position each pole check your posts are not leaning too far and if you have your fixing points (eyebolts) on the posts, ensure they are positioned toward its diagonal opposite.

Allow adequate time for your concrete to set before installing your shade sail.

If you live in unprotected areas of high wind or you have sandy soil, your sail may need extra support. Before erecting the sail, you may wish to seek advice from a structural engineer.

# Attaching Your Shade Sail

Attach your fully extended turnbuckle(s) to your fixing points, working from the highest attachment points to the lowest. Next, attach your turnbuckles onto the stainless steel buckles of your shade sail.

The last attachment point can be the tightest and it can help to have assistance to hook the edge of the shade sail to the hook of the turnbuckle.

Strapping or rope can help to bring the edge of the sail to the hook of the turnbuckle, giving you more pulling power.

**Please note** – It is not essential, but is recommended, to use turnbuckles on each corner to attach your shade sail as you can tension more effectively with them.

However you may find other attachment accessories more appropriate for your application. You can find a full list of accessories available in our accessories checklist and website.



**Handy Tip** – Before you begin it is a great idea, if using turnbuckles to have these fully extended and the threads lubricated to avoid thread galling. This occurs when under tension the steel heats up and the turnbuckle can seize, rendering them useless.

It is also recommended, when using turnbuckles with a hook eye, to attach the eye end directly to your fixing point and use the hook to attach to the shade sail. As if any failures occur, the hook end will straighten first and the shade will fall to the ground without causing any potential damage as the turnbuckle will still be attached to your fixing point and not flapping about with the shade sail.

## Tensioning

Once all sides are attached to the fixing points you can start to tension the sail slowly from each point. Slowly screw in your turnbuckles, moving from corner to corner, tensioning a little at a time. Tensioning is complete when your shade sail is firm and tight across the entire surface.

Whether installing a small or large sail, it is usually going to be tight to fit for the first time. That is why it is important to work your way around slowly and do not over tension. Tensioning should only be done by hand.

After a period of around 7 days you may find your shade sail has settled and a little more tensioning is required. This is normal.

Check all your fittings are properly tightened and secure. Work your way around and check all turnbuckles are hooked in correctly and nuts locked off, pins on d-shackles are tightened and nuts on eyebolts are also tight. It is recommended that you check your attachment points on a regular basis.

In areas prone to cyclones, it can be quite common to use thin strong nylon cord to secure the fixing points to the shade sail. This is laced through the eyebolt and shade sail ring a few times which allows the corner of the sail to get closer to the fixing point. However the main reason for this technique to be employed in cyclone prone areas is the speed and ease at which you can get the shade sail down when a storm is coming. You can simply cut the lacing and release the sail. If you plan to use lacing in place of a turnbuckle, ensure the nylon cord is UV stabilised.

**IMPORTANT – Over tensioning and under tensioning can cause damage to your shade sail. Failures in the stitching, webbing and fabric are common if tensioning is not correct.**

# Shade Sail Maintenance

**Here are a few handy hints for keeping your shade sail in peak condition.**

- ✓ Once your shade sail has been installed for a couple of weeks and it has experienced the full force of Mother Nature it is a good idea to check to see if further tensioning is required. The fabric is very tight when it is first installed and after a few weeks of rain, wind, and sun, it is normal for the material to settle in and loosen a little bit requiring additional tensioning.

It is important to keep your shade sail taut as this will increase the lifespan significantly and will keep it looking great!

- ✓ It is highly recommended to take your shade sail down in instances of severe weather.

- ✓ Periodically check all your fixing points and tensioning accessories to ensure they are in good condition and are not wearing down.

- ✓ If you live in a leafy environment or in an area prone to debris falling, it's recommended to remove this from the shade sail regularly to reduce instances of fabric staining.

- ✓ If your shade sail becomes dirty over time it can be cleaned with mild soapy water and a soft bristled brush. **Do not use any harsh or industrial strength cleaners or bleaches** as this will badly damage the material. It is also not recommended to use high pressure water hoses on the shade sails as this can lead to damaged stitching etc.

**The Shady Ladies would like to thank you for downloading our installation guide and we hope this has provided you some valuable information to getting your project underway.**

We take great pride in offering a cost effective solution to our customers globally.

Our shade sails not only protect you from the harsh sun and reduce heat; they are also used widely to provide privacy and can also add significant value to your property.

With over 30 years of retail experience, customer service is of paramount importance to us.

Yours Sincerely, Sharon & Kirsten  
The Shady Ladies at The Shade Sail Shop  
[www.theshadesailshop.com.au](http://www.theshadesailshop.com.au)

The Outdoor Shop Australia Pty Ltd trading as The Shade Sail Shop ABN 49 142 056 586  
Logistics warehouse 2/165 Blackwall Road Woy Woy NSW 2256 Australia