

Best Practices to Keep Unencapsulated Polystyrene Foam Out Of The Bay

By Peter Adams, from the South Channel Association and Volunteer Member of the Say 'No' to Dock Foam Committee

Unencapsulated polystyrene foam, blue foam, breaks down for several reasons:

Mammals	Disturbance by mink, muskrats, beavers and otters.
Rocks	Changing water levels can cause rocks to rub on exposed foam billets.
Ice	Ice moving during wind events or spring break-up dislodges pieces of unprotected foam.
Waves	Rocking motion from waves may cause unprotected foam to rub on rocks or ice. If the frame of a dock isn't solid, waves could flex the dock and break off bits of foam.
UV light	Sunlight causes the outer layer of foam to become brittle and easily broken

It's tough to prevent damage caused by UV light but other factors can be eased.

Mitigation Measures

1. Choose a location for winter mooring that's protected from wind and ice movement and in water deep enough rocks won't impact foam if water levels drop.
2. Ensure the dock's summer location is in water deep enough to prevent rocks from impacting the foam should water levels drop. The ramp may have to be extended to push the dock into deeper water.
3. Install heavy gauge screening on any gaps in the outer skirting. This helps reduce access by mammals and to contain small pieces of foam dislodged by mammals.
4. Remove several top decking boards to allow access to the foam billets and then gather pieces of dislodged foam. When securing decking boards use screws to allow future access.
5. Swim under the dock and look for exposed foam billets. Fastening a length of dimension lumber (2"x6" minimum) to the framing and along the length of a billet will help protect it from rocks and ice. Doing this underwater isn't easy but it is possible.

The most effective way to retro fit your dock with the measures mentioned above is to flip it upside down. This allows screening to be fastened to the underside where mammals often get in and allows the dimensional lumber to protect exposed billets to be positioned and secured in a sturdy way.

Note: Bill 228 comes into force in 2023. The above measure of retro-fitting may not comply with the regulations which are not currently defined. The law states "A person who constructs or reconstructs a floating dock, floating platform or buoy shall ensure that any expanded or extruded polystyrene in the dock, platform or buoy is fully encapsulated." If you are going to this trouble – it may be best to investigate implementing different kinds of floats like pontoons or air or foam filled modular squares that are fully encapsulated by durable and thick plastic.

Flipping a dock can be a dangerous process because of the weight of water-soaked framing and billets. It's recommended to hire a contractor to do this. The structural integrity of a dock must be sound enough to withstand flipping, and older docks may not be candidates for this option. Please contact SCA if you'd like to pursue this.

Your safety is your own responsibility.