

# DefendEar®

## Custom-Fit Hearing Protection

 **Handcrafted in the USA**

Since 1959, Westone has made the finest custom earpieces for hearing healthcare, hearing protection, and music performance and enjoyment. DefendEar hearing protection products are handcrafted in the USA at our Colorado Springs, CO manufacturing facility. For more information on which DefendEar product is ideally suited for your specific application please visit us at:

[westone.com/defendear](http://westone.com/defendear)

phone: 800.525.5071 / 719.540.9333

website: [westone.com/defendear](http://westone.com/defendear)

e-mail: [defendear@westone.com](mailto:defendear@westone.com)

**Westone®**  
THE IN-EAR EXPERTS®

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## Environmentally Friendly Protection

DefendEar Durable HPDs & Pouch (3 Years):



VS

Disposable Earplug Environmental Waste (1 Year):

1 1/3 boxes, 260 packages, 520 earplugs



## Choose DefendEar by Westone:

- Repeatability attenuation
- Individualized fit for maximum comfort
- Situation appropriate attenuation
- Cost effective
- Environmentally friendly
- Handcrafted in the USA

## Earpiece Color Examples

Westone offers a wide range of colors and finishes from discrete skin tones to high-visibility colors, as well as several combinations to meet unique personal tastes or application requirements.



To see all of our color options visit [westone.com/defendear](http://westone.com/defendear)

# DefendEar®

## Custom-Fit Hearing Protection

### INDUSTRIAL



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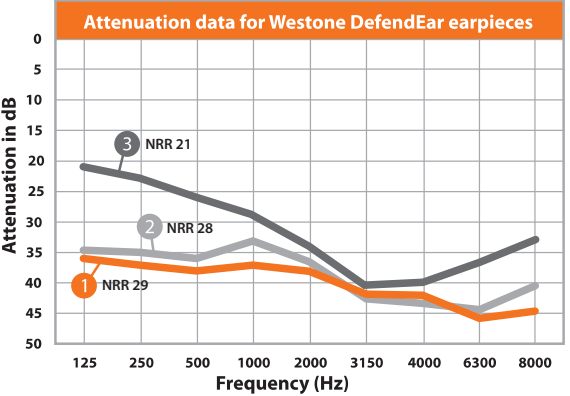
# DefendEar® by Westone: Your personal defense against noise-induced hearing loss.

## Are You Overprotected?

Situational awareness is a key component of an effective noise reduction solution. Users must be able to understand speech communication as well as detect audible warnings of equipment or facilities. Over protection can be just as dangerous as being under protected.

- 1 Select the DefendEar protection device with an NRR rating that reduces harmful environmental noise to a safe level.
- 2 Select the DefendEar protection device with a communication solution that's appropriate for your work environment.

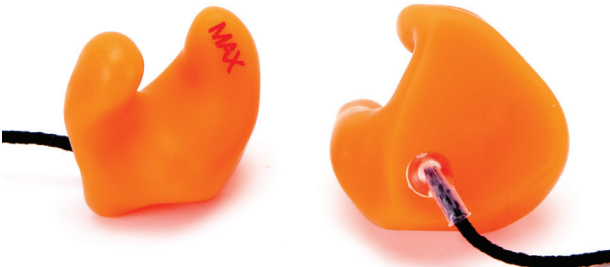
## Attenuation Data:



- 1 DefendEar Max
- 2 DefendEar Convertible (Closed)
- 3 DefendEar Convertible (Open), DefendEar Convertible Comm

All Westone Custom Hearing Protection Device Noise Reduction Ratings have been tested and calculated according to EPA regulation 40 C.F.R Part 211 Subpart B.

NRR data acquired according to ANSI Standard S3.19-1974, Method for the Measurement of Real-Ear Protection of Hearing Protectors and Physical Attenuation of Earmuffs, at an independent laboratory that is accredited by the National Voluntary Laboratory Accreditation Program of the National Institute of Standards and Technology.



**DefendEar Max** NRR 29  
The Maximum NRR available in the DefendEar line. Ideal for high noise industrial environments.



**DefendEar Convertible** NRR 21/28  
Detachable cord allows selectable protection between NRR 21 and a higher NRR 28. Great for industrial environments with a wide ranging amount of noise exposure.

## Options

- Metal detection capability
- Radio communication option
- 3D scanning of ear impressions



**DefendEar Convertible Comm**  
Comm option allows connection to surveillance kit type radios, while also providing NRR of 21 (NRR of 28 available when comm port is closed).  
(Radio and surveillance kit not included)



**Convertible Metal Detectable**  
Metal detectable option makes both the earpiece and cord metal detectable for the food industry.  
Also available in Max.



Slick-Sil is a registered trademark licensed from Surface Solutions Group, LLC.

\* Westone OtoBlast material compatibility tested according to MIL-STD-810F by an independent NIST-NVLAP / OSHA NRTL / DSCC / NCC CB / A2LA accredited laboratory.

OtoBlast has passed testing according to ISO Standard 10993: Biological Evaluation of Medical Devices Part 10, Tests for Irritation & Delayed Hypersensitivity Biological Evaluation of Medical Devices Part 5, Tests for In Vitro Cytotoxicity

\*\* Independent testing performed October 23, 2009 in compliance with JIS Z 2801 standards.

## Technology

**OTO BLAST™** **Medical Grade OtoBlast™ Silicone\***  
DefendEar Industrial custom earpieces are handcrafted using OtoBlast, Westone's proprietary medical grade premium silicone. OtoBlast is soft and flexible, yet extremely durable, offering a high level of noise reduction and hours of comfort.

**anti\* MICROBIAL** **Slick Sil® AM**  
DefendEar Industrial custom earpieces are coated with Slick-Sil, the latest in anti-microbial coatings. This chemically bonded process is proven to be 99.9% effective against bacteria, germs, and other pathogens that can cause infection, itching, pain, and odor. Slick-Sil simultaneously attacks multiple sites in the pathogenic cell, deactivating its physiological and reproductive functions. The end result is that reproduction of the microorganism is stopped or the microorganism is killed. Slick-Sil's soft, low-friction finish not only lasts the lifetime of the earpiece but also ensures comfortable fit.

**Made in the USA**  
DefendEar earpieces are meticulously built by a staff of dedicated artisans and lab techs in the USA. Westone's products exhibit a level of craftsmanship that truly embodies America's rich history of handmade artistry.

**Westone Custom Fit**  
Fully custom earpieces are cast and sculpted from actual impressions of your ears, resulting in the best fit and acoustic seal possible. These lightweight earpieces have a consistent fit resulting in repeatable protection that stays in place during high activity and movement.