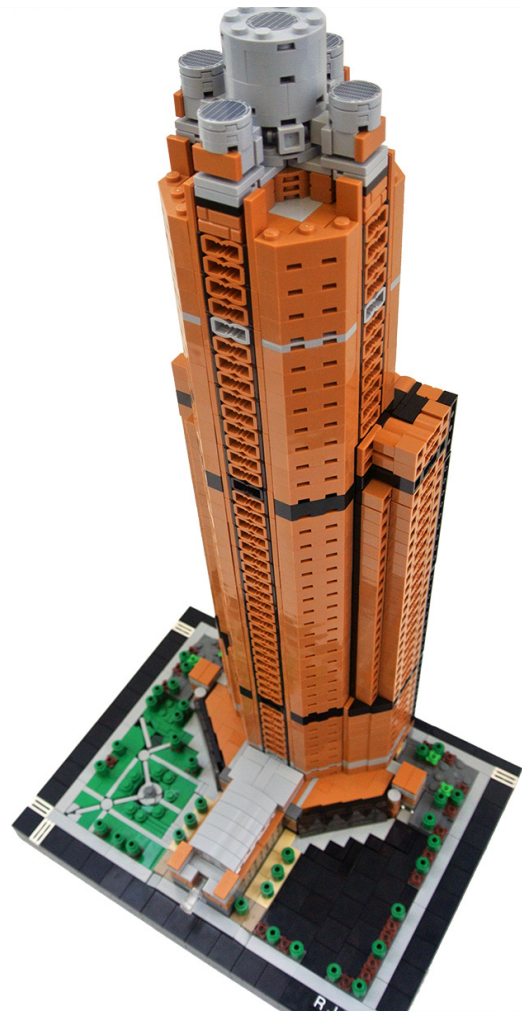


Building in Microscale

By Rocco Buttiere

Building landmark locations, specifically skyscrapers and supertall structures, in LEGO® bricks often varies in terms of difficulty by the scale at which the models are depicted. One of the more challenging scales to build in is microscale. The way I would describe microscale is that one of its main characteristics is the need to portray a sense of realism with a model that is so much smaller than it would be in real life and also give the viewer a sense of where a person would fit into the model and what size they might be in comparison. While there are an infinite number of subject matters a builder could use microscale to make, my area of “expertise” would be in making skyscraper models.

Whenever I attempt to replicate a famous building or structure, I first try to envision a small section or certain “moment” within the fabric of the buildings’ architecture that I would be able to capture nicely in the medium of LEGO bricks. For all of my models, this is the determining factor in how I go about designing the overall model and capturing the realism as best as I can. Not only do I strive for accuracy in a model by itself, I also fashion all my models to a common scale of 1:650. I believe that part of appreciating an individual model in my scale is also appreciating its size in comparison to many other well-known landmarks. For example, the tallest building in the world, the Burj Khalifa in Dubai, stands at an impressive 2,717 ft or 828 m. Compared to Chicago’s Willis Tower and John Hancock Center, the Burj Khalifa is taller than both Chicago buildings combined, not counting antennas. Having these three models among my collection not only celebrates each one by



expressing their unique architectural aspects, it also helps to accurately illustrate the comparison of each one to the next.

Part of capturing the realism of a building also depends greatly on how I translate specific architectural elements into LEGO bricks. Building in microscale, I use many small pieces that are often not commonly found or abundantly used in the average LEGO set. The trick, I have found, is finding the right piece, or arrangement of pieces, to be able to achieve the realism I strive for. For many of the more vertically inclined skyscrapers, or ones with long, continuous vertical lines, my typical de facto piece to use is the 1x2 grill tile. This element has been rather invaluable for many of the older skyscrapers I have modeled, especially those of the Art Deco movement. Architecturally speaking, Art Deco is well known for its strong vertical lines, often continuing from the lower floors all the way to the upper setbacks. The grill tile also lends itself well to the narrow window space between these lines.

I believe that the uses of a single piece, however, only leave a lasting impression so long as they are not over-used within



the overall context of my work. For this reason, I try and think of new methods for modeling aside from simple brick-stacking for basic floor-by-floor buildings. I have managed to invent a few useful techniques for more unique buildings. In my Marina City model, for instance, I was able to replicate the two towers' famous corn-cob-shape using the out-of-production 1x8 technic plate with rounded ends. By placing jumper plates in the middle, I was able to rotate the 1x8 plates on top of one another and create twenty-two rounded columns to represent the buildings' windows and balconies. Another example is my model of 311 South Wacker. To represent each of the building's floors, I used 1x2 log bricks turned sideways with the bottoms facing out. The underside of these pieces gave a nice depth to each floor and also helped me realize how useful the undersides of elements can be in microscale buildings.



Another useful trick I have learned is incorporating sideways techniques into the bases of my models. Part of capturing the realism of a real-life building, I believe, is also modeling the context of the building, specifically the plaza details and cross-streets. For the majority of my models, the bases are usually quite straight-forward to design and feature no special

methods such as pieces on their sides. For a few, however, the modeling requires more complex techniques. Something like a strip of marble tiling on the ground can determine whether the technique must incorporate sideways plates to better portray a thin line. Sideways pieces in the base can also help represent the border between a street and a sidewalk. In my World Financial Center model, I had to use sideways slope bricks to represent the numerous angled divisions between the streets and sidewalks. Similarly, my model of 311 South Wacker incorporates sideways slopes and tiles for some tricky angled sidewalks in the building's plaza.

Altogether, I would say that I have come a long way since I started making microscale skyscrapers back in 2009. In more than one instance, I have not been able to make a model I have wanted to do because I could not think of the right technique at that moment. In most of these cases, I have since succeeded in replicating the buildings I had been stumped by. Part of the fun I derive from making these models is coming up with new techniques to share with my fellow builders. To me, the best question a fellow builder could ask is, "How did you do that?"

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