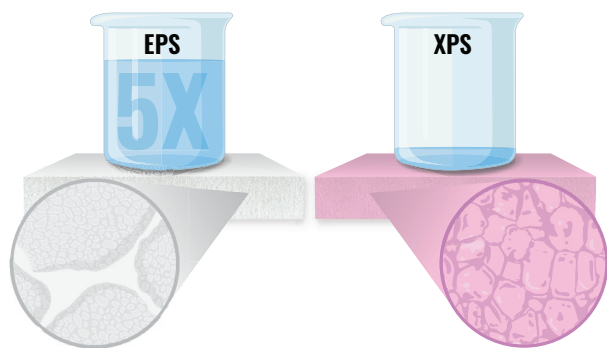




# THE XPS INSULATION ADVANTAGE

## STUDY FINDINGS<sup>1</sup>

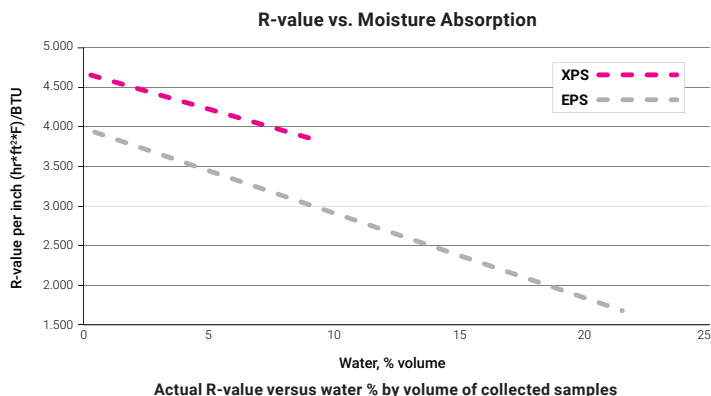
**EPS ABSORBS 5X MORE MOISTURE THAN XPS.**



**EPS takes on more moisture because of how it's made.**

- Formed by expanding polystyrene beads to create cells
- Results in voids between cells that can take on water
- Formed through a continuous extrusion process
- With NO VOIDS between cells, XPS resists moisture penetration

## MORE MOISTURE MEANS LOWER R-VALUES



As insulation takes on moisture, R-values decline. The thermal performance of EPS declines quickly as it takes on more moisture than XPS.

## ABOUT THE STUDY

### Who conducted the study?

Researchers from the University of Alaska Fairbanks

### What did they study?

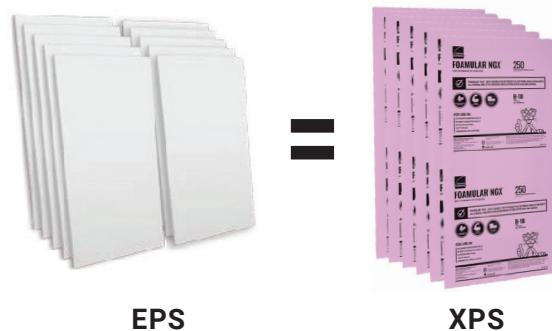
- Differences in performance between expanded polystyrene insulation (EPS) and extruded polystyrene insulation (XPS) in real-world environments in the harsh Alaskan landscape
- EPS and XPS placed in below-grade applications to help protect Alaskan permafrost
- Multiple locations sampled over multiple years
- Applications included areas below tarmacs and roadways

### Want to get more details?

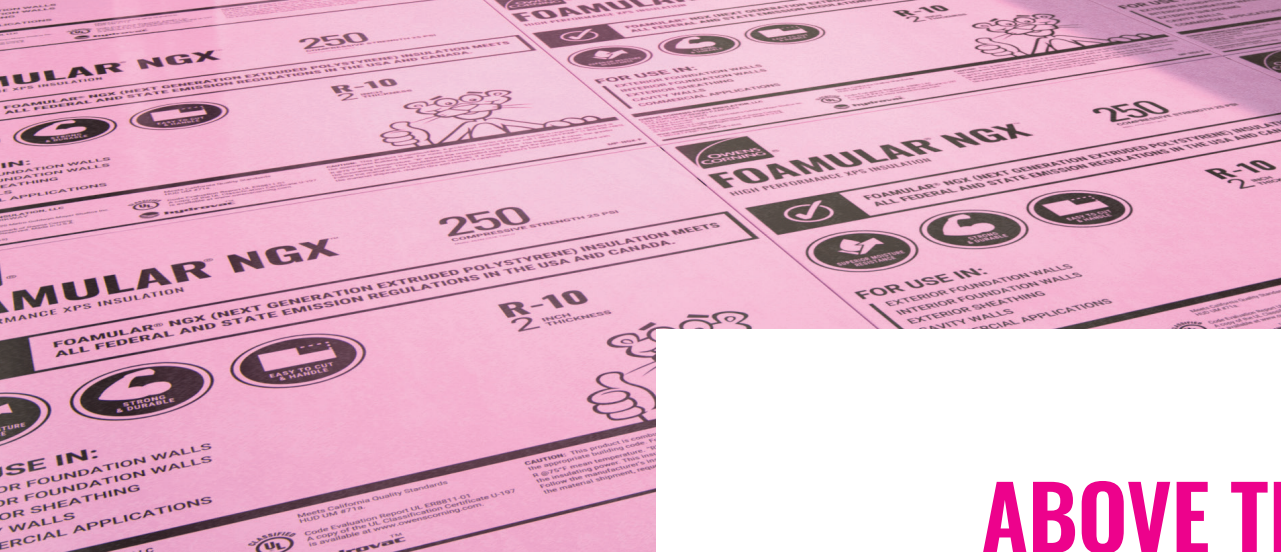
Read the full study here:



## EPS REQUIRES UP TO 2X WHEN SPECIFYING



Designers would need to specify as much as 2X the amount of EPS to get the same R-value as XPS.



# BUILD ABOVE THE REST

Owens Corning® FOAMULAR® NGX™ XPS insulation offers all the performance and ease-of-use advantages of Owens Corning® FOAMULAR® insulation with market-leading combination of performance and sustainability.

## MAXIMIZE PERFORMANCE. MINIMIZE GLOBAL WARMING POTENTIAL.

Owens Corning® FOAMULAR® NGX™ is made with a proprietary blowing agent and process that meets or exceeds new, more stringent regulatory standards for reducing high global warming potential HFC blowing agents.

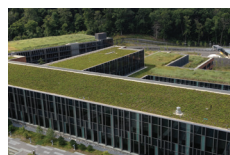
## FOAMULAR® NGX™ INSULATION CAN BE SPECIFIED IN THE SAME LOCATIONS AS LEGACY FOAMULAR® XPS:



WALL ASSEMBLIES



BELOW-GRADE  
FOUNDATION WALLS  
AND SLABS



VEGETATIVE ROOF  
ASSEMBLIES



### 90% Reduction in GWP

Delivers a 90% reduction in blowing agent global warming potential (GWP)<sup>2</sup>



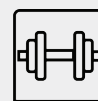
### Low Water Absorption

Extremely low water absorption potential, delivering superior R-value retention in the presence of water



### Eliminates HFC 134a

Completely eliminates use of HFC 134a



### Handles Heavy Loads

A wide range of compressive strengths — up to 100 psi — to handle heavy loads



### Energy Efficiency

Excellent energy efficiency in the form of a high R-5 per inch



### Lifetime Guarantee

The only XPS with a limited lifetime warranty that guarantees a minimum 90% of R-value for the life of the product

LEARN MORE ABOUT FOAMULAR® NGX™ INSULATION AND CALCULATE HOW MUCH IT COULD REDUCE THE GWP OF YOUR NEXT PROJECT.



OWENS CORNING INSULATING SYSTEMS, LLC  
ONE OWENS CORNING PARKWAY  
TOLEDO, OH 43659 USA

1-800-438-7465 (1-800-GET-PINK®)  
[www.owenscorning.com](http://www.owenscorning.com)

<sup>1</sup> Connor, B. (2019). Comparison of polystyrene expanded and extruded foam insulation in roadway and airport embankments. Alaska University Transportation Center. University of Alaska Fairbanks.

<sup>2</sup> Impact measured over 100-year time horizon, as compared to FOAMULAR® blowing agent formulation.

<sup>3</sup> Compared to the leading competitor's XPS insulation. Data extracted from Dupont™ Styrofoam™ Brand XPS Product Environmental Product Declaration, Declaration Number: 4789559274.101.1. Issued January 1, 2021.