

Jewel Changi Airport

Jewel Changi Airport

Inside Jewel Changi Airport

[Map](#)

General information

Status	Completed
Type	Mixed use • Observation
Architectural style	Neofuturistic
Location	Changi, Singapore
Address	78 Airport Boulevard, Singapore 819666
Country	Singapore
Coordinates	1.3644°N 103.9915°E
Construction started	5 December 2014; 9 years ago
Opened	17 April 2019; 5 years ago (soft opening) ^[1] 18 October 2019; 5 years ago (official opening) ^[2]
Cost	S\$1.7 billion
Owner	Changi Airport Group CapitaLand Jewel Changi Airport Trustee Pte. Ltd.

Technical details

Material	Steel and Glass
Size	3.5 hectares (8.6 acres)
Floor count	12 – 5 above-ground storeys and 7 basement levels (Levels B5 — B2, B2M, B1, B1M, L1-L5)
Floor area	135,700 square metres (1,461,000 sq ft)

Design and construction

Architect	Moshe Safdie RSP Architects Planners & Engineers Private Limited
Structural engineer	RSP Architects Planners & Engineers Private Limited
Other designers	PWP Landscape Architecture ICN Design International Pte Ltd Benoy Lighting Planners Associates ^[3]
Main contractor	Obayashi Corporation ^[4] Woh Hup Pte. Ltd.

Website

www.jewelchangiairport.com

Jewel Changi Airport (also known as **Jewel** or **Jewel Changi**) is a nature-themed entertainment and retail complex on the inside of [Changi Airport, Singapore](#), linked to three of its passenger terminals. Its highlight is the world's tallest indoor waterfall, known as the Rain Vortex, which is surrounded by a lot of plants.^[5]

Jewel includes gardens, entertainment, a hotel, about 300 dining places, as well as early [baggage](#) check-in facilities before flying a plane. It covers a total size of 135,700 m² (1,461,000 sq ft), about 10 storeys – five aboveground and five underground levels.^[6] Its attractions include the Shiseido Forest Valley, an indoor garden which is about five storeys, and the Canopy Park at the highest level, featuring more gardens and places for relaxation.^[7]

Jewel receives about 300,000 people a day. In October 2019, six months after its soft opening, it had welcomed 50 million people, exceeding its first target for the whole year.^[2] The complex and airport is located in [Changi](#), at the eastern end of Singapore, approximately 20 km (12 mi) northeast from Singapore's Downtown Core.^[8]

Conception

[\[change\]](#) | [change source](#)

Jewel was made to maintain Changi Airport's status as a major flying hub in the Asia-Pacific.^[9] It was first mentioned by Prime Minister [Lee Hsien Loong](#) in his National Day Rally speech in 2013 as part of Changi Airport's long-term plans to double its capacity by the mid-2020s and "create more opportunities for Singapore and Singaporeans".^{[10][11]}

Built over the former open-air car park in front of Changi Airport Terminal 1, Jewel expanded Terminal 1's arrival hall and baggage claim areas by 70%, and its handling capacity is also expected to increase from 21 to 24 million passengers a year.^{[12][13]} Jewel was officially opened on 18 October 2019 by Lee Hsien Loong, six months after its soft opening. During this time, it had received 50 million people – about 300,000 people a day – exceeding its initial target of 40-50 million people for the first year.^[2]

Jewel was developed by Jewel Changi Airport Trustee Pte Ltd, a partnership between Changi Airport Group (CAG) and CapitaLand, through its own shopping mall business, CapitaLand Mall Asia.^[14] The project cost S\$1.7 billion,^[15] and did not involve any government funds or taxpayers' money.^[16]

Design and development

[\[change\]](#) | [change source](#)

Jewel's circle glass-and-steel façade was designed by a lot of architects, led by [Moshe Safdie](#),^[12] who also designed Singapore's [Marina Bay Sands](#).^[17] Renowned local firm RSP Architects Planners & Engineers were the executive architect and structural engineers.^[18] The landscape architect was Peter Walker and Partners,^[19] who co-designed the National 9/11 Memorial and worked with Safdie on the landscaping of Marina Bay Sands. Benoy were the interior designers; BuroHappold Engineering were responsible for the façade and Lighting Planners Associates handled the lighting.^[20] The Rain Vortex was engineered by water design firm WET Design. It has a 360-degree light and sound show projected onto it.^[21]

Jewel was imagined to put together a marketplace and an urban park. "The component of the traditional mall is combined with the experience of nature, culture, education and recreation, aiming to provide an uplifting experience. By drawing both people and locals, we aim to create a place where the people of Singapore interact with the people of the world," said Safdie.^[22]

The glass panels of the dome are framed in steel which rests on a complex frame.^[23] At night, the glowing dome can be seen from all surrounding areas.^[24]

Attractions

[\[change\]](#) | [\[change source\]](#)

Access to Jewel from Terminal 1

Shiseido Forest Valley

[\[change\]](#) | [\[change source\]](#)

A partnership of Shiseido and art collective teamLab, the Shiseido Forest Valley (, *Shiseidō Foresutobarē*) is one of Asia's largest indoor gardens, spanning five stories and approximately 22,000 square metres (240,000 sq ft) located in the heart of Jewel Changi Airport. It houses around 3,000 trees and 60,000 smaller plants of 120 different that live in high-altitude tropical forests from around the world.^{[25][26][27]}

The Rain Vortex

[\[change\]](#) | [\[change source\]](#)

The Rain Vortex, sponsored as the HSBC Rain Vortex, is the world's largest and tallest indoor waterfall, standing at 40 metres (130 ft) high.^[28] Recirculating rain water is pumped to the roof to free fall through a round hole at up to 37,850 liters (8,330 imp gal; 10,000 U.S. gal) per minute to a basement-level pool.^[25] An acrylic funnel at the bottom prevents splashing and insulates the sound of the cascade. The toroid-shaped roof has more

than 9,000 pieces of glass spanning 200 by 150 meters (660 by 490 ft)^[25] with a sloped oculus as the mouth of the waterfall acting as "a continuation of the building...completed in a liquid form."^[29] At night, the circular walls of the waterfall becomes a 360-degree stage for a light-and-sound show.^[30]

To prevent excess humidity in the Jewel, the waterfall's flow changes direction often to reduce air turbulence. The design process by WET Design engineers included testing a one-fifth-scale model and a full-size partial sample.^[31]

The Changi Airport Skytrain connecting the terminals passes above ground near the waterfall, allowing passengers remaining [airside](#) to see the Vortex and Jewel itself.^[32]

Canopy Park

[\[change\]](#) | [change source](#)

At the highest level of Jewel, the 14,000 square metres (150,000 sq ft) Canopy Park houses recreation and leisure attractions.^[33] About half of the total landscaping is hosted at Canopy Park, including two gardens: Topiary Walk and Petal Garden.^[34] The Topiary Walk features animal-shaped topiaries at every corner, while the Petal Garden has seasonal floral displays.^[35] The park includes a [suspension bridge](#) called the **Canopy Bridge** that is located 23 metres (75 ft) above the ground which offers a panoramic view of the Rain Vortex. At 50 metres (160 ft) long, the Canopy Bridge also has a glass panel flooring at the centre section that offers a view through to level 1 of Jewel.

The park also consists of two mazes, situated at the eastern end of the Jewel called the Hedge Maze and Mirror Maze.^{[25][36]} The Hedge Maze is Singapore's largest with hedge walls standing at 1.8 metres (5 ft 11 in) high. The maze features gates that can be pushed within that will change the path of the maze. It ends at an elevated watchtower that offers a bird's-eye view of the entire maze. The Mirror Maze is located under the dome with plants branching across the top of the maze. The maze makes use of mirrors and various reflections.^{[30][37]}

• Sky Nets

The Sky Nets, also called the Manulife Sky Nets for sponsorship reasons, provide children's play facilities, including a Bouncing Net and a Walking Net. The Bouncing Net is 250 metres (820 ft) long, suspended 8 metres above ground at its highest point.^[38] A separate 50 metres (160 ft) long Walking Net lets people to look down 25 metres (82 ft)s to Jewel's Level 1.^[34]

• Discovery Slides

The Discovery Slides feature four integrated slides: two tube slides and two sliding surfaces.^[38] The entire structure sits at an incline, 3 metres (9.8 ft) high on one end, and close to 7 metres (23 ft) on the other,^[39] and lets people to view the Forest Valley and the Rain Vortex.^[40] The Discovery Slides were designed by Carve and built by Playpoint in Singapore.^[38]

- **Foggy Bowls**

The Foggy Bowls are four concave bowls with depths of between 30 centimetres (12 in) and 65 centimetres (26 in) for people to jump in while mist is released to create an illusion of playing among clouds.^[30]

Changi Experience Studio

[[change](#) | [change source](#)]

The Changi Experience Studio is a 3,000 square metres (32,000 sq ft) space with games and displays relating to Changi Airport's history and lets people a behind-the-scenes look of how the airport is run.^[30]

Facilities

[[change](#) | [change source](#)]

Pokémon Centre Singapore

Hotel

[[change](#) | [change source](#)]

A hotel within Jewel, with about 130 rooms, operated by the international hotel brand, YOTEL, opened on 12 April 2019.^{[41][42]} It is YOTEL's second hotel in Singapore after the 2017 opening of the YOTEL on Orchard Road.^[42]

Aviation facilities

[[change](#) | [change source](#)]

An ‘integrated multi-modal transport lounge’ provides ticketing, boarding pass collection and baggage transfer service in a single location. Early check-in facilities allows passengers to check-in and drop off luggage up to 24-hours ahead of regular check-in times.^[41] There are dedicated facilities for fly-cruise and fly-ferry passengers.^[41]

Retail

[[change](#) | [change source](#)]

Jewel houses both local and international brands. Tenants include the largest Nike store in Southeast Asia,^[43] the first and only [Apple Store](#) located inside an airport complex,^[44] [Marks & Spencer](#), Muji, Zara, Uniqlo, Singapore's second basement cinema operated by Shaw Theatres with 11 screens including an [IMAX](#) theatre with a seating capacity of 828 and Five Spice, a food court by Food Junction with 19 unique stalls and supermarket chain NTUC FairPrice Finest.^[45]

Jewel also includes [American](#) burger places such as [A&W Restaurants](#) and Shake Shack, [Norwegian](#) fast-casual restaurant Pink Fish, [Swiss](#) artisanal chocolatier Läderach, [Sichuan](#) restaurants Xiao Bin Lou and Yu's Kitchen, Boston-based ice cream parlour chain Emack & Bolio's, [British](#) casual eatery Burger & Lobster, [Peruvian](#) restaurant TONITO, [Japan](#)'s Tokyo Milk Cheese Factory and the first permanent [Pokémon](#) Centre in East Asia outside of Japan.^{[46][47][48][49][50][51]}

Awards

[[change](#) | [change source](#)]

- Jewel Changi Airport was awarded the 2016 International Architecture Award by The Chicago Athenaeum, an international museum of architecture and design.^[52]
- In November 2019, Jewel Changi Airport was awarded the Special Jury Award at the year's Mapic Awards.^[53]

In popular culture

[[change](#) | [change source](#)]

The song "The Right Time" by Singaporean singer [JJ Lin](#) was motivated by Jewel, which was shown in its music video.^{[54][55]}

References

[[change](#) | [change source](#)]

1. [↑] ["Jewel Changi Airport to open on April 17"](#). *The Straits Times*. 6 March 2019. [Archived](#) from the original on 7 March 2019. Retrieved 6 March 2019.
2. [↑] [2.0 2.1 2.2](#) Toh, Ting Wei (18 October 2019). ["Jewel Changi Airport sees 50 m visitors since opening six months ago"](#). *The Straits Times*. Retrieved 25 October 2019.^{[[permanent dead link](#)]}
3. [↑] ["Jewel Changi Airport"](#). *Lighting Planners Associates*. Archived from the original on 24 July 2021. Retrieved 10 September 2019.
4. [↑] ["Jewel- Changi Airport Mixed Development – Obayashi Singapore"](#). *www.obayashi.com.sg*. [Archived](#) from the original on 5 June 2019. Retrieved 5 June 2019.

5. [↑](#) Kaur, Karamjit (21 March 2017). ["Changi's Jewel shaping up well for sparkling start in 2019"](#). *The Straits Times*. [Archived](#) from the original on 25 December 2017. Retrieved 9 January 2018.
6. [↑](#) ["Changi Airport Group unveils 'Project Jewel' "](#). 19 August 2013. [Archived](#) from the original on 17 January 2018. Retrieved 9 January 2018.
7. [↑](#) ["Jewel at Changi Airport to open in early 2019, Canopy Park unveiled"](#). [Archived](#) from the original on 17 January 2018. Retrieved 9 January 2018.
8. [↑](#) ["Regulations"](#) (PDF). *Caas.gov.sg*. [Archived](#) (PDF) from the original on 23 September 2015. Retrieved 3 March 2017.
9. [↑](#) migration (20 August 2013). ["Jewel at Changi will offer travelers stunning welcome"](#). *The Straits Times*. [Archived](#) from the original on 17 January 2018. Retrieved 9 January 2018.
10. [↑](#) ["Expanding Changi Airport for 2030 and Beyond - National Day Rally 2013"](#). *govsingapore youtube channel* uploaded 22 Aug 2013.
11. [↑](#) ["Terminal 5 will double Changi Airport's capacity: PM Lee"](#). *TODAYonline*. [Archived](#) from the original on 17 January 2018. Retrieved 9 January 2018.
12. [↑](#) [12.0 12.1 "A first look at Changi Airport's new 'Jewel' "](#). *TODAYonline*. [Archived](#) from the original on 17 January 2018. Retrieved 9 January 2018.
13. [↑](#) ["Changi Airport Proves It Is The Jewel Of The World"](#). *TheDesignAir*. 14 March 2015. [Archived](#) from the original on 17 January 2018. Retrieved 9 January 2018.
14. [↑](#) migration (20 December 2013). ["Project Jewel at Changi Airport to cost \\$1.47b"](#). *The Straits Times*. [Archived](#) from the original on 17 January 2018. Retrieved 9 January 2018.
15. [↑](#) Karamjit Kaur (5 December 2014). ["Work on Changi Airport's Jewel project and T1 expansion begins"](#). *The Straits Times*. [Archived](#) from the original on 17 January 2018. Retrieved 9 January 2018.
16. [↑](#) ["Clarification on funding of Jewel Changi Airport"](#). *gov.sg*. 30 June 2020. Retrieved 28 August 2020.
17. [↑](#) Heilpern, John. ["Architect Moshe Safdie on the "Bilbao Effect" "](#). *Vanity Fair*. [Archived](#) from the original on 14 April 2016. Retrieved 9 January 2018.
18. [↑](#) ["RSP Architects Planners & Engineers"](#). *RSP*. [Archived](#) from the original on 17 April 2019. Retrieved 17 April 2019.
19. [↑](#) ["Jewel Changi Airport | PWP Landscape Architecture"](#). *www.pwpla.com*. [Archived](#) from the original on 18 April 2018. Retrieved 17 April 2018.
20. [↑](#) [Jewel Changi Airport Archived](#) 2019-05-20 at the [Wayback Machine](#) 6 May 2019
21. [↑](#) [World's tallest indoor waterfall inside Safdie Architects' Singapore airport building Archived](#) 2019-07-02 at the [Wayback Machine](#) Dezeen, 12 March 2019
22. [↑](#) ["Safdie reveals greenhouse for Singapore's Changi airport"](#). *Dezeen*. 5 December 2014. [Archived](#) from the original on 3 July 2017. Retrieved 9 January 2018.

23. [↑ "Moshe Safdie's Jewel Changi Airport biodome breaks ground in Singapore". Archived from the original on 18 January 2018. Retrieved 9 January 2018.](#)
24. [↑ "Changi Airport: Singapore's Crown Jewel". apex.aero. Archived from the original on 17 January 2018. Retrieved 9 January 2018.](#)
25. [↑ 25.0 25.1 25.2 25.3 "Inside Jewel Changi Airport: An interactive special". CNA. Retrieved 15 September 2019.](#)
26. [↑ "Resonating Forest – Shiseido Forest Valley at Jewel Changi Airport - teamLab / _____". Resonating Forest – Shiseido Forest Valley at Jewel Changi Airport - teamLab / _____. Archived from the original on 25 May 2019. Retrieved 27 May 2019.](#)
27. [↑ "Shiseido Opens SHISEIDO FOREST VALLEY at Jewel Changi Airport". News Release - Shiseido group website. Retrieved 27 May 2019.](#)
28. [↑ Surana, Sanjay \(11 April 2019\). "At Singapore's Changi Airport, a New Jewel Shines". The New York Times. ISSN 0362-4331. Archived from the original on 12 April 2019. Retrieved 12 April 2019.](#)
29. [↑ Baskas, Harriet \(14 April 2019\). "Singapore's Changi Airport, called the world's best airport, now touts the world's tallest indoor waterfall". CNBC. Retrieved 6 November 2019.](#)
30. [↑ 30.0 30.1 30.2 30.3 hermesauto \(7 June 2017\). "Jewel Changi Airport: 6 things you should not miss". The Straits Times. Archived from the original on 9 January 2018. Retrieved 9 January 2018.](#)
31. [↑ Zhang, Sarah \(7 September 2016\). "How to Fit the World's Biggest Indoor Waterfall in an Airport". Wired. ISSN 1059-1028. Retrieved 29 October 2019.](#)
32. [↑ "Getting between Terminal 2 & Terminal 3". Archived from the original on 1 April 2015. Retrieved 6 April 2015.](#)
33. [↑ "Canopy bridge, mazes among features at Changi Airport's S\\$1.7 billion Jewel". TODAYonline. Archived from the original on 16 January 2018. Retrieved 9 January 2018.](#)
34. [↑ 34.0 34.1 Planet, Lonely. "Inside Canopy Park at Singapore's Jewel Changi Airport". www.lonelyplanet.com. Archived from the original on 17 January 2018. Retrieved 9 January 2018.](#)
35. [↑ hermesauto \(7 June 2017\). "Changi Airport's Jewel promises to be a playground for kids and adults with sky nets, mazes and suspended bridge". The Straits Times. Archived from the original on 17 January 2018. Retrieved 9 January 2018.](#)
36. [↑ "Singapore Jewel Changi Airport tourist attractions". funsandfacts. 30 April 2020. Archived from the original on 11 July 2020. Retrieved 12 July 2020.](#)
37. [↑ "Changi Airport unveils 14,000 m² Canopy Park at Jewel". Channel NewsAsia. Archived from the original on 18 January 2018. Retrieved 9 January 2018.](#)
38. [↑ 38.0 38.1 38.2 hermesauto \(7 June 2017\). "Jewel Changi Airport: 6 things you should not miss". The Straits Times. Archived from the original on 9 January 2018. Retrieved 9 January 2018.](#)
39. [↑ "Changi Airport unveils 14,000 m² Canopy Park at Jewel". Channel NewsAsia. Archived from the original on 18 January 2018. Retrieved 9 January 2018.](#)

40. [↑](#) Zhang, Benjamin Zhang (9 June 2017). ["The best airport in the world is building a \\$1.7 billion indoor forest and waterfall"](#). *Business Insider Singapore*. [Archived](#) from the original on 17 January 2018. Retrieved 17 January 2018.
41. [↑](#) [41.0 41.1 41.2](#) ["Singapore's Jewel Changi: World's most awesome airport?"](#). *CNN Travel*. 9 December 2014. [Archived](#) from the original on 17 January 2018. Retrieved 9 January 2018.
42. [↑](#) [42.0 42.1](#) ["Micro-hotel chain Yotel to open at Jewel Changi Airport on April 12"](#). *The Straits Times*. 8 March 2019. [Archived](#) from the original on 9 March 2019. Retrieved 9 March 2019.
43. [↑](#) ["Jewel Changi Airport's retail space nearly 90% taken up ahead of March 2019 opening"](#). *The Business Times*. 11 October 2018. Retrieved 21 April 2021.
44. [↑](#) hermesauto (11 July 2019). ["First Apple store inside an airport complex to open on Saturday at Jewel Changi Airport"](#). *The Straits Times*. Retrieved 20 October 2019.
45. [↑](#) Lin, Jessica. ["Singapore's S\\$1.7 billion Jewel Changi opens on Apr 17 - but there's a way to get inside before everyone else does, Business Insider - Business Insider Singapore"](#). *www.businessinsider.sg*. [Archived](#) from [the original](#) on 28 August 2019. Retrieved 20 October 2019.
46. [↑](#) ["Coming soon to Changi Airport's Jewel: Cinema, fast-food chain A&W"](#). *The Straits Times*. 15 July 2018. [Archived](#) from the original on 16 July 2018. Retrieved 16 July 2018.
47. [↑](#) ["Jewel Changi Airport tenants to include A&W, Pokemon, Shaw Theatres"](#). *Channel NewsAsia*. 12 October 2018. [Archived](#) from the original on 12 October 2018. Retrieved 12 October 2018.
48. [↑](#) ["Close to 90% of Jewel Changi Airport's retail space leased to date with unique experiential retail concepts"](#) (PDF). *Jewel Changi Airport*. 11 October 2018. [Archived](#) from [the original](#) (PDF) on 27 March 2019. Retrieved 15 October 2018.
49. [↑](#) ["Burger & Lobster to launch at Jewel Changi Airport"](#) (PDF). *Jewel Changi Airport*. 31 January 2019. [Archived](#) (PDF) from the original on 27 March 2019. Retrieved 4 March 2019.
50. [↑](#) ["Apple to open 2 more stores here: Sources"](#). *The Straits Times*. 27 March 2019. [Archived](#) from the original on 28 March 2019. Retrieved 28 March 2019.
51. [↑](#) ["Tokyo Milk Cheese Factory & Cow Cow Kitchen"](#). *Jewel Changi Airport*. 23 June 2019. [Archived](#) from the original on 23 June 2019. Retrieved 23 June 2019.
52. [↑](#) ["Jewel Changi Airport wins International Architecture Award"](#). *Channel NewsAsia*. [Archived](#) from the original on 18 January 2018. Retrieved 9 January 2018.
53. [↑](#) Ang, Prisca (15 November 2019). ["Changi's Jewel shines with global award; it is the top pick of international retail real estate experts"](#). *The Straits Times*. Retrieved 20 May 2020.
54. [↑](#) ["JJ Lin was blown away when he saw Jewel's waterfall - and now there's a song about it"](#). *Business Insider*. [Archived](#) from the original on 22 August 2019. Retrieved 22 August 2019.
55. [↑](#) ["High-flier JJ Lin salutes Changi Airport's Jewel with new song called The Right Time"](#). *The Straits Times*. [Archived](#) from the original on 22 August 2019. Retrieved 22 August 2019.

Other websites

[[change](#) | [change source](#)]

Wikimedia Commons has media related to ***Jewel Changi Airport***.

- [Official website](#)
- [Emporis.com - Changi Airport](#)

Retrieved from "https://simple.wikipedia.org/w/index.php?title=Jewel_Changi_Airport&oldid=9758631"