

# Mainsail: 8000615 Caroline-1 Hitchiker 48 MainsailV2.des

Design Info  
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Design File:  
\\NAS\Engineering files\Queenie-Customer Order\Fareast Sails\2024 Orders\Need to be Confirmed\8000615 Caroline

Initial Design Date: 26/7/2024  
Boat:  
Hitchiker 48  
Client:

Comments:

Design Data  
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Main

Measurements

Luff geodesic: 12.582m  
Leech geodesic: 13.384m  
Foot geodesic: 5.423m  
Head geodesic: 0.135m  
Upper width (MUW): 1.337m  
Three-quarter width (MTW): 2.426m  
Half width (MHW): 3.931m  
Quarter width (MQW): 4.808m  
Foot median: 12.869m  
ORC Mainsail area: 43.945m?  
Surface area: 46.466m?  
Clew height: 0.273m  
Mast rake: 0.450m

Battens

Position	Length	Roach	Angle	Luff	Leech	Full
85.714%	1.877m	0.850m	71.153?	10.772m	11.395m	Full
71.429%	2.989m	1.120m	71.153?	8.975m	9.495m	Full
57.143%	3.776m	1.119m	71.153?	7.179m	7.596m	Full
42.857%	4.339m	0.938m	71.153?	5.384m	5.697m	Full
28.571%	4.761m	0.653m	71.153?	3.589m	3.798m	Full
14.286%	5.114m	0.333m	71.153?	1.794m	1.899m	Full

Reefing Points

1, Luff: 2.230m ; Leech: 2.308m ; Offset: 0.000m ; Number Eyelets: 0  
2, Luff: 5.000m ; Leech: 5.126m ; Offset: 0.000m ; Number Eyelets: 0  
3, Luff: 7.544m ; Leech: 7.769m ; Offset: 0.000m ; Number Eyelets: 0

Draft Stripes

1, Luff: 4.085m ; Leech: 3.910m ;  
2, Luff: 8.236m ; Leech: 8.234m ;

Luff Slides

1, Position: 0.897m  
2, Position: 2.691m  
3, Position: 4.486m  
4, Position: 6.281m  
5, Position: 8.077m  
6, Position: 9.873m  
7, Position: 11.677m

Luff Curve

		Fanned Luff (@ 5.00% [0.270m])	Before BSeam
12.582m,	0.000m	100% (12.582m) :	0.000m
11.014m,	-0.031m	90% (11.324m) :	0.069m
9.436m,	-0.052m	80% (10.065m) :	0.124m
7.855m,	-0.062m	70% (8.808m) :	0.160m
6.291m,	-0.063m	60% (7.549m) :	0.175m
4.688m,	-0.058m	50% (6.291m) :	0.174m
3.145m,	-0.047m	40% (5.033m) :	0.161m
1.568m,	-0.026m	30% (3.775m) :	0.135m
0.000m,	0.000m	20% (2.516m) :	0.097m
		10% (1.259m) :	0.051m
		0% (0.000m) :	0.000m

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## Seam Allowances

	Split	Radial	Cross
Zone: 1/a	0.000m	0.000m	0.000m
Zone: 1/b	0.000m	0.000m	0.000m
Zone: 2/a	0.000m	0.000m	0.000m
Zone: 2/b	0.000m	0.000m	0.000m
Zone: 3/a	0.000m	0.000m	0.000m
Zone: 3/b	0.000m	0.000m	0.000m
Zone: 4	0.038m	0.015m	0.038m
Cover 1	0.025m	0.025m	0.025m

## Edge Excesses

	Luff	Leech	Foot
Sail:	0.000m	0.000m	0.000m
Cover 0	0.000m	0.000m	0.000m

## Total Seam Lengths (m)

Horizontal	0.00
Radial/Vertical	15.10
Bi-Radial Split	0.00

## Materials

Material	Area (m <sup>2</sup> )	Panels
Material 1	46.48	1\1, 1\2, 1\3, 1\4, 1\5 1\6, 1\7, 1\8, 1\9, 1\10 1\11, 1\12, 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\1, 2\2, 2\3, 2\4, 2\5 2b\6, 2b\5, 2b\4, 2b\3, 2b\2 2b\1, 3\1, 3\2, 3\3, 3b\4 3b\3, 3b\2, 3b\1, 4\1, 4\2 4\3, 4\4, 4\5

