

Introduction

Utilization of proper tackle is necessary to secure vessels adequately at their moorings. Storms, wind, waves, tides, currents and wash must be considered when selecting appropriate mooring tackle. Each person mooring a vessel in the Waterford Harbor Management Area is responsible for any damage to their own vessel or to any other vessel or property that may be caused by their vessel. The Harbor Management Commission recommends minimum standards for tackle to secure vessels adequately in the Harbor Management Area, but these standards are advisory only, and the Town of Waterford assumes no liability for personal injury or property damage which may result from the utilization of any mooring tackle which meet or exceed these recommendations.

The Harbor Management Commission will periodically review and update the recommended minimum standards for mooring tackle. These recommended minimum standards will be provided to each person applying for a mooring permit. It must be remembered, however, that no standards can ensure adequate vessel security under all conditions, particularly severe coastal storm conditions with associated wind and wave hazards.

Minimum Recommended Standards for All Moorings

1. Mooring tackle should meet the following minimum standards:

Boat Length (Feet)	Mushroom Anchor (Pounds)	Bottom Chain (Inches)	Top Chain (Inches)	Nylon or Dacron Line (Inches)
Under 16	75	3/8	5/16	1/2
16-19	150	3/8	5/16	1/2
20-22	200	1/2	5/16	5/8
23-25	250	1/2	5/16	5/8
26-30	300	5/8	3/8	3/4
31-35	400	5/8	3/8	3/4
36-40	500	3/4	1/2	7/8
41-50	600	3/4	1/2	1
51-65	750	1	1/2	1-1/4

2. Only Mushroom anchors should be used on permanent moorings.
3. The maximum length of the pennant should be two and one-half (2-1/2) times the distance from the bow chock to the water plus the distance from the bow chock to the mooring cleat or post.

4. All pennant lines running through a chock or any other object where chafing may occur should have adequate chafe guards.
5. The total scope of the chain should be no less than two and one-half (2-1/2) times the depth of the water at high tide at the location of the mooring unless the Harbormaster approves a lesser length based on a finding that special physical conditions exist which make such length unnecessary. The bottom and top chains should each consist of approximately fifty percent (50%) of the scope.
6. All shackles, swivels and other hardware used in the mooring hook-up should be proportional in size to the chain used.
7. All shackles should be properly sized.
8. It is recommended that the pennant be spliced or shackled into the bitter end of the top chain below the permanent buoy so the strain is not carried by the buoy. A second pennant and anchor meeting the minimum specifications should be used in heavy weather.
9. The pick-up or permanent buoy should be of a type and size to be determined by the Harbor Management Commission and should be marked in accordance with standards provided by the Harbormaster.