

# Mainsail: 8000321 Mathieu-1 Lerouge catamaran sq top mainsailV2.des

Design Info  
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Initial Design Date: 6/4/2024  
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): 1.832m  
Three-quarter width (MTW): 2.658m  
Half width (MHW): 3.766m  
Quarter width (MQW): 4.612m  
Foot median: 14.383m  
ORC Mainsail area: 49.850m?  
Surface area: 52.073m?  
Clew height: 0.100m  
Mast rake: 0.270m

Battens

Position	Length	Roach	Angle	Luff	Leech	Full
100.000%	1.678m	0.000m	112.379?	12.971m	14.823m	Full
90.148%	2.058m	0.306m	79.584?	12.474m	13.363m	Full
77.008%	2.790m	0.467m	75.694?	10.755m	11.415m	Full
61.304%	3.451m	0.473m	75.694?	8.562m	9.087m	Full
43.186%	4.108m	0.407m	75.694?	6.031m	6.402m	Full
22.958%	4.708m	0.250m	75.694?	3.207m	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

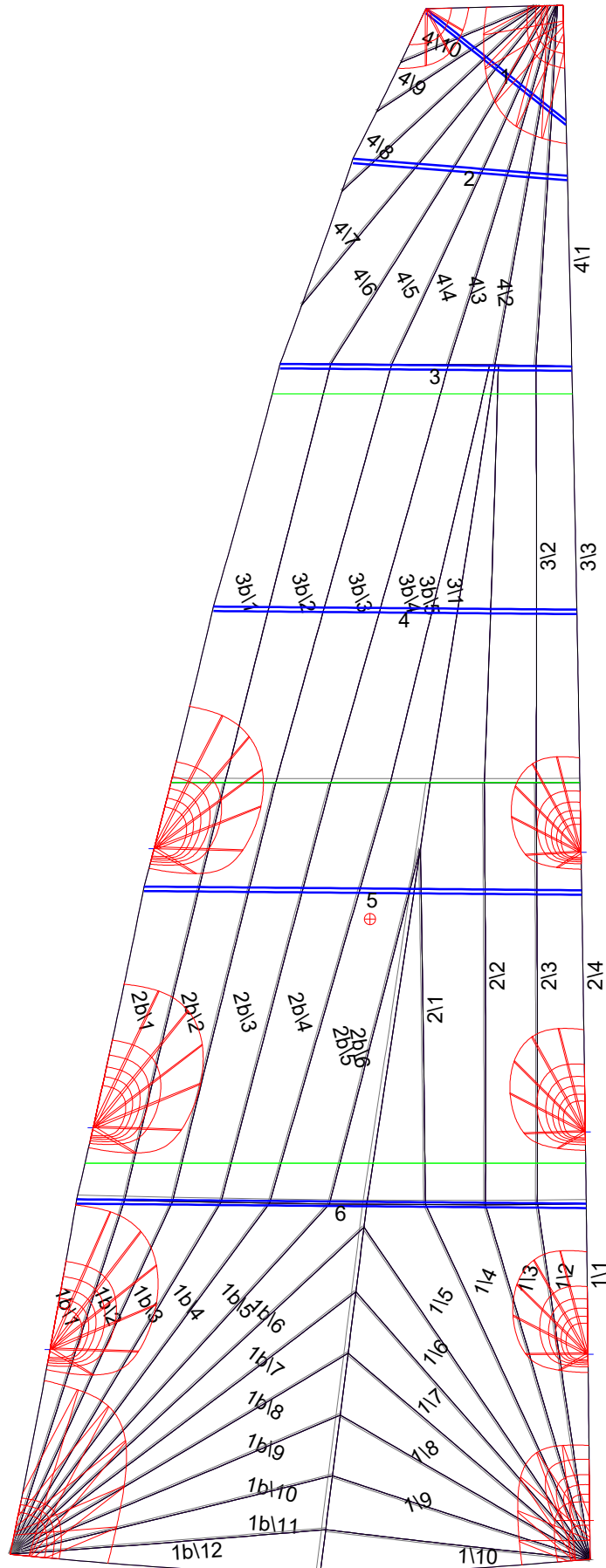
Draft Stripes

- 1, Luff: 3.572m ; Leech: 3.608m ;
- 2, Luff: 7.004m ; Leech: 7.131m ;
- 3, Luff: 10.507m ; Leech: 10.742m ;

Luff Curve

Luff Curve		Fanned Luff (@ 5.00% [0.261m])	Before BSeam
14.010m,	0.000m	100% (14.010m) :	0.000m
12.264m,	-0.014m	90% (12.609m) :	0.048m
10.507m,	-0.024m	80% (11.208m) :	0.084m
8.746m,	-0.029m	70% (9.807m) :	0.106m
7.005m,	-0.030m	60% (8.406m) :	0.117m
5.220m,	-0.028m	50% (7.005m) :	0.118m
3.502m,	-0.022m	40% (5.604m) :	0.112m
1.746m,	-0.013m	30% (4.203m) :	0.096m
0.000m,	0.000m	20% (2.802m) :	0.069m
		10% (1.401m) :	0.035m
		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
Sail:	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 <sup>2</sup> )	Panels
Material 1	52.11	1b1,1b2,1b3,1b4,1b5 1b6,1b7,1b8,1b9,1b10 1b11,1b12,2b1,2b2,2b3 2b4,2b5,2b6,2b7,2b8,2b9 2b10,2b11,3b1,3b2,3b3 3b4,3b5,3b6,3b7,3b8,3b9 3b10,3b11,4b1,4b2,4b3,4b4,4b5 4b6,4b7,4b8,4b9,4b10