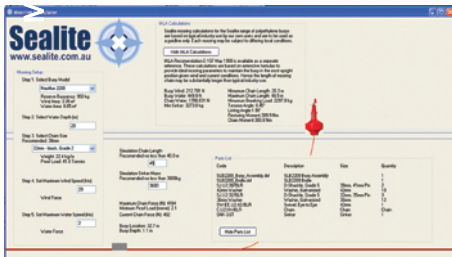




*"Our experience
for your convenience"*



Sealite can provide turn-key mooring solutions for the range of buoy products, enabling complete systems to be containerised and delivered to customer sites around the world.

As a service to valued customers, Sealite has developed an advanced mooring calculator based on IALA guidelines and experience from major users.

Known as SeaMoor™, this facility is available free of charge by contacting Sealite.

The system simulates site mooring based on the following easy steps:

Step 1. Select Buoy Model

Customers select which Sealite buoy they're planning to use in their installation.

Step 2. Select Water Depth

Customers select the water depth of their proposed installation.

Step 3. Confirm Recommended Chain Size

The calculator will recommend a chain size at this point, which the customer can confirm or choose a larger or smaller size. The calculator will perform simulations based on this data.

Step 4. Set Maximum Wind Speed

Users enter the likely maximum wind speed. Wind speed will affect the buoy performance in different ways, depending on the exposed wind area of the navaid.

Step 5. Set Maximum Current

Customers enter the maximum water speed, which will affect both the buoy and chain.

Step 6. Simulate Chain Length

The calculator will recommend a chain length at this point, based on the available information entered. Customers can adhere to this information, or select their own length. The calculator will perform simulations based on this data.

Step 7. Simulate Sinker Mass

The calculator will recommend a sinker mass, based on the available information entered. Customers can adhere to this information, or select their own mass. The calculator will perform simulations based on this data.

The calculator will then simulate navaid mooring using all of this available data, and produce a parts list of required components.

The Sealite Advantage

- Complete range of mooring chain & accessories to compliment Sealite buoy products
- IALA recommended mooring solutions calculated with Sealite advanced SeaMoor™ mooring calculator
- Flexibility in manufacture to meet various installation requirements & local conditions
- One-stop for all marine AtoN equipment



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Sealite Mooring Calculator

Select buoy type and installation parameters to view mooring simulation

Buoy Location indicates an approximate watch circle given the mooring chain length and total water depth

Buoy Depth indicates how deep the buoy will float in the water (draft)

Mooring Setup

Step 1. Select Buoy Model
Newbu 2200
Reserve Buoyancy: 850 kg
Wind Area: 3.35 m²
Water Area: 0.95 m²

Step 2. Select Water Depth (m)
20

Step 3. Select Chain Size
Recommended: 30mm
30mm - Black, Grade 2
Weight: 22.4 kg/m
Proof Load: 41.8 Tonnes

Step 4. Set Maximum Wind Speed (kts)
Wind Force: 30

Step 5. Set Maximum Water Speed (kts)
Water Force: 2

M/A Calculations

Sealite mooring calculations for the Sealite range of polyethylene buoys are based on typical industry use by our own users and are to be used as a guideline only. Each mooring may be subject to differing local conditions.

Hide M/A Calculations

M/A Recommendation E-107 May 1999 is available as a separate reference. These calculations are based on extensive formulas to provide ideal mooring parameters to maintain the buoy in the most upright position given wind and current conditions. Hence the length of mooring chain may be substantially longer than typical industry use.

Buoy Weight: 212.789 N
Buoy Volume: 443.9 N
Chain Weight: 1788.838 N
Max Sinker: 3272.0 kg

Minimum Chain Length: 20.2 m
Maximum Chain Length: 48.5 m
Minimum Sinking Load: 2297.8 kg
Tension Angle: 2.46°
Lifting Angle: 1.50°
Restoring Moment: 399.5 Nm
Chain Moment: 389.9 Nm

Simulation Chain Length
Recommended: no less than: 49.0 m

Simulation Sinker Mass
Recommended: no less than: 3600 kg

Maximum Chain Force (N): 4184
Minimum Proof Load (tonnes): 21
Current Chain Force (N): 492

Buoy Location: 32.7 m
Buoy Depth: 1.3 m

Code	Description	Size	Quantity
SLB2200	Buoy Assembly -04	SLB2200 Buoy Assembly	1
SLB2200	Buoy -04	SLB2200 Buoy	1
SL122	30mm R/L	30mm Chain Pin	2
42mm	Washer	42mm Chain Pin	10
SL122	30mm R/L	30mm Chain Pin	2
30mm	Washer	30mm Chain Pin	12
SLV-ELU-02	42mm R/L	42mm Chain Pin	1
CLC2006-R	Chain	Chain	1
SNK-3-07	Sinker	Sinker	1

By changing the various mooring parameters (eg. chain length) users can visualise the affect on the installation

Shows a list of recommended parts for mooring Sealite's buoy

Users can check that the Proof Load listed in Step 3 is greater than the Minimum Proof Load. Heavier chain may be required to ensure this



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