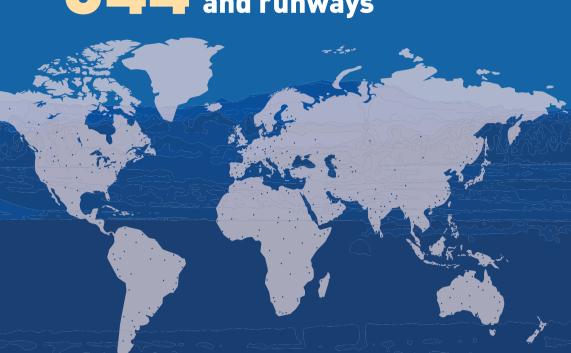
# **Airports & Acoustics**

# THE FACTS

The aviation industry is firmly back on its feet and there are no signs of its growth slowing down. New airports, terminals and runways are being built with plans for many more in the future.

2222 MILLION Total No of flights globally in 2021 **544** Planned new airports and runways



Source: www.stay-grounded.org

# The World's Busiest Airports

		A-T1	
	,747,367	ATL	Hartsfield-Jackson Atlanta International Airpor
4	,127,704	DXB	Dubai International Airport
3	,877,164	HND	Tokyo Haneda International Airport
3	,753,858	DFW	Dallas / Fort Worth International Airport
3	,709,394	DEN	Denver International Airport
3	,676,067	LHR	London Heathrow Airport
3	,618,433	ORD	O'Hare International Airport
3	,470,696	IST	Istanbul Airport
3	,413,855	LAX	Los Angeles International Airport
3	,380,205	DEL	Delhi

Figures shown are measured in 'seats occupied' for 2022

## **Key numbers**

Airports require high acoustic performance to create a relaxing atmosphere – blocking out the loud sounds of aircraft and high traffic noises.

#### >110 dBA

The maximum sound level when starting engines of a wide-body aircraft, as measured at a distance of 20m from the nearest aircraft engine

## 60 dBA

The allowable (equivalent) sound level in the check-in and waiting areas

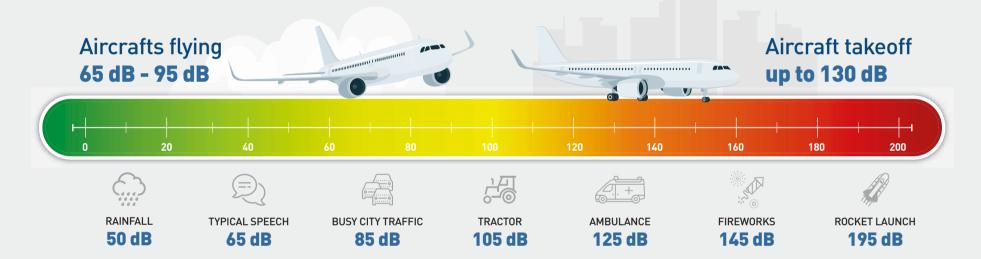
#### 1 - 1.5 sec

The allowable reverberation time at mid frequencies for passenger check-in and waiting areas depending on the air volume of the room

### **Sound level comparisons**

The sound level of typical daytime activities can vary between 40 dB and 85 dB. Typical aircraft noise levels are between 65 dB and 95 dB. Very close to a runway, an aircraft could be as loud as 130 dB.

Source: www.oag.com



# Airports – Aesthetics and noise

The design of airport roofs seeks to attract attention, make a statement and connect the building with the history and unique features of its location.

Below are five of the most visually striking airports in the world



**CHINA**Beijing Daxing International Airport



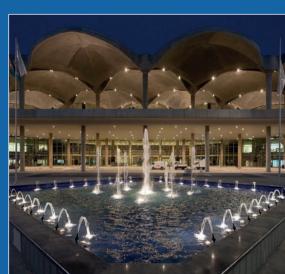
PHILIPPINES

Mactan International Airport

Source-Integrated Design Associates



MADRID Barajas International Airport



**JORDAN**The Queen Alia International Airport



USA
Louis Armstrong, New Orleans
International Airport
Source: Shutterstock

Pick your favourite and let us know why in the comments.

Or start a conversation with us about roof cover board specification.

The acoustic performance of airports, as well as fire and structural performance, is critical.



