

Mainsail: 7000422 Paul Mainsail.des

Design Info

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Initial Design Date: 24/5/2023

Boat:

Client:

Design Data

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Main

Measurements

Luff geodesic:	9.652m
Leech geodesic:	10.116m
Foot geodesic:	3.316m
Head geodesic:	0.115m
Upper width (MUW):	0.665m
Three-quarter width (MTW):	1.212m
Half width (MHW):	2.106m
Quarter width (MQW):	2.779m
Foot median:	9.875m
ORC Mainsail area:	18.853m ²
Surface area:	19.357m ²
Clew height:	0.100m
Mast rake:	0.000m

Battens

Position	Length	Roach	Angle	Luff	Leech	Full
80.000%	1.061m	0.228m	71.623°	7.736m	8.064m	Full
60.000%	1.828m	0.296m	71.623°	5.823m	6.048m	Full
40.000%	2.433m	0.261m	71.623°	3.910m	4.032m	Full
20.000%	1.100m	0.151m	71.623°	1.996m	2.016m	

Reefing Points

1, Luff: 1.447m ; Leech: 1.492m ; Offset: 0.000m ; Number Eyelets: 2

Draft Stripes

1, Luff: 3.184m ; Leech: 3.217m ;
2, Luff: 6.369m ; Leech: 6.556m ;

Luff Slides

1, Position: 0.665m
2, Position: 1.331m
3, Position: 1.996m
4, Position: 2.634m
5, Position: 3.272m
6, Position: 4.547m
7, Position: 5.185m
8, Position: 6.461m
9, Position: 7.099m
10, Position: 8.375m
11, Position: 9.013m

Luff Curve

		Fanned Luff (@ 5.00% [0.165m])	Before BSeam
9.652m,	0.000m	100% (9.652m) :	0.000m
8.449m,	-0.022m	90% (8.687m) :	0.038m
7.239m,	-0.038m	80% (7.722m) :	0.074m
6.026m,	-0.045m	70% (6.756m) :	0.101m
4.826m,	-0.046m	60% (5.791m) :	0.116m
3.596m,	-0.042m	50% (4.826m) :	0.117m
2.413m,	-0.034m	40% (3.861m) :	0.107m
1.203m,	-0.019m	30% (2.896m) :	0.086m
0.000m,	0.000m	20% (1.930m) :	0.060m
		10% (0.965m) :	0.029m
		0% (0.000m) :	0.000m

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Seam Allowances

Zone:	Split	Radial	Cross
Zone: 1/a	0.025m	0.015m	0.025m
Zone: 1/b	0.025m	0.015m	0.025m
Zone: 2	0.025m	0.015m	0.025m
Zone: 3	0.025m	0.015m	0.025m
Zone: 4	0.025m	0.015m	0.025m

Edge Excesses

Sail:	Luff	Leech	Foot
	0.000m	0.000m	0.000m

Total Seam Lengths (m)

Horizontal	6.17
Radial/Vertical	57.88
Bi-Radial Split	2.62

Materials

Material	Area (m ²)	Panels
Material 1	19.39	1\1,1\2,1\3,1\4,1\5 1\6,1\7,1b\1,1b\2,1b\3 1b\4,1b\5,1b\6,1b\7,2\1 2\2,2\3,2\4,2\5,2\6 3\1,3\2,3\3,3\4,3\5 4\1,4\2,4\3,4\4

