

Mainsail: 7001224 Bruce-1 Beneteau First310 Mainsail.des

Fareast Sails/ Michael,

Design Info
=====

Design File:
\\NAS\Engineering files\Queenie-Customer Order\Fareast Sails\2023 Order\Need to be Confirmed\7001224 Bruce\700

Initial Design Date: 27/12/2023
Boat:
Beneteau First 310
Client:
Fareast Sails/ Michael,

Comments:
tack angle 87 degree

Design Data
=====

Main

Measurements

Luff geodesic:	11.350m
Leech geodesic:	11.807m
Foot geodesic:	3.810m
Head geodesic:	0.115m
Upper width (MUW):	0.685m
Three-quarter width (MTW):	1.254m
Half width (MHW):	2.253m
Quarter width (MQW):	3.091m
Foot median:	11.516m
ORC Mainsail area:	24.292m ²
Surface area:	24.668m ²
Clew height:	0.101m
Mast rake:	0.000m

Battens

Position	Length	Roach	Angle	Luff	Leech	Full
80.000%	1.068m	0.133m	74.761?	9.070m	9.421m	Full
60.000%	1.907m	0.170m	74.761?	6.801m	7.066m	Full
40.000%	1.400m	0.151m	74.761?	4.533m	4.711m	
20.000%	1.300m	0.091m	74.761?	2.266m	2.355m	

Reefing Points

1, Luff: 1.420m ; Leech: 1.465m ; Offset: 0.000m ; Number Eyelets: 2
2, Luff: 3.000m ; Leech: 3.093m ; Offset: 0.000m ; Number Eyelets: 2

Draft Stripes

1, Luff: 3.743m ; Leech: 3.708m ;
2, Luff: 7.487m ; Leech: 7.641m ;

Luff Curve

		Fanned Luff (@ 5.00% [0.189m])	Before BSeam
11.349m,	0.000m	100% (11.350m) :	0.000m
8.570m,	-0.065m	90% (10.215m) :	0.043m
5.680m,	-0.076m	80% (9.080m) :	0.084m
2.840m,	-0.051m	70% (7.945m) :	0.117m
0.000m,	0.000m	60% (6.810m) :	0.135m
		50% (5.675m) :	0.136m
		40% (4.540m) :	0.124m
		30% (3.405m) :	0.104m
		20% (2.270m) :	0.076m
		10% (1.135m) :	0.038m
		0% (0.000m) :	0.000m

Mainsail: 7001224 Bruce-1 Beneteau First310 Mainsail.des Fareast Sails/ Michael,

Seam Allowances

Zone:	Split	Radial	Cross
Zone: 1/a	0.025m	0.015m	0.025m
Zone: 1/b	0.025m	0.015m	0.025m
Zone: 2/a	0.025m	0.015m	0.025m
Zone: 2/b	0.025m	0.015m	0.025m
Zone: 3	0.025m	0.015m	0.025m

Edge Excesses

Sail:	Luff	Leech	Foot
	0.000m	0.000m	0.000m

Total Seam Lengths (m)

Horizontal	4.73
Radial/Vertical	91.05
Bi-Radial Split	7.44

Materials

Material	Area (m ²)	Panels
D5.2M	24.71	1\1,1\2,1\3,1\4,1\5 1\6,1\7,1\8,1\9,1\10 1b\1,1b\2,1b\3,1b\4,1b\5 1b\6,1b\7,1b\8,1b\9,1b\10 1b\11,2\1,2\2,2\3,2b\1 2b\2,2b\3,2b\4,3\1,3\2 3\3,3\4,3\5

