

MAY 7 – AUGUST 7, 2022

SIOUX CITY ART CENTER



**T  
O  
W  
E  
R  
S** **OF  
T  
O  
M  
O  
R  
R  
O  
W**  
**WITH  
LEGO®  
BRICKS**



*Towers of Tomorrow with LEGO® Bricks* features 20 of the world's most astonishing skyscrapers from the United States of America, Australia, Asia, Canada and United Arab Emirates constructed with breathtaking architectural detail and accuracy by Australia's Ryan McNaught, the only certified LEGO professional in the Southern Hemisphere.

The Home Insurance Building, built in Chicago in 1885 and demolished in 1931, is well-known as the first modern skyscraper because of its innovative steel and reinforced concrete structure. It may have only been 12 stories tall, or 180 feet high, but it was the precursor for today's newest and most ambitious buildings. *Towers of Tomorrow* includes some of the most iconic towers from across North America including Toronto's CN Tower, Philadelphia's Comcast Technology Center, Los Angeles' Wilshire Grand Center, Chicago's Willis Tower, Atlanta's Bank of America Plaza, New York's super slender skyscrapers: 111 West 75<sup>th</sup> Street, Central Park Towers and the city's iconic landmarks, Empire State Building and Chrysler Building.

Skyscrapers across Asia featured in the exhibition include Taiwan's Taipei 101, Japan's Tokyo Skytree, Kuala Lumpur's twin Petronas Towers, Singapore's extra ordinary Marina Bay Sands and the amazing, self-contained city that is China's Shanghai Tower. Australia is represented by Barangaroo Crown Hotel Resort in Sydney, the Eureka Tower in Melbourne, Infinity Tower in Brisbane and the Gold Coast's Q1 building.

For centuries, building models have given architects a way to visualize, adjust, improve upon and share their architectural projects. Ranging from the abstract to hyper-precise, models encapsulate, in miniature form, the scale of their visions and how people will interact with them. On a scale of 1:200 and built with stunning precision and attention to detail, the LEGO® towers also offer visitors a birds-eye view of these extra-ordinary buildings and are just as impressive in model size. Visitors, young and old, can create their own 'tower of tomorrow' from over 200,000 loose LEGO bricks in hands-on construction areas and add their creations to a steadily rising futuristic LEGO metropolis inside the exhibition.

#### About Ryan McNaught

Ryan McNaught, aka 'The BrickMan' is one of only 14 Certified LEGO® professionals worldwide modelling larger than life LEGO masterpieces. McNaught and his team used more than half a million LEGO bricks (well over 1.5 tons of LEGO) and took over 2,400 hours to build the structures featured in the *Towers of Tomorrow* exhibition. Ryan runs a full-time LEGO® building studio in Melbourne and making interactive models is his speciality, building things that people can not only be inspired by but interact with.



This staggeringly slim structure appears to defy gravity. Set on a tiny street frontage of just over 60 feet (18 meters), 111 West 57<sup>th</sup> Street has an astounding width-to-height ratio of 1:23. With unparalleled views of the city and Central Park, this residential tower is one of the new generation of super-slender skyscrapers that are changing New York City's skyline.

## 111 WEST 57<sup>TH</sup> STREET

- New York City, USA
- 1428 feet high
- Completed 2018
- Designed by SHoP Architects

"This tower's narrow shape and intricate detailing presented challenges. Its gold patterning was too small to be reproduced with LEGO bricks; instead we've added tan lines down the windows. We call this selective compression – selecting details to capture the essence of the building."

Ryan McNaught, LEGO® certified professional

## 111 WEST 57<sup>TH</sup> STREET MODEL

- 86 inches high
- 58 hours to build
- 19,600 bricks



Said to resemble a sharpened pencil, the Bank of America Plaza's postmodern design harks back to the golden age of Art Deco skyscrapers. Crowned with a pyramid covered with 23-carat gold, this soaring rose granite tower is a distinctive sight on the Atlanta skyline.

## BANK OF AMERICA PLAZA

- Atlanta, USA
- 1023 feet high
- Completed 1992
- Designed by Kevin Roche, John Dinkeloo & Associates

"While it looks simple enough, this tower was unexpectedly complicated to re-create. Despite being square, it has many difficult angles and facets. It is the shortest North American tower on display, but took longer to make than many of the others."

Ryan McNaught, LEGO® certified professional

## BANK OF AMERICA PLAZA MODEL

- 61 inches high
- 111 hours to build
- 37,975 bricks



Like two glorious sails yet to unfurl, this ethereal tower will be a new landmark on the shoreline of Barangaroo. Built on a former maritime industrial site on Sydney Harbour, the proposed six-star international hotel resort will have expansive views, taking in the Sydney Opera House and the Sydney Harbour Bridge.

## BARANGAROO HOTEL RESORT

- Sydney, Australia
- 890 feet high
- Completed 2021
- Designed by Wilkinson Eyre Architects

"Here's another crazy unique shape. It's tall and bulges in the middle, and is divided into wings that look like pointed petals from above. Once again, our ability to sculpt gentle curves and create colors was pushed to the limit."

Ryan McNaught, LEGO® certified professional

## BARANGAROO HOTEL RESORT MODEL

- 54 inches high
- 150 hours to build
- 25,000 bricks

The Burj Khalifa is the world's tallest tower, rising almost 650 feet (200 meters) above any other structure. Construction took 22 million hours of labour, and would have taken one person 7534 years to complete. The tower's three-lobed configuration is inspired by spider lily petals and its tapering form by minarets, a common feature in traditional Islamic architecture.

## BURJ KHALIFA

- Dubai, UAE
- 2717 feet high
- Completed 2010
- Designed by Skidmore, Owings & Merrill

"The model was too tall to fit in our workshop, so we built it in five tiers, and could only assemble it in the car park."

Ryan McNaught, LEGO® certified professional

## BURJ KHALIFA MODEL

- 163 inches high
- 135 hours to build
- 48,365 bricks



Central Park Tower is one of the many new super-tall towers on what is becoming known as New York's "Billionaires' Row." Valuable extra floor space was created by purchasing air rights above a neighboring building. When completed, the tower will be the western hemisphere's tallest residential building – unless another development gets there first.

## CENTRAL PARK TOWER

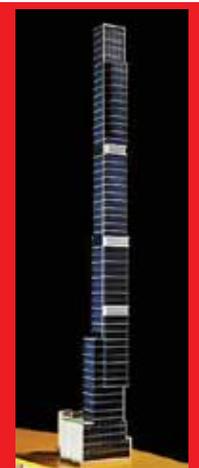
- New York City, USA
- 1550 feet high
- Completed 2019
- Designed by Adrian Smith + Gordon Gill Architecture

"With its cantilever jutting out on one side, it's like nothing else around it. You either love it or you hate it – I think it's a cool building."

Ryan McNaught, LEGO® certified professional

## CENTRAL PARK TOWER MODEL

- 93 inches high
- 73 hours to build
- 15,780 bricks



The Chrysler Building is a classic example of Art Deco architecture. Adorned with fenders, hub caps, and American eagles, and topped with a gleaming stainless-steel crown, it's an ode to the US automobile industry of the early 20th century. It was the world's tallest skyscraper for only 11 months, overtaken in 1931 by the Empire State Building, but its elegance renders the Chrysler Building a much-loved feature of the New York skyline.

## CHRYSLER BUILDING

- New York City, USA
- 1046 feet high
- Completed 1930
- Designed by William Van Alen

"To re-create the ornamental features, we had to find the most appropriate LEGO pieces. The triangular windows on the tower's crown are made from wings from a spaceship and the fronts of cars."

Ryan McNaught, LEGO® certified professional

## CHRYSLER BUILDING MODEL

- 63 inches high
- 111 hours to build
- 19,250 bricks





The CN Tower is a thrill-seeker's delight, with a number of vertigo-inducing attractions. The world's highest external 'edge walk' allows you to circumnavigate the building – completely hands free! – 1168 feet (350 meters) above the ground. You can climb even higher in an elevator that travels through the tower's upper core to the SkyPod observation platform, a breathtaking 1467 feet (447 meters) above the city.

## CN TOWER

- Toronto, Canada
- 1815 feet high
- Completed 1976
- Designed by John Andrews, WZMH Architects

"This tower is a crazy shape – it looks like a UFO landed in the middle of Toronto. We made the donut-like ring with bumper bars from LEGO cars."

Ryan McNaught, LEGO® certified professional

## CN TOWER MODEL

- 109 inches high
- 83 hours to build
- 15,211 bricks



Envisaged as a vertical Silicon Valley, the Comcast Technology Center is Philadelphia's tallest skyscraper. A slender illuminated glass shaft extends 126 feet (38 meters) above the tower into the sky, and glass curtain walls allow natural light to stream through the interior. Designed to be a building for the future, it features punched stainless-steel panels that offer a nod to Philadelphia's manufacturing past.

## COMCAST TECHNOLOGY CENTER

- Philadelphia, USA
- 1121 feet high
- Completed 2018
- Designed by Foster + Partners

"This tower was interesting architecturally as it features a lot of glass and interior gardens, and we tried as much as possible to relay that in the model."

Ryan McNaught, LEGO® certified professional

## COMCAST TECHNOLOGY CENTER MODEL

- 67 inches high
- 62 hours to build
- 22,500 bricks



If New York City were a chessboard, the Empire State Building would be the king, with the Chrysler Building its queen. Built more than 85 years ago, it's one of the world's most iconic skyscrapers, and was the tallest building in the world for 41 years. With its Art Deco style and ornamental spire, the Empire State Building remains an enduring symbol of the American spirit.

## EMPIRE STATE BUILDING

- New York City, USA
- 1454 feet high
- Completed 1931
- Designed by Shreve, Lamb & Harmon Associates

"First we had to decide whether to include King Kong, but there's so much more to this famous tower! If you look carefully, you can see we used dinosaur claws in front of knights' shields to achieve some of the Art Deco ornamentation."

Ryan McNaught, LEGO® certified professional

## EMPIRE STATE BUILDING MODEL

- 87 inches high
- 70 hours to build
- 20,400 bricks





A retractable glass viewing cube which protrudes from the 88th floor allows a dizzying view as you hover 984 feet (300 meters) above the city. The tower's name was inspired by the miners' uprising at the Eureka Stockade during the gold rush of the 1850s, a pivotal event in Australia's history. The distinctive red stripe represents the blood shed during this battle, while the gold crown captures the light of the setting sun.

## EUREKA

- Melbourne, Australia
- 975 feet high
- Completed 2006
- Designed by Nonda Katsalidis, Fender Katsallidis Architects

"The great thing about Eureka Tower, apart from its being in Melbourne where I live, is that we got to use gold bricks, which are truly rare and precious in LEGO world. If only they were real gold!"

Ryan McNaught, LEGO® certified professional

## EUREKA MODEL

- 58 inches high
- 108 hours to build
- 13,900 bricks



Embellished with white horizontal lines, vertical dashes and spiraling grooves that joyously etch the building, the Infinity Tower is a standout on Brisbane's skyline. Tall, slim, and cylindrical, the tower is able to deflect the powerful storms and gusty winds that regularly batter this subtropical region.

## INFINITY TOWER

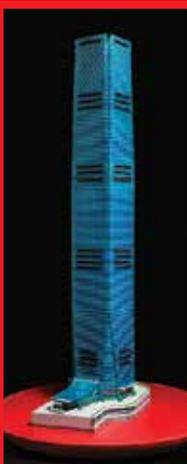
- Brisbane, Australia
- 817 feet high
- Completed 2014
- Designed by DBI Design

"It sounds strange, but the Infinity Tower is covered in SNOT (a well-used LEGO term meaning 'studs not on top'). You'd never guess, but the tower is actually built sideways so we could get those long, narrow, vertical lines and a smooth cylindrical shape overall."

Ryan McNaught, LEGO® certified professional

## INFINITY TOWER MODEL

- 49 inches high
- 103 hours to build
- 6,600 bricks



Imagine a dragon covered in scales of glass, its tail gently resting on the ground. Hong Kong's International Commerce Centre is beautiful, refined, and understated. It also employs cutting-edge aerodynamics: its shingles function like aircraft flaps, deflecting gale-force winds.

## INTERNATIONAL COMMERCE TOWER

- Hong Kong, China
- 1588 feet high
- Completed 2010
- Designed by Kohn Pedersen Fox Associates

"We thought this one would be simple but we were sorely mistaken. Its vast hinged walls slope inwards and outwards and there's a notched channel down each side. What I'm most proud of is the intense color we got from placing 'trans blue' glass over a background of 'earth blue' bricks."

Ryan McNaught, LEGO® certified professional

## INTERNATIONAL COMMERCE TOWER MODEL

- 95 inches high
- 122 hours to build
- 21,200 bricks

Resembling a six-legged creature prowling the shoreline, this awe-inspiring skyscraper is definitely a head turner. Oddly perched upon inward-sloping towers, a 2.96 acre (1.2-hectare) platform contains landscaped greenery, restaurants, and a vast infinity pool. This SkyPark rests on an automated cradle that can adjust to even the slightest building movement from wind or earth tremors.

## MARINA BAY SANDS

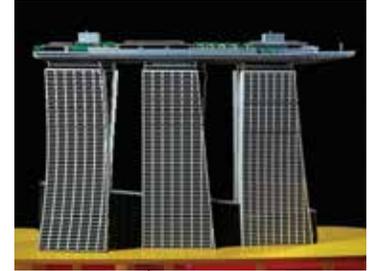
- Singapore
- 679 feet high
- Completed 2010
- Designed by Moshe Safdie, Safdie Architects

"Marina Bay Sands has never been done in LEGO bricks at this scale and I can see why. Each supporting tower curves upwards like a banana. Some get thinner, others get thicker, some grow narrower, others grow wider. And then of course they all join in together. It proves what they say, 'LEGO doesn't like curves.'"

Ryan McNaught, LEGO® certified professional

## MARINA BAY SANDS MODEL

- 39 inches high
- 155 hours to build
- 26,400 bricks



Like a pair of mighty rocket ships ready to blast into space, the Petronas Twin Towers building is both otherworldly and culturally grounded. The towers feature a series of interlocked circles and squares, based on the traditional Islamic star motif known as the "Rub el Hizb," which stack upwards into the sky.

## PETRONAS TWIN TOWERS

- Kuala Lumpur, Malaysia
- 1483 feet high
- Completed 1996
- Designed by César Pelli

"Keen-eyed LEGO fans will see that we built this model upside down. To get the glass bricks looking clean and sharp we needed the studs facing downwards. It's not your 'everyday' LEGO building, and it's probably the craziest technique used in the whole project."

Ryan McNaught, LEGO® certified professional

## PETRONAS TWIN TOWERS MODEL

- 89 inches high
- 360 hours to build
- 82,200 bricks



Located in the heart of Surfers Paradise, Q1 is the tallest building in Australia, soaring high above the sand, surf, sun-tanned bodies, and holiday glitz of Queensland's Gold Coast. The Q1 features Australia's highest external building climb experience, taking you 886 feet (270 meters) above the ground.

## Q1

- Gold Coast, Australia
- 1058 feet high
- Completed 2005
- Designed by Sunland Design Group and Innovarchi

"For me, the color scheme really pops. A combination of dark blue, mid-blue and white makes the Q1 sparkle like a jewel. It's always hard to pick favorites, but this one comes pretty close."

Ryan McNaught, LEGO® certified professional

## Q1 MODEL

- 64 inches high
- 82 hours to build
- 11,900 bricks





Majestically tapering upwards and twisting 120 degrees as it goes, this so-called “vertical city” is actually a building wrapped in a “second skin.” In the space between, nine separate “sky-lobbies” or neighborhoods provide residents with fresh air, gardens, and simulated “outdoor living” areas far above the bustle of Shanghai below. At a staggering 2073 feet (632 meters) high, Shanghai Tower is China’s tallest building.

## SHANGHAI TOWER

- Shanghai, China
- 2073 feet high
- Completed 2015
- Designed by Gensler

“This building was a mind-bender. It’s basically a model with 80 separate LEGO layers, each shaped like a guitar pick. Inside it’s like a random stack of tin cans surrounded by trees and beams. Because the outer skin is transparent we had to create a lot of internal details as well.”

Ryan McNaught, LEGO® certified professional

## SHANGHAI TOWER MODEL

- 124 inches high
- 185 hours to build
- 104,800 bricks



To some people, Taipei 101 looks like a stem of green bamboo. To others it’s a pile of precariously stacked noodle boxes. Able to withstand earthquakes and typhoons, commonplace in Taiwan, this building can sway, literally. A giant pendulum suspended down its center works to counteract external forces, keeping the tower upright.

## TAIPEI 101

- Taipei, Taiwan
- 1667 feet high
- Completed 2004
- Designed by CY Lee and Partners

“The big challenge with Taipei 101 was its color. The actual building changes color throughout the day from dark green to deep blue. The perfect LEGO color was a shade called ‘dark azure’, but it was too rare to use. We finally went with ‘dark gray’, which we’ve tweaked with clever lighting.”

Ryan McNaught, LEGO® certified professional

## TAIPEI 101 MODEL

- 100 inches high
- 80 hours to build
- 18,600 bricks



In a city famous for robots, sci-fi movies, and visionary technology, it’s no surprise that Tokyo’s tallest building also beams TV and radio signals far and wide. Its distinctive engineering references traditional craftsmanship and culture, blending Japan’s past, present, and future. A crisscross of interlaced tubular columns enables the Skytree to withstand Tokyo’s high winds and seismic activity, and the occasional rampaging monster!

## TOKYO SKYTREE

- Tokyo, Japan
- 2080 feet high
- Completed 2012
- Designed by Nikken Sekkei

“This is one of the craziest towers in the exhibition. For the lattice we developed a cool system of ‘jumper plates’ and ‘hinged elements’ to make the crisscross work properly, as well as allowing the shape to change from a triangle at the bottom to a circle at the top.”

Ryan McNaught, LEGO® certified professional

## TOKYO SKYTREE MODEL

- 125 inches high
- 191 hours to build
- 19,200 bricks

Resembling a pile of staggered building blocks, the Willis Tower was known as Sears Tower until 2009. The structure is clad in bronze-tinted windows framed in black aluminum, and its austere profile creates a monolithic presence and striking silhouette on Chicago's skyline.

## WILLIS TOWER (SEARS TOWER)

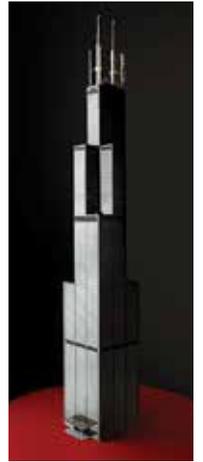
- Chicago, USA
- 1730 feet high
- Completed 1974
- Designed by Skidmore, Owings & Merrill

"This tower was one of my personal favorites. To get the tower's distinctive color we used black bricks behind smoky glass."

Ryan McNaught, LEGO® certified professional

## WILLIS TOWER (SEARS TOWER) MODEL

- 104 inches high
- 64 hours to build
- 29,500 bricks



Reflecting the city's bright blue skies, the Wilshire Grand Center marks the start of a new era of tall contemporary buildings in downtown Los Angeles. With its shining glass facade, sail-shaped roof and elegant spire, the design provides a striking contrast to the surrounding boxy concrete towers that were constrained by building codes of the past.

## WILSHIRE GRAND CENTER

- Los Angeles, USA
- 1100 feet high
- Completed 2017
- Designed by AC Martin

"With its crazy slopes and curves, and flowing river of glass between the tower and podium, the Wilshire Grand presented a lot of unique features that are difficult to translate with LEGO. This was the hardest tower to make after the Burj Khalifa."

Ryan McNaught, LEGO® certified professional

## WILSHIRE GRAND CENTER MODEL

- 66 inches high
- 96 hours to build
- 18,900 bricks



*Towers of Tomorrow with LEGO® Bricks* is a traveling exhibition from Sydney Living Museums and toured internationally by Flying Fish.

This exhibition is presented in Sioux City by the Sioux City Art Center Blockbuster IV Partners.

Exhibition programming at the Sioux City Art Center is supported by the H. H. Everist, Jr. Program Endowment Fund.

