BOOST WELL-BEING WITH BETTER INDOOR AIR

Good air quality in buildings is vital to health and well-being.

"From the year 1800 to 2000 we've moved from 90% of people working outside to less than 20%."

Russel Foster, Nuffield Laboratory, Oxford University

Itchy eyes, sneezing, fatigue, throat irritation, headaches, coughing, allergies, respiratory diseases and even heart disease. The impact of poor air quality in our homes, schools and workspaces has become a major concern worldwide, known as Sick Building Syndrome.

"Concentrations of some pollutants indoors are often two to five times higher than typical outdoor concentrations," says the Environmental Protection Agency (EPA) in North America.

AIR POLLUTION CHALLENGES

The EPA says that the very young, elderly and vulnerable people with cardiovascular or respiratory diseases are particularly sensitive to air pollution because they spend more time indoors.

The report by data agency YouGov and Velux® states that the average adult breathes in around 15,000 litres of air every day and that often includes Volatile Organic Compounds (VOCs). "Indoor pollutants have increased in recent decades due to factors such as the increased use of synthetic building materials," says the EPA.

The impact is considerable. A report by the initiative Buildings 2030 says exposure to poor indoor air quality has been leading to lower levels of work productivity and absenteeism through sickness as well as lower attention spans in classrooms. More alarmingly, the World Health Organisation has released figures revealing that 3.8 million people a year die prematurely from illnesses attributable to household air pollution.

A new World Green Building Council report Doing Right By Planet and People released in April 2018 states: "Employees prefer and work best when they are in spaces with ample natural light, good air quality and access to greenery."

Many countries such as Germany, France, Italy and Belgium are introducing stricter VOC regulatory requirements, while Green Building Rating Systems – including BREEAM, LEED, WELL, DGNB and HQE – are placing more emphasis than ever on indoor air quality.

At Knauf Insulation we have always aimed to contribute to the comfort and health of buildings and their residents through our solutions. In 2009 we launched the first range of Glass Mineral Wool to feature our bio-based binder ECOSE Technology.

ECOSE SOLUTIONS CERTIFIED 'OUTSTANDING'

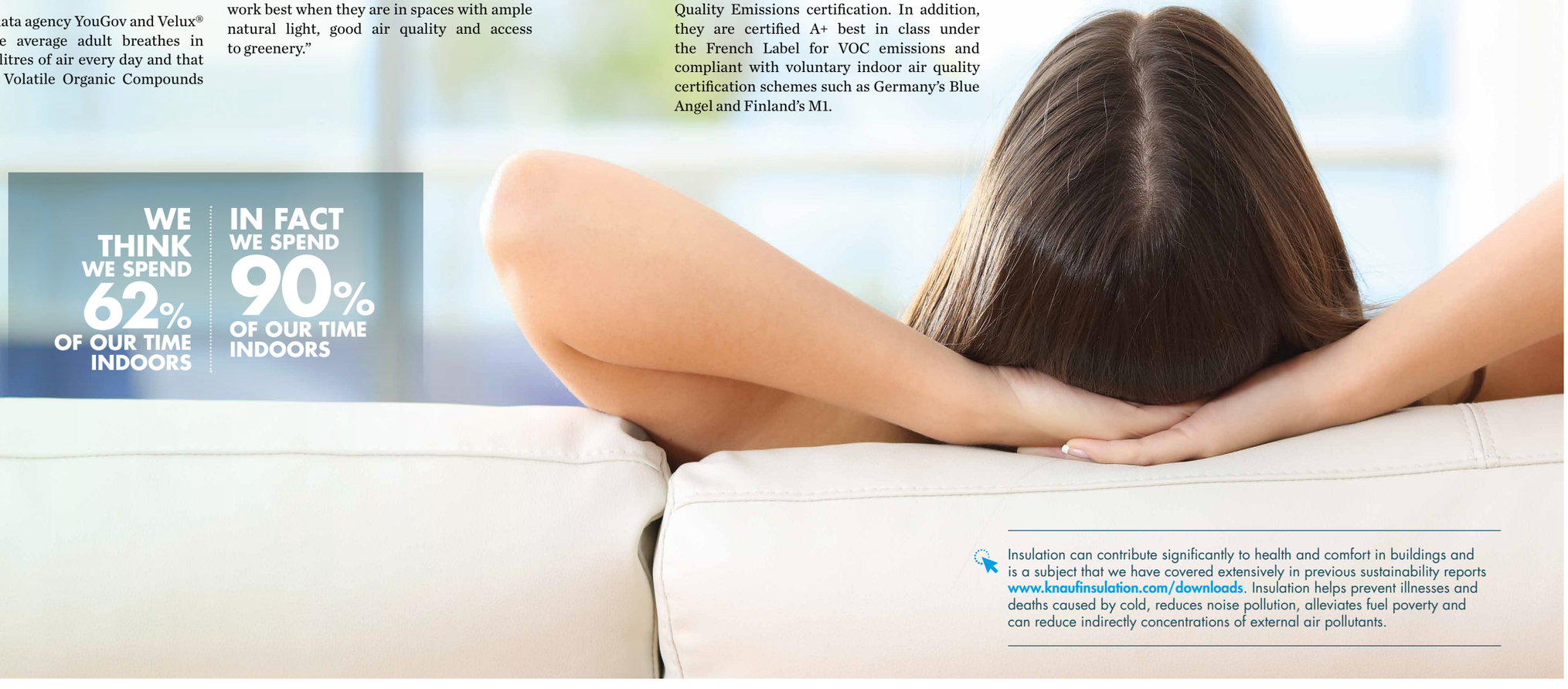
Our ECOSE solutions are certified by Eurofins Indoor Air Comfort Gold as an "outstanding material" according to VOC and Indoor Air Quality Emissions certification. In addition, they are certified A+ best in class under the French Label for VOC emissions and compliant with voluntary indoor air quality certification schemes such as Germany's Blue Angel and Finland's M1.

ECOSE, EUROFINS AND DGNB SUCCESS

Knauf Insulation was the first company to have its Mineral Wool with ECOSE Technology and no added formaldehyde certified Indoor Air Comfort Gold by Eurofins.

Now the Eurofins standard has been recognised by DGNB – the German Sustainability Building Assessment System – the only certification of its kind to be accepted by this system.

Indoor Air Comfort Gold is regarded as Europe's most comprehensive certification for verifying low emitting products of volatile organic compounds (VOCs). The Eurofins certification combines the most stringent criteria for VOC emissions laid down in national regulations, a large number of voluntary labels on VOC emissions and VOC requirements for LEED, WELL, BREEAM, DGNB and HQE.



Insulation can contribute significantly to health and comfort in buildings and is a subject that we have covered extensively in previous sustainability reports **www.knaufinsulation.com/downloads**. Insulation helps prevent illnesses and deaths caused by cold, reduces noise pollution, alleviates fuel poverty and can reduce indirectly concentrations of external air pollutants.