

Mainsail: 8000201 Alex-1 Catalina C380 MainsailV2.des

Design Info
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Design File:
\\NAS\Engineering files\Queenie-Customer Order\Fareast Sails\2024 Orders\Need to be Confirmed\8000201 Alex Cata

Initial Design Date: 12/3/2024
Boat:
Catalina C380
Client:

Comments:

Design Data
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Main

Measurements

Luff geodesic: 13.622m
Leech geodesic: 14.351m
Foot geodesic: 4.752m
Head geodesic: 0.133m
Upper width (MUW): 0.872m
Three-quarter width (MTW): 1.599m
Half width (MHW): 2.876m
Quarter width (MQW): 3.918m
Foot median: 13.940m
ORC Mainsail area: 36.906m?
Surface area: 37.798m?
Clew height: 0.100m
Mast rake: 0.000m

Battens

Position	Length	Roach	Angle	Luff	Leech	Full
80.000%	1.365m	0.203m	72.661?	10.891m	11.443m	Full
60.000%	2.443m	0.289m	72.661?	8.168m	8.582m	Full
40.000%	3.360m	0.271m	72.661?	5.444m	5.721m	Full
20.000%	4.116m	0.160m	72.661?	2.722m	2.861m	Full

Reefing Points

1, Luff: 1.797m ; Leech: 1.866m ; Offset: 0.000m ; Number Eyelets: 3
2, Luff: 3.745m ; Leech: 3.886m ; Offset: 0.000m ; Number Eyelets: 3
3, Luff: 5.788m ; Leech: 6.008m ; Offset: 0.000m ; Number Eyelets: 2

Draft Stripes

1, Luff: 3.404m ; Leech: 3.427m ;
2, Luff: 6.809m ; Leech: 7.002m ;
3, Luff: 10.215m ; Leech: 10.611m ;

Luff Slides

1, Position: 0.755m
2, Position: 1.472m
3, Position: 3.447m
4, Position: 4.523m
5, Position: 6.341m
6, Position: 7.250m
7, Position: 9.068m
8, Position: 9.978m
9, Position: 11.799m
10, Position: 12.710m

Luff Curve

		Fanned Luff (@ 5.00% [0.237m])	Before BSeam
13.621m,	0.000m	100% (13.622m) :	0.000m
11.924m,	-0.036m	90% (12.260m) :	0.022m
10.216m,	-0.062m	80% (10.898m) :	0.039m
8.504m,	-0.073m	70% (9.536m) :	0.049m
6.811m,	-0.074m	60% (8.173m) :	0.052m
5.075m,	-0.069m	50% (6.811m) :	0.051m
3.405m,	-0.055m	40% (5.449m) :	0.048m
1.697m,	-0.031m	30% (4.087m) :	0.040m
0.000m,	0.000m	20% (2.724m) :	0.029m
		10% (1.362m) :	0.014m
		0% (0.000m) :	0.000m

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Seam Allowances			
Zone:	Split	Radial	Cross
1	0.035m	0.035m	0.035m

Edge Excesses			
Sail:	Luff	Leech	Foot
	0.000m	0.000m	0.000m

Total Seam Lengths (m)

Horizontal	31.93
Radial/Vertical	0.00
Bi-Radial Split	0.00

Materials

Material	Area (m ²)	Panels
Material 1	37.80	1,2,3,4,5 6,7,8,9,10 11,12

