

SHENZHEN BAO'AN INTERNATIONAL AIRPORT – EXPANSION T3, GUANGDONG, CHINA STUDIO FUKSAS

Right The linear volumes of the terminal are like white brandy snags

Below The departures concourse is on the upper level

All photography courtesy of Archivio Fuksas

With its organic shape, the project concept provokes the image of a sculpture that has been modeled by the wind. The building's structure is fabricated from steel, with a concrete substructure, while the profile of the roofing is characterised by variations in height, alluding to the natural landscape.

The symbolic element of the plan is the internal and external honeycomb-motif 'skin'. Through its double layering, this allows natural light in, thereby creating light effects within the internal spaces. The cladding is made of alveolus-shaped metal and glass panels of different sizes that can be partially opened.

The terminal and concourse constitute the major portion of the passengers' perception of an airport. The concourse comprises three levels: departure, arrival and services. The spatial concept for the interior is one of fluidity and combines two different ideas: movement and pause. *Massimiliano and Dorianna Fuksas, partners, Studio Fuksas*





Project data

Start date 2008

Completion of phase 1 November 2013

Gross internal area 451,000m²

Total construction cost £605 million

Client Shenzhen Airport Group

Executive architect Beijing Institute of Architecture Design (BIAD)

Interior designer Fuksas Design

**Structural engineer/facade consultant/
parametric design** Knippers Helbig
Advanced Engineering

Services engineer HL-PP Consult

Civil engineer BIAD

Lighting consultant Speirs + Major
Associates

General contractor China State
Construction Engineering Corporation,
China Construction Eighth
Engineering Division

Steelwork contractor China Construction
Third Engineering

Selected products and specialist contractors

Facade contractors

Shenzhen Sanxin Facade Engineering,
Shenzhen Ruihua Construction,
China Fangda Group
www.sanxingglass.com

Interior contractors

Shenzhen Decoration and Construction Industries,
Decoration Company of China Construction
Engineering 3rd Bureau, Shenzhen Hongtao
Decoration
www.sdcic.cn

Signage

AirMedia Group
www.airmediagroup.co.uk

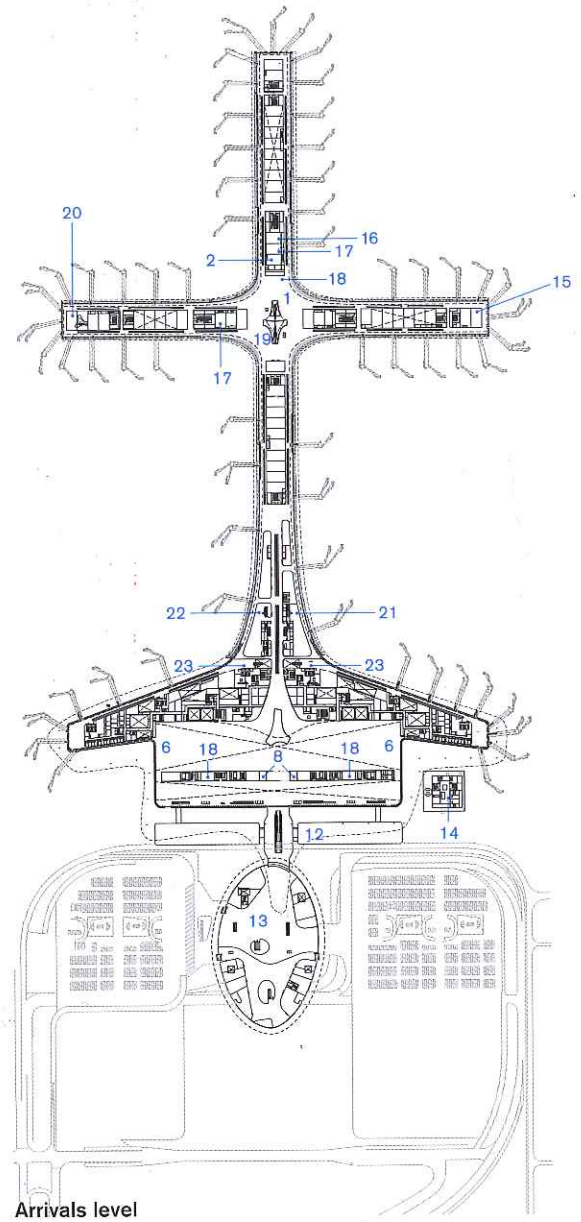
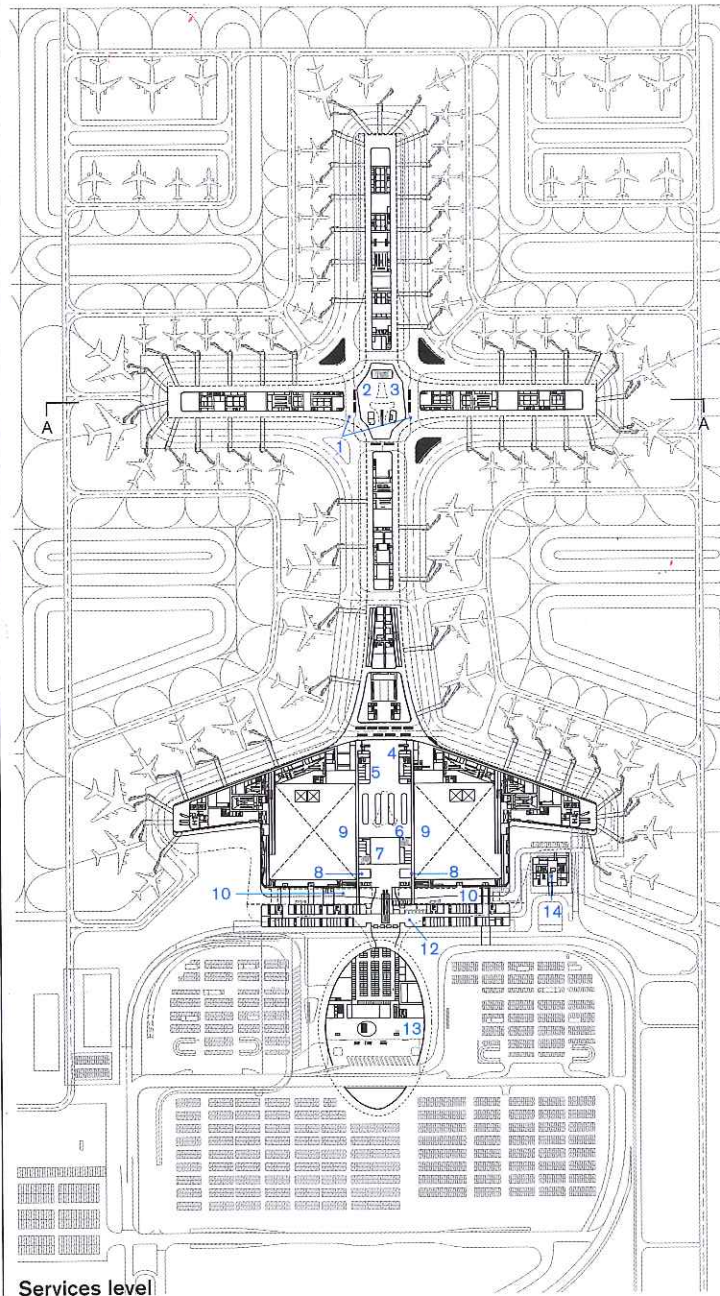
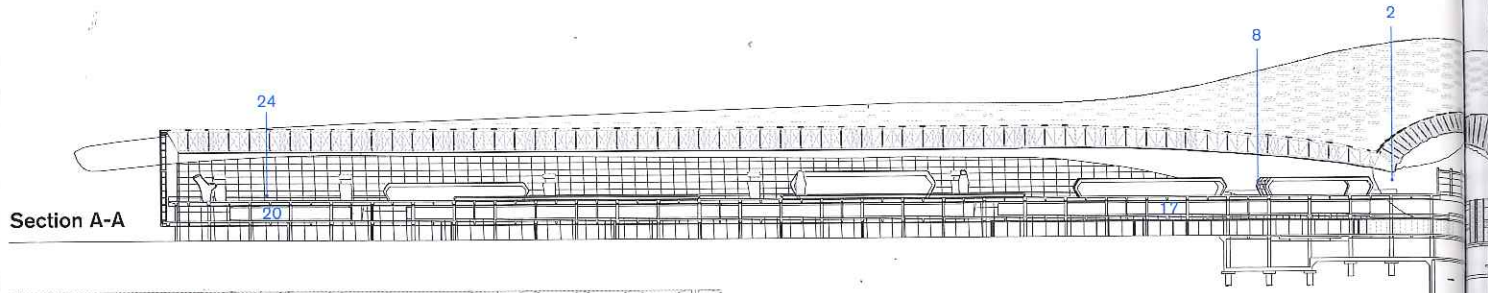
Luggage system

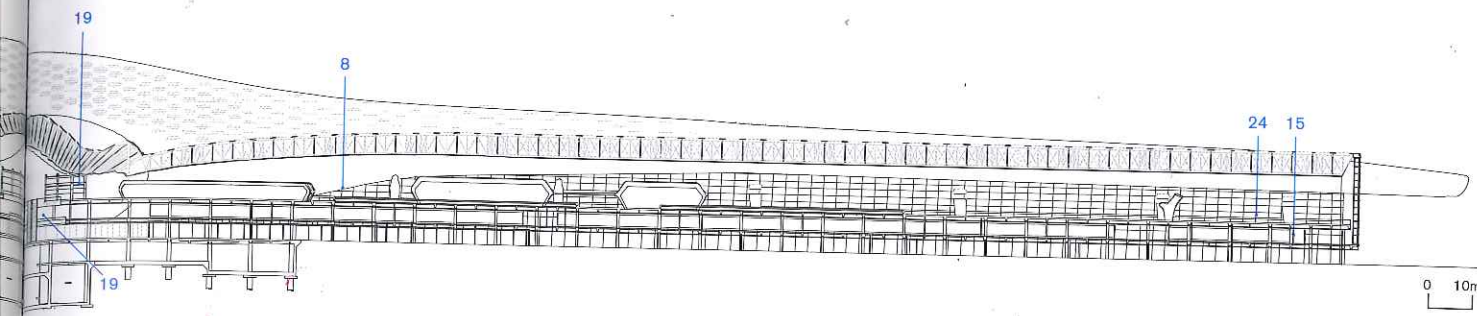
Vanderlande Industries
www.vanderlande.com

Elevators and escalators

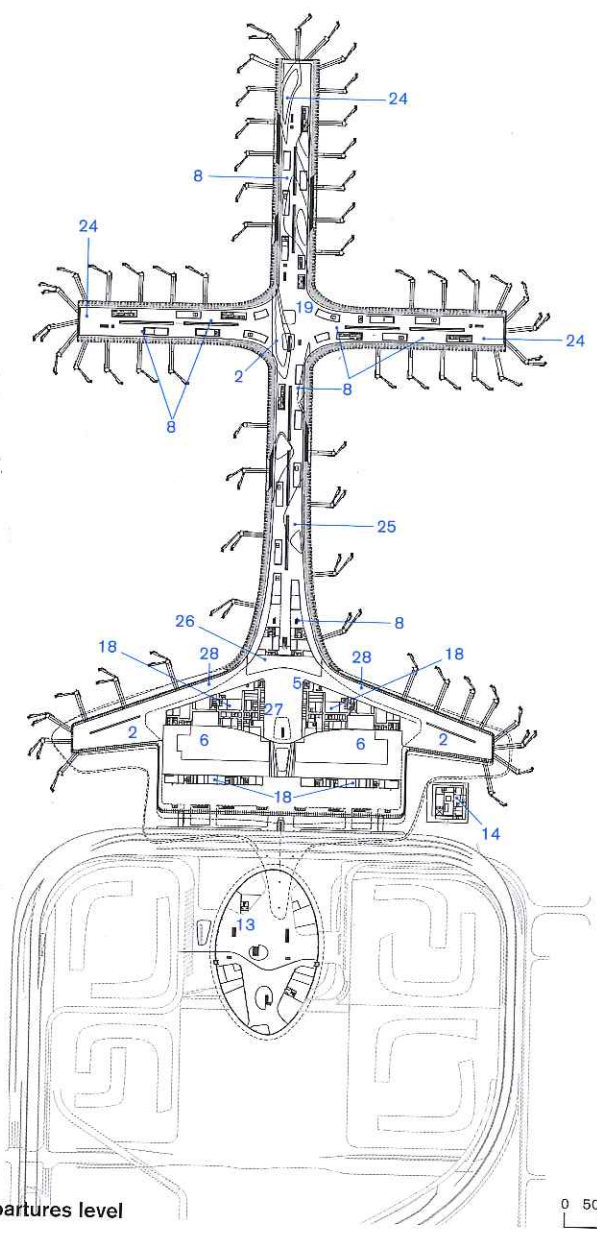
Kone, Otis
www.kone.com
www.otis.com







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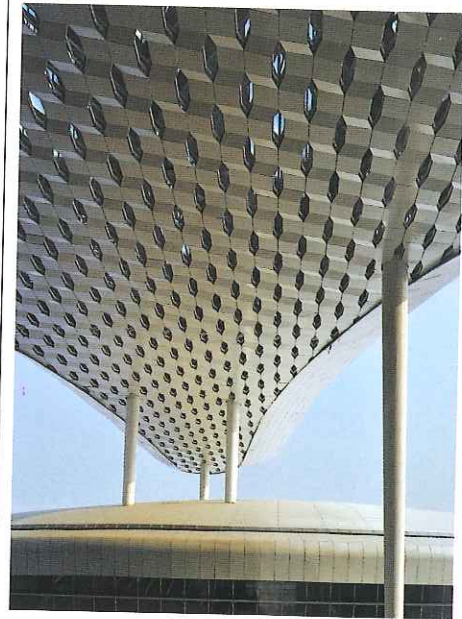


Departures level

0 50m N

1. Bus terminal
2. Bar
3. Domestic hardstand holdroom
4. Medical
5. Passport control
6. Baggage claim
7. Customs
8. Shops
9. Space for baggage handling services
10. Garden
11. International hardstand holdroom
12. Commercially important passengers
13. Ground transportation centre
14. VIP building
15. Waiting area
16. Reception
17. Airline lounge
18. Office
19. Information point
20. Hold room
21. Projection room
22. Massage centre
23. International arrivals
24. Domestic departures
25. Domestic arrivals
26. Duty free
27. International security checkpoint
28. International departures

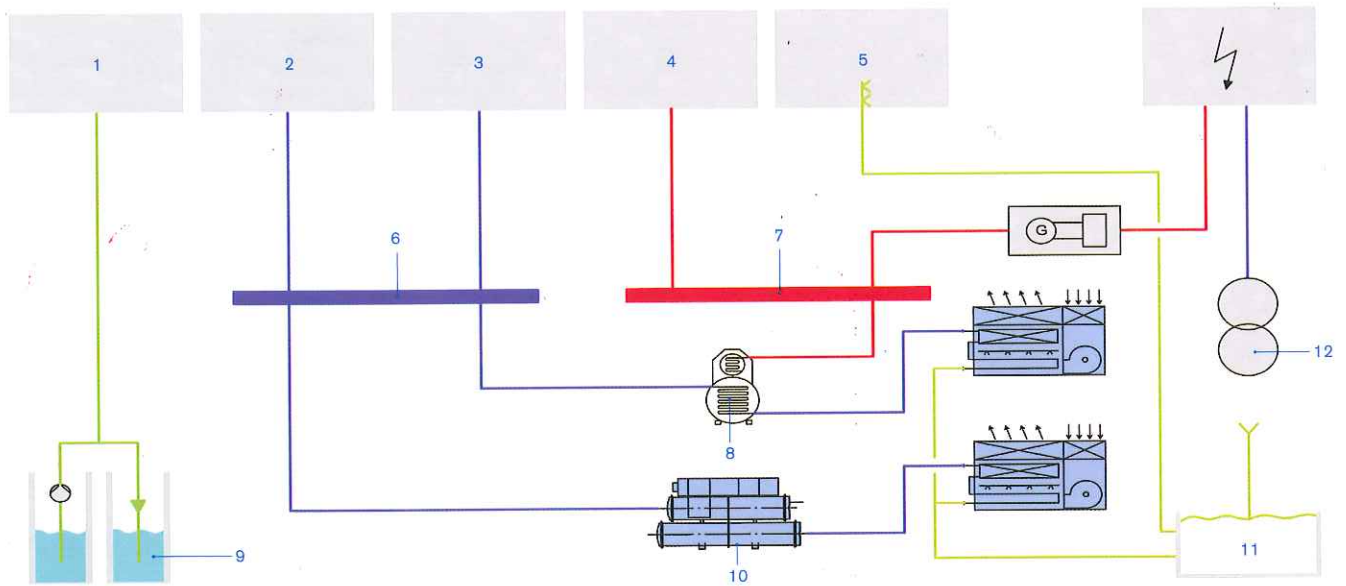
The cladding is made of alveolus-shaped metal and glass panels that can be partially opened



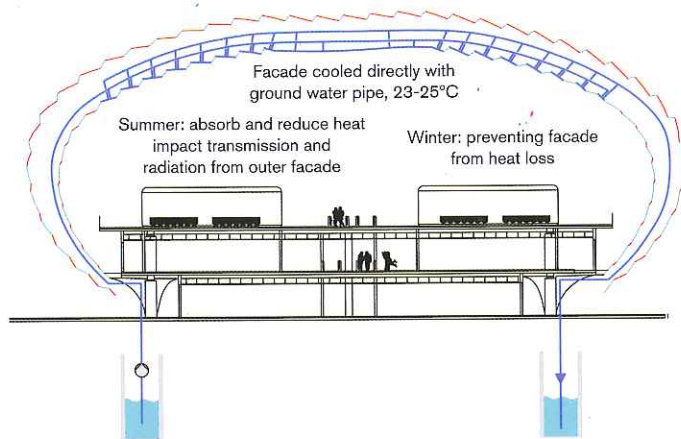
Above right Textured canopy underbelly
Right Hexagonal skylights on the back of one of the linear volumes
Next spread Undulating honeycomb roof surface above departures concourse and arrivals below



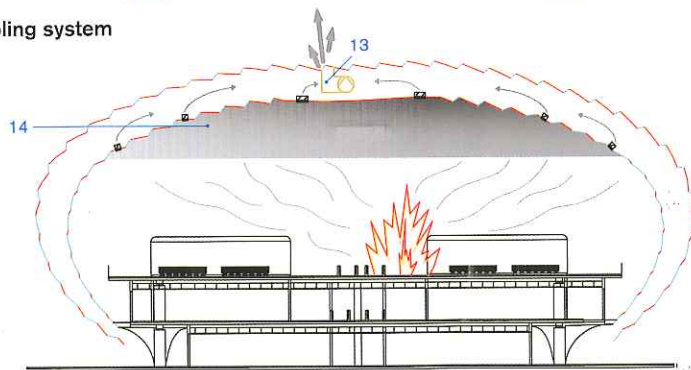




Heating and cooling system



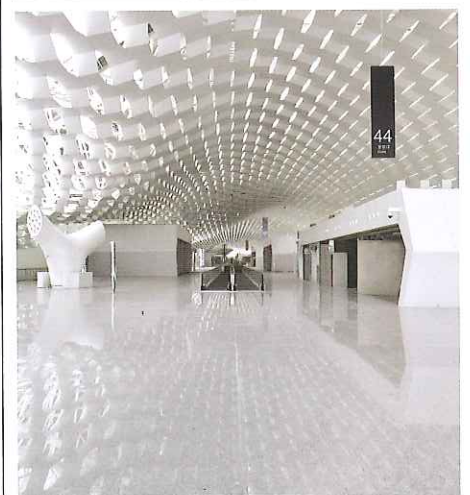
Facade cooling system

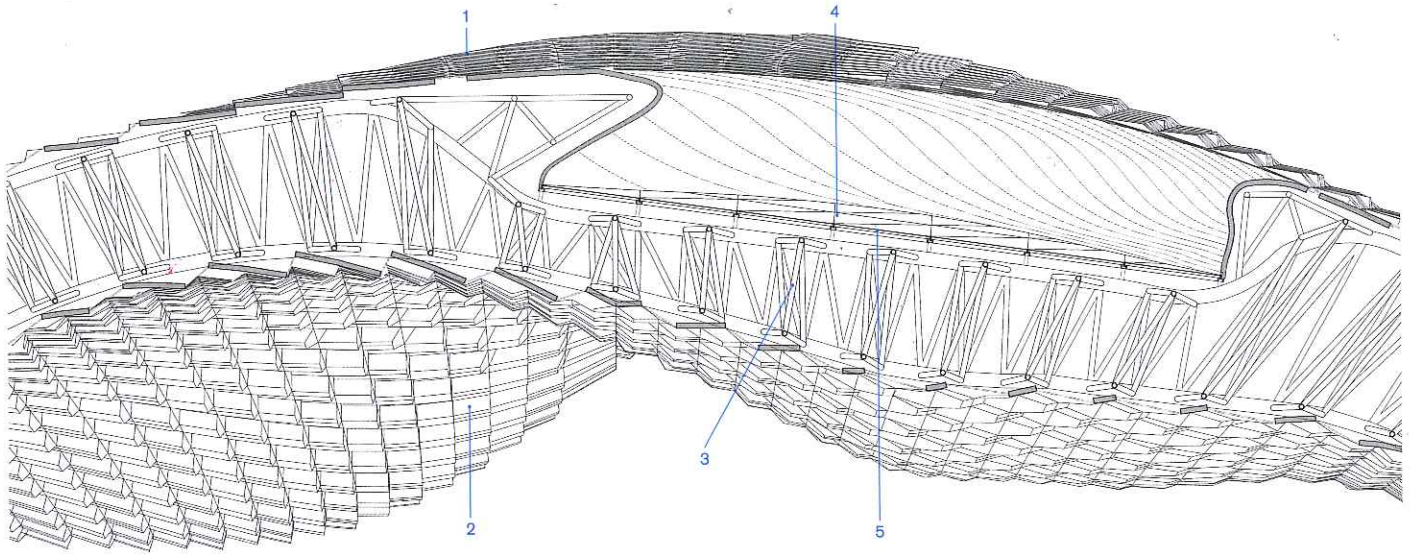


Smoke extraction system

- | | |
|--|-------------------------|
| 1. Cooling elements facade | 6. Cooling facade |
| 2. Floor cooling | 7. Heating |
| 3. Cooling coil air-handling unit | 8. Absorber chiller |
| 4. Heating coil air-handling unit | 9. Groundwater |
| 5. Adiabatic cooling air-handling unit | 10. Electrical chiller |
| | 11. Rainwater collector |
| | 12. Transformer |
| | 13. Smoke extractor fan |
| | 14. Smoke |

The 'honeycomb' skin allows natural light in, creating light effects within the internal spaces





Skylight isometric



1. Outer skin
2. Inner skin
3. Steel structure
4. Skylight with integrated smoke evacuation
5. Glass

Left Departures
 concourse bar
 Below Lipped
 aperture in honey-
 comb cladding

The profile of the roofing is characterised by height variations, alluding to the natural landscape

