

Mainsail: 8001029 Antoine-1 Beneteau First310 MainsailV1.des Fareast Sails/ Michael,

Design Info
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Design File:
\\NAS\Engineering files\Queenie-Customer Order\Fareast Sails\2024 Orders\Need to be Confirmed\8001029 Antoine E

Initial Design Date: 13/11/2024
Boat:
Beneteau First 310
Client:
Fareast Sails/ Michael,

Comments:
tack angle 88.5 degree

Design Data
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Main

Measurements

Luff geodesic:	11.424m
Leech geodesic:	12.005m
Foot geodesic:	3.910m
Head geodesic:	0.115m
Upper width (MUW):	0.707m
Three-quarter width (MTW):	1.302m
Half width (MHW):	2.345m
Quarter width (MQW):	3.197m
Foot median:	11.643m
ORC Mainsail area:	25.291m?
Surface area:	25.739m?
Clew height:	0.101m
Mast rake:	0.300m

Battens

Position	Length	Roach	Angle	Luff	Leech	Full
80.000%	1.106m	0.149m	73.045?	9.134m	9.577m	Full
60.000%	1.100m	0.211m	73.045?	6.851m	7.183m	
40.000%	1.100m	0.189m	73.045?	4.567m	4.789m	
20.000%	1.050m	0.112m	73.045?	2.284m	2.394m	

Reefing Points

1, Luff: 1.812m ; Leech: 1.879m ; Offset: 0.000m ; Number Eyelets: 0
2, Luff: 3.825m ; Leech: 3.969m ; Offset: 0.000m ; Number Eyelets: 0

Draft Stripes

1, Luff: 2.855m ; Leech: 2.952m ;
2, Luff: 5.710m ; Leech: 5.925m ;
3, Luff: 7.995m ; Leech: 8.317m ;

Luff Slides

1, Position: 1.144m
2, Position: 2.288m
3, Position: 3.432m
4, Position: 4.576m
5, Position: 5.720m
6, Position: 6.864m
7, Position: 8.008m
8, Position: 10.279m

Luff Curve

		Fanned Luff (@ 5.00% [0.195m])	Before BSeam
11.423m,	0.000m	100% (11.424m) :	0.000m
8.626m,	-0.065m	90% (10.282m) :	0.021m
5.717m,	-0.076m	80% (9.139m) :	0.041m
2.858m,	-0.051m	70% (7.997m) :	0.053m
0.000m,	0.000m	60% (6.854m) :	0.058m
		50% (5.712m) :	0.055m
		40% (4.570m) :	0.049m
		30% (3.427m) :	0.040m
		20% (2.285m) :	0.027m
		10% (1.143m) :	0.012m
		0% (0.000m) :	0.000m

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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	4.94
Radial/Vertical	74.86
Bi-Radial Split	7.44

Materials

Material	Area (m ²)	Panels
7oz p	25.78	1/1,1/2,1/3,1/4,1/5 1/6,1/7,1/8,1/9,1b1 1b2,1b3,1b4,1b5,1b6 1b7,1b8,1b9,2/1,2/2 2/3,2b1,2b2,2b3,3/1 3/2,3/3,3/4

