

For a better world  
Environmental protection and sustainability



**OWA**



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## Healthy growth

When we think about environmental protection we view it from two perspectives. Firstly from the company's research and development of products and their possible effect on the global market and secondly as a manufacturer whose activities may have a direct influence on the environment. Both perspectives create their own environmental responsibilities and this brochure is intended to provide an overview of what we are doing to meet those responsibilities. As the population continues to rise, the world has become a rapidly changing, global market offering many new challenges and opportunities. Our vision is to meet this growth with sustainable, well managed development. We are providing innovative solutions for the "Green Architecture" of the modern world and encouraging responsible, organic growth within our organisation so we can achieve the declared aim of becoming a "Green" company.

Will you join us on the journey?

## Green construction

OWA develops produces and sells complete ceiling systems. The demands placed on our products by planners, designers, architects, distributors and installers are diverse and numerous. Design, functionality, acoustics and fire resistance are some of the required key, product characteristics. One other question is becoming increasingly important: "What do OWA ceiling systems contribute to the sustainable design of the building?" In other words what do the products deliver in terms of air quality, comfort, ease of access and recycling?



### Product Partnership for healthy indoor environments

Since the 1st January 2013, and after successful verification of the OWAcoustic range, OWA was accredited as a product partner with the Sentinel Haus Institute. Air is one of the most important aspects of life and the Institute's aim is to partner with building products that can contribute to a safe and healthy indoor environment. Today's way of life means that most of us will spend at least 20 hours a day inside a building of some sort so it is imperative to our wellbeing that the air quality is as high as possible. The German Federal Environment Agency recommends a maximum of 1000 g/m<sup>3</sup> for solvents (TVOC). This value is also guaranteed by the SHI health pass.



### You score well with OWA – according to DGNB and LEED®

The German Sustainable Building Council (DGNB) awards certificates according to a wide range of criteria, which are set out in 63 "statements". Less detailed, but well established as an international standard, is the LEED® (Leadership in Energy and Environmental Design) points system. OWA products meet both these standards. They pose no health risks and have attained a number of quality labels.



**OWAconsult**<sup>®</sup>  
www.owaconsult.de

**Worth its weight in platinum: OWAconsult**<sup>®</sup> The importance we attach to “green” architecture and construction

consult<sup>®</sup>, our own in-house consultancy department. When seeking accreditation to the LEED<sup>®</sup> Green Building rating system, BREEAM<sup>®</sup> or even the DNGB standard for sustainable building, we can provide you with the appropriate ceiling and acoustic solution. We can also answer any questions associated with composition, health and safety or disposal of OWA ceilings.

#### **The feel-good factor**

The design of a ceiling – materials, shapes, colours, surface texture, etc. – can have a key influence on the visual ambiance of a room. Similarly the acoustic performance of a ceiling can have a large impact on the sound quality of the room, as well as its effective use and comfort. Our products offer innovative single or composite solutions including ceiling canopies, natural look ceilings and flexible acoustic solution for the interior working environment of today and tomorrow ensuring people have a comfortable working environment now and in the future.

#### **Quality reflecting new values**

The less often a product has to be replaced, the better it is for the environment. Our ceiling systems are designed to remain impressive for the life of the building, retaining the original benefits of appearance, acoustics and fire performance.

## Preserving nature

Sustainability is inextricably linked to a product's performance and the properties of the materials used in its manufacture. OWA embraced the principle of sustainability long before it was considered to be an important aspect of a product's characteristic and uses naturally occurring, sustainable and recycled materials in its mineral wool manufacturing process. Mineral wool, the key constituents of OWA ceiling tiles, is one of today's most thoroughly researched and monitored building materials.



### **Rating: natural**

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

- > bio-soluble mineral wool                      30% – 60%
- > organic binding agents                        5% – 10%
- > solvent-free dispersions                       0% – 5%
- > natural fillers (clay, perlite)                20% – 40%
- > recycled pulp                                      2% – 5%

### **Control of the entire supply chain, the shortest route to quality**

OWA makes a difference: We produce our own mineral wool and for that reason have full control of the raw material supply chain. Working with selected suppliers, we ensure the shortest transport routes with over 80 % of our raw materials being sourced in Germany and most from the local area.



### **From ceiling to wall**

OWA Ceiling tiles are 100 % recyclable so can be integrated into the building lifecycle programme. On removal they can be recycled. An example of re-use is as a filler in other construction products,

### **Green supply chain**

Sustainable production means ensuring the entire supply chain operates according to our environmental principles and we select our suppliers of raw materials, energy and consumables such as packaging on this basis. For example, we require our clay suppliers to keep dust levels produced during extraction below the limits applicable in Germany, and hence at a level that poses no risk to health.

## Protecting resources

With its product development OWA promotes the concept of “Green Architecture” but how good would the products be if they are not manufactured in accordance with standards of sustainable production? Of course the concept of “eco-friendly” production will always be fiction or rather a vision. However this does not prevent us from doing all we can to get as close as possible to a “Green Factory” – and with astounding results!



### **Certified to ISO 14001 and EN ISO 50001**

We have received certification of compliance with the international environmental management standard ISO 14001 and ISO 50001. As well as adherence to all relevant legislation; this commits us to pursuing a continuous process of improvements with defined environmental objectives and constant monitoring. By implementing the ISO 50001 energy management system we can monitor our usage, identify areas where savings could be made and contribute to the conservation of natural resources.

### **LEED® Gold for OWA**

Our “House of Ceilings” – the OWA head office and administration building, was recognised as a ground breaking design when it was built in 1999. In 2012 we had it assessed under the LEED® Green Building Rating System for existing buildings and achieved “GOLD” When built innovative technologies such as heating the building using energy recovered from the production plant and cooling using only water, were integrated into the design. Many of these innovations are still not standard features in today’s office buildings.

### **Breathe again at OWA?**

Standing in front of a major industrial production facility, complete with “smoking” chimneys, visitors to our company HQ in Amorbach are frequently amazed by the quality of the air. In fact the exhaust smoke is virtually pure water vapour. After all Amorbach is a climatic spa, known for the health-giving properties of its air and we want to keep it that way!



### **More intelligence for less energy**

Energy is a key element in the production of ceiling tiles. We use natural gas, the most efficient commercially available, fossil fuel, and are continuously improving our energy technology. When we built our 7 storey office building in 1998, we installed a heat recovery system in the mineral wool production facility to heat the building. This was so successful that in 2006 we installed a state of the art heat recovery system to make use of the waste heat from the dryers. This is used to heat our production areas and to pre-heat the air needed for combustion. This has resulted in a 20 % reduction in energy consumption and a dramatic drop in CO<sub>2</sub> emissions. In 2007 this innovation was recognised and we were presented with an environmental award by E-ON.

### **Water, clouds, clean solutions**

Around 80 % of the water needed in the OWA plant is vaporised during the production process and can be seen as white clouds of pure water vapour above the plant in Amorbach. Of the remaining water, only 7 % is sent to a waste water treatment plant, the rest is recycled back into the production cycle.

### **Our noise stays inside**

The production of mineral wool generates high levels of noise which is why the production plant has been sound-proofed. As a spa resort Amorbach stipulates strict environmental controls and, to ensure we are good neighbours, our production and logistics are organised to minimise noise. Delivery and loading times are carefully regulated and loading at night is not allowed.

### **New colour-mixing plant**

Only by monitoring the whole production process is it possible to analyse and optimise processes quickly and precisely. That is why we have brought the technical heart of our tile finishing facility right up to date. This has resulted in significant savings in raw materials, more efficient handling of colours and batch checking, better reproduction, greater flexibility for customers' requirements and the ability to handle smaller runs thanks to optimised mixing technology.

### **Reuse of consumables**

We are a major consumer of materials such as cardboard, cardboard packaging, foils and wood and use our buying power to support our environmental ethos. We predominantly use recycled paper and source the materials from suppliers who are committed to eco-friendly production. Almost all our consumables can be recycled.

## Guiding values

If you want to make the world a little better you have to start with yourself. As a company, we acknowledge our responsibility, to our employees and to our global, regional and local environments. We are involved with the environment at all of our plant locations, especially Amorbach in the Odenwald, where we have had our registered Head Quarters for over 60 years.



### **We keep thinking (and acting)**

OWA is a family firm entering its third generation. Maximising profits at any price, achieving short term shareholder returns, both are alien concepts for us, yet we continue to grow at a substantial pace. We see this as confirmation that we have the correct long term objectives.

### **Ground-breaking: our corporate guidelines**

In 2011 we drew up a comprehensive set of regulations, representing a mutual commitment between management and employees to act in an ethical manner. Environmental protection and occupational safety are extremely important in our factory.

### **Occupational safety is environmental protection**

Workplaces also represent environments. We offer our employees ergonomic working environments, wherever possible. Danger areas are secured and hazardous emissions prevented or controlled. Our on-site safety representative guarantees the highest standards of health and safety measures are maintained throughout the plant and regular training sessions ensure our employees are kept up to date with current safety at work measures.

### **For a vital location**

OWA is the biggest employer in the southern Lower Main region. This commits us to regional involvement. We systematically strengthen the social, ecological and economic vitality around our plant – by supporting and funding environmental initiatives, clubs and charitable institutions.

### **Encouraging involvement, developing talent**

We want to generate interest, develop talent and promote achievement. For that reason we place great importance on the further education and training of our employees. We want to give our young people long term job prospects by providing them with thorough training. 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, which is an unusually long time for a medium-sized company.

## Making our mark

OWA is certified to a number of national and international quality and environmental standards issued by the recognised testing institutions, and is preparing to qualify for others. Awards and prizes confirm our commitment and drive us on to make further improvements.



### **Blue Angel for OWAacoustic® ceiling tiles, OWAtecta® metal ceilings and OWAconstruct® suspension systems**

This Eco label provides certification that the products poses no health risks and confirms that it contains no hazardous materials or adverse effect on the living environment.



### **DIN 18177**

“Wet-process factory-produced mineral panels – characteristics and test methods” limits the emissions of formaldehyde and VOC.



### **TÜV certificates**

ISO 9001:2008 (Quality)

ISO 14001:2004 (Environment)

BS OHSAS 18001:2007 (Occupational health and safety)

ISO 50001:2012 (Energy)



### **Fibre persistence certification, Fraunhofer Institute, Hanover**

This confirms the bio-solubility of our mineral wool, in compliance with the Hazardous Materials and Chemicals Prohibition Ordinance and European Directive 97 / 69.



### **Asbestos-free certificate, GSA, Neuss-Norf**

Certification confirming that our ceiling tiles contain no asbestos.



### **CE Mark**

Our products comply with the EU Regulations. OWA was the first company in its sector to introduce the CE label in accordance with the European standard EN 13964.

### **Transparency in composition**

OWAcoustic®-mineral ceiling tiles are free of asbestos and formaldehyde. A statement from the German Institute for Building Physics is available. The mineral wool used for the manufacture of the tiles is bio-soluble.



### **HQE® / LEED® / DGNB®**



OWA products can also be used in buildings that must comply with the important requirements of the certification procedures for sustainable buildings.



### **RAL**

The criteria for classification as a non-carcinogenic substance according to the Hazardous Materials Ordinance (annexll, no.5, bio-persistent fibres) and European Ordinance 1272/ 2008 (note Q) are satisfied and guaranteed by the “RAL Quality Mark for Mineral Wool”



### **E.ON Environment Award**

Excellent! In 2007 OWA received the prestigious environmental award from Germany’s biggest energy provider for its innovative heat-recovery system.



**Institut Bauen  
und Umwelt e.V.**

### **Environmental Product Declaration – EPD**

An EPD makes statements about the use of energy and resources, and the extent to which a product contributes to the greenhouse effect, acid rain, over-fertilisation, destruction of the ozone layer and smog formation. It also gives details about technical properties which are required for the assessment of the performance of the product in a building, such as service life, heat and noise insulation, or its influence on the quality of the air inside the building. Together with WETEC (the Wet-felt Technical Committee), Odenwald Faserplattenwerk GmbH supports sustainable building by means of Environmental Product Declarations at the Building and Environment Institute [Institut Bauen und Umwelt e. V], as we also see it as our role to provide information about the origin of the raw materials, production and treatment processes and energy consumption, and to be aware of the effects on the environment so that these can be minimised in a continuous process of improvement. The EPD complies with the Europe-wide harmonised standard EN 15804.



### **ECOPROFIT in the Bavarian Lower Main region**

Since 2008 we have been continuously involved in ECOPROFIT (Ecological Project for Integrated Environmental Protection) and are committed to promoting savings in energy and raw materials.



### **LEED® Gold for OWA**

In 2012 we had our administration building assessed under the LEED® Green Building Rating System for existing buildings and achieved “GOLD”



## Give example(s)

Everyone talks about sustainability – doing something is better! The use of OWA ceiling systems in sustainable building projects around the world confirms the effectiveness of our environmental product campaign. Hard facts and figures prove the success of our environmental measures in the plant. Last but not least, our project to re-establish the local wildlife habitat at the factory was completed in 2011 and proved just how much fun it can be to actively participate in an environmental project. It also showed that if you give nature a chance it will improve your quality of life and reward you handsomely.



### **Ceiling systems for “green” office building in São Paulo**

The Eldorado Business Tower is the first building of its type in Brazil to be awarded Platinum certification, the highest level according to LEED®. OWA won the competition for ceiling systems because OWA mineral tiles are made of certified, bio-soluble mineral wool, free of asbestos and solvents, and as a result of their low emissions are classified as posing no risk to health (awarded the Blue Angel). 43,000 m<sup>2</sup> of OWAcooustic® ceiling tiles were installed in the offices and over 4000 m<sup>2</sup> of OWAcooustic® premium tiles in a concealed system was selected for the main entrance and lift lobby areas.



### **Environmental project at the Amorbach plant**

The “Billbach” project, the realignment of the stream that runs through our company site, took two years. The measure was intended to improve flood protection and to create space for the extension of the factory. One deliberate side effect was the re-establishment of the wildlife habitat in the watercourse and bank areas. The scheme cost several million Euros to carry out and has already proved its worth. The initial measures passed their first test in a flood which occurred in 2011. A wide variety of new life has returned to the stream since the realignment and regeneration of the Billbach, including crayfish and the rare admiral butterflies. Employees and neighbours of the plant are equally delighted about their newly acquired relaxation zone.

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