

Mainsail: 8000240 Elie-1 fullbattMaisailV3.des

Design Info
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Design File:
\\NAS\Engineering files\Queenie-Customer Order\Fareast Sails\2024 Orders\Need to be Confirmed\8000240 Elie main

Initial Design Date: 15/3/2024
Boat:
Client:

Comments:
luff=13.37m, leech=13.97m, foot=4.31m
4 full batten from top length:
@1=1.21m, @2=2.211m, @3=3.086m, @4=3.729m.
foot total 10 sliders, even space 390mm

Design Data
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Main

Measurements

Luff geodesic: 13.365m
Leech geodesic: 13.972m
Foot geodesic: 4.310m
Head geodesic: 0.135m
Upper width (MUW): 0.792m
Three-quarter width (MTW): 1.448m
Half width (MHW): 2.639m
Quarter width (MQW): 3.567m
Foot median: 13.548m
ORC Mainsail area: 32.997m?
Surface area: 33.474m?
Clew height: 0.089m
Mast rake: 0.000m

Battens

Position	Length	Roach	Angle	Luff	Leech	Full
80.282%	1.210m	0.162m	74.052?	10.724m	11.184m	Full
60.381%	2.211m	0.270m	74.052?	8.065m	8.412m	Full
40.244%	3.086m	0.289m	74.052?	5.375m	5.606m	Full
20.117%	3.729m	0.145m	74.052?	2.686m	2.802m	Full

Reefing Points

1, Luff: 1.530m ; Leech: 1.580m ; Offset: 0.000m ; Number Eyelets: 3
2, Luff: 3.290m ; Leech: 3.391m ; Offset: 0.000m ; Number Eyelets: 3
3, Luff: 5.980m ; Leech: 6.166m ; Offset: 0.000m ; Number Eyelets: 2

Draft Stripes

1, Luff: 4.409m ; Leech: 4.457m ;
2, Luff: 8.819m ; Leech: 9.076m ;

Luff Slides

1, Position: 0.895m
2, Position: 1.900m
3, Position: 3.678m
4, Position: 4.479m
5, Position: 6.405m
6, Position: 7.168m
7, Position: 8.951m
8, Position: 9.837m
9, Position: 11.604m
10, Position: 12.485m

Foot Slides

1, Position: 0.380m
2, Position: 0.774m
3, Position: 1.169m
4, Position: 1.563m
5, Position: 1.958m
6, Position: 2.352m
7, Position: 2.747m
8, Position: 3.141m
9, Position: 3.536m
10, Position: 3.930m

Luff Curve

13.365m, 0.000m
11.699m, -0.031m
10.023m, -0.053m
8.344m, -0.062m
6.682m, -0.064m
4.980m, -0.059m
3.341m, -0.047m
1.665m, -0.027m
0.000m, 0.000m

Fanned Luff (@ 5.00% [0.215m])

100% (13.365m) : 0.000m
90% (12.029m) : 0.018m
80% (10.692m) : 0.033m
70% (9.356m) : 0.041m
60% (8.019m) : 0.044m
50% (6.683m) : 0.044m
40% (5.346m) : 0.041m
30% (4.009m) : 0.035m
20% (2.673m) : 0.025m
10% (1.337m) : 0.012m
0% (0.000m) : 0.000m

Before BSeam

0.000m
0.049m
0.092m
0.122m
0.140m
0.145m
0.138m
0.118m
0.086m
0.043m
0.000m

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

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

Total Seam Lengths (m)

Horizontal	29.11
Radial/Vertical	0.00
Bi-Radial Split	0.00

Materials

Material	Area (m ²)	Panels
Material 1	33.48	1,2,3,4,5 6,7,8,9,10 11,12

