

OPEN CELL FOAM

CLOSED CELL FOAM

VS.

» Understanding Differences in Structure and Permeability

The differences that cause manufacturers to choose between open and closed cell materials are their structural composition, permeability, and price point.



FIND OUT WHICH FOAM OPTION IS RIGHT FOR YOUR PROJECT!

OPEN CELL STRUCTURE

CLOSED CELL STRUCTURE

- | Foam cells are not closed completely
- | Permeable
- | Lightweight, spongy foam
- | Soft and flexible
- | R values for open cell from 3 to 4 per inch
- | Applications where less moisture present

- | Foam cells are closed
- | Relatively impermeable
- | Higher density foam
- | Firm and durable
- | R values for closed cell from 3 to 6.5 per inch
- | Applications where significant fluid exposure is likely

» Differences in Permeability and Application

	Semi Open Cell Foam	Closed Cell Foam
Air Permeability 	<ul style="list-style-type: none"> • Allows some airflow • Can be suitable for filtration 	<ul style="list-style-type: none"> • Can be a suitable air barrier • Suitable for gasketing applications
Water Vapor 	<ul style="list-style-type: none"> • Vapor permeable 	<ul style="list-style-type: none"> • Vapor semi-impermeable • Water-resistant
Heat Insulation 	<ul style="list-style-type: none"> • Suitable insulator in dry conditions • Heat-resistant 	<ul style="list-style-type: none"> • Suitable insulator, especially in moist or humid conditions • Heat-resistant • Increases structural strength
Noise Isolation 	<ul style="list-style-type: none"> • Superior acoustical absorber • Reduces echoes and sound waves within a space 	<ul style="list-style-type: none"> • Can act as an acoustical barrier • Stops noise from entering or leaving a space

» Which Type of Foam Works Best for Your Project?



Open Cell Foam is more economical, but may not meet all environmental requirements.

Closed Cell Foam is more expensive, but may offer additional environmental resistance and structural support.

» Still unsure which foam is right for you? Talk to us!

Depending on your situation, one type of foam may perform better than the other. The information provided above is a general overview. To find out specifically what type of foam is right for your custom project, [contact an expert today](#).