GORE® Portable Electronics Vents



HOW TO SELECT AN ACOUSTIC VENT?

Capitalize on Gore's global leadership in acoustic venting technology. In addition to designing custom venting solutions, we have an extensive portfolio of standard products — in diverse sizes, styles and structures that offer application-specific performance characteristics.

To select the right GORE® Acoustic Vent for your portable electronic device, choose from our materials, our forms and our constructions, using these guidelines.

Choose your level of protection

Portable electronics are continually exposed to conditions that can cause device failures and customer dissatisfaction. Whether those conditions result from daily consumer use and abuse or from rugged industrial or military applications, choosing the right venting material is key to obtaining reliable protection and quality acoustic performance.

The level of protection that's right for your application and your housing design determines whether our ePTFE or non-woven venting materials will best fit your end use.

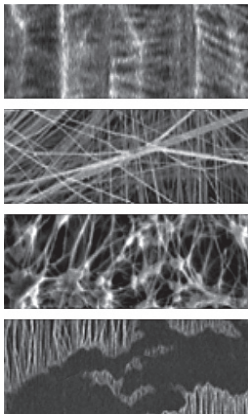
Level of Protection Needed	GORE® Acoustic Vents for Immersion Applications	GORE® Acoustic Vents for Dust and Splash Applications
Immersion (target IP67+)	X	
Liquid splash or spray (target IP64)	X[1]	X[2]

1. If housing design has large unprotected access for spray to hit or water to pool near transducer.
2. If housing design readily evacuates water from vent and protects transducer from direct spray. This is also the easiest solution to integrate acoustically into your design.

Your choice of GORE® Acoustic Vents is backed by our global support resources and more than 60 years of experience in providing the most consistent and reliable products on the market.

What Matters for Acoustic Immersion Protection

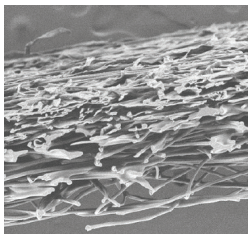
Gore's acoustic venting products for maximum immersion protection are engineered from expanded polytetrafluoroethylene (ePTFE). The engineered ePTFE structure has nodes, fibrils and pores that allow air and sound to pass through readily, while effectively repelling water, other fluids and solid particulates.



ePTFE construction of GORE® Acoustic Vents as seen under magnification

What Matters for Acoustic Dust and Splash Protection

Gore's acoustic venting products for dust and splash protection are designed with non-woven materials, using a complex three-dimensional microstructure engineered specifically for portable electronic acoustic protection.



GORE® Acoustic Vents for dust and splash protection as seen under magnification

Together, improving life

Choose the form and construction that best fits your device

GORE® Portable Electronic Vents are available in a variety of standard pre-cut shapes and sizes based on many common industry transducer sizes. Variables such as geometry, construction and adhesive determine which vent product is optimal for your device and application.

Geometry and Construction

Many factors go into determining the best geometry and construction for a venting solution, including:

- type of the transducer (speaker, receiver, microphone)
- size of the transducer
- industry standards the device must meet
- size and amount of open space in the transducer

Our portfolio of standard vents offers a solution for the majority of applications. Gore's expert associates are ready to help you select the best product for your design quickly and easily. If no standard product meets all your criteria, Gore will partner with you to design a custom solution for your specific needs. Our expertise in designing acoustic solutions is unparalleled.

Adhesive

A critical aspect of vent selection is choosing the proper adhesive — one that will adhere reliably to both the vent membrane material and the mounting surface within the device. Factors that affect the adhesive selection include:

- temperature
- mounting surface material

Gore has a catalog of adhesives designed for optimal performance with our venting materials. Our standard product offerings use adhesive materials that perform reliably in a wide temperature range and adhere reliably to most common materials.

For application temperatures outside of our standard range or for low-adhesion mounting surfaces such as silicone or polypropylene, a Gore associate will consult with you about alternative adhesives that will work best for your design and application.



Fitness For Use and Our Quality Commitment

Our engineers select and qualify all venting materials and constructions based on the concept of fitness for use, which means delivering the best product to meet the demands of a specific application.

At Gore, delivering the best product means that our product is:

- the most appropriate solution to satisfy the requirements of your device design, your application and your end-use customer
- produced under stringent quality standards
- tested to ensure consistent performance; our materials are tested for compliance with industry protection standards like IP or NEMA and for acoustic performance such as impedance and transmission loss

With this test data and our expertise in acoustic science, materials technology and industry requirements, our engineers are well equipped to consult with you on ways to optimize your acoustic system for high-quality sound and reliable protection.

For more information on acoustic vent technology, click over to gore.com/portableelectronics and see these articles:

- → PDF Why choose a GORE® Acoustic Vent?
- → PDF How to design with GORE® Portable Electronic Vents?

Contact Gore to learn about the right GORE® Portable Electronic Vent for your unique application.

Why Choose GORE® Portable Electronic Vents for Your Electronic Devices?

Leading OEMs have specified over 5 billions of GORE® Portable Electronic Vents because they know our products and services can help accelerate their development of innovative and differentiated devices in fast-paced, highly competitive markets.

Product & Application Leadership
Grounded in a deep understanding of material science and acoustics, Gore can provide the optimum venting solution. We balance trade-offs
between diverse problems such as adverse operating environments, immersion events and acoustic performance.

Fast Development
The mobile electronics industry develops and releases new products quickly. Our fast response to customer requests during the development process sets us apart. Gore supports this need for quickness with designs and prototypes to ensure engineering teams can meet their project timelines and their application requirements.

Material Science
Gore is a global materials science company dedicated to transforming industries and improving lives. Gore develops materials with microporous structures that provide desirable attributes and performance characteristics to engineer vents and other products used in a variety of markets and industries.

Reliable Performance
To ensure products are “fit for use”, every Gore product must adhere to the highest standards of quality, performance and reliability. Through a comprehensive understanding of end-use applications and requirements, our products do what they say they will do.

Supply Security
Leading OEMS specify Gore because we have consistently proven our ability to quickly ramp up to supply vents for projects of over 10 million devices per year and to continue to supply high quality products on-time without disruption.

Global Support
Our global teams of sales associates, application engineers, manufacturing engineers, and research personnel enable us to provide agile and robust support to customers around the world.

About Gore

W. L. Gore & Associates is a global materials science company dedicated to transforming industries and improving lives. Since 1958, Gore has solved complex technical challenges in demanding environments — from outer space to the world’s highest peaks to the inner workings of the human body. With approximately 12,000 Associates and a strong, team-oriented culture, Gore generates annual revenues of $5.6 billion.

gore.com

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