

Mainsail: 8000922 Marcus Townson 38 Fullbattmain.des

Design Info
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Design File:
\\NAS\Engineering files\Queenie-Customer Order\Fareast Sails\2024 Orders\Need to be Confirmed\8000922 Marcus T

Initial Design Date: 20/9/2024
Boat:
Townson 38
Client:

Comments:

Design Data
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Main

Measurements

Luff geodesic: 12.750m
Leech geodesic: 13.475m
Foot geodesic: 4.550m
Head geodesic: 0.150m
Upper width (MUW): 0.928m
Three-quarter width (MTW): 1.683m
Half width (MHW): 2.941m
Quarter width (MQW): 3.867m
Foot median: 13.062m
ORC Mainsail area: 34.568m?
Surface area: 35.572m?
Clew height: 0.100m
Mast rake: 0.000m

Battens

| Position | Length | Roach | Angle | Luff | Leech | Full |
|----------|--------|--------|---------|---------|---------|------|
| 83.333% | 1.259m | 0.366m | 71.753? | 10.623m | 11.182m | Full |
| 66.667% | 2.219m | 0.484m | 71.753? | 8.497m | 8.946m | Full |
| 50.000% | 2.992m | 0.470m | 71.753? | 6.372m | 6.709m | Full |
| 33.333% | 3.627m | 0.367m | 71.753? | 4.247m | 4.473m | Full |
| 16.667% | 4.124m | 0.194m | 71.753? | 2.123m | 2.236m | Full |

Reefing Points

1, Luff: 1.500m ; Leech: 1.749m ; Offset: 0.000m ; Number Eyelets: 3
2, Luff: 3.500m ; Leech: 3.698m ; Offset: 0.000m ; Number Eyelets: 3

Draft Stripes

1, Luff: 3.122m ; Leech: 3.125m ;
2, Luff: 6.245m ; Leech: 6.387m ;
3, Luff: 9.432m ; Leech: 9.775m ;

Luff Slides

1, Position: 0.630m
2, Position: 1.280m
3, Position: 2.733m
4, Position: 3.342m
5, Position: 4.955m
6, Position: 5.664m
7, Position: 7.080m
8, Position: 7.789m
9, Position: 9.206m
10, Position: 9.914m
11, Position: 11.332m
12, Position: 12.041m

Luff Curve

| | | Fanned Luff (@ 5.00% [0.227m]) | Before BSeam |
|----------|---------|--------------------------------|--------------|
| 12.748m, | 0.000m | 100% (12.750m) : | 0.000m |
| 11.160m, | -0.058m | 90% (11.476m) : | 0.074m |
| 9.561m, | -0.100m | 80% (10.200m) : | 0.137m |
| 7.959m, | -0.118m | 70% (8.925m) : | 0.179m |
| 6.374m, | -0.120m | 60% (7.650m) : | 0.201m |
| 4.750m, | -0.111m | 50% (6.375m) : | 0.205m |
| 3.187m, | -0.089m | 40% (5.100m) : | 0.196m |
| 1.589m, | -0.050m | 30% (3.825m) : | 0.169m |
| 0.000m, | 0.000m | 20% (2.550m) : | 0.123m |
| | | 10% (1.275m) : | 0.064m |
| | | 0% (0.000m) : | 0.000m |

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Seam Allowances

| Zone: | Split | Radial | Cross |
|-----------|--------|--------|--------|
| Zone: 1/a | 0.040m | 0.015m | 0.040m |
| Zone: 1/b | 0.040m | 0.015m | 0.040m |
| Zone: 2/a | 0.040m | 0.015m | 0.040m |
| Zone: 2/b | 0.040m | 0.015m | 0.040m |
| Zone: 3/a | 0.040m | 0.015m | 0.040m |
| Zone: 3/b | 0.040m | 0.015m | 0.040m |
| Zone: 4 | 0.040m | 0.015m | 0.040m |

Edge Excesses

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

Total Seam Lengths (m)

| | |
|-----------------|--------|
| Horizontal | 9.01 |
| Radial/Vertical | 127.65 |
| Bi-Radial Split | 9.70 |

Materials

| Material | Area (m ²) | Panels |
|-------------|------------------------|---|
| Palma Tec13 | 7.73 | 1\1,1\2,1\9,1\10,1b\10 1b\11,2\1,2\2,3\1,3\2 |
| Palma Tec18 | 27.87 | 1\3,1\4,1\5,1\6,1\7 1\8,1\11,1\12,1b\1,1b\2 1b\3,1b\4,1b\5,1b\6,1b\7 1b\8,1b\9,1b\12,1b\13,2\3 2\4,2\5,2b\6,2b\5,2b\4 2b\3,2b\2,2b\1,3\3,3b\4 3b\3,3b\2,3b\1,4\1,4\2 4\3,4\4,4\5 |

