## Explanation DESIGN COMPARISON TABLE

**LOA:** Length overall – overall length of boat.

**BOA**: Beam overall - overall width of boat.

**DRAFT**: Measured from waterline to lowest hull point.

<u>DWL –DESIGN WATERLINE</u>: The waterline drawn on the plans and transferred to the hulls, sitting at this waterline the boat will displace the calculated weight of the boat.

<u>DISPLACEMENT</u>: The weight of the boat when floating at the Designed Waterline DWL point (see above) ( ie total loaded boat.)

**DRY WEIGHT**: The weight of the completed boat without Payload which is fuel, water, stores or personal gear, so as built with all fixtures.

BRUCE NO\POWER TO WEIGHT RATIO: This shows us the relationship between sail area and weight in a comparable figure (ie, how well she will sail). The higher the figure, the better. The "Light" figures shown in the design comparison table are for normal Coastal cruising load, "Heavy" is for fully stocked ocean cruising. (FORMULA = Cube root of displacement in Pounds, divided into the square root of the total sail area in feet) (Sail Area, we use main and genoa)

**BRIDGEDECK CLEARANCE**: Is the distance between the water and lowest point of the underwing. Important seaworthiness factor.

<u>WATERLINE BEAM TO LENGTH RATIO</u>: Shows the relationship between the length and width of one hull at Waterline. The higher the figure the more efficient the boat is.

<u>WETTED AREA</u>: Is the total under water area for both hulls and indicates parasitic drag. The more area in the water the more there is to drag through it.

**ESTIMATED BUILDING HOURS AND MATERIALS COSTS**: These are our estimates for a complete boat without spinnaker, radar, water makers etc.

Personal choices in building, finishing and equipment can affect these greatly and these estimates do not include tools, rent, electricity etc. We base these on feedback from customers and try to be as accurate as we can but obviously this is a very variable thing. We used to estimate a very low budget option to show what it "could" be built for but realise that most people now want a well finished cat so these estimates are an average of what the boats are being built and launched for MATERIAL COST ONLY. The new designs we base on similar volume boats. Do your own research – use these as a general guide only.

<u>PAYLOAD</u>: This is roughly how much personal gear, extra equipment, stores, water, fuel etc. the boat will carry before sitting on DWL. Found by subtracting the as built, dry weight from the displacement figure.

**DRY WEIGHT**: Subtract the Payload from the Displacement, and is what the weight of the boat should be, as built, not loaded. This is not always achieved and so the Payload is reduced – care and consideration must be given to this fact.

<u>**DIESELS**</u>: We understand that diesel engines are a popular choice for many people, they are therefore an option on those designs that can carry the extra weight. Shown in design comparison table.

**CONSTRUCTION MATERIAL OPTIONS**: See section in Table: **W** = Western Red Cedar Strip; **D** = Durakore strip; **DP** = Duflex Panels; **F** = Foam which could be straight Foam or Duflex Foam depending on design.

## Schionning Designs Pty Ltd ACN: 097 225 226

P.O. Box 42, Lemon Tree Passage NSW 2319 Albatross Marina, Lemon Tree Passage NSW 2319

Phone: +61 2 4982 5599 Fax: +61 2 4982 5499 Email: info@schionningdesigns.com.au

## **DESIGN COMPARISON TABLE**



Range	Model	LOA (m)	BOA (m)	Draft Boards up.	Headroom Hull/Bridge Deck	Mast Height	Sail Area Main/ Genoa	Payload (kg)	Displace- ment (kg)	Immer- sion kg/cm	Power to Weight ratio Bruce No. Heavy/Light	Bridgedeck Clearance (m)	Beam To Length ratio	Wetted Area	Estimated Building Time Hours Kit/Self-cut	Estimated Material Cost *Basic Sailaway	Est. Motor Speed	Est. Sailing Speed	Construction Material Options	Motor Option OB/D
																	Cr To	Cr T	ор	
	930	9.30	6.1	0.431	1.85/1.6	12	50.5	800	2980	113	1.25/1.38	0.6	12:01	17.9	3000/3500	\$100,000	6 8.5	10 2	0+ W or D	1 x OB
Cosmos	1100	11.00	6.6	0.46	2.0/1.87	15	75	1000	3900	139	1.39/1.45	0.65	12.3:1	22.6	3800/4500	\$165,000	7 9		0+ W or D	2 x OB
	1160	11.60	6.8	0.48	1.9/1.92	16	84	1500	5200	216	1.33/1.38	0.65	11.4:1	26.8	4500/6000	\$180,000	7 10	10 2	0+ W or D	2 OB/D
	1250	12.50	6.9	0.465	2.22/1.8	17	95	1800	5630	209	1.41/1.50	0.7	12.2:1	29.5	4800/6000	\$190,000	7 10	10 2	0+ W or D	2 OB/D
	1250S	12.50	6.9	0.54	2.22/1.8	17	95	2500	7000	210	1.34/1.40	0.7	11.7:1	31.7	5000/6300	\$230,000	7 10	10 2	0+ D	2 OB/D
	1320	13.20	7.5	0.49	1.89/2.0	17.5	100	1800	6274	214	1.36/1.43	0.8	12.3:1	30.9	5200/6500	\$215,000	7 10	10 2	0+ W or D	2 OB/D
	1430	14.30	8.16	0.467	2.0/2.0	18	110	2000	7000	247	1.38/1.46	0.8	12.3:1	34.3	5800/6900	\$290,000	7 11		0+ W or D	2 OB/D
	1750	17.50	9.41	0.65	2.06.2.07	22	150	3000	13200	330	1.40/1.44	1	13.3:1	51.3	7500/8500	\$340,000	8 12	10 2	0+ W or D	2 D
Wilderness	930	9.30	6	0.4	1.9/1.53	13	50	700	2400	96	1.33/1.47	0.65	13:01	18	2800/3500	\$110,000	6 8	9.5	0+ D or F	1 x OB
	1030	10.30	6.2	0.4	1.85/1.85	13.5	60.6	900	3200	135	1.33/1.45	0.65	12:01	20	3500/4000	\$130,000	6 9	10 2	0+ DPorF kit	1 x OB
	1100	11.00	6.5	0.45	1.94/1.88	15	76	1600	4770	164	1.31/1.41	0.65	11.7:1	24.4	3800/4500	\$160,000	7 10	10 2	0+ DPorF kit	2 OB/D
	1230	12.30	7	0.53	1.95/2.1	17	95	1800	6350	174	1.34/1.41	0.8	12.5:1	30.8	4000/5000	\$200,000	8 10	10 2	0+ DporF kit	2 OB/D
	1320	13.20	7.4	0.45	1.94/1.85	17	96	2000	6289	206	1.32/1.41	0.8	12.4:1	31.1	5000/6000	\$215,000	9 10	10 2	0+ DPorF kit	2 OB/D
	1480	14.80	7.7	0.451	2.03/1.93	18	99	1900	7000	229	1.35/1.48	0.95	14.1:1	35.5	5500/6600	\$300,000	9 10		0+ DPorF kit	2 OB/D
	1620	16.20	8.5	0.56	1.97/2.04	19.5	143	2500	10800	301	1.37/1.47	0.925	13:01	46.4	6200/7200	\$350,000	9 10	10 2	0+ DPorF kit	2 OB/D
	1160	11.60	6.54	0.48	1.85/1.9	16	86	1100	4543	157	1.41/1.53	0.7	13.7:1	24.9	4000/4700	\$165,000	7 11	11 2	0+ D	2 x OB
	1320	13.20	7.38	0.46	1.9/1.9	17	100	1500	5608	200	1.48/1.55	0.8	13.5:1	29.2	5000/5600	\$215,000	7 11		0+ D	2 OB/D
Waterline	1480	14.80	8.02	0.475	2.0/1.92	18	110	2000	7060	238	1.47/1.52	0.9	14.8:1	33.4	5500/6500	\$280,000	10 12		0+ D	2 OB/D
	1620	16.20	8.35	0.51	2.1/1.97	19.2	132	1900	8656	274	1.51/1.53	0.925	14.8:1	41	6000/7000	\$310,000	8 10		0+ D	2 OB/D
	1750	17.50	9.5	0.55	2.08/2.05	23	179.5	2000	9068	299	1.60/1.70	0.95	15.3:1	42	7200/8000	\$330,000	10 12		0+ D	2 x D
	1730	17.50	9.0	0.55	2.00/2.03	23	179.5	2000	9000	299	1.00/1.70	0.93	13.3.1	42	7200/8000	φ330,000	10 112	1/1	0+ D	2 X D
Growler	1150	11.50	7	0.4	N/A/Sit	16	81	800	2800		1.47/1.57	0.8	15:01	21.8	na/4000	\$120,000	7 11	13 2	0+ D	2 x OB
	1500	15.00	11.6	0.4	N/A/Sit	20	116	1000	4000		1.70/1.88	0.9	17:01	25	na/5000	\$160,000	8 12	14 2	0+ D	2 x OB
Lina	1220	12.20	7.5	lo 4	1 5/1 45	17	0.4	800	2700	144	1.47/1.60	In 0	15:01	24.0	2500/4000	£100 000	7 111	10	0.10	2 x OB
Line			7.5	0.4	1.5/1.45		81		3700			0.8		21.8	3500/4000	\$180,000	7 11		0+ D	
Honours	1400	14.00	8.2	0.4	2.8/2.8	18	94.5	1000	4500	170	1.48/1.60	0.9	16:01	25.2	4000/4700	\$200,000	7 11	14 2	0+ D	2 x OB
Radical Bay	8000	8.00	5.76	0.3	1.7/N/A	8.5	41	300	1100	66		0.68	14.5:1		1500/2000	\$60,000	5 8	12 2	0+ D	1 x OB
Prowler	7000	7.00	4.87	0.5	1.64/2.0	NA	NA	400	2500	68	NA	0.57	12.8:1	17.4	1800/2800	\$50,000	10 22	NA N	A D	2 x OB
	9000	9.00	4.9	0.4	1.74/1.9	NA	NA	700	2900	84	NA NA	0.7	15.5:1	20.4	2500/3000	\$90,000	20 25		A D	2 x OB
	1100	11.00	6.2	0.55	1.95/1.9	NA	NA	1500	6000	130	NA	0.8	15.4:1	34.2	4000/6000	\$180,000	18 26		A D	2 x D
	420	12.80	6.7	0.9	2.0/2.0	NA	NA	1500	8000	188	NA	0.75	16.4:1	39	5200/7200	\$250,000	20 26	NA N	A D	2 x D
	580	17.70	8.55	1	Full/Full	NA	NA	2500	21000	316	NA	1	16.6:1	44.5	7500/9000	\$450,000	20 27		A D	2 x D
Alaskan	390	11.90	6.42	0.68	1.9/1.9	NA	NA	2800	8800	172	NA	0.8	13.8:1	40.8	5000/6700	\$210,000	15 22	NA N	A D	2 x D
	490	14.00	7.15	8.0	2.0/2.0	NA	NA	3500	15020	252	NA	1	13.7:1	57.6	6200/8200	\$350,000	18 24	NA N	A D	2 x D
	4400	144.00	0.0	0.0	4.05/4.0		L NIA	0500	0000	170	L 110	0.0	40.00.4	07.0	4000/0000	0400 000	140 140	INTA IN	A 1.47 D	To . D
Aqua Play	1100	11.00	6.6	0.8	1.95/1.9	NA	NA	2500	8262	172	NA NA	0.8	12.06:1	37.2	4000/6200	\$180,000	12 18		A W or D	2 x D
	1250	12.50	6.9	8.0	1.9/2.0	NA	NA	3000	9500	226	NA	0.75	11.7:1	41.1	6200/8000	\$250,000	12 15	NA N	A W or D	2 x D
Signature	1320	13.20	7.6	0.467	1.9/1.9	17	100	1400	5400	188		0.8	13.7:1	28.9	4500/5500	\$200,000	7 11	11 2	0+ D	2 x OB
Globetrotter	2000	20.80	11.49	0.54	1.95/1.95	24	179	4500	16000	408	1.65/1.75	1.1	16:01	60.7	7500/8500	\$450,000	10 12	15 2	0+ D	2 x D