

**MATRIX™**  
NO-ROLL EARPLUG

Matrix™



29 NRR  
Orange

27 NRR  
Green

23 NRR  
Blue



# WANT INNOVATION? WE'LL GIVE YOU AN EARFUL.

Introducing Matrix™ – the new single-use, no-roll earplug that blocks noise, while voice can be heard more naturally.

HOWARD  
LEIGHT 

# The Story

The basic cylinder shaped earplug has been an industry staple for more than 40 years. At Howard Leight, that means it's time for change. So we created Matrix™, the first cylinder-shaped no-roll earplug designed from the wearer up. Unlike other cylinder plugs, Matrix employs a brand new material that looks familiar, but performs in a whole new way. Matrix was developed with the user in mind, and tested for comfort, fit and performance on industrial workers.



## Say goodbye to rolling and waiting.

Now there's no need to roll, because the unique design of Matrix allows you to simply push the plug in and go. Insertion is easy, fast and reliable. And there's no need to wait for the plug to expand either – protection is instant upon proper insertion.

# Matrix takes the cylinder earplug f



## Matrix Perform

### Feature

- 1 No-Roll Insertion
- 2 Smaller Diameter
- 3 Smooth Outer Skin
- 4 Sound Management
- 5 Three Attenuation Levels



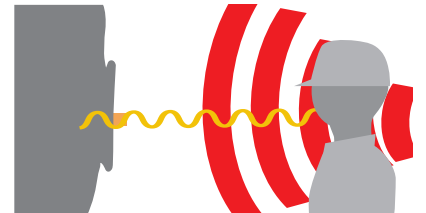
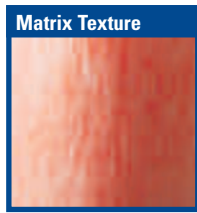
**Better fit.**

Improper fit has long been a big problem for traditional cylinder plugs. With Matrix, the ease of insertion and smaller diameter make getting a safe fit a safe bet.



**More comfortable. Much more.**

Matrix features a super soft outer skin – a great match for the sensitive skin in the ear canal. And its smaller diameter low pressure foam eliminates that stuffy, plugged up feeling so familiar to earplug wearers.



**Keep connected.**

Matrix's uniform attenuation blocks noise while voice frequencies can be heard more naturally. This means workers can hear each other much better on the job, enhancing communication, safety, and overall compliance. Matrix also comes in three distinct attenuation profiles, to specifically match any application.

# From old and outdated to bold and innovative.

## Attenuation Profile

Description	Benefit
Patented dual-density foam	<ul style="list-style-type: none"> <li>• Insertion is fast and easy, same as a Multiple-Use earplug</li> <li>• Delivers instant protection upon proper insertion</li> <li>• Dirty fingers won't contaminate body of earplug</li> </ul>
Less pressure inside the ear canal	<ul style="list-style-type: none"> <li>• Eliminates that plugged-up feeling</li> </ul>
Feels like your own skin	<ul style="list-style-type: none"> <li>• A great match for sensitive skin inside your ear canal</li> </ul>
Uniform attenuation profile	<ul style="list-style-type: none"> <li>• Workers can hear each other better on the job</li> <li>• Enhances communication, safety and overall compliance</li> <li>• Avoids overprotection</li> </ul>
NRR 29 – Orange/High NRR 27 – Green/Medium NRR 23 – Blue /Low	<ul style="list-style-type: none"> <li>• Helps prevent overprotection in marginal noise environments</li> <li>• Allows targeted attenuation for specific applications</li> </ul>

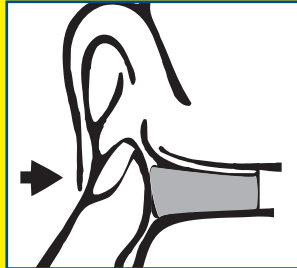
## Matrix Ordering Information

SKU	Description	Packaging	Configuration
MTX-1-OR [NRR 29] MTX-1-GR [NRR 27] MTX-1-BU [NRR 23]	Uncorded	Polybag	Case of 2,000 PR [10 Boxes/200 PR]
MTX-30-OR [NRR 29] MTX-30-GR [NRR 27] MTX-30-BU [NRR 23]	Corded	Polybag	Case of 1,000 PR [10 Boxes/100 PR]
MTX-1-OR-D [NRR 29] MTX-1-GR-D [NRR 27] MTX-1-BU-D [NRR 23]	Uncorded LS-500 Dispenser Refill	Bulk	Case of 2,000 PR [4 Boxes/500 PR]

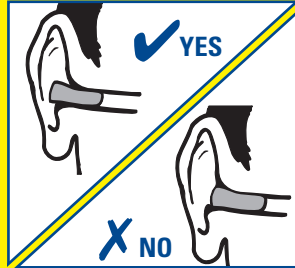
## MATRIX FITTING INSTRUCTIONS



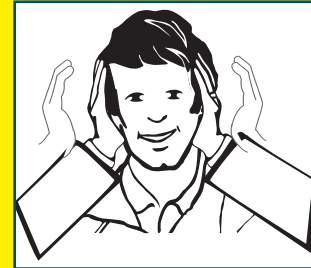
1. Reach over head with free hand, pull ear up and back and **INSERT** earplug well inside ear canal.



2. Earplugs should be inserted as shown in these drawings. Stop pushing earplug when finger touches the ear.



3. **PROPER FIT:** If properly fitted, the end of the earplugs should not be visible to someone looking at you from the front. If either or both earplugs do not seem to be fitted properly, remove the earplug and reinsert.



4. While in a noisy environment and with earplugs inserted, cup both hands over ears and release. The earplugs should be blocking enough noise so that covering them with your hands should not result in a significant difference. If proper fit is not obtained, move to a quiet location and repeat fitting instructions.

**WARNING:** Remove earplugs slowly with twisting motion to gradually break seal. Rapid removal may damage eardrum. Improper fitting will reduce effectiveness and could result in hearing loss or injury. Keep away from infants and small children. These earplugs are non-toxic but may interfere with breathing if caught in windpipe. Failure to follow these warnings may result in serious personal injury or serious illness, including total loss of hearing.

### Matrix Single-Use Earplug Attenuation Data

#### Orange NRR 29 Class A (L) Attenuation data tested according to ANSI S.3.19-1974

Frequency/HZ	125	250	500	1000	2000	3150	4000	6300	8000
Mean Attenuation	31.4	34.3	38.3	34.5	36.0	40.3	39.2	40.9	44
Standard Deviation	3.6	4.0	3.9	3.0	2.7	3.4	3.1	3.5	3.4

#### Green NRR 27 Class A (L) Attenuation data tested according to ANSI S.3.19-1974

Frequency/HZ	125	250	500	1000	2000	3150	4000	6300	8000
Mean Attenuation	25.9	29.7	35.5	34.4	35.2	39.0	37.3	40.1	43.2
Standard Deviation	3.8	3.7	4.1	3.1	3.0	3.2	2.4	3.8	3.4

#### Blue NRR 23 Class A (L) Attenuation data tested according to ANSI S.3.19-1974

Frequency/HZ	125	250	500	1000	2000	3150	4000	6300	8000
Mean Attenuation	21.4	26.4	31.3	31.8	34.2	39.6	39.6	40.3	43.5
Standard Deviation	5.8	4.5	4.6	4.9	3.2	2.8	2.0	2.4	2.5

### About Howard Leight

From our beginnings as a one-man operation more than 30 years ago, Howard Leight Industries has grown into one of the largest manufacturers of in-ear protection in the industrial market and the recognized innovator in protection and fit. Since 2001 we've been part of the Bacou-Dalloz™ Hearing Safety Group. Combining the innovation and expertise of Howard Leight® earplugs and Bilsom® earmuffs, the Bacou-Dalloz Hearing Safety Group is a world leader in hearing safety.



Howard Leight Industries  
7828 Waterville Road  
San Diego, CA 92154

Tel 800.430.5490  
Fax 401.232.3110  
www.howardleight.com

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