

SAILING RIG SPECIFICATION

SPAR:

Item	Required section modulus, moments of inertia*	Recommended section**, length
MAIN MAST		
Mast	$I_y = 890cm^4$, $I_x = 430cm^4$	200x40x4.1 mm, l=15900 mm
Boom	Vertical SM= 112 cm ³ ; horizontal SM= 56 cm ³	200x40x4.1 mm; l=5340 mm
Upper spreader	$I_{xy} = 4.8^4 cm^3$; close to mast SM=0.016 cm ³	Pipe 70x3 mm; l=1405 mm
Lower spreader	$I_{xy} = 11.9^4 cm^3$; close to mast SM=0.031 cm ³	Pipe 70x3 mm; l= 915mm

SHROUDS AND STAYS:

Item	Breaking strength	1x19 SS wire, d, mm	Approx.length, mm***
MAIN MAST			
Lower shroud (single)	83.9 kN	10	6175
Intermediate shroud	51.1 kN	8	11470
Upper shroud	66.6 kN	10	15280
Forestay	75.0 kN	10	15520
Backstay (double)	110.7 kN (for single)	10	17390
Inner stay	60.0 kN	8	11840

*** - length includes turnbuckle and fittings

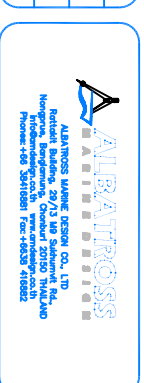
SAILS:

Item	Area, m ²	Luff,mm	Leech,mm	Foot,mm	Material, g/m ²	Notes
MAIN MAST						
Mah	36.1	14240	14740	5060	355	2 reefpoints
Genoa	44.5	14880	13540	6535	355	Furling
Staysail	14.9	10955	10315	2925	355	Furling
Storm Jb	6.9	6385	4780	3030	500	
Topsail	6.1	3370	5265	3290	500	

IMPORTANT NOTES:

1. Moments of inertia and section modulus are given for guidance in selection of a suitable mast section. Mast builder is to ensure fitness of section chosen.
2. Moments of inertia and section modulus do not include additional reinforcements, stiffenings or compensation at halyard exits, etc.
3. Mast stiffening and taper details to be confirmed with designer prior to commencement of work

Design:	AMD1250
Title:	SAILS AND RIG PLAN
Drawing No:	AMD1250.SP.01
Client:	



Date:	30/01/2008	Scale:	1:40
Sheet 01	Sheets 1	Edition	V2
Designed:	AN		
Checked:			
Approved:			
Filename:	AMD1250.dwg		