EPS Concrete Block-Outs

Form Follows Function... The EPS Block-Outs were used to help frame the window and door penetrations of this poured in place wall. After the forms were removed, the EPS Block-Out was also removed and used again as a light weight fill, to reduce the mass of the stairs and decks on the project. The contractor saved on material costs, labor costs and accelerated the construction time.

EPS Concrete Block-Outs by FMI-EPS are used for poured-in-place, tilt-up and precast concrete systems to reduce the required volume of concrete, framing material, labor and overall weight of the concrete structure.

EPS Insulation can act as a key component in a concrete wall panel of a building's envelope. It can be cut to a variety of thicknesses and lengths to provide the right R-value to attain the Energy Performance objectives that your project requires.

FMI-EPS's state-of-the-art cutting equipment can easily cut architectural shapes, custom 3-Dimensional shapes and pattern designs for custom projects.

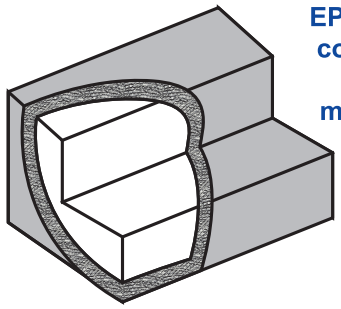
EPS Concrete Block-Outs:

+ Light weight with high strength properties.
+ Excellent adhesion to concrete.
+ Custom sizes, architectural shapes and patterns.
+ Cost saving solutions, accelerated construction time, framing material and reduced labor costs.
+ Stable insulating R-Value, best insulating value per dollar.
+ Weather resistant, can be handled and installed in most weather conditions.

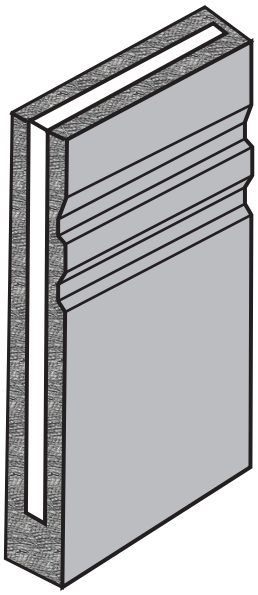
Environmentally Safe:

EPS Concrete Block-Outs contain no CFC's, HCF's, HCFC's, dyes or formaldehyde. It is inert, non-nutritive and stable. It will not decompose, decay or produce undesirable gases or leachates.

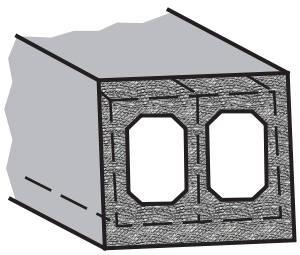
EPS is recyclable and safe for WTE systems and landfills. We encourage you to conserve energy and support recycling.



EPS Block-Outs used in concrete decks, ramps & stairs reduces material cost & weight



EPS insulated wall section strong, light weight & energy efficient



EPS Block-Outs for poured-in-place concrete beam

FMI EPS LLC

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EPS Concrete Block-Outs

Using EPS Block-Outs for concrete decks, ramps and stairs, not only reduces the amount of concrete, but lighter concrete mass means a smaller footing can be used, with less weight against a building's foundation.

Technical Data **EPS Insulation meets or exceeds physical and thermal 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 (70)	25.0 (173)	30.0 (208)	35.0 (240)	50.0 (345)	75.0 (517)
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	3.1 (0.55) 3.3 (0.59)	3.85 (0.67) 4.17 (0.0)	3.92 (0.69) 4.25 (0.74)	4.17 (0.73) 4.55 (0.77)	4.35 (0.76) 4.76 (0.80)	4.2 (0.74) 4.6 (0.80)
Thermal Conductivity (K-Value)* 75 ± 2° F (24 ± 1° C) 40 ± 2° F (4.4 ± 1° C)	BTU/(hr)(Sg.Ft.)(F/in.)	C 177, C518	0.323 (1.82) 0.303 (1.70)	0.260 (1.48) 0.240 (1.37)	0.255 (1.46) 0.235 (1.35)	0.240 (1.37) 0.220 (1.26)	0.230 (1.31) 0.210 (1.20)	0.238 (1.35) 0.217 (1.25
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
Water Vapor Permeability of 1" (25.4 mm) thickness max perm	Max perm/in (ng/PA*s*m²)	E 96	5.0 (287)	5.0 (287)	3.5 (201)	3.5 (201)	2.5 (115)	2.5 (115)
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
Flame Spread Smoke Developed		E84-81A E84-81A	20 150-300	15 @ 6" 95-125	5 @ 4" 105-190	5 @ 4" 2-235	15 @ 4" 20-145	<25 @ 4" max <450 @ 4" max
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

*R means resistance to heat flow. The higher the R-value, the greater the insulating power.
Federal Trade Commission requires; using the R-Value publication at 75°F temperature when calculating R-Values of all insulations.

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.

EPS Molders Association

EPS PLEASE RECYCLE RESOURCE SAVING CFC, HCFC & HFC FREE

Energy Star INSULATION

CLASSIFIED UL

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