

Mainsail: 8000321 Mathieu-1 Lerouge catamaran sq top mainsail.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 L

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

Comments:

Design Data
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Main

Measurements

Luff geodesic: 14.010m
Leech geodesic: 14.899m
Foot geodesic: 5.190m
Head geodesic: 1.300m
Upper width (MUW): 1.833m
Three-quarter width (MTW): 2.681m
Half width (MHW): 3.791m
Quarter width (MQW): 4.608m
Foot median: 14.377m
ORC Mainsail area: 49.892m?
Surface area: 52.067m?
Clew height: 0.100m
Mast rake: 0.000m

Battens

| Position | Length | Roach | Angle | Luff | Leech | Full |
|----------|--------|--------|----------|---------|---------|------|
| 100.000% | 1.691m | 0.000m | 112.379? | 12.949m | 14.805m | Full |
| 89.555% | 2.111m | 0.320m | 75.841? | 12.489m | 13.259m | Full |
| 77.008% | 2.818m | 0.467m | 75.841? | 10.739m | 11.401m | Full |
| 61.304% | 3.483m | 0.473m | 75.841? | 8.549m | 9.076m | Full |
| 43.186% | 4.125m | 0.407m | 75.841? | 6.022m | 6.394m | Full |
| 22.958% | 4.700m | 0.250m | 75.841? | 3.202m | 3.399m | Full |

Reefing Points

- 1, Luff: 1.849m ; Leech: 1.890m ; Offset: 0.000m ; Number Eyelets: 0
- 2, Luff: 3.851m ; Leech: 3.933m ; Offset: 0.000m ; Number Eyelets: 0
- 3, Luff: 6.373m ; Leech: 6.512m ; Offset: 0.000m ; Number Eyelets: 0

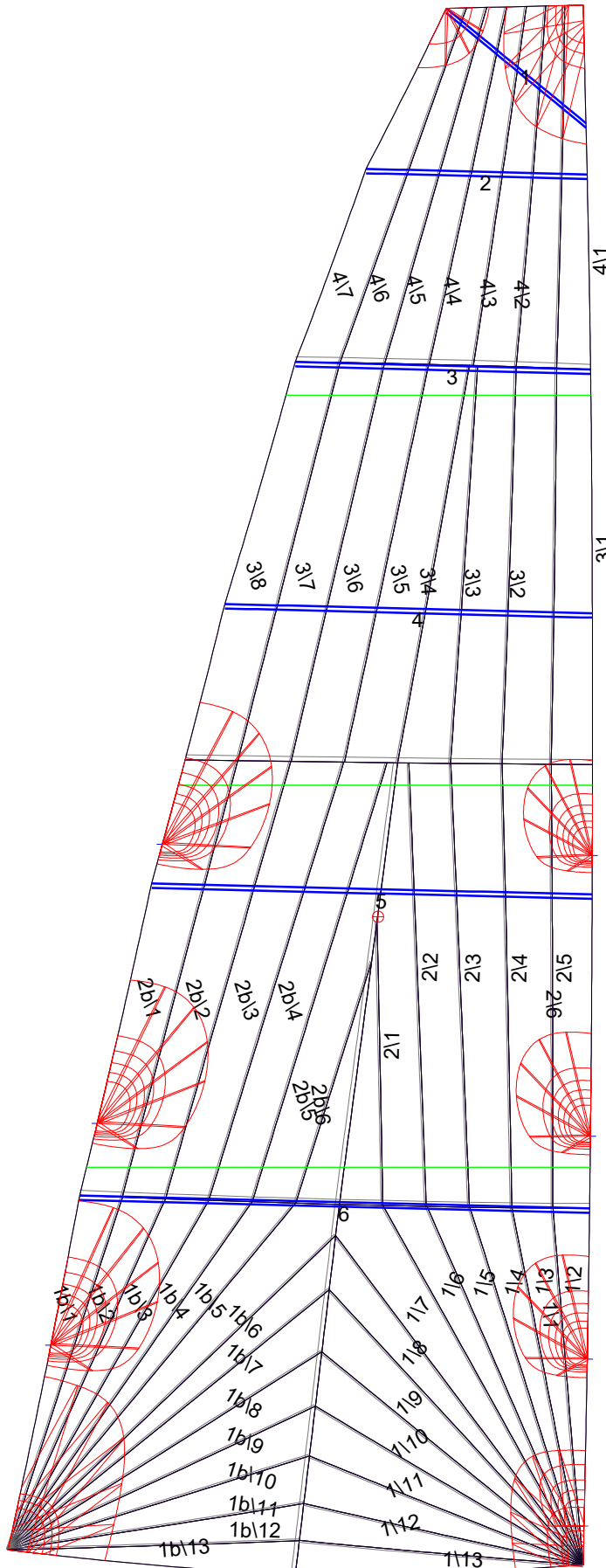
Draft Stripes

- 1, Luff: 3.571m ; Leech: 3.525m ;
- 2, Luff: 7.003m ; Leech: 7.059m ;
- 3, Luff: 10.505m ; Leech: 10.686m ;

Luff Curve

| | | Fanned Luff (@ 5.00% [0.258m]) | Before BSeam |
|----------|---------|--------------------------------|--------------|
| 14.009m, | 0.000m | 100% (14.010m) : | 0.000m |
| 12.263m, | -0.040m | 90% (12.609m) : | 0.066m |
| 10.507m, | -0.069m | 80% (11.208m) : | 0.119m |
| 8.746m, | -0.081m | 70% (9.807m) : | 0.151m |
| 7.004m, | -0.083m | 60% (8.406m) : | 0.166m |
| 5.220m, | -0.076m | 50% (7.005m) : | 0.166m |
| 3.502m, | -0.061m | 40% (5.604m) : | 0.156m |
| 1.746m, | -0.035m | 30% (4.203m) : | 0.133m |
| 0.000m, | 0.000m | 20% (2.802m) : | 0.099m |
| | | 10% (1.401m) : | 0.049m |
| | | 0% (0.000m) : | 0.000m |

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Seam Allowances

| Zone: | Split | Radial | Cross |
|-----------|--------|--------|--------|
| Zone: 1/a | 0.038m | 0.016m | 0.045m |
| Zone: 1/b | 0.038m | 0.016m | 0.045m |
| Zone: 2/a | 0.038m | 0.016m | 0.045m |
| Zone: 2/b | 0.038m | 0.016m | 0.045m |
| Zone: 3 | 0.038m | 0.016m | 0.045m |
| Zone: 4 | 0.038m | 0.016m | 0.045m |

Edge Excesses

| Sail: | Luff | Leech | Foot |
|-------|--------|--------|--------|
| Sail: | 0.000m | 0.000m | 0.000m |

Total Seam Lengths (m)

| | |
|-----------------|--------|
| Horizontal | 11.35 |
| Radial/Vertical | 162.59 |
| Bi-Radial Split | 7.69 |

Materials

| Material | Area (m ²) | Panels |
|------------|------------------------|--|
| Material 1 | 52.14 | 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 |