

Mainsail: 8000321 Mathieu-1 Lerouge catamaran sq top mainsailV1.des

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

Initial Design Date: 27/3/2024
Boat:
Lerouge design catamaran
Client:

Comments:
Mast rake 1.7deg

Design Data
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Main

Measurements

Luff geodesic: 14.010m
Leech geodesic: 14.919m
Foot geodesic: 5.240m
Head geodesic: 1.300m
Upper width (MUW): 1.838m
Three-quarter width (MTW): 2.694m
Half width (MHW): 3.820m
Quarter width (MQW): 4.654m
Foot median: 14.390m
ORC Mainsail area: 50.288m?
Surface area: 52.560m?
Clew height: 0.100m
Mast rake: 0.459m

Battens

Position	Length	Roach	Angle	Luff	Leech	Full
100.000%	1.700m	0.000m	112.379?	12.938m	14.823m	Full
89.555%	2.118m	0.320m	75.699?	12.489m	13.275m	Full
77.008%	2.835m	0.467m	75.699?	10.739m	11.415m	Full
61.304%	3.507m	0.473m	75.699?	8.548m	9.087m	Full
43.186%	4.160m	0.407m	75.699?	6.021m	6.402m	Full
22.958%	4.748m	0.250m	75.699?	3.200m	3.403m	Full

Reefing Points

- 1, Luff: 1.849m ; Leech: 1.891m ; Offset: 0.000m ; Number Eyelets: 0
- 2, Luff: 3.851m ; Leech: 3.936m ; Offset: 0.000m ; Number Eyelets: 0
- 3, Luff: 6.373m ; Leech: 6.516m ; Offset: 0.000m ; Number Eyelets: 0

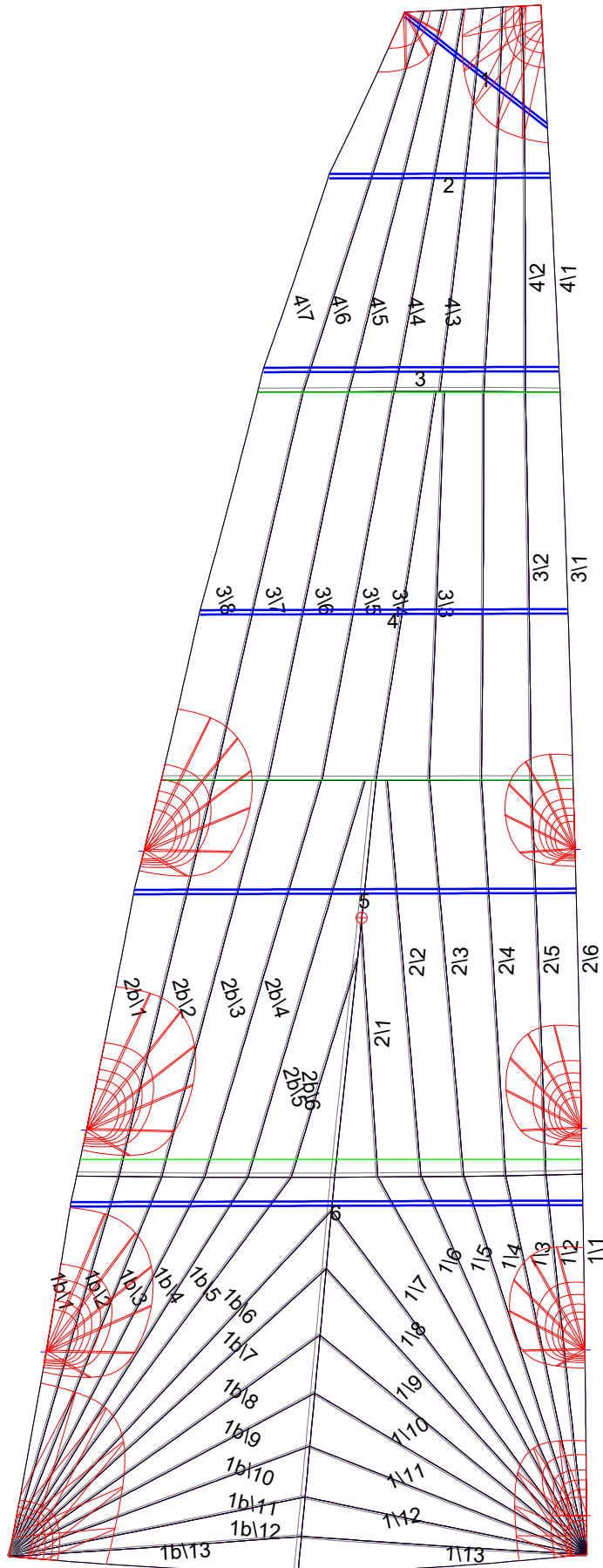
Draft Stripes

- 1, Luff: 3.571m ; Leech: 3.665m ;
- 2, Luff: 7.003m ; Leech: 7.178m ;
- 3, Luff: 10.505m ; Leech: 10.778m ;

Luff Curve

		Fanned Luff (@ 5.00% [0.261m])	Before BSeam
14.009m,	0.000m	100% (14.010m) :	0.000m
12.263m,	-0.040m	90% (12.609m) :	0.069m
10.507m,	-0.069m	80% (11.208m) :	0.122m
8.746m,	-0.081m	70% (9.807m) :	0.155m
7.004m,	-0.083m	60% (8.406m) :	0.169m
5.220m,	-0.076m	50% (7.005m) :	0.170m
3.502m,	-0.061m	40% (5.604m) :	0.161m
1.746m,	-0.035m	30% (4.203m) :	0.139m
0.000m,	0.000m	20% (2.802m) :	0.103m
		10% (1.401m) :	0.053m
		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	0.038m	0.016m	0.038m
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	11.50
Radial/Vertical	163.25
Bi-Radial Split	7.52

Materials

Material	Area (m ²)	Panels
Material 1	52.60	1\1, 1\2, 1\3, 1\4, 1\5 1\6, 1\7, 1\8, 1\9, 1\10 1\11, 1\12, 1\13, 1b\1, 1b\2 1b\3, 1b\4, 1b\5, 1b\6, 1b\7 1b\8, 1b\9, 1b\10, 1b\11, 1b\12 1b\13, 2\6, 2\5, 2\4, 2\3 2\2, 2\1, 2b\6, 2b\5, 2b\4 2b\3, 2b\2, 2b\1, 3\1, 3\2 3\3, 3\4, 3\5, 3\6, 3\7 3\8, 4\1, 4\2, 4\3, 4\4 4\5, 4\6, 4\7