

For a better world

OWA

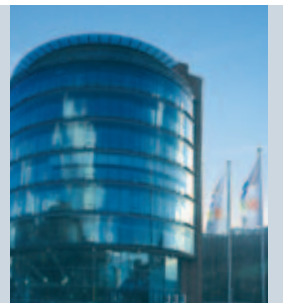


Protecting the environment
Sustainability
Responsibility





Working with nature



TAKING ACTIVE RESPONSIBILITY FOR THE ENVIRONMENT AT OWA

Natural resources are becoming more and more scarce, whilst the global population continues to rise. People need space to live and work, clean air, clean water and a certain amount of unspoiled nature. Will we be able to find a balance between global economic growth and preserving the environment, even as global warming accelerates? As a company, OWA has always focussed on invention and development. We thus see it as our primary concern to try to find ways to successfully address this question.

The principle of sustainability

The concept of sustainability holds the key. The term originates from the timber industry, where it basically means: "Only cut as much wood as the forest is able to replenish!" This idea of "sustainability" has come to be used as a synonym for contemporary green economic management. It represents an ideal which we wish to turn into a reality within our sphere using all the means at our disposal.

At home in a natural environment

OWA was active in protecting the environment long before it became popular as a promotional bandwagon. Amorbach im Odenwald – for more than 60 years the site of the registered office and production plant of Odenwald Faserplattenwerk GmbH – was and still is an official climatic spa. That says quite a bit about how we at OWA feel about the environment.

Blue Angel for low-emission building materials

Our ceiling systems consist of natural raw materials without artificial additives. Moreover our production is submitted to severe and neutral controlled environmental specifications. Our achievement: We are the first producer in our industrial sector who has received the "Blue

Angel" for low-emission building materials. The environmental label confirms that our mineral wool tiles are made of harmless raw materials. So they can be used in sensitive areas such as schools, nurseries and hospitals.

EN ISO certifications

We have obtained certifications of compliance with the international standards for quality management (EN ISO 9001:2008) and environmental management (EN ISO 14001:2004). In so doing, we have committed ourselves to pursuing a continuous process of improvement with regard to defined environmental and quality objectives and to monitoring the results of our efforts. Experts from TÜV Süd review the effectiveness of our system on an annual basis.

Employee protection

Our health and safety at work management system was recently certified to the new BS OHSAS 18001:2007 standard. Numerous improvements in occupational health and safety, e.g. the reduction of noise emissions at machines, also impact positively on the protection of the environment. The areas of environmental protection and occupational health and safety hold further synergy potential, more and more of which we are endeavouring to harness.



Quality meeting LEED standards



CEILING SYSTEMS FOR ECOLOGICAL ARCHITECTURE

OWA ceiling systems are produced in accordance with strict environmental standards. OWA thus meets the stringent standards of the LEED programme (Leadership in Energy and Environmental Design). This environmental certification programme for office and residential buildings, initiated in 2000 by the US Green Building Council, is on its way to become the global standard for environmentally-compatible building construction.

Natural grade

OWA ceiling panels are made of bio-soluble fibres derived from natural sources and recycled materials in differing proportions:

Biologically absorbable mineral wool	30 – 60 %
Organic binding agents	5 – 10 %
Solvent-free dispersions	0 – 5 %
Natural fillers (clay, perlite)	20 – 40 %
Recycled pulp	2 – 5 %

Certified safety

OWA ceiling panels contain no asbestos, PCBs, organic solvents or harmful finishes. They are free from harmful emissions and pose no health risks. This is confirmed by certifications received from leading research and inspection organisations, including: Fibre Persistence Certification (Fraunhofer Institute for Toxicology and Aerosol Research), Certification for low emission building materials “Blue Angel” (RAL gGmbH, Sankt Augustin), Certification for non-detectability of Formaldehyde emissions (Eurofins Danmark A/S), Asbestos-free Certification (GSA, Gesellschaft für Schadstoffmessung und Auf-tragsanalytik GmbH, Neuss).

The short route to quality

OWA works with select materials suppliers, taking care to ensure short transport routes. Some 80 % of the materials we process come from Germany, a significant portion of which comes from the local area. As we produce our own mineral wool, we have absolute control over our

basic raw material. We import the additive perlite from the Mediterranean by ship.

From ceiling to wall

OWA ceiling panels are 100 % recyclable and can be integrated into lifecycle building concepts. By recycling them, other raw materials can be saved; panel components can be used as a filler for example in the production of bricks.

Green suppliers

Environmentally-compatible production means structuring the entire supply chain on the basis of ecological criteria. Accordingly, we are very selective when it comes to choosing our partners. For example, we require our clay suppliers to maintain dust levels under 10 mg / m³ (which poses no risk to health) during demolition.

Sustainability in accordance with LEED

LEED permits the certification of various types of buildings on the basis of the sustainability categories of waste management, saving water and energy, the selection of raw materials and resources, as well as interior room quality. The products used are assessed according to defined criteria and awarded grades. OWA products satisfy these criteria, earn points for investors and, in doing so, contribute to the ongoing appreciation in the value of the property (see explanation on LEED in the supplement to this brochure).

Breathing easy at OWA



Biologically absorbable
mineral wool made from red-
hot lava



SUSTAINABLE PRODUCTION

Visitors to our main office in Amorbach are always amazed at the quality of the air. Despite our running a major manufacturing operation here replete with ‘smokestacks’. Taking a closer look, you will find that what comes out of our emissions systems is nearly 100% water vapour. After all, Amorbach is and intends to remain a climatic spa.

Saving energy

It takes energy to manufacture fibreboard. We mainly rely on natural gas, which is the most efficient fossil fuel and generates the least CO₂ emissions. We are continually optimising our energy technology. When we built our seven-story office building in 1998 for example, heating was drawn from our waste heat from mineral wool production. Our latest accomplishment: a heat recovery system. The system utilises heat emitted in semi-treated panel manufacture to pre-heat the air required for combustion, saving natural gas and CO₂. Heating for the production halls is also generated this way. Result: a 20% reduction in total energy consumption and a dramatic lowering of CO₂ at our Amorbach location. For this innovation we received an Environment Award from natural gas provider E.ON in 2007.

Preserving clean air

Our commitment comes into play at an early stage. We obligate our suppliers to ensure low production emissions and maintain SO₂, fluoride and chloride levels within the strict EU limits. Effective filters used at our Amorbach plant ensure that fine particle emissions are kept well below the maximum limits.

Water ecology

Approximately 80% of the water required for the OWA plant evaporates as steam in the production process. The white clouds visible above the Amorbach plant are thus made of pure water vapour. The remaining production water is cycled through again, with only 7% roughly of water utilised flowing into municipal water treatment. We are thus not far away from having a closed water cycle. The process is monitored by means of regular lab analysis.

Sound reduction

Mineral wool fibres are produced under extremely high temperature linked with a very high noise level. This requires sophisticated sound encapsulation for the entire production process. Amorbach's status as a climatic spa imposes very strict tolerance limits, to which our entire production and logistics chain must be aligned for conformance. Delivery and loading times are regulated at OWA, with night-time loading strictly prohibited.

Return to values

We are a major buyer of such materials as cardboard, cartons and films, and throw our weight around accordingly in the interest of ecological objectives. We thus predominantly used recycled paper, and purchase packaging materials from environmentally certified manufacturers. Nearly all consumable materials are recycled.



We have our own acoustic technician on the staff, whose job is company-wide sound optimisation and to give advice to the customers for specific requirements. This specialist employs the latest technology, including cameras, rendering sound sources visible.



The many facets of sustainability

GROWTH THROUGH KNOW-HOW AND EXPERIENCE

If you want to change the world, you must first change yourself. We are committed to social responsibility, in particular towards our employees and the country we call home. Our region. Our activities are concentrated here.

Development for life

OWA is a family firm entering its third generation. Maximising profits at any cost and short-sighted shareholder driven interests play no role in our business. Yet we continue to grow internationally, at a substantial pace. This confirms for us that we are on track for realising our long-term business objectives. We are interested in sustainable growth. For true progress, serving mankind and the environment.

Ensuring safety

The workplace is part of the environment. We provide our employees an ergonomic work environment. Potential sources of danger are secured, hazardous emissions are avoided, employees are sensitized for possible risks. We have appointed a Safety Officer specifically to ensure that higher workplace safety standards are maintained company-wide. Regular training sessions are also held to keep our employees up to date about the latest developments concerning the handling of hazardous materials

Unfolding strengths

OWA is the largest employer in the southern Untermain region. Accordingly, we bear a certain responsibility with regard to the region. We support and fund environmental initiatives/organisations and charities in the interest of the social, ecological and economic vitality of our surrounding area.

Promoting talent

We want to generate interest, develop talent and promote achievement. That is why every year we offer some ten young men and women an opportunity to receive solid vocational training and a chance at a sound career with outstanding future prospects. We view ongoing continuing education as key to enhancing our competitiveness. The skills, motivation and dedication of our staff members make them real assets to our organisation. The average length of service at OWA is 18 years – unusually long for a medium-sized company.



Constant controls and monitoring ensure OWA quality

Signs of progress

COMMITMENT YIELDS AWARDS

OWA holds national and international quality and environmental certifications issued by a new range of standard-setting and inspection institutions, with additional certifications in planning. The distinctions and awards we have received tell the story of our commitment and motivate us to achieve further improvements.

CE

Our products conform to EU regulations. OWA was the first company in the industry to fulfil European standard EN 13964.

RAL

OWAcoustic® mineral wool panels are free of asbestos and formaldehyde. We hold a General Building Authority Permit from the German Institute for Building Technology. The mineral wool utilised in panel production is biologically absorbable. The criteria for non-classification as a carcinogenic substance, as per the Hazardous Materials Ordinance (Annex IV No. 22 biopersistent fibres) and EU directive 97/69 (note Q), are being met, as evidenced by the RAL Mineral Wool Seal of Quality.

Green Buildings

OWA products are future-oriented, being suitable for global standards for ecological building yet to be implemented.

E.ON Environment Award

What a distinction! In 2007 OWA was awarded the prestigious Environment Award given by Germany's largest energy provider for our innovative heat recovery system.

Ecological status report – lifecycle analysis

Back in 2005 OWA established an ecological status report for its products in partnership with the French company Ecobilan (a subsidiary of the PWC Group). The report is updated annually given any significant changes, representing a lifecycle analysis of OWAcoustic® ceiling panels. The EPD received (= Environmental Product Declaration) in connection with the HQE® method (Haute Qualité Environnementale) in connection with the French standard NF P 01-010, is based on the well-known standards in the series ISO 14.... The standards ISO 14040, 14041 and 14042 are relevant in this context, which have to do with producing an ecological status report, determining the scope of the report analysis, and conducting a lifecycle analysis.

Bavaria's Untermain region:

'Ecological Profit' (Ökoprofit)

In 2009 OWA was named an 'Ecological Profit' company for the second time because of its various initiatives for saving energy and reducing CO₂.



**Environmental label “Blue Angel”,
RAL gGmbH, Sankt Augustin:**

Confirms, that our ceiling panels are made of completely harmless raw materials

LEED:

Information on the OWA product range in relation to the fulfilment of LEED criteria

TÜV:

ISO 9001:2008 (quality)

ISO 14001:2004 (environment)

BS OHSAS 18001:2007 (job safety)

RAL seal of quality:

Certifies the continuous monitoring of our production

**Certification of fibre persistence,
Fraunhofer Institute, Hanover:**

Certification that our mineral wools are biologically absorbable in compliance with the Prohibited Hazardous Materials and Chemicals Ordinance and EU directive 97/69

**Certified asbestos-free,
GSA, Neuss-Norf:**

Certification that our ceiling panels contain no asbestos

Eurofins certification:

Certification that our ceiling panels emit no formaldehyde

E.ON award:

Distinction awarded by our energy provider E.ON for our innovative energy-saving concept for the production of mineral wool ceiling panels

CE declaration of compliance:

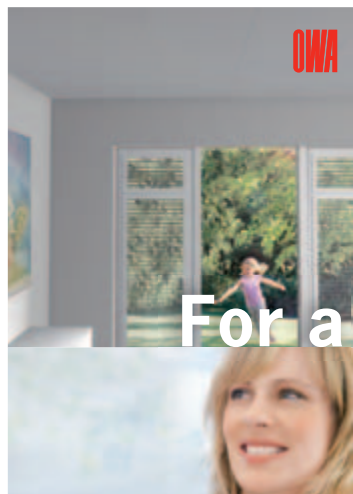
We produce in accordance with EU Construction Products Directive 89/106 EEC and EN 13964

FDES:

French environmental product declaration, used in the assessment of the environmental compatibility of buildings

Ökoprofit award:

Recognition for involvement in the successful Ecology Project for Integrated Environmental Technology conducted by the Untermain region of Bavaria



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Sustainability
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