## STONEWAYS VPRS

# Rating Certificate

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Yacht	Witchery	Rig	Bermudian Sloop
Sail number	141	Design	Hawk 20
TCC	0.808	Series / built	1993 / 1998
No spinnaker TCC	0.784	Crew limit	5 people
Performance indicator	'S		
Mainsail area	<b>13.59</b> m <sup>2</sup>	Mizzen / mizzen staysail area	<b>0.00</b> m <sup>2</sup> / <b>0.00</b> m <sup>2</sup>

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Mainsail area	<b>13.59</b> m <sup>2</sup>	Mizzen / mizzen staysail area	<b>0.00</b> m <sup>2</sup>	/	<b>0.00</b> m <sup>2</sup>
Upwind headsail area	<b>7.49</b> m <sup>2</sup>	Displacement / length	207		
Flying headsail area	<b>0.00</b> m <sup>2</sup>	Sail area / wetted surface	<b>2.38</b> (upwi	nd sails	s)

**0.00** m Sail area / wetted surface 2.38 (upwind sails) **20.88** m<sup>2</sup> 19.28 (upwind sails) Spinnaker area Sail area / displacement

Opininanti area	20.00 111			can area / alepiacement	10120 (	aprima cane,
Hull & appendages			source	Rig		
Hull Length	LH	<b>6.10</b> m	Р	Spar material		Aluminium a
Bow overhang	BO	<b>0.70</b> m	E	Forestay length	FL	<b>7.08</b> m
Stern overhang	SO	<b>0.20</b> m	E	Foretriangle base	J	<b>2.12</b> m
Waterline length	LWL	<b>5.20</b> m	С	Flying h/sail tack length	FHTL	m
Stern height	Y	<b>0.06</b> m	E	Spinnaker pole length	SPL	<b>2.38</b> m
Beam	MB	<b>2.26</b> m	P	Mainsail hoist	P	<b>8.05</b> m
Topside overhang	TSO	<b>0.19</b> m	E	Mainsail outhaul	E	<b>2.89</b> m
Freeboard at mast	FBI	<b>0.60</b> m	E	Boom above sheer	BAS	<b>0.78</b> m
Draught	T	<b>1.30</b> m	P	Mizzen hoist	PY	m
Empty weight	EW	<b>841</b> kg	P	Mizzen outhaul	EY	m
Fixed ballast weight	KW	<b>392</b> kg	P	Main sail		
Moveable ballast		None		Half width	MHW	<b>1.85</b> m
Keel type		Z4P1F1S2		Three quarter width	MTW	<b>1.06</b> m
Keel depth	KD	<b>1.10</b> m	E	Upper width	MUW	<b>0.59</b> m
Keel chord	KC	<b>0.35</b> m	E	Construction		Woven
Rudder type		Transom H	lung	Reefing		Slab
Decidal and all and a		0.00	_			

Kee	I type	2	Z4P1F1S2		Three quarter width	MTW	<b>1.06</b> m	S
Keel	depth	KD	<b>1.10</b> m	E	Upper width	MUW	<b>0.59</b> m	S
Keel	chord	KC	<b>0.35</b> m	E	Construction		Woven	
Rudde	r type		Transom Hung		Reefing		Slab	
Rudder	depth	RD	<b>0.80</b> m	E	Upwind headsail			
Rudder	chord	RC	<b>0.25</b> m	Ε	Luff length	HLU	<b>6.24</b> m	S

ridader chora	110	0.20 111	_	Lan longin	TILO	0.24 111	U
Propeller type		None		Luff perpendicular	HLP	<b>2.39</b> m	S
Propeller blades	PRN			Half width	HHW	<b>1.20</b> m	S
Propeller diameter	PRD	m		Three quarter width	HTW	<b>0.61</b> m	S
Mizzen staysail				Foot height	HFH	<b>0.20</b> m	E
Staysail luff length	LLY	т		Construction		Woven	
Staysail luff perp	LPY	m		Reefing		Change Sail	1

Staysall	iuii peip	LFT	111	Reeling Change Sail	
Flying headsa	il			Spinnaker	
FH It	uff length	FHLU	m	* Luff length SLU 6.54 m	S
FH leed	ch length	FHLE	m	* Leech length SLE 6.54 m	S
FH h	nalf width	FHHW	m	* Half width SHW 3.83 m	S
FH f	oot width	FHFL	m	* Foot width SFL 3.91 m	S
* OR	Area	FHA	m²	* <b>OR</b> Area <i>SPA</i> $m^2$	
			•		

Measurement source: A=Authenticated; O=Owner measured; S=Sister vessel; P=Published; C=Calculated **System data source: D**=Database derived; **E**=Estimated TCC calculated on 10/01/2024 at 10:56:55

IMPORTANT: see notes on page 2 for appropriate use and validity

### Certificate notes

#### 1. Correct use of the published ratings

Multiply the elapsed time by the TCC to obtain corrected time.

The TCC is calculated for the declared sail plan, which may or may not include a downwind headsail (spinnaker). For boats without a downwind headsail the words "(no spinnaker)" appear after the TCC.

Boats with a full sailplan also have a "no spinnaker TCC" for use only when racing in a non-spinnaker class.

If spinnaker and non-spinnaker boats race together, non-spinnaker boats will have an advantage on upwind legs, and a disadvantage off the wind.

#### 2. Data quality

The fairest ratings will result from accurate measurement; ratings calculated using a significant amount of estimated and published data are far more likely to be out of line with expectations than those using measured and sister ship data. Owners must notify the rating office of any changes or errors in the rating data.

#### 3. Applicability

This certificate is issued for the sole purpose of correcting elapsed times recorded in yacht races. It is not to be used for any other purpose.

#### 4. Validity

Unless stated to the contrary, or superseded, this certificate is valid until the end of the calendar year in which it was issued. The validity can be checked by referring to the certificates published at: www.vprs.org/ratings.html

#### Additional information

Empty weight includes outboard which must be carried when racing.

#### 6. Stability

An SSS base value provides a guide to the stability of a boat but does not guarantee safety or freedom of risk from capsize or sinking. The safety of a boat is the sole responsibility of the skipper who must ensure that the boat is fully found, thoroughly seaworthy, and operated by a crew sufficient in number and experience who are physically fit to face bad weather. The SSS base value does not constitute any warranty as to the seaworthiness of any boat or the safety of any gear and shall not limit the absolute responsibility of the skipper of the boat.

Guard rails fitted No

Dayboat Yes

**SSS base value** 3 Valid only for data on this certificate.