


INTERNATIONAL 2.4 METRE CLASS

Rating Certificate

National Letters and Sail Number	SWE 431	
ISAF Plaque no.	456	
Designer	Peter Norlin	
Builder	Björndahl	
Building Year	2005	
Owner	Jan Nordin	
Owners adress	Horstagränd 5 861 91 Timrå	
Supersedes former certificate, dated	2008-09-11	Swedish Sailing Federation
This certificate is dated	2008-09-12	
Validity confirmed by	<i>Kjell Martinsson</i>	
Measurer: Esko Hyppä	2005-05-15	Stamp of Authority
Complementary measurement: Håkan Kellner	2007-05-29	

Overall Length			4.181
Add (Overhang Forward to L ₁)	0.425		
Add (Overhang Aft to L ₁)	0.661		
Subtract Total Overhang	1.086	1.086	
Measured Length			3.095
Girth at Bow	0.312		
Subtract (Twice Vertical Height at Bow)	0.240		
0 at Bow	0.072		
Add 1,5*0 at Bow, (min 0.108)		0.108	
Girth at Stern	0.898		
Subtract (Twice Vertical Height at Stern)	0.529		
0 at Stern	0.369		
Add 1/3 0 at Stern, minimum 0.080		0.123	
Add any penalty at 0 ₂			
Correct length, L		3.326	3.326
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			3.326
Add (Mean Freeboard Bow 0)	0.327		
Add (Mean Freeboard Midship D)	0.291		
Add (Mean Freeboard Stern 0 and 0 ₂)	0.289		
Sum of Freeboards	0.907		
Subtract (1/3 sum) FREEBOARD, F, max	0.292		0.292
			3.034
Beam penalty			0.000
Tumblehome penalty			0.000
\sqrt{S}			2.654
Total of Measurements			5.688
Divide by 2.37 = RATING =			2.400
Displacement penalty			0.000
Draft penalty			0.000
Final Rating			2.400

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This certificate is dated	2008-09-12
Overall Length	4.181
Add (Overhang Forward to L	0.542
(Overhang Aft to L	0.661
Subtract Total Overhang	<u>1.203</u>
Water Line Length	2.978
Beam at 1/3 Height of Midship Freebord	0.000
Maximum draft	0.000
Tumble Home	0.000
Weight by weighing	<u>254 kg</u>
with 35 kg ballast	<u>289 kg</u>
Minimum weight required by Rule	<u>289 kg</u>

Areas of Sails	I = 3.750
	J = 1.560
	P = 4.650
	E = 1.960
Mainsail =	4.557
Foretriangle Total =	2.925
Foretriangle Total x 0.85 =	<u>2.486</u>
Sail Area for Rating = S =	<u>7.043</u>
\sqrt{S}	2.654

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