



Performance Building Solutions

Styrofoam™ Brand XPS

The history of innovation continues



Trusted performance

DuPont™ Styrofoam™ Brand extruded polystyrene (XPS) is rooted in more than 80 years of technical innovation and leadership. From the beginning, when it created an entirely new product category and changed building construction, Styrofoam™ Brand XPS has been setting standards for thermal and moisture protection.

DUPONT
Styrofoam™
Brand



Transparency. Performance. Quality.

We are committed to transparency in our reporting and quality at every level. Our products have been evaluated by third parties with certifications that meet or exceed standards for both sustainability and performance.



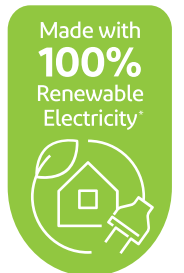
Published EPD and [Embodied Carbon/LCA Optimization Assessment](#), demonstrating low-GWP Styrofoam™ Brand XPS has achieved a 94% reduction in embodied carbon relative to the previous formulation



20% pre-consumer recycled content on average as certified by UL Environment



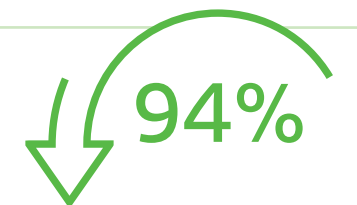
[GreenCircle certified](#) Styrofoam™ Brand XPS products have completed a manufacturer inventory and are publicly available



All Styrofoam™ Brand XPS products are produced using 100% renewable electricity¹

¹We have purchased Renewable Energy Credits to offset our electricity usage since 2016.

Styrofoam™ Brand XPS is produced using a low global warming potential (GWP) formulation. It's the latest move in a journey driven by our commitment to build a more sustainable future, all while maintaining the trusted performance you've come to expect.



Styrofoam™ Brand XPS is produced using a low-GWP formulation, reducing embodied carbon by 94%.

EPS and XPS foam – what's the difference?

EPS foam allows the intrusion of water over time.¹ The closed-cell structure of Styrofoam™ Brand XPS Insulation is the design choice for buildings that withstand the elements and the test of time.

- Moisture** — XPS structure absorbs significantly less water than EPS products
- R-Value** — XPS maintains R-value better than EPS when water is present
- Durability** — Absorbed water can cause damage in freeze/thaw conditions

¹Billy Connor, April 2019. "Comparison of Polystyrene Expanded and Extruded Foam Insulation in Roadway and Airport Embankments". Alaska University Transportation Center, University of Alaska Fairbanks, (INE/AUTC 19.08). <https://aidc.uaf.edu/projects/2019/comparison-of-polystyrene-expanded-and-extruded-foam-insulation-in-roadway-and-airport-embankments/>

The original XPS is there when you need it

Products for applications from foundation to roof

Styrofoam™ Brand XPS Insulation is produced in a large selection of sizes, cuts, edge treatments and compressive strengths readily available through our extensive dealer network. Our products and systems offer excellent long-term thermal performance (R-value of 5.0/inch unless otherwise noted), ease of use, moisture resistance and, in some situations, reusability.

1 Low slope roofs

For a longer-lasting, energy-efficient and sustainable roof, use moisture-resistant and high-performance Styrofoam™ Brand XPS Insulation.

2 Exterior walls

High-performance buildings use easy-to-install Styrofoam™ Brand XPS Insulation on above-grade exterior walls. DuPont also offers fully integrated wall systems that leverage our proven compatible materials.

3 Foundations, slabs, crawlspaces and more

Styrofoam™ Brand XPS Insulation features superior resistance to water absorption, water vapor transmission and freeze/thaw cycling, making it ideal for use with slab foundations and interior or exterior below-grade walls.

DuPont™ Styrofoam™ Brand Extruded Polystyrene (XPS) Insulation products

Properties*	Thermal resistance ^(1,2) aged R-value per inch @ 75°F mean temp	Compressive strength, minimum, lb/in ² ⁽³⁾	Flexural strength, minimum, lb/in ²	Water absorption, maximum, % by volume	Water vapor permeance ⁽⁴⁾ , maximum, perm	Dimensional stability, maximum, % linear change	Coefficient of linear thermal expansion, x10 ⁻³ in/in-°F	Complies with ASTM C578, Type ⁽⁵⁾	Maximum use temperature, °F	Flame spread ⁽⁶⁾	Smoke developed	Width, in	Length, in	Typical thickness range, in
ASTM method	C518	D1621	C203	C272	E96	D2126				E84	E84			
Low slope roofs														
DuPont™ Styrofoam™ Brand Roofmate™	5.0	40	60	0.1	1.0	2.0	3.5	VI	165	15	165	24	96	1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0
DuPont™ Styrofoam™ Brand Ribbed Roofmate™	5.0	40 ⁽⁷⁾	60	0.1	1.0	2.0	3.5	VI	165	15	165	24	96	2.0
DuPont™ Styrofoam™ Brand Plazamate™	5.0	60	75	0.1	0.8	2.0	3.5	VII	165	15	165	24	96	2.0, 3.0
DuPont™ Styrofoam™ Brand Plazamate™ XR	6.7	60	75	0.01	0.2	2.0	3.5	VII	165	20	50	48	96	2.25, 3.0
DuPont™ Styrofoam™ Brand Highload 40	5.0	40	60	0.1	1.0	2.0	3.5	VI	165	15	165	24 48	96 96	2.0, 3.0
DuPont™ Styrofoam™ Brand Highload 60	5.0	60	75	0.1	0.8	2.0	3.5	VII	165	15	165	24	96	2.0, 3.0
DuPont™ Styrofoam™ Brand Highload 100	5.0	100	100	0.1	0.8	2.0	3.5	V	165	15	165	24	96	2.0
Exterior walls														
DuPont™ Styrofoam™ Brand Cavitymate™	5.0	15	40	0.1	1.5	2.0	3.5	X	165	15	165	16	96	1.0, 1.5, 2.0, 3.0
DuPont™ Styrofoam™ Brand Cavitymate™ SC	5.0	15	40	0.1	1.5	2.0	3.5	X	165	15	165	48	96	1.0, 1.5, 2.0, 2.5
DuPont™ Styrofoam™ Brand Cavitymate™ Plus	5.0	25	50	0.1	1.5	2.0	3.5	IV	165	15	165	16	96	1.0, 1.5, 2.0
DuPont™ Styrofoam™ Brand Cavitymate™ Ultra	5.6	25	50	0.1	1.5	2.0	3.5	IV	165	15	155	15.75	96	1.75, 2.125, 2.5, 3.0
DuPont™ Styrofoam™ Brand Residential Sheathing ⁽⁸⁾	5.0	15	40	0.1	1.5	2.0	3.5	X	165	15	165	48	96	.55
DuPont™ Styrofoam™ Brand Scoreboard ⁽⁹⁾	5.0	25	50	0.1	1.5	2.0	3.5	IV	165	15	165	48	96	0.75, 1.0, 1.5, 2.0, 2.5, 3.0
DuPont™ Styrofoam™ Brand Square Edge ⁽⁹⁾	5.0	25	50	0.1	1.5	2.0	3.5	IV	165	15	165	24 48	96 96	0.75, 1.0, 1.5, 2.0, 2.5, 3.0, 4.0
DuPont™ Styrofoam™ Brand Tongue and Groove	5.0	25	50	0.1	1.5	2.0	3.5	IV	165	15	165	24 48	96 96	0.75, 1.0, 1.5, 2.0
DuPont™ Styrofoam™ Brand UtilityFit™	5.0	15	40	0.1	1.5	2.0	3.5	X	165	15	165	16	96	1.0, 1.5, 2.0, 3.0
DuPont™ Styrofoam™ Brand Ultra SL	5.6	25	50	0.1	1.5	2.0	3.5	IV	165	15	155	48	96	1.75, 2.125, 2.5, 3.0
Foundations, slabs, crawlspaces and more														
DuPont™ Styrofoam™ Brand Highload 40	5.0	40	60	0.1	1.0	2.0	3.5	VI	165	15	165	24 48	96 96	2.0, 3.0
DuPont™ Styrofoam™ Brand Highload 60	5.0	60	75	0.1	0.8	2.0	3.5	VII	165	15	165	24	96	2.0, 3.0
DuPont™ Styrofoam™ Brand Highload 100	5.0	100	100	0.1	0.8	2.0	3.5	V	165	15	165	24	96	2.0
DuPont™ Styrofoam™ Brand Scoreboard ⁽⁹⁾	5.0	25	50	0.1	1.5	2.0	3.5	IV	165	15	165	48	96	0.75, 1.0, 1.5, 2.0, 2.5, 3.0
DuPont™ Styrofoam™ Brand Square Edge ⁽⁹⁾	5.0	25	50	0.1	1.5	2.0	3.5	IV	165	15	165	24 48	96 96	0.75, 1.0, 1.5, 2.0, 2.5, 3.0, 4.0
DuPont™ Styrofoam™ Brand Tongue and Groove	5.0	25	50	0.1	1.5	2.0	3.5	IV	165	15	165	24 48	96 96	0.75, 1.0, 1.5, 2.0

* These are typical physical properties. Not to be construed as sales specifications.

⁽¹⁾ Values are consistent with the criteria of ASTM C578 and the requirements of the FTC R-value rule (16 CFR Part 460). A 15-year limited thermal warranty is available.

⁽²⁾ R means resistance to heat flow. The higher the R-value, the greater the insulating power. R-values are expressed in ft² · h · °F/Btu.

⁽³⁾ Vertical compressive strength is measured at 10% deformation (5% for DuPont™ Styrofoam™ Brand Plazamate™ Insulation and for DuPont™ Styrofoam™ Brand Highload 40, 60 and 100 Insulation) or at yield, whichever occurs first. Because DuPont™ Styrofoam™ Brand Extruded Polystyrene Foam Insulation is a viscoelastic material, adequate design safety factors should be used to prevent long-term creep and fatigue deformation. For static loads, 3:1 is suggested. For dynamic loads, 5:1 is suggested.

⁽⁴⁾ Water vapor permeance varies with product type and thickness. Values are based on the desiccant method, and they apply to insulation 1" in thickness. Thicker products have lower permeance.

⁽⁵⁾ Former Federal Specification HH-I-524C was canceled in 1985 and replaced by ASTM C578.

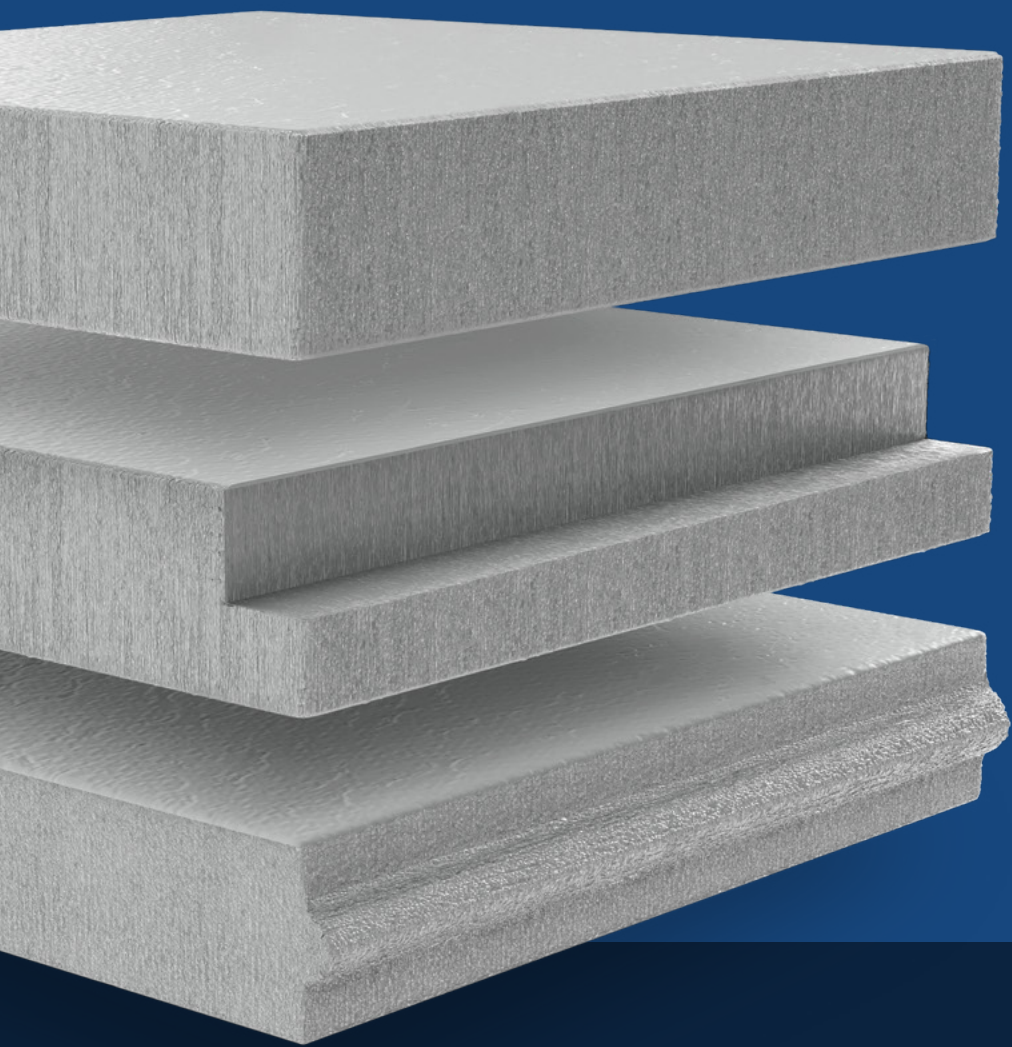
⁽⁶⁾ This numerical flame spread rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.

⁽⁷⁾ When placing a load over the surface of the product, the compressive strength should be multiplied by 0.52 to account for the surface area lost due to channels cut into the foam surface.

⁽⁸⁾ ASTM C518 R-Value at nominal 1 inch.

⁽⁹⁾ If using product for Z-furring applications, contact your local DuPont sales representative for exact product sizes. Note: Not all products are available in all parts of the country. Other product sizes are available on a made-to-order basis. Contact your DuPont representative with questions.

Build better.
Build beyond.
Build for sure.



Square Edge

Classic profile available for a variety of thermal insulation needs

Shiplap

Edges ensure energy efficiency and minimize on-site cutting and waste

Tongue and Groove

Designed to lock into the adjoining sheet for maximum coverage

* Not all products are available in all locations.



Styrofoam™ Brand Plazamate™ XR Insulation
Offers the highest thermal resistance per inch of any XPS roofing insulation. R-value of 6.7/inch.



Heroes of
Chemistry Award
2024 Winner



Go beyond compliance

We're going further than ensuring environmental compliance; we're continuing to advance our 2030 Sustainability Goals and invest in global efforts and technology innovations to help you design and build energy-efficient, resilient and durable structures in this rapidly changing world.



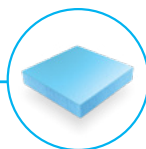
1941

Styrofoam™ is invented, creating an entirely new product category (XPS)



1983

Styrofoam™ Brand Insulation begins a proud legacy of support with Habitat for Humanity



2009

Styrofoam™ Brand Insulation introduces zero ODP (ozone depletion potential) formulation



2011

BLUEDGE™ technology is introduced, providing a more sustainable flame-retardant solution for polystyrene foam

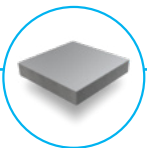


2016

Styrofoam™ Brand Insulation begins production with 100% renewable energy

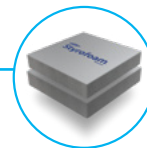
2021

Styrofoam™ Brand Insulation reduced-GWP formulation launched in Canada | Styrofoam™ Brand ST-100 Series XPS low-GWP formulation launched in HFC-regulated U.S. states | EPD published for Low-GWP Styrofoam™ Brand XPS, providing easy access to embodied carbon data | Published Embodied Carbon/LCA Optimization Assessment; Low-GWP Styrofoam™ Brand XPS achieves 94% reduction in embodied carbon



2023

All sites in North America manufacturing Styrofoam™ Brand XPS Insulation producing grey, low-GWP formulation



2024

All DuPont™ Styrofoam™ Brand XPS products known as grey, Low-GWP Styrofoam™ Brand XPS



For technical information, see the [Resource Center](#) on the DuPont website.



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