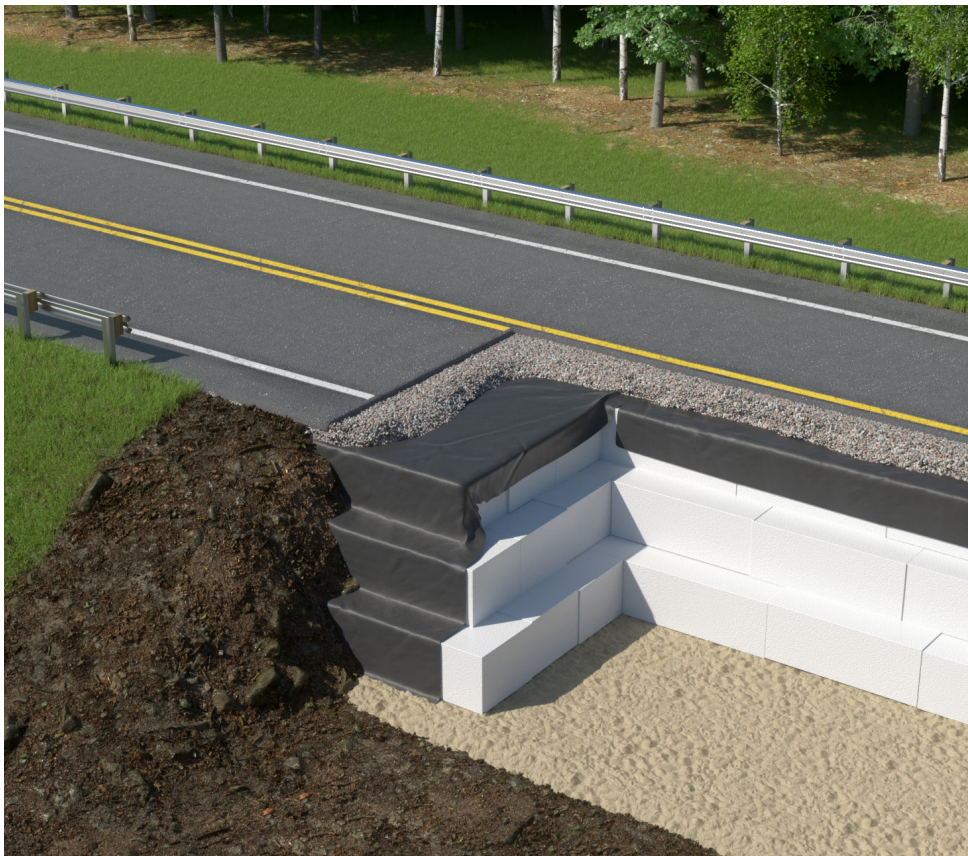


Aeroslab®

GeoFoam

Structural Backfill Blocks



- Stable, geofoam-type product
- Meets ASTM D6817
- Can be used in a variety of applications
- Fabricated to various sizes to meet project specific needs

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Structural Backfill Blocks

Description

Kingspan Insulation, LLC (“Kingspan”) manufactures high-quality expanded polystyrene (EPS) GeoFoam, which is a lightweight, engineered fill material that is used in various construction and civil engineering applications calling for a geofoam-type product. It is made from expanded polystyrene beads that are fused together to form large, rigid blocks.

GeoFoam offers several benefits in construction and civil engineering projects due to its properties and characteristics. GeoFoam is extremely lightweight compared to traditional fill materials like soil, rock, or gravel. This characteristic reduces the overall load on the foundation and can lead to significant savings in structural design and construction costs. The low unit weight of GeoFoam minimizes the settlement potential of the fill, especially in areas with weak or compressible soils. This helps maintain the integrity and stability of structures built on top of or adjacent to the GeoFoam fill. Being composed of expanded polystyrene, GeoFoam does not biodegrade, ensuring long-lasting stability and performance.

Versatile Applications

Transportation

- Under highway
- Bridge abutments

Foundations

- Insulated pavements
- Insulated rail lines
- Retaining walls
- Buried structures

Resistant to Weather Effects

- Frost heave
- Spring break-up
- Permafrost thaw

Compliances and Approvals

EPS insulation products have been tested and found to meet the requirements of the specifications listed below. A Kingspan representative can provide you the assistance in determining the suitability of these and any unlisted specifications.

- ASTM C578
- ASTM D6817
- Miami-Dade County*

*Only EPS manufactured in Kingspan Miami have certifications/approvals

Handling & Storage

When stored outdoors, EPS should be protected from exposure to direct sunlight using the original packaging or an opaque, light-colored tarp. EPS that has been unwrapped should be covered or rewrapped. EPS left exposed should be covered within 60 days to minimize UV damage. Once the exposed EPS is covered, the damage stops and is limited to the thin layer of cells on the surface that was exposed to the UV. EPS cells below the UV exposed surface layer are generally undamaged and the EPS overall performance remains intact.

WARNING: This product is combustible. A protective barrier or thermal barrier is required as specified in the appropriate building code. Protect it from exposure to open flame or other ignition sources during shipping, storage and installation.

Health & Safety

Kingspan EPS is made of synthetic materials that is generally recognized as not providing a food source for insects, fungus, mold, or mildew. It should always be properly installed and stored. For detailed safe handling and safety information, refer to product SDS.

This product should not be used as an exposed interior surface in buildings where people can be expected to be present. An approved fire protection barrier, such as ½” gypsum wallboard or equivalent, should be applied between this product and the interior of such buildings. Fire and building codes should be followed.

WARNING: Do not stand on or otherwise support your weight on this product unless it is fully supported by a load bearing surface.

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Sustainability

EPS rigid foam insulation is an inert, organic material produced from petroleum and natural gas by-products. Our EPS product does not contain chlorofluorocarbons (CFCs) or hydro-chlorofluorocarbons (HCFCs). It provides no nutritive value to plants, animals or micro-organisms.

Fabrication and Installation

GeoFoam is easily fabricated after manufacture to meet specific design and dimensional requirements. Because of its light weight it is easily stored, handled, and installed on the job site. GeoFoam blocks are cut and shaped to the desired dimensions using specialized cutting tools. This allows manufacturers to create blocks of various sizes and shapes to meet specific project requirements.

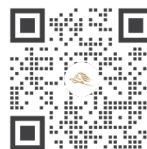
ASTM D6817 Requirement

Physical Properties ¹	ASTM Method	Units	GeoFoam 15 ²	GeoFoam 19	GeoFoam 22	GeoFoam 29	GeoFoam 39 ²
Type	D6817		EPS 15	EPS 19	EPS 22	EPS 29	EPS 39
Density (min)	D1622	lb/ft ³	0.90	1.15	1.35	1.80	2.40
Compressive Strength (min)	C165	lb/in ²					
1% deformation			3.6	5.8	7.3	10.9	15.0
5% deformation			8.0	13.1	16.7	24.7	35.0
10% deformation			10.2	16.0	19.6	29.0	40.0
Flexural Strength (min)	C203	lb/in ²	25.0	30.0	35.0	50.0	60.0
Oxygen Index (min)	D2863	Volume %	24	24	24	24	24

¹ Values listed are minimum or maximum required to meet specifications listed in data table.
² Not available from Kingspan Miami.

For more information on specific building product recommendations and installation guidelines, contact your Kingspan Insulation LLC representative.

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Please scan the QR code for the most recent product information.

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