

Section B30 Forebeams

Allyacht Spars Australia manufactures forebeams for catamarans using a selected range of mast sections. Fittings and attachments such as End Connections, A-frames and Catwalk Lugs are also manufactured in a range of sizes.

Note: *It is generally the boat designer’s responsibility to design the forebeam - the design specifications should enable selection of the appropriate components from this Catalogue. Allyacht Spars Australia can, in some cases, specify the forebeam components.*

B30.1 Forebeam Sections

Note: *These are structural forebeam components, and consequently must be selected in accordance with the specifications of the forebeam as detailed by the designer/consultant.*

FOREBEAM SECTION	PART NO.	NOTE
IM15	IM15-HY.A	For more detail on these sections, see Section A1 of the Catalogue.
IM16L	IM16L-HY.A	
IM18L	IM18L-HY.A	
IM19	IM19-HY.A	
IM20W	IM20W-HY.A	
IM22W	IM22W-HY.A	
AYS235	AYS235.A	
AYS250	AYS250.A	
AYS280	AYS280.A	

B30.2 End Connections

Note: *These are structural forebeam components, and consequently must be selected in accordance with the specifications of the forebeam as detailed by the designer/consultant.*

End Connections are the structure for connecting the Forebeam to the hulls, and can be one of four styles - Pinned, Palm Plate, Tagged or Built-in.

Pinned End Connections are usually sized according to the forestay loading, and the size of the End Connection pin is a critical factor to consider. The Part No. is for a Pinned End Connection Set which includes a pair of End Connections, each with a Bridle Wire Lug incorporated into the fitting.

PIN SIZE (mm) (in)	PINNED END CONNECTION SET	
	PART NO.	
12.7 ½	030.PIN.127	
15.9 5/8	030.PIN.159	
19.0 ¾	030.PIN.190	
22.2 7/8	030.PIN.222	



Palm Plate End Connections fit against the inside of each hull, and as such, the plates are fixed across the ends of the forebeam. They are sized according to plate thickness, as shown in the design specifications. The Part No. is for a Palm Plate End Connection Set which includes a pair of End Connections, each with a Bridle Wire Lug incorporated into the fitting.

PLATE THICKNESS (mm)	PALM PLATE END CONNECTION SET PART NO.
10	030.PP10
12	030.PP12
16	030.PP16

Tagged End Connections fit against a structure built in to the top of each hull, and as such, are fixed along the forebeam where it crosses each hull. They are sized according to plate thickness, as shown in the design specifications. The Part No. is for a Tagged End Connection Set which includes a pair of End Connections, each with a Bridle Wire Lug incorporated into the fitting.

PLATE THICKNESS (mm)	TAGGED END CONNECTION SET PART NO.
10	030.TAG10
12	030.TAG12
16	030.TAG16

Built-in End Connections are usually bonded or through-bolted to each hull, and necessitate sleeving of the forebeam. They are sized according to the forebeam section, as shown in the design specifications. The Part No. represents sleeving of the appropriate size, per metre, with the required length being determined by the design specifications. Note that the Bridle Wire attachment is NOT incorporated in the Built-in End Connection and must be ordered separately - see Section B30.3.

FOREBEAM SECTION	BUILT-IN END CONNECTION SET PART NO.
IM15	IM15.SLEEVE
IM16L	IM16.SLEEVE
IM18L	IM18.SLEEVE
IM19	IM19.SLEEVE
IM20W	IM20.SLEEVE
IM22W	IM22.SLEEVE
AYS235	AYS235.SLEEVE
AYS250	AYS250.SLEEVE
AYS280	AYS280.SLEEVE


B30.3 Bridle Wire Tangs

Note: *These are structural forebeam components, and consequently must be selected in accordance with the specifications of the forebeam as detailed by the designer/consultant.*

For Built-in End Connections only, Bridle Wire Tangs are the fixture for connection of the Bridle Wire to the forebeam. As such each Bridle Wire Tang sits on the forebeam just before the point at which the forebeam joins the hull. Allyacht Spars produces a simple yet effective stainless steel tang fitted with two bolts. Note that for Pinned, Palm Plate, and Tagged End Connections, the Bridle Wire attachment is usually in the form of a lug incorporated into the End Connection, and Bridle Wire Tangs are not used.

The Bridle Wire Tang should be selected according to the pin size of the bridle fittings (see table below), and with reference to the design specifications. The Part No. is for a pair of Bridle Wire Tangs - two are required for a forebeam.

BRIDLE WIRE TANG Pin Size		BRIDLE WIRE TANG PART NO.
(mm)	(in)	
9.5	3/8	030.TANG.095
12.7	1/2	030.TANG.127
15.9	5/8	030.TANG.159
19.0	3/4	030.TANG.190
22.2	7/8	030.TANG.222



Bridle Wire Tang


B30.4 Bridle Wire A-Frames

Note: *These are structural forebeam components, and consequently must be selected in accordance with the specifications of the forebeam as detailed by the designer/consultant.*

A Bridle Wire A-Frame enables the forebeam to support the forestay and is sized according to the design specifications for the forebeam. The A-Frame is fastened to the top of the forebeam and accommodates the Bridle Wire running from one end of the forebeam to the other.

Allyacht Spars Australia uses several sizes of A-Frame, listed below with critical dimensions. Note that the Bridle Wire and fittings must be ordered separately.

<u>A-FRAME SECTION DESCRIPTION</u>	<u>A-FRAME SECTION DIMENSIONS (mm)</u>	A-FRAME PART NO.
B Spreader Section	<u>85 x 23</u>	030.AFRAME/B
C Spreader Section	<u>115 x 33</u>	030.AFRAME/C
D Spreader Section	125 x 42	030.AFRAME/D
50mm tube	50 x 3 (OD x WT)	030.AFRAME.50
60mm tube	60 x 5 (OD x WT)	030.AFRAME.60




B30.5 Forebeam Forestay Lugs

Note: These are structural forebeam components, and consequently must be selected in accordance with the specifications of the forebeam as detailed by the designer/consultant.

The Forestay Lug provides the attachment point for the forestay on the forebeam, and is sized according to forestay pin size. For highly-loaded forestays, an Underslung Support Bracket may be required.


FORESTAY PIN SIZE (mm)	FORESTAY PIN SIZE (in)	FORESTAY LUG PART NO.	UNDERSLUNG SUPPORT BRACKET PART NO.
12.7	½	030.STAYLUG12	030.STAYBKT12
15.9	5/8	030.STAYLUG16	030.STAYBKT16
19.0	¾	030.STAYLUG19	030.STAYBKT19
22.2	7/8	030.STAYLUG22	030.STAYBKT22



B30.6 Tramp Entry

The Tramp Entry is the modification of the sail track on the forebeam section to allow fitting of a trampoline deck to the forebeam. The required location needs to be specified when ordering a forebeam.


DESCRIPTION	PART NO.
Tramp Entry - modification of sail track for trampoline entry	004.099



B30.7 Catwalk Lugs

If a catwalk is to be installed, Catwalk Lugs may need to be fitted to the forebeam as attachment points for the catwalk. The lugs are sized according to the thickness of plate required for the lug, which must be in accordance with the design specifications for the forebeam. When ordering, specify the distance that lugs need to be apart, which will be specified in the design of the forebeam.


DESCRIPTION	CATWALK LUG Plate (mm)	CATWALK LUG PART NO.
Catwalk Lug Small	6	030.CATLUG6
Catwalk Lug Medium	8	030.CATLUG8
Catwalk Lug Large	10	030.CATLUG10



Catwalk Lug
(mounted behind Forestay Lug)

B30.8 Anchor Rollers


There are two types of anchor roller. The Overtop sits above the forebeam and comes in one size only, with a single roller. The Underslung supports the anchor with two rollers which hang below the forebeam. Three sizes are available.

DESCRIPTION	SUIT FOREBEAM SIZE	ANCHOR ROLLER PART NO.	 Anchor Roller Underslung
Anchor Roller Overtop	All sizes	030.T/ROLL	
Anchor Roller Underslung Small	IM15 to IM19	030.STOW/SML	
Anchor Roller Underslung Medium	IM19 to IM22W	030.STOW/MED	
Anchor Roller Underslung Large	AYS235 to AYS280	030.STOW/LGE	

B30.9 Prodder Attachment

Note: *These are structural forebeam components, and consequently must be selected in accordance with the specifications of the forebeam as detailed by the designer/consultant.*

This fitting provides the attachment point on the front of the forebeam for a prodder. It is sized according to the prodder diameter.

DESCRIPTION	SUIT PRODDER Dia (mm)	PRODDER ATTACHMENT PART NO.	
Prodder Attachment Small	60 x 3	030.PROD16/18	
Prodder Attachment Medium	80 x 3	030.PROD20/22	
Prodder Attachment Large	100 x 3	030.PROD235/310	

B30.10 Bridle Wire

Note: *These are structural forebeam components, and consequently must be selected in accordance with the specifications of the forebeam as detailed by the designer/consultant.*

The Bridle Wire runs over the A-Frame, and is attached to the Bridle Wire attachments fitted at either end of the forebeam (often as part of the End Connection), just beside the point where the forebeam joins the hull. The Bridle Wire consists of wire, a swage toggle fitting at one end and a swage turnbuckle (rigging screw) at the other end. It must be sized according to the design specifications of the forebeam.