Virtually any kid who picks up a bucket of LEGO bricks will start by making a house, usually in mismatched, rainbow colours, maybe featuring a few of the little plastic minifig people. It seems almost too obvious to state that LEGO brings out the architect in all of us; but what has iconic architecture brought to LEGO?

Israeli-Canadian architect Moshe Safde set the world of architecture alight with his Habitat 67 community housing project for Montreal’s Expo 67, and he used LEGO bricks to do the initial planning. And it shows:

Montreal’s Habitat 67 housing project. Wikimedia Commons

The connection between LEGO – founded in Denmark in 1934 – and architecture is a long one, and the original LEGO plastic set in 1957, called Town Plan No. 1, allowed kids to make a gas station, a hotel and other town buildings.

The Sydney Opera House joined New York’s Empire State Building and Seattle's Space Needle as a model in the LEGO’s 2012 Architecture range. AAP Image/James Morgan

Many of the early LEGO sets are based around buildings of various sorts, whether they’re the firehouses and police stations in the early Town (and later City) theme released in 1978, or the elaborate keeps and dungeons in the Castle series.

LEGO tried to capitalise on the interest in buildings by releasing some sets designed especially for architects in the 1960s but these were a commercial failure. The company quickly refocused its attention on kids, especially boys aged five to 12, with sets that featured cars, spaceships and, eventually, Star Wars.

Trouble in LEGOLAND

AAP Image/Supplied by LEGO Star Wars

But in the early 2000s a couple of strange things happened. First, LEGO started to lose money – a lot of money – as its key demographic of young boys began switching to video games, and other diversions more interactive than plastic construction bricks.

The once family-run company was forced to bring in an outside CEO for the first time, and began to think hard about what new markets it might tap to start making up the shortfall.

Second, it noticed that it had a lot of adults who liked to build with LEGO. These “Adult Fans of LEGO” or “AFOLs” became important to the company, and one of them in particular came to the attention of the Danish brand.

His name was Adam Reed Tucker, and he loved to build huge recreations of celebrated buildings from his hometown of Chicago.
When he pitched his idea of a premium series of sets that featured well-known architectural icons, LEGO was just desperate enough to let him try it. The result was the 2008 release of the first set in the LEGO Architecture range, a 69 brick reconstruction of the Sears Tower.

Sears Tower. Brandon Cripps

Doubts quashed

Any doubts LEGO might have had about the product were quashed when half the initial run sold out in ten days, and a new way of thinking was born within the company.

Rather than selling kits to kids and their parents in toy stores, adults can now pick up architectural models of the White House or the Brandenburg Gate in galleries and museum gift stores across the world.

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There are now around 20 architecture sets, all designed by Tucker. It’s the rare architect's studio that doesn’t feature a model of Frank Lloyd Wright’s Fallingwater or Robie House, and there is a flourishing sub-culture of YouTube videos starring stop-motion of the models being assembled.

Farnsworth House stop motion.

The more ambitious of these include remarkable combinations of stop-motion and computer graphics.

Fallingwater stop motion, now with added water!

The success of the series has led to the company’s most recent foray into this space, the LEGO Architecture Studio. Released a couple of months ago in the US, it comprises more than 1,200 bricks, all of them white or clear.

Unlike the other sets in the series, this set isn’t about copying any one building in the mimetic style of play that LEGO has adopted in the last few years.

Instead, the set comes with a 272 page book with some fundamental architectural principles such as designing with mass and density, negative space, and so on. It also comes with endorsements from brand-name architectural practices such as SOM, MAD Architects and Sou Fujimoto Architects, together with the implicit exhortation to build models as interesting as buildings by these renowned architects.

It’s not just the modern architectural greats – LEGO fans can also buy models of ancient buildings such as the Taj Mahal. aldisley

This type of set hearkens back to the earliest days of LEGO, when the founder, Ole Kirk Christiansen, dreamed of building a system of play that would allow children to build openly and imagine their own versions of the world. LEGO is, after all, a contraction of the Danish expression leg godt, or “play well”.

Of course, it’s not children who will be playing well with the Architecture Studio’s monochromatic blocks. It will be architects, architecture students and other AFOLs.

Because the sets are aimed at adults, LEGO has come to accept that each new release will be greeted with some degree of snarkiness. Among the AFOLs, the criticism has long been that the Architecture series is overpriced at around US$150 for a Studio set – about twice as much as children’s sets with the same number of bricks.

LEGO has paid tribute to New York’s Empire State Building with a model and a King Kong minifig. Pedro Vezini

Among architects, the all-white bricks seems to have found favour; and no, it wasn’t just that the LEGO
designers wanted to emulate minimalists such as Richard Meier or John Pawson. White is the only colour that didn’t evoke a well-known building product, such as red for bricks, or black for granite.

We mere mortals can now design and build our own architectural designs, as well as mimic famous ones such as the Empire State Building. And LEGO has introduced a competition to let us vote on which iconic building should be immortalised by Adam Reed Tucker in the next Architecture series set.

Just don’t expect too much. Moshe Safde’s Habitat 67 won the most votes in the 2012 competition, but the company decided not to release a set based on the quirky design.

“We can’t promise to build it,” the firm said, “but we do promise to be inspired by you.”