

Carpentry
92 dB(A)



Angle grinding/
cutting
90 – 110
dB(A)



Digging/
scabbling
100 dB(A)



MIG Welding
95 – 102
dB(A)

Make the right choice when selecting hearing protection in construction.

Hearing protectors need to be worn for the full time of noise exposure. Where hearing protection has been chosen as a control measure, ensure you select the right product and wear it for the full duration when exposed to noise. For example, a hearing protector with an SNR value of 30dB, not worn for 30 minutes out of an 8 hour will reduce overall attenuation to 12dB. Minutes matter.

Continuous exposure to unprotected noise above 85 dB(A) can lead to long-term damage. Noise-induced hearing loss is caused by the damage and eventual death of the sensory cells in your ears, called hair cells. Unlike some other cells, human ear hair cells never grow back.¹

Effective protection drops when hearing protectors are not worn.



Construction operations often exceed harmful noise levels.

In construction, many tasks result in average noise levels above the Upper Exposure Action Value 85dB(A) Leq,d.²

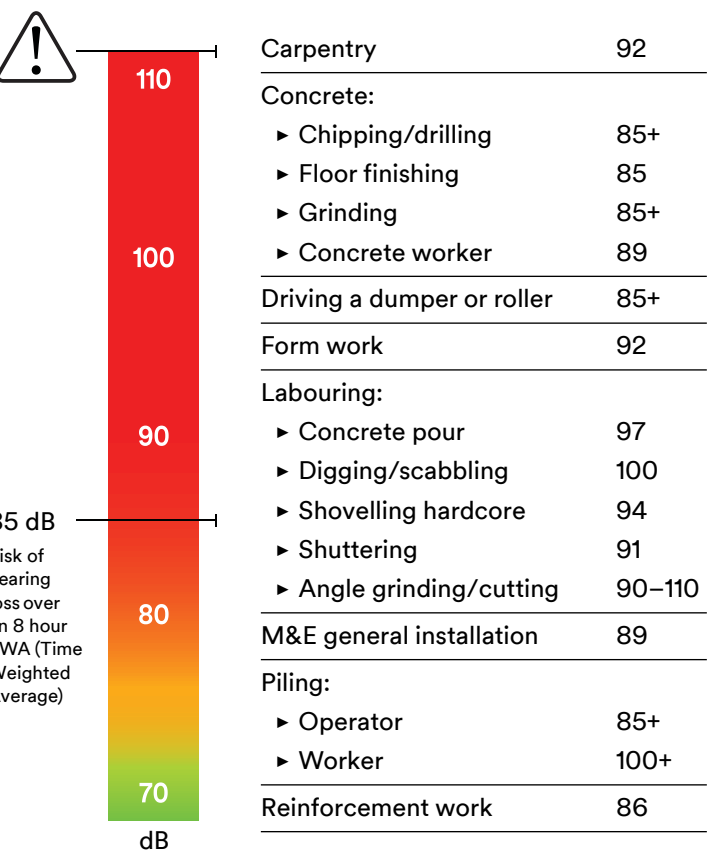
40% of workers did not either select the correct hearing protectors or wore it when exposed to noise.⁴

Noise-induced hearing loss is the most common reported occupational disease in the EU.³

Factors that may increase noise-induced hearing loss risks:

- ▶ Not wearing hearing protection during hazardous noise exposure or removing it to communicate¹
- ▶ Not wearing hearing protection that provides enough noise reduction for the task
- ▶ Not verifying that the hearing protection fits the worker and that the worker is properly trained
- ▶ Absence of hearing protection fit testing to help achieve proper attenuation⁵

Sound levels in construction operations, dB(A)²



For more information visit the 3M Centre for Hearing Conservation:
www.3M.co.uk/3M/en_GB/hearing-protection-uk/support/hearing-conservation/

Consider these hearing protection and protective communication solutions:



3M™ PELTOR™ X4 Earmuffs

Designed for comfort and moderate to high noise exposure during tough jobs where loud sounds are frequent.



3M™ E-A-R™ Push-Ins™ Earplugs

3M™ E-A-R™ Push-Ins™ Earplugs feature a soft foam eartip made from 3M™ E-A-Rfoam™ with a smooth skin surface for improved comfort and a semi-flexible stem that helps easy insertion and removal in the ear canal. This product can be fitted using one hand fitting method with an SNR of 31dB or two hand fitting method with an SNR of 35dB.



3M™ PELTOR™ Electronic Earplug, EEP-100

Helps protect workers' hearing and can help promote auditory situational awareness and communications in challenging environments.

To learn more about 3M hearing protection solutions, explore our eBook:
Personal safety solutions for hearing conservation in construction

[Download eBook ▶](#)

References:

1. Elliott H. Berger, E-A-RLOG, 'Hearing Protector Performance: How They Work – and What Goes Wrong in the Real World', 1996. [Online]. Available: <https://multimedia.3M.com/mws/media/6006330/e-a-r-log-5-protection-performance.pdf>. [Accessed 13 January, 2022].
2. <https://www.hse.gov.uk/construction/healthrisks/physical-ill-health-risks/assessing-noise.htm>
3. EU-15 figures. Reported in European Agency for Safety and Health at Work, Data to describe the link between OSH and employability 2002, ISBN 92-95007-66-2
4. HSE RR720 'Real world use and performance of hearing protection 2009'
5. 3M, 'Hearing Protection Fit Testing: What, Why and How', August 2018. [Online]. Available: <https://multimedia.3M.com/mws/media/15784680/hearing-protection-fit-testing-whatwhy-how-technical-bulletin.pdf>. [Accessed 10 November, 2021].