

# Mainsail: 8000322 Kurt-1 Corsair 31 square top mainV1.des

Design Info  
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Design File:  
\\NAS\Engineering files\Queenie-Customer Order\Fareast Sails\2024 Orders\Need to be Confirmed\8000322 Kurt Cors

Initial Design Date: 6/8/2024  
Boat:  
Corsair 31  
Client:

Comments:  
tack angle 86 deg,  
mast rake 65cm

Design Data  
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Main

Measurements

Luff geodesic: 40.354Ft  
Leech geodesic: 42.088Ft  
Foot geodesic: 14.160Ft  
Head geodesic: 3.166Ft  
Upper width (MUW): 5.244Ft  
Three-quarter width (MTW): 8.350Ft  
Half width (MHW): 11.459Ft  
Quarter width (MQW): 13.071Ft  
Foot median: 41.027Ft  
ORC Mainsail area: 416.489Ft?  
Surface area: 437.714Ft?  
Clew height: 0.328Ft  
Mast rake: 2.133Ft

Battens

Position	Length	Roach	Angle	Luff	Leech	Full
100.000%	4.166Ft	0.000Ft	113.421?	37.706Ft	41.810Ft	Full
88.996%	6.511Ft	1.837Ft	84.242?	35.207Ft	37.209Ft	Full
77.992%	8.863Ft	2.822Ft	80.486?	31.049Ft	32.608Ft	Full
65.679%	10.344Ft	2.835Ft	79.208?	26.224Ft	27.460Ft	Full
52.179%	11.569Ft	2.554Ft	79.080?	20.814Ft	21.816Ft	Full
39.062%	12.455Ft	2.046Ft	79.232?	15.516Ft	16.332Ft	Full
26.698%	13.083Ft	1.419Ft	79.675?	10.456Ft	11.162Ft	Full
12.304%	13.717Ft	0.675Ft	79.015?	4.806Ft	5.144Ft	Full

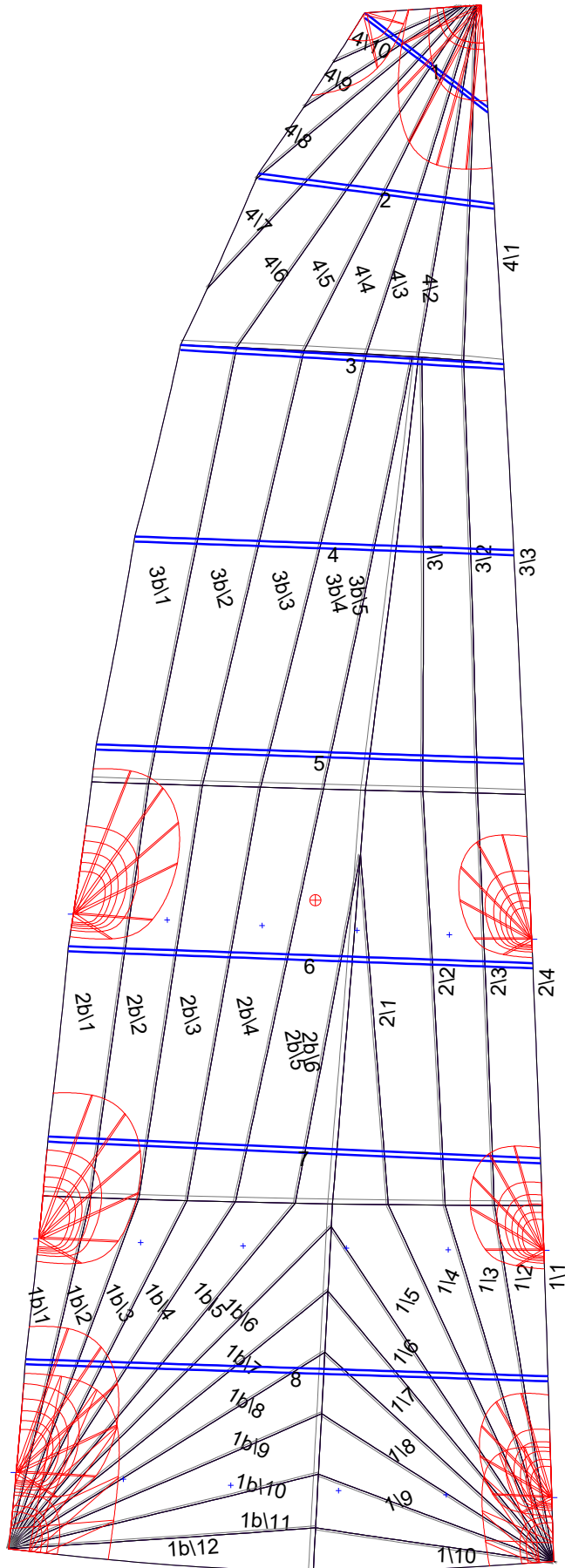
Reefing Points

- 1, Luff: 1.659Ft ; Leech: 2.000Ft ; Offset: 0.000Ft ; Number Eyelets: 4
- 2, Luff: 8.063Ft ; Leech: 8.110Ft ; Offset: 0.000Ft ; Number Eyelets: 4
- 3, Luff: 16.129Ft ; Leech: 16.587Ft ; Offset: 0.000Ft ; Number Eyelets: 4

Luff Curve

		Fanned Luff (@ 5.00% [0.706Ft])	Before BSeam
40.353Ft,	0.000Ft	100% (40.354Ft) :	0.000Ft
35.324Ft,	-0.093Ft	90% (36.320Ft) :	0.190Ft
30.265Ft,	-0.160Ft	80% (32.283Ft) :	0.335Ft
25.192Ft,	-0.188Ft	70% (28.248Ft) :	0.420Ft
20.176Ft,	-0.192Ft	60% (24.213Ft) :	0.448Ft
15.036Ft,	-0.177Ft	50% (20.177Ft) :	0.432Ft
10.088Ft,	-0.142Ft	40% (16.142Ft) :	0.392Ft
5.029Ft,	-0.081Ft	30% (12.106Ft) :	0.325Ft
0.000Ft,	0.000Ft	20% (8.070Ft) :	0.233Ft
		10% (4.036Ft) :	0.121Ft
		0% (0.000Ft) :	0.000Ft

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## Seam Allowances

Zone:	Split	Radial	Cross
Zone: 1/a	0.125Ft	0.052Ft	0.125Ft
Zone: 1/b	0.125Ft	0.052Ft	0.125Ft
Zone: 2/a	0.125Ft	0.052Ft	0.125Ft
Zone: 2/b	0.125Ft	0.052Ft	0.125Ft
Zone: 3/a	0.125Ft	0.052Ft	0.125Ft
Zone: 3/b	0.125Ft	0.052Ft	0.125Ft
Zone: 4	0.125Ft	0.052Ft	0.125Ft

## Edge Excesses

Sail:	Luff	Leech	Foot
Sail:	0.000Ft	0.000Ft	0.000Ft

## Total Seam Lengths (Ft)

Horizontal	33.81
Radial/Vertical	416.35
Bi-Radial Split	32.75

## Materials

Material	Area (Ft <sup>2</sup> )	Panels
Material 1	437.86	1\1,1\2,1\3,1\4,1\5 1\6,1\7,1\8,1\9,1\10 1b\1,1b\2,1b\3,1b\4,1b\5 1b\6,1b\7,1b\8,1b\9,1b\10 1b\11,1b\12,2\4,2\3,2\2 2\1,2b\6,2b\5,2b\4,2b\3 2b\2,2b\1,3\3,3\2,3\1 3b\5,3b\4,3b\3,3b\2,3b\1 4\1,4\2,4\3,4\4,4\5 4\6,4\7,4\8,4\9,4\10