



ATLANTIC-2600

Ocean Buoy
Installation & Service Manual

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1.0	Manual Launch	April 2011	C. Procter	
1.1	Max Mooring Load adjustment	May 2012	M. Walker	
1.2	Breather Unit	September 2013	P. Rainey	
1.3	Mooring diagram update	September 2015	D. Tomaszewicz	
2.0	Contact details	April 2016	J. Dore	
2.1	Warranty V2-3 & Footer	February 2016	S.Amirthalingam	M.Nicholson
2.2	Remove spec and warranty	November 2018		



Introduction

Congratulations! By choosing to purchase a Sealite Buoy, you have become the owner of one of the most advanced rotationally-moulded polyethylene marine buoys in the world.

Sealite Pty Ltd has been manufacturing buoys for over 25 years, and particular care has been taken to ensure your buoy gives years of service.

As a commitment to producing the highest quality products for our customers, Sealite has been independently certified as complying with the requirements of ISO 9001:2008 quality management system.

By taking a few moments to browse through this booklet, you will become familiar with the versatility of your buoy, and be able to maximise its operating function.

Sealite Buoy Division

Sealite marine buoys are manufactured on-site from rotationally-moulded UV-stabilised polyethylene, and are designed to offer a low-maintenance, high visibility solution to marine navigation.

The Sealite buoy division provides turn-key production of navigation buoys. From tooling development, raw materials selection, and production, to final testing and inspection, Sealite guarantees superior quality and fast turn-around times.

Sealite's buoy products are available in a wide range of configurations and sizes, and can be economically shipped worldwide.

Why Choose Polyethylene Buoys?

- No painting
- Inhibits growth
- Increased interval between servicing
- Routine maintenance on location
- Easily repaired in the unlikely event of damage
- Lightweight for ease of deployment and maintenance
- Environmentally friendly – no use of toxic antifouling paint

Mooring Requirements & Regulations

Please contact your local authority for any specific requirements regarding the deployment of buoys. IALA also has guidelines and recommendations that should be followed.

All information given in this manual is advisory only. Please consult with your local authority before deploying your buoy products.

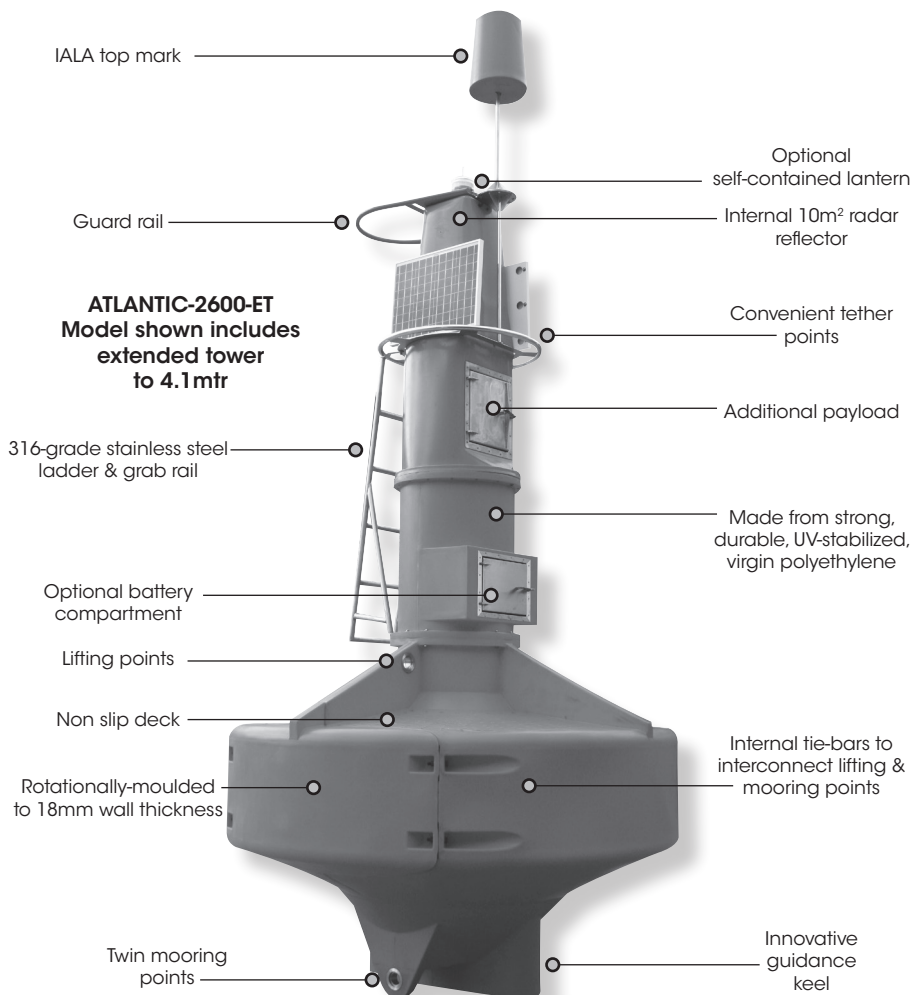
Local conditions that need to be considered include:-

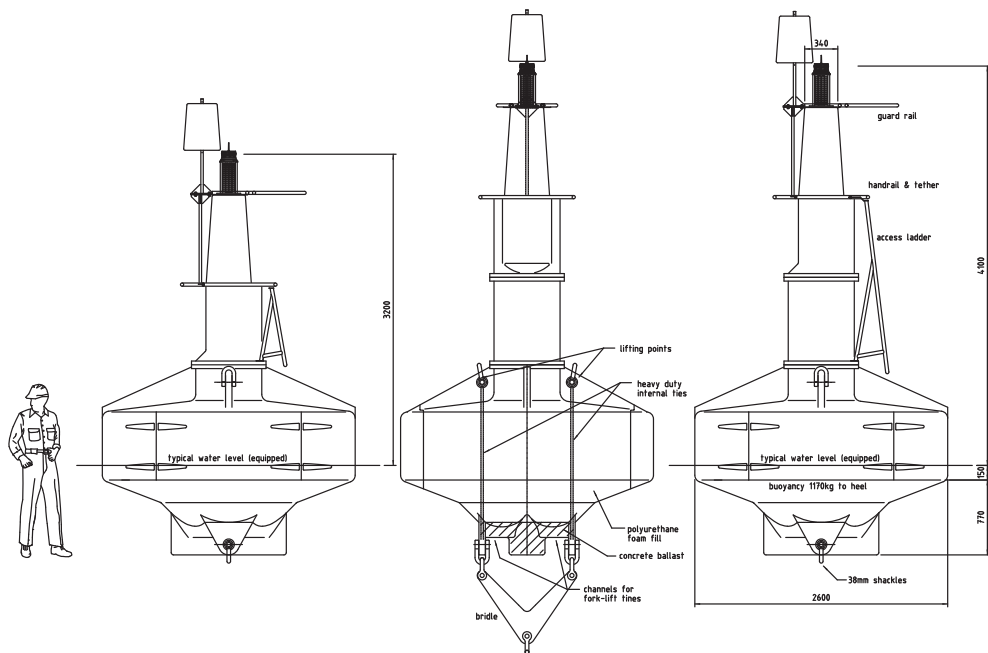
- Water depth
- Maximum currents
- Maximum wind speeds
- Sinker size and weight

ATLANTIC-2600 Ocean Buoy

The ATLANTIC-2600 is a robust, rotationally-moulded polyethylene navigation buoy designed for offshore port and coastal applications.

Product Features & Technical Specifications

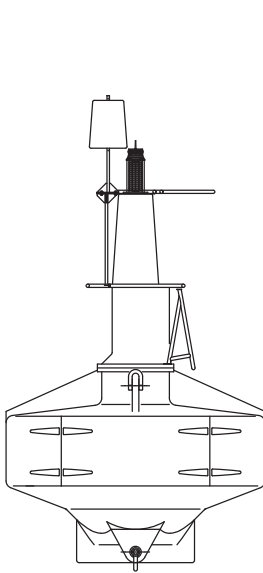




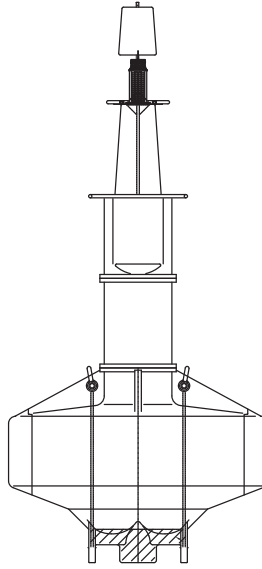
**ATLANTIC-2600
Standard Model**

**ATLANTIC-2600-ET
Model includes extended tower**

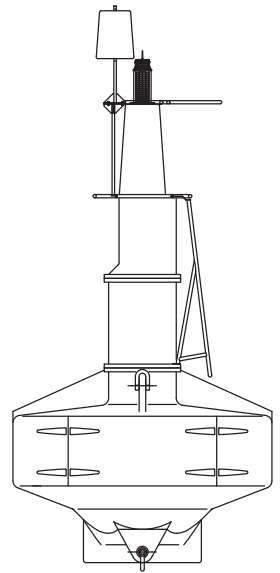
ATLANTIC-2600 Product Components



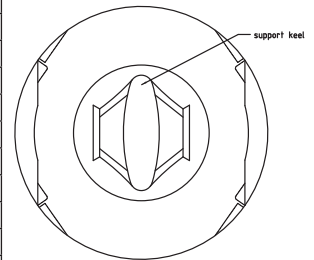
ATLANTIC-2600
Standard Model



ATLANTIC-2600-ET
Model includes extended tower



No	Description	Standard Model	Extended Tower
		Qty	
1	Atlantic Float Section	1	1
2	Atlantic Float Section Side Panels	2	2
3	Atlantic Tower	1	1
4	Mid Section	-	1
5	Ladder	1	1
6	Grab Rail	1	1
7	Guard Rail	1	1
8	Day Mark Mounting Plate (Optional)		
9	Atlantic Lug Bushes	4	4
10	G316 S/S Bolt. M10x100mm Long	16	32
11	G316 S/S Flat Washer	32	64
12	G316 S/S Spring or Locking Washer	16	32
13	G316 S/S Plain Nut	16	32
14	G316 S/S Bolt M16 x 90mm	8	8
15	G316 S/S M16 Flat Washer	16	16
16	G316 S/S M16 Spring Washer	8	8
17	G316 S/S M16 Plain Nut	8	8
18	Galvanised Grade M Shackle Ø38 with Ø44 pin, inside width 70mm x 137mm	2	2
19	Galvanised Grade S Shackle, Ø32mm	2	2
20	Galvanised Grade S Shackle, Ø38mm	1	1
21	Bridle Plate	1	1
G316 S/S = Grade 316 Stainless Steel			



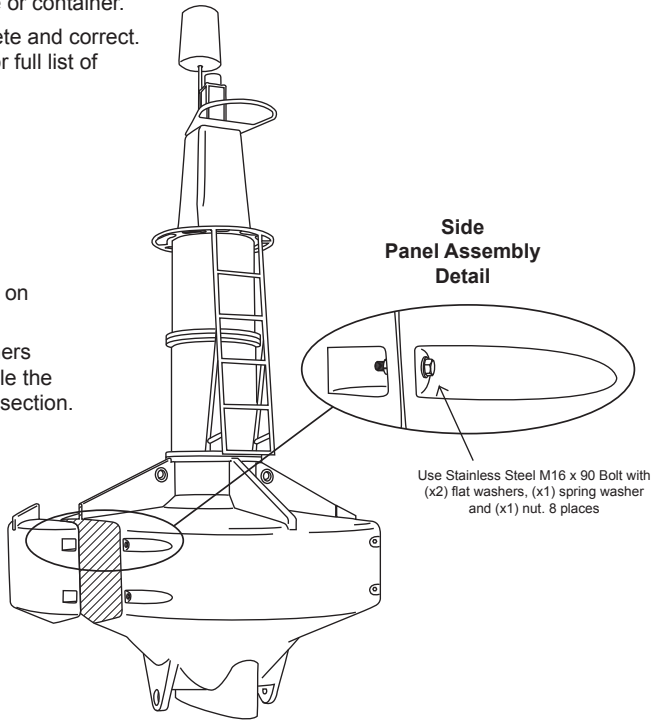
Assembly Instructions

Check Components

- Unload all components from crate or container.
- Check all components are complete and correct. Use table on the previous page for full list of components.

Prepare the Float Section

- Position the Atlantic Float Section on solid, level ground.
- Using the 8 x M16 bolts, flat washers spring washers and nuts; assemble the float side panels to the main float section.



Prepare Tower Section

- Fit the grab rail to the tower section
- Fit the guard rail and top mark support
- Fit the top mark and the lantern to the top of the tower section
- Fit the mid section to the tower (extended tower model only)
- Fit the ladder assembly
- Fit any day mark brackets
- Fit the tower section to the float assembly using 16 x M10 Bolts, washers and nuts
- Final Inspection:
 - o Check all bolts are tightened
 - o Check lantern is working correctly
 - o Check battery (if fitted) is secured properly
 - o Check battery door (if fitted) is latched properly to form a water tight seal
- Ensure the lug bushes are fitted to the mooring bushes of the buoy
- Fit the mooring assembly to the mooring points

Sealite Breather Unit

How it Works

Inside the breather unit, is an air channel which forms in the shape of an S-Bend which runs from the M16 threaded hole to a small hole located on the other side.

This channel, fills with water and spills out through the small hole, allowing the water to effectively drain from the buoy and at the same time, preventing water from entering into the buoy through the small hole.

Installation Instructions for Breather Units (For Products which Contain Sealite's Power Packs)

1. Unscrew the white plug located at the side/base of the buoy
2. Apply a small amount of marine grade silicon adhesive to the thread of the breather valve
3. Carefully screw in the breather unit ensuring that the arrow's direction is pointing down.



Mooring Assembly Instructions

Check Components

- Unpack all Mooring and check all components are complete and correct.

Prepare & Attach Chain

- Fit and secure 1 x Ø38mm Shackle and 1 x Ø38mm Swivel Eye to the base of the bridle.

Note: All Shackles must be positively locked. For example use 3mm Stainless Steel wire to lock the pin eye, or use a shackle pin with nut and split pin.

- Fit and secure a length of chain to the Swivel Eye using 1 x Ø38mm Shackle.

Note: Please use the guides below to determine the correct chain size and length.

- Fit and secure the Bridle to the Buoy using 2 x Ø32mm Shackles. Place Ø36mm washers to either side of the bridle plate to pack the Shackle for a neat fit.

Attach Mooring Block

- Fit and secure the Chain to the Mooring Block.
- The Buoy is now ready for deployment.

Chain Size Guide

Water Depth		Recommended Chain Size (from swivel to mooring block)
Metres	Feet	
6 to 14	20 to 46	44mm
14 to 22	46 to 72	38mm
22 to 32	72 to 105	32mm
32 to 50	105 to 164	25mm
50 to 75	164 to 246	22mm

Chain Length Guide

	Recommended Length of Chain	Maximum Water Depth
Best Practice (Up to 6kts current)	3 x Water Depth	50m
For Reduced Water Circle (Current 2kts to 4kts)	2.5 x Water Depth	75m
For Minimum Water Circle (use only where current <2kts)	Not less than 2 x Water Depth	75m

ATLANTIC-2600 Mooring Diagram

NOTES:-

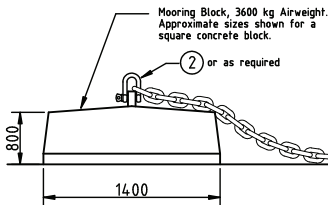
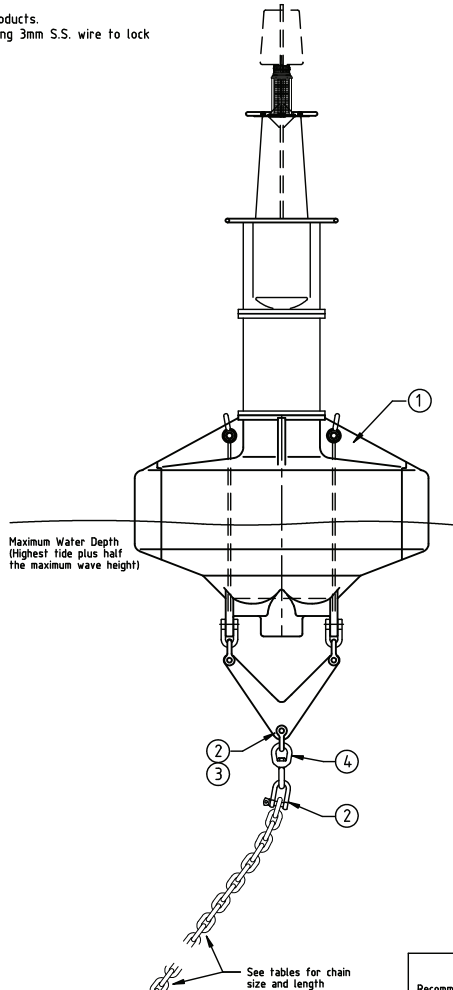
- 1/ Shackles, swivel and chain are to be load rated products.
2/ All shackle pins are to be positively locked. eg using 3mm S.S. wire to lock pin eye, or use shackle pin with nut and split-pin.

Water Depth		Recommended Chain Size (mm) (from swivel to mooring block)
Metres	ft	
6 to 20	20 to 65	44
20 - 30	65 - 100	38
30 - 45	100 - 150	32
45 - 70	150 - 230	25
70 - 105	230 - 345	22

CHAIN SIZE

	Recommended Length of Chain	Maximum Water Depth (m)
Best Practice (up to 6kts current)	3 x Water Depth	50
For Reduced Watch Circle (where current is 2 to 4 kts)	2-1/2 x Water Depth	75
For minimum Watch Circle (use only where current < 2kts)	Not less than 2 x Water Depth	75

CHAIN LENGTH



General Note
Recommendations given herein are advisory only. As each buoy installation varies, the buoy operator should establish fitness for purpose prior to installation.

1007			
4	Swivel, Eye to Eye $\phi 38$ or larger	1	15
3	S.S Washer, Diam 42	as requ'd	-
2	D-Shackle Grade S, $\phi 38$ with $\phi 41$ pin	3	22
1	slb2600_buoy_assemblyXX.dxf	1	970
Item	Material Description	Qty	Wt(kg)



Marine Buoy Maintenance

Sealite Marine Buoys are designed to require very little maintenance. We recommend the buoy be inspected annually. Inspection may need to increase depending on the local conditions and the position of the buoy.

IALA Recommendation AISM E-107 suggests moorings are inspected annually.

Marine Buoy – Annual Maintenance

- Visually inspect buoy for damage
- Inspect the top mark for any damage. Repair any broken or damaged section.
- Clean buoy of animal debris

Mooring – Annual Maintenance

- Check and clear the tail and ride chains from shells and algae.
- Check for wear on any shackle axis and check the tapered pins. Any worn shackles must be replaced.
- Check the free movement of each swivel around its head. If any swivel head sticks it must be replaced.
- Check every link of the thrash length of the chain. Check the diameter of the nips and sides and also inspect the welds on every link.
- If depth allows, a worn riding chain may be reversed.
- Change a chain when any link shows excessive wear.
- Chain must be replaced if any link wears to less than 3/5 of the original diameter.

Mooring – Biannual Maintenance

- Inspect the ground chain and sinker.

Lanterns – Maintenance

- Please refer to the Installation Manual for the specific Marine Lantern fitted to the Buoy.



Notes



Sealite Buoy Warranty

Refer to Sealite website: www.sealite.com