

# Mainsail: 8000405 Tim-1 Wylie 38 MainsailV2.des

Design Info  
=====

Design File:  
\\NAS\Engineering files\Queenie-Customer Order\Fareast Sails\2024 Orders\Need to be Confirmed\8000405 Tim Wylie

Initial Design Date: 20/4/2024  
Boat:  
Wylie 38  
Client:

Comments:  
reduced slightly leech roach to be sure within backstay

Design Data  
=====

Main

Measurements

Luff geodesic: 13.005m  
Leech geodesic: 13.779m  
Foot geodesic: 4.140m  
Head geodesic: 0.135m  
Upper width (MUW): 0.825m  
Three-quarter width (MTW): 1.491m  
Half width (MHW): 2.609m  
Quarter width (MQW): 3.465m  
Foot median: 13.366m  
ORC Mainsail area: 31.559m?  
Surface area: 32.361m?  
Clew height: -0.213m  
Mast rake: 0.407m

Battens

| Position | Length | Roach  | Angle   | Luff    | Leech   | Full |
|----------|--------|--------|---------|---------|---------|------|
| 82.000%  | 1.178m | 0.218m | 71.694? | 10.666m | 11.264m | Full |
| 62.000%  | 2.166m | 0.330m | 71.694? | 8.067m  | 8.516m  | Full |
| 42.000%  | 1.200m | 0.297m | 71.694? | 5.465m  | 5.769m  |      |
| 22.000%  | 1.050m | 0.176m | 71.694? | 2.863m  | 3.022m  |      |

Reefing Points

1, Luff: 1.718m ; Leech: 1.787m ; Offset: 0.000m ; Number Eyelets: 3  
2, Luff: 3.578m ; Leech: 3.720m ; Offset: 0.000m ; Number Eyelets: 3  
3, Luff: 6.504m ; Leech: 6.776m ; Offset: 0.000m ; Number Eyelets: 2

Draft Stripes

1, Luff: 4.294m ; Leech: 4.631m ;  
2, Luff: 8.585m ; Leech: 9.065m ;

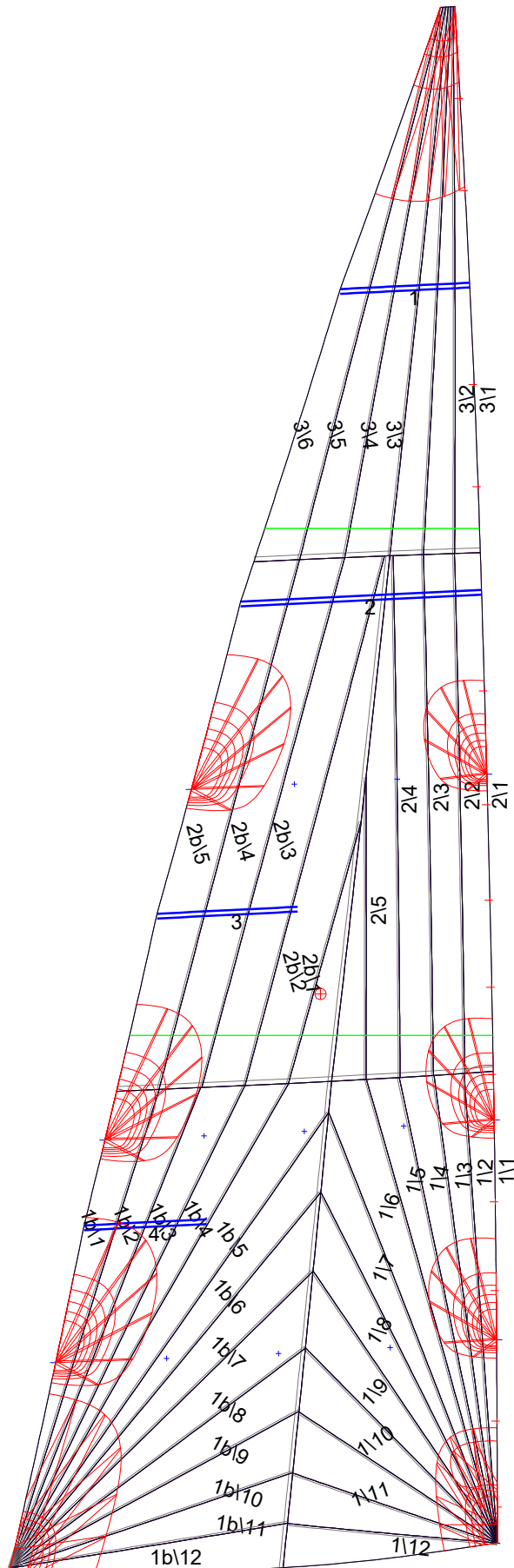
Luff Slides

1, Position: 1.030m  
2, Position: 2.134m  
3, Position: 2.887m  
4, Position: 3.963m  
5, Position: 4.701m  
6, Position: 5.439m  
7, Position: 6.246m  
8, Position: 7.209m  
9, Position: 8.937m  
10, Position: 9.801m  
11, Position: 11.445m  
12, Position: 12.225m

Luff Curve

|          |         | Fanned Luff (@ 5.00% [0.206m]) | Before BSeam |
|----------|---------|--------------------------------|--------------|
| 13.004m, | 0.000m  | 100% (13.005m) :               | 0.000m       |
| 11.383m, | -0.043m | 90% (11.704m) :                | 0.026m       |
| 9.753m,  | -0.074m | 80% (10.404m) :                | 0.110m       |
| 8.118m,  | -0.087m | 70% (9.103m) :                 | 0.144m       |
| 6.502m,  | -0.089m | 60% (7.803m) :                 | 0.162m       |
| 4.845m,  | -0.082m | 50% (6.502m) :                 | 0.166m       |
| 3.251m,  | -0.066m | 40% (5.202m) :                 | 0.157m       |
| 1.620m,  | -0.037m | 30% (3.901m) :                 | 0.134m       |
| 0.000m,  | 0.000m  | 20% (2.601m) :                 | 0.099m       |
|          |         | 10% (1.300m) :                 | 0.051m       |
|          |         | 0% (0.000m) :                  | 0.000m       |

# Mainsail: 8000405 Tim-1 Wylie 38 MainsailV2.des



## Seam Allowances

|           | Split  | Radial | Cross  |
|-----------|--------|--------|--------|
| Zone: 1/a | 0.032m | 0.016m | 0.040m |
| Zone: 1/b | 0.032m | 0.016m | 0.040m |
| Zone: 2/a | 0.032m | 0.016m | 0.040m |
| Zone: 2/b | 0.032m | 0.016m | 0.040m |
| Zone: 3   | 0.032m | 0.016m | 0.040m |

## Edge Excesses

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

## Total Seam Lengths (m)

|                 |        |
|-----------------|--------|
| Horizontal      | 5.34   |
| Radial/Vertical | 131.71 |
| Bi-Radial Split | 9.01   |

## Materials

| Material   | Area (m <sup>2</sup> ) | Panels  |
|------------|------------------------|---|
| Material 1 | 32.39                  | 1\1,1\2,1\3,1\4,1\5<br>1\6,1\7,1\8,1\9,1\10<br>1\11,1\12,1b\1,1b\2,1b\3<br>1b\4,1b\5,1b\6,1b\7,1b\8<br>1b\9,1b\10,1b\11,1b\12,2\1<br>2\2,2\3,2\4,2\5,2b\1<br>2b\2,2b\3,2b\4,2b\5,3\1<br>3\2,3\3,3\4,3\5,3\6 |