

GPH = 545.1 **CDL = 9.554**

BOAT

Class **Cape 31**
Designer **Mills**
Builder **Noordhoek**
Age Date **07/2017**
Series Date **07/2017**
Offset File **CAPE31-EST901.off**

HULL

Length Overall **9.550 m**
Maximum Beam **3.052 m**
Draft **2.452 m**
Displacement **1,832 kg**
DLR **2.7821**
IMS Division **Performance**
Dynamic Allowance **0.000%**
Age Allowance **0.130%**

PROPELLER

Installation **Strut**
Type **Folding 2 blades**
Diameter **0.381m**

CREW

Maximum weight **605 kg**
Minimum weight **454 kg * when applied**
Non Manual Power **No**
Crew Arm Extension **0.00 m**

SAIL AREAS (m²)

	Measured	Rated
Mainsail	36.79	37.91
Headsail Luffed	24.37	24.37
Headsail Flying		
Symmetric		
Asymmetric	115.99	115.99

** 1 asymmetric(s) with SHW/SFL < 85%*

SAIL LIMITATIONS

Headsails **5**
Spinnakers **4**

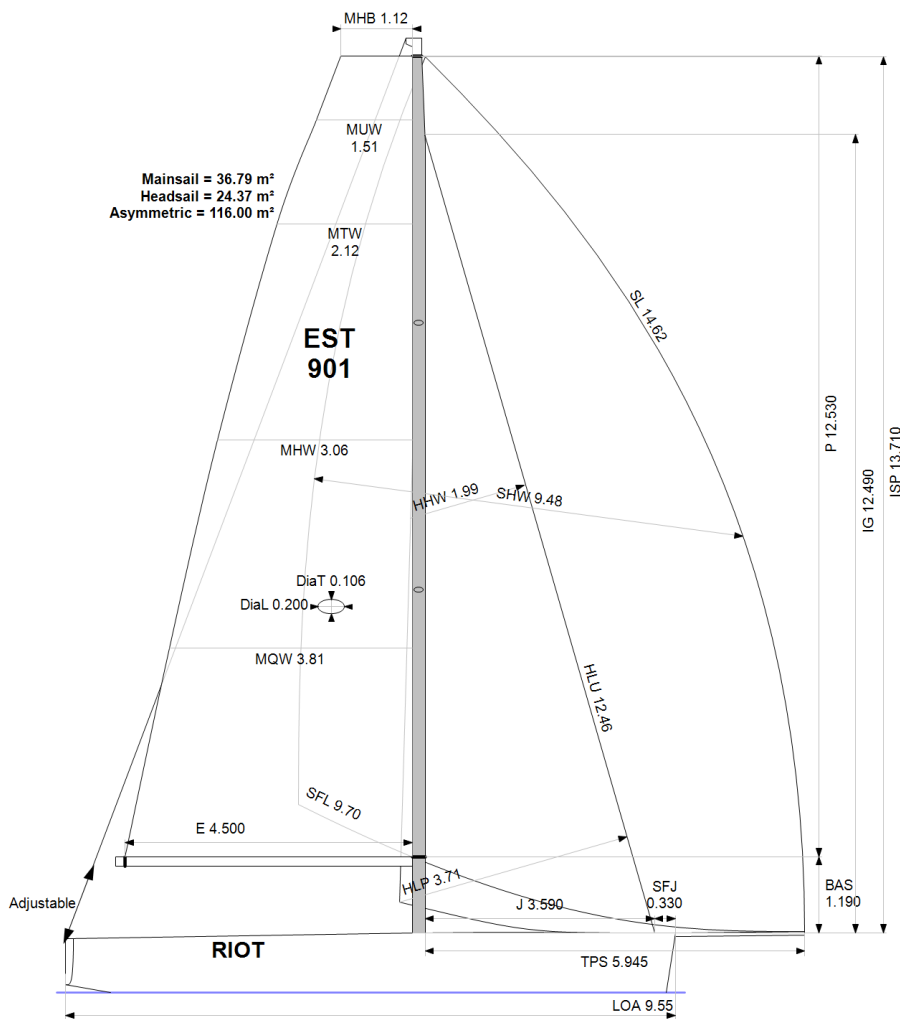
STABILITY

Righting Moment **72.4 kg·m**
Stability Index **113.6**

COMMENTS

Ex. RSA-31002

OWNER



Rated boat velocities in knots

Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat Angles	43.1°	41.3°	38.6°	37.9°	37.5°	37.1°	37.5°
Beat VMG	3.87	4.78	5.19	5.34	5.41	5.52	5.55
52°	5.92	7.01	7.40	7.57	7.66	7.85	8.03
60°	6.28	7.21	7.72	7.97	8.11	8.30	8.58
75°	6.82	7.49	8.14	8.65	8.91	9.07	9.63
90°	7.00	7.91	8.52	9.07	9.70	10.05	10.45
110°	6.82	7.76	8.90	9.81	10.47	11.09	12.25
120°	6.50	7.58	8.68	9.80	10.94	11.75	13.17
135°	5.68	7.10	8.04	9.25	10.63	11.84	14.56
150°	4.76	6.06	7.10	7.95	9.01	10.22	13.72
Run VMG	4.12	5.25	6.12	6.89	7.80	8.85	11.89
Gybe Angles	142.5°	145.0°	151.3°	149.3°	144.5°	144.0°	144.5°

The owner certifies that he/she understands his/her responsibilities under ORC Rule and Regulations.

Time Allowances in secs/NM							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	931.4	753.5	693.1	674.7	665.7	652.2	648.7
52°	608.0	513.9	486.7	475.9	469.7	458.4	448.4
60°	573.0	499.5	466.2	451.7	443.8	433.9	419.6
75°	528.1	480.6	442.4	416.1	404.2	396.9	373.7
90°	514.1	455.2	422.3	397.0	371.1	358.2	344.4
110°	528.1	464.2	404.4	366.8	343.9	324.6	293.9
120°	554.2	474.8	414.7	367.5	329.1	306.3	273.3
135°	633.8	507.0	448.0	389.4	338.7	304.1	247.2
150°	756.8	593.9	506.8	452.6	399.8	352.3	262.3
Run VMG	873.8	685.7	588.5	522.7	461.6	406.8	302.9
Selected Courses							
Windward / Leeward	902.6	719.6	640.8	598.7	563.6	529.5	475.8
All purpose	682.8	564.7	507.9	473.6	446.8	424.0	388.2

Single Number Scoring Options		
Course	Time On Distance	Time On Time
Windward / Leeward	614.3	0.9767
All purpose	485.4	1.2360

Custom scoring options for Estonia

Single Number	Time On Distance	Time On Time
Coastal/Long Distance	531.3	1.1293
Triple Number Coastal/Long Distance Low	623.8	0.9619
Triple Number Coastal/Long Distance Medium	485.9	1.2347
Triple Number Coastal/Long Distance High	416.3	1.4414
Triple Number Windward/Leeward Low	811.1	0.7397
Triple Number Windward/Leeward Medium	614.1	0.9771
Triple Number Windward/Leeward High	517.9	1.1585

Performance Curve	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Coastal/Long Distance	899.7	676.9	574.9	511.3	465.7	425.7	363.5

Data in meters/kilograms (Metric)

HULL AND APPENDAGES

Class	Cape 31	LOA	9.550	VCGD	-0.315
Measurement	26/07/2021	Max. Beam	3.052	VCGM	-0.316
Measurer		Draft	2.452	RM Measured (kg·m)	72.4
HIN		Displacement	1.832	RM Default (kg·m)	68.4
Plan review		Wetted area	17.97	Limit of positive stability(°)	120.1
Hull construction	Solid	IMS L	9.332	Stability Index	113.6
Carbon Rudder	Yes	LSM0	8.700		
Light stanchions	Yes	Acc. length	9.550		
Trim tab	No	Sink (kg/mm)	14.35		

PROPELLER

Propeller Type	Folding 2 blades	PRD	0.381	EDL	1.060	ST3	0.180
Installation	Strut	PBW	0.095	ST1	0.055	ST4	0.105
Twin screw	No			ST2	0.180	ST5	0.275
PIPA	0.0035						

RIG

Forestay tension	Aft	P	12.530	E	4.500
Inner stay	None Fitted	IG	12.490	J	3.590
Carbon mast	Yes	ISP	13.710	BAS	1.190
Headsail furler	No	MDT1	0.106	FSD	0.000
Mainsail furler	No	MDL1	0.200	SFJ	0.330
Articulated bowsprit	No	MDT2	0.070	SPL	0.000
Non-circular rigging	No	MDL2	0.140	TPS	5.945
Fiber rigging	No	TL	1.400	BD	0.150
Runners/Checkstays	0	MW	0.200	MWT	81.00
Spreaders	2	GO	0.200	MCG	4.650

FLOTATION AND STABILITY

Inclining Test	Boom Inclining	SFFP	0.000	SAFP	9.565	W1	54.0	PD1	254.1	WD	4.370
Flotation Date	24/07/2021	FFM	0.697	FAM	0.729	W2	54.0	PD2	254.4	PLM	9000.00
Measurer		FF	0.701	FA	0.732	W3	54.0	PD3	259.6	GSA	1.0
Comment	pirita	LCFcl	5.182	LCFsh	5.370	W4	54.0	PD4	259.2	RSA	1.0
		SG	1.0000	HBI	0.937	LCFD	4.500				

MEASUREMENT INVENTORY

Id	Tank Type	Capacity	LCG	VCG	Condition	Description
1	fuel plastic	20.0	6.09		0-0	
1	Battery One battery		5.70			

MAINSAIL

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Maker	Material	Comment
1	1.12	1.51	2.12	3.06	3.81	36.79		02/01/2021	North Sails	Unknown	2021 3Di
31	1.11	1.51	2.12	3.03	3.79	36.63		04/12/2017	North Sails	Unknown	

HEADSAIL

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Btn	Flying	FT	Area	Measurer	Meas.Date	Maker	Material	Comment
1	0.11	0.63	1.11	1.99	2.85	3.71	12.46	Yes	No		24.37		05/01/2021	North Sails	Unknown	Light 2021
2	0.11	0.57	1.04	1.90	2.80	3.70	12.48	Yes	No		23.77		22/12/2020	North Sails	Unknown	Med. 2021
No2	0.10	0.56	1.03	1.90	2.77	3.66	12.40	Yes	No		23.41		02/12/2017	North Sails	Unknown	Black string
6	1.00	0.55	1.00	1.86	2.74	3.58	12.02	Yes	No		22.88		24/07/2021	North Sails	Unknown	J-2 oldest
5	0.11	0.56	1.01	1.86	2.70	3.63	12.19	Yes	No		22.62		24/07/2021	North Sails	Unknown	J-2
3	0.09	0.48	0.88	1.71	2.59	3.45	10.62	Yes	No		18.43		24/07/2021	North Sails	Unknown	J-4 old
4	0.11	0.50	0.90	1.74	2.62	3.50	10.43	Yes	No		18.40		24/07/2021	North Sails	Unknown	J-4 new

ASYMMETRIC SPINNAKER

Id	SLU	SLE	SL	SHW	SFL	Ratio	Area	Measurer	Meas.Date	Maker	Material	Comment
4	15.60	13.63	14.62	9.48	9.70	98%	115.99		24/07/2021	North Sails	Unknown	A2 2021
6	15.37	13.37	14.37	9.47	9.57	99%	113.64		24/07/2021	North Sails	Unknown	A2 old
3	15.40	13.74	14.57	8.85	9.94	89%	110.10		24/07/2021	North Sails	Unknown	A1,5 2021
2	15.05	13.40	14.23	7.70	9.01	85%	94.38		24/07/2021	North Sails	Unknown	A3
1	14.52	13.10	13.81	5.62	7.48	75%	68.96		24/07/2021	North Sails	Unknown	75%