


INTERNATIONAL 2.4 METRE CLASS

Rating Certificate

National Letters and Sail Number	SWE 438
ISAF Plaque no.	614
Designer	Håkan Södergren
Builder	Master Yacht Int.
Building Year	2007
Owner	Hasse Malmsten
Owners adress	Kaponjärsgatan 3 413 02 Göteborg

Supersedes former certificate, dated		Swedish Sailing Federation
This certificate is dated	2007-07-20	
Validity confirmed by	<i>Kjell Malmsten</i>	
Measurer: Gunnar Gustavsson	2007-07-14	Stamp of Authority
Complementary measurement: Per Lindell	2007-04-28	

Overall Length		4.106	
Add (Overhang Forward to L ₁)		0.332	
Add (Overhang Aft to L ₁)		0.711	
Subtract Total Overhang		1.043	1.043
Measured Length			3.063
Girth at Bow		0.313	
Subtract (Twice Vertical Height at Bow		0.240	
0 at Bow		0.073	
Add 1,5*0 at Bow, (min 0.108)			0.110
Girth at Stern		1.053	
Subtract (Twice Vertical Height at Stern		0.565	
0 at Stern		0.488	
Add 1/3 0 at Stern, minimum 0.080			0.163
Add any penalty at 0 ₂			
Correct length, L			3.335
Subtract (Skin d to d ₁ Port		0.000	
Subtract (Chain d to d ₁ Port		0.000	
d Port		0.000	
Subtract (Skin d to d ₁ Starboard		0.000	
Subtract (Chain d to d ₁ Starboard		0.000	
d Starboard		0.000	
Add d			0.000
2d			0.000
Add to find sum of measurements			3.335
Add (Mean Freeboard Bow 0		0.340	
Add (Mean Freeboard Midship D		0.317	
Add (Mean Freeboard Stern 0 and 0 ₂		0.317	
Sum of Freeboards		0.974	
Subtract (1/3 sum) FREEBOARD, F, max	0.292		0.292
Beam penalty			3.043
Tumblehome penalty			0.000
\sqrt{S}			0.000
Total of Measurements			2.644
Divide by 2.37 = RATING =			5.687
Displacement penalty			2.400
Draft penalty			0.000
Final Rating			0.000
			2.400

National Letters and Sail Number	SWE 438
ISAF Plaque no.	614
This certificate is dated	2007-07-20
Overall Length	4.106
Add (Overhang Forward to L	0.437
(Overhang Aft to L	0.711
Subtract Total Overhang	<u>1.148</u>
Water Line Length	2.958
Beam at 1/3 Height of Midship Freebord	0.000
Maximum draft	0.000
Tumble Home	0.000
Weight by weighing	<u>253 kg</u>
with 35 kg ballast	<u>288 kg</u>
Minimum weight required by Rule	<u>284 kg</u>

Areas of Sails	I = 3.750
	J = 1.560
	P = 4.595
	E = 1.960
Mainsail =	4.503
Foretriangle Total =	2.925
Foretriangle Total x 0.85 =	<u>2.486</u>
Sail Area for Rating = S =	<u>6.989</u>
\sqrt{S}	2.644

If in doubt, the Certificate can be checked against the official website: www.ssf.se/tk/24/cert24.asp