

Mainsail: 8000112 Conor Hunter Horizon 27 fullbattmainV1.des

Design Info
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Design File:
\\NAS\Engineering files\Queenie-Customer Order\Fareast Sails\2024 Orders\Need to be Confirmed\8000112 Conor\8000112 Conor

Initial Design Date: 31/1/2024
Boat:
Hunter Horizon 27 (British Hunter)
Client:

Comments:
Hunter Horizon 27 (British Hunter)), Fractional rig,
mast rake 16inch,
luff curve 4inch @50%%
tack angle 88.5 deg

Design Data
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Main

Measurements

Luff geodesic: 8.850m
Leech geodesic: 9.384m
Foot geodesic: 3.306m
Head geodesic: 0.115m
Upper width (MUW): 0.642m
Three-quarter width (MTW): 1.176m
Half width (MHW): 2.071m
Quarter width (MQW): 2.767m
Foot median: 9.066m
ORC Mainsail area: 17.088m?
Surface area: 17.545m?
Clew height: 0.100m
Mast rake: 0.406m

Battens

| Position | Length | Roach | Angle | Luff | Leech | Full |
|----------|--------|--------|---------|--------|--------|------|
| 80.000% | 1.021m | 0.164m | 71.626? | 7.073m | 7.490m | Full |
| 60.000% | 1.787m | 0.227m | 71.626? | 5.304m | 5.618m | Full |
| 40.000% | 2.404m | 0.200m | 71.626? | 3.534m | 3.745m | Full |
| 20.000% | 2.894m | 0.115m | 71.626? | 1.764m | 1.873m | Full |

Reefing Points

1, Luff: 1.079m ; Leech: 1.122m ; Offset: 0.000m ; Number Eyelets: 3
2, Luff: 2.344m ; Leech: 2.436m ; Offset: 0.000m ; Number Eyelets: 3
3, Luff: 3.759m ; Leech: 3.911m ; Offset: 0.000m ; Number Eyelets: 2

Draft Stripes

1, Luff: 2.919m ; Leech: 3.069m ;
2, Luff: 5.838m ; Leech: 6.120m ;

Luff Slides

1, Position: 0.880m
2, Position: 2.645m
3, Position: 4.414m
4, Position: 6.185m
5, Position: 7.960m

Luff Curve

| | | Fanned Luff (@ 5.00% [0.165m]) | Before BSeam |
|---------|---------|--------------------------------|--------------|
| 8.848m, | 0.000m | 100% (8.850m) : | 0.000m |
| 7.746m, | -0.047m | 90% (7.966m) : | 0.028m |
| 6.636m, | -0.081m | 80% (7.080m) : | 0.053m |
| 5.524m, | -0.098m | 70% (6.195m) : | 0.069m |
| 4.424m, | -0.102m | 60% (5.310m) : | 0.076m |
| 3.297m, | -0.094m | 50% (4.425m) : | 0.077m |
| 2.212m, | -0.075m | 40% (3.540m) : | 0.072m |
| 1.103m, | -0.043m | 30% (2.655m) : | 0.063m |
| 0.000m, | 0.000m | 20% (1.770m) : | 0.047m |
| | | 10% (0.885m) : | 0.024m |
| | | 0% (0.000m) : | 0.000m |

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| Seam Allowances | | | |
|-----------------|--------|--------|--------|
| Zone: | Split | Radial | Cross |
| 1 | 0.025m | 0.025m | 0.025m |

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

Total Seam Lengths (m)

| | |
|-----------------|-------|
| Horizontal | 16.31 |
| Radial/Vertical | 0.00 |
| Bi-Radial Split | 0.00 |

Materials

| Material | Area (m ²) | Panels |
|------------|------------------------|----------------------|
| Material 1 | 17.52 | 1,2,3,4,5 6,7,8,9 |

