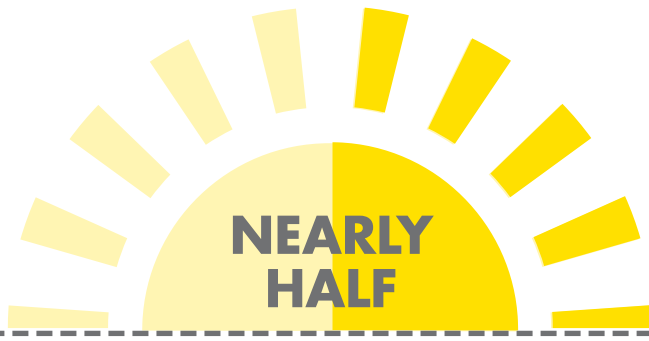
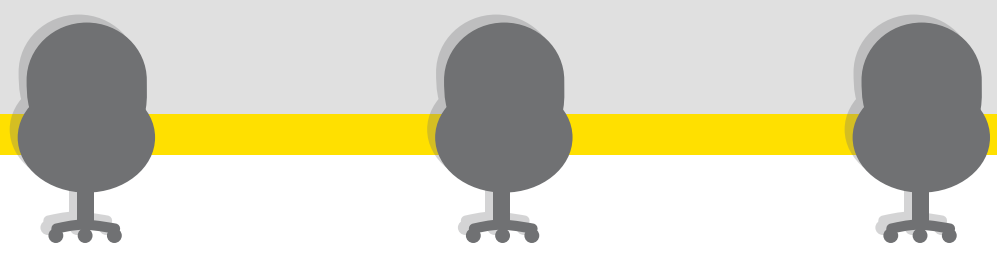


THE IMPORTANCE OF ACOUSTICS IN A SUCCESSFUL OFFICE

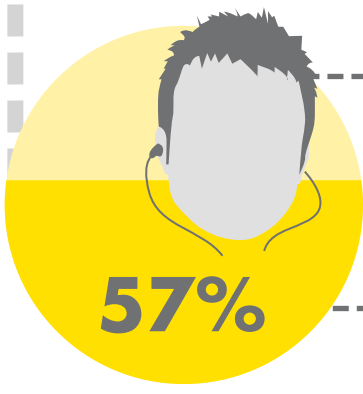
The office is still an important part of the working landscape yet the ways in which we work are more varied than ever before. But what about the acoustics in the office? Not all of us want to work in the silence of a library, but are employers providing the right sound environment to ensure health, success and productivity?

Open plan is the generic term used in architectural and interior design for any floor plan which makes use of large, open spaces and minimizes the use of small, enclosed rooms such as private offices

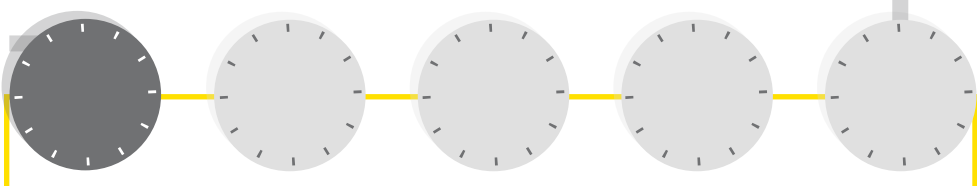


of our waking hours are spent in work or work related activities

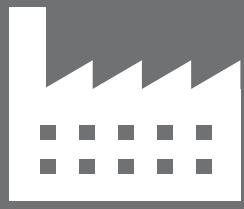
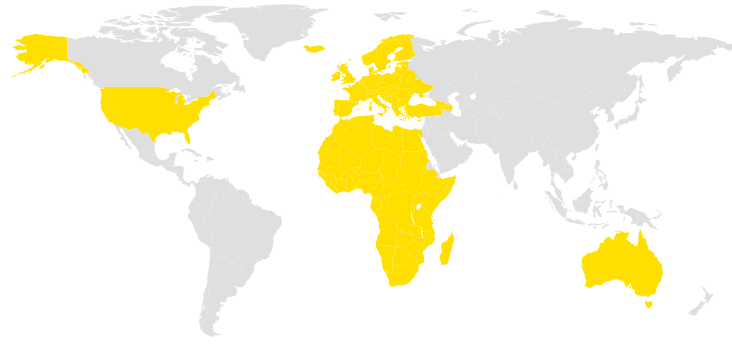
62% of office workers are bothered by a **lack of opportunity for privacy** in the workplace



of respondents do **nothing** to address noise problems in the workplace.



Britons have some of the longest working hours in Europe, with **one in five** spending more than 45 hours a week in the office.



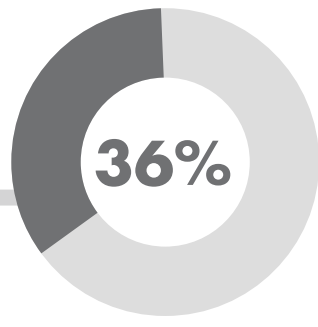
Analyzed data from **142 buildings** and **23,450 occupants** shows acoustical satisfaction as the lowest rating in LEED™ - Post Occupancy Evaluations

Noise is probably the **most prevalent annoyance source** in offices, and can lead to increased stress for occupants (Evans et al. 2000, Sundstrom 1994).

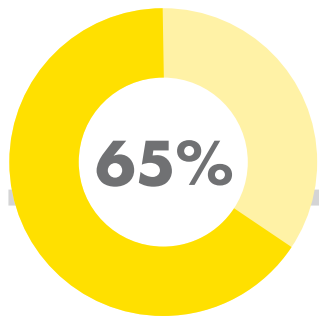


After surveying 65,000 people over the past decade in North America, Europe, Africa and Australia, researchers at the University of California, Berkeley, report that more than half of office workers are dissatisfied with the level of "speech privacy," making it the leading complaint in offices everywhere.

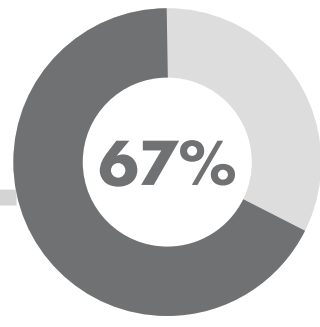
Indicating from 'a reasonable amount' to 'a lot', respondents noticed the following sound sources as follows:



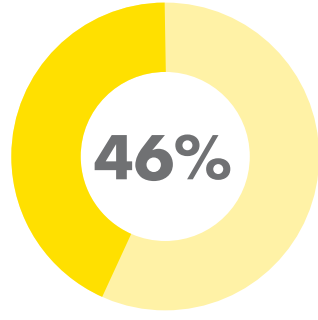
Ventilation



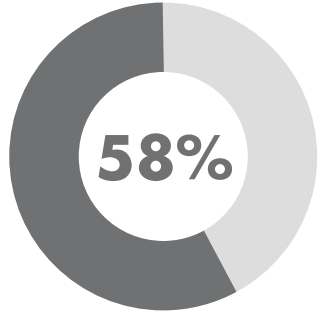
Ringing Telephones



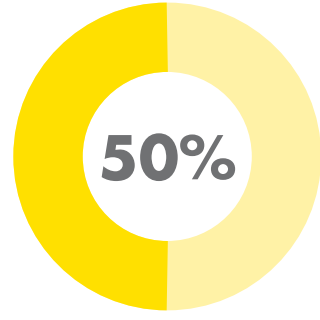
Colleagues talking on the phone



Sounds from teams working further away

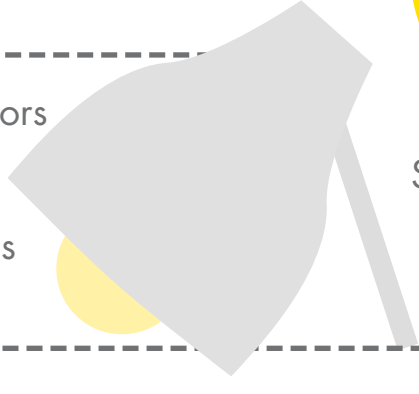


Talking, laughing, people close in the same room



Talking, laughing, people far away in the same room

There are a number of factors that cause work-related stress, including poor working conditions, such as noise or bad lighting



There is no doubt that work related stress is a serious problem for UK employers.

In 2010/11:

211,000

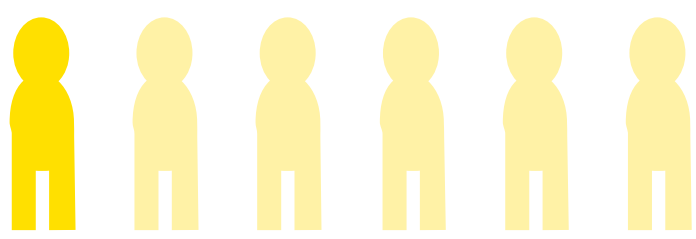
new cases of work related stress, depression or anxiety reported in the previous 12 months;

400,000

in Britain report work related stress at a level they believe is making them ill;

Each case of stress related ill health leads to an average of 27 days off work;

A total of 10.8 million working days were lost in Britain to work related stress

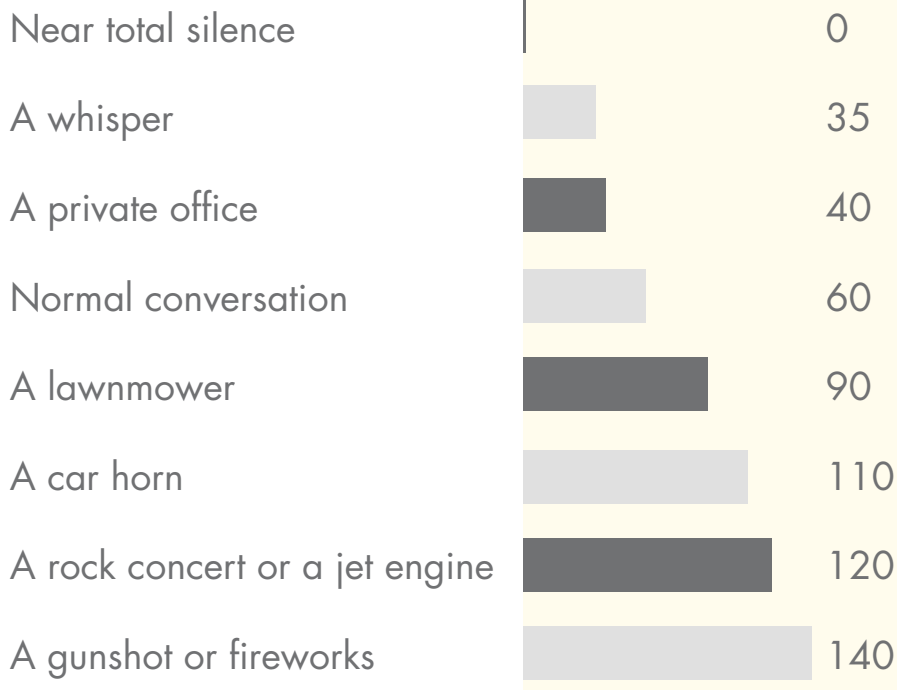


There are more than 10 million people in the UK with some form of hearing loss, or one in six of the population.

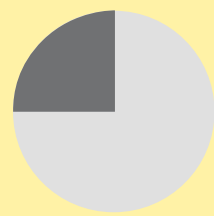
3.7 MILLION

From the total are of working age (16 – 64)

Sounds we hear in dB(A)



It takes an average of 15 minutes to regain concentration after being distracted from a difficult task by unwanted noise¹



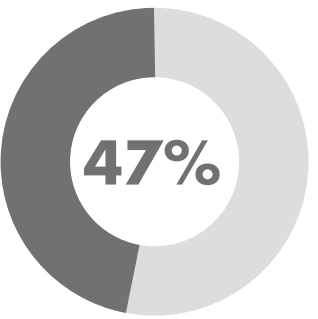
With just 5 distractions over an 8 hour day, this equates to a 15% reduction in productivity. In a company of 200 staff this is equivalent of 30 people being paid to do nothing.²

Older staff will increasingly **continue beyond today's normal retirement age** and this will require changes to certain work patterns and to the design of the workplace itself.

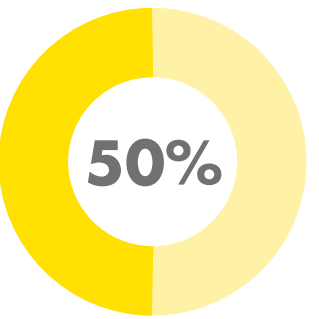


57% of office workers said they don't think their phone conversations interrupt other colleagues, yet 86% said they noticed others talking on the phone

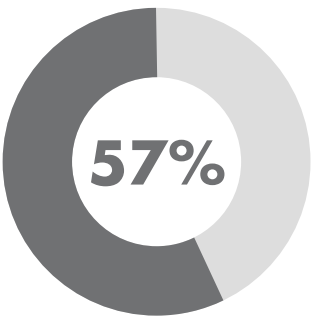
"HOW WELL OFFICE ENVIRONMENTS SUPPORT BOTH COLLABORATION AND CONCENTRATION IS FUNDAMENTAL. UNDERSTANDING HOW ACOUSTICS CAN SUPPORT OR HINDER THESE WORK MODES IS AN ESSENTIAL BUILDING BLOCK TO A SUCCESSFUL DESIGN SOLUTION."



are sensitive to a noisy environment



said they have difficulty working quickly and concentrating in a noisy environment



said they find it difficult to hold a conversation with a radio on



Although most office workers will spend 40-60% of their time on concentrated tasks, 42% said they have no access to privacy booths/areas to perform work requiring concentration.



To continue the debate, find us on Twitter at **@ecophonuk**
Further acoustic reference documents can be found at **<http://acousticbulletin.com>**

SOURCES

en.wikipedia.org/wiki/Open_plan – US Department of Labor Bureau of Labor Statistics bls.gov/tus/tables/a1_2011.pdf – Saint Gobain Ecophon Office Workers Survey, 2012 – dailymail.co.uk/health/article-1259309/Why-open-plan-offices-bad-health.html – University of California, Berkeley, Center for the Built Environment, IEQ Survey – nytimes.com/2012/05/20/science/when-buzz-at-your-cubicle-is-too-loud-for-work.html?_r=2& – Brother Research – cbe.berkeley.edu/research/pdf_files/Lehrer2006_BetterBricksPOE.pdf – cbe.berkeley.edu/research/pdf_files/Jensen2005_IndoorAir.pdf – bupa.co.uk/individuals/health-information/directory/w/stress-workplace#textBlock204700 – hse.gov.uk/stress/faqs.htm#stress-impact – Saint Gobain Ecophon, Continuing Professional Development Presentation, Acoustics in the Modern Office – hhc.rca.ac.uk/cms/files/welcomingworkplaceguidance.pdf – actiononhearingloss.org.uk/your-hearing/about-deafness-and-hearing-loss/statistics.aspx – Paige Hodsman