

# **DIVERSIFIED – WELL EQUIPPED FOR THE FUTURE**

The Lindner Group has developed into a sound, multidimensional enterprise since it was founded by Hans Lindner in 1965. This document will provide you with an overview of our comprehensive product and service portfolio for building envelopes, interior design and insulation technology in almost all fields of application.

We are pioneers in our industry in terms of digitisation and process optimisation in project management and on construction sites. We support our customers by means of modern technical solutions and are also at the forefront of BIM both at product and process level. We are extremely focused on "healthier construction", as dictated by our environment and the well-being of our customers. Innovative concepts such as cradle-to-cradle® and workplace strategies are our passion. We can thus realise even your most unusual requests according to our motto "Building New Solutions".

We are a strong team of motivated colleagues who feel content within our employee-oriented Group. You will also note as a customer that we take pleasure in our work and are proud of what we can achieve — "There is no way for "No way!"

Our partners recognise us as solution-oriented, technically strong, reliable and economically sound. We are a wholly-owned family business and will remain so in the future.

# FROM HERE ALL OVER THE WORLD

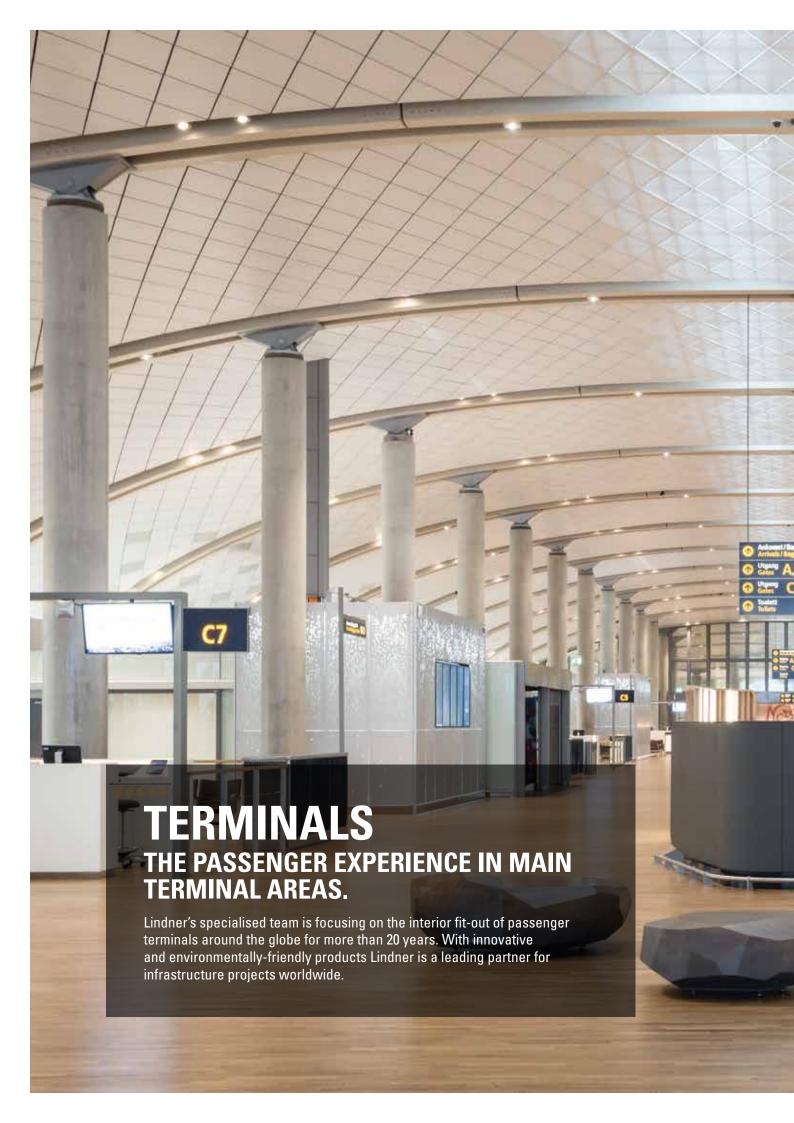
Our headquarters in Lower Bavarian Arnstorf has always served as the corporate head office and stands as a symbol of constancy and growth. The company's expansion over decades has seen the premises increase in size to include numerous production and office buildings. The site now covers an area of approximately 200,000 m². This makes the Lindner Group the largest employer in the Rottal-Inn district and one of the largest companies in Lower Bavaria.

The Lindner Group serves many markets and customers all over the world from the tranquil town of Arnstorf. Our fitters, project managers, construction estimators and branch managers set out from here every week and travel to their projects throughout Germany and all over the world. Besides the facilities for the company's project and supply business, including production, sales and administration, the Arnstorf site also houses the Hans Lindner Foundation and the company's training centre. The Schlossparkhotel Mariakirchen is located only four kilometres away and provides pleasant accommodation and a home-brewed beer for our guests.

- + 6,700 members of staff worldwide
- + daily on 2,500 construction sites
- + 57 % equity ratio
- + 1,800 partner companies
- + 10,000 suppliers



www.Lindner-Group.com Terminals and Stations . 3





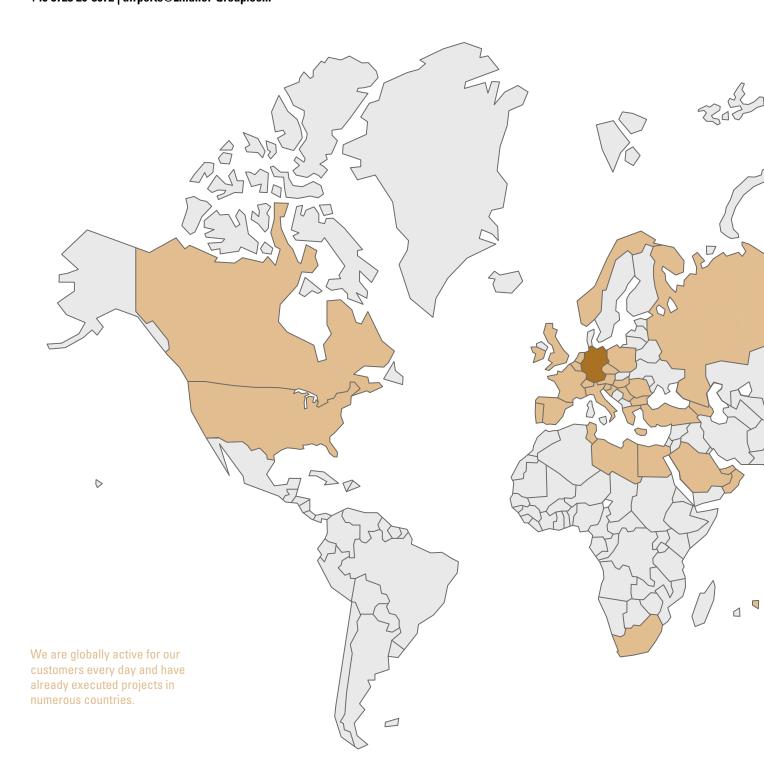
# A GLOBAL PLAYER... WITH OUR ROOTS IN ARNSTORF

Globally we have realised countless projects for our customers. From very small and simple up to very large and demanding. We implement this using innovative solutions, as it is evident from the many examples on the following pages.

We manage these projects partly via our global network of established subsidiaries and partly via specialised project teams sent from Germany, or via reliable partner companies in terms of the delivery business.

Contact us at our headquarters in Arnstorf or visit www.Lindner-Group.com to find your local point of contact.

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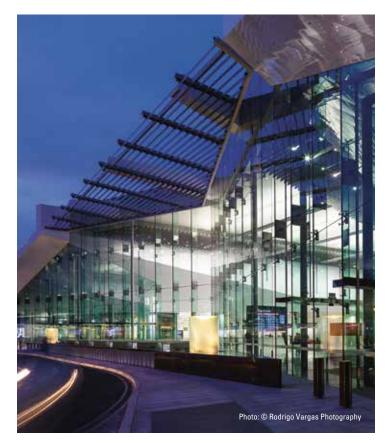
### **MAIN AIRPORT REFERENCES BY LINDNER**

Abu Dhabi Air Traffic Control Tower, UAE Amsterdam Schiphol Airport, Netherlands Ankara Esenboga Airport, Turkey Athens Eleftherios-Venizelos Intl. Airport, Greece Barcelona-El Prat Intl. Airport, Spain Budapest Ferenc Liszt Intl. Airport, Hungary Canberra Intl.Airport, Australia Cologne-Bonn Intl. Airport, Germany Dubai Intl. Airport, UAE Dublin Intl. Airport, Republic of Ireland Durban King Shaka Intl. Airport, South Africa Enfidha Intl. Airport, Tunisia Frankfurt Intl. Airport, Germany Hong Kong Chek Lap Kok Intl. Airport Istanbul Atatürk Intl. Airport, Turkey Las Vegas McCarran Intl. Airport, USA London Heathrow Intl. Airport, UK Luxembourg Intl. Airport Madrid Barajas Intl. Airport, Spain Mauritius Sir Seewoosagur Ramgoolam Intl. Airport Mumbai Chhatrapati Shivaji Intl. Airport, India Munich Franz-Josef Strauß Intl. Airport, Germany Ningbo Lishe Intl. Airport, China Oslo Gadermoen Intl. Airport, Norway Paris Charles de Gaulle Intl. Airport, France Perth Intl. Airport, Australia Sibiu Intl. Airport, Romania Singapore Changi Intl. Airport Shanghai Pudong Intl. Airport, China Sydney Intl. Airport, Australia Tripoli Intl. Airport, Lybia Tbilisi Shota Rustaveli Intl. Airport, Georgia Vienna Intl. Airport, Austria Wroclaw-Copernicus Intl. Airport, Poland Zagreb Franjo Tudman Intl. Airport, Croatia

### **☐ CANBERRA AIRPORT, AUSTRALIA**

Canberra Airport, a vital passenger and freight hub of Australia's capital, has carried out major redevelopment works to their terminal and surrounding infrastructure. Lindner supplied 6,000 m² of Hook-On ceilings and recessed lights in the departure and arrivals areas to the Southern Concourse Extension. Furthermore, Lindner supplied customised Baffle and Hook-On ceilings for the new Western Concourse Terminal and The Atrium – the terminal's centrepiece with a three-story glass facade giving passengers a unique view of the runways and the beautiful landscaped gardens on the front side of the terminal.





# **ARCHITECT**

**Guida Moseley Brown Architects** 

# **BUILDER**

**Construction Control** 

### **SCOPE OF WORKS**

- LMD-E perforated metal Hook-On ceilings customised LMD-L metal Baffle ceilings for the interior and exterior

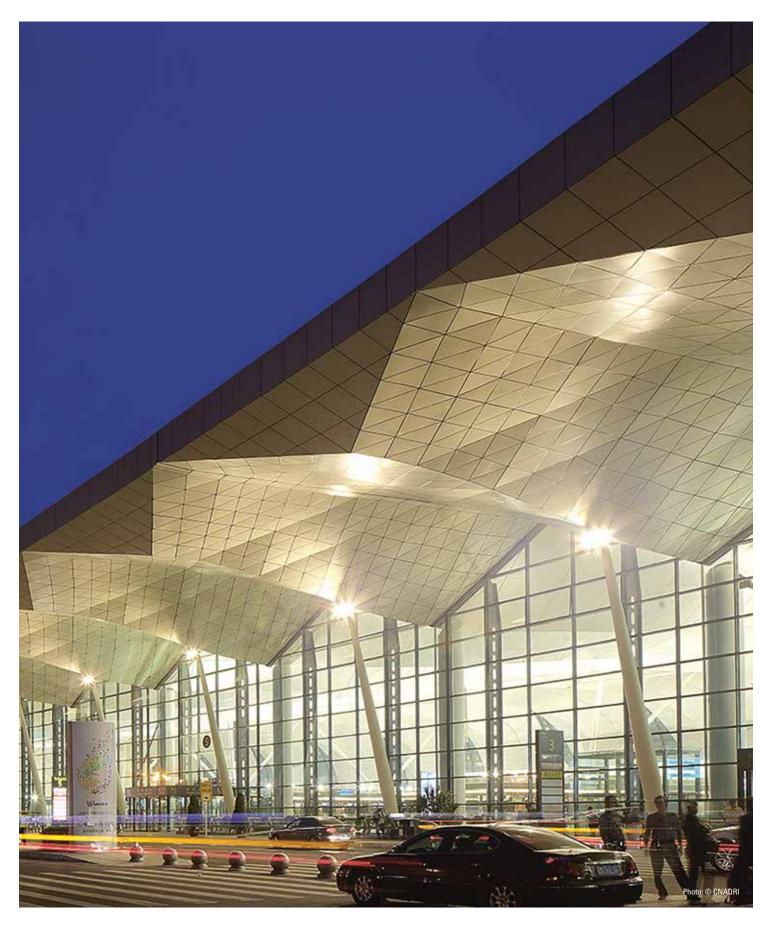
# **CONTRACT VALUE**

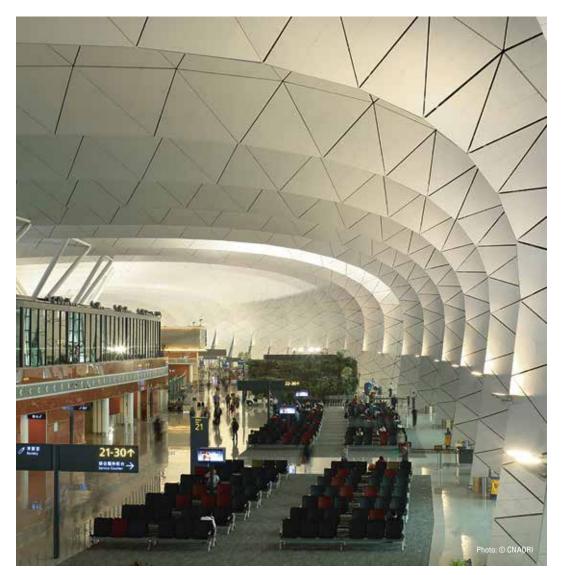
950,000 EUR



# **>>** SHENYANG TAOXIAN INTERNATIONAL AIRPORT, CHINA

Shenyang Airport is an air transportation junction in northeast China. Nowadays, there are approx. 130 domestic air lines and 25 international air lines. Some of the destinations are very famous tourist destinations, including Beijing, Shanghai, Xian, Shenzhen, Guangzhou, Hangzhou, Hong Kong, Macau, Taipei, Seoul, Osaka and Tokyo. For the iconic interior shape of the wall and ceiling cladding supplied by Lindner, over 16,000 different kinds of panels were necessary due to the curved shapes. One larger triangular structure surrounded by an open joint is composed of 9 smaller triangular cladding panels.





### **ARCHITECT**

CNADRI (China Northeast Architecture Design and Research Institute)

### **BUILDER**

Liaoning Airport Management Group

# **SCOPE OF WORKS**

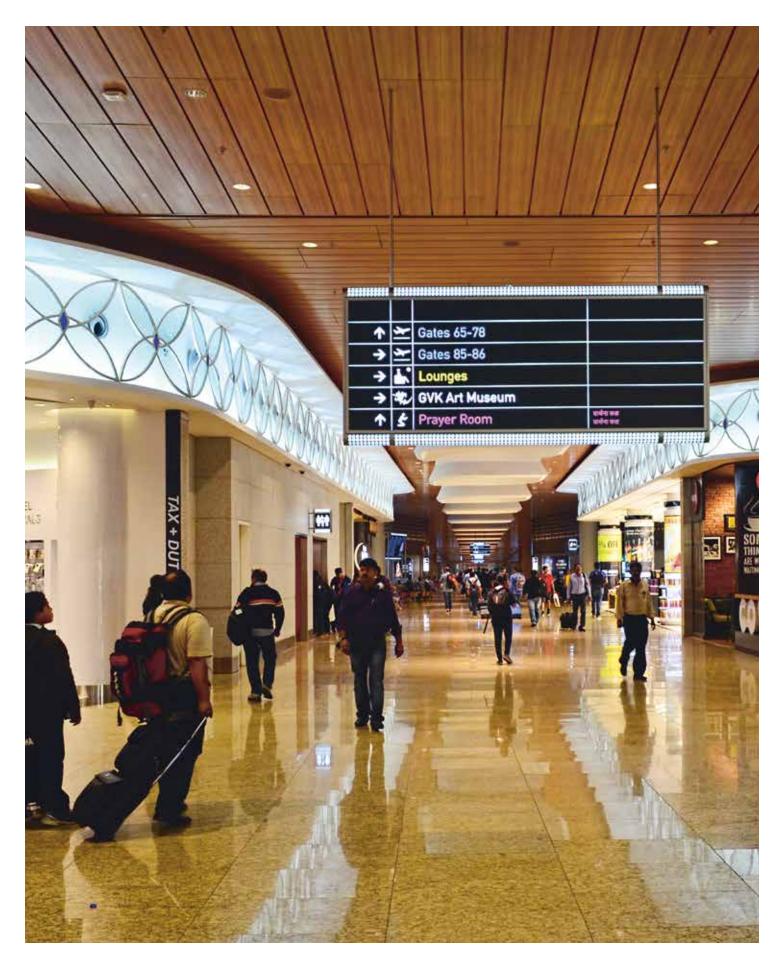
- LMD-S customised triangular perforated metal ceilings
- customised triangular perforated metal wall claddings

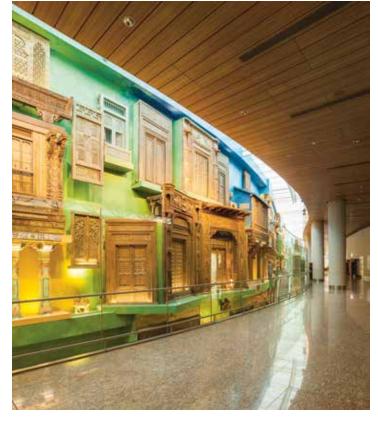
### **CONTRACT VALUE**

850,000 EUR



culture. The largest art exhibition of the country can be found in this terminal, giving arriving passengers a warm welcome with an insight into local culture. The building has an annual capacity of 40 million passengers and a LEED Gold certification.





# ARCHITECT Larsen & Toubro

BUILDER

# MIAL and GVK

# **SCOPE OF WORKS**

- 71,500 m² LMD-E Hook-On metal ceilings with ARTline wooden optic powder coating
- 12,200 m<sup>2</sup> LMD-E Hook-On metal ceilings in bronze colour
- 5,000 m² plasterboard ceilings and light coves
- various other ceiling types

### **CONTRACT VALUE**

7.3 million EUR

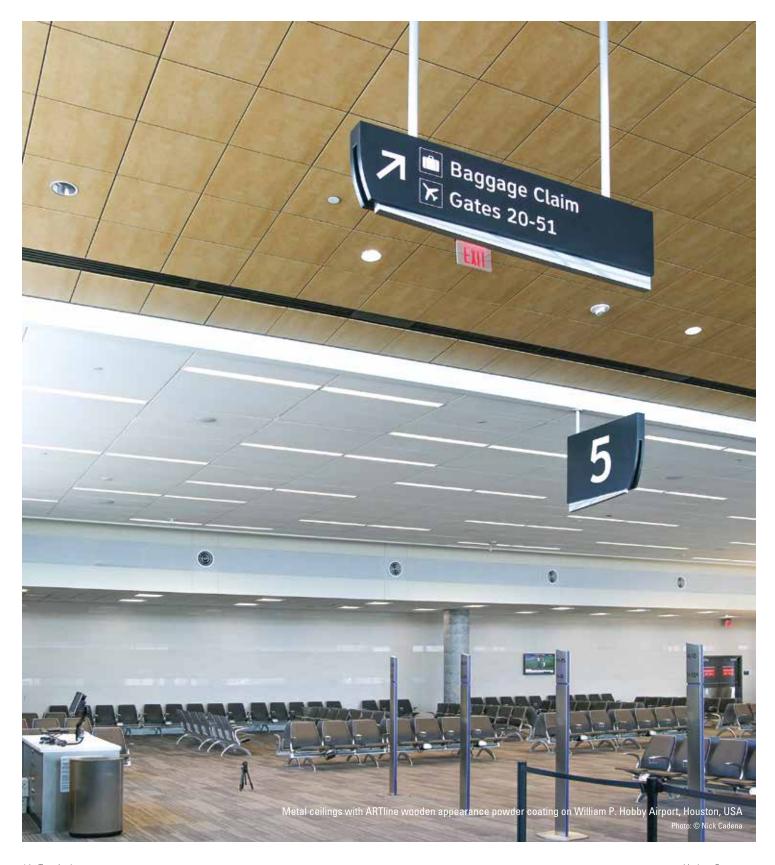


### **CASE STUDY – SPECIAL SURFACES**

### Metal and wood – a perfect symbiosis

ARTline surface is a wooden optic décor suitable for metal claddings and ceilings. ARTline's wooden surface is undergoing an extensive powder coating process, fulfils the demands for fire security as well as UV-resistance and shows high durability against different chemicals and solvents. Micro-perforation is the best choice to preserve the wooden appearance and simultaneously use the surface for acoustic absorption.

Alternatively our surface option PUREline provides real wood veneer on metal or for the highest standards regarding non-combustibility and fireproofing FIREwood – a combination of real wood veneer on a special calciumsulphate board – can be used for claddings and ceilings of many different types.







### **PRODUCT FEATURES**

### **ARTline**

- + imitation of wood surfaces and fantasy decors by means of special coating process on metal
- + easy cleaning/maintenance and good resistance against UV radiation, solvents and chemicals of many kinds
- + fire behavior fulfils the building material class A2-s1, d0 according to EN 13501-1 and Class A according to ASTM E 84
- + available with micro-perforation to minimise the impact on the wooden appearance

### **PUREline**

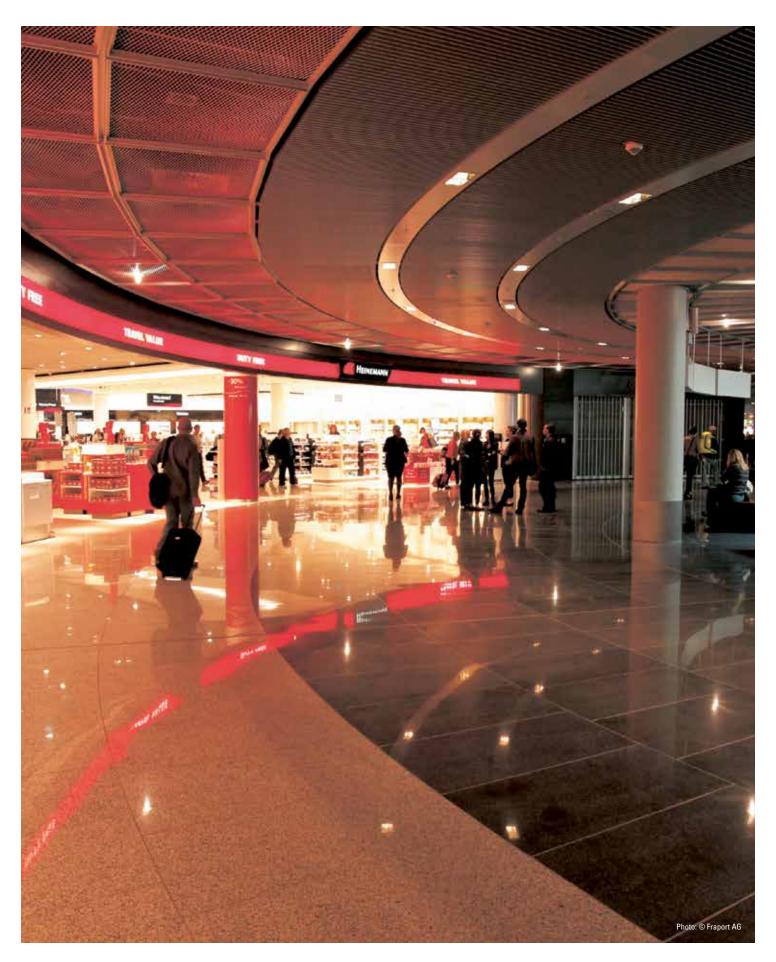
- + real wood veneer on metal
- + fire behavior fulfils the building material Class A according to ASTM E 84
- + resistance against UV radiation
- + available with micro-perforation to minimise the impact on the wooden appearance

### **FIREwood**

- + real wood veneer on calcium sulphate panels
- + fire behavior fulfils the building material class A2-s1, d0 according to EN 13501-1
- + resistance against UV radiation
- + best performance regarding Green Building Standards

FRANKFURT RHINE MAIN AIRPORT A-PLUS, GERMANY

The new pier A-Plus expands the Terminal 1 of Frankfurt Airport, adding check-in positions for wide-body aircrafts. Lindner carried out extensive interior fit-out works as well as the complete interior fit-out of five new Lufthansa Lounges and the Heinemann Duty Free Shops.





### **ARCHITECT**

gmp Architekten von Gerkan, Marg & Partner BUILDER

# Fraport AG SCOPE OF WORKS

- dry construction, drywall partitions, doors
- metal ceilings and metal wall claddings
- shop closings
- interior facades
- exterior ceilings
- raised floors
- insulation works
- luminaires
- complete interior fit-out of five Lufthansa Lounges
- complete interior fit-out of the Heinemann Duty Free Shops

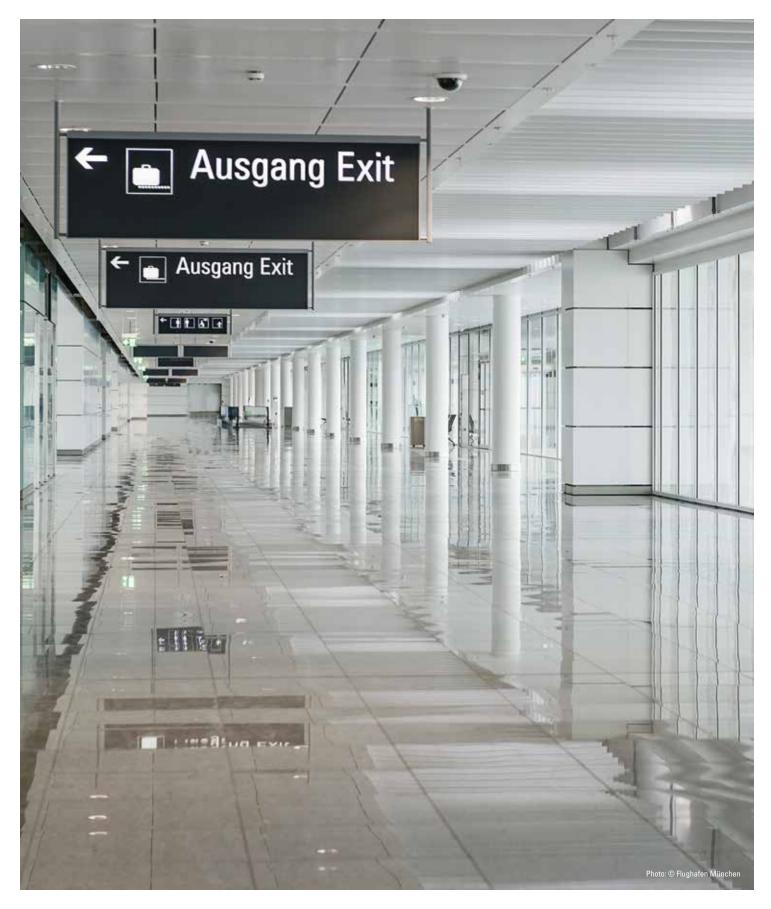
# **CONTRACT VALUE**

68 million EUR



### **☑ MUNICH FRANZ JOSEF STRAUSS AIRPORT TERMINAL 2 SATELLITE, GERMANY**

Munich Airport is the second busiest airport in Germany in terms of passenger traffic behind Frankfurt Airport, and the seventh busiest airport in Europe, handling 42 million passengers in 2016. As of February 2017, the airport features flights to 248 destinations, making it the airport with the fifth-most destinations worldwide. Munich Airport serves as the secondary hub for Lufthansa and its Star Alliance partners besides Frankfurt. Being within approx. one hour car drive away from the Lindner Group's headquarters, Lindner has been heavily involved in the construction and development of the airport from the start with Terminal 1 (opened in 1992) to Terminal 2 in the last decade up to now with the new mid-field satellite building opened in 2016.





### **ARCHITECT**

# Koch & Partner

### **BUILDER**

# Flughafen München GmbH SCOPE OF WORKS

- 51,900 m² LMD-B Post Cap ceilings with Cross Noggins
   12,200 m² various other LMD metal ceilings
   LMD-St Expanded Metal ceilings

- plasterboard linings for shops
- glass smoke barriers
- support rails and substructure for signage

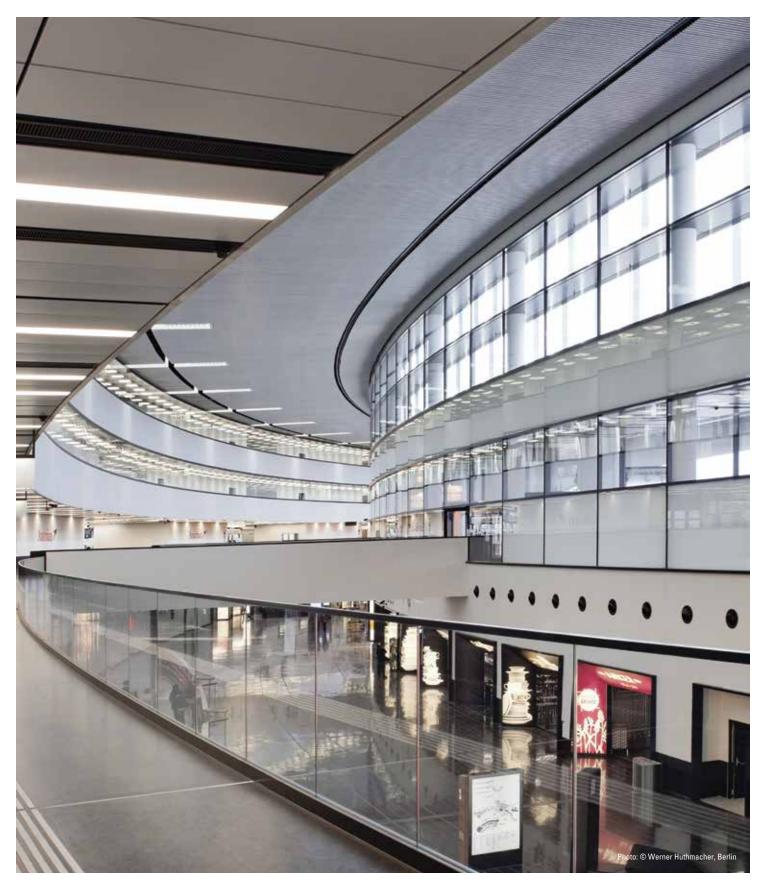
# **CONTRACT VALUE**

9.5 million EUR



### **☑ VIENNA INTERNATIONAL AIRPORT, AUSTRIA**

Vienna International Airport is the biggest and busiest airport in Austria. The 730 m curved terminal building has been designed with glass facades on its north and south side, which will give an important visual connection for passengers between the landside and airside of the airport. The main hall of the terminal extension has been designed to be airy and spacious in an open plan concept making full use of natural light and allowing "connections" to be made at all levels of the building. Vienna represents one of the first airport project that benefits from Lindner's innovative hollow and raised access floor systems not only for back-of-house areas but also for main terminal areas allowing for a flexible cable management in the floor cavity. Besides that Lindner supplied ceiling systems with sophisticated access operation mechanism allowing for easy maintenance access to the services being housed in the ceiling void.



# Photo: © Werner Huthmacher, Berlin

### **ARCHITECT**

ZT GmbH, Neumann und Partner

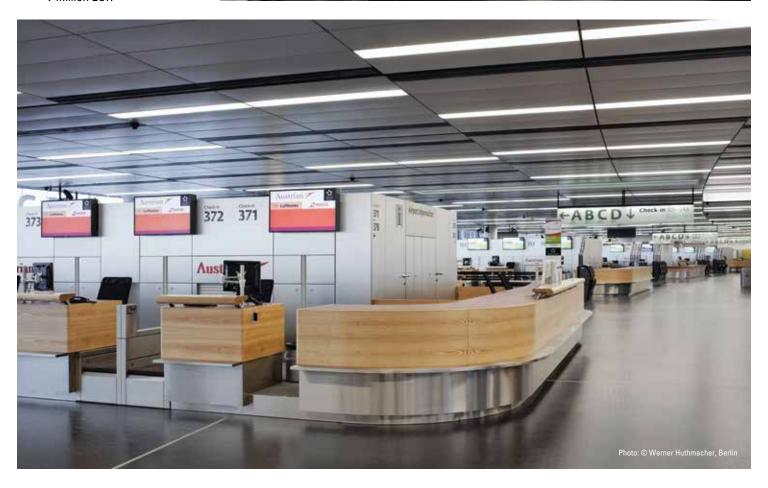
### **BUILDER**

ARGE Skylink Innenausbau (Swietelsky/Bögl) rhtb: projekt GmbH SCOPE OF WORKS

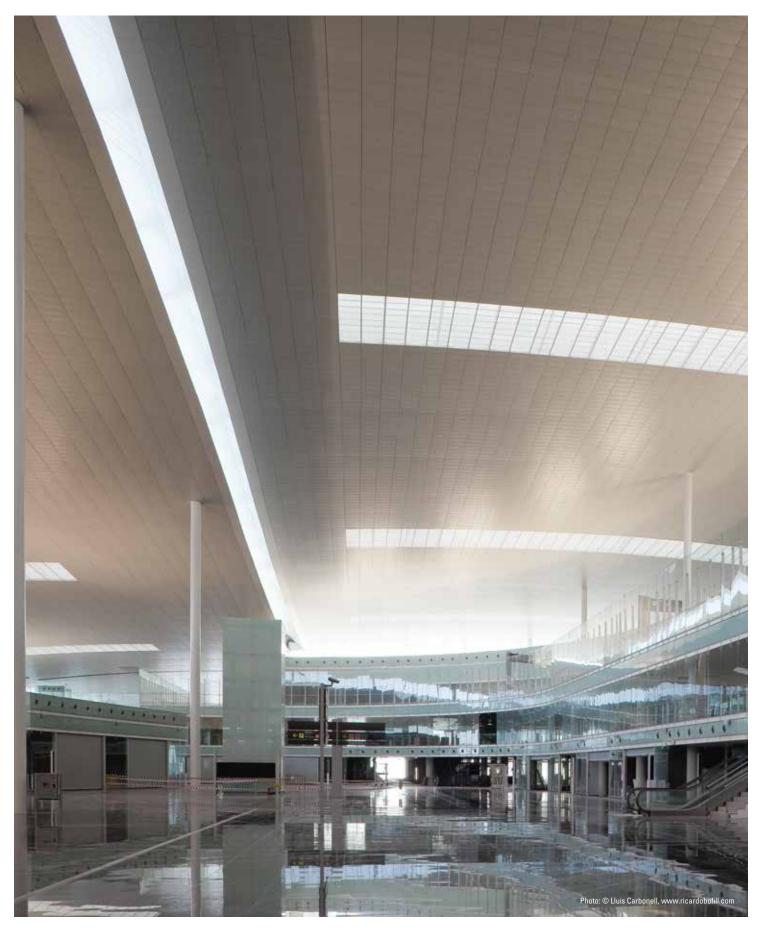
- 35,000 m<sup>2</sup> Floor systems NORTEC and FLOOR and more®
- 9,000 m<sup>2</sup> Ceiling system LMD-E Hook-On with customised Swing-Down function

# CONTRACT VALUE

7 million EUR



 □ BARCELONA INTERNATIONAL AIRPORT, SPAIN
 The building's design has a sophisticated multicultural character with Mediterranean architecture. Lindner provided more than 230,000 m² to the major hub of the Catalonia region. The main component of the ceilings' appearance consists of custom made Hook-On panels with extremely high insulation sound values. The special configuration and substructure supports the curved 3D shape even with a rectangular ceiling system.





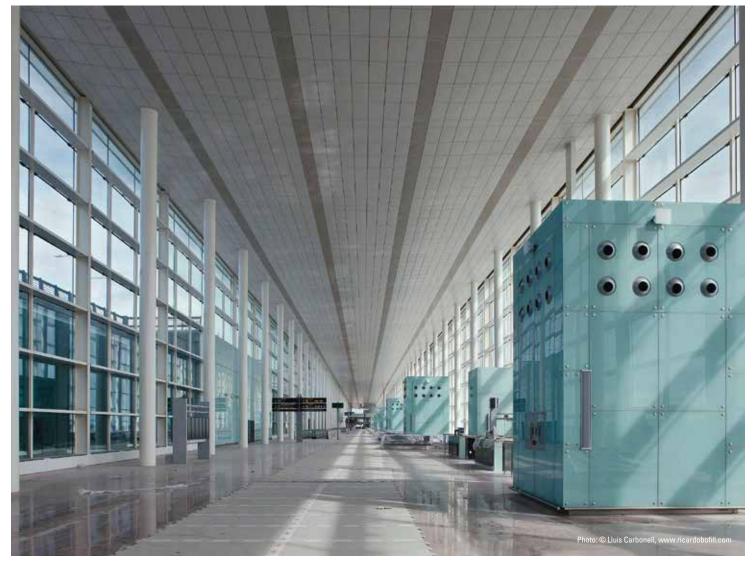
ARCHITECT Ricardo Bofill Taller de Arquitectura BUILDER

# AENA

# **SCOPE OF WORKS**

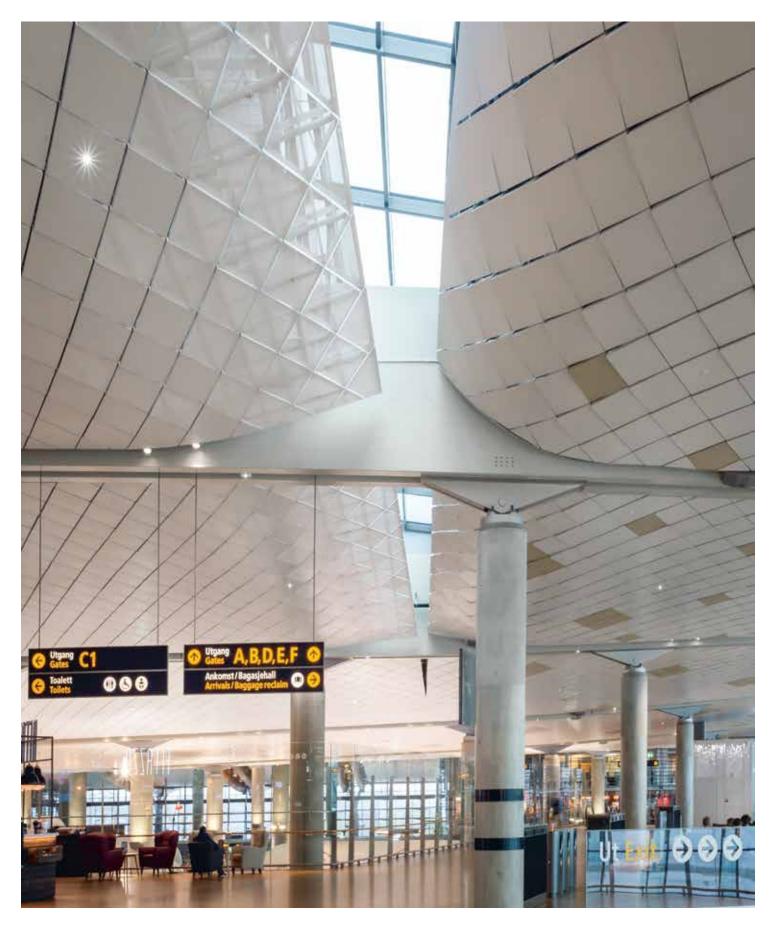
- Hook-On ceilings customised ceilings CONTRACT VALUE

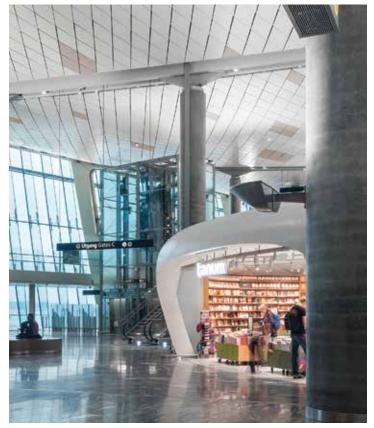
16 million EUR



# **□** OSLO GARDERMOEN AIRPORT, PIER NORTH, NORWAY

The new North Pier is the main new design feature at Oslo Gardermoen Airport. The pier, which is constructed with curved glulam beams and cladded with oak, creates an efficient and flexible passenger flow by siting domestic and international areas one on top of the other, allowing all travellers to use all gates. The shape of the building takes advantage of passive solar energy and sunlight, and features low-carbon technologies like district heating and natural thermal energy. Thanks to Lindner's innovative and sustainable products, the airport's needs and the architect's visions could perfectly be realised on this project.





### **ARCHITECT**

Nordic Office of Architecture

### **BUILDER**

Avinor/OSL

# **SCOPE OF WORKS**

- 18,000 m² customised metal ceilings
   20,000 m² FLOOR and more® power comfort, heavy-duty hollow floor with heating/cooling
- Pavilions (structures for shopping areas)

# **CONTRACT VALUE**

8 million EUR



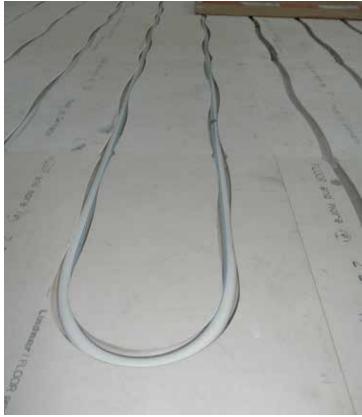
# **CASE STUDY – OSLO'S PIER NORTH SPECIALTIES**

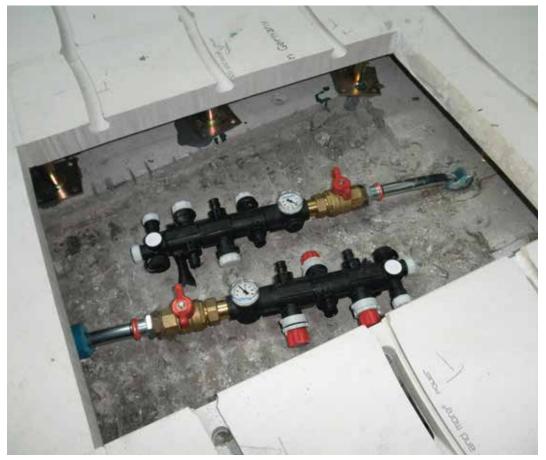
### Hollow floor with integrated heating/cooling technologies – FLOOR and more® power comfort

- + loadable within shortest time period (especially suitable for fast-track projects)
  + highly flexible regarding cable and supply line management
- + enormous cost savings on long-term period when changes to room lay-out need to be made compared to traditional screed systems
- + panels are a premium Green Building product as made of recovered paper, recycled gypsum and reprocessed water









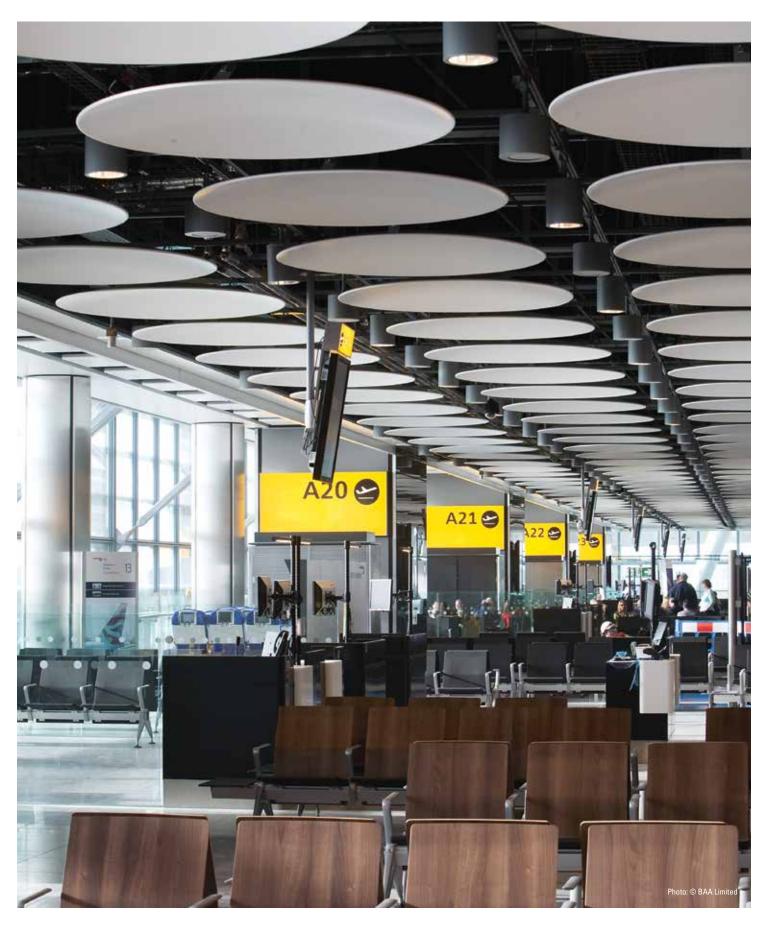
# **PRODUCT FEATURES**

- + heats up and cools down
- very quickly
  + almost any floor covering
  can be used
- + heating capacity
  60 100 W/m² and
  cooling capacity
  23 45 W/m²
- + eco-friendly; low flow temperature

- + special panel composition
  + strengthened pedestals
  + stringers are not required
  + safe for driving over with heavy motorised lifting apparatus

### **∠ LONDON HEATHROW AIRPORT, UK**

A contract value of 130 million EUR — one of the largest projects in airport construction was awarded to the Lindner Group. With Terminal 5 Lindner highlighted its capability of being the perfect partner to execute such a large construction project. Our core competence is to provide bespoke solutions such as the  $130,000 \text{ m}^2$  of metal ceilings which we supplied and installed in T5 and which perfectly exemplify our company's business expertise. Besides the T5 milestone project, different subsidiaries of the Lindner Group have been widely involved in the development of the Terminals 2,3 and 4 as well.





# **ARCHITECT**

Pascall & Watson Ltd.

### **BUILDER**

- BAA plc SCOPE OF WORKS Drop & Slide, Disc, Raft, Mesh, Tubular and Canopy
- ceilings
   curtain wall special bomb resistant Hook-On facades
- Lindner Life glass partitions
- floor systems doors

# **CONTRACT VALUE**

130 million EUR

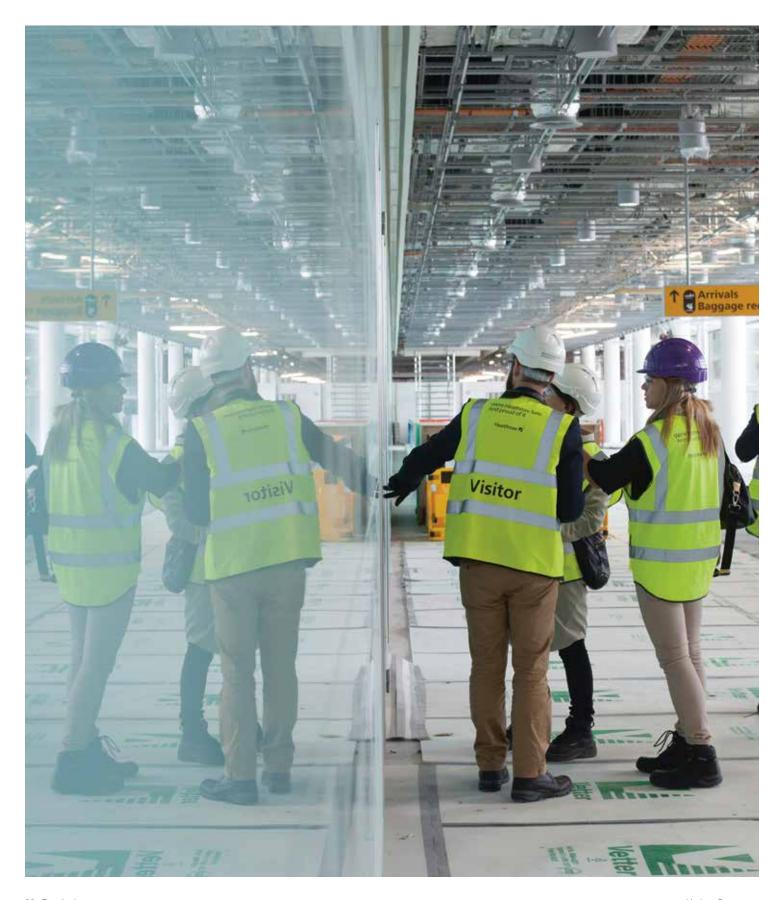


# **CASE STUDY – LONDON HEATHROW AIRPORT'S SPECIALTIES**

# Glass wall lining Lindner Free Individual

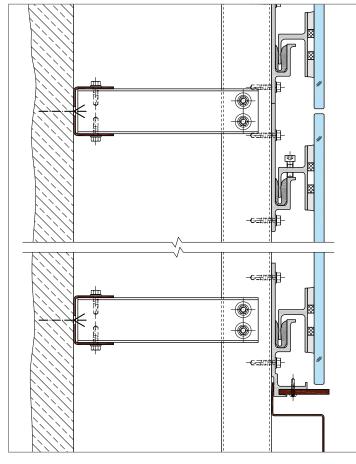
- + sophisticated appearance and elegant design + exterior depth/wall cavity variable + glass and metal surfaces combinable

- + inspection opening can be integrated
- + requirements for impact load, wind and suction loads are met
- + optionally available as bomb-blast-enhanced version





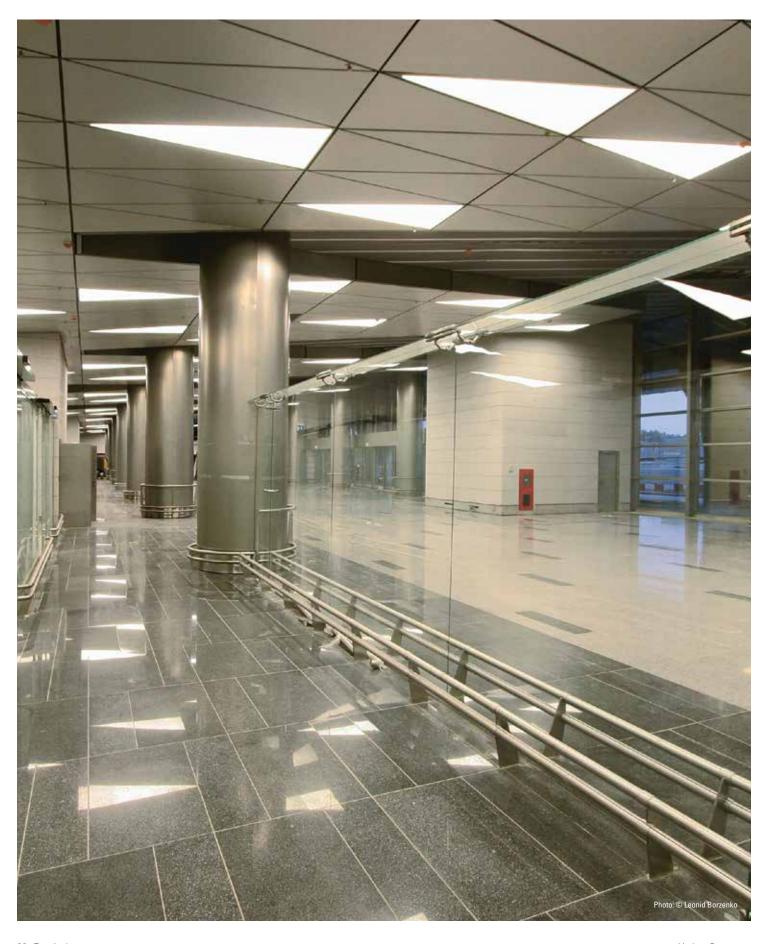




### **PRODUCT FEATURES**

- + construction options: fastened to the wall
- + measurements: material-related production
- + joint width: 5 mm (standard)
- + height: unlimited, as back-mounted onto load-bearing wall
- + weight: 40 45 kg/m<sup>2</sup>
- + steel substructure/steel studs: constructed from folded or rolled steel sheet profiles, zinc coated or laquered
- + hook-on construction: consisting of extruded aluminium profile, anodised
- + build connections: Relocatable floor, ceiling and wall connections
- + combinable wall panels: glass panels, metal panels
- + bonding: type: in accordance with ETAG 002 standard for Structural Glazing
- + permissible temperature range: -50 °C to +150 °C

MOSCOW VNUKOVO AIRPORT, RUSSIA
Lindner is an expert in developing customised solutions. For Vnukovo Airport, Lindner developed a ceiling system based on a modular design with two triangular panels forming a parallelogram. As a further highlight of the ceiling's visual appearance, the architect influenced the design with bespoke integrated lighting systems specifically developed and produced by Lindner. Even with 80 different panel shapes the access to services is guaranteed via every single panel.



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# **ARCHITECT** Metrogiprotrans **BUILDER**

### OAO Vnukovo **SCOPE OF WORKS**

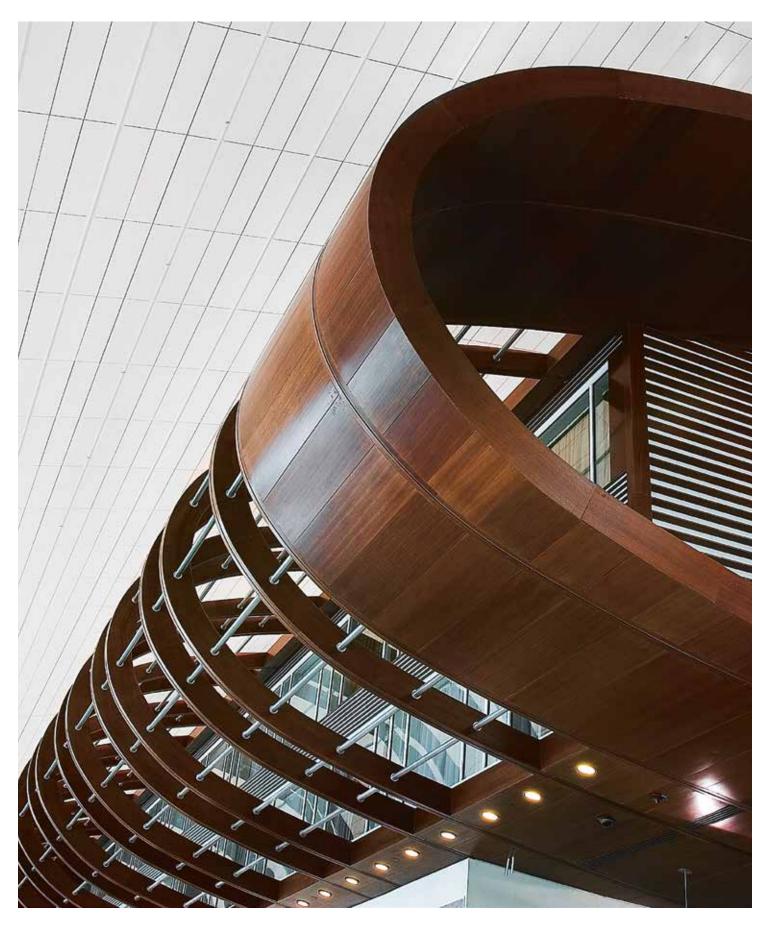
- LMD-S special triangular ceiling panels with torsion spring system
   customised Hook-On/Corridor ceilings
   customised Lighting systems
  CONTRACT VALUE

600,000 EUR



### **☑ DUBAI INTERNATIONAL AIRPORT, UAE**

The Dubai International Airport Hotel is located in the transit area of the airport. Hotel guests can enjoy celebrity treatment with world-class service during their stay. Being a landmark building within the airport, Lindner was responsible for the hotel envelope and adjoining ceilings with genuine wood surface. The applied system called PUREline consists of a real wood veneer on metal panels of aluminium or galvanised steel. The highest demands such as fire and earthquake resistance or light weight together with an exceptional visual appearance can be easily provided with this product.





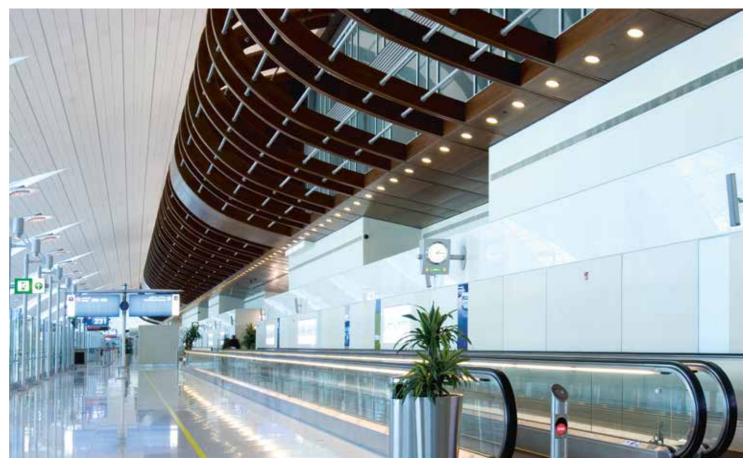
ADPi/Dar al Handasah, Shair and Partners BUILDER Cloisall Co. LLC

# **SCOPE OF WORKS**

- PUREline real wood veneered suspended ceiling
- wall cladding
- curved aluminium ribs with real wood
- laminate aluminum panel enclosure
- custom made linear wood grill assembly

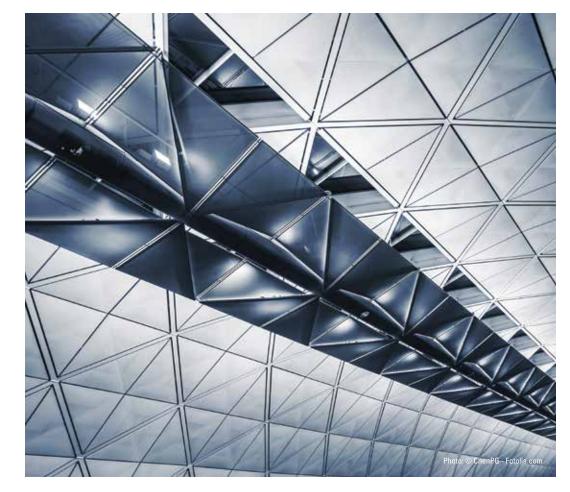
# **CONTRACT VALUE**

7 million EUR



HONG KONG INTERNATIONAL AIRPORT, CHINA
Foster + Partners' design supplemented the project an astonishing appearance. The focus is on the specially coated, trinagular ceiling panels which were supplied and installed by Lindner and which cover an area of more than 160,000 m².





## **ARCHITECT** Foster & Partners **BUILDER**

## **BCJ Joint Venture SCOPE OF WORKS**

- triangular metal ceilings for the exterior and interior
- plain and perforated aluminum panels
- external soffit lining
- binnacles
- daylight reflectorscheck-in islands

## **CONTRACT VALUE**

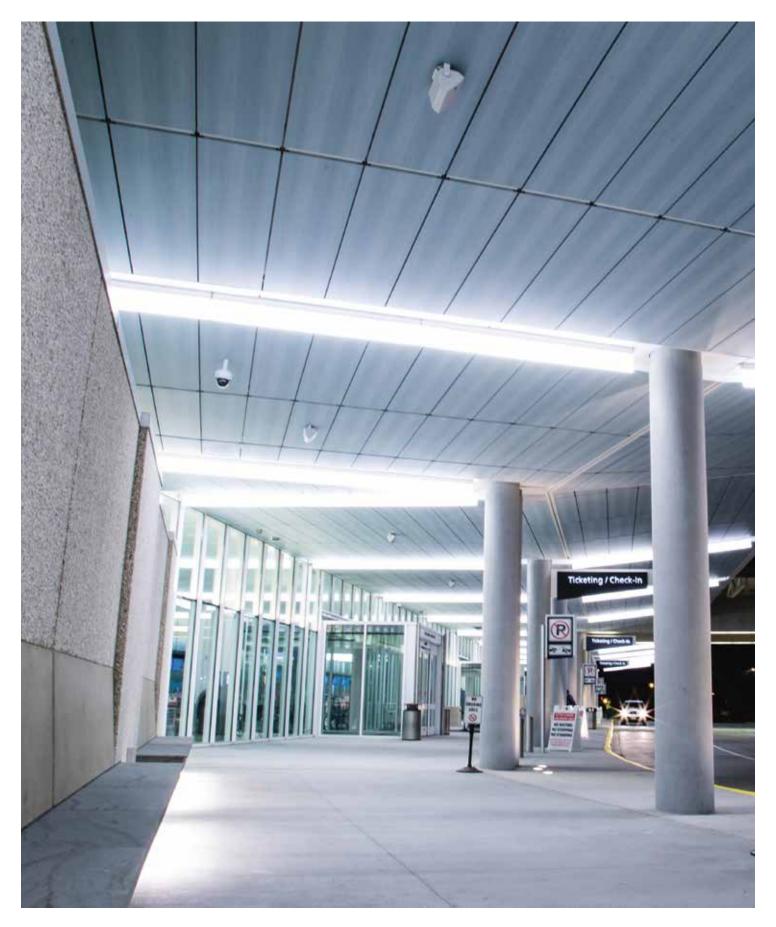
64 million EUR



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## **□ CHARLESTON INTERNATIONAL AIRPORT, CHARLESTON SC, USA**

The Charleston International Airport modernisation covers a complete overhaul of the airport, the addition of five new gates, a new consolidated car rental facility and streamlined security check points. The retail and lounge areas will see a new high ceiling with skylight, to create a more pleasant travel experience to the 2.6 million passengers passing through each year. Our customed finish panels were installed throughout the airport, covering nearly all ceiling areas, adding a new perspective for the coastal airport with our Haight Blue Wood panels in partnership with Pure + FreeForm.



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**ARCHITECT** Fentress **BUILDER** 

Warco Construction **SCOPE OF WORKS** 

7,100 m<sup>2</sup> of

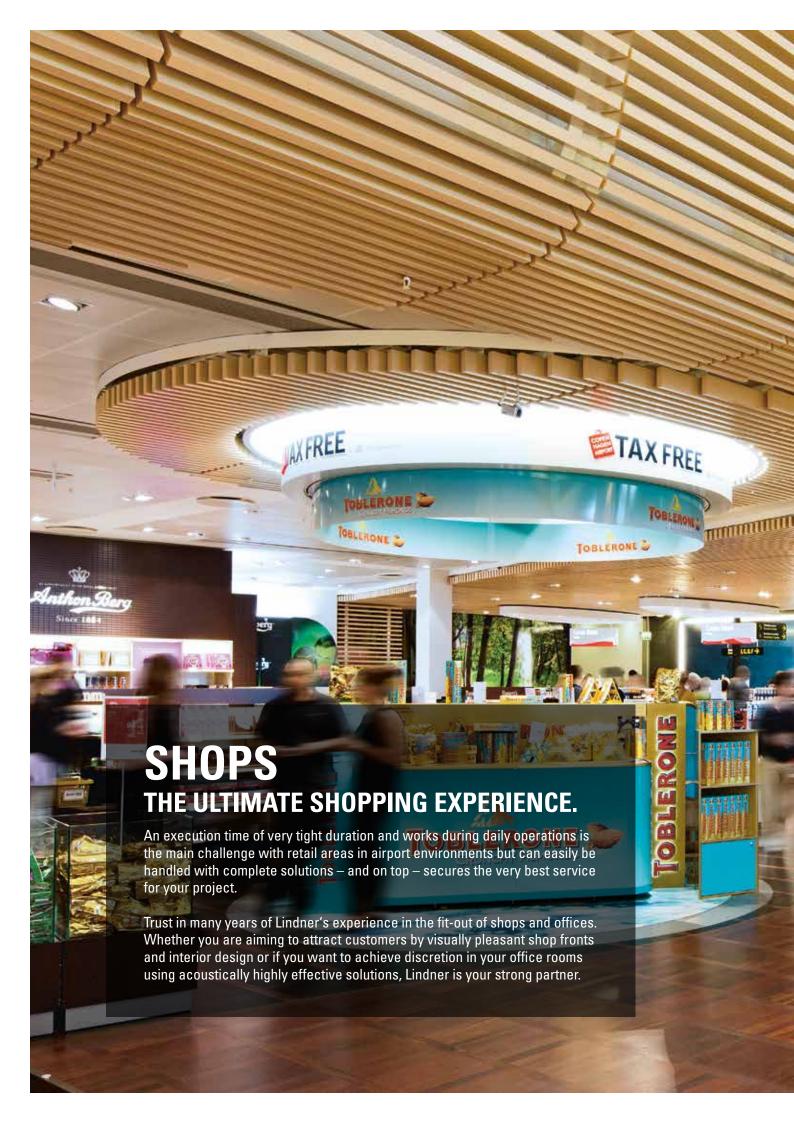
- LMD-W Exterior Ceilings LMD-E 340 Drop and Slide Interior Ceilings

**CONTRACT VALUE** 

1.2 million EUR



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## **☑ GEBRÜDER HEINEMANN SHOPS AT VIENNA INTERNATIONAL AIRPORT, AUSTRIA**

One of Heinemann's shops is located at Vienna Airport. In order to give this shop a special charisma, it was redesigned. It was intended that the ceiling would play an important role as a design element. With this project, Lindner once again proved its competence and reliability as a partner for special solutions. The optical and technical requirements from the ceiling could be met with a custom system from the LMD-DS canopy ceiling product family. This ceiling serves as an eye-catcher while skillfully complementing the overall look of the room. Besides the ceiling, the installed Lindner FLOOR and more® hollow floor system certainly contributes to the success of this shop by providing a flexible and sustainable solution for cable and supply line management.



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BMC BaumanagementConsulting GmbH (flooring); Gebrüder Heinemann

## **SCOPE OF WORKS**

- LMD-DS Metal Canopy Ceilings FLOOR and more®-hollow floor system

## **CONTRACT VALUE**

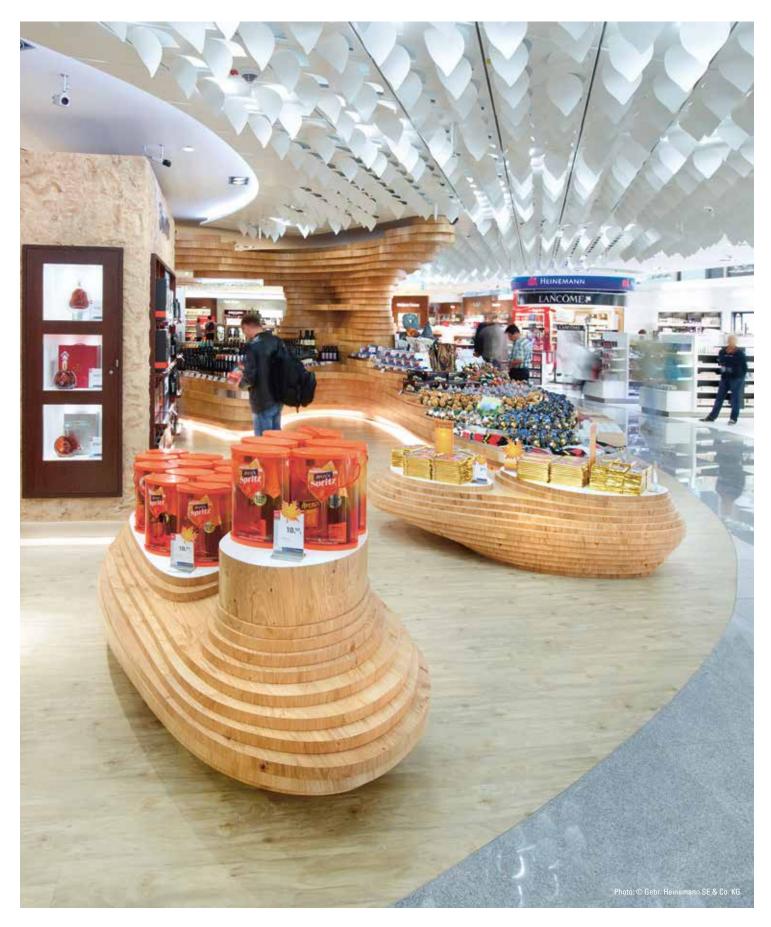
190,000 EUR



Shops . 43 www.Lindner-Group.com

## **☐ GEBRÜDER HEINEMANN SHOPS AT FRANKFURT INTERNATIONAL AIRPORT PIER A-PLUS, GERMANY**

By applying the theme "German Forest", the Heinemann Shop at Frankfurt Airport takes reference to its surrounding region, just like all other international Duty Free Shops of Heinemann. This has been put into practice with several constructional aspects, such as the generous use of wood and other natural materials. The "leafs" of the forest are provided by a Custom Metal Ceiling System which was developed specifically for this project by Lindner. Furthermore, Lindner was responsible for the execution of numerous other works as a part of the shop's fit-out.



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#### **ARCHITECT**

JSK Architekten, FAAG Technik GmbH, Gebrüder Heinemann, Büro Grünzig Gesellschaften

## **SCOPE OF WORKS**

- plasterboard ceilings
- plasterboard partitions
- wall claddings
- FLOOR and more® hollow floor system
- screed works
- site equipment
- painting works
- doors
- tiling works
- LMD-B Post Cap Metal Ceilings
- LMD-S Customised Metal Ceilings
- demolition works

## **CONTRACT VALUE**

3.4 million EUR





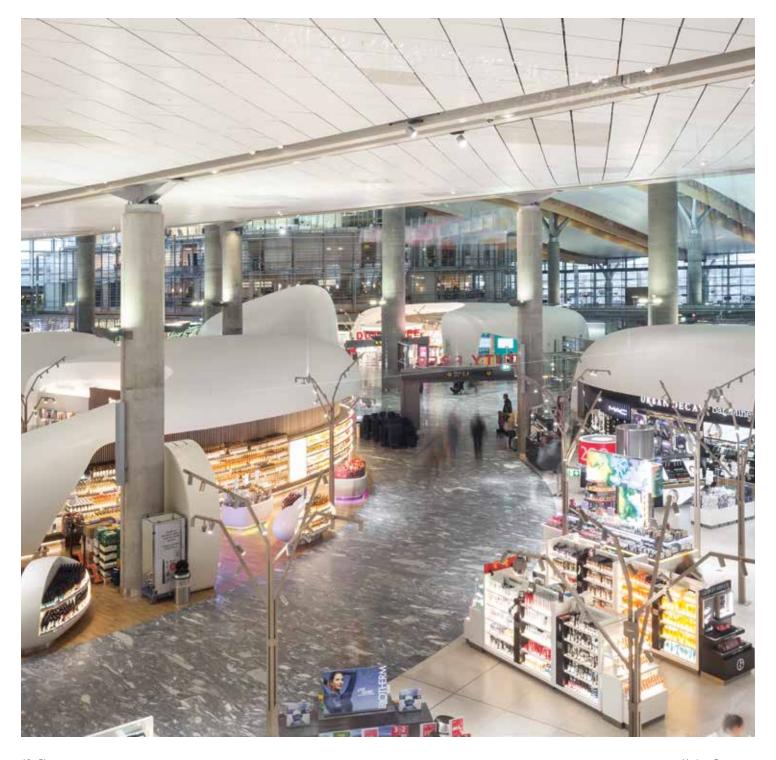
www.Lindner-Group.com Shops . 45

#### **☑ THE PAVILIONS PROJECT AT OSLO AIRPORT PIER NORTH – RETAIL AREA, NORWAY**

Since the extension of the main terminal and the new construction of "Pir Nord", Oslo Airport is capable of processing about 30 million passengers per year. The new terminal uses its 300 metres in length to house eleven new gates including restrooms, restaurants and shops.

Lindner AG was commissioned with the development, planning and construction of five free-form retail pavilions in the pier. In order to reduce both the weight and the logistics efforts, Lindner recommended the use of wood instead of steel. The entire support structure, being designed in detailed 3D planning, was constructed with a framework of laminated timber. Over 10,000 parts needed to be milled and numbered for quicker installation. The pavilions organic form was created through a multi-layered convex cladding of bendable gypsum fibre boards that also fulfilled the fire protection requirements. The exterior hull was finished with a structured mineral lime plaster. The interior was cladded with 8,000 unique triangular, acoustically effective metal panels.

Lindner AG was also contracted with other custom solutions in the terminal. Lindner developed and supplied a ceiling system for an area of about 18,000 m², consisting of approximately 1,500 differentiated and diamond-shaped panel types. The central area saw the fitting of further 2,000 m² of expanded metal ceilings and 7,000 m² hook-on ceilings. Futhermore, 20.000 m² of the hollow floor system FLOOR and more® power comfort have been installed. This particularly resilient system is fitted with an integrated heating and cooling system, allowing efficient temperature control even in these open spaces.



46 . Shops www.Lindner-Group.com



**ARCHITECT** 

Nordic Office of Architecture

## **SCOPE OF WORKS**

Development and installation of Pavilions with erection of the structures as well as interior and exterior lining

## **CONTRACT VALUE**

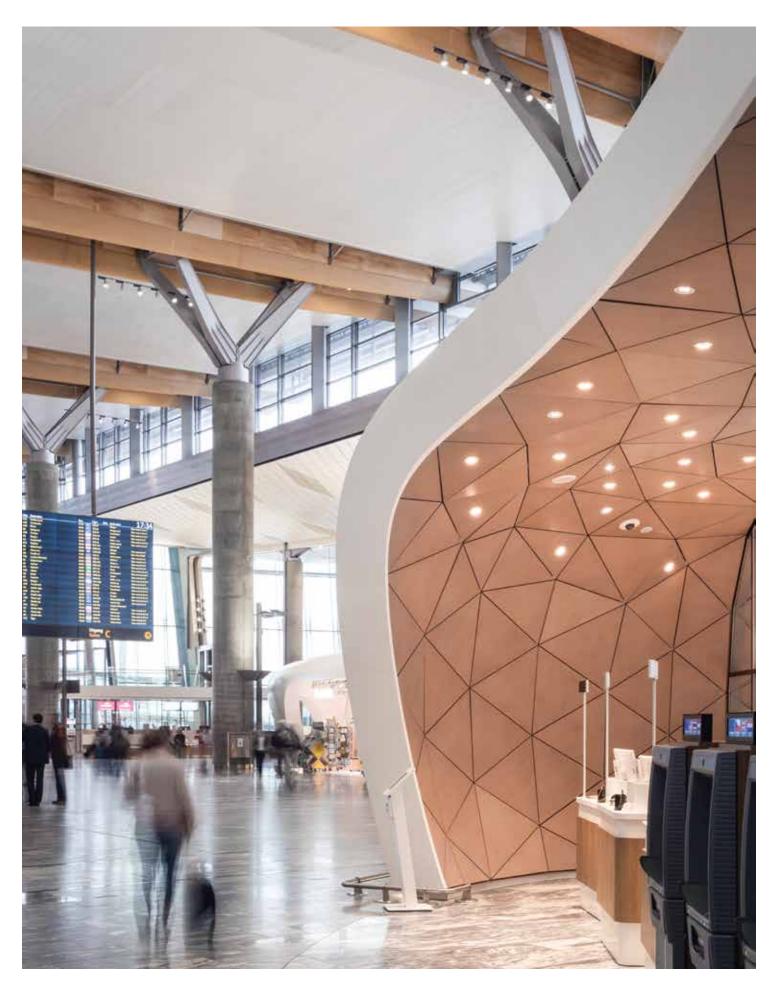
5.7 million EUR



www.Lindner-Group.com Shops . 47

## OSLO AIRPORT PIER NORTH PAVILIONS - "THE STONES" IN A CASE STUDY

From design and functional intent regarding people flow to concept stage and realisation.

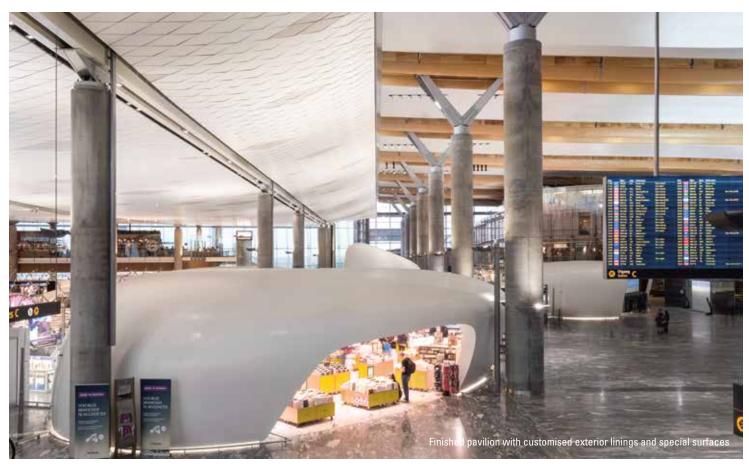






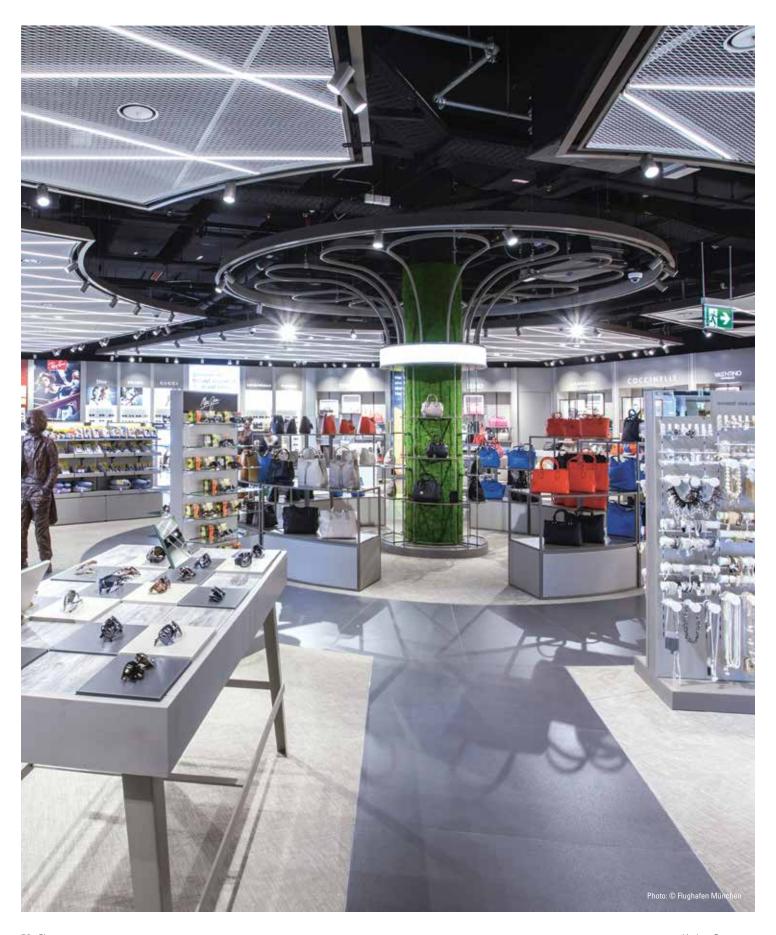






www.Lindner-Group.com Shops . 49

MUNICH AIRPORT T2 SATELLITE BUILDING – DUTY FREE SHOP AREA, GERMANY
The new duty free area at Munich's Satellite Terminal embodies the unique flair of the Bavarian capital with all its cultural aspects. The different shop areas have been designed to characteristics based on the individual districts and historical places of Munich. Metal figures of local celebrities, a cosy beer garden atmosphere and a modern interior fit-out create an emotional shopping experience for travellers and shorten the waiting times. Lindner contributed to the realisation of the shop with various interior fit-out products.



50 . Shops www.Lindner-Group.com



## ARCHITECT Gruschwitz GmbH **SCOPE OF WORKS**

- expanded metal ceilings
- plasterboard ceilings
  plasterboard partitions
  mineral fibre ceilings
- wall claddings
- wooden doors

**CONTRACT VALUE** 

680,000 EUR



www.Lindner-Group.com Shops . 51





## **∠ LUFTHANSA LOUNGES AT FRANKFURT AIRPORT**

In October 2012, the new pier A-Plus of Frankfurt Airport was comissioned as an add-on to Terminal 1 facilities. In addition to the large amount of works performed on the pier, Lindner was also responsible for the turnkey interior fit-out of five new Lufthansa Lounges. One First, two Senator and another two Business Class Lounges realised with state-of-the-art fittings and furnishings by Lindner were comissioned to the client.



54 . Lounges www.Lindner-Group.com

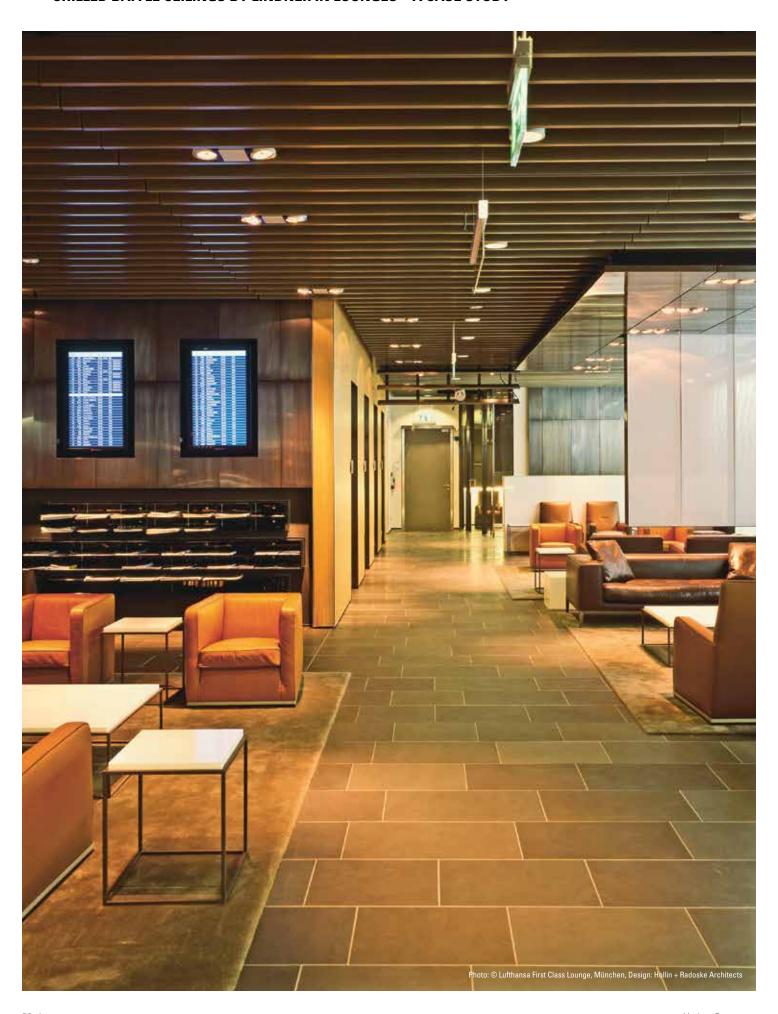


ARCHITECT
K2 Architekten
CLIENT
Deutsche Lufthansa AG
SCOPE OF WORKS
Complete interior fit-out of 9,000 m² Lounge Area
CONTRACT VALUE
2.4 million EUR

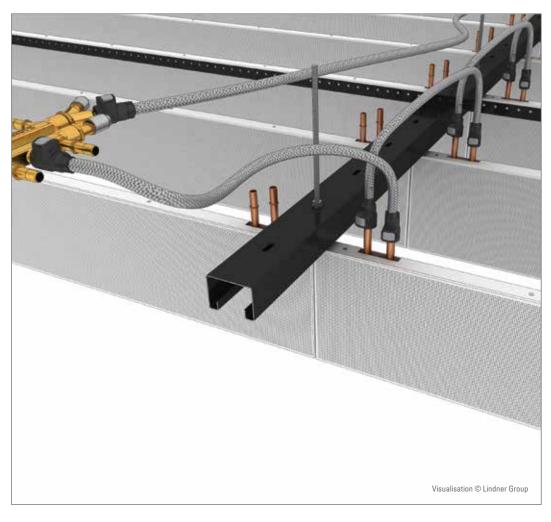


www.Lindner-Group.com Lounges . 55

## CHILLED BAFFLE CEILINGS BY LINDNER IN LOUNGES - A CASE STUDY

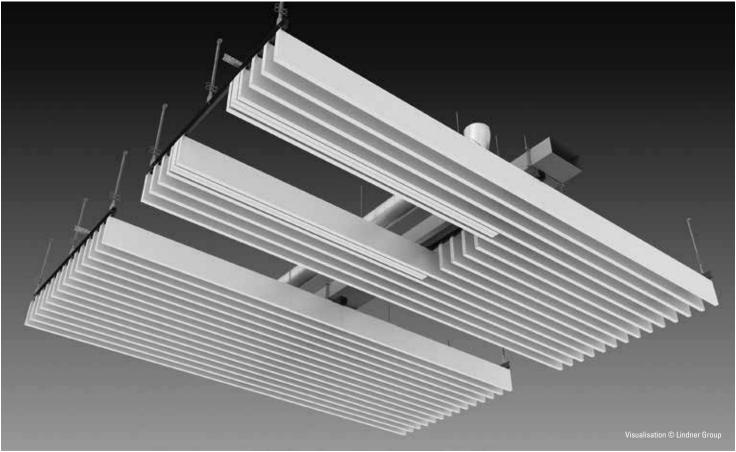


56 . Lounges www.Lindner-Group.com



## **PRODUCT FEATURES**

- + very maintenance-friendly thanks to movable baffles
- + different centre distances possible
- + ceiling void can be used for ventilation purposes + free spaces between the
- + free spaces between the baffles can be used for the installation of various fixtures, e. g. lighting units, sprinklers, or the suspension of signs etc.
- sion of signs etc.
  + perforated baffles with inlays suitable for sound absorption
- + systems can be equipped with heating and cooling technology – Lindner Plafotherm® Ceilings



www.Lindner-Group.com Lounges . 57

## ${\scriptstyle ullet}$ Emirates first and business class lounge at shanghai pudong airport

An Emirates Business and First Class Lounge was built at the international departure terminal 2 at Shanghai Pudong International Airport. It was the first airline lounge in this terminal. Lindner was responsible for the turnkey interior fit-out of the 860 m² lounge. Further Emirates Lounges realised by Lindner are located at Birmingham, Dusseldorf, Frankfurt, Hamburg, Munich and Zurich Airport.



58 . Lounges www.Lindner-Group.com



## **ARCHITECT**

- Emirates Architects
- Lindner

## **SCOPE OF WORKS**

Complete interior fit-out as turn-key solution CONTRACT VALUE

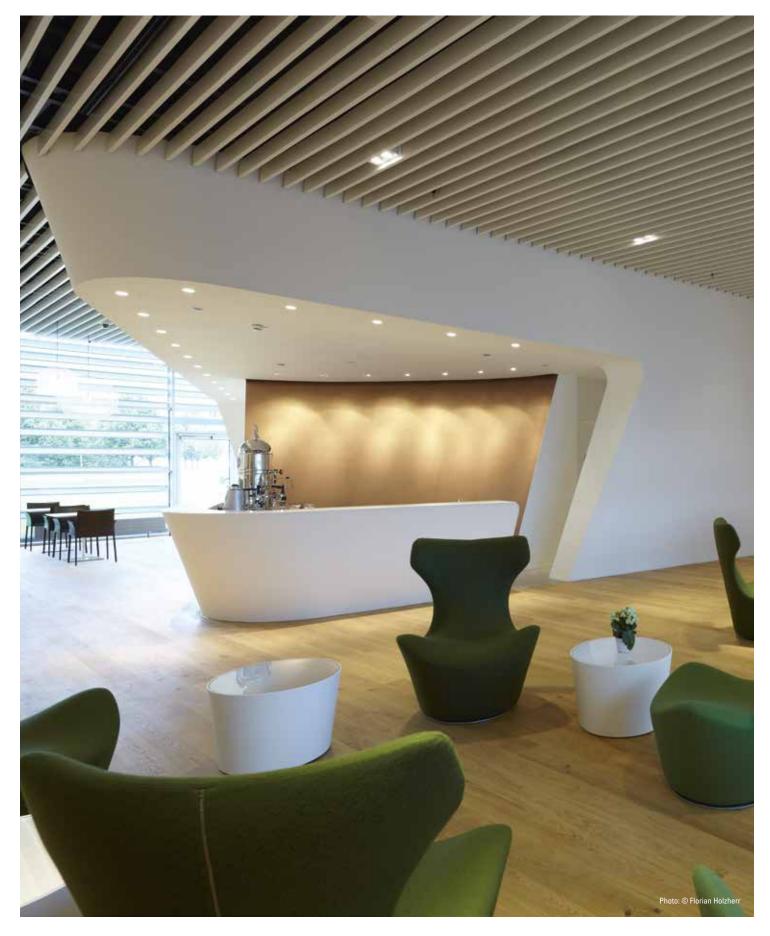
1.5 million EUR



www.Lindner-Group.com Lounges . 59

## **> VIP LOUNGE AT MUNICH AIRPORT**

Munich airport, with transit passengers making up 37% of all passengers passing through, certainly is one of the most important airport hubs in Europe. Terminal 1 holds up to 25 million passengers and its new VIP lounge, located in Module D South, helps well-heeled travellers pass their waiting time in exclusive lounge and service areas. Lindner furnished the new VIP lounge with its premium dry lining systems besides further trades.



60 . Lounges www.Lindner-Group.com



#### **ARCHITECT**

Erich Gassmann Architekten **BUILDER** 

Flughafen München GmbH

## **SCOPE OF WORKS**

- baffle, acoustic, customised mineral fibre as well as plain and perforated plasterboard ceilings systems
   metal stud plasterboard, wet area plasterboard and
- customised partition systems
- glass partition systems

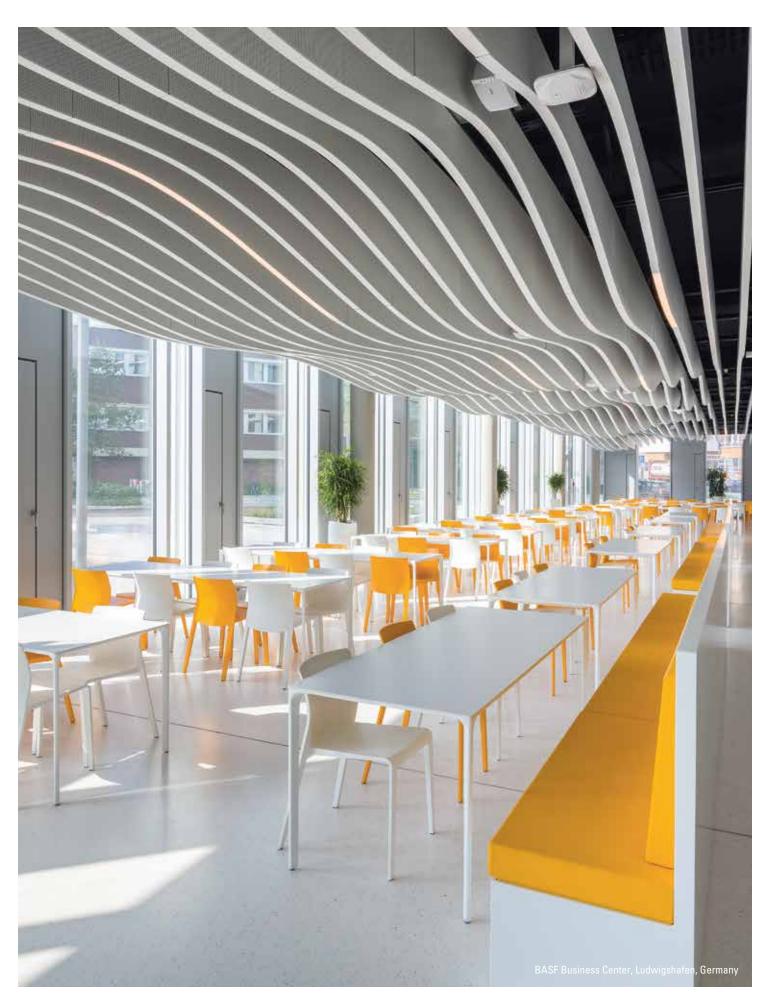
## **CONTRACT VALUE**

400,000 EUR



www.Lindner-Group.com Lounges . 61

## **LINDNER LAOLA WAVY BAFFLE CEILINGS – A CASE STUDY**



62 . Lounges www.Lindner-Group.com



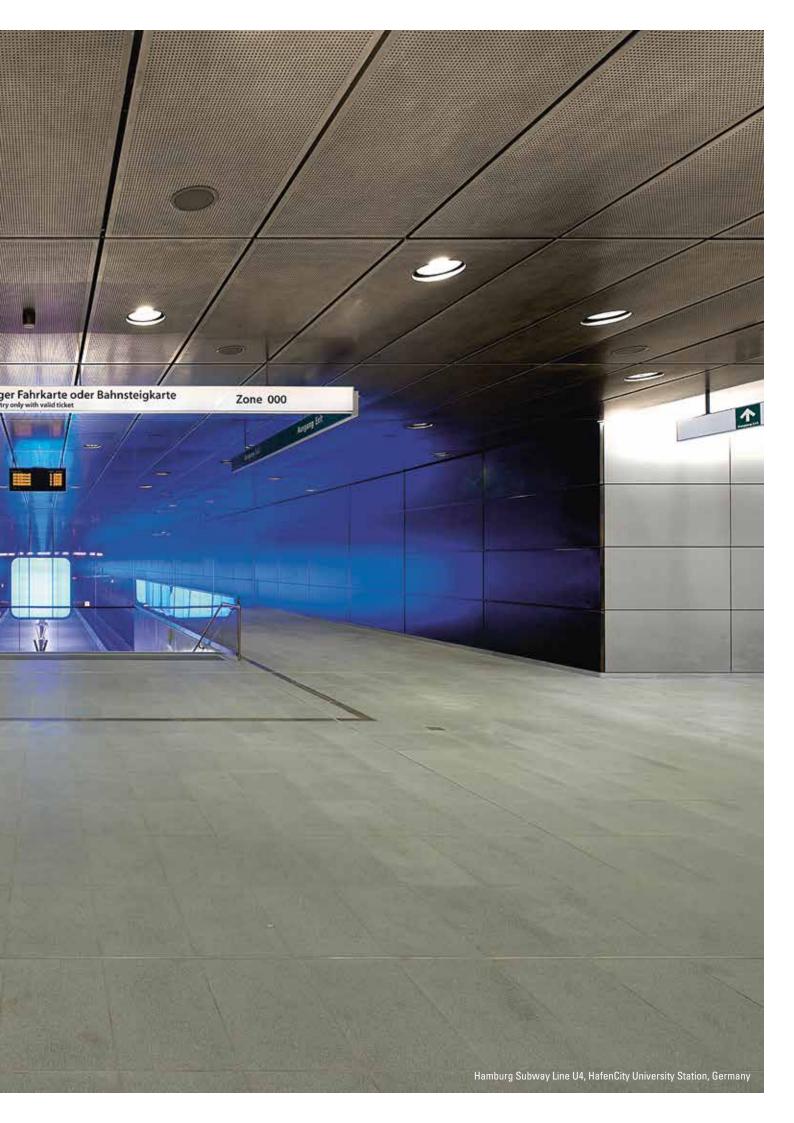


#### **PRODUCT FEATURES**

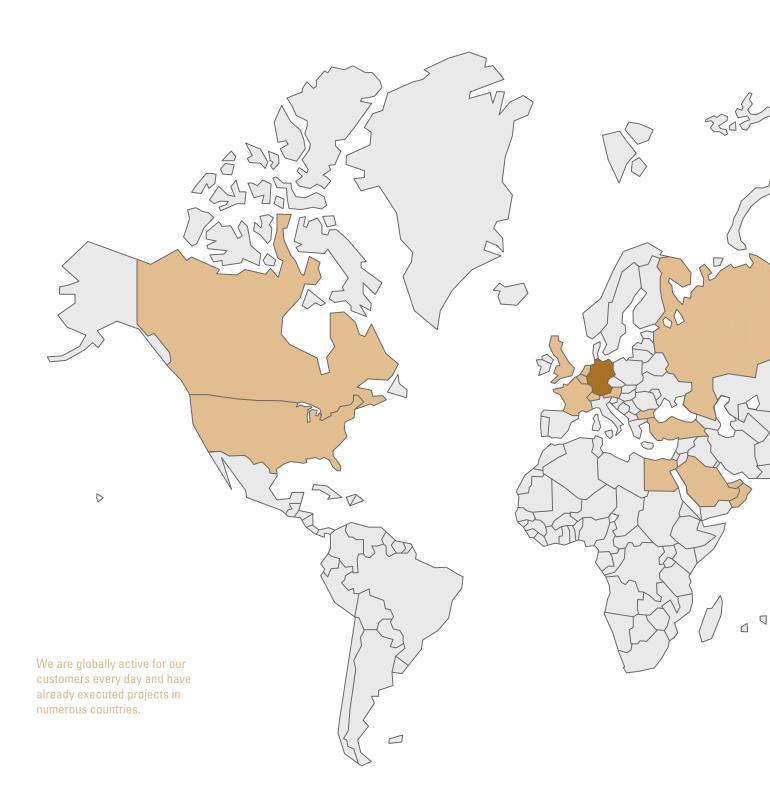
- + variable baffle heights
- + wide range of radii selectable
- + high-performance lighting units can be directly integrated into baffles to follow the shape and accentuate the ceiling
- + very maintenance-friendly thanks to movable baffles
- + different centre distances possible
- $+ \ \mbox{ceiling void can be used for ventilation purposes}$
- + free spaces between the baffles can be used for the installation of various fixtures, e. g. lighting units, sprinklers, or the suspension of signs etc.
- + perforated baffles with inlays suitable for sound absorption

www.Lindner-Group.com Lounges . 63





# **LINDNER MAIN RAILWAY REFERENCES AROUND THE GLOBE**



66 . Railways www.Lindner-Group.com



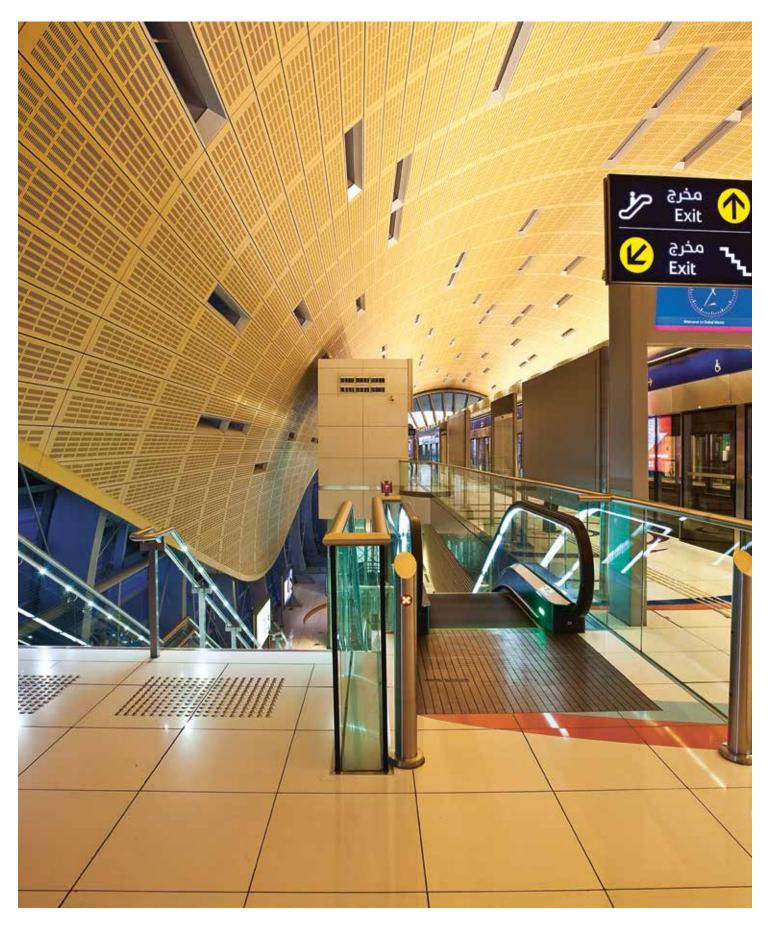
## **MAIN RAILWAY REFERENCES BY LINDNER**

Arnhem Terminal, Netherlands Berlin Central Station, Germany Cairo Metro, Egypt Cologne City Rail, Germany Dubai Metro, UAE Düsseldorf Subway and Central Station, Germany Essen Subway, Germany Frankfurt 'The SQUAIRE', Germany Ganzenhoef Metro Station, Netherlands Hamburg Subway, Germany Istanbul Railway, Turkey Lai King Station, Hong Kong London Underground and Crossrail Stations, UK Madinah and Makkah Haramain Railway Stations, KSA Munich Subway and Railway Stations, Germany New York WTC Path and Hudson Yards Station, USA Stratford Station, UK Toronto Subway Stations, Canada Utrecht Vaartsche Rijn Station, Netherlands Vienna Central Station, Austria

www.Lindner-Group.com Railways . 67

## **⋈ METRO DUBAI, UAE**

The Dubai Metro is a driverless, fully automated metro rail network in the United Arab Emirates city of Dubai. Lindner worked to a tight schedule for the fit-out of all stations on the Red and Green Line. The interiors of the stations are uniquely designed in respect of their historical background and adopt a specific design theme. Most elements have been customised for their particular use within the stations. More than  $53,000 \, \text{m}^2$  of special ceilings,  $88,000 \, \text{m}^2$  of screed,  $30,000 \, \text{m}^2$  glass work and numerous other trades have been carried out to the complete satisfaction of the client.



68 . Railways www.Lindner-Group.com



ARCHITECT
Atkins
BUILDER
JT Metro Joint Ve

JT Metro Joint Venture SCOPE OF WORKS

Complete interior fit-out of 13 stations on the Red Line and 11 stations on the Green Line

**CONTRACT VALUE** 

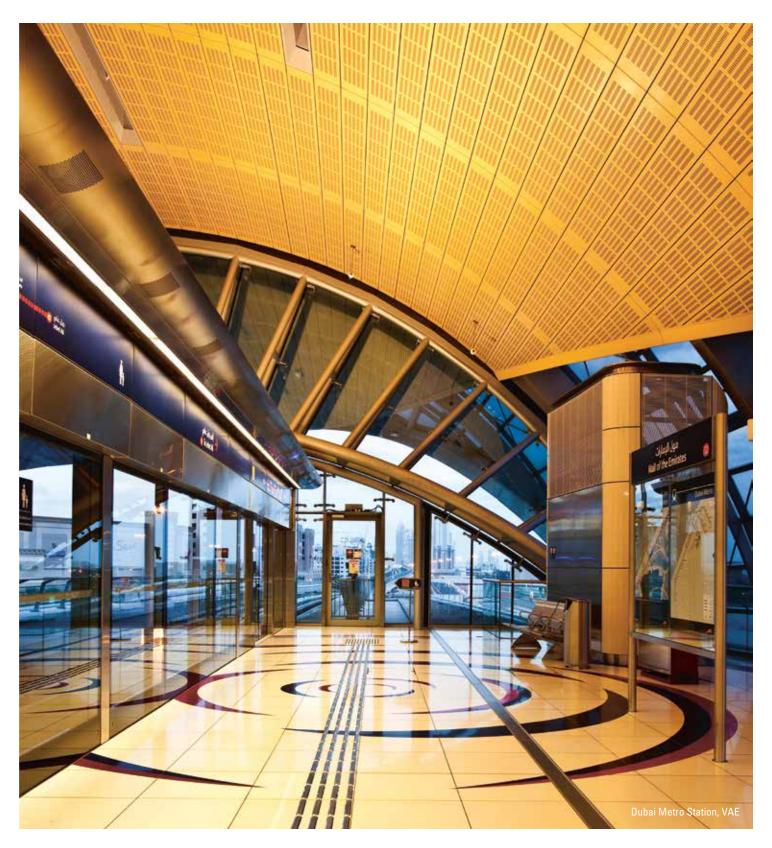
145 million EUR



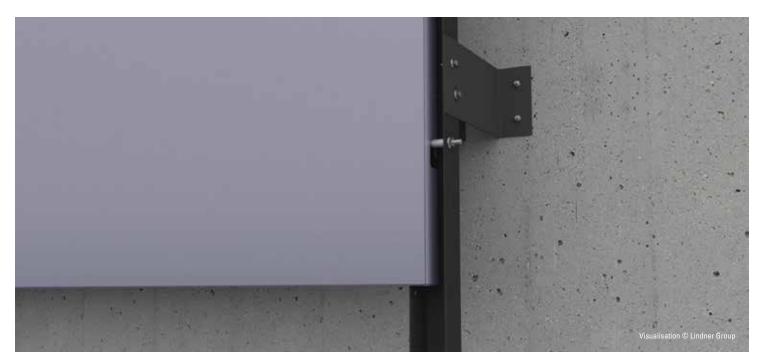
www.Lindner-Group.com Railways . 69

#### CASE STUDY – THE PIN CHANNEL SUBSTRUCTURE SYSTEM

Among other challenging requirements regarding the Dubai Metro projects, Lindner had to come up with a solution for the inner claddings of several stations that had the shape of a tube with a cladding that went from typical wall cladding zones with a seamless transition into the curved ceiling area. To achieve this seamless transition and being able to work with a continuously running homogeneous substructure, Lindner developed the so-called pin channel system that allows for maintenance-friendly operation in use and ease of installation. Special notches in the edges of the panels provide for the reception on bolts at the substructure profiles. The curved shape of the cladding was cost-effectively realised by transferring the curvature from the panels into the substructure, i.e. only the substructure profiles are curved while the panels could be manufactured without curvature by cleverly selecting the panel dimensions for the segmentation of the curved shape. The panels that are hooked onto the bolts of the substructure system are self-securing due to the notches and therefore also rest in place in the event of seismic loads. This substructure system is also available for a range of different cladding materials like metal, glass or timber.



70 . Railways www.Lindner-Group.com

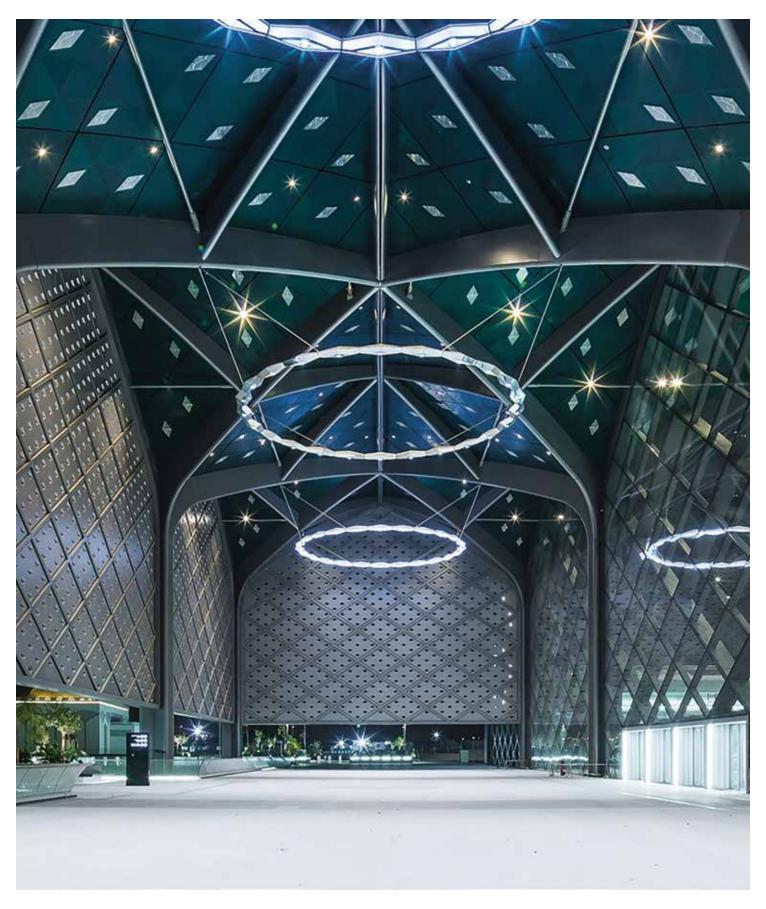




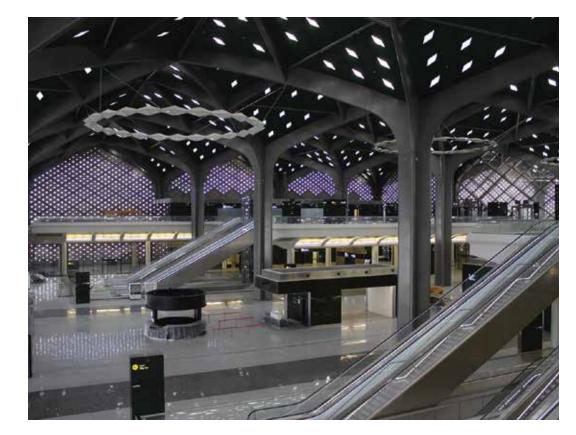
www.Lindner-Group.com Railways . 71

## **☑ MAKKAH AND MADINAH HARAMAIN HIGH SPEED STATIONS, SAUDI ARABIA**

The Haramain High Speed Rail is one of the major infrastructure projects for the Kingdom of Saudi Arabia, connecting the cities of Makkah, Madinah, Jeddah and the developing King Abdullah Economic City (KAEC). Lindner worked in close collaboration with the architects Foster + Partners to deliver seamlessly integrated ceiling solutions that fulfil a wide variety of demands ranging from acoustics, fire proofing, resistance to seismic as well as other loads and of course shaping the appearance of prominent areas such like the train boarding area. Besides the ceiling, our innovative and sustainable raised access floor system NORTEC is used in technical areas.



72 . Railways www.Lindner-Group.com



# **ARCHITECT** Foster + Partners SCOPE OF WORKS

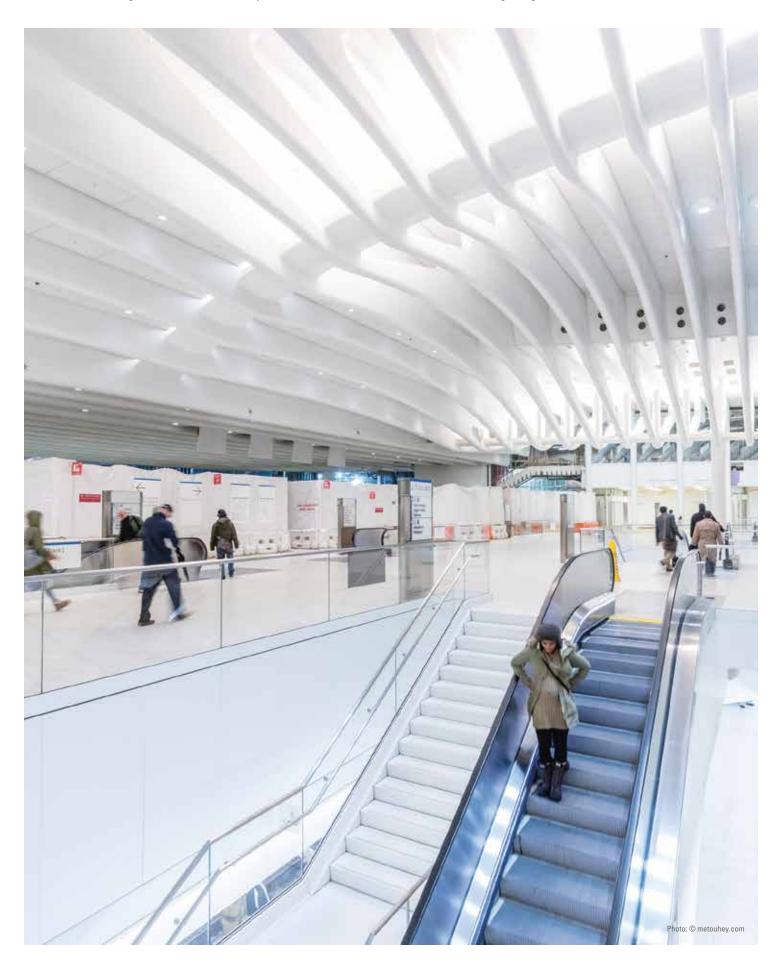
- customised LMD-TC metal Tube and LMD-E Hook-On ceilings
  - raised floor NORTEC
  CONTRACT VALUE

1.5 million EUR



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WORLD TRADE CENTER PATH STATION, NEW YORK CIY, USA
World Trade Center Station for PATH rail service originally opened in 1909. Following the September 11, 2001 attacks, the station was reconstructed. It was designed by Spanish architect Santiago Calatrava. With our customised ceiling following 3D-shapes featuring structural design extrusions milled with precision we could contribute to the breathtaking design.



www.Lindner-Group.com 74 . Railways



ARCHITECT
Santiago Calatrava
CLIENT
Port Authority NY & NJ
SCOPE OF WORKS
12,000 m² of customised
Torsion Spring ceilings
CONTRACT VALUE

3.2 million EUR



www.Lindner-Group.com Railways . 75

The office building, with a length of 660 metres and a height of 9 floors, is connected to the Terminal 1 of Frankfurt International Airport and Frankfurt Railway Station and was fitted out with various ceiling systems by Lindner. The futuristic design is not only an eye-catcher in this region it also provides additional space for offices, hotels and shops.





JSK Architekten

#### **BUILDER**

THE SQUAIRE GmbH & Co. KG

## **SCOPE OF WORKS**

- Plafotherm® metal heating and cooling ceilings LMD-B Post-cap ceilings
- LMD-S customised ceilings
- glass partition
- metal partitions
- accessories for partition systems doors with aluminium frame
- acoustic metal elements
- Fire-resistant doors
- FLOOR and more®
- FLOOR and more® comfort

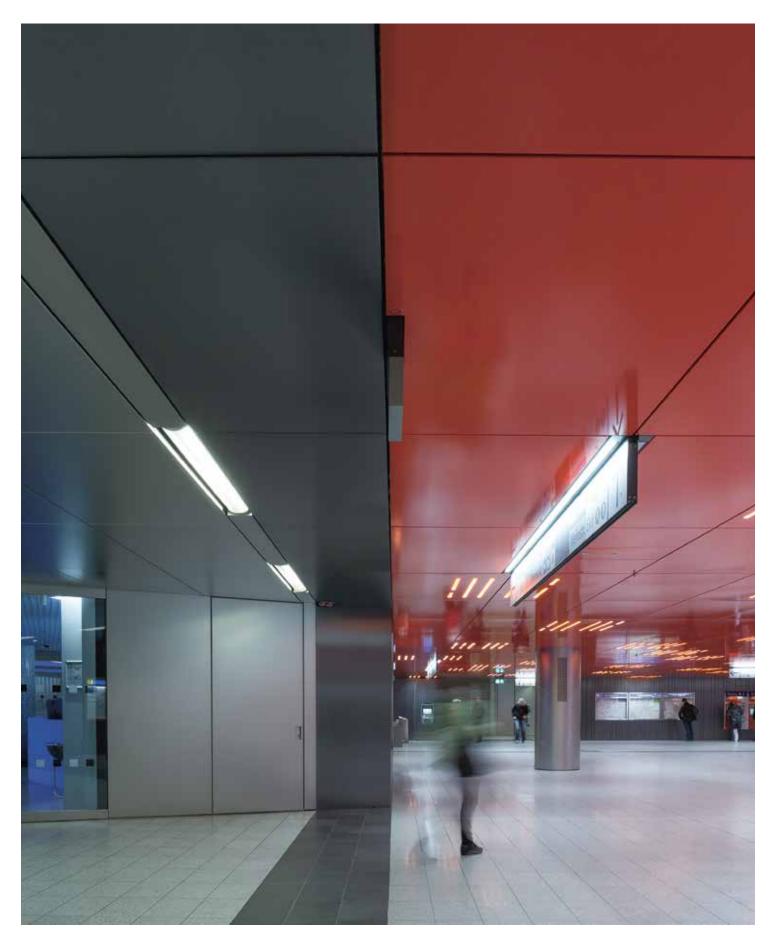
## **CONTRACT VALUE**

26 million EUR



Railways . 77 www.Lindner-Group.com

MARIENPLATZ SUBWAY STATION RENOVATION, MUNICH, GERMANY
Marienplatz Station is an important stop on the Munich S-Bahn and U-Bahn network, located under the square of the same name in Munich's city centre. From 2011 until October 2015, the station was refurbished and the mezzanine level was realised in an entire new design with the relocation of kiosks to border areas and new interior fit-out works. Lindner contributed to this with customised metal ceilings and structures for the wayfinding and signage system.



78 . Railways www.Lindner-Group.com

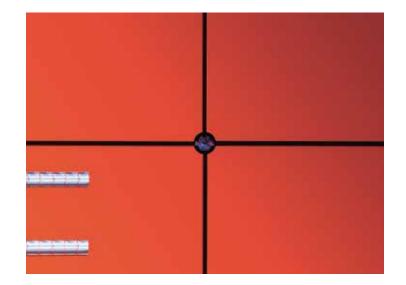
Allmann Sattler Wappner Architekten **CLIENT** 

Stadtwerke München GmbH

## **SCOPE OF WORKS**

- LMD-S customised metal ceilings
- Wayfinding/Signage CONTRACT VALUE

2.1 million EUR

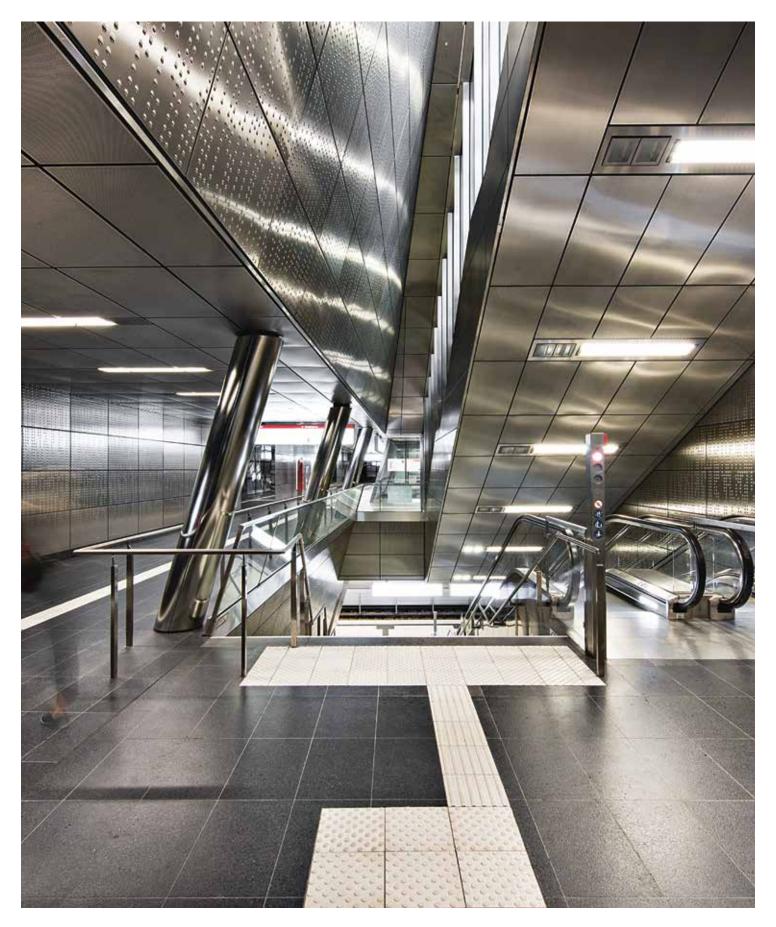




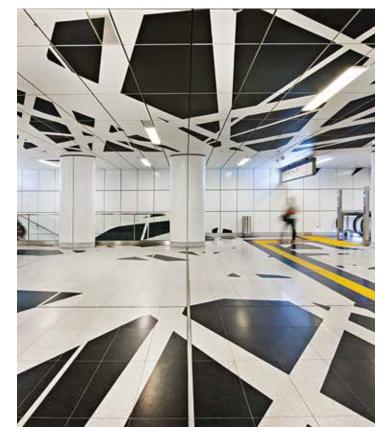
www.Lindner-Group.com Railways . 79

## **>>** WEHRHAHNLINIE, DÜSSELDORF, GERMANY

The Wehrhahn-Linie is one of the main subway lines operated by the city railway of Düsseldorf. Works for the 3.4 km long track including 6 new stations started in November 2007 and the line started its service in February 2016. The stations were also part of an art project with each station having its own motto designed by graduates of the Academy of Arts Düsseldorf. Lindner fitted out the stations with different types of metal ceilings incorporating the design intent of the art motto besides fulfilling many other functional and aesthetic requirements.



80 . Railways www.Lindner-Group.com



netzwerkarchitekten

**CLIENT** 

Landeshauptstadt Düsseldorf

**SCOPE OF WORKS** 

- 6,400  $\mbox{m}^2$  LMD-St customised expanded metal ceilings 8,200  $\mbox{m}^2$  LMD-E customised hook-on ceilings

**CONTRACT VALUE** 

6.8 million EUR



www.Lindner-Group.com Railways . 81

#### **∠ CROSSRAIL STATIONS, LONDON, UK**

Crossrail is a 118-kilometre railway line under development in England, running through parts of London and the home counties of Berkshire, Buckinghamshire and Essex. The central section and a large portion of the line, between Paddington in central London and Abbey Wood in the south-east, are due to open in December 2018; when it will be named the Elizabeth line in honour of Queen Elizabeth II.

The project was approved in 2007 and construction began in 2009 on the central section and connections to existing lines that will become part of the route. It has been described as one of Europe's largest infrastructure construction projects. Its main feature is 21 km of new twin tunnels through central London. Lindner was involved in the fit-out works of platforms and link tunnels of the main stations in central London featuring striking GFRC linings that follow the shape of the tunnels as well as advertisement panels and grilles besides various other works.



82 . Railways www.Lindner-Group.com

- John Mc Aslan + Partners
- WSP

#### **CLIENT**

#### Costain Skanska JV

#### **SCOPE OF WORKS**

- 7.000  $\mbox{m}^2$  GFRC (gypsum fibre reinforced concrete) blast-enhanced lining following the shape of platform and connecting tunnels
- 200 t of primary steelwork
- LMD-E 340 Secure blast-enhanced Drop-Slide metal ceiling
- Lindner Free Individual Secure blast-enhanced glass wall cladding

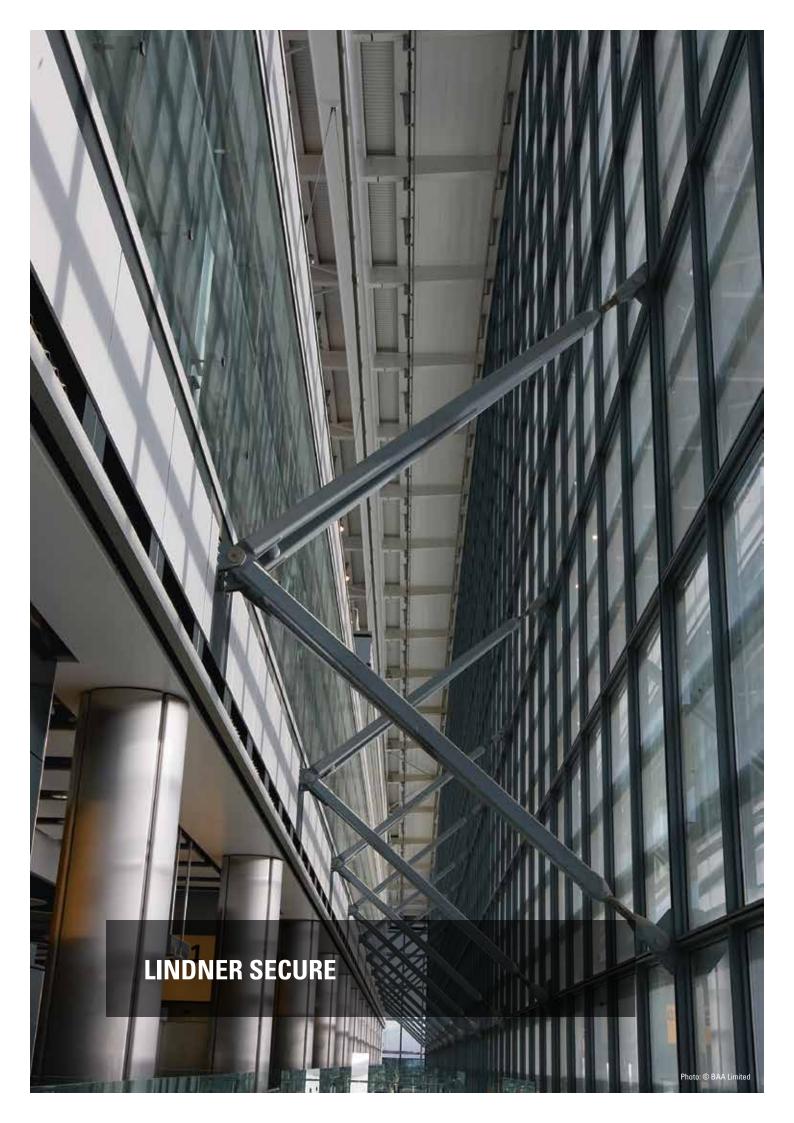
## **CONTRACT VALUE**

25 million EUR





www.Lindner-Group.com Railways . 83



## FEEL COMPLETELY SAFE - LINDNER SECURE

Lindner Secure is a new product range developed in response to the increasing demand for enhanced security environments. With a heightened risk of terrorist activity in today's society, where political unrest and religious tensions are playing out on an international stage, it is unfortunately necessary to assess any public structure that sees the gathering of large numbers of people – from airports and stadia to shopping centres, hospitals and law courts – in the context of bomb-blast security.

The intention is to provide architects and designers with the tools and systems they need to create inherently blast-enhanced environments without compromising design excellence. A comprehensive system of facades, partition walling, suspended ceilings and raised floors, with complementary products including waste bins is available which meets security best practice without detracting from aesthetic or functional performance and importantly without inspiring public fear or paranoia.

Usually these surfaces and materials carry huge potential of injury or even cause death by released splinters. The tested Lindner systems ensure that dangerous fragmentation does not occur.

Lindner Secure products are elegant, unobtrusive and effective, integrating seamlessly into architectural schemes of all scales to ensure safety is quite literally 'designed in'.







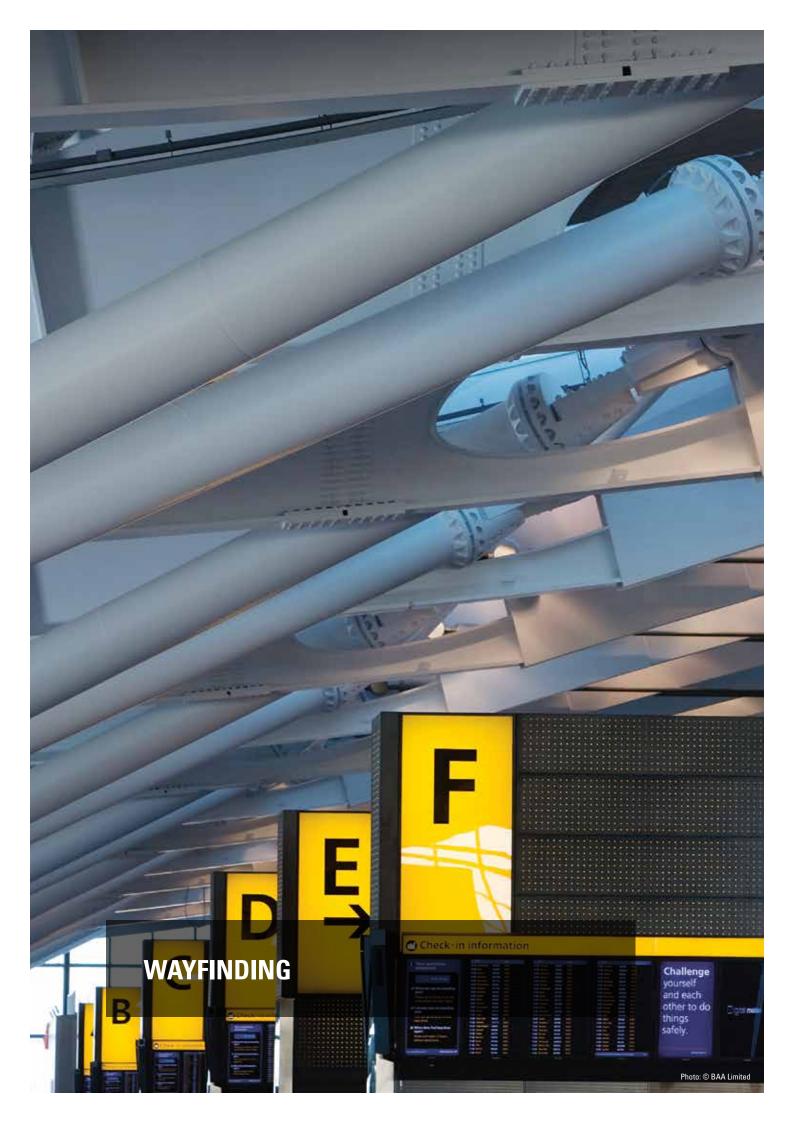








www.Lindner-Group.com Lindner Secure . 85



# ON THE RIGHT PATH – SMART WAYFINDING SOLUTIONS BY LINDNER

Orientation systems must establish a clear, understandable communication to travelers in order to ensure orientation in an optimum way. For this to be successfully achieved, modern way-finding systems include all aspects of writing, icons and arrows to render orientation to all non-locals as easy as possible. However, orientation systems not only have to be highly functional, their design has to be simultaneously appealing for visitors who do not know their way around, fit into the overall image of the environment and match the prevailing cultural identity.

In cooperation with our partners Billings Jackson Design and City ID, Lindner offers the implementation of all of the above-mentioned aspects. Billings Jackson Design is an architectural firm specializing in industrial design in the field of transport and urban infrastructure. City ID developes guidance systems and transport information solutions with a unique design to people movement and noteworthy places to unite. Together with these partners Lindner realizes high quality systems for orientation to comply with the highest standards of both design and function.

Depending on the location, whether in subway stations, airports or simply in an urban environment, our solutions cope with the prevailing influences such as wind loads, moisture or electrical protection with backlit signs. Through many years of experience on major infrastructure projects around the world, we offer a wide range of wayfinding systems - from simple signage to highly functional displays at airports with integrated cooling and ventilation elements.





www.Lindner-Group.com Wayfinding . 87