

Mainsail: 8000321 Mathieu-1 Lerouge catamaran sq top mainsailV3.des

Design Info
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Initial Design Date: 20/4/2024
Boat:
Lerouge design catamaran
Client:

Design File:
\\NAS\Engineering files\Queenie-Customer Order\Fareast Sails\2024 Orders\Need to be Confirmed\8000321 Mathieu

Comments:
Mast rake 1 deg
luff curve 30mm

Design Data
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Main

Measurements

Luff geodesic: 14.010m
Leech geodesic: 14.916m
Foot geodesic: 5.240m
Head geodesic: 1.300m
Upper width (MUW): 1.834m
Three-quarter width (MTW): 2.662m
Half width (MHW): 3.766m
Quarter width (MQW): 4.609m
Foot median: 14.383m
ORC Mainsail area: 49.855m?
Surface area: 52.072m?
Clew height: 0.100m
Mast rake: 0.270m

Battens

Position	Length	Roach	Angle	Luff	Leech	Full
100.000%	1.683m	0.000m	112.379?	12.965m	14.823m	Full
90.148%	2.062m	0.306m	79.584?	12.470m	13.363m	Full
77.008%	2.796m	0.467m	75.694?	10.751m	11.415m	Full
61.304%	3.453m	0.473m	75.694?	8.559m	9.087m	Full
43.186%	4.107m	0.407m	75.694?	6.029m	6.402m	Full
22.958%	4.706m	0.250m	75.694?	3.205m	3.403m	Full

Reefing Points

- 1, Luff: 1.849m ; Leech: 1.891m ; Offset: 0.000m ; Number Eyelets: 0
- 2, Luff: 3.852m ; Leech: 3.936m ; Offset: 0.000m ; Number Eyelets: 0
- 3, Luff: 6.374m ; Leech: 6.515m ; Offset: 0.000m ; Number Eyelets: 0

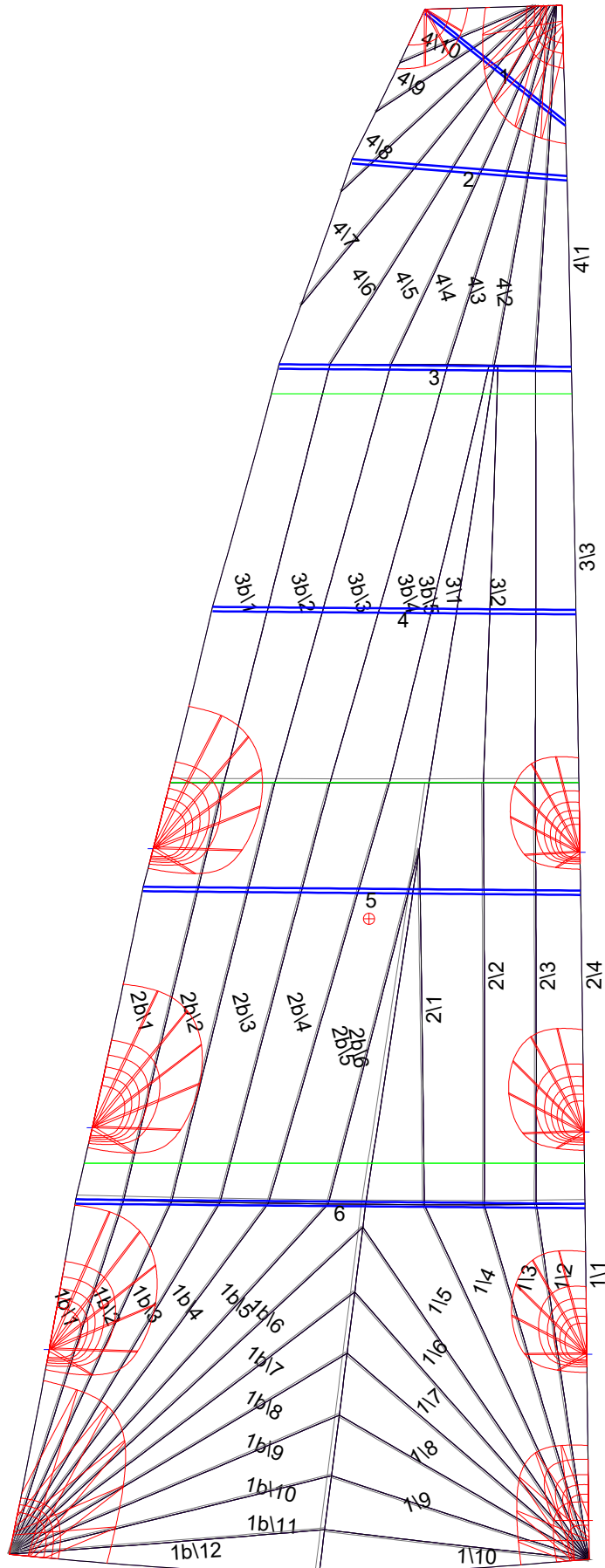
Draft Stripes

- 1, Luff: 3.572m ; Leech: 3.608m ;
- 2, Luff: 7.004m ; Leech: 7.131m ;
- 3, Luff: 10.507m ; Leech: 10.743m ;

Luff Curve

Luff Curve		Fanned Luff (@ 5.00% [0.261m])	Before BSeam
14.010m,	0.000m	100% (14.010m) :	0.000m
12.264m,	-0.019m	90% (12.609m) :	0.052m
10.507m,	-0.029m	80% (11.208m) :	0.089m
8.746m,	-0.031m	70% (9.807m) :	0.110m
7.005m,	-0.030m	60% (8.406m) :	0.118m
5.220m,	-0.026m	50% (7.005m) :	0.118m
3.502m,	-0.020m	40% (5.604m) :	0.111m
1.746m,	-0.011m	30% (4.203m) :	0.094m
0.000m,	0.000m	20% (2.802m) :	0.067m
		10% (1.401m) :	0.033m
		0% (0.000m) :	0.000m

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Seam Allowances

Zone:	Split	Radial	Cross
Zone: 1/a	0.038m	0.016m	0.038m
Zone: 1/b	0.038m	0.016m	0.038m
Zone: 2/a	0.038m	0.016m	0.038m
Zone: 2/b	0.038m	0.016m	0.038m
Zone: 3/a	0.000m	0.000m	0.000m
Zone: 3/b	0.000m	0.000m	0.000m
Zone: 4	0.038m	0.016m	0.038m

Edge Excesses

Sail:	Luff	Leech	Foot
	0.000m	0.000m	0.000m

Total Seam Lengths (m)

Horizontal	8.56
Radial/Vertical	124.41
Bi-Radial Split	7.50

Materials

Material	Area (m ²)	Panels
Material 1	52.11	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\11,1b\12,2\4,2\3,2\2 2\1,2b\6,2b\5,2b\4,2b\3 2b\2,2b\1,3\3,3\2,3\1 3b\5,3b\4,3b\3,3b\2,3b\1 4\1,4\2,4\3,4\4,4\5 4\6,4\7,4\8,4\9,4\10