

Concepts

Products

Service



**Designed by awareness.  
Lindner Sustainability**



**Lindner**

Building New Solutions



# Building new solutions.

Lindner executes projects worldwide in all areas of interior finishing work, insulation technology and industrial services as well as facade construction. From planning to completion, we are your competent partner. Our extensive range of manufacture allows us to set standards in the fusion of design and functionality, enabling maximum flexibility for individual requirements. In doing so, ecological thinking is a prerequisite for us. We find the best possible solution and translate your dreams into reality. As your comprehensive partner:

For your ideas, and for your success.

## That's what we can do for you.

### Lindner Concepts:

Individual solutions from one single source for individual industries or specific requirements.

### Lindner Products:

Materials and systems in premium quality for all fields of interior fitting and facade solutions.

### Lindner Service:

Services for a comprehensive project management.

# Commitment included.

Sustainable products by Lindner –  
answering environment's demands.

Our approach to sustainability:

- high quality products with durable serviceability
- resource-efficient production processes
- harmonious balance of design and functionality

# Total Quality Management

We, the Lindner Group, are anxious to fulfill the individual wishes and requests of our customers in the best possible way. Thereby we set a high value on the quality of our products, flexibility, reliability and responsibility towards the people and the environment.

The environmental objectives are determined by the management of Lindner.

The objectives are the following:

- Avoidance of damages caused to the environment
- Protection of natural resources
- Commitment to fulfill the requirements of the appropriate laws
- Pursuit of continuous improvement

These objectives are defined in our **Quality Management Guide**.

An important component of Lindner Holding is the centralized Quality Management Department. The **Environment Commissioner** bears responsibility for the monitoring of the existing environmental measures.

As a matter of course we preferably procure **ecologically friendly products**.

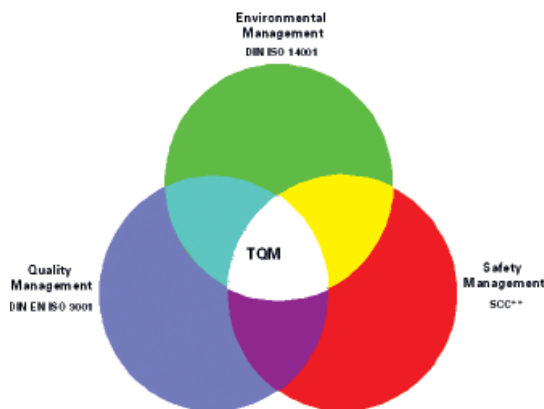
Therefore the following information is requested from our suppliers:

- Information about the after sales services
- Maintenance and repair for every purchased product
- Recycling ability of the product as an important aspect for the life cycle and hence the sustainability

Our service contracts with external providers are always concluded with explicit regard to quality and environmental aspects. In this context companies are favored which have been certified according to ISO EN 14001 or can prove an environmental management system according to other applicable standards.

The **manufacturing** of our own products in the different production departments is carried out according to ecological and economical aspects. The different manufacturing processes are audited regularly for ecological purposes and consistent improvements are observable. Special customer requests are met individually. Customized solutions are developed and supervised already during planning stage by our own experts.

Our ambition is to follow a **Total Quality Management (TQM) System** based on the recommendations of the international norm DIN EN ISO 9001 and the requirements of the Security Management System SCC\*\*. TQM is a continuous process of creating awareness for quality improvement among employees and partners with respect to environmental compatibility and safety. It is geared towards the long-term benefit of the customers. Considering all environmental measures which have already been implemented and set down in our procedure directives, the requirements according to the guideline DIN ISO 14001 are fulfilled to a large extent in all divisions of our company.



With our corporate environmental management we, at Lindner, aim to encourage our suppliers and customers to act environmentally friendly and save resources for the future.

# Sustainability

## Ceiling Systems

According to: U.S. Green Building Council  
LEED® – NC Green Building Rating System  
for New Construction & Major Renovations –  
Version 2.2 October 2005

### **MR 2.1/2.2 Construction Waste Management**

- Since our products are generally manufactured true to the dimensions determined in advance, they hardly produce any cut-off waste during installation. Our environment commissioner is at hand to provide support for efficient waste management and information for an exact estimation and calculation of the resulting waste on the construction site.

### **MR 3.1/3.2 Materials Reuse**

- In general, most of our ceiling products can be dismantled and re-installed in other areas of an existing building. They can even be transferred into another building without impairment of serviceability when handled according to our guidelines and recommendations.

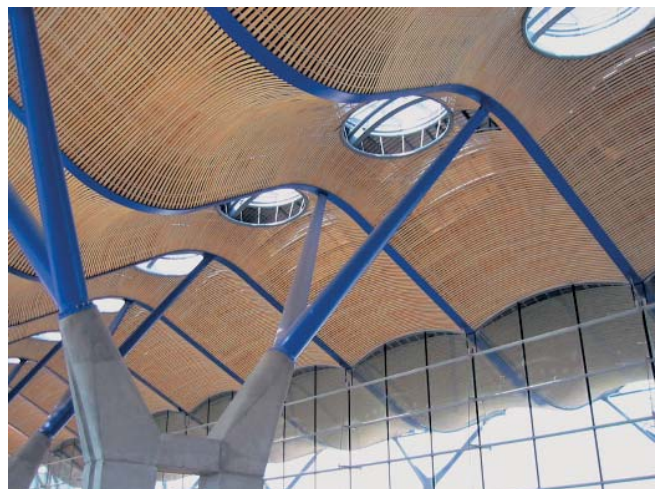
### **MR 4.1/4.2 Recycled Content**

- All primary raw materials used in our manufacturing plant have been selected according to highest standards in quality and environmental compatibility.  
The main components for our ceiling systems are made of zinc-galvanized steel sheet and aluminum with proportions of recycled material of up to 70 %. Other metals, such as copper for the cooling and heating registers of our radiant ceiling systems, are also supplied and recycled in a way that complies with highest environmental demands. All of them contain high proportions of both pre- and post-consumer recycled raw material.

- Our in-house powder coating facilities have been built-up and modernized with regard to utmost environmental friendliness. The painting process is solvent free. Spare powder that has not been applied onto the work piece is always re-circulated into the coating process without any forfeit of quality for the end product. Resulting process sewages are completely treated.

### **MR 6 Rapidly Renewable Materials**

- Although we mainly supply metal ceiling systems we at Lindner can also offer experience in the design of ceilings manufactured from renewable materials, such as real wood bamboo. Bamboo is a very fast growing natural product and therefore of utmost environmental compatibility.



Madrid Barajas International Airport, Madrid (Spain)

# Sustainability

# Ceiling Systems

## **EQ 3.1/3.2 Indoor Air Quality: During Construction and Before Occupancy**

- Most ceiling systems and their components are delivered factory finished and do not require on-site fabrication. They can not release any harmful fibers or compounds when handled properly, and there are no solvent emissions. As a result, we decisively contribute to the prevention of air contamination in the construction or renovation phase and later during occupancy.

## **EQ 4.1 Low-Emitting Materials: Adhesives & Sealants**

- Most products delivered from our production plant are factory finished and do not require on-site use of adhesives or sealants. Hardly any of our components are glued together. If requested, our ceiling panels will be provided with factory applied gasket strips for joint closure. If a predefined level of sound absorption demands for panel lining, the fleece will be bonded in our factory as well. The absence of potentially malodorous materials in direct field use decisively contributes to an adequate indoor air quality in the construction phase. All adhesives and sealants used are harmless to the health of installers and building occupants.

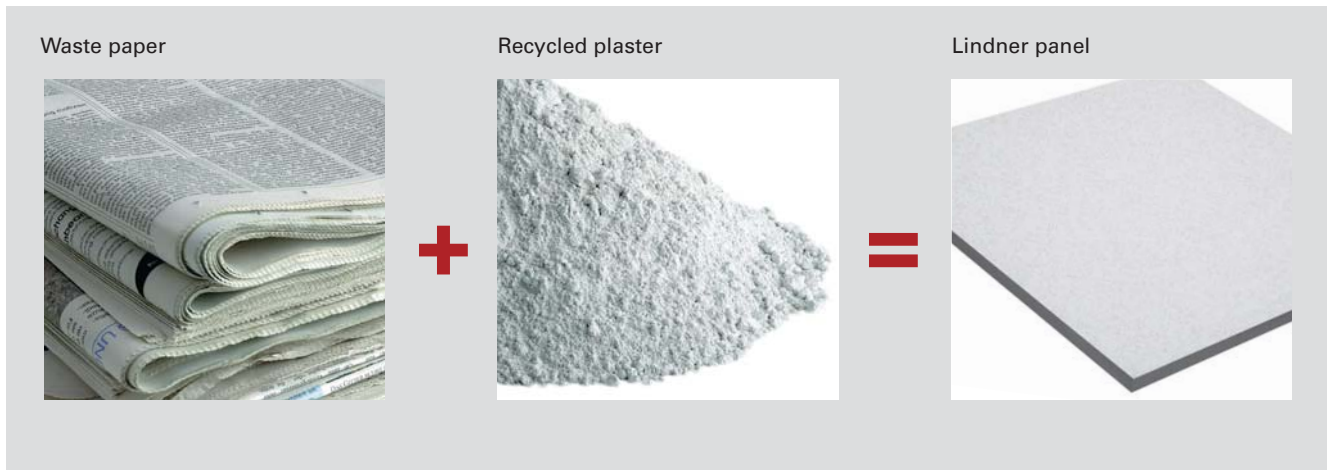
## **EQ 4.2 Low-Emitting Materials: Paints & Coatings**

- All ceiling components will be delivered with a factory finished surface and do not require on-site painting or coating unless enhanced demands for the corrosion protection of cut panels have to be met. Additionally the powder coating process is completely solvent-free, and in general, lacks the involvement of any hazardous materials. Therefore harmful emissions and contamination of indoor air can be ruled out to a very great extent during construction, before and during occupancy.

## **EQ 7.1/7.2 Thermal Comfort: Design and Verification**

- Heated or chilled ceilings by Lindner mainly relying on thermal radiation, (which generally is to be preferred over convection type heating and cooling), will supply comfortable and healthy atmosphere for the occupants in all areas of application by balancing temperature highs and lows. Additionally, our systems display sustainable environmental design through efficient use of energy and water during operation.

# Sustainability Floor Systems



Secondary school, Bruckmühl (Germany)

Lindner raised floor type NORTEC contributes to the well being and safety of the building occupants. Due to its non-combustibility and its resistance to heat, this raised floor could be used for escape routes, thereby adding an additional important protection for people inside the building.

# Sustainability

# Floor Systems

According to: U.S. Green Building Council  
LEED® – NC Green Building Rating System  
for New Construction & Major Renovations –  
Version 2.2 October 2005

## **MR 2.1/2.2 Construction Waste Management**

- Our raised floor systems are ordered, manufactured and installed according to a grid layout defined in advance. The planning stage already includes the optimization of field cuts of panels to the benefit of the installation phase. Our environment commissioner is gladly at hand to provide support for efficient waste management and information for an exact estimation and calculation of the resulting waste on the construction site.

## **MR 3.1/3.2 Materials Reuse**

- In general most of our panels, stringers and pedestals can be dismantled and re-installed in other areas of an existing building or even transferred into another building without impairment of serviceability when handled according to our guidelines and recommendations.

## **MR 4.1/4.2 Recycled Content**

- All primary raw materials used in our manufacturing plant have been selected according to highest standards in quality and environmental compatibility. Our NORTEC raised floor panels mainly consist of gypsum (proportion 90 %), cellulose fibers (9 %) and water. Cellulose fibers are extracted from 100 % waste paper that has been

disintegrated in water. This mash is mixed with gypsum (calcium sulfate semi-hydrate) which is recycled waste material out of the combustion gas desulphurization process itself. Water that has been dehumidified from the panel during compression and drying phase is treated and re-circulated into the manufacturing process.

- Waste produced during formatting of our LIGNA panels is collected by disposal companies and reused to create new energy (e.g. in power plants).

## **MR 6 Rapidly Renewable Materials**

- Our standard floor panels are delivered with bare finish or steel or aluminum applied on top of the panel. Nevertheless it is also common to finish panels with floor covering made from, or mainly consisting of, rapidly renewable materials like linoleum or bamboo.

## **MR 7 Certified Wood**

- Parquet flooring used and applied by Lindner is exclusively procured from manufacturers processing wood that has been certified according to the regulations of the Forest Stewardship Council (FSC).

**EQ 3.1/3.2 Indoor Air Quality: During Construction and Before Occupancy**

- Lindner raised floor systems have a very high level of prefabrication. As a result the floor panels merely have to be laid upon the substructure on the construction site. Due to the natural composition of our floor panels no unpleasant or harmful emissions will result.

**EQ 4.1 Low-Emitting Materials: Adhesives & Sealants**

- Adhesives and sealants are predominantly used within our production plant. Of course we take care that only products of low emission levels are processed for the wellbeing of our employees, the installer, and future occupants. All adhesives and sealants used on site fulfill the international standards for lowest emissions.
- Our LIGNA panels have the lowest formaldehyde class rating. Therefore emissions of formaldehyde are kept to a minimum. Compliance with these boundary values is continuously monitored by independent regulatory institutions.

**EQ 4.2 Low-Emitting Materials: Paints & Coatings**

- All raised floor components will be delivered with a factory finished surface and do not require on-site painting or coating. As a result, harmful emissions and contamination of indoor air can be ruled out to a very great extent during construction, before and during occupancy.

**EQ 4.3 Low-Emitting Materials: Carpet Systems**

- Lindner raised floor systems can be applied with almost every common type of covering. We certainly try to focus our counseling efforts towards carpet systems in compliance with the Green Label program.

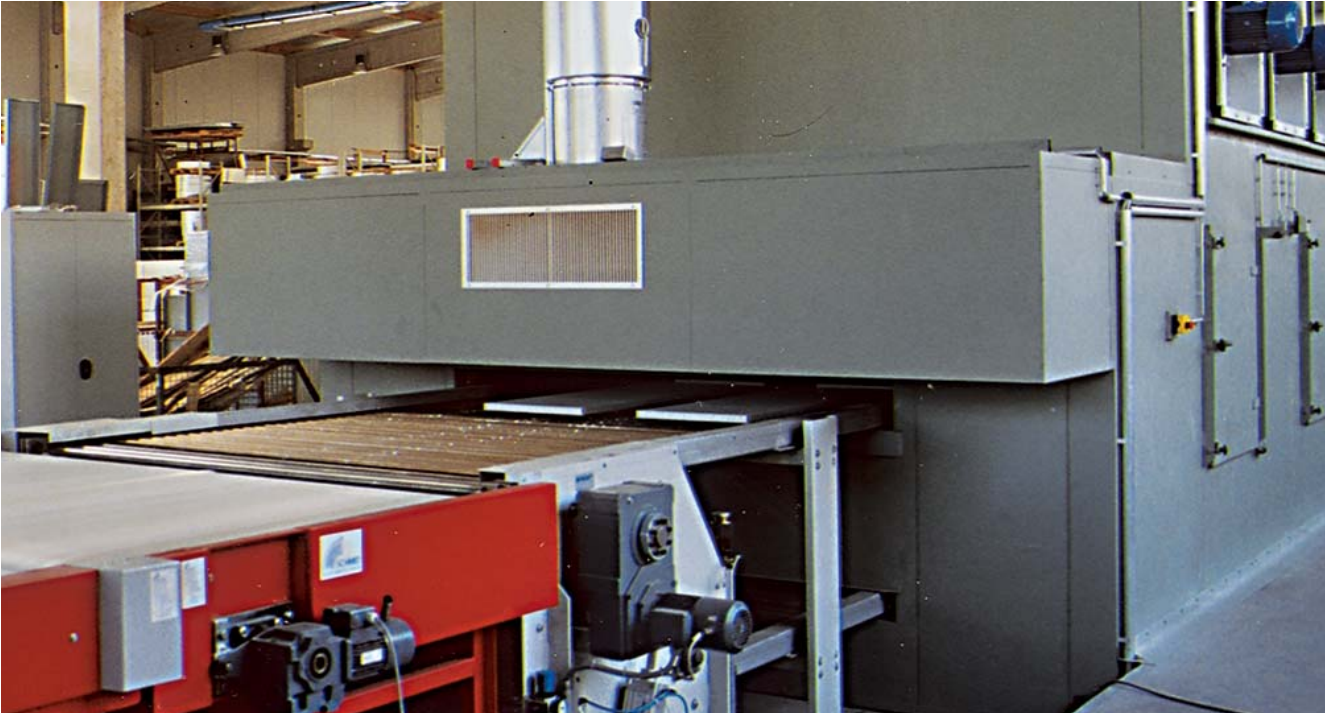
**EQ 7.1/7.2 Thermal Comfort: Design and Verification**

- Lindner raised floor systems can be employed for the thermal modulation of rooms and buildings. Thin pipes are integrated into the panels and cool or heat the panel surface. The high proportion of thermal radiation produced by our radiant floor panels is ideal for a room heating system. Chilled panels with circulating cool water can dissipate heat from a sunlit floor surface before it is received by the room air.



Paul-Löbe-Haus, Berlin (Germany)

# Sustainability Wall Systems



Our modern powder-coating facility; spare powder that has not been applied onto the work piece is always re-circulated into the coating process without any forfeit of quality for the end product.



Transparent glazed partition walls for a comfortably daylighted work environment

# According to: U.S. Green Building Council LEED® – NC Green Building Rating System for New Construction & Major Renovations – Version 2.2 October 2005

## **MR 2.1/2.2 Construction Waste Management**

- Our products are generally delivered made-to-measure and with a very high degree of prefabrication. As a result the amount of potential waste is minimized in advance. Our environment commissioner is gladly at hand to provide support for efficient waste management and information for an exact estimation and calculation of the resulting waste on the construction site.

## **MR 3.1/3.2 Materials Reuse**

- As a major advantage most of our partition and wall cladding products can be dismantled and flexibly relocated to change room layouts after renovation or even transferred into other areas of an existing building without impairment of serviceability when handled according to our guidelines and recommendations.

## **MR 4.1/4.2 Recycled Content**

- All primary raw materials used in our manufacturing plant have been selected according to highest standards in quality and environmental compatibility.  
The main components for our partition and wall cladding systems are made of zinc-galvanized steel sheet and aluminum with proportions of recycled material of up to 70 %. The paneling of the partitions is made of chipboard, plasterboard or glass with proportions of recycled material of up to 90 %.
- Our in-house powder coating facilities have been built-up and modernized with regard to utmost environmental friendliness. The painting process is solvent free. Spare powder that has not been applied onto the work piece is always re-circulated into the coating process without any forfeit of quality for the end product. Resulting process sewages are completely treated.

## **EQ 3.1/3.2 Indoor Air Quality: During Construction and Before Occupancy**

- Most partition and wall cladding systems and their components are delivered factory finished and do not require field fabrication. They do not release any harmful fibers or compounds when handled properly and there are no solvent emissions. As a result we decisively contribute to the prevention of air contamination in the construction or renovation phase and later during occupancy.

## **EQ 4.1 Low-Emitting Materials: Adhesives & Sealants**

- Most finished partitions and wall claddings leaving our production plant are ready-made systems and do not require application of adhesives or sealants on the construction site. Only the gasket strips for the connection profiles are applied locally. The extensive absence of potentially malodorous materials in direct field use, decisively contributes to an acceptable indoor air quality in the construction phase. All adhesives and sealants in use are harmless to the health of installers and building occupants.

## **EQ 4.2 Low-Emitting Materials: Paints & Coatings**

- All partition and wall cladding components will be delivered with a completely finished surface and do not require on-site painting or coating. In addition the powder coating process is completely solvent-free, and in general does not involve hazardous materials. This way harmful emissions and contamination of indoor air can not occur during construction, before and during occupancy.

## **EQ 8.1/8.2 Daylight & Views**

- The application of transparent glass partitions allows daylight shining through the facade to reach the corridor space. Savings in energy and hence costs can be obtained. The proportion of clear surface with our glass partitions ranges from >75 % up to 95 %.

## We can do it all for you.

### Lindner Concepts:

- insulation engineering and industrial service
- clearance of harmful substances
- coldroom construction
- clean rooms
- airports and railways
- studios and cinemas
- high-end interior fit-out
- general contracting
- Public-Private Partnership (PPP)

### Lindner Products:

- facades
- ceiling systems
- lights and lighting systems
- partition systems
- doors
- floor systems
- heating and cooling technologies

### Lindner Service:

- general planning
- development and design
- delivery
- installation
- maintenance

### Lindner

Bahnhofstrasse 29  
94424 Arnstorf  
Germany  
Phone +49 (0)8723/20-0  
Fax +49 (0)8723/20-21 47  
info@Lindner-Group.com  
www.Lindner-Group.com