

Mainsail: 8000201 Alex-1 Catalina C380 MainsailV1.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: 6/3/2024
Boat:
Catalina C380
Client:

Comments:

Design Data
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Main

Measurements

Luff geodesic: 13.493m
Leech geodesic: 14.236m
Foot geodesic: 4.752m
Head geodesic: 0.135m
Upper width (MUW): 0.918m
Three-quarter width (MTW): 1.684m
Half width (MHW): 2.970m
Quarter width (MQW): 3.971m
Foot median: 13.815m
ORC Mainsail area: 37.348m?
Surface area: 38.387m?
Clew height: 0.100m
Mast rake: 0.000m

Battens

Position	Length	Roach	Angle	Luff	Leech	Full
80.000%	1.459m	0.287m	72.291?	10.792m	11.345m	Full
60.000%	2.564m	0.398m	72.291?	8.098m	8.509m	Full
40.000%	3.448m	0.351m	72.291?	5.404m	5.673m	Full
20.000%	4.162m	0.203m	72.291?	2.710m	2.836m	Full

Reefing Points

1, Luff: 1.780m ; Leech: 1.842m ; Offset: 0.000m ; Number Eyelets: 3
2, Luff: 3.709m ; Leech: 3.838m ; Offset: 0.000m ; Number Eyelets: 3
3, Luff: 5.733m ; Leech: 5.934m ; Offset: 0.000m ; Number Eyelets: 2

Draft Stripes

1, Luff: 3.372m ; Leech: 3.382m ;
2, Luff: 6.745m ; Leech: 6.913m ;
3, Luff: 10.118m ; Leech: 10.490m ;

Luff Slides

1, Position: 0.748m
2, Position: 1.458m
3, Position: 3.414m
4, Position: 4.480m
5, Position: 6.281m
6, Position: 7.181m
7, Position: 8.982m
8, Position: 9.883m
9, Position: 11.687m
10, Position: 12.590m

Luff Curve

		Fanned Luff (@ 5.00% [0.237m])	Before BSeam
13.492m,	0.000m	100% (13.493m) :	0.000m
11.811m,	-0.036m	90% (12.144m) :	0.022m
10.119m,	-0.062m	80% (10.794m) :	0.040m
8.423m,	-0.073m	70% (9.445m) :	0.050m
6.746m,	-0.074m	60% (8.096m) :	0.053m
5.027m,	-0.069m	50% (6.747m) :	0.052m
3.373m,	-0.055m	40% (5.397m) :	0.048m
1.681m,	-0.031m	30% (4.048m) :	0.041m
0.000m,	0.000m	20% (2.698m) :	0.029m
		10% (1.349m) :	0.015m
		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	32.63
Radial/Vertical	0.00
Bi-Radial Split	0.00

Materials

Material	Area (m ²)	Panels
Material 1	38.38	1,2,3,4,5 6,7,8,9,10 11,12

