

Mooring Guidelines

| Vessel Length Overall (Approx metres) | | Less than 7 | 7-12 | >12 metres | Notes |
|---------------------------------------|---|---|---|---|--|
| Approx. Displacement (Tonnes) | | Less than 3 | 3-20 | >20 tonnes (or exposed position) | |
| Mooring Block | (Air Weight Tonnes) | 1 | 2 | 4 | |
| Anchor Ring Diameter (mm) | Minimum | 32 | 32 | 32 | 2 rings will lengthen life of block. Reject at 25mm. |
| | Recommended | 32 | 40 | 40 | |
| | Fail at | Scrap at 25mm | Scrap at 25mm | Scrap at 25mm | |
| Ground Shackle | Minimum | 6mm greater than ground chain size | 32 | 36 | |
| | Recommended | 32 | 38 | 38 | |
| | Fail at | Scrap at 25mm | Scrap at 25mm | Scrap at 28mm | |
| Ground (Bottom) Chain (GC) | Length (metres) | 2m minimum | 5m minimum | 5m minimum | |
| | Safety of lifting is increased by having the ground chain reach the surface to allow lifting with the heaviest chain. | | | | |
| | Diameter (mm) | (Recommend 31-36mm) | 35-38mm or > | 36-42mm or > | |
| | Fail at | Scrap at 25mm | Scrap at 25mm | Scrap at 30mm | |
| | Increase the bottom chain in proportion to boat length. (Actual boat length can be used up to 7 metres, after which increased intermediate chain may be required to keep costs down). | | | | |
| Intermediate Shackle Diameter | | Minimum 22mm Fail at 18mm | Minimum 25mm Fail at 22mm | Minimum 28mm Fail at 25mm | Recommend min 5mm > Intermediate chain |
| Intermediate Chain (IC) | Length | Depends on Depth. 4 metres a common length. | | | |
| | Diameter (mm) | Minimum 16mm Fail at 14mm | Minimum 20mm Fail at 17mm | Minimum 20mm Fail at 18mm | Weight a factor. Capstan or winch on boat? |
| Swivel | Diameter | 22mm | 22/25mm | 25/28mm | Shall be one size larger than largest chain being joined. |
| | SWL (Tonne) | 5 | 5 | 7 | |
| Top Rope | Length | To suit; minimum 2.5m, maximum = water depth at low tide. | To suit; minimum 2.5m, maximum = water depth at low tide. | To suit; minimum 2.5m, maximum = water depth at low tide. | Reinforced anti-chafe hose to be fitted and not loose enough to slip. Swivel should be off bottom at low tide. |
| | Diameter (mm) | 20-24mm rope | 24-32mm rope or 16mm galv. chain | 32mm rope or 16mm galv. chain | Polyester or nylon. 5 tucks per splice. Chain can be used instead. |
| Buoy Rope | Diameter (mm) | Minimum 12mm | Minimum 12mm | Minimum 12mm | |
| Buoy | Mooring number must be engraved into buoy, lettering not less than 35mm high. Tagged with date or year of last inspection an advantage. | | | | |

- Notes: D = depth at MHWS. Vessels over 15 metres subject to specific design requirements.
- Ensure all components are rated safe working load above the weight of the block and tackle below it when lifting the block.

NOTES: Any worn item will no longer have a SWL.

Larger than 4 tonne moorings are outside the scope of this document and require individual engineering.