

EPS Flotation Blocks

PERMANENT, POSITIVE FLOTATION

Proven Performance

For over 35 years, EPS Flotation Blocks have been designed and specified by Engineers. Fabricated, manufactured and installed by Marine Contractors in Docks, Floating Structures and Marinas for the general public's use and enjoyment. EPS Flotation Blocks can be designed and engineered with concrete or plastic encapsulation systems, for years of maximum service life, while meeting stringent environmental marine standards.

Extremely Buoyant

The unique closed cell structure of EPS has an extremely low bulk density, exhibits minimal capillarity and provides a buoyancy factor of 60-62 lbs. per cubic foot. EPS Flotation Blocks can be molded, shaped and or fabricated for almost any marine flotation system. EPS Flotation Blocks are easily installed using common building techniques.

Stable, Permanent and Positive

EPS Flotation Blocks are made from highly stable molded Expanded Polystyrene. EPS is a closed cell, resilient, lightweight foamed plastic which has a density range between 1.0 and 2.5 pcf. This corrosion-proof, lightweight product is maintenance-free and won't sink or absorb water when punctured for years of permanent positive flotation to use and enjoy.

Environmentally Responsible

EPS Flotation Blocks contain no CFC's, HCFC's, HFC's, dyes or formaldehyde. It is inert, non-nutritive, will not decompose, decay or reduce fungus or bacteria. EPS is recyclable and safe for WTE Systems and landfills. We encourage EPS Flotation Blocks to be encapsulated and protected in concrete, polyethylene and or impact resistant coating to ensure that our lakes and waterways are clean and debris free. We also encourage you to support recycling and energy conservation.

BOATHOUSES - DOCKS - MARINAS

**CUSTOM SIZES
VERSATILE FLOTATION
LIGHTWEIGHT
WATER-PROOF
PUNCTURE-PROOF
CORROSION-PROOF
MAINTENANCE-FREE**





We make the EPS Flotation Block to fit your dock, not vice versa.

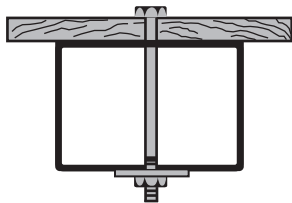
EPS Billets start out 36" x 48" x 192" (16 feet supports over 11,500 pounds in one block!)

We recommend that EPS Flotation Blocks be encapsulated with plastic or impact resistant coating. Encapsulation keeps the styrene beads intact, and prevents the corners and edges from breaking.

This helps eliminate trash and debris on our lakes and waterways.

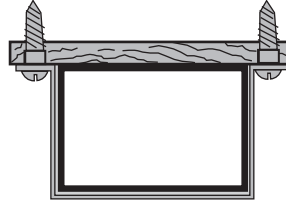
Typical EPS Flotation Block Attachment

Threaded Rod



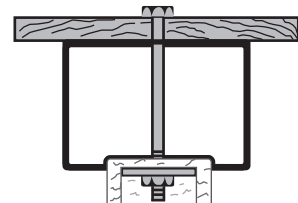
A common fastening technique is to use a rod through a block with a plate on the bottom

Strapping

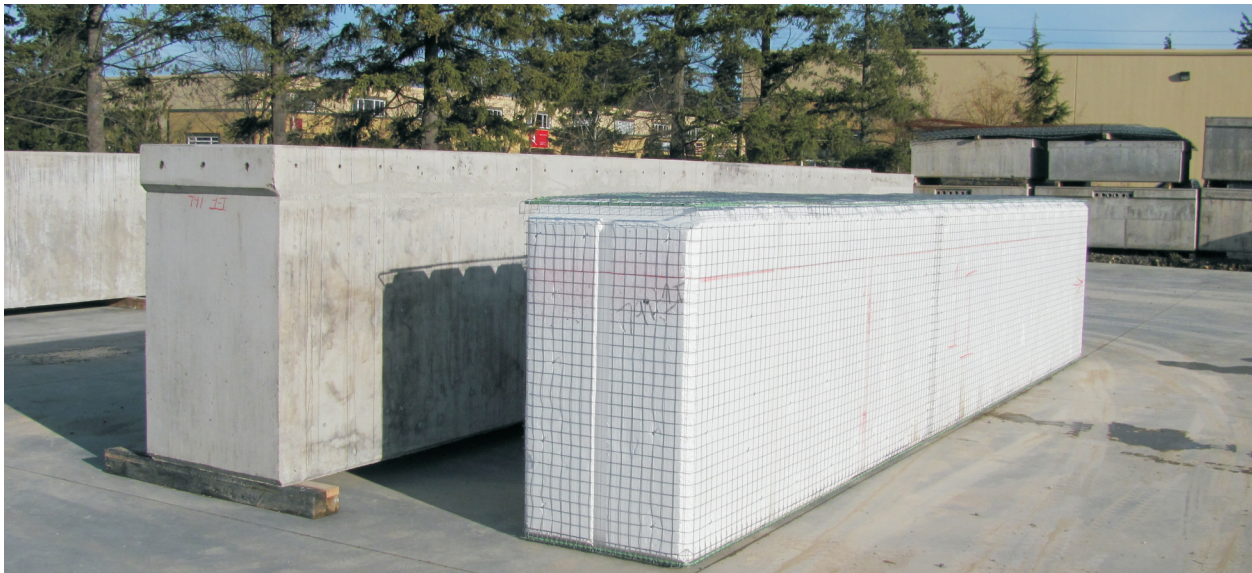


Strapping is an alternative fastening method

Rod w/ skid plate



An option to use with the threaded rod, is to add lumber to the bottom to act as a skid plate if your dock will sit out of the water.



EPS Flotation Blocks

Common Sizes

FMI-EPS's production staff has over 50 years of combined experience in the industry. That experience, plus our state-of-the-art fabricating technology, allows us to consistently produce the same EPS Flotation Block economically and quickly.

EPS Flotation Blocks are molded in state-of-the-art equipment. High pressure steam produces "Well Fused" EPS Flotation Blocks.

Computerized drawings are used to fabricate the EPS Flotation Blocks to your exact size and specification.

If you can draw it, **FMI-EPS** can produce it.

We fabricate custom EPS Flotation Blocks to fit your dock, not vise versa.

FMI-EPS offers in house Randon QC testing that is monitored by an independent laboratory.

EPS is the most "Cost Effective" flotation foam on the market.

Typical Size	Maximum Flotation	
	Lbs.	Kgs.
10" x 20" x 48"	333	151
10" x 20" x 96"	666	302
10" x 20" x 108"	750	340
12" x 20" x 48"	400	181
12" x 20" x 96"	800	362
16" x 20" x 48"	533	241
16" x 20" x 96"	1,066	483
24" x 24" x 48"	960	435
24" x 48" x 48"	1,920	870
24" x 48" x 96"	3,840	1,741
36" x 24" x 96"	2,880	1,306
36" x 48" x 96"	5,760	2,612

EPS has a buoyancy of 60 lbs of 0" Freeboard
Custom Fabricated EPS Flotation Blocks are available

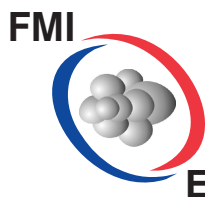
Technical Data

EPS Flotation Blocks meets or exceeds physical property standards as established in ASTM C 578

Physical Properties	Units	ASTM Test	Type XI	Type I	Type VIII	Type II	Type IX	Type XIV
Compressive Resistance at 10% Strain Deformation (2" cube)	Min psi (kPa)	D 1621, C 165	5.0 (35)	10.0 (69)	13.0 (90)	15.0 (104)	25.0 (173)	40.0 (276)
Flexural Strength	Min psi (kPa)	C 203	10.0 (69)	25.0 (173)	30.0 (208)	35.0 (242)	50.0 (345)	60.0 (414)
Thermal Resistance (R-Value)* 75 ± 2° F (24 ± 1° C) 40 ± 2° F (4.4 ± 1° C)	Min R* for 1" thickness	C 177, C518	3.22 (0.57) 3.43 (0.60)	3.85 (0.67) 4.17 (0.73)	3.92 (0.69) 4.25 (0.75)	4.17 (0.73) 4.55 (0.80)	4.35 (0.77) 4.76 (0.84)	4.35 (0.77) 4.76 (0.84)
Coefficient of Thermal Expansion	In./(In.)(F)	D 696	0.000035	0.000035	0.000035	0.000035	0.000035	0.000035
Moisture Resistance Water Absorption by total immersion	% by volume Max	C 272	<4.0	<4.0	<3.0	<3.0	<2.0	<2.0
Oxygen Index	Min Volume %	D 2863	24.0	24.0	24.0	24.0	24.0	24.0
Dimensional Stability (Change in dimensions)	Max %	D 2126	2.0	2.0	2.0	2.0	2.0	2.0
Max. Service Temperature Long Term / Intermittent	F		167 / 180	167 / 180	167 / 180	167 / 180	167 / 180	167 / 180
Density, minimum Density, nominal	Min lb/ft³ (kg/m³) lb/ft³	C 303	0.70 (12) 0.75	0.90 (15) 1.00	1.15 (18) 1.25	1.35 (22) 1.50	1.80 (29) 2.00	2.40 (38) 2.50

Design Cautions:

- **Flammability:** EPS is combustible and should not be exposed to flame or other ignition sources. EPS should be covered with a thermal barrier or otherwise installed in accordance with applicable code requirements.
- **Solvent Damage:** EPS is susceptible to damage by petroleum based solvents and their vapors. Protect with vapor barrier covering and or use compatible adhesives when applicable.
- **Ultraviolet Damage:** Extended exposure to sunlight causes minor discoloration and surface dusting. Shield EPS from direct sunlight for prolonged periods of time.



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