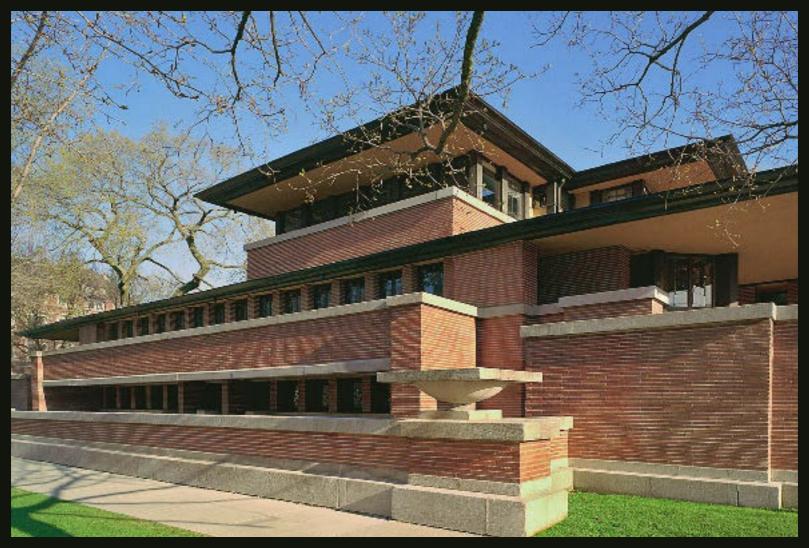




- Booklet available in English on
- Livret disponible en français sur
- Folleto disponible en español en Architecture.LEGO.com



© Frank Lloyd Wright Preservation Trust

Contents

Frederick C. Robie™ House	5
The design and construction of Frederick C. Robie $ m ^{ imes}$ House	e 6
From 1910 to today	12
Frank Lloyd Wright	14
Facts about Frederick C. Robie™ House	15
A Word from the Artist	176
The 'Scale Model' line-LEGO Architecture in the 1960s	177
References	179



FLWFDN

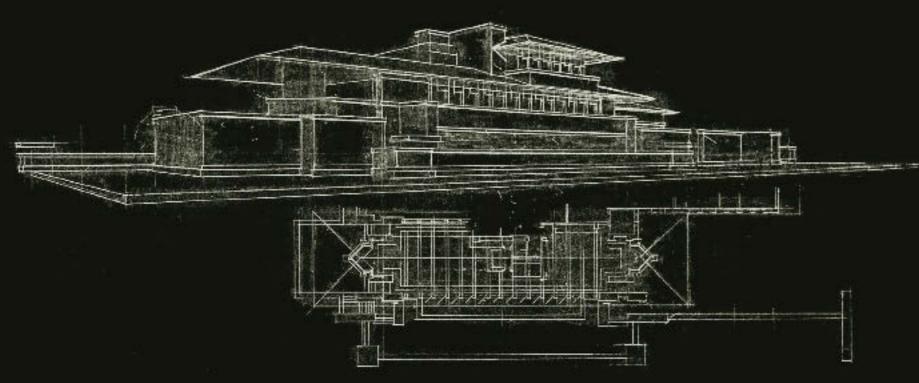
Frederick C. Robie™ House

Frederick C. Robie™ House, completed in 1910, is widely considered to be Frank Lloyd Wright's most accomplished Prairie style work. This architectural style, the first that was uniquely American, is characterized by dominating horizontal lines, banded rows of windows, and spacious and open interior plans. The exterior is dominated by gently sloping roofs and building materials in line with Wright's ideas on the nature of materials: brick, wood, steel, limestone, and concrete stucco, the last-named being used to cover the massive expanses of soffits under the cantilevered porches.

Homes like these were designed to offer their owners great vistas from the

many windows and balconies. Open spaces on the first and second floors of the interiors of the homes were intended to continue to the outside through these windows. The relationship between architecture and nature—one of the most important influences on Wright—is emphasized throughout the open and flowing design of Frederick C. Robie[™] House.

"We of the Middle West are living on the prairie. The prairie has a beauty of its own and we should recognize and accentuate this natural beauty, its quiet level." Frank Lloyd Wright



FLWFDN © 2011

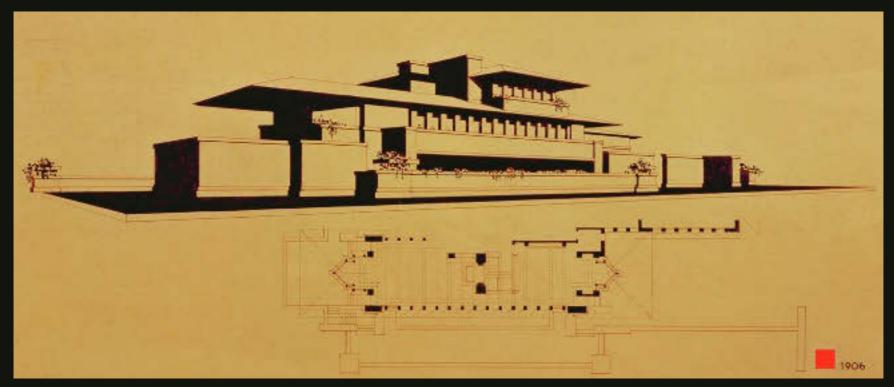
The design & construction of Frederick C. Robie™ House

In 1908, Frederick C. Robie, a young and ambitious Chicago businessman, decided he wanted to build a "sturdy, functional and strikingly modern" home for his family in Hyde Park, an elegant Chicago neighborhood and home to the campus of the University of Chicago.

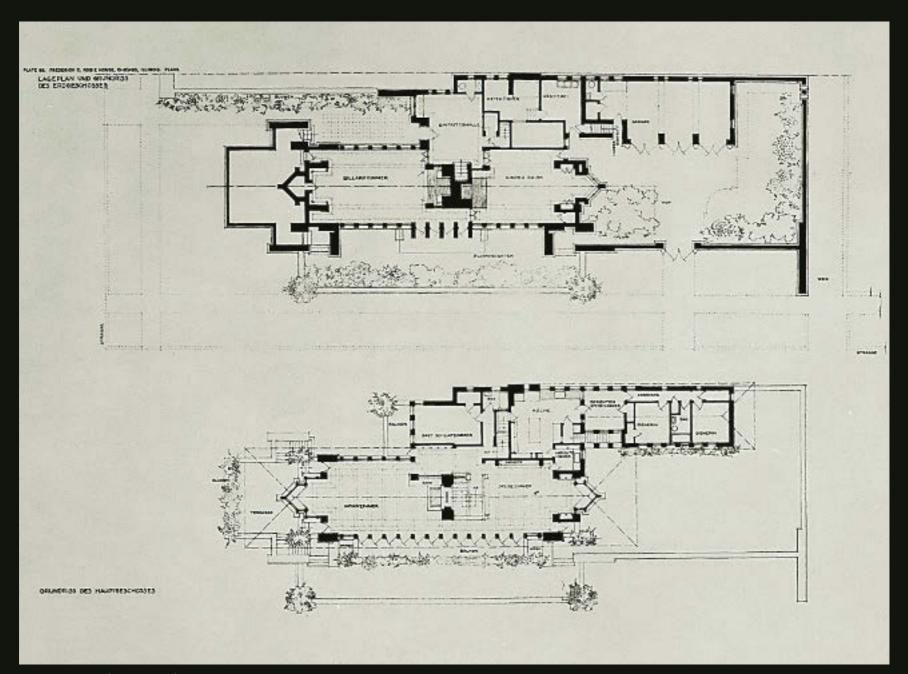
Robie wanted a house with an abundance of light and great views of the surrounding neighborhood, yet one that also maintained his family's privacy. He didn't like small confining rooms and thought that flowing spaces were essential in a well designed home. In Frank Lloyd Wright, he found an architect who not only agreed with these ideals, but who could transform them into a unique physical expression.

"From the first we had a definite community of thought." Frederick Robie, on meeting Frank Lloyd Wright.

The actual site itself helped determine Frank Lloyd Wright's ideas and plans. Measuring 18 meters (60 ft.) by 55 meters (180 ft.), the corner lot was three times as long as it was wide. These dimensions led Wright to think of the home in terms of long, narrow rectangles. The home therefore consists primarily of two long and narrow "vessels," each similar in shape to the hull of a ship, one set on top and slightly off-center of the other. When viewed from above, the two vessels are easy to see; however, from the street, each blends into the other, forming what looks like a single, continuous horizontal structure.



Exterior drawing (FLWFDN ©2011)



Floor plan drawings (FLWFDN ©2011)

To further emphasize the horizontal lines of the house, the horizontal joints of the red-orange, iron-spotted Roman bricks were filled with a cream-colored mortar and the small vertical joints were filled with brick-colored mortar. From a distance, this complex and time-consuming process creates an impression of continuous lines of horizontal color and minimizes the appearance of individual bricks.

Robie House was one of the first residences to incorporate steel beams directly into its design. These strong beams in the ceilings and floors were necessary to create the cantilevered balconies, which appear to be suspended in mid-air.

As the steel beams also carry most of the building's weight, the exterior walls have little structural function, which in turn allowed Wright to fill them with large numbers of doors and windows. More importantly, the steel structure eliminated the need for internal structural columns and walls, thus underlining the overall open plan favored by both Wright and Robie.

"Both Mr Wright and myself were highly in accord on every line to the last inch. And we agreed that there should be no deviation whatsoever from these specifications." Frederick Robie, on working with Frank Lloyd Wright.



The brickwork (FLWFDN)



The entrance (FLWFDN)

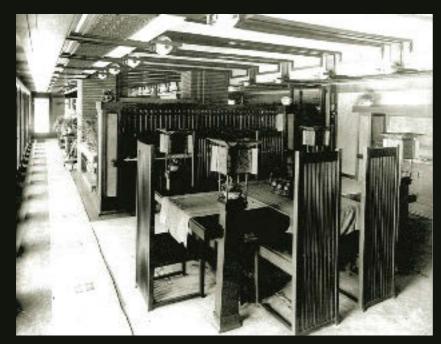
The entire building fills approximately 841.9 m² (9,062 square ft). The front door and main entrance are partially hidden on the northwest side of the building beneath an overhanging balcony in order to create a sense of privacy and protection for the family. The entrance hall itself is low-ceilinged and dark, but the stairs to the second floor create a sense of anticipation as the visitor moves upward. Once upstairs, the 'light filled' living and dining rooms create a sharp contrast to the dark entrance hall, making the living areas seem even more spacious.

The ground floor of Robie™ House was designed for general everyday use, with a billiard room, playroom, and service areas. The first floor contains a kitchen and guest room as well the home's formal areas, including the living and dining

rooms. These two rooms are separated by a central chimney mass, but the spaces are connected along their south sides, and the chimney mass itself has an opening above the fireplace through which the rooms are visually connected.

The second floor contains the private family spaces: three bedrooms surrounding a central hall. The first floor features a long balcony that stretches nearly the entire length of the home.

When clients like the Robies hired Frank Lloyd Wright to design a home, they received more than just a house. Wright typically also provided designs for furniture, lighting fixtures, wall hangings, rugs, and, in some cases, even dishes. With Robie he worked with and supervised George Mann Niedecken to



Dining room (FLWFDN)



Kitchen (© Frank Lloyd Wright Preservation Trust)



Living Room (FLWFDN)

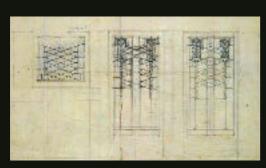
create what he termed a "complete environment." As well as furniture for the entrance hall, dining and living rooms, Wright also created the 29 different art glass designs that can be found in 175 of the house's window and door panels. The contractor for the project, H.B. Barnard Co. of Chicago, began construction on April 15, 1909, Frank Lloyd Wright did not supervise the construction of the house himself except in the earliest stages. He closed his Oak Park, Illinois studio in the fall of 1909 and left for Europe, turning over his existing commissions, including the Robie House, to fellow architect Hermann von Holst.

The Robie family—Frederick, Laura, and their two children, Frederick Jr. and Lorraine—moved into the home in May 1910, although all of the final details,

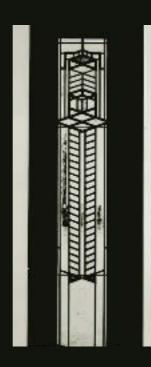
including rugs and furniture, were not completed until January 1911. The final cost of the home was \$58,500-\$13,500 for the land, \$35,000 for the design and construction of the building, and \$10,000 for the furnishings. Robie's original budget had been \$60,000.

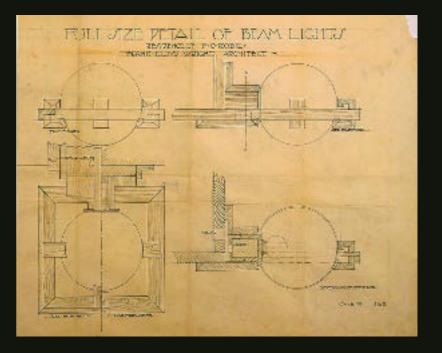
"I doubt very much if there was a single extra screw, or piece of hardware necessary; it was perfectly wonderful. ...The detailed arrangement was so perfect that Barnard (the builder) afterwards told me that he might as well have been making a piece of machinery." Frederick Robie, on the building process.





Glass and light fixture design (FLWFDN)





From 1910 to today

Unfortunately, the Robie family's tenure in their new home was short-lived. As a result of financial problems caused by the death of his father and the deterioration of his marriage, Robie was forced to sell the house after living in it for only 14 months.

Robie sold the house and the majority of the custom-designed furnishings to David Lee Taylor in December 1911. Taylor, president of a Chicago-based advertising agency, bought the house as a Christmas present for his wife, Ellen, and their six sons. His Christmas card read: "To Momma/Our \$50,000 house/Pop."

Misfortune continued to follow the residents of Robie™ House, and in October 1912, Taylor died suddenly and by November, his widow, Ellen Taylor, had already sold the house to Marshall Dodge Wilber and his wife, Isadora. They, along with their two daughters Marcia and Jeanette, moved into the house on December 3, 1912. The Wilbers were the last family to live in Robie House, residing there for 14 years.

In January 1926, the Wilbers sold the Robie™ House to the Chicago Theological Seminary. The seminary used the house as a dormitory and dining hall for married students, although it was primarily interested in the site for purposes of future expansion.

In 1941, a graduate student at the Illinois Institute of Technology accidentally discovered that the Seminary was moving ahead with a plan to demolish Robie™ House to erect a new, larger dormitory on the site, and he informed his instructors, including Ludwig Mies van der Rohe. The threat of demolition aroused a storm of protest. A letter-writing campaign to save the house was organized, and Wright himself wrote a letter calling the house "a source of world-wide architectural inspiration." Although the Seminary's plans were subsequently postponed, the crisis was averted more by the onset of World War II than by a change of view by the property's owner.

A more serious threat to the existence of the Robie™ House arose 16 years later. On March 1, 1957, the Seminary again announced plans to demolish Robie House on September 15 in order to begin the construction of a dormitory for its students. This time, an international outcry arose, and Wright himself, then 89 years old, returned to the Robie House accompanied by the media, students

and neighborhood organizers to protest against the intended demolition. Commenting on the threatened demolition, Wright quipped, "It all goes to show the danger of entrusting anything spiritual to the clergy."

The threat of demolition was only averted when William Zeckendorf, a friend of Wright and president of a New York-based development firm, bought the house from the Chicago Theological Seminary in August 1958. He donated the house to the University of Chicago in 1963. For the next 34 years, the University used Robie™ House as offices: first to house the Adlai E. Stevenson Institute of International Affairs and later as the headquarters for the University's Alumni Association.

In January 1997 the University handed over the running of the house to the Frank Lloyd Wright Preservation Trust. Beginning in March 2002, the Preservation Trust began a historic multi-year restoration of the Robie™ House, with the aim of returning the building to its original condition when completed in 1910.

It is difficult, if not impossible, to discuss modern American or international architecture without mentioning the significance of Robie™ House. Amongst all the plaudits the house has received, two special distinctions stand out. In April 1957, it was the first building to be declared a Chicago Landmark by the newly-formed Commission on Chicago Architectural Landmarks. And in November 1963, it was certified a United States Registered National Historic Landmark. The first national landmark in the city of Chicago, and the first to be selected solely on the basis of its architectural merit.

The architectural significance of the Robie™ House was probably best stated in a farsighted article in *House and Home* magazine from 1957: "Above all else, Robie™ House is a magnificent work of art. But, in addition, the house introduced so many concepts in planning and construction that its full influence cannot be measured accurately for many years to come. Without this house, much of modern architecture as we know it today, might not exist."

Frederick C. Robie was never in doubt about what he had helped to create. Long retired and living in an apartment in Cleveland, he looked fondly back to happier times and called the house named after him "the most ideal place in the world."







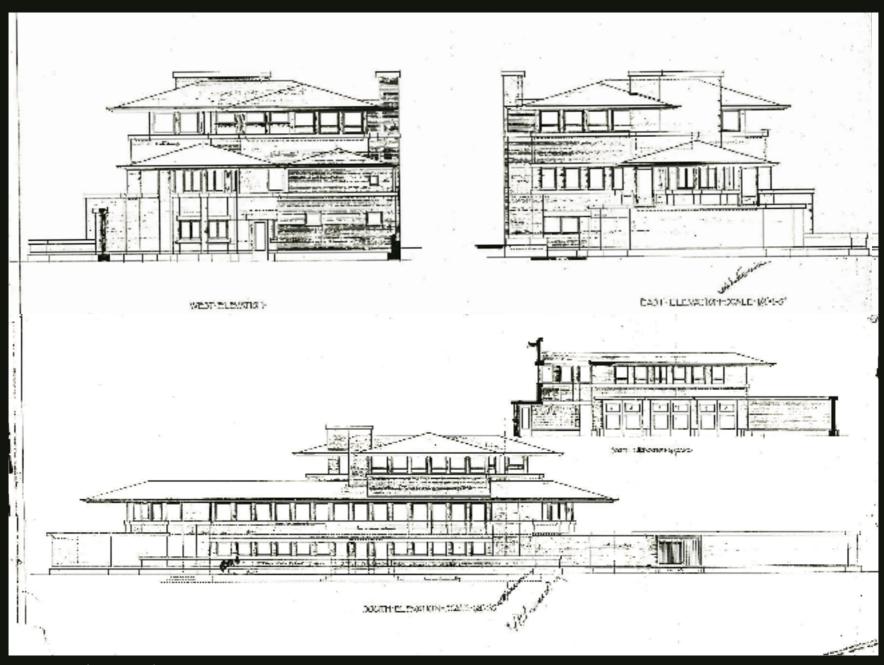












Exterior drawings (FLWFDN ©2011)

Frank Lloyd Wright®

Arguably America's greatest architect and among the world's most gifted, Frank Lloyd Wright was also a man of boundless energy. In a career that spanned over 74 years, he designed more than 900 works-including houses, offices, churches, schools, libraries, bridges, museums and many other building types. Of that total, over 500 resulted in completed works. Today, over 400 of these buildings still remain.

However, Wright's creative mind was not confined to architecture. He also designed furniture, fabrics, art glass, lamps, dinnerware, silver, linens and graphic arts. In addition, he was a prolific writer, an educator and a philosopher. He authored twenty books and countless articles, and lectured throughout the United States and in Europe.

Frank Lloyd Wright was born in 1867, in the rural farming town of Richland Center, Wisconsin, just two years after the American Civil War ended and passed away at the age of 91, in 1959.

While there is evidence of Wright attending both high school and the University of Wisconsin-Madison, there is no record of him graduating from either. In 1887 Wright moved to Chicago, and by the early 1890s he was already head draftsman at the architectural firm of Adler & Sullivan. During this time he designed and built his own Oak Park home and later added an attached studio when he established his own practice. Though a tumultuous private and professional life would ensure that Wright would always be surrounded by controversy, he was also recognized as a brilliant architect by his peers.

No other architect took greater advantage of setting and environment. No other architect glorified the sense of "shelter" as did Frank Lloyd Wright. "A building is not just a place to be. It is a way to be," he said. Wright's work-not least Robie House-has stood the test of time.



Frank Llayo Il

Facts about Frederick C. Robie™ House

Location: Chicago, Illinois, USA
Architect: Frank Lloyd Wright
Date: From 1908-1910

Construction type: Residence

Construction materials: Steel beams iron-spotted Roman bricks

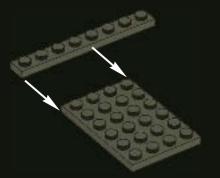
 Style:
 Prairie

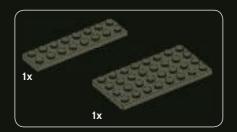
 Original Cost:
 \$60,000

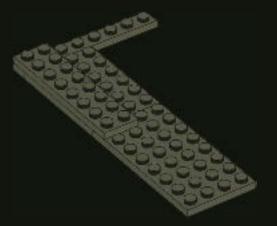


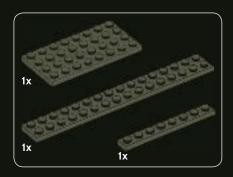
© Frank Lloyd Wright Preservation Trust

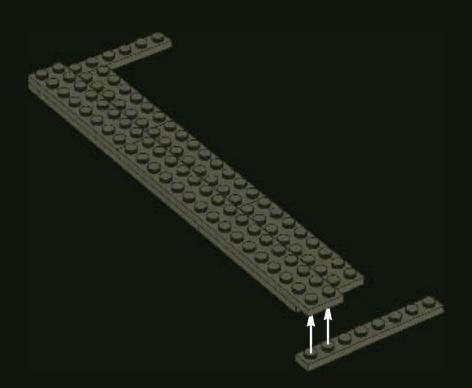


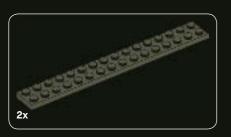


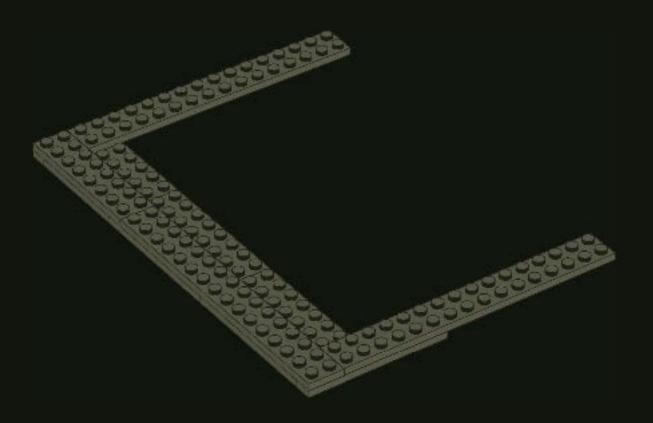




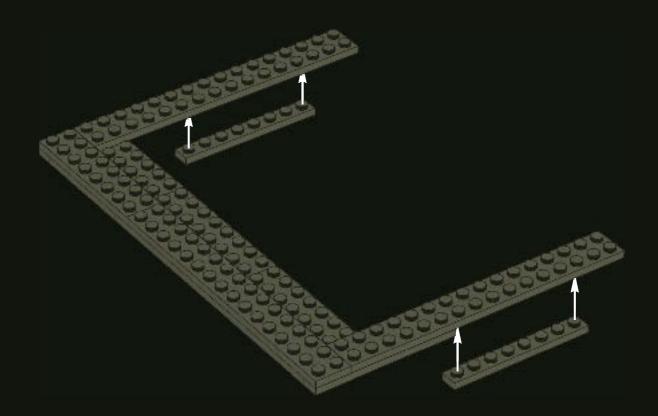




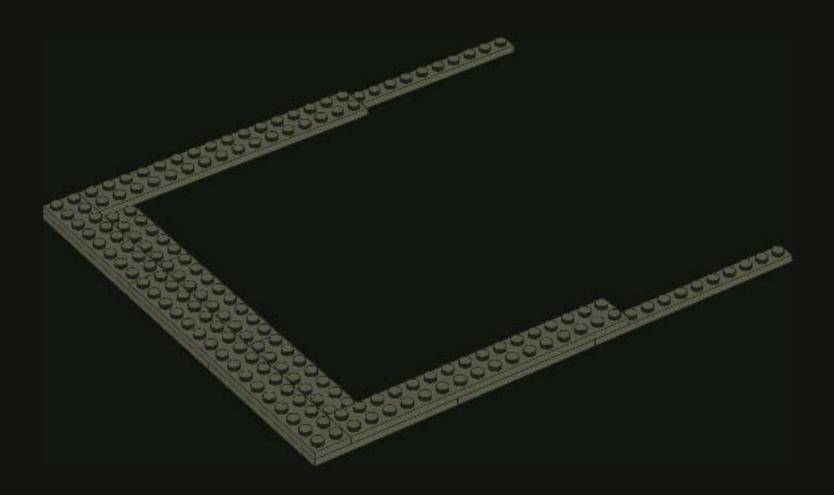




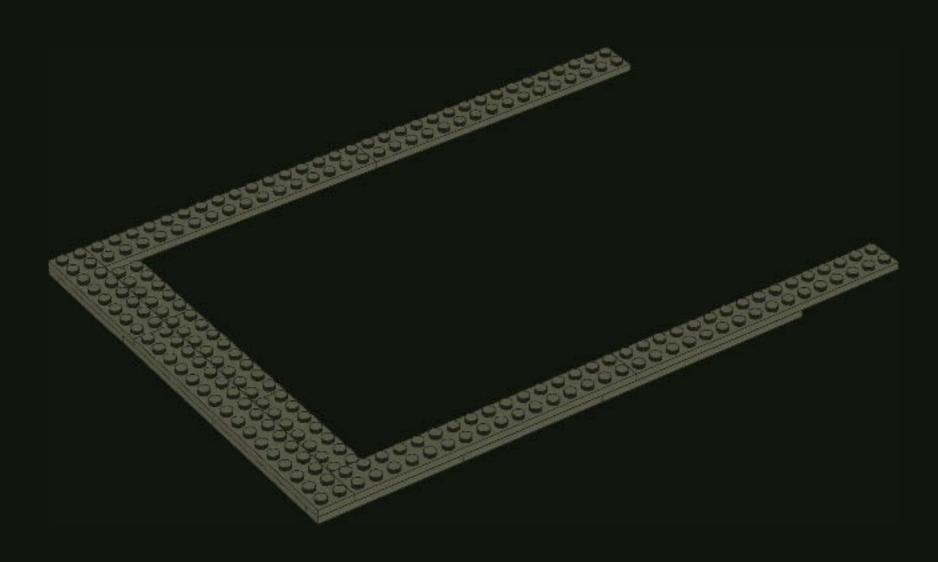




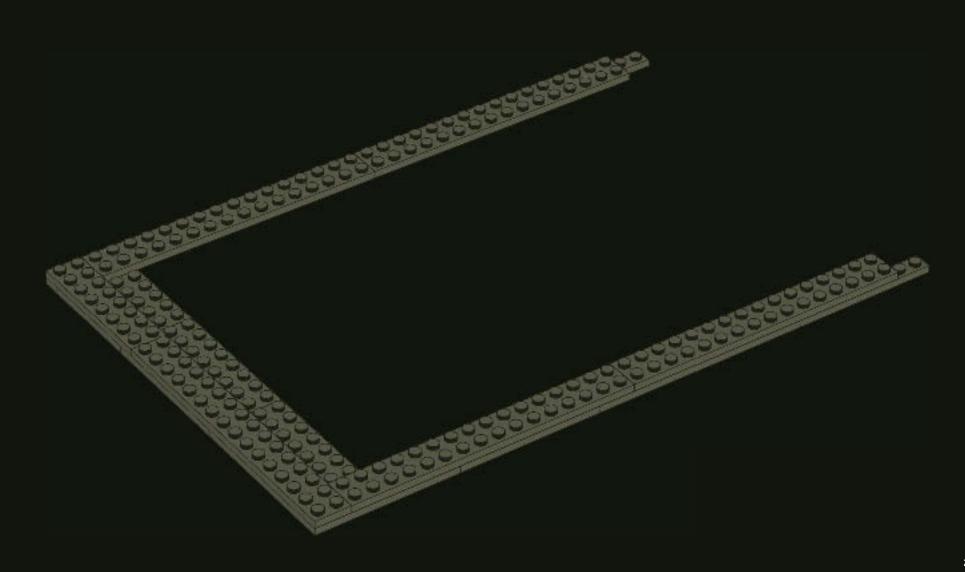


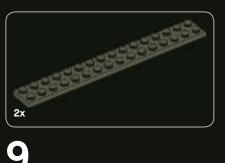




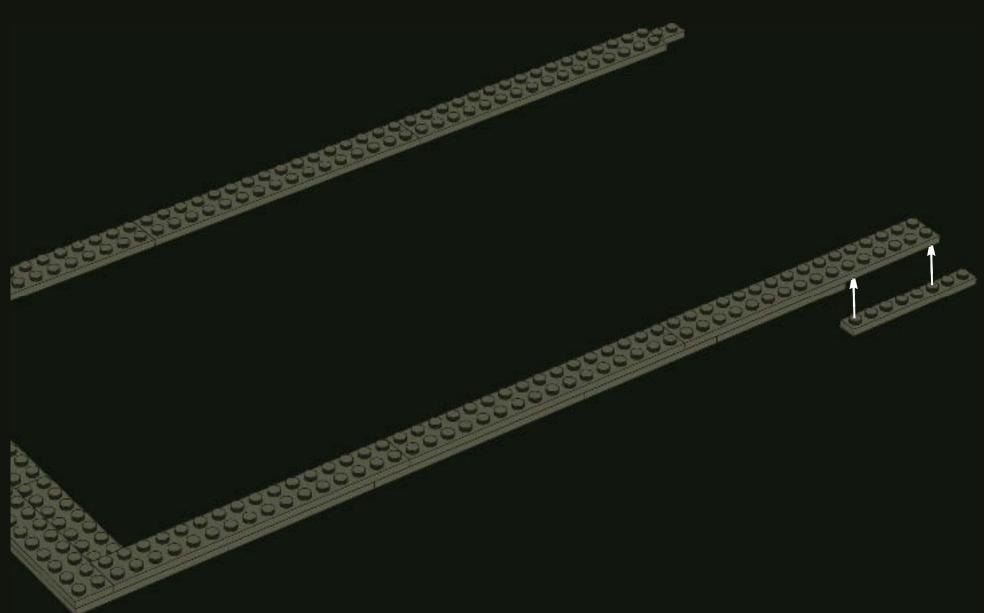




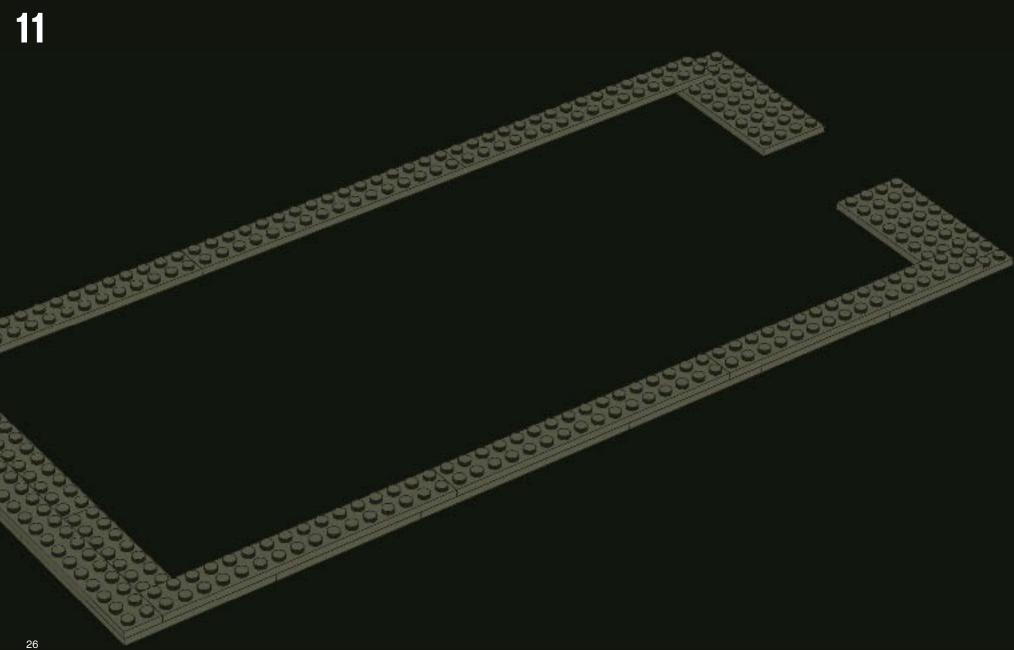


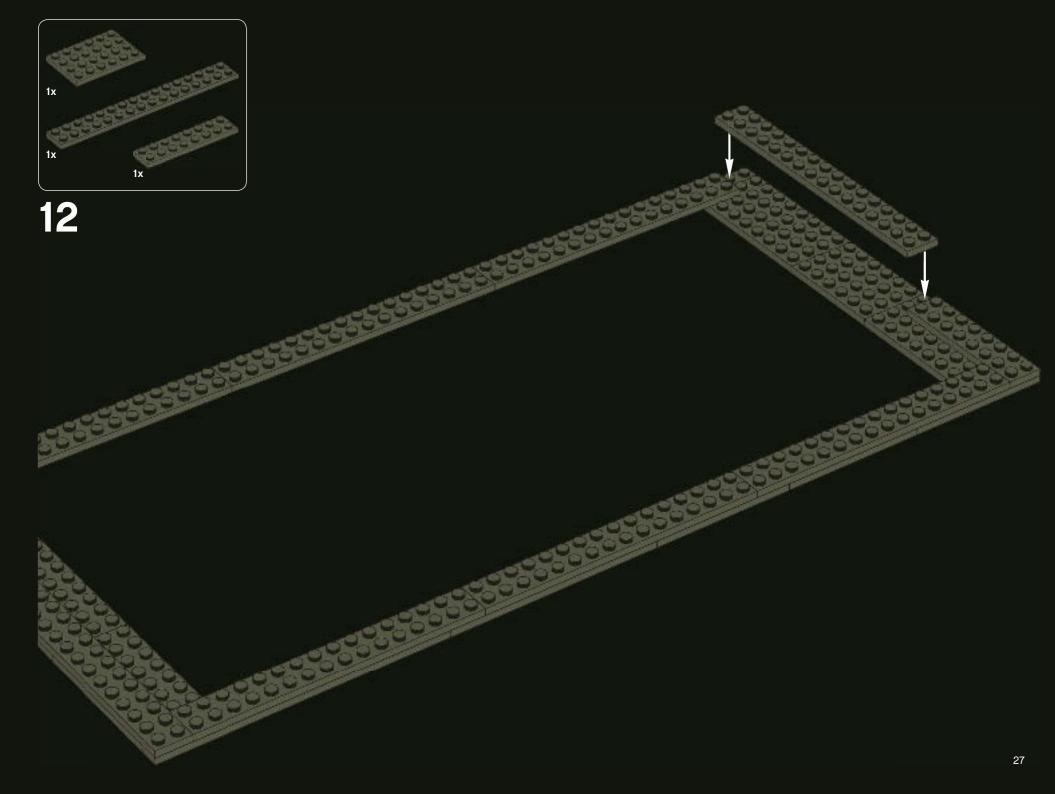


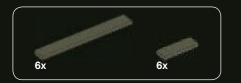


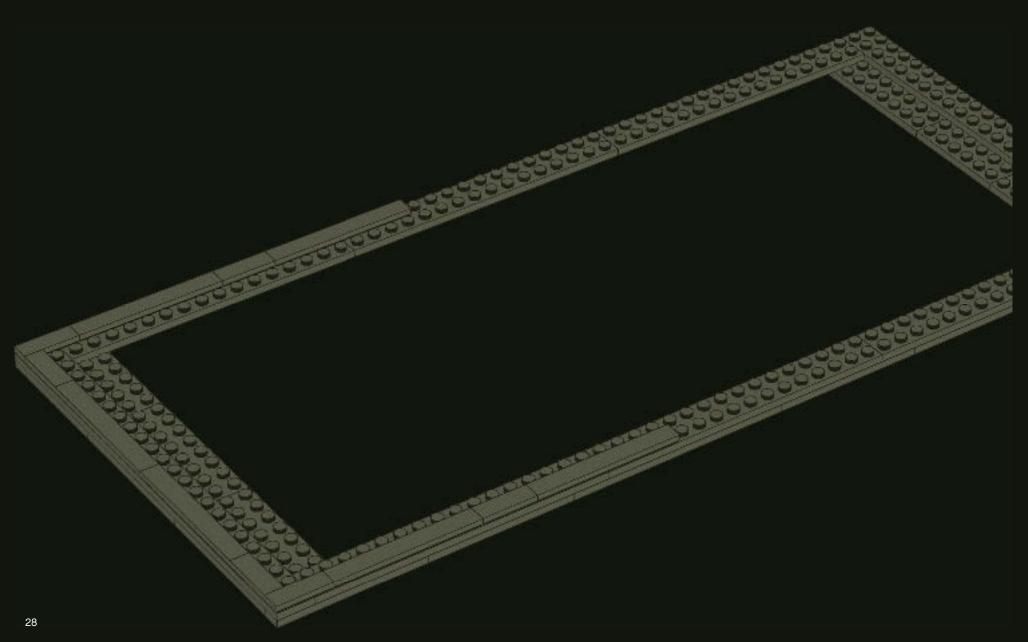




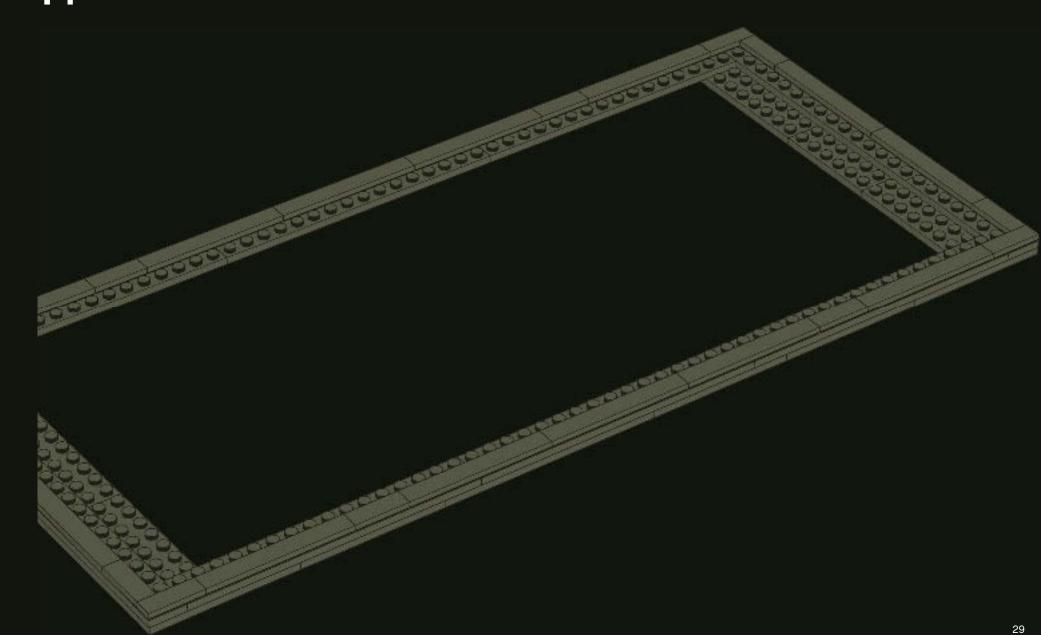


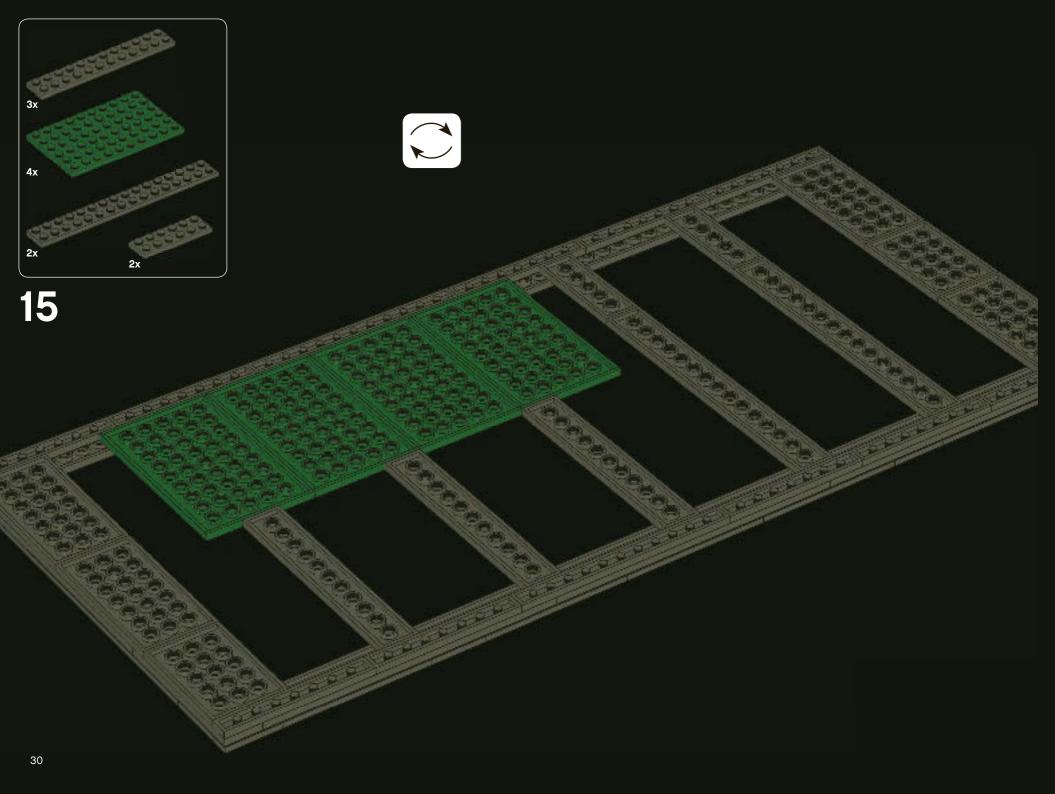


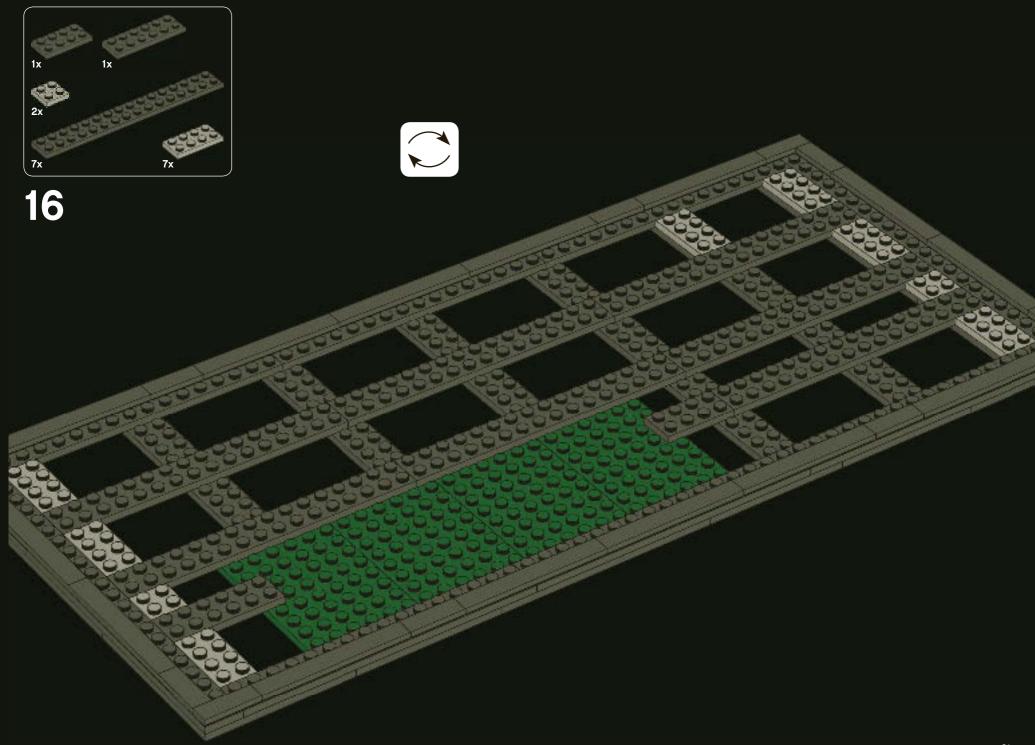


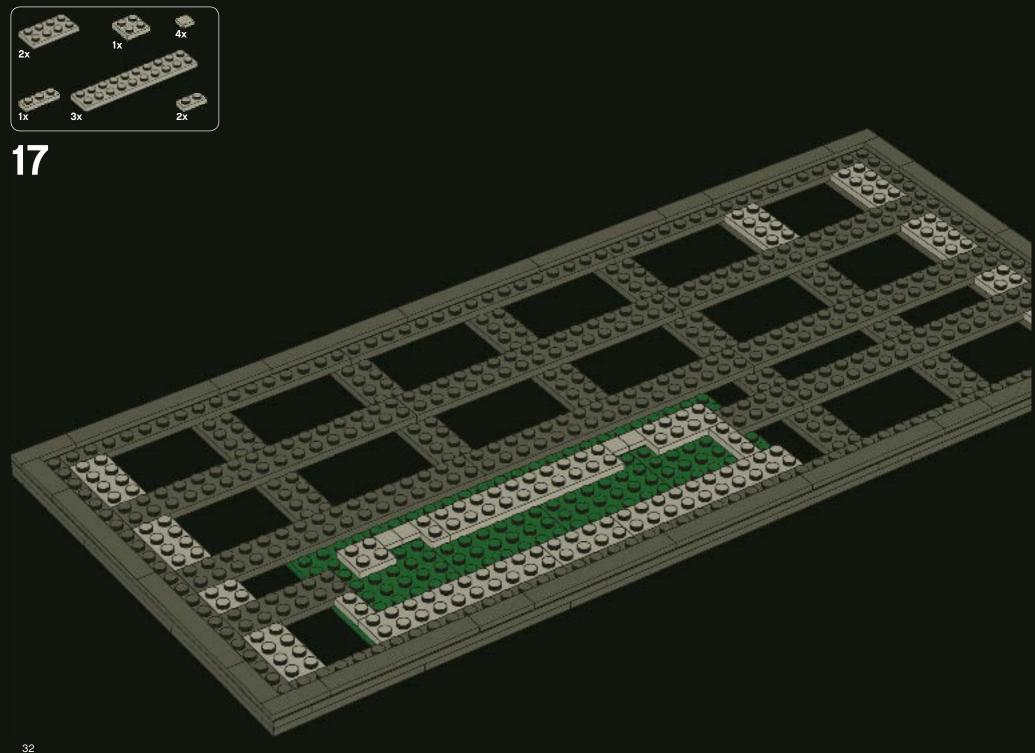


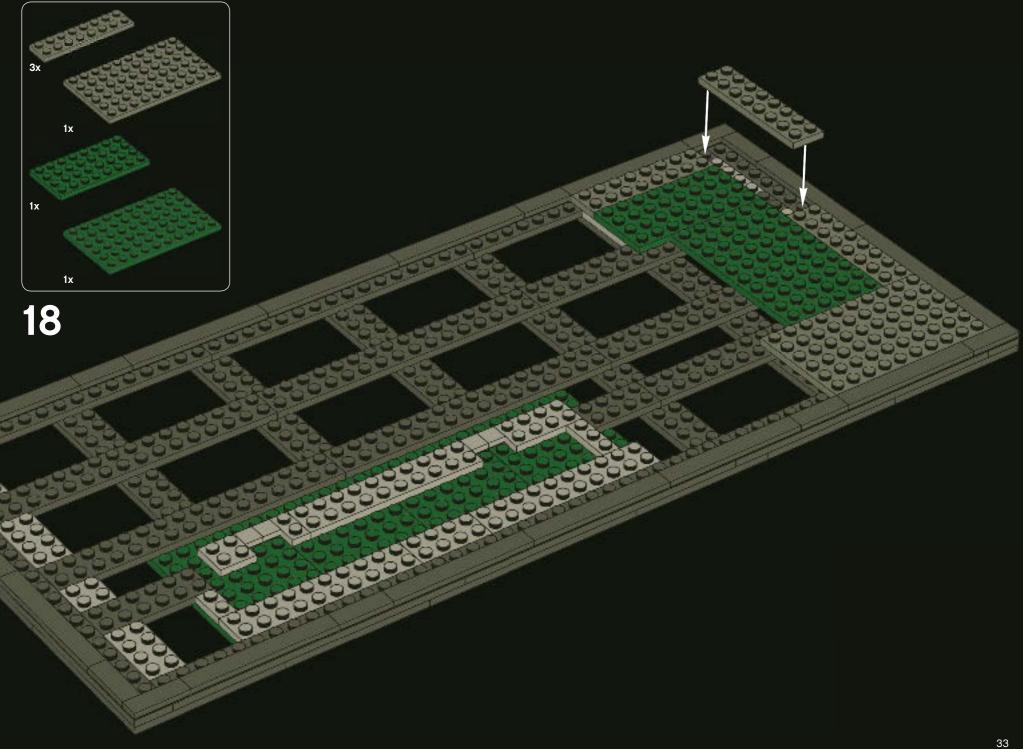


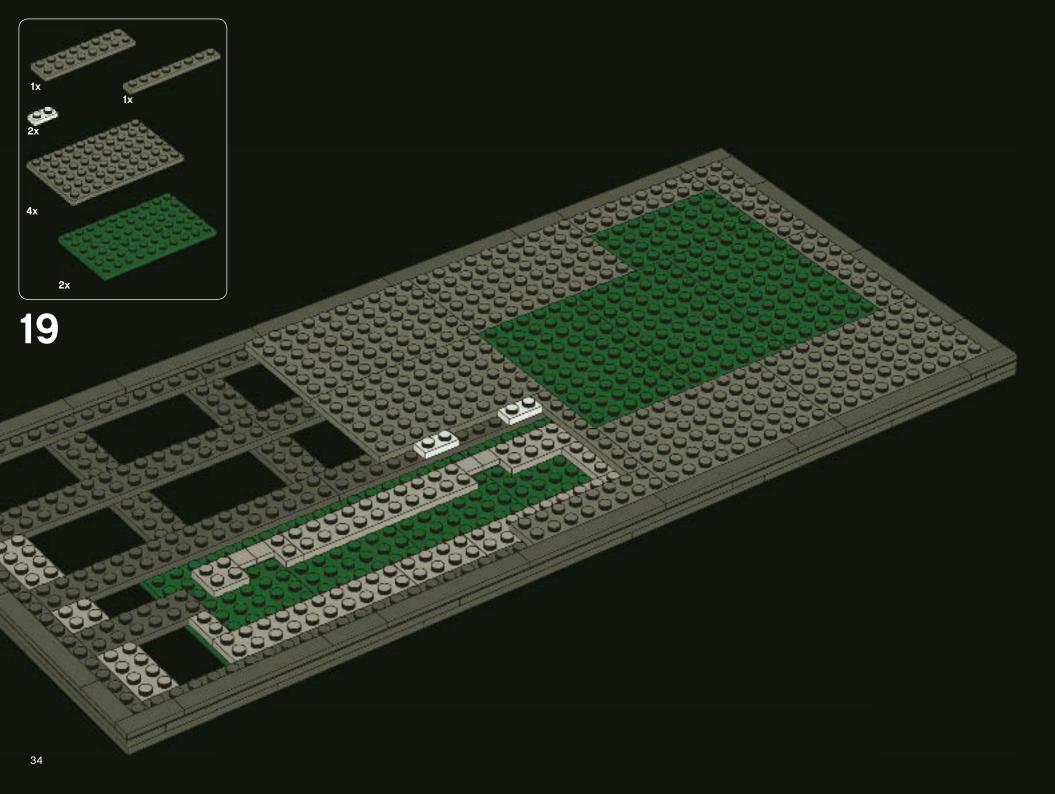


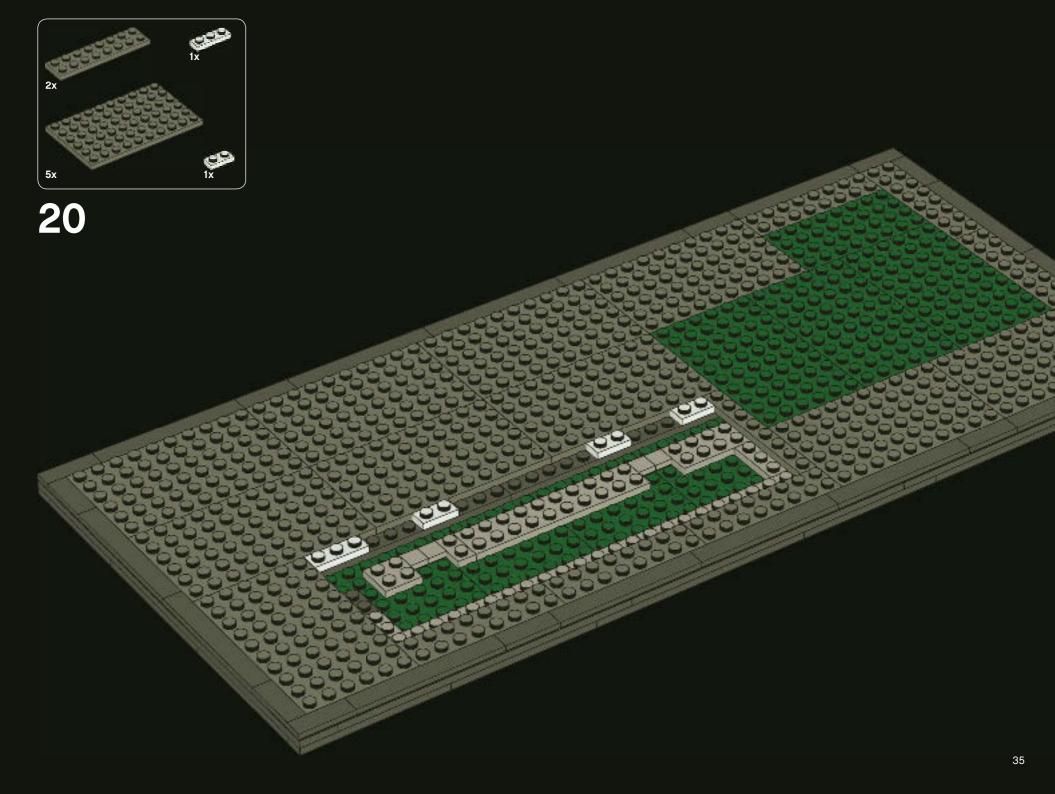


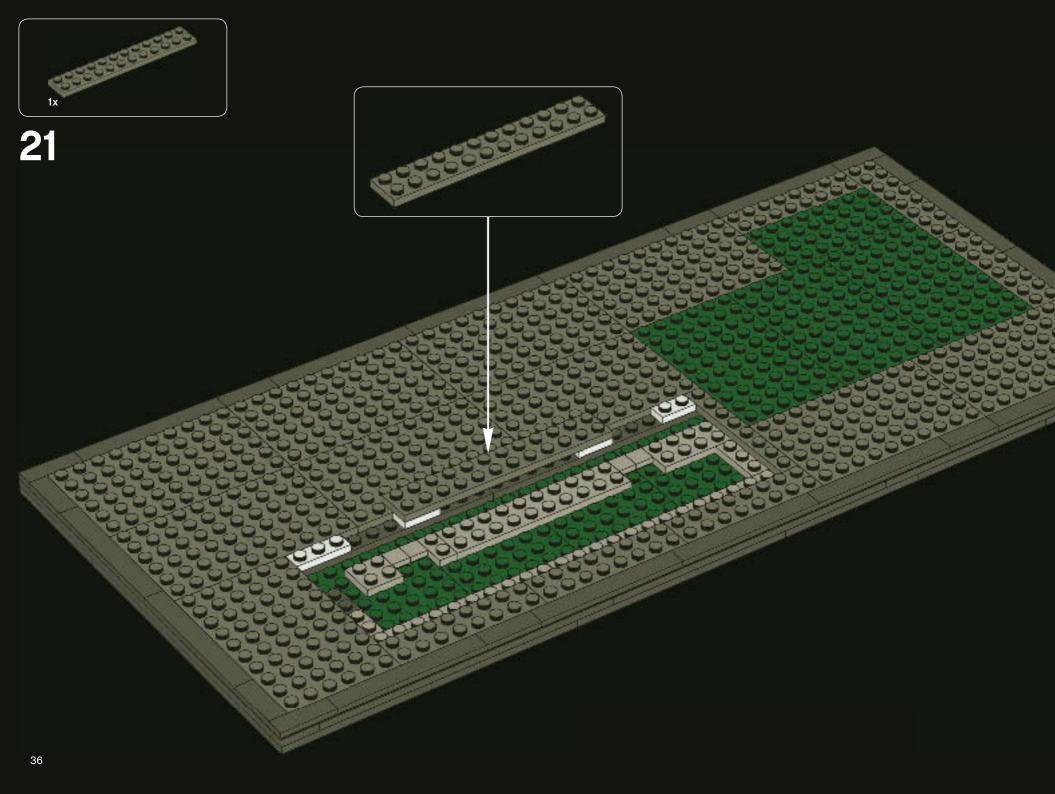




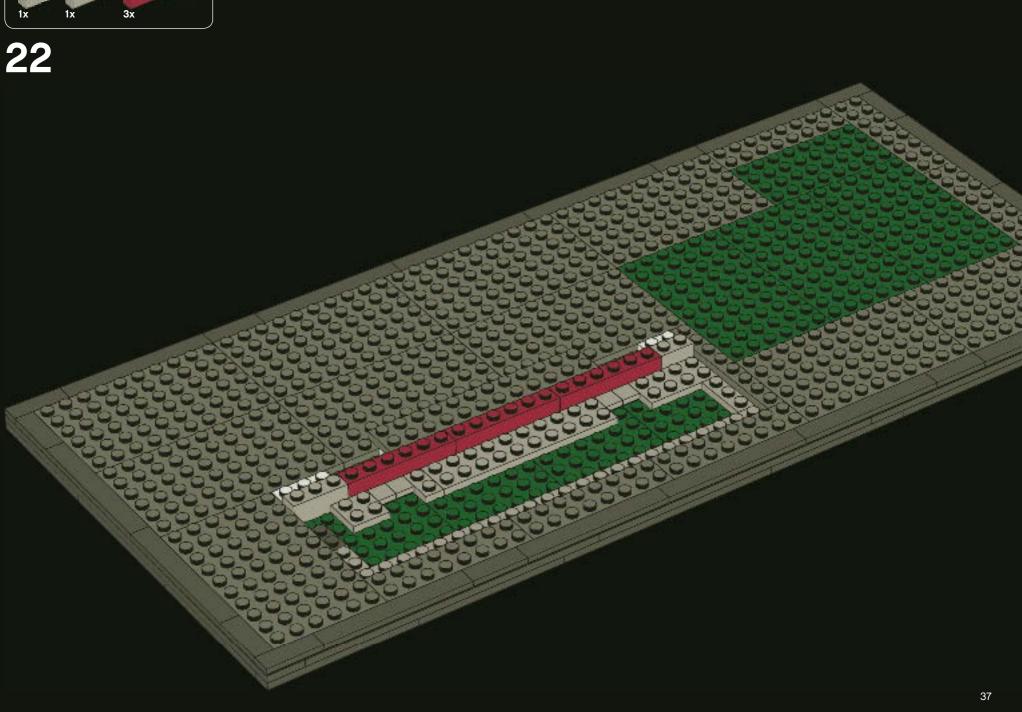


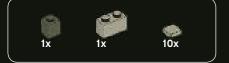


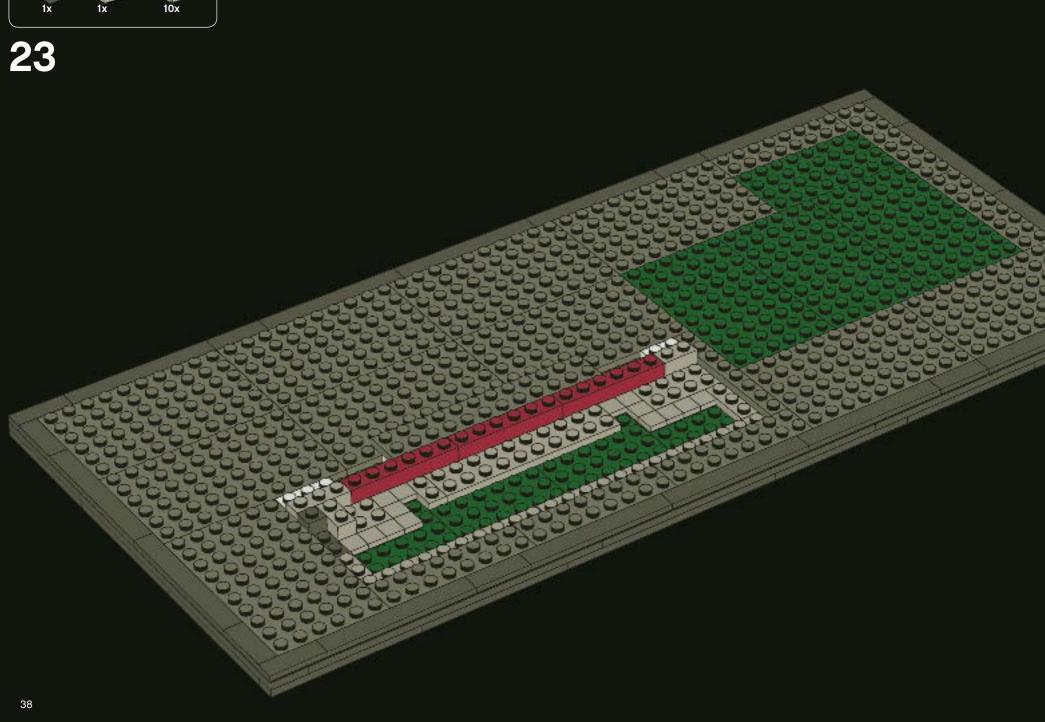




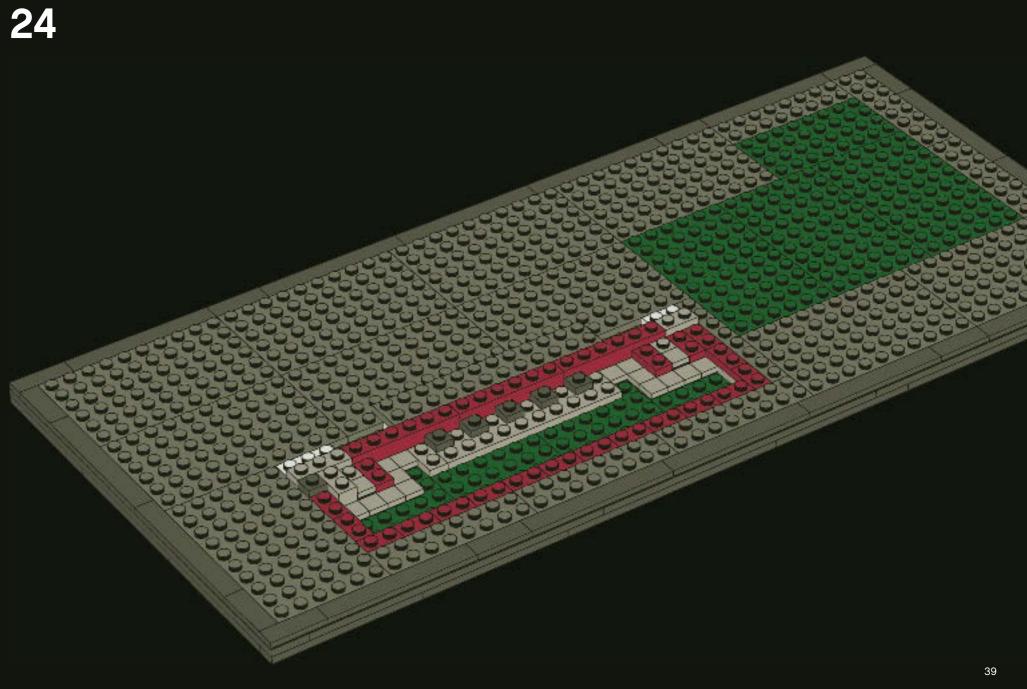




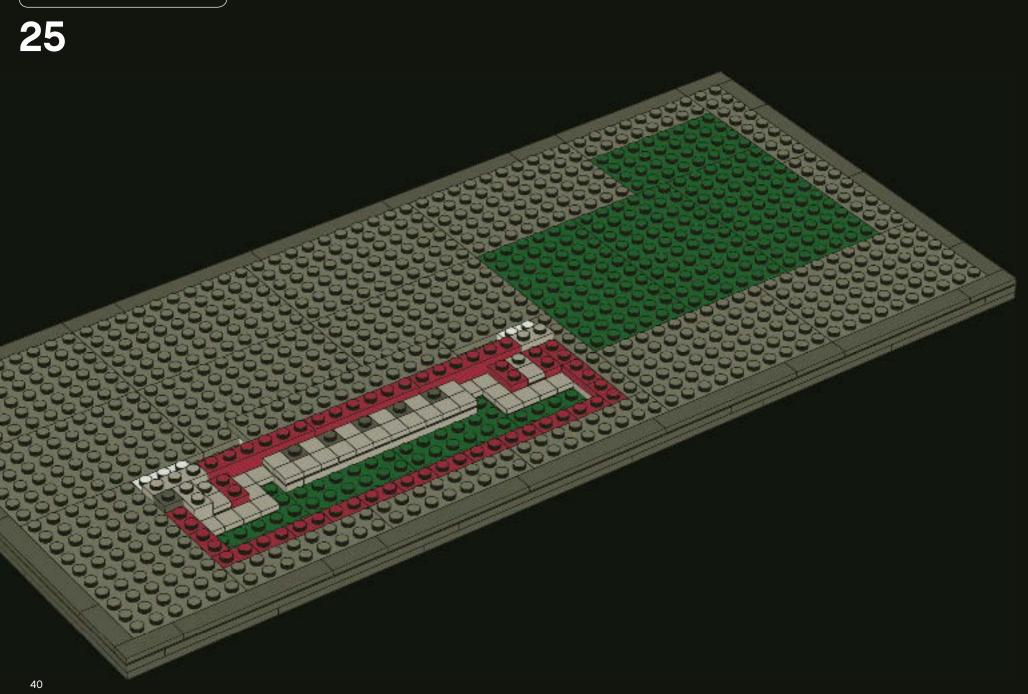




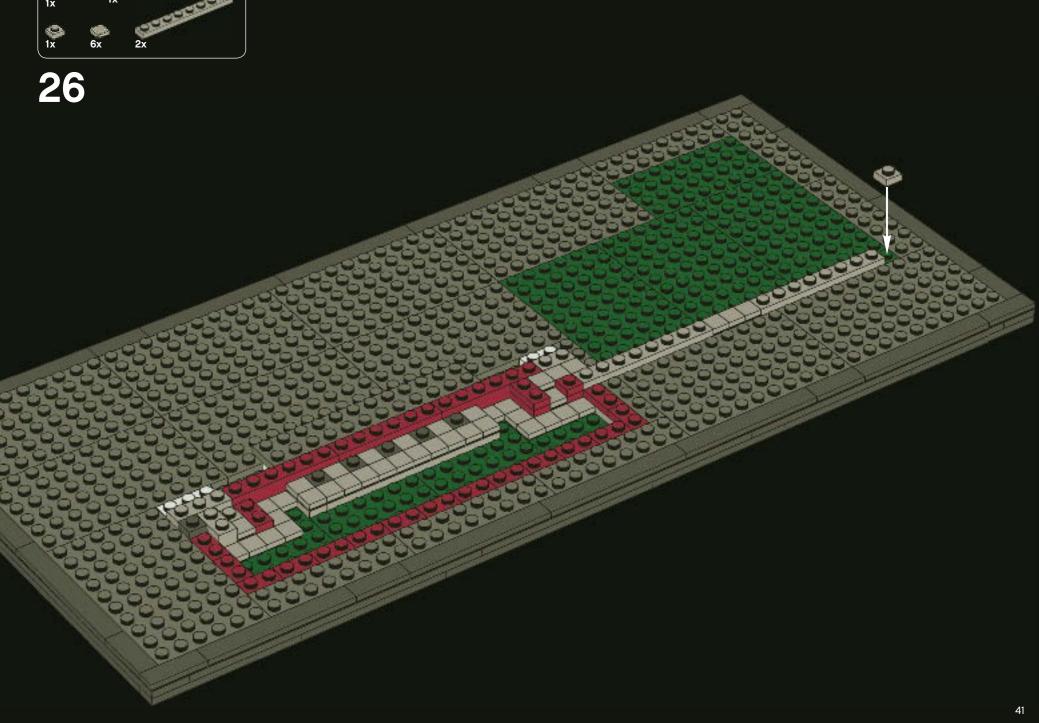




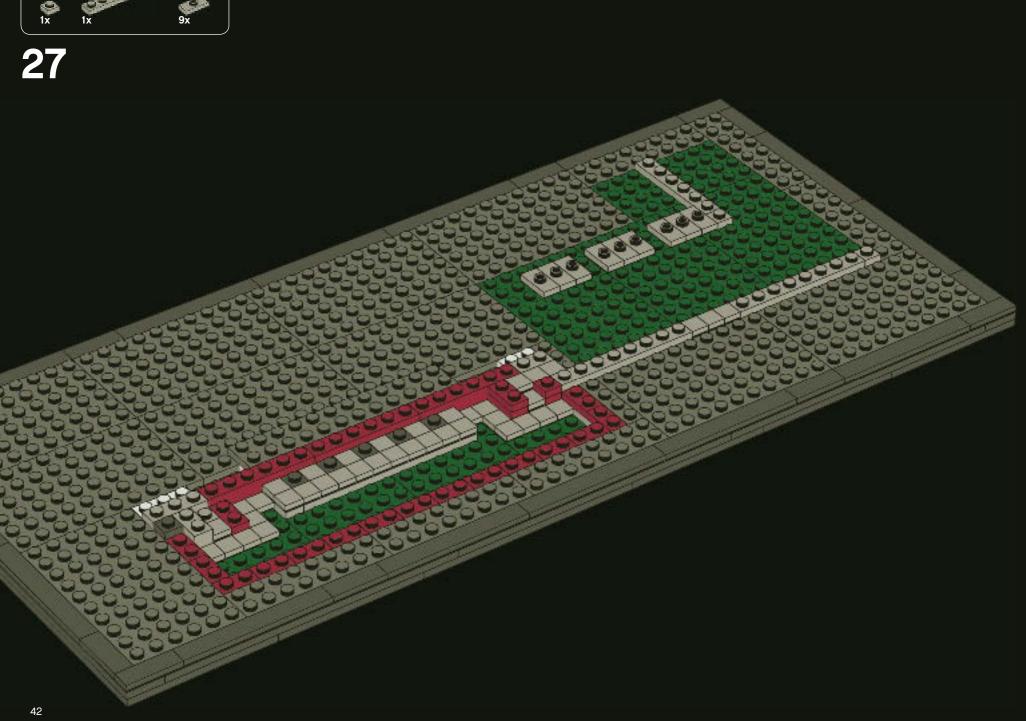




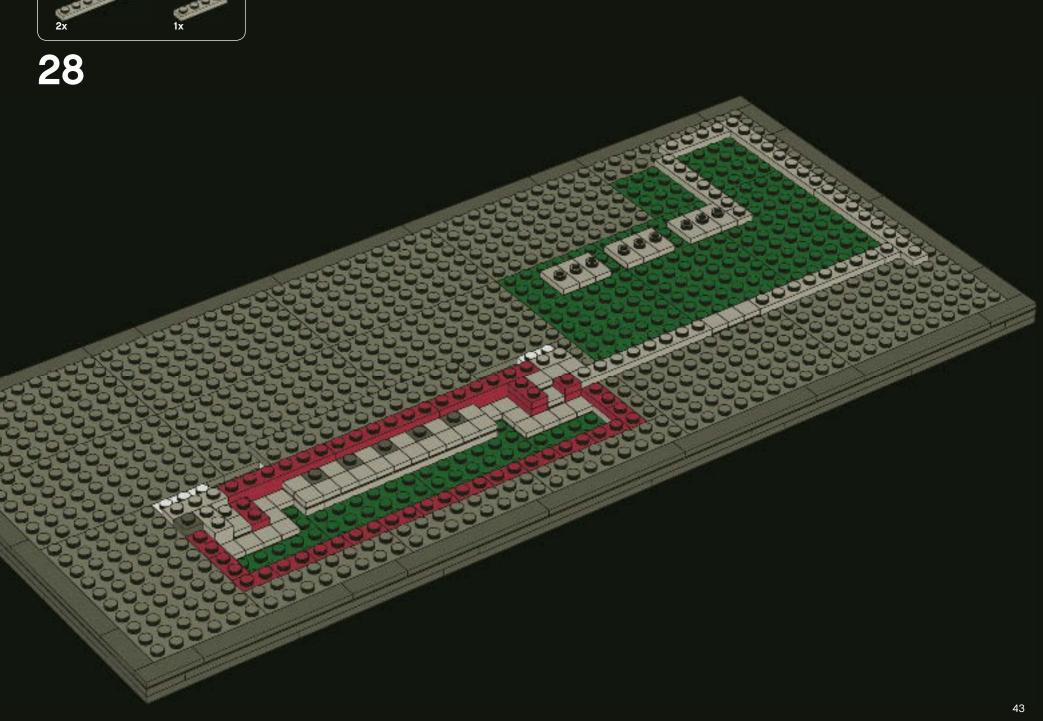




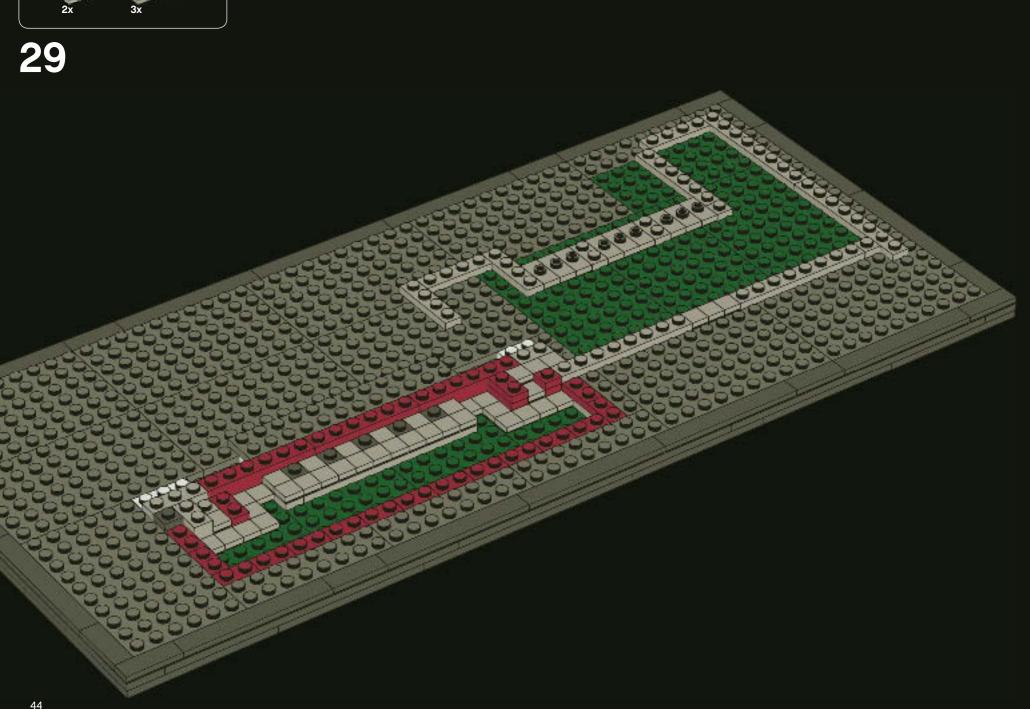




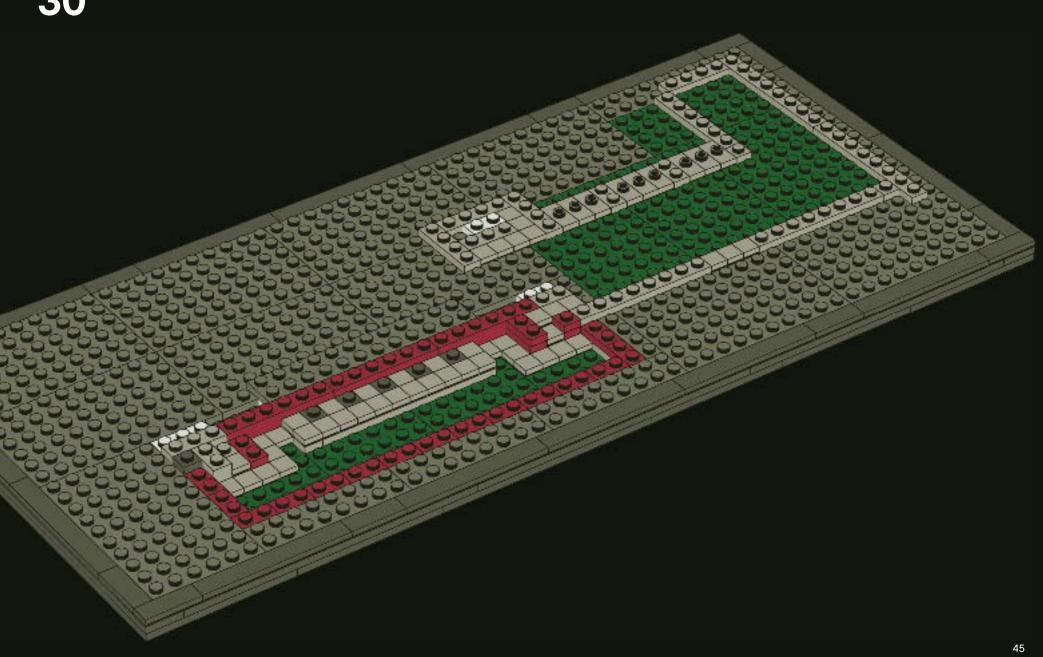




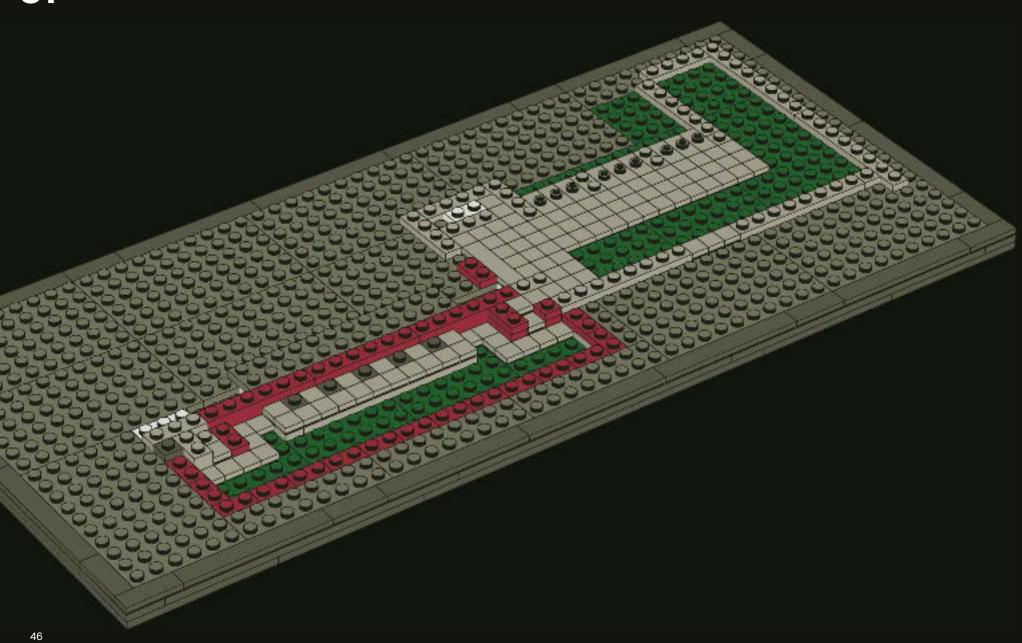




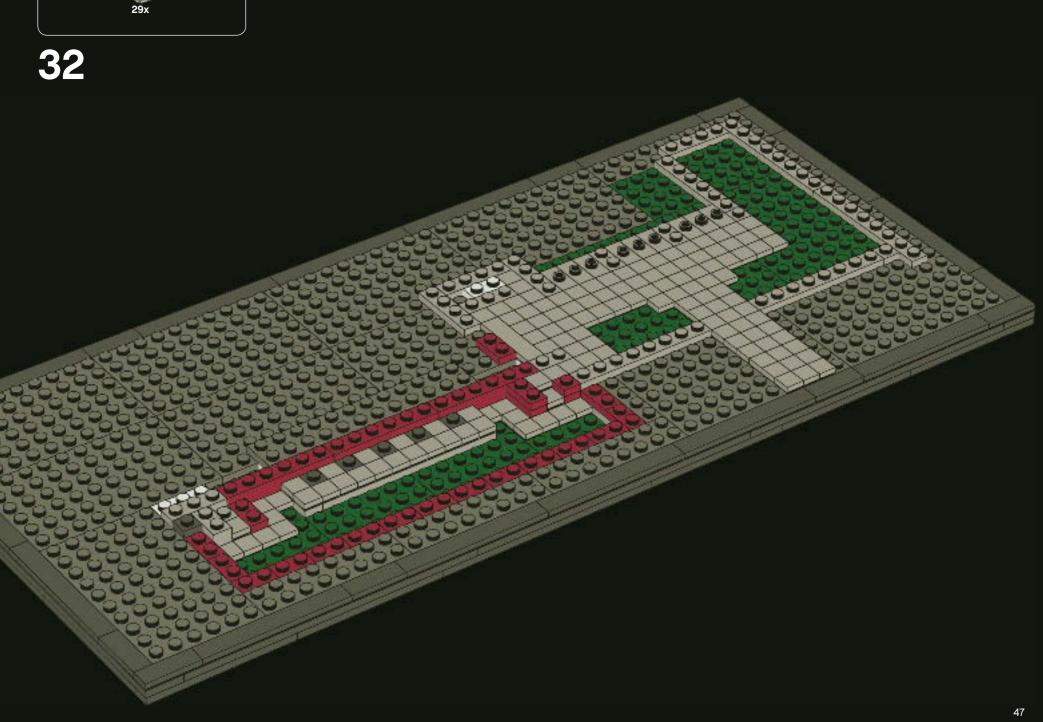


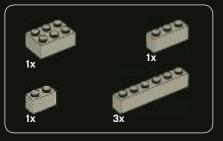


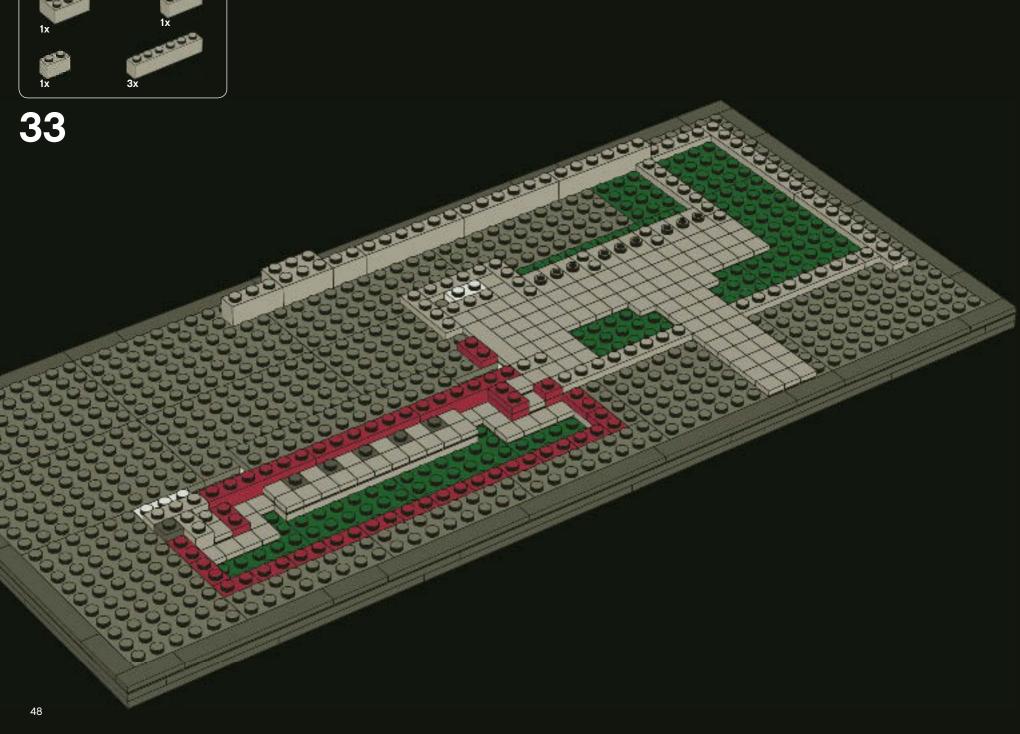


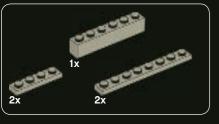


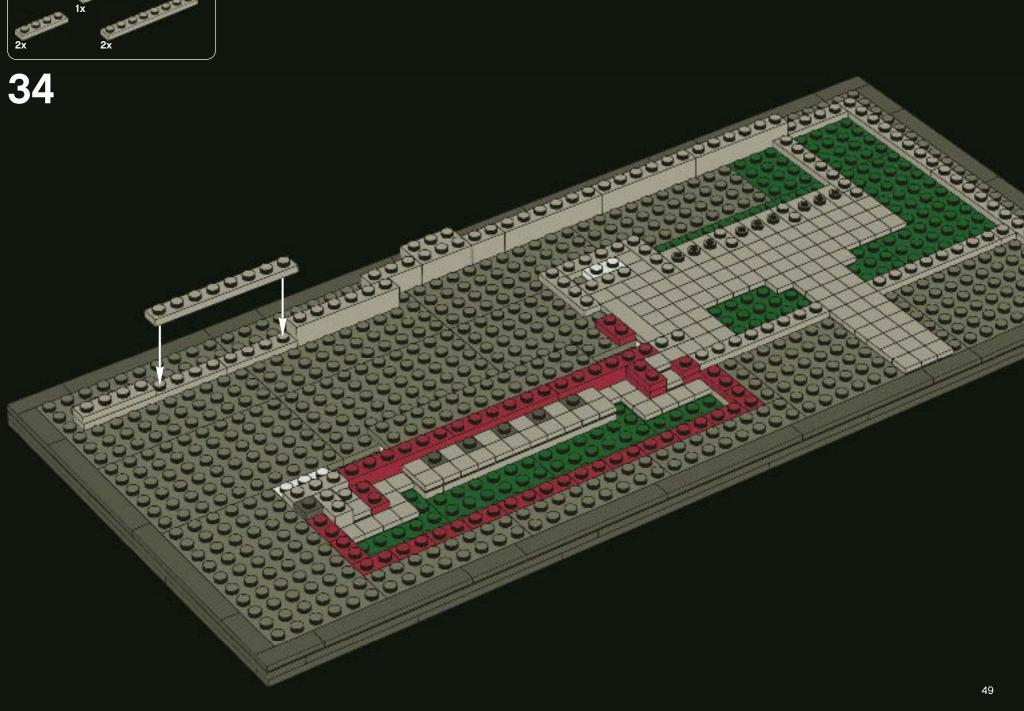


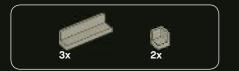


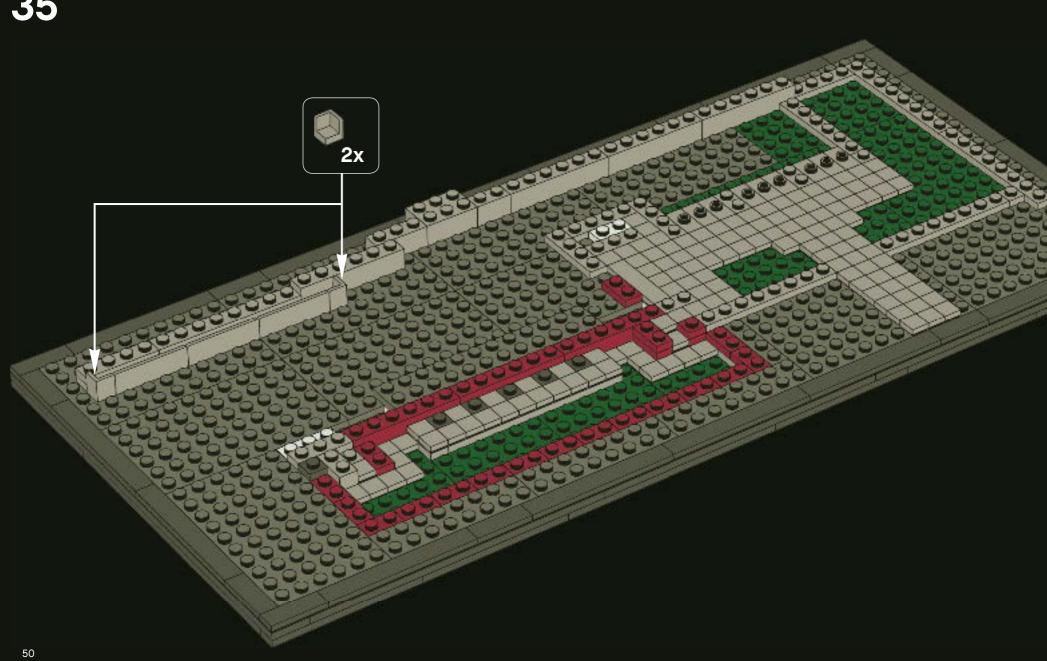




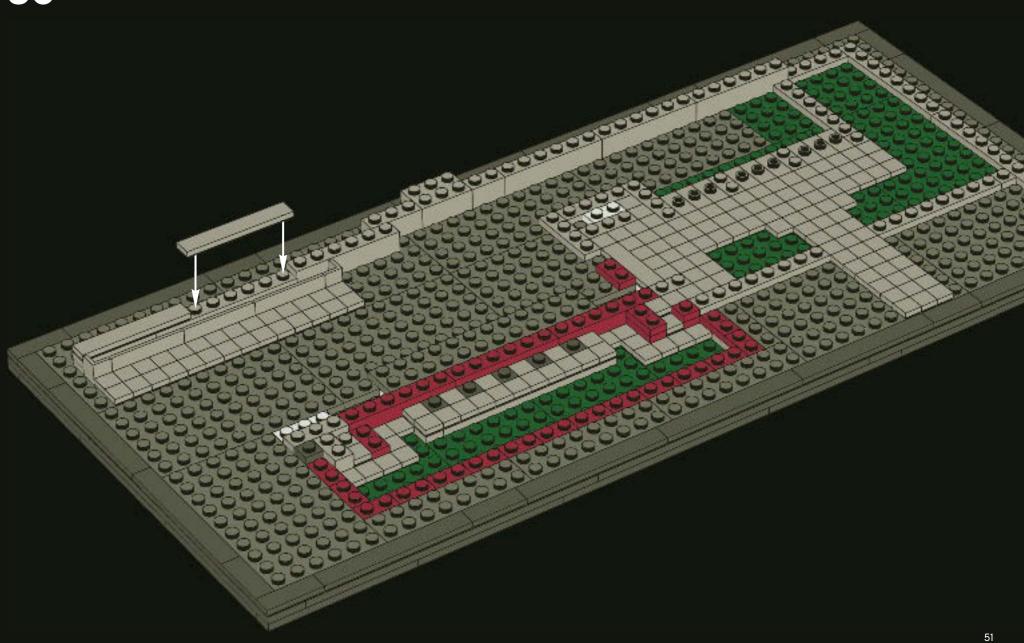


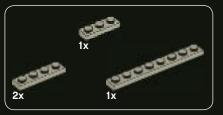


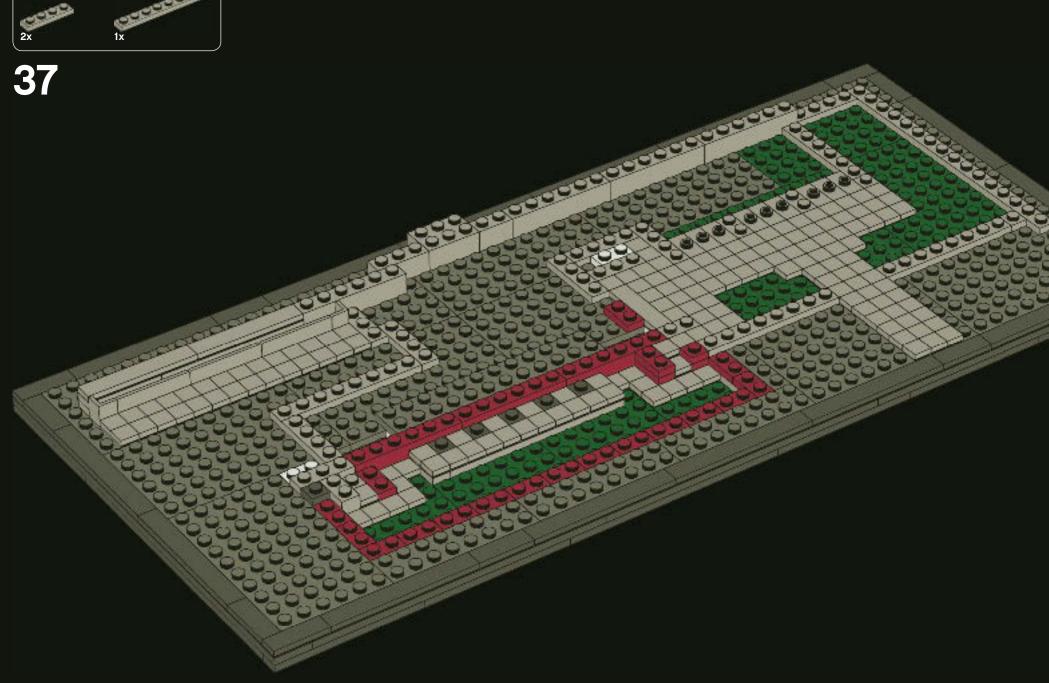




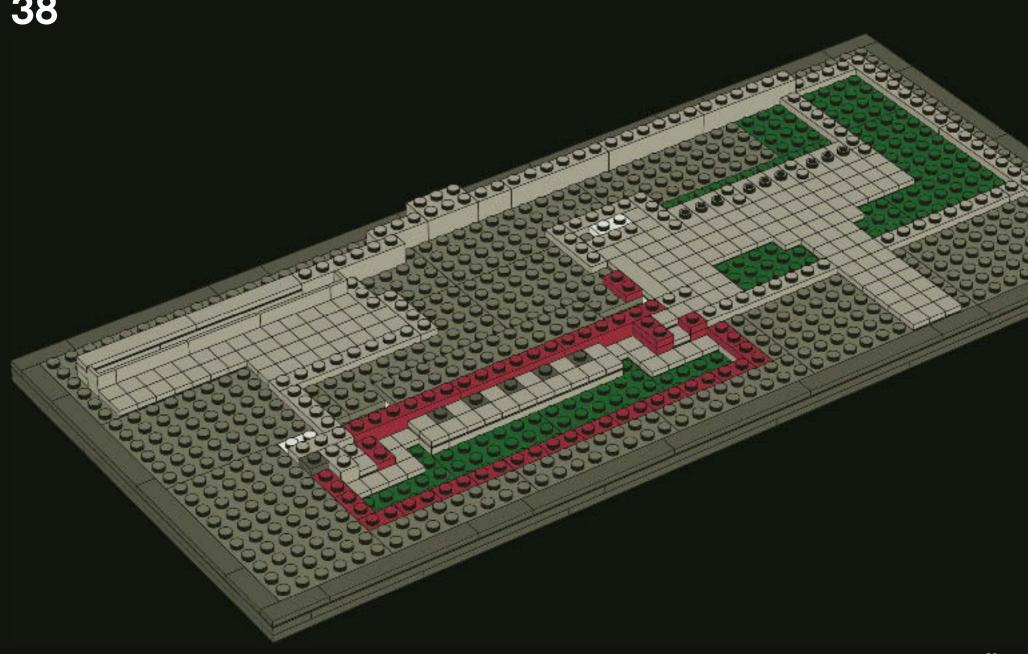








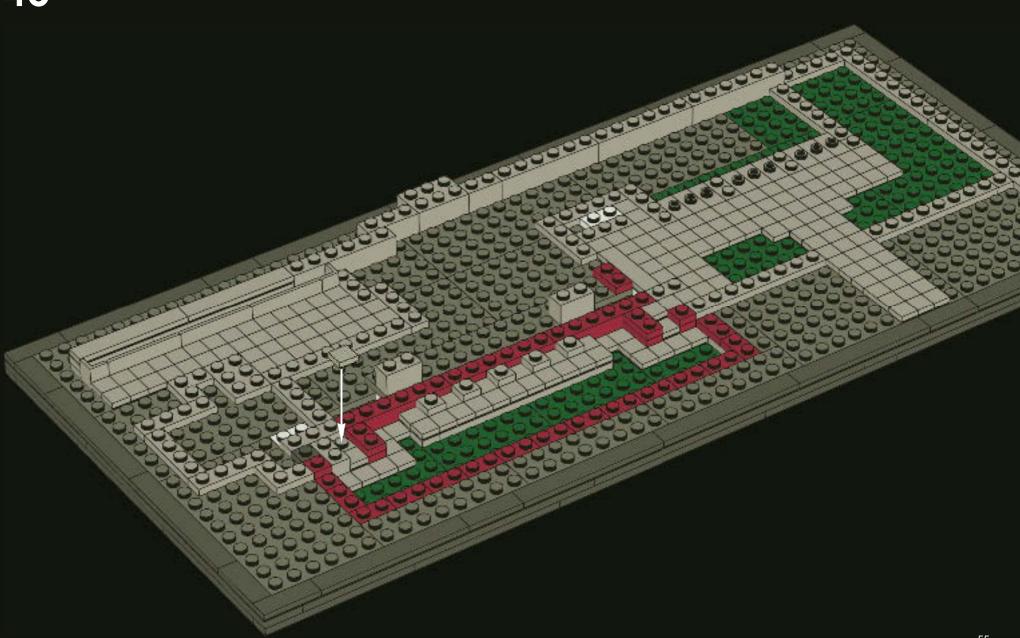








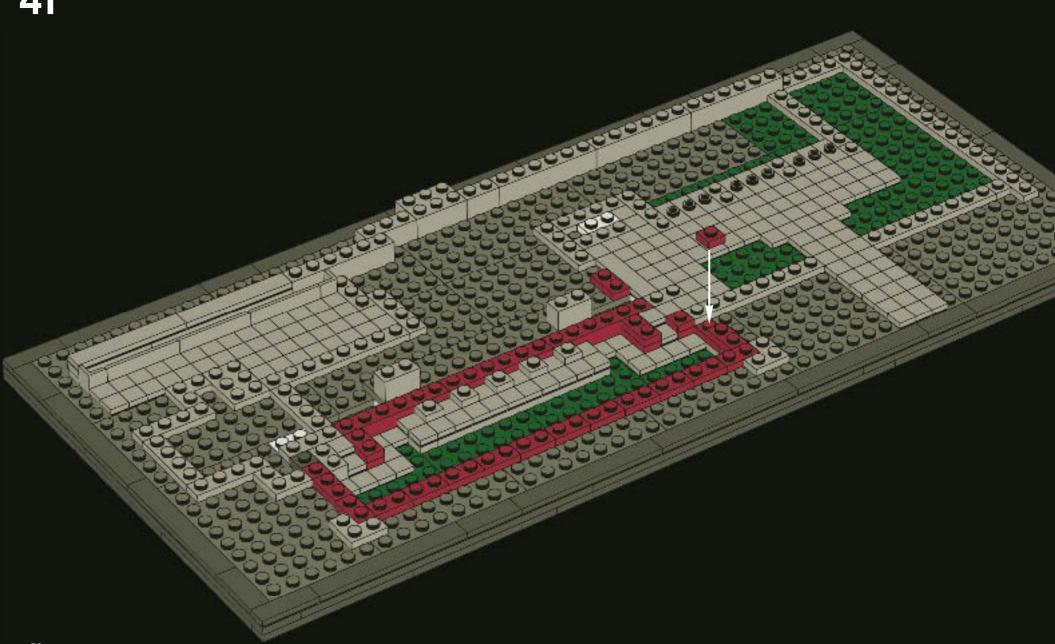


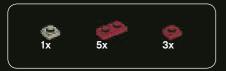


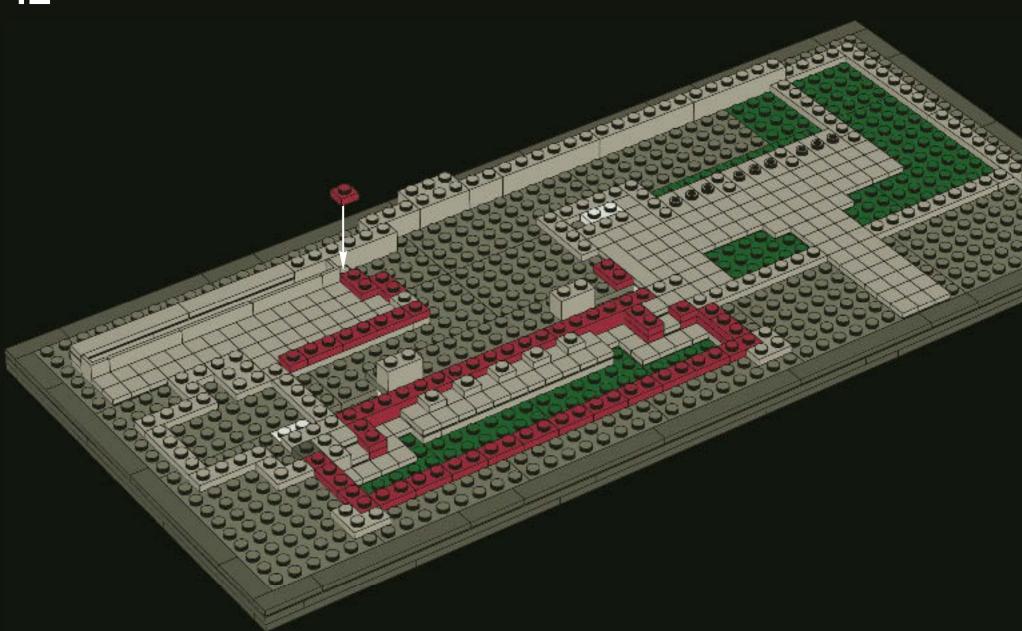




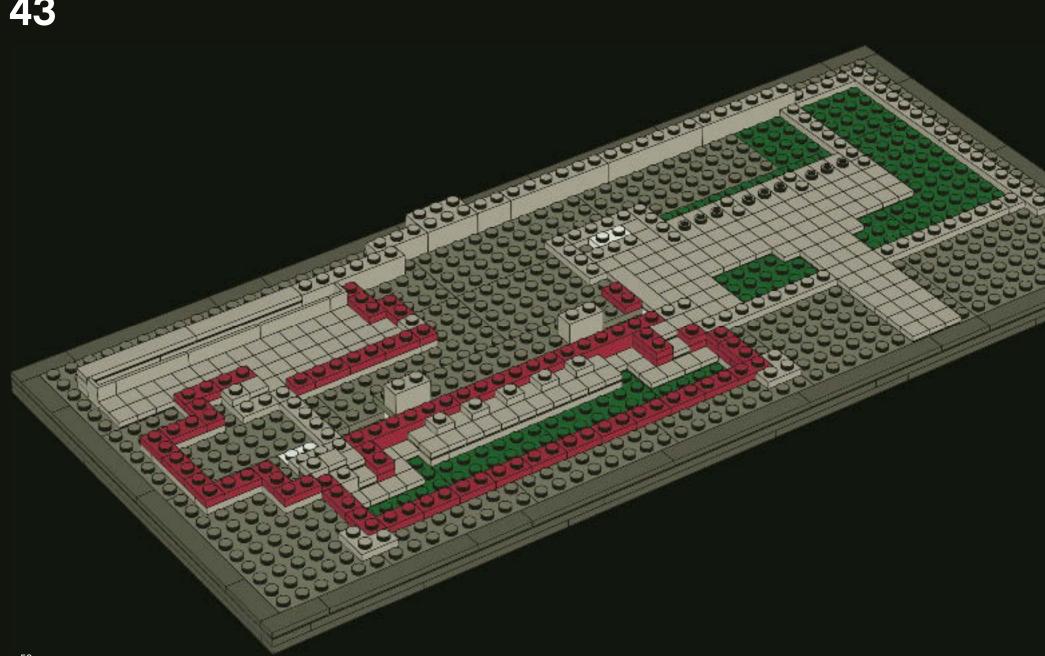






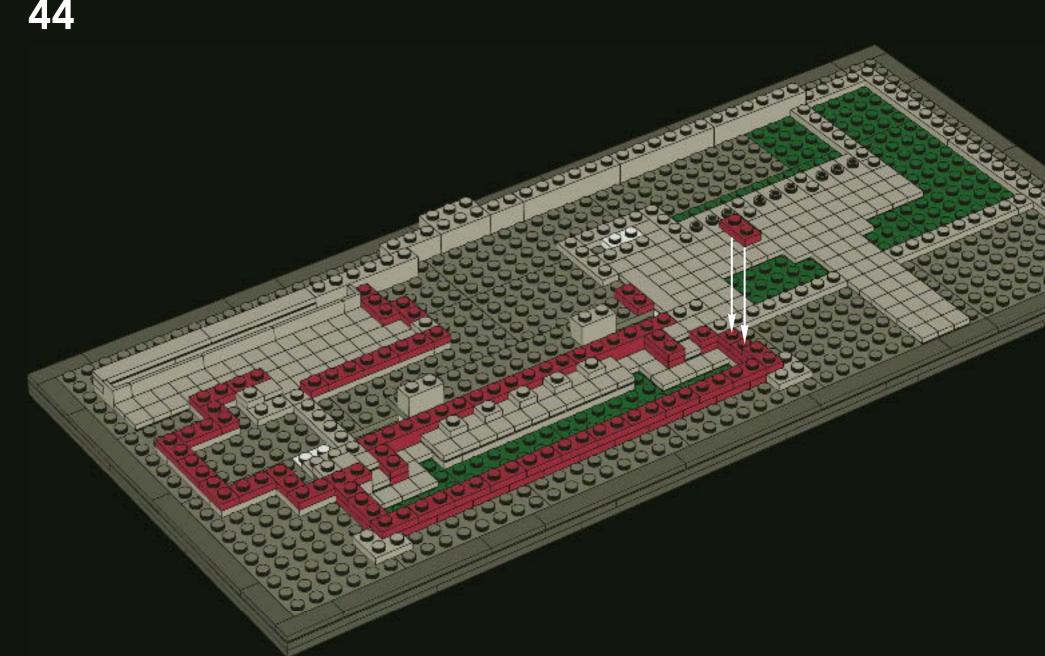






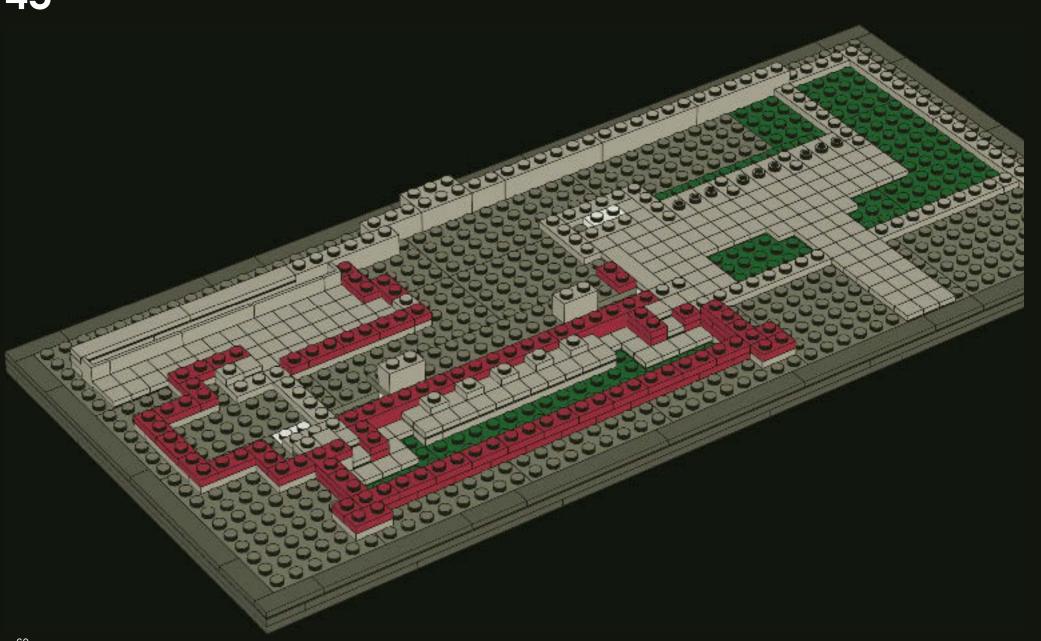


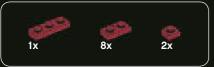


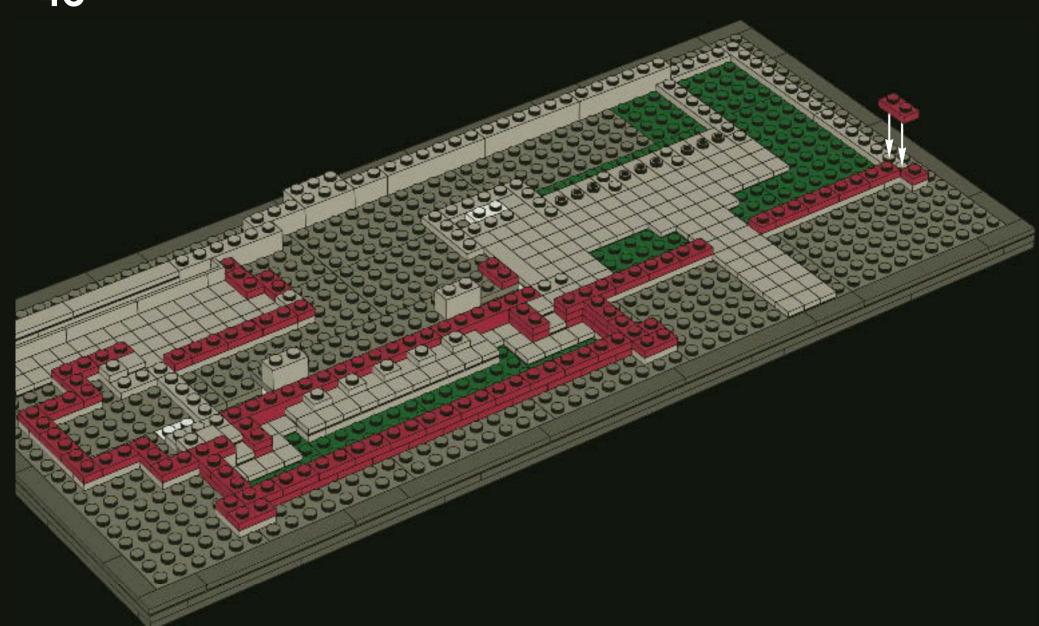




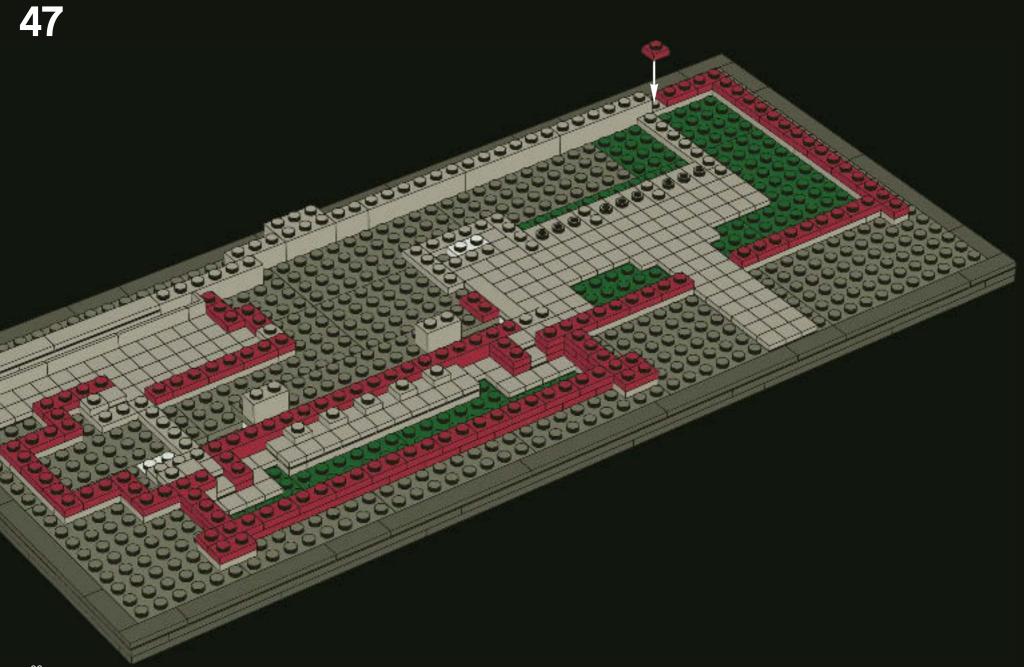


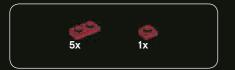


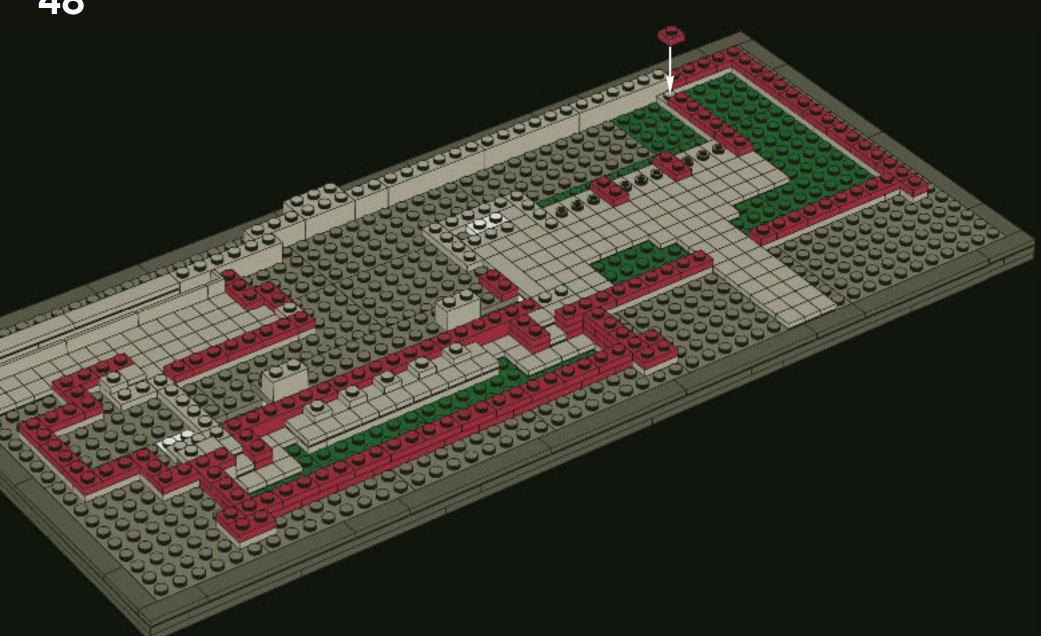


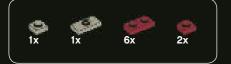


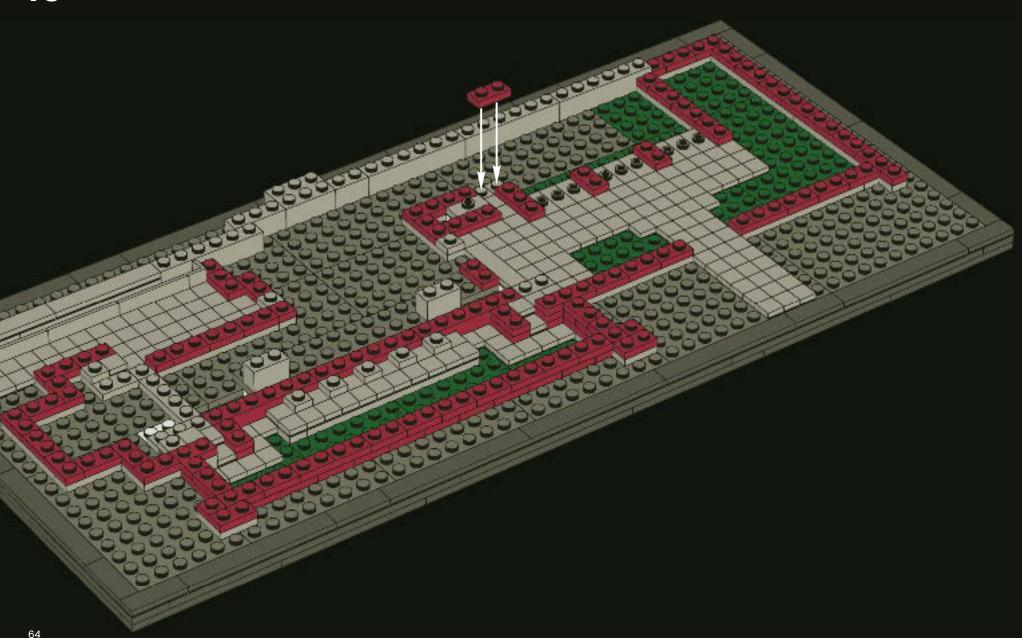








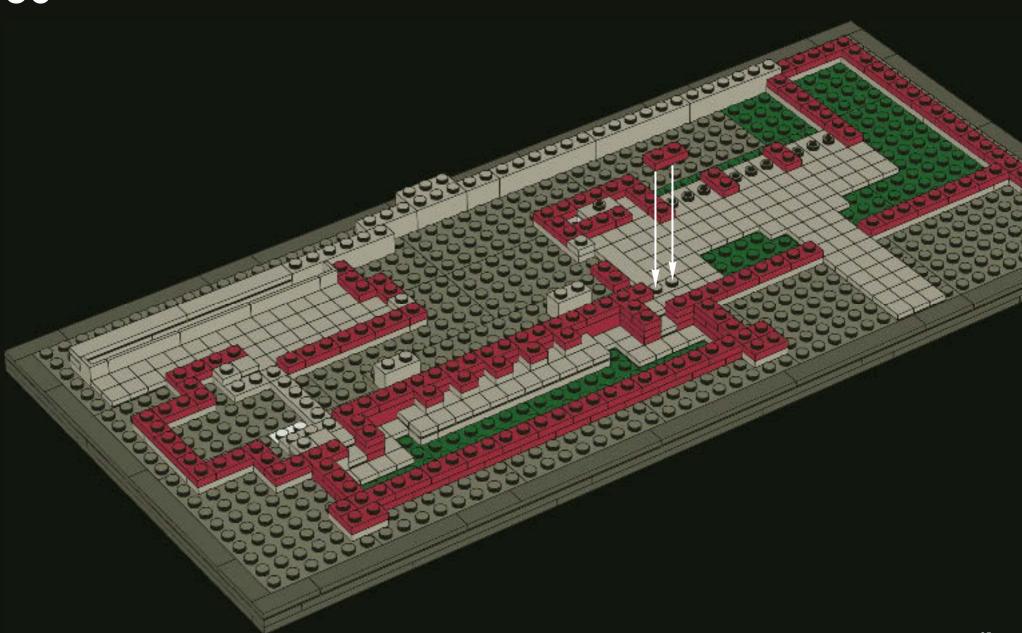








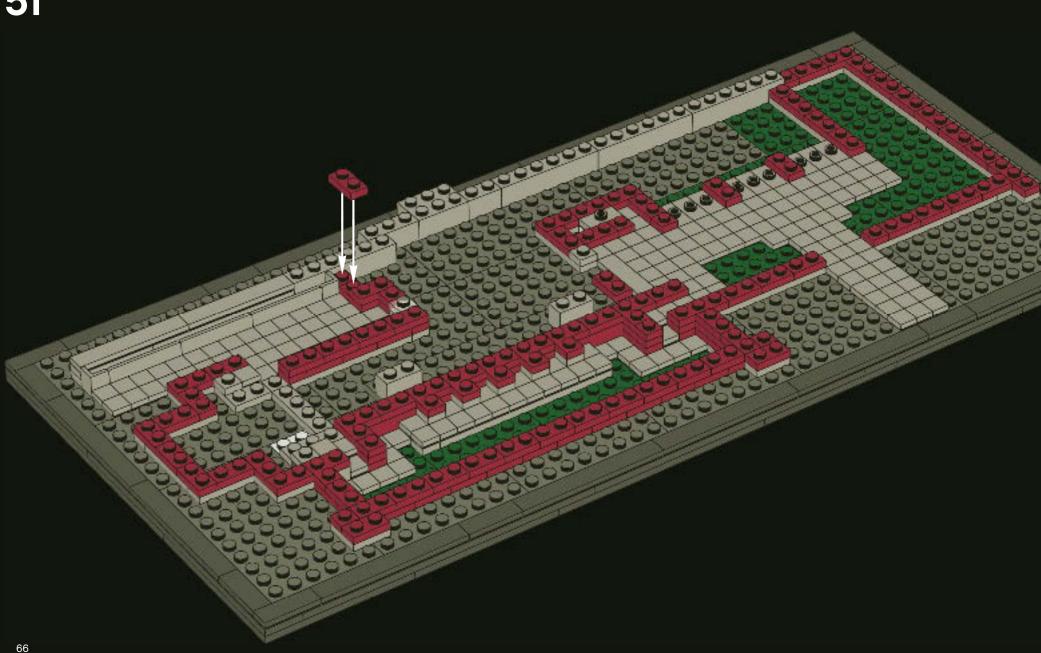




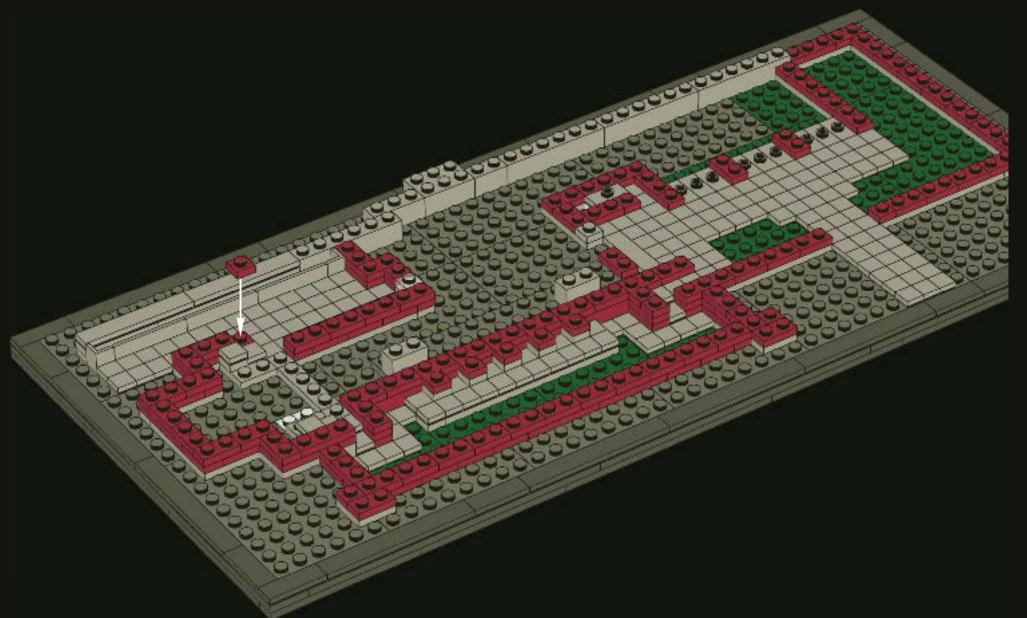


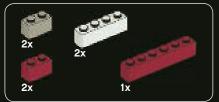


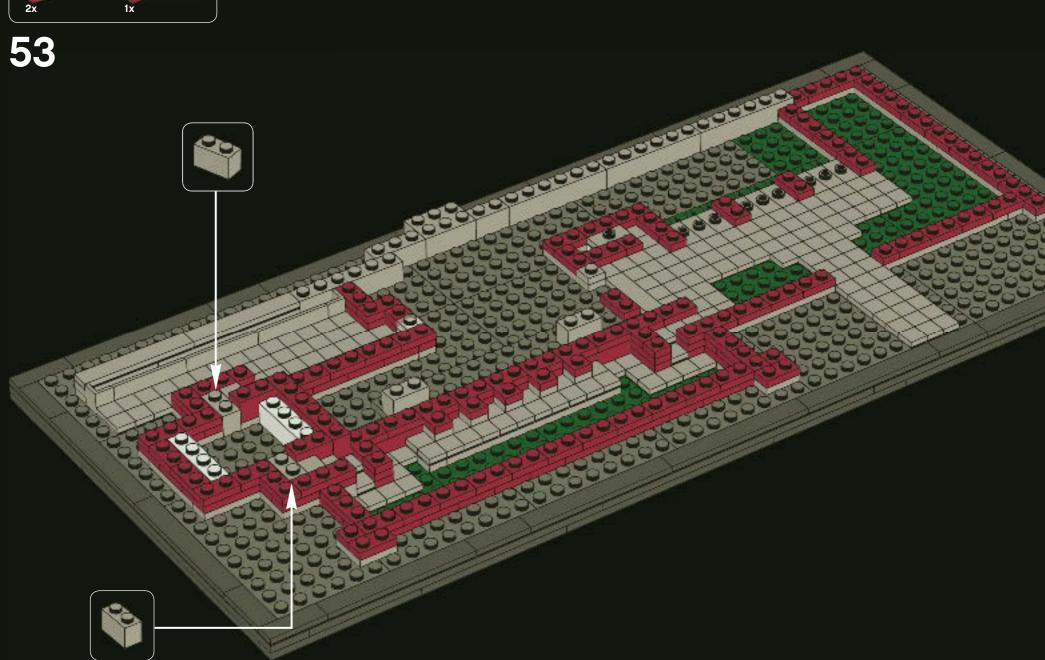




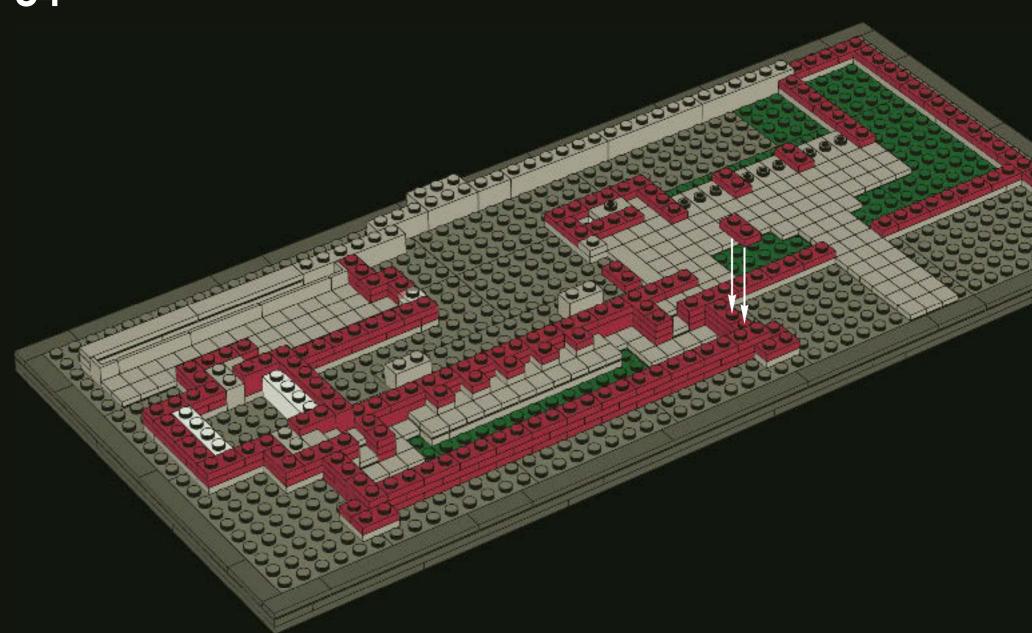






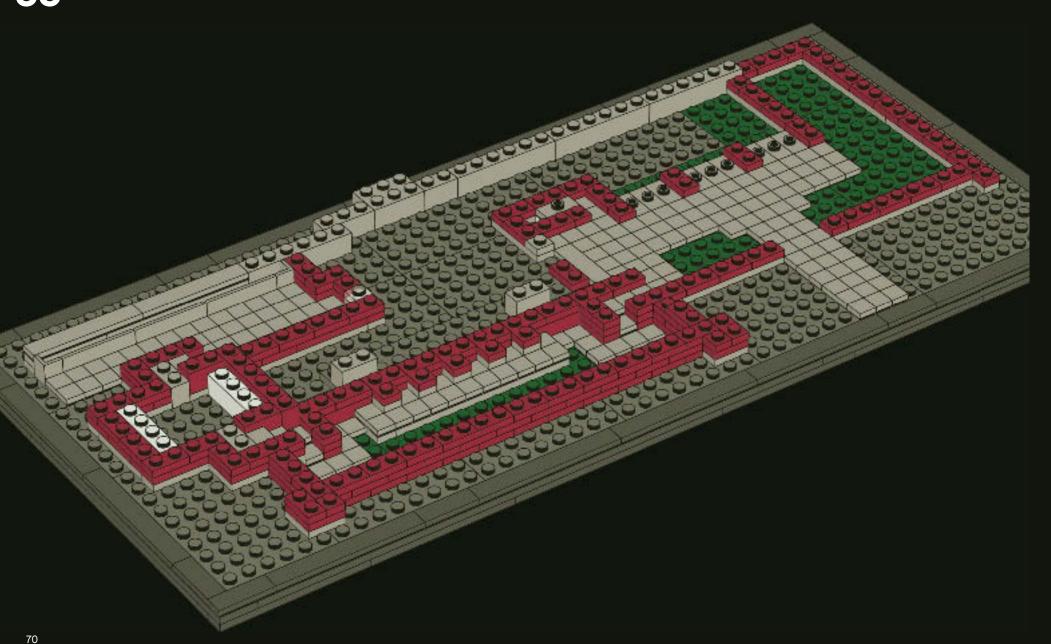








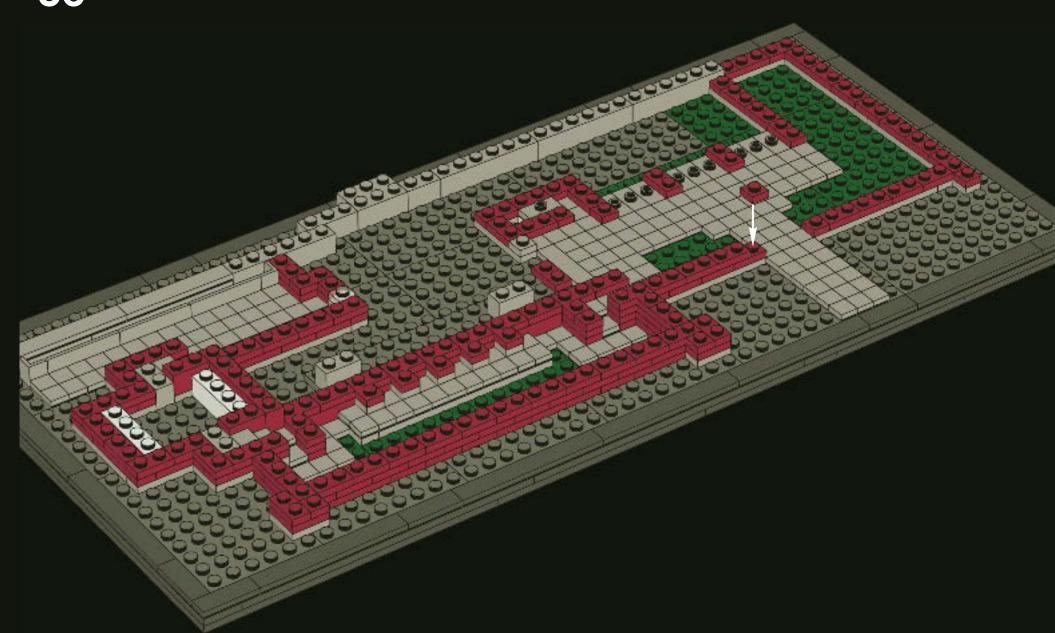




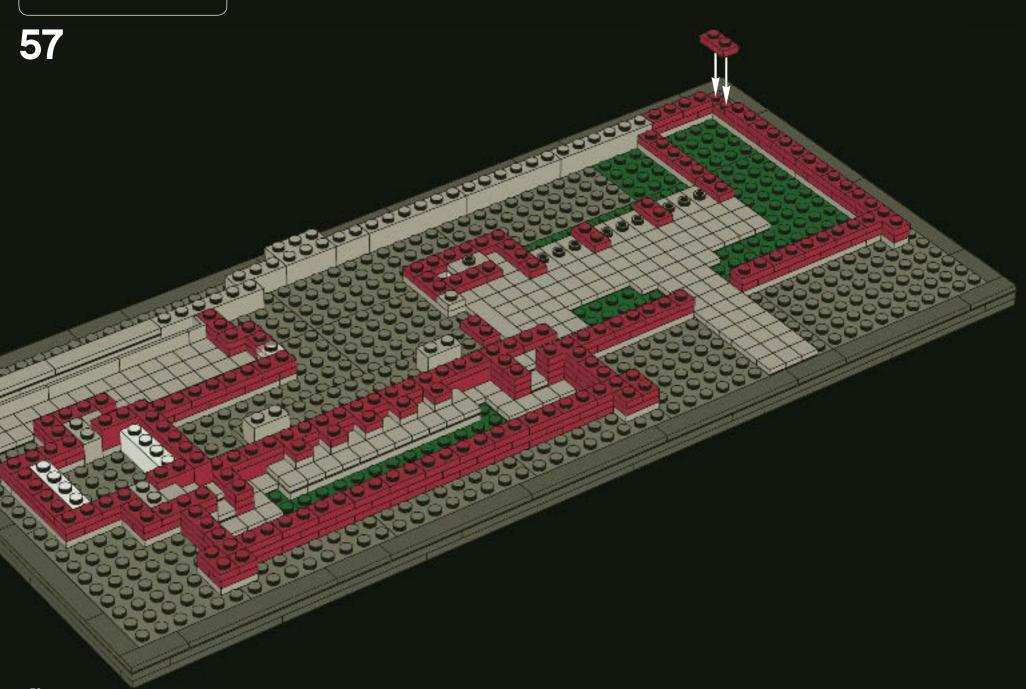


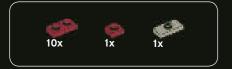


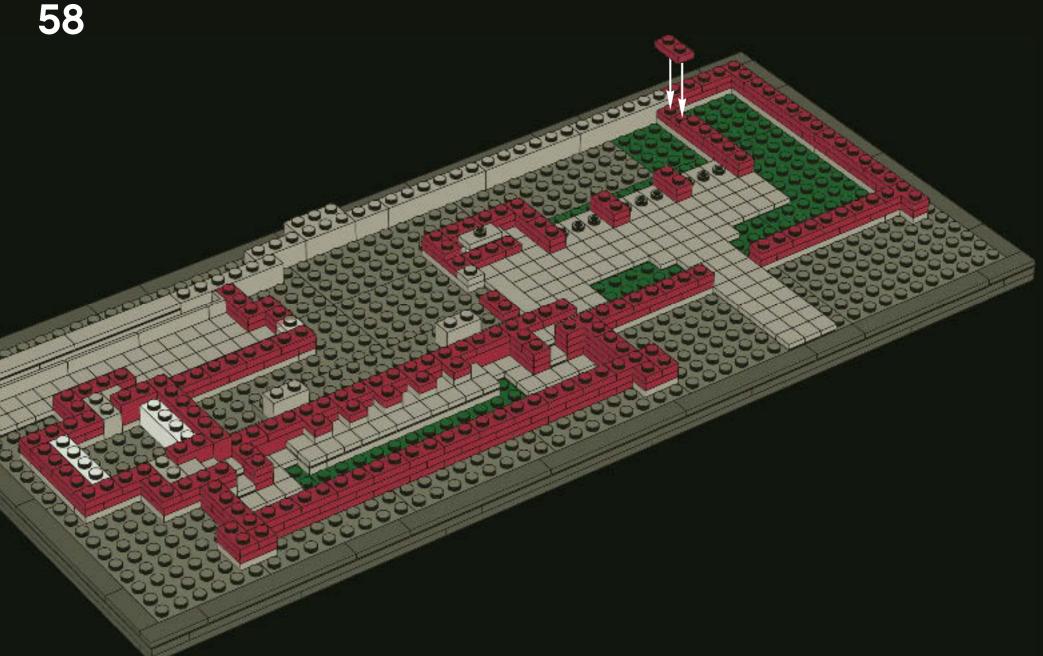










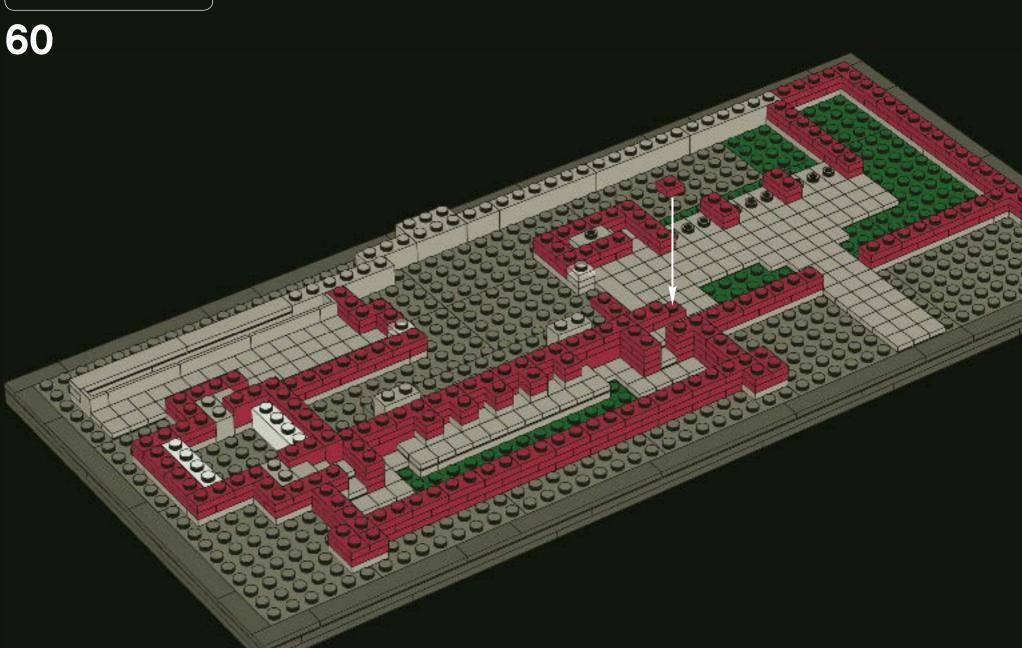






Sold to the second seco

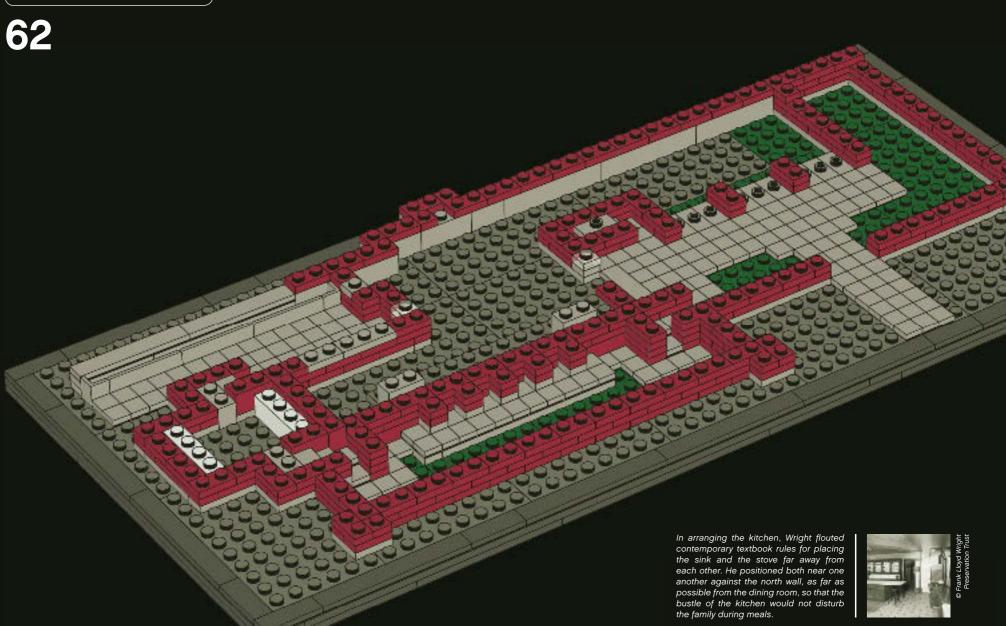








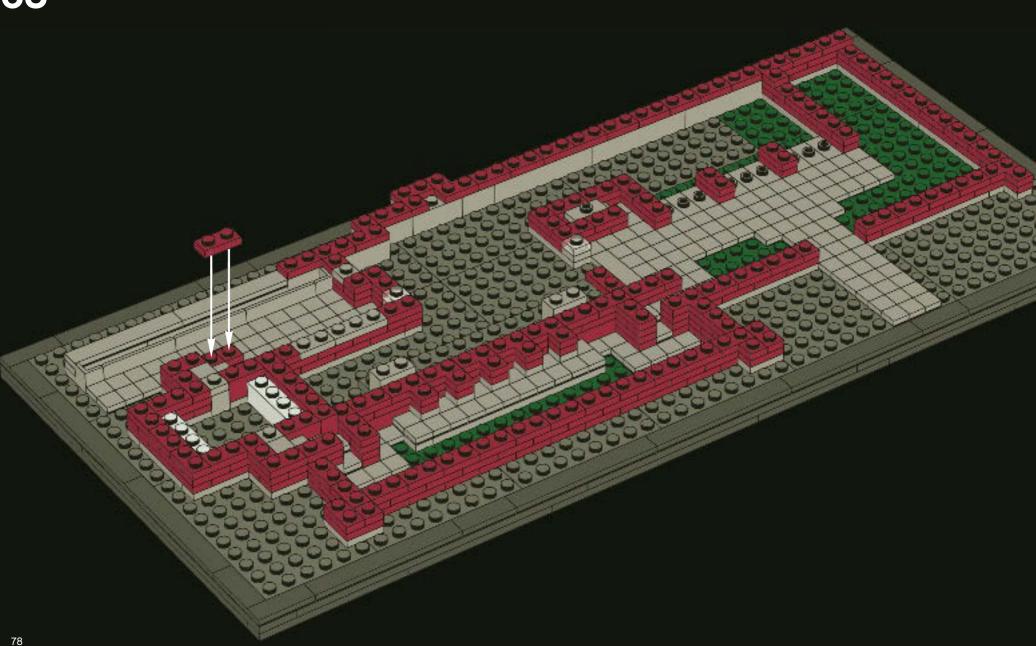




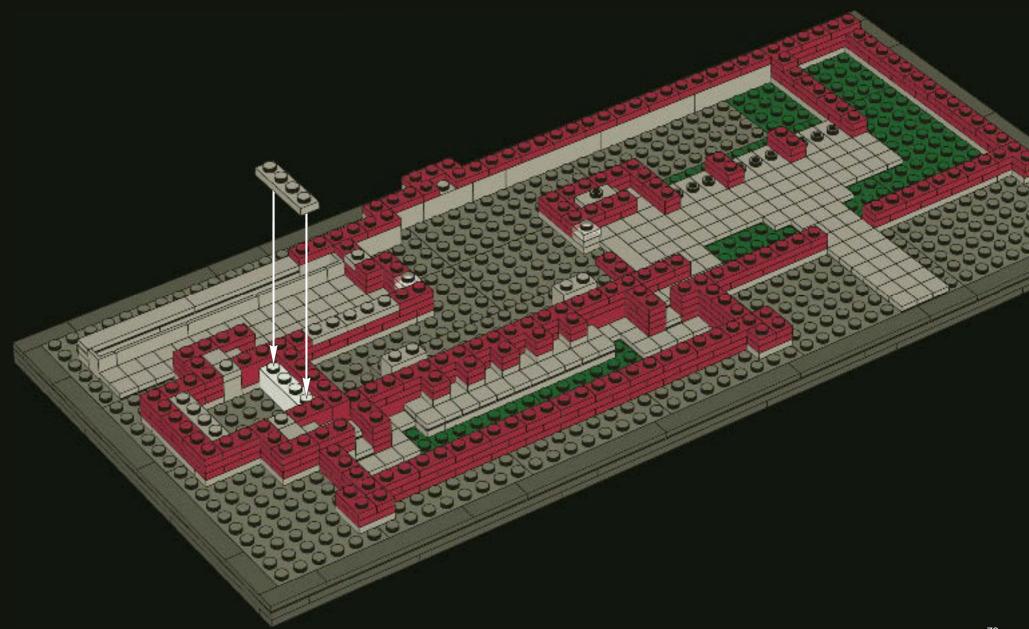




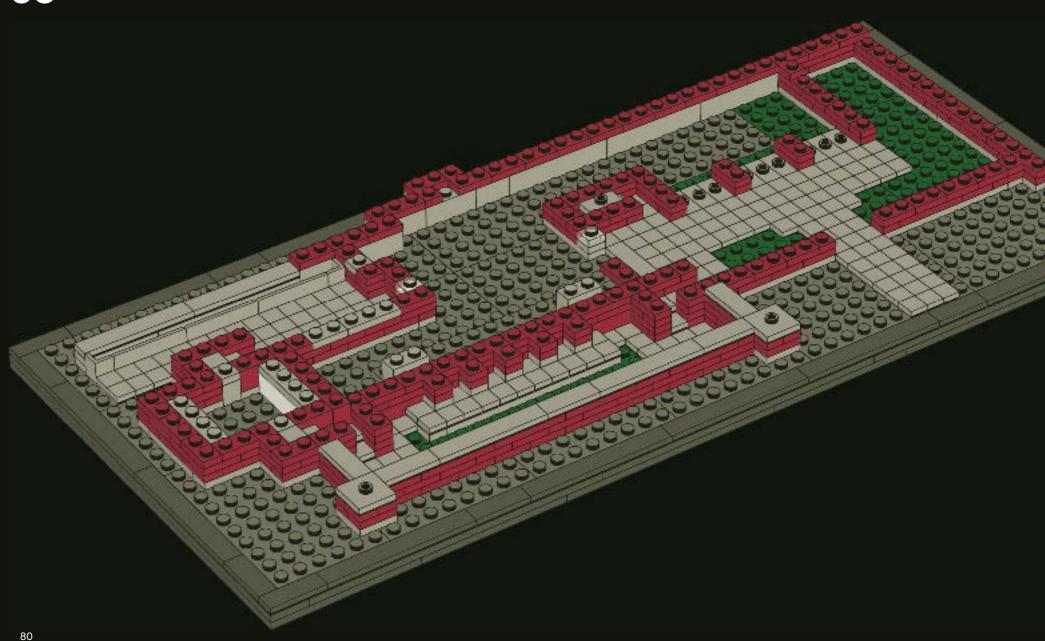


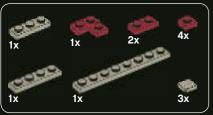








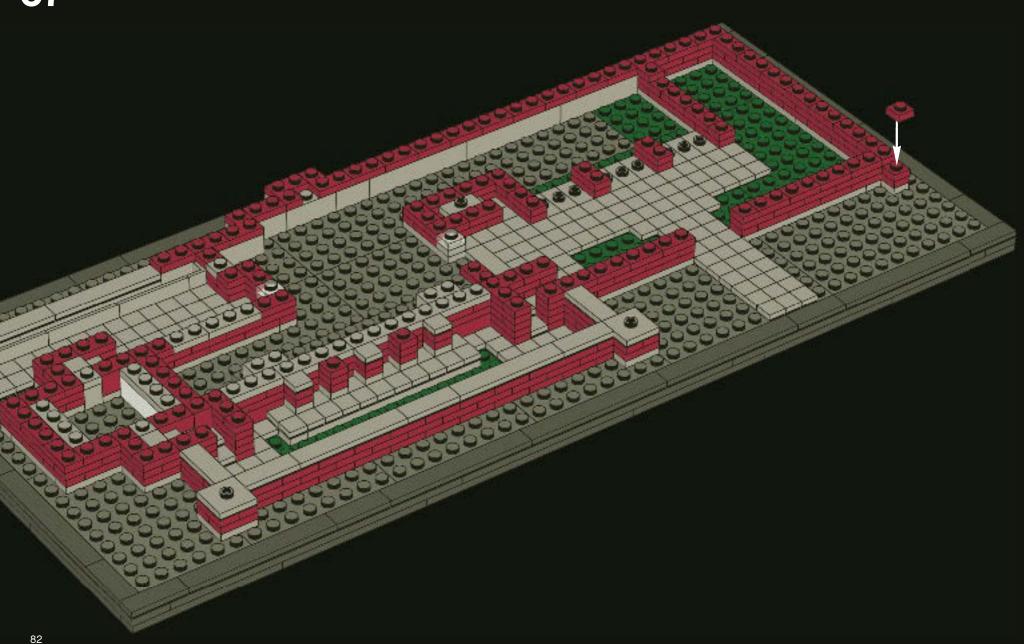








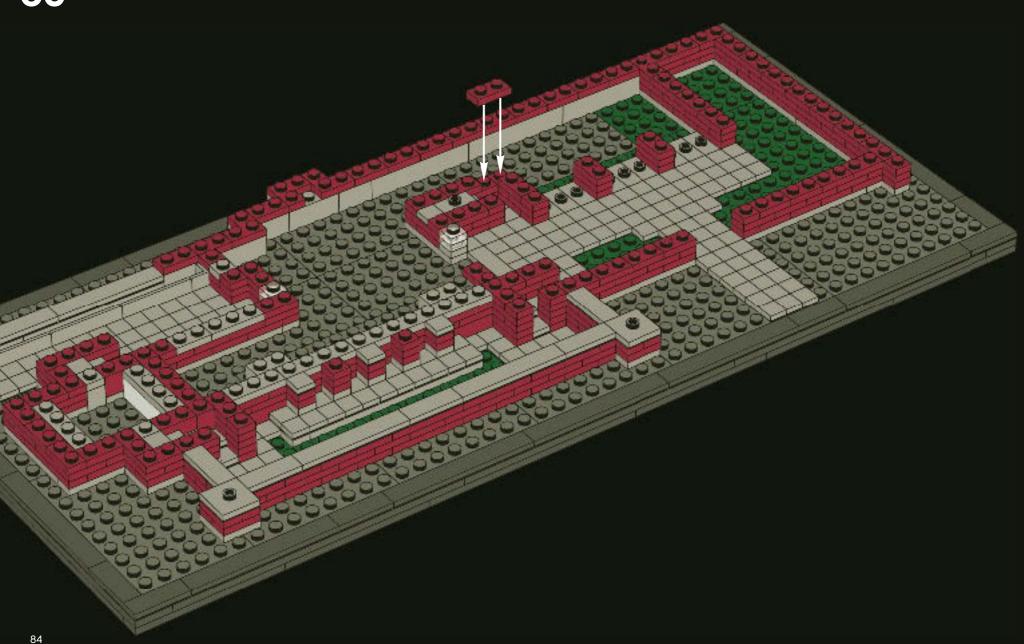






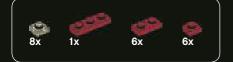


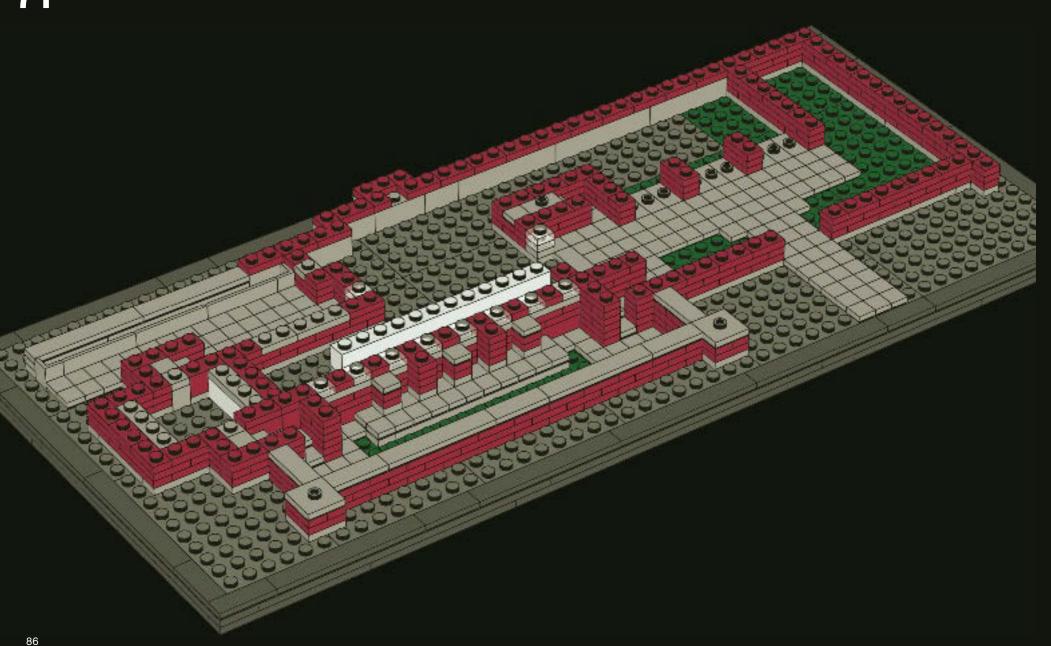




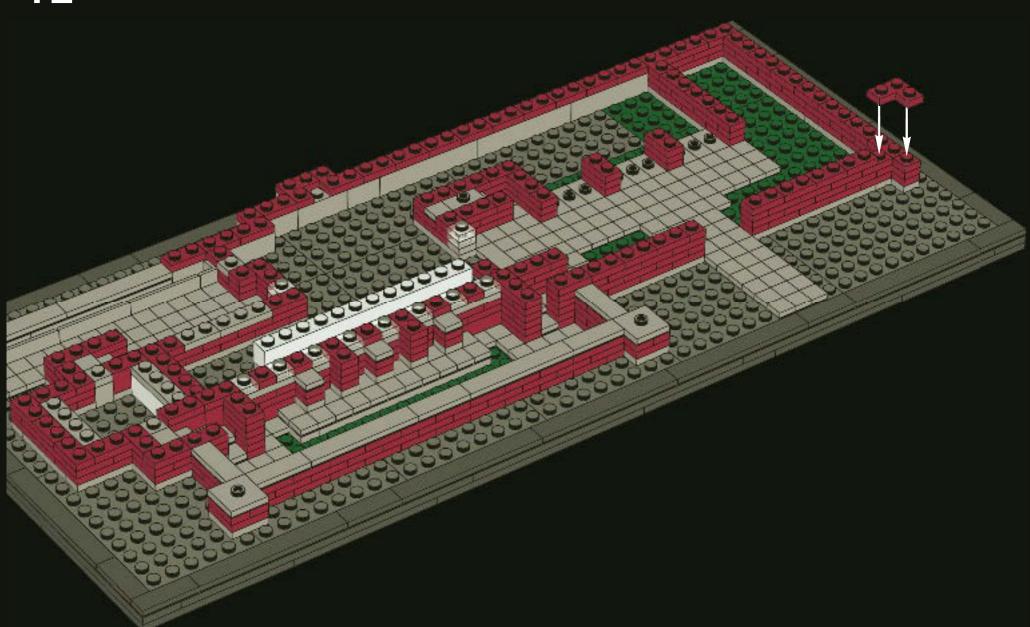


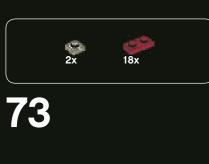






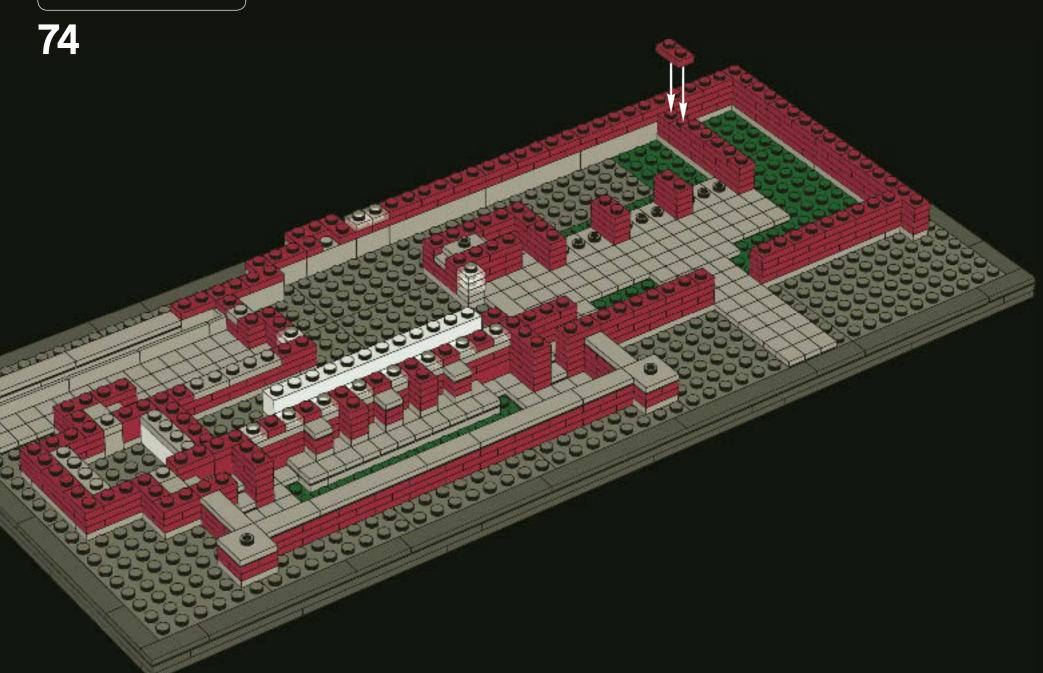








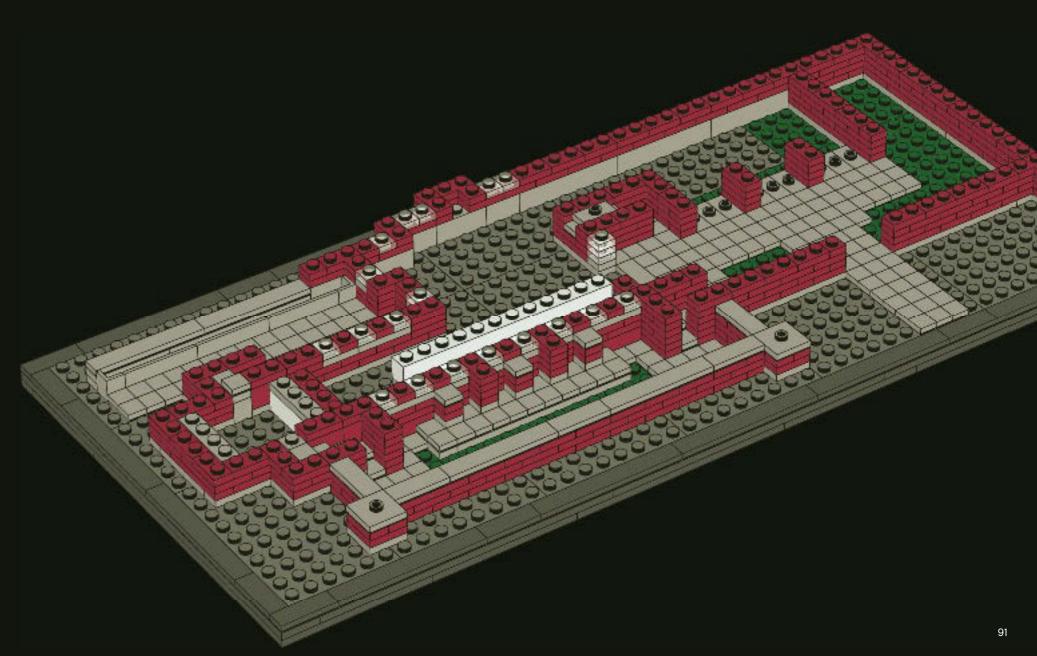




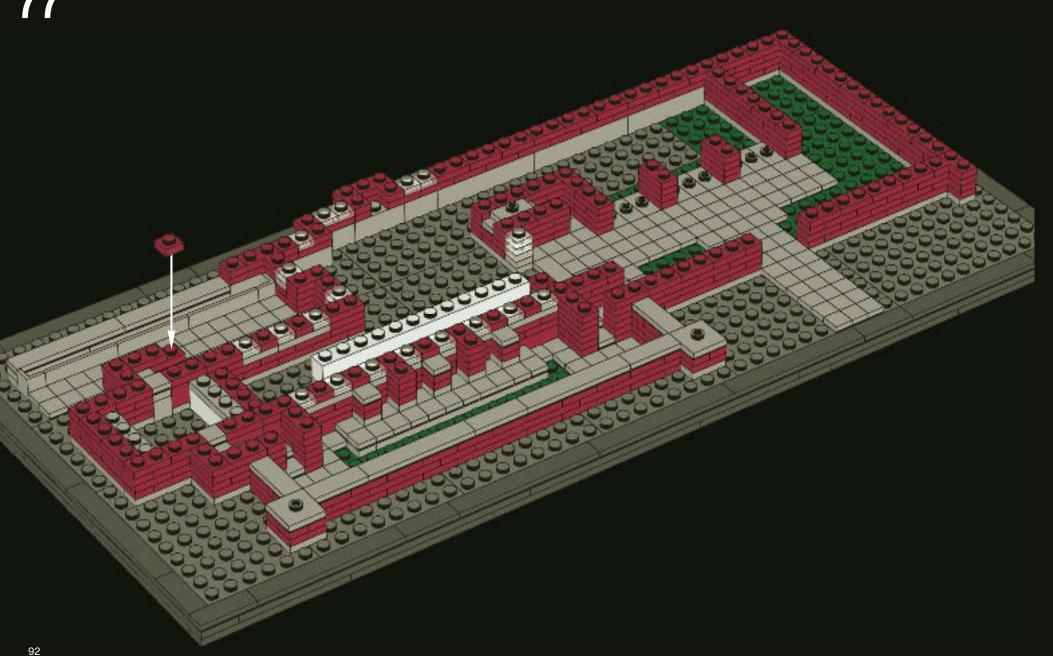


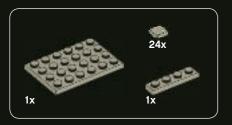


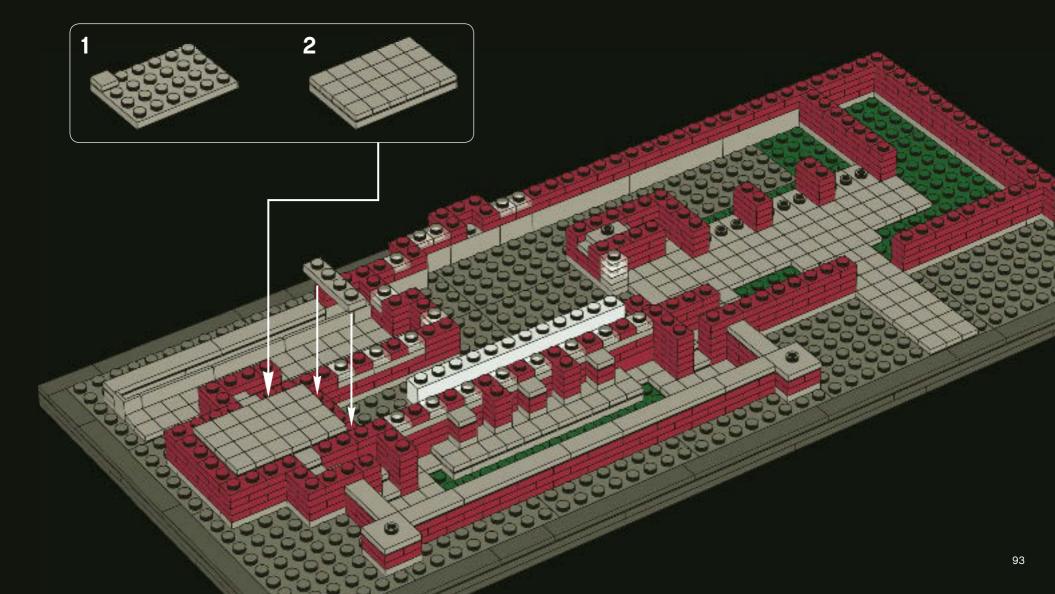


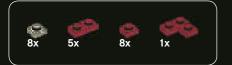


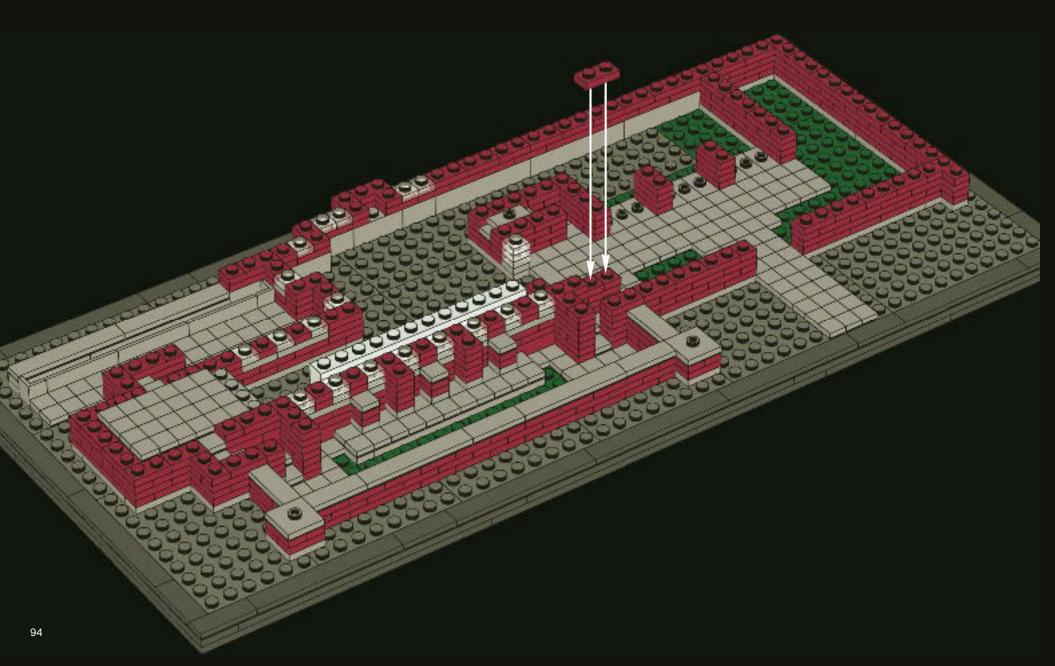




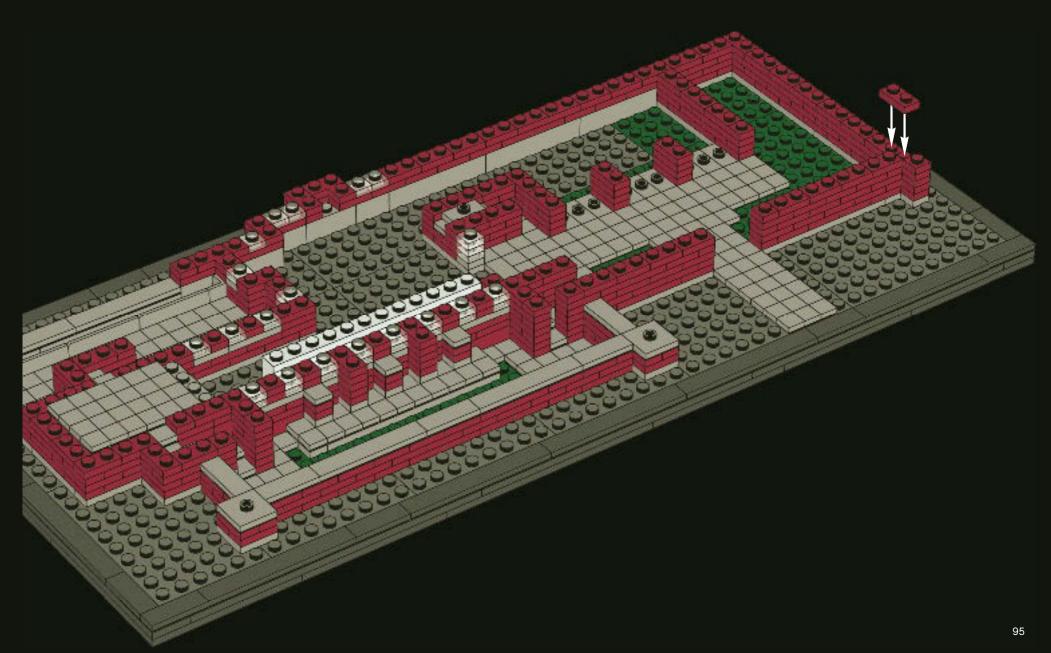




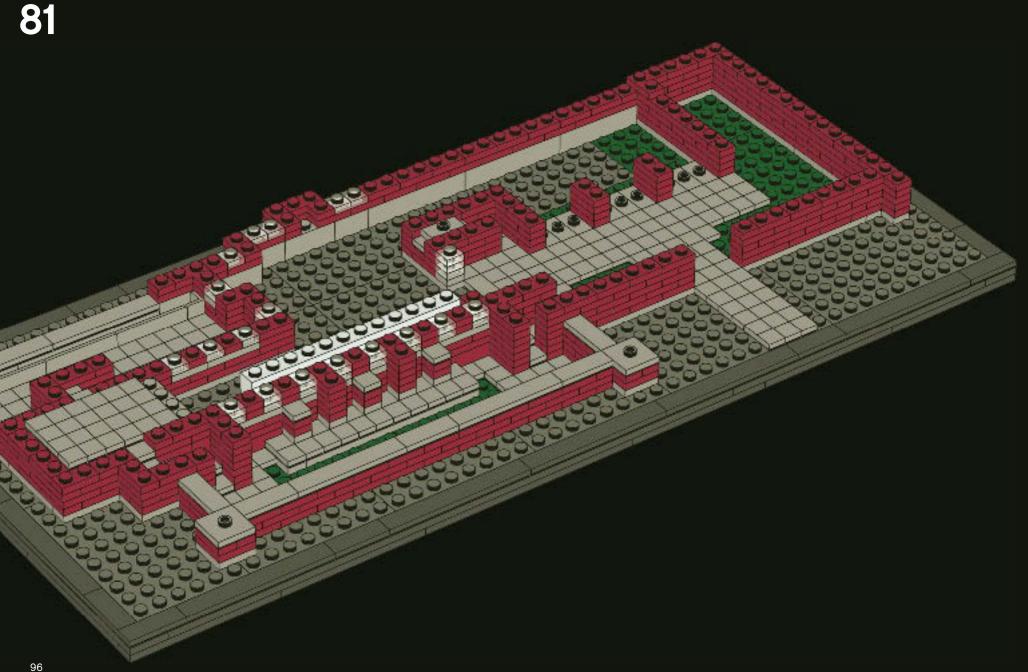


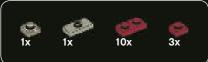










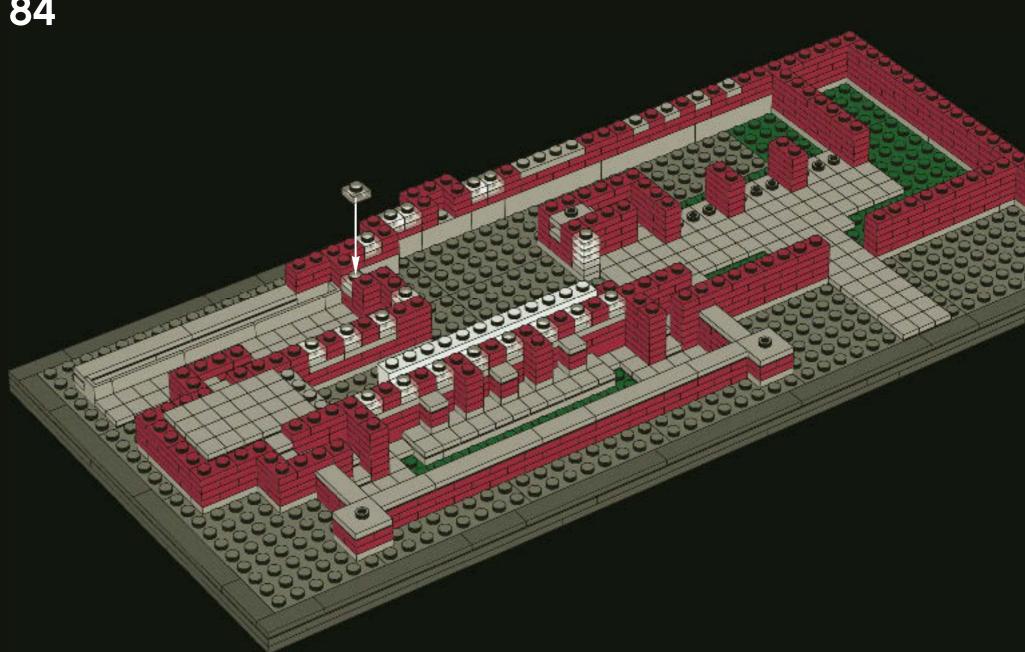




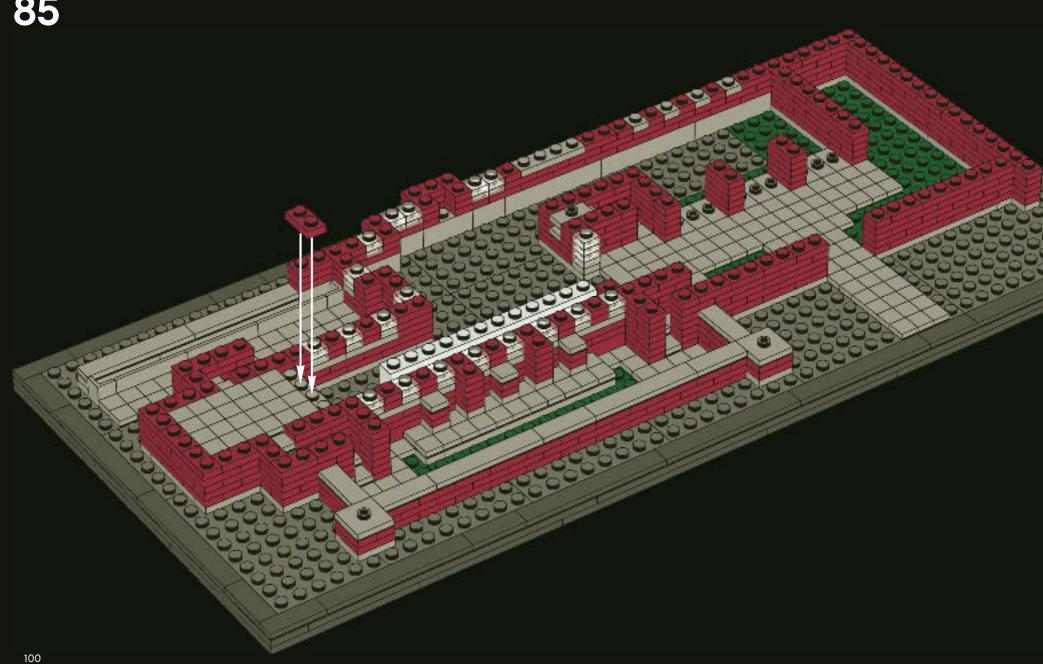




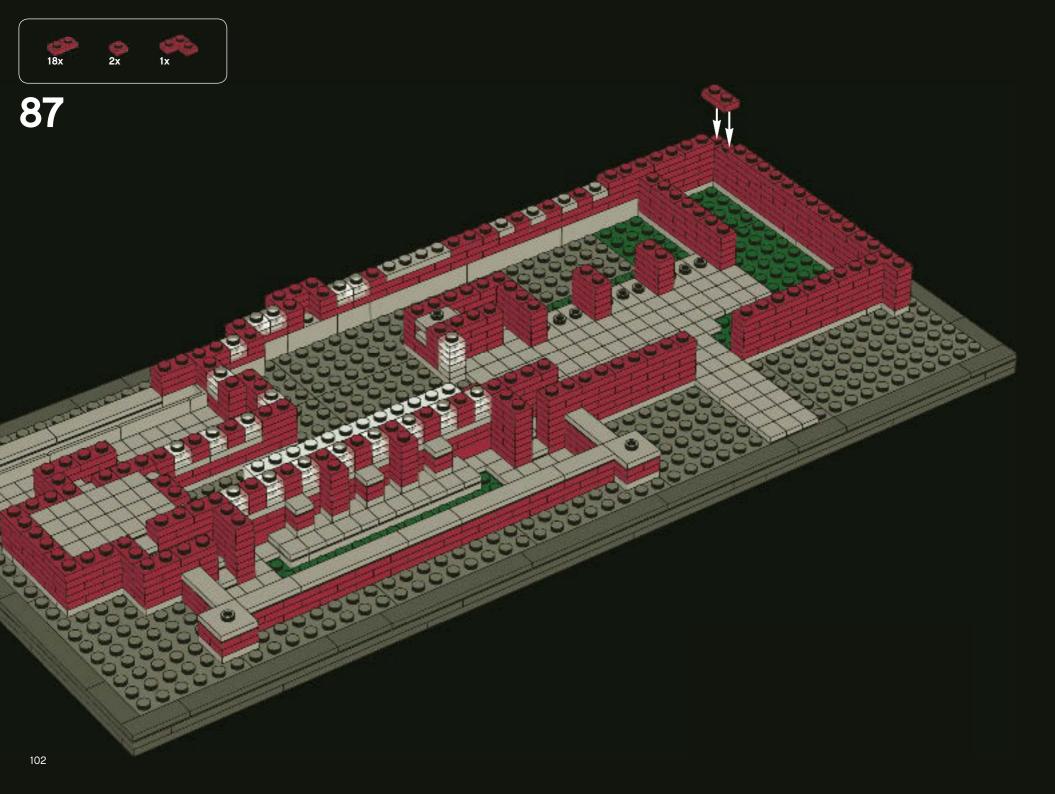


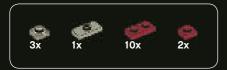








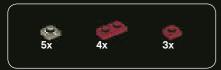


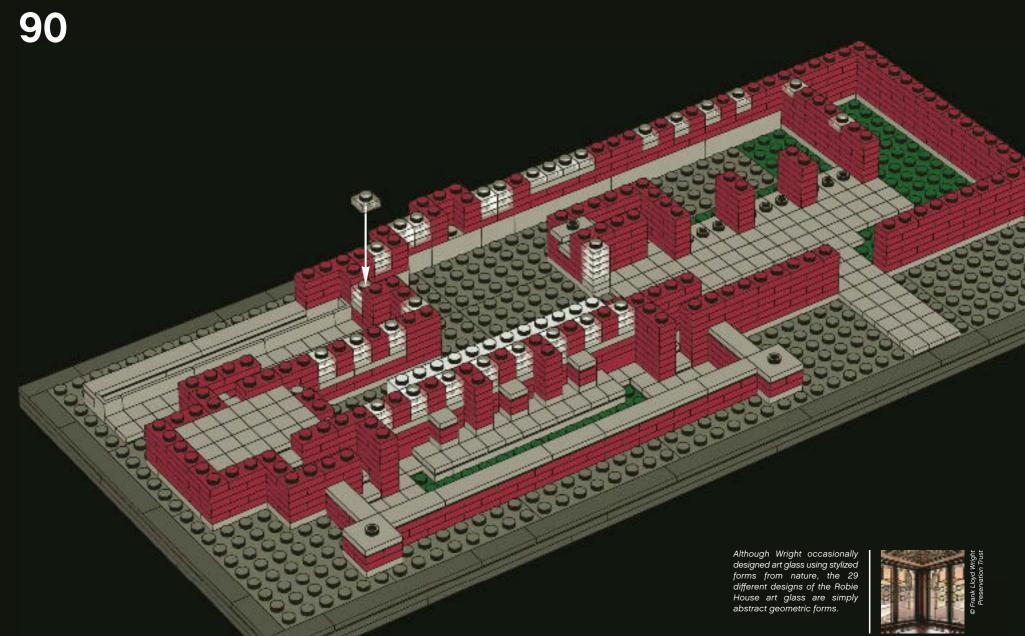




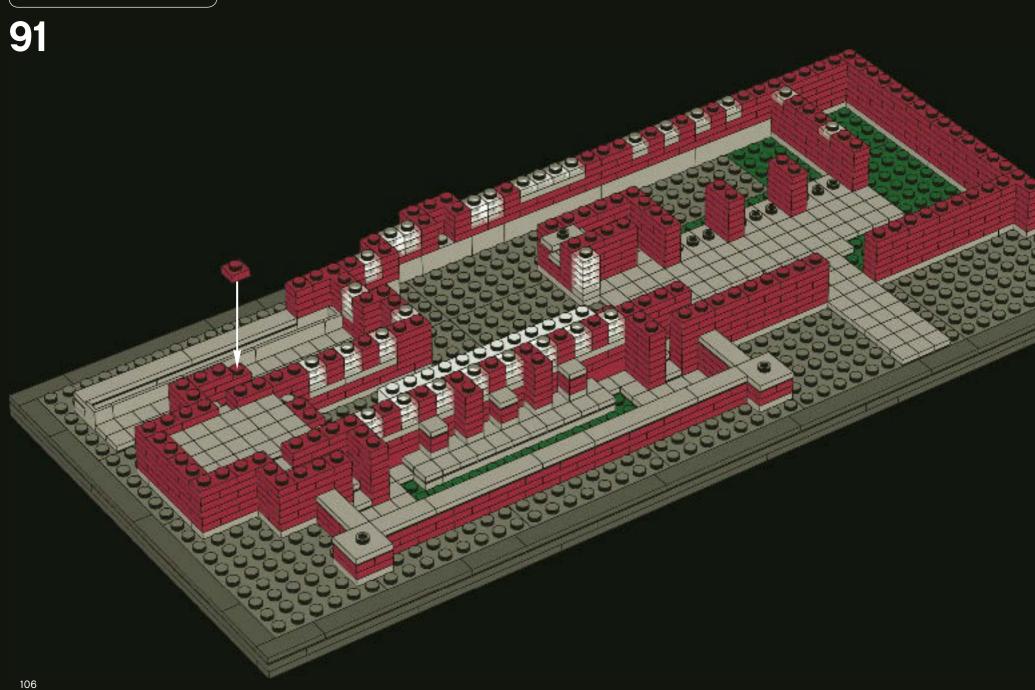


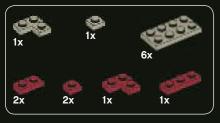


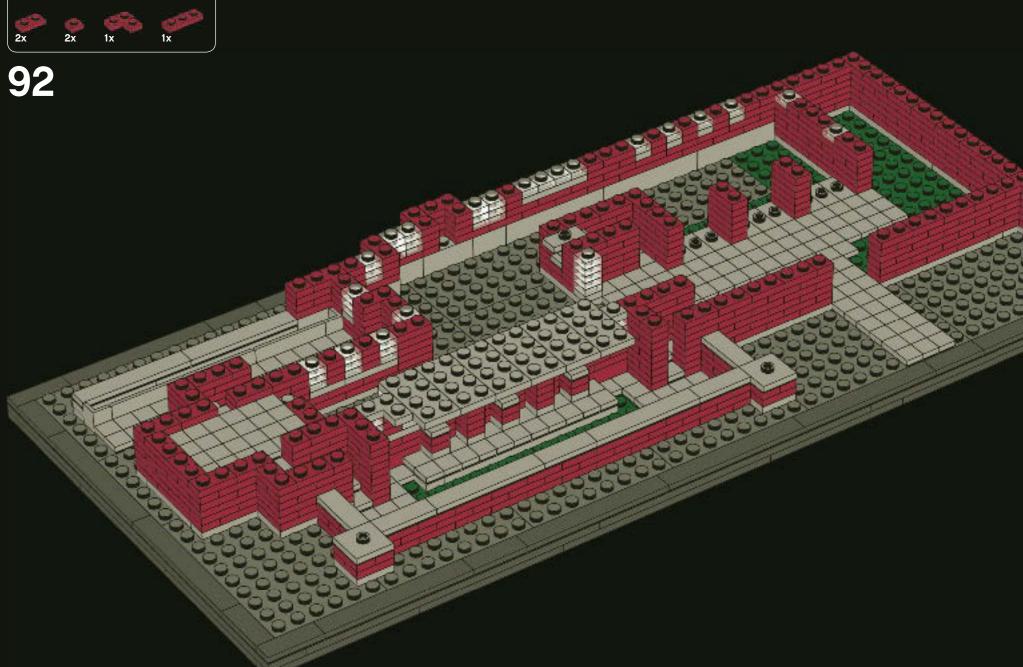


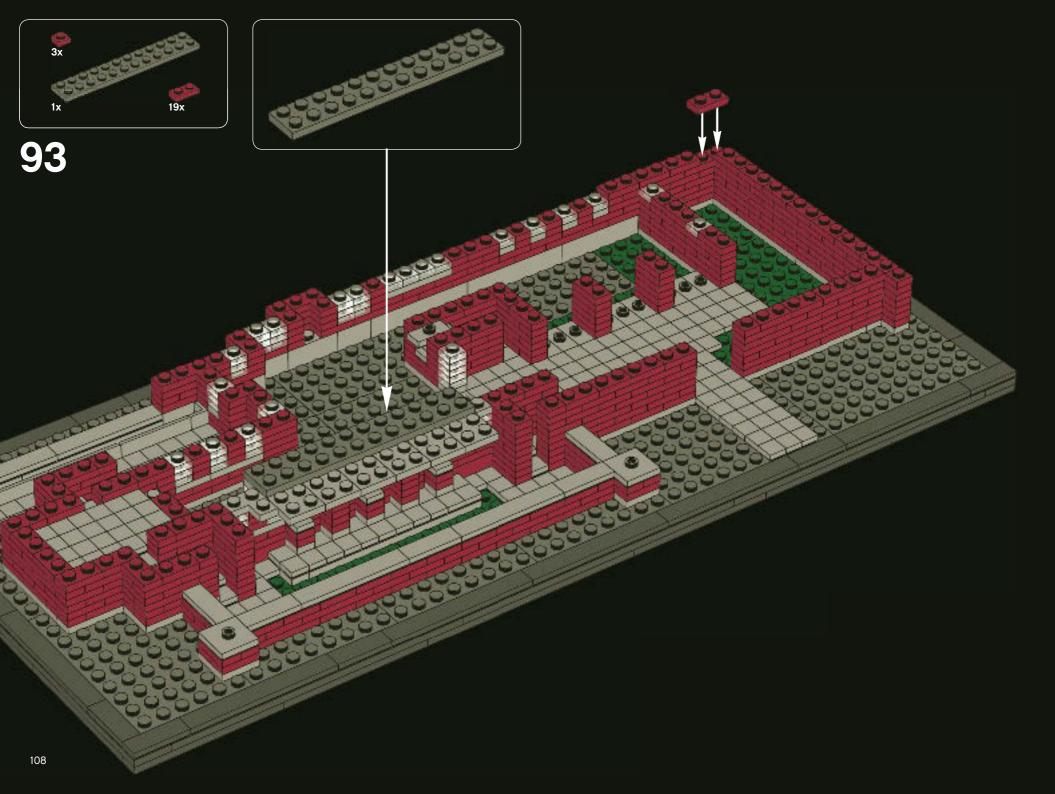






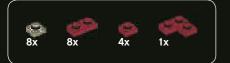






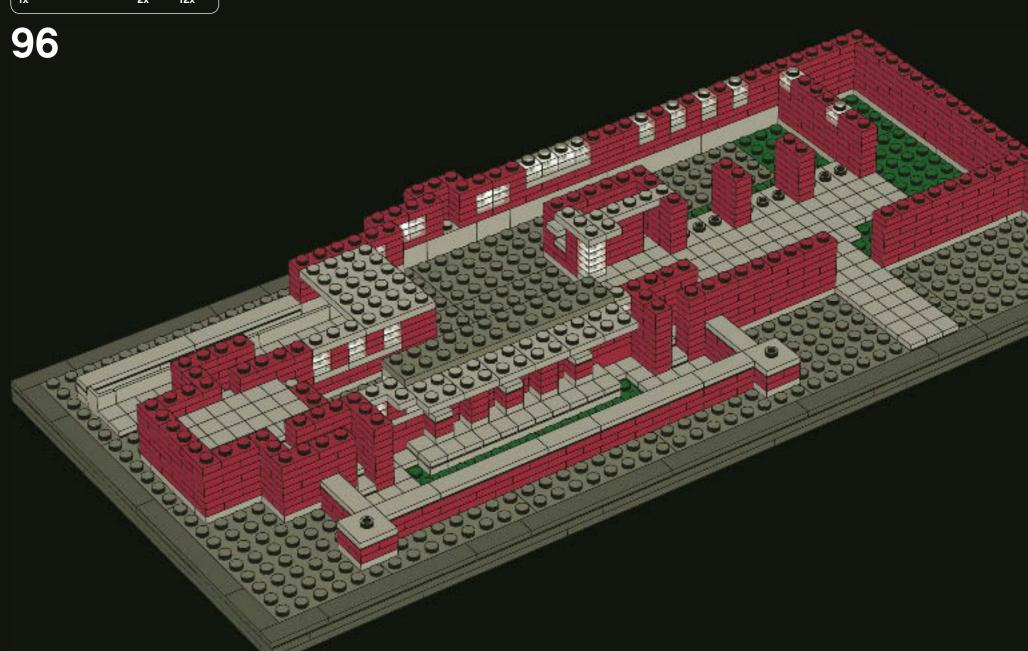




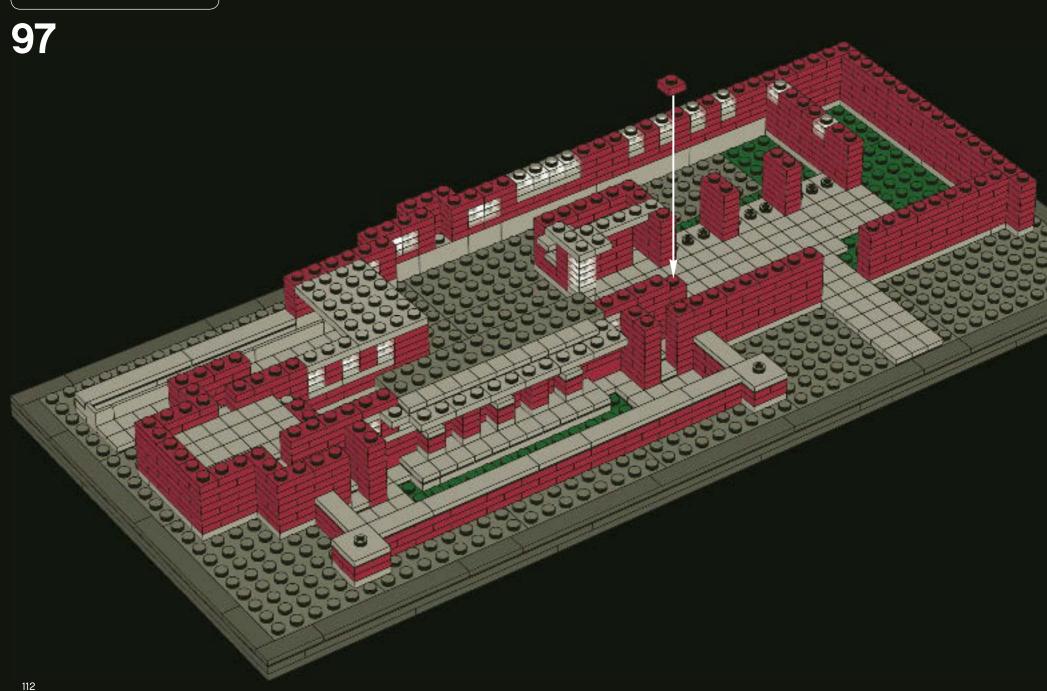


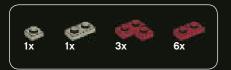


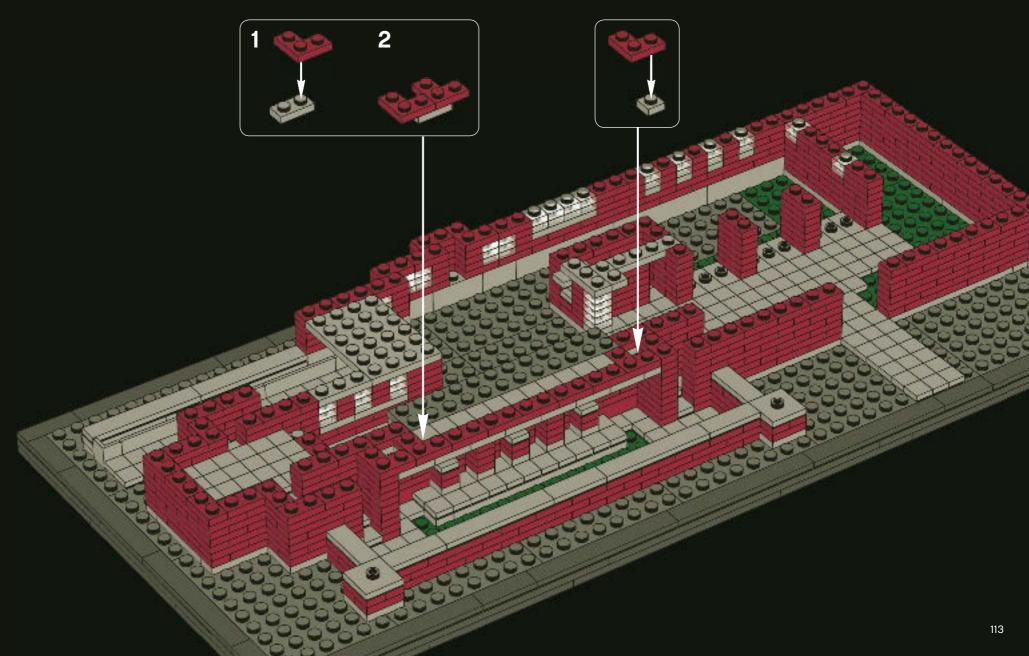






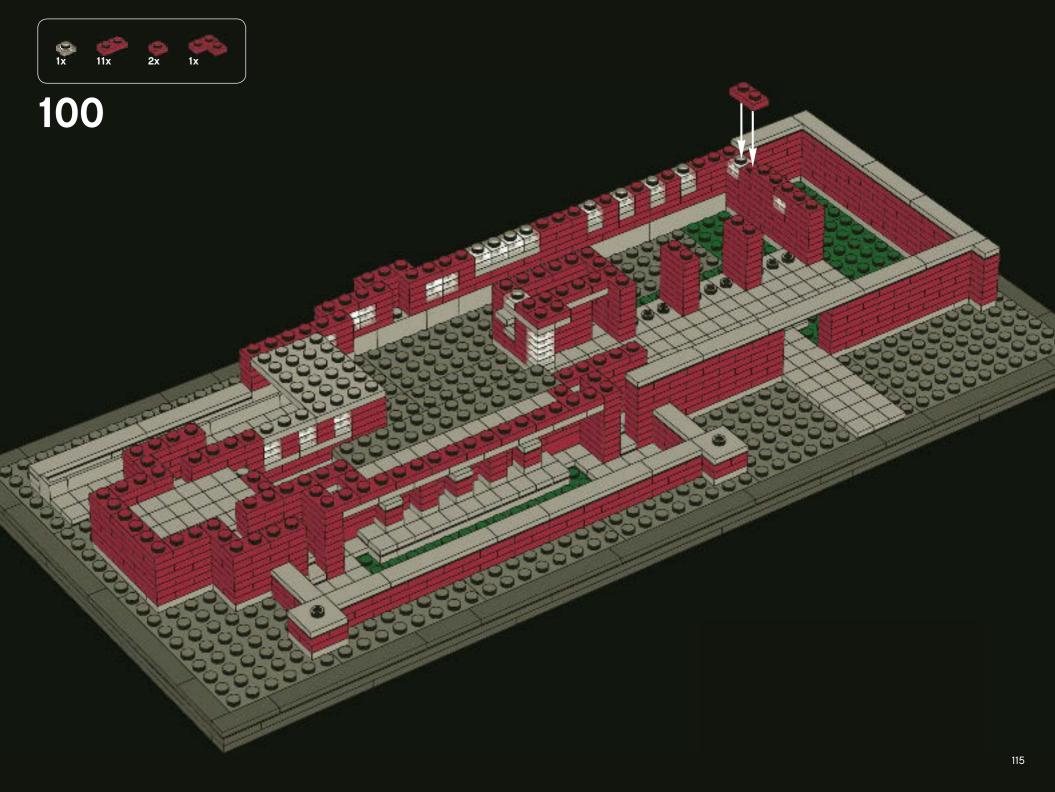




















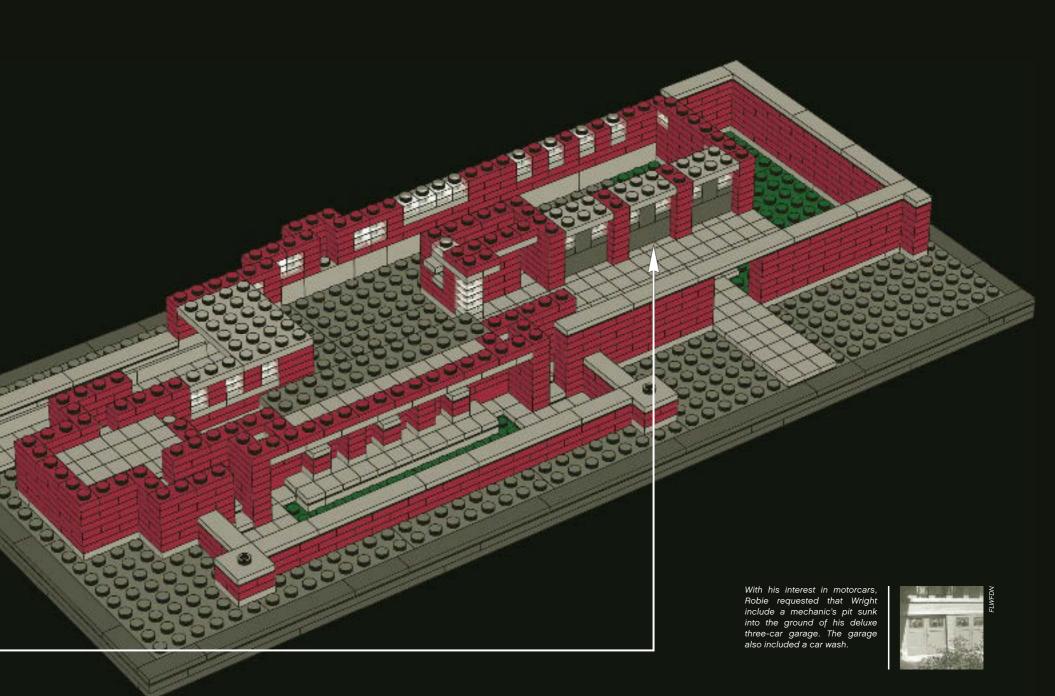


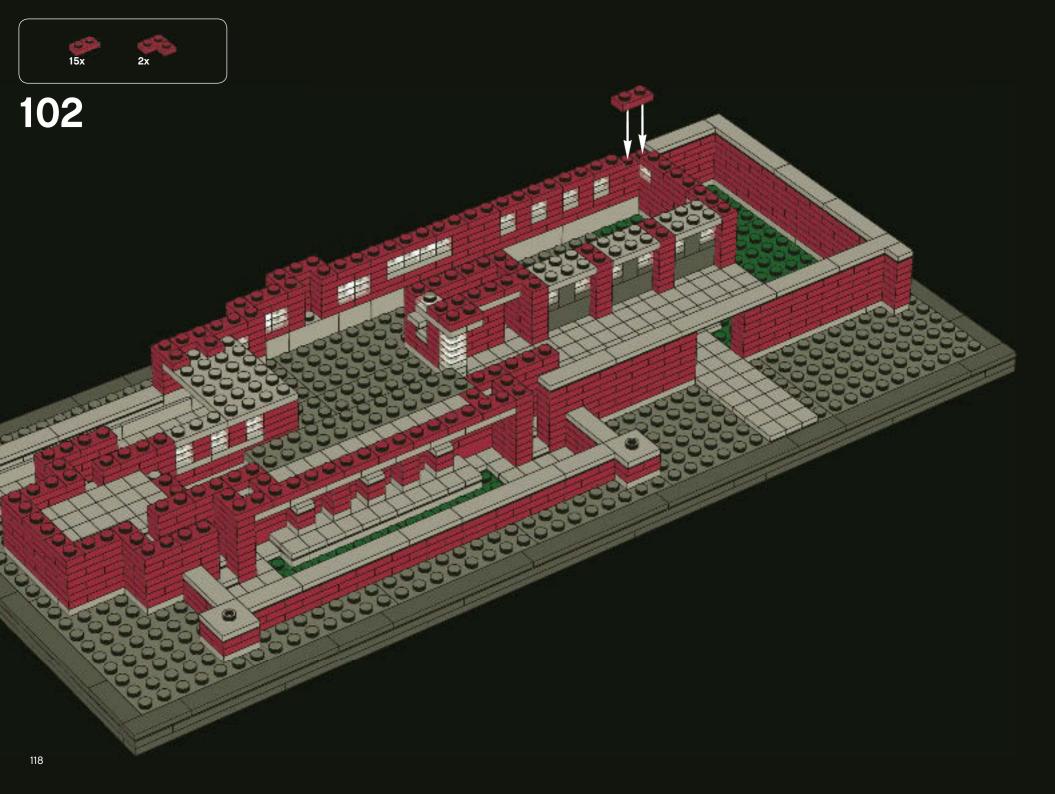


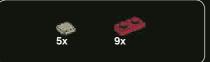




x

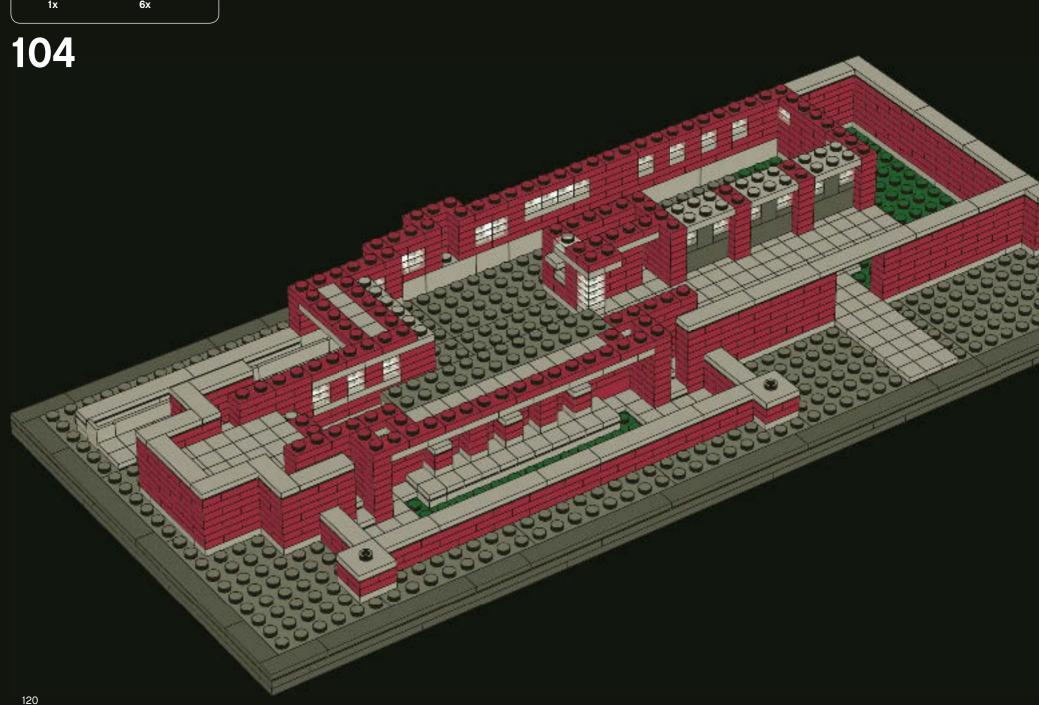


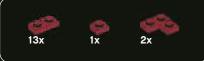


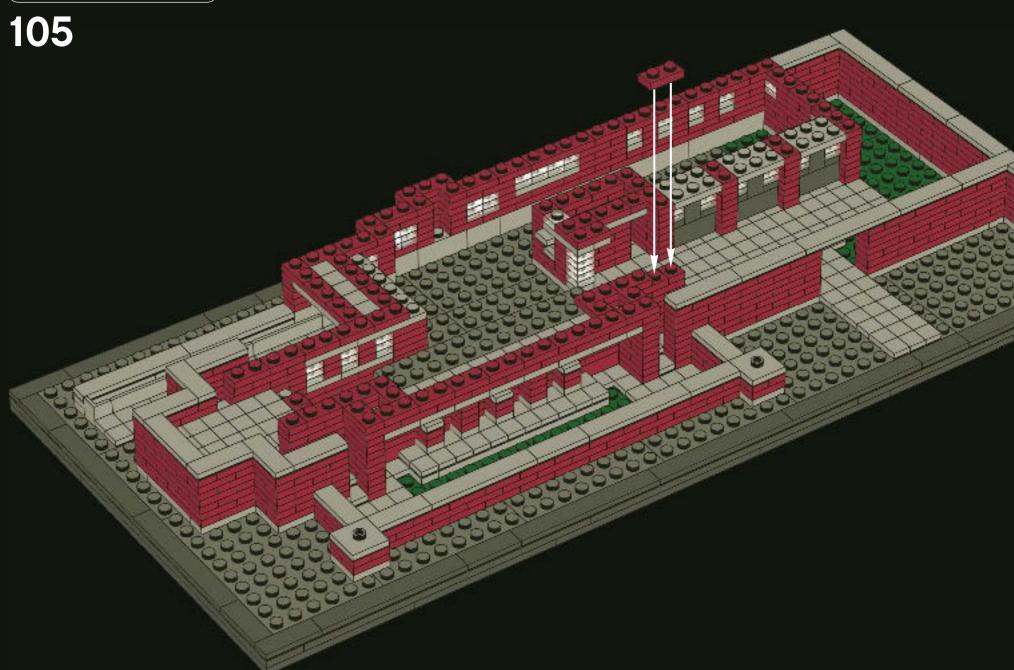


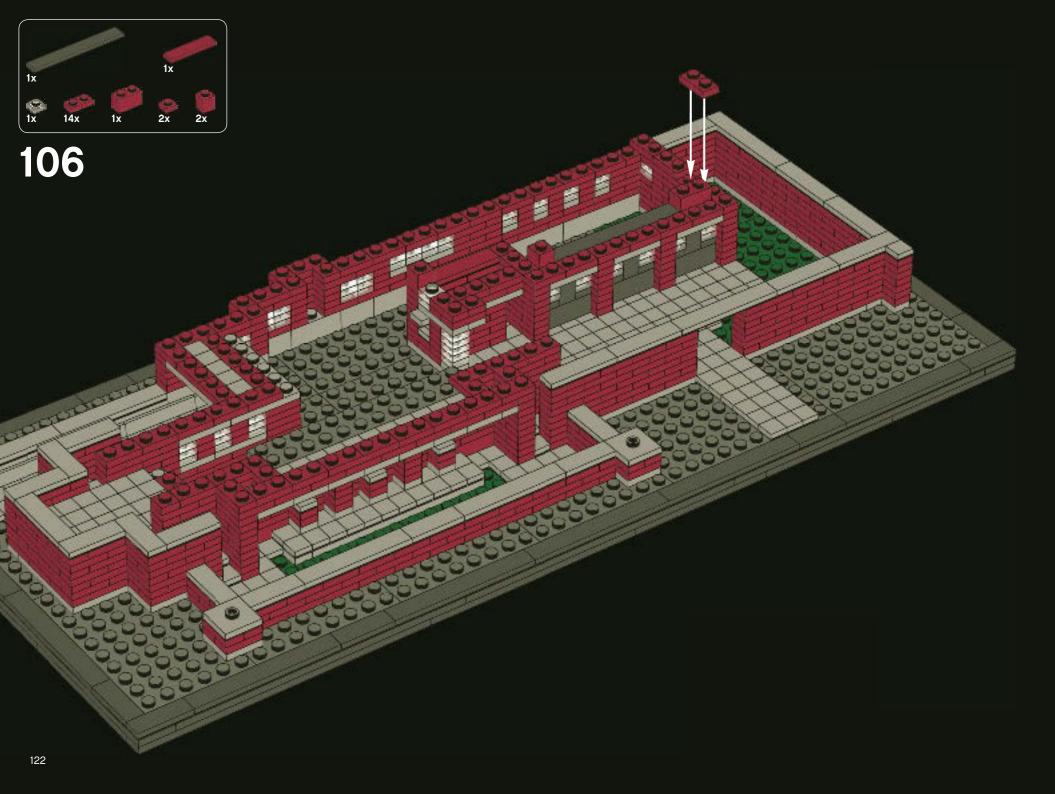










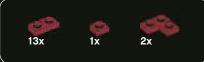




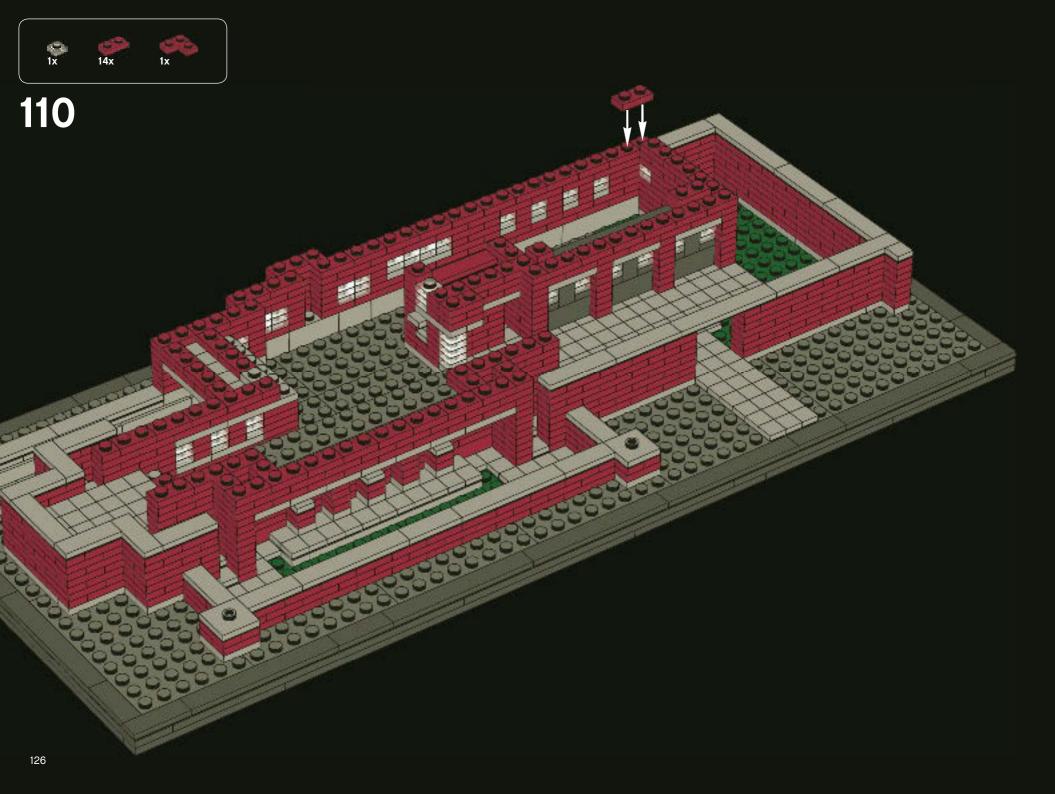


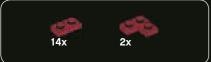








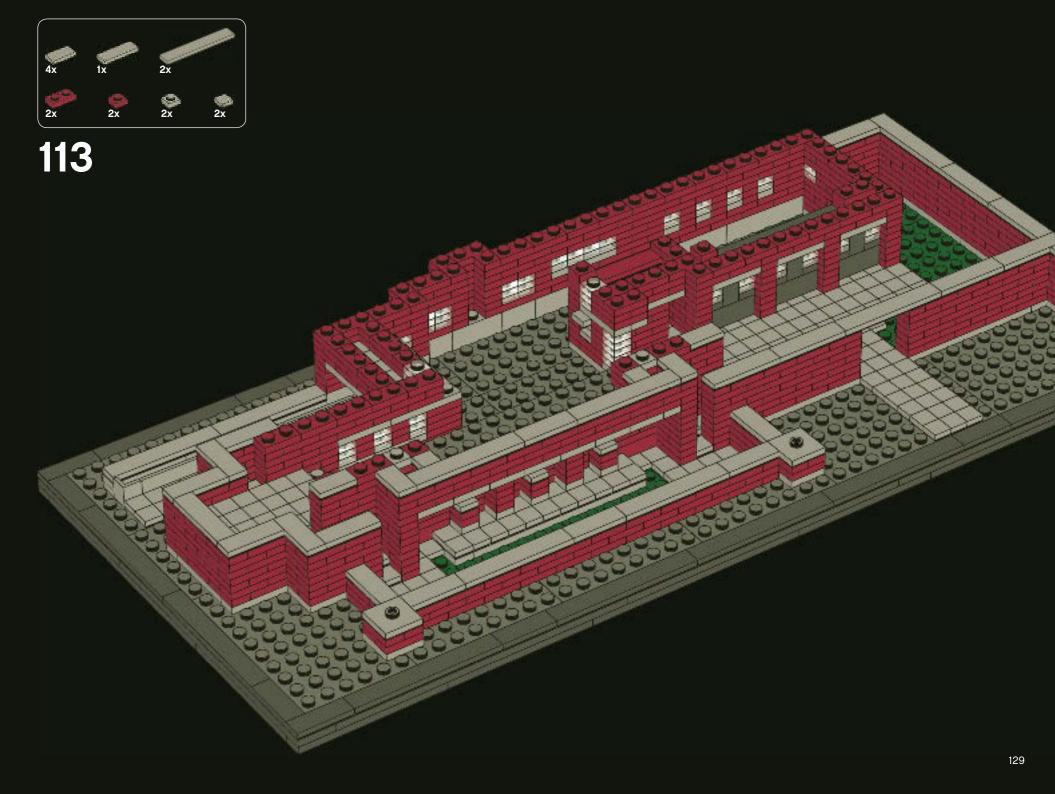


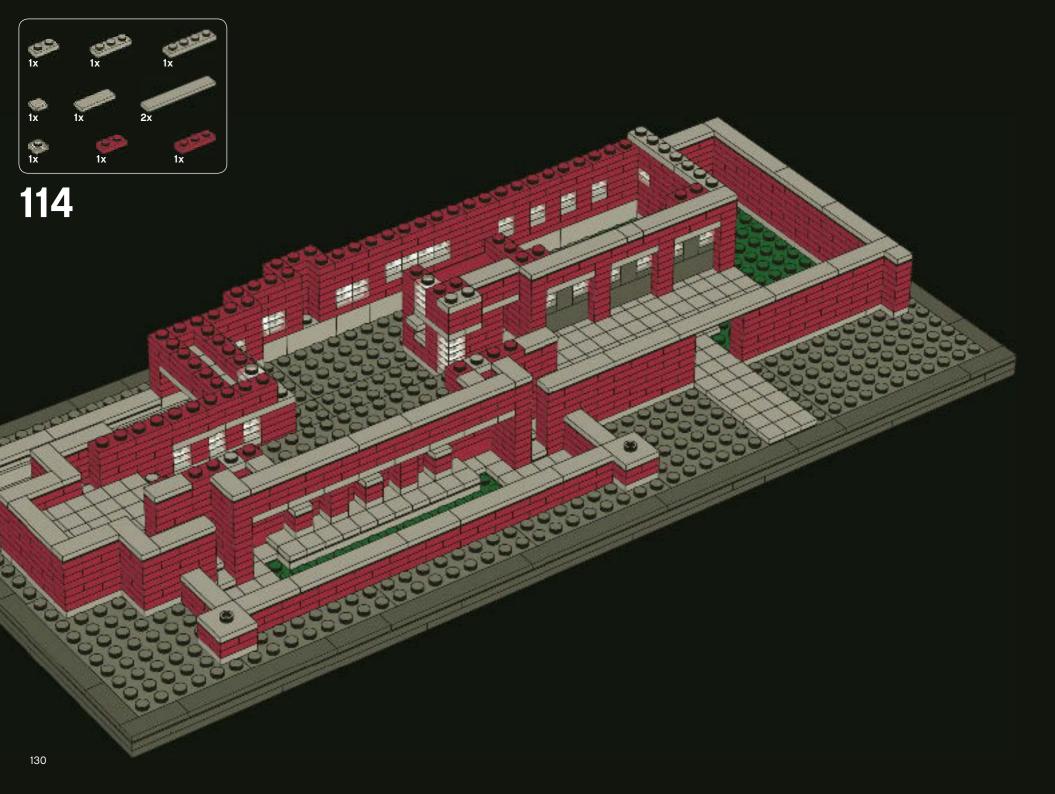






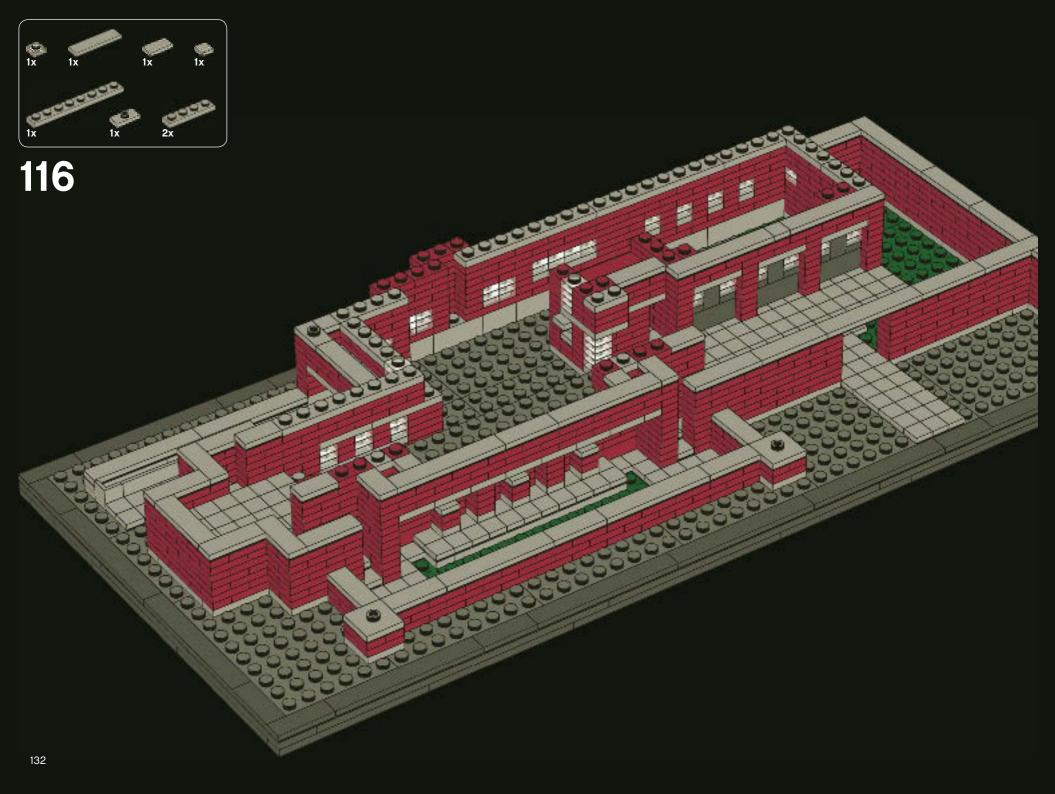


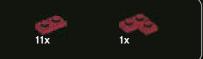






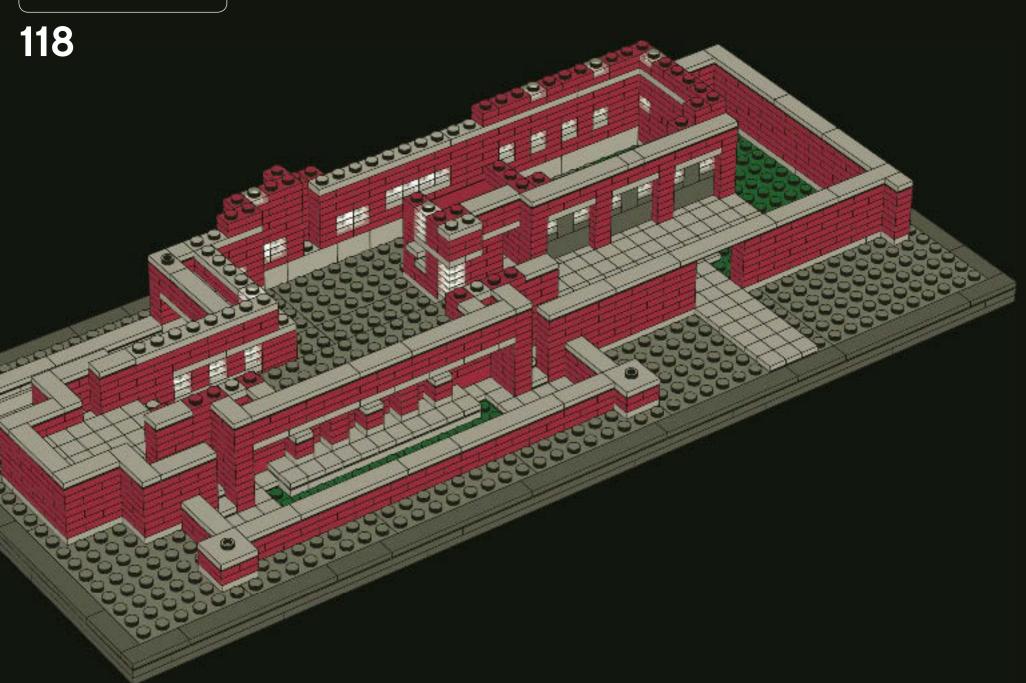






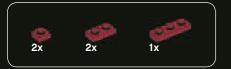


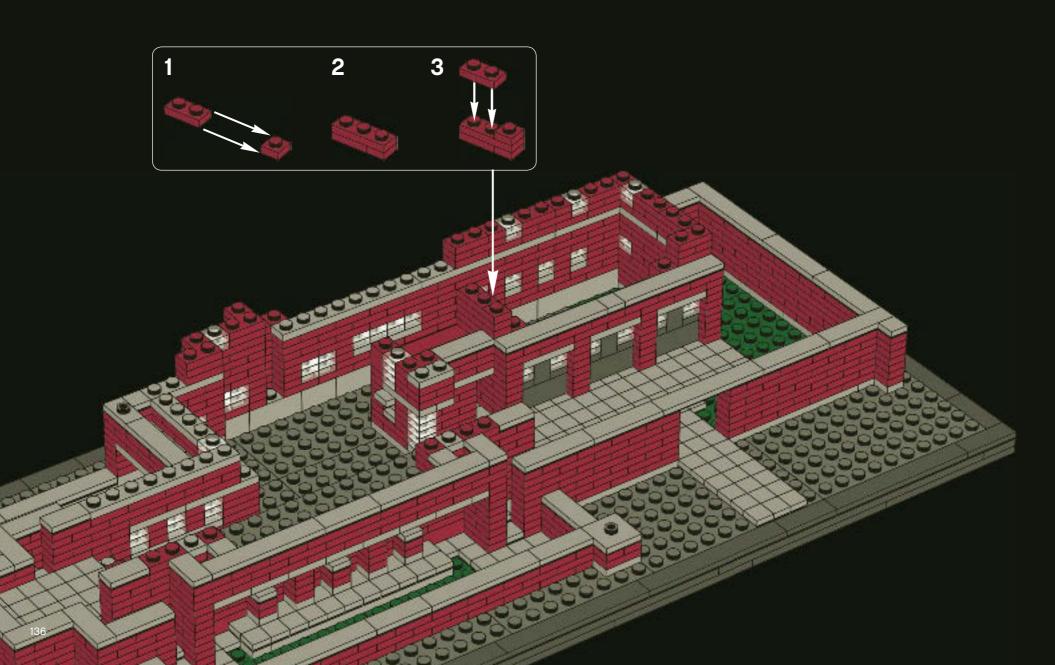


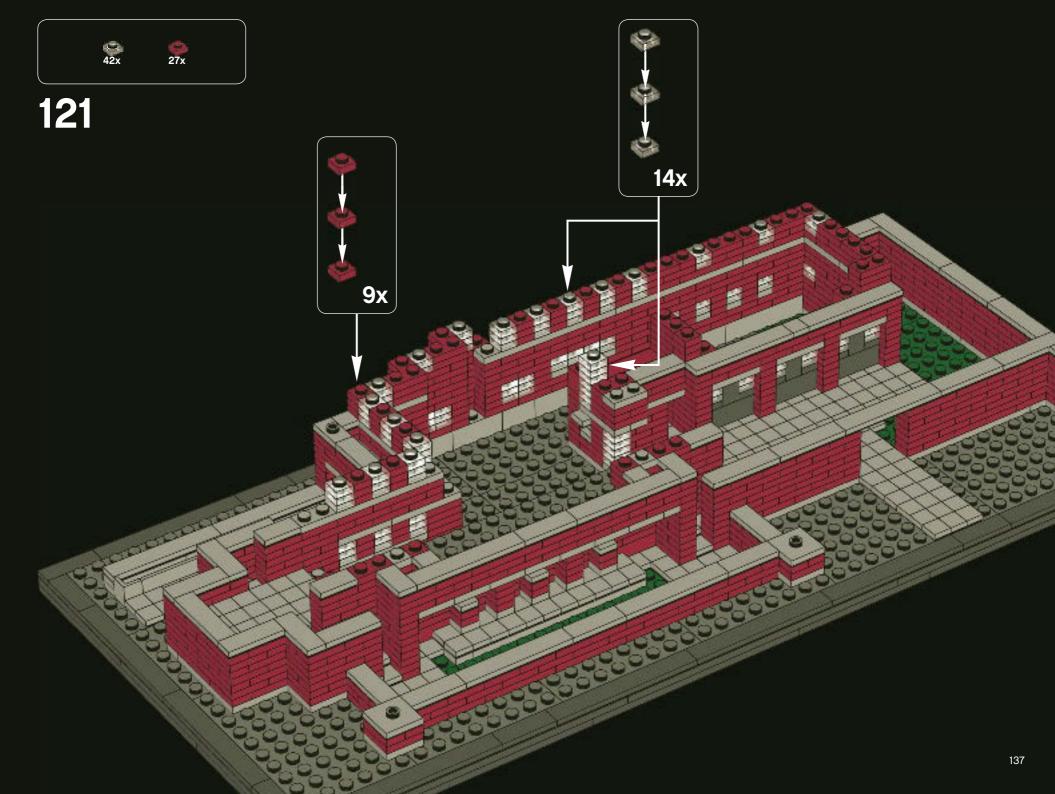


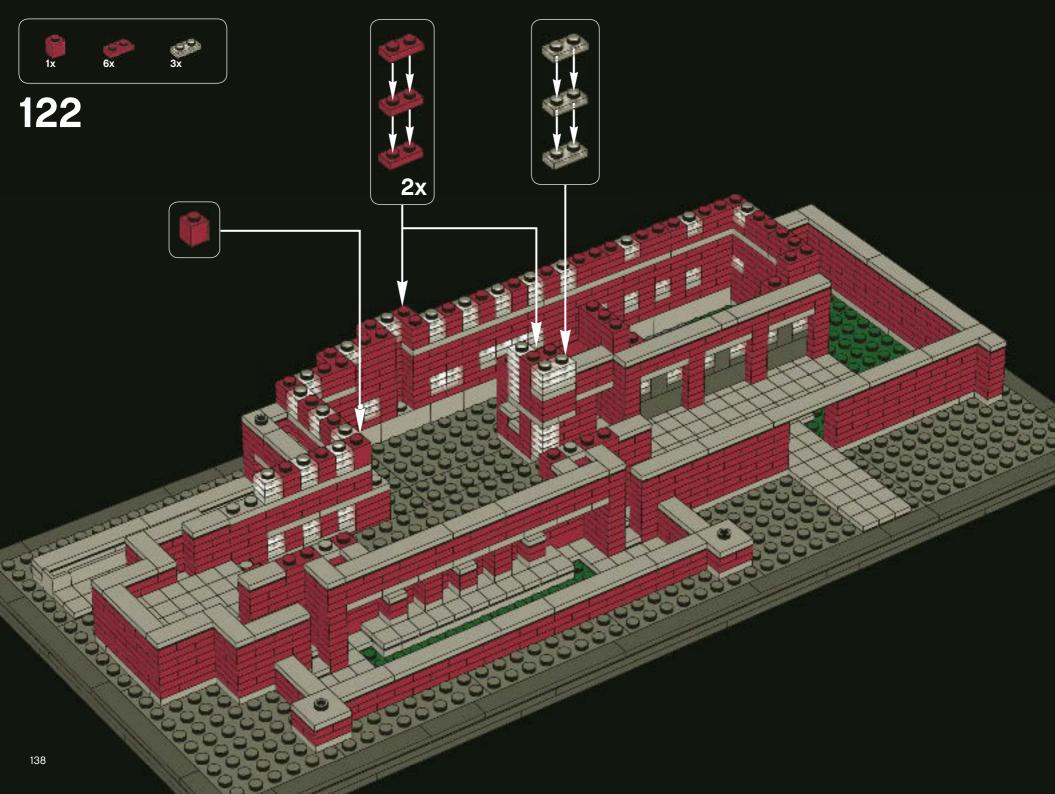




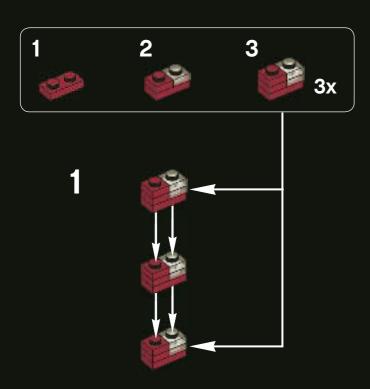






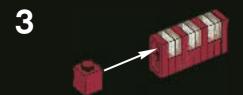


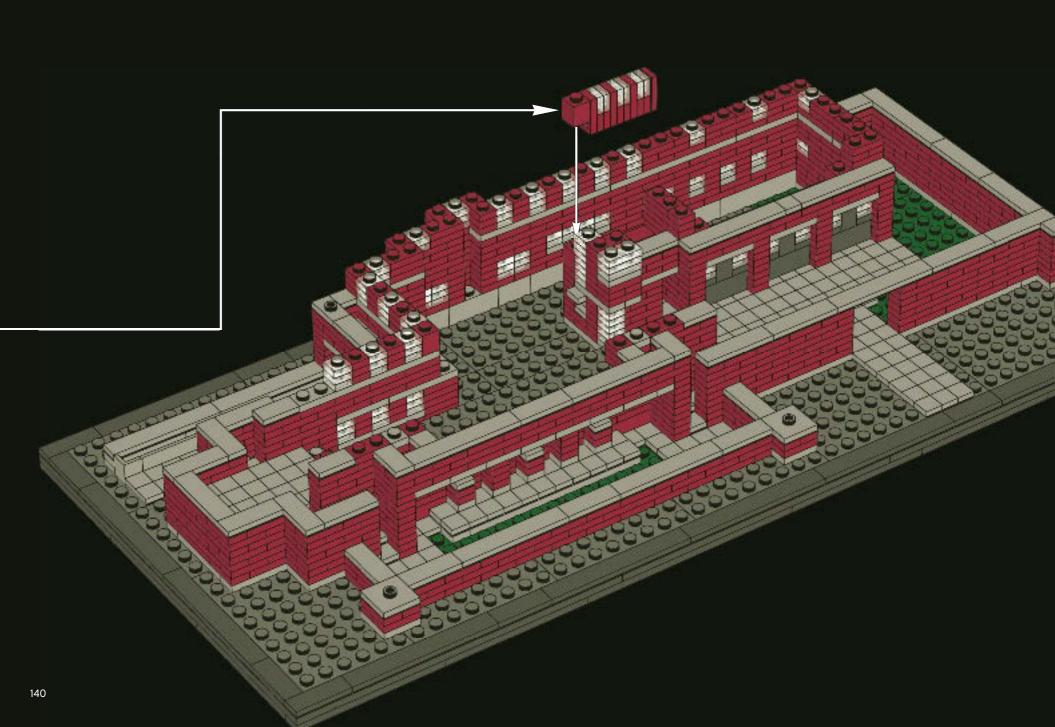




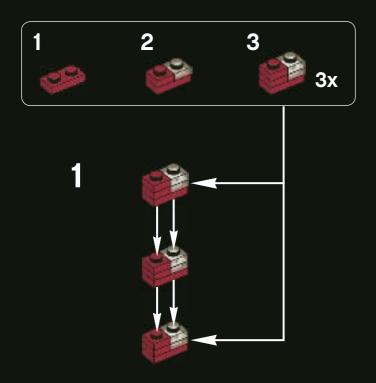




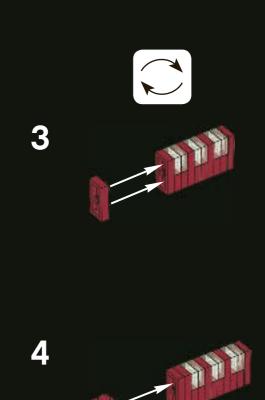


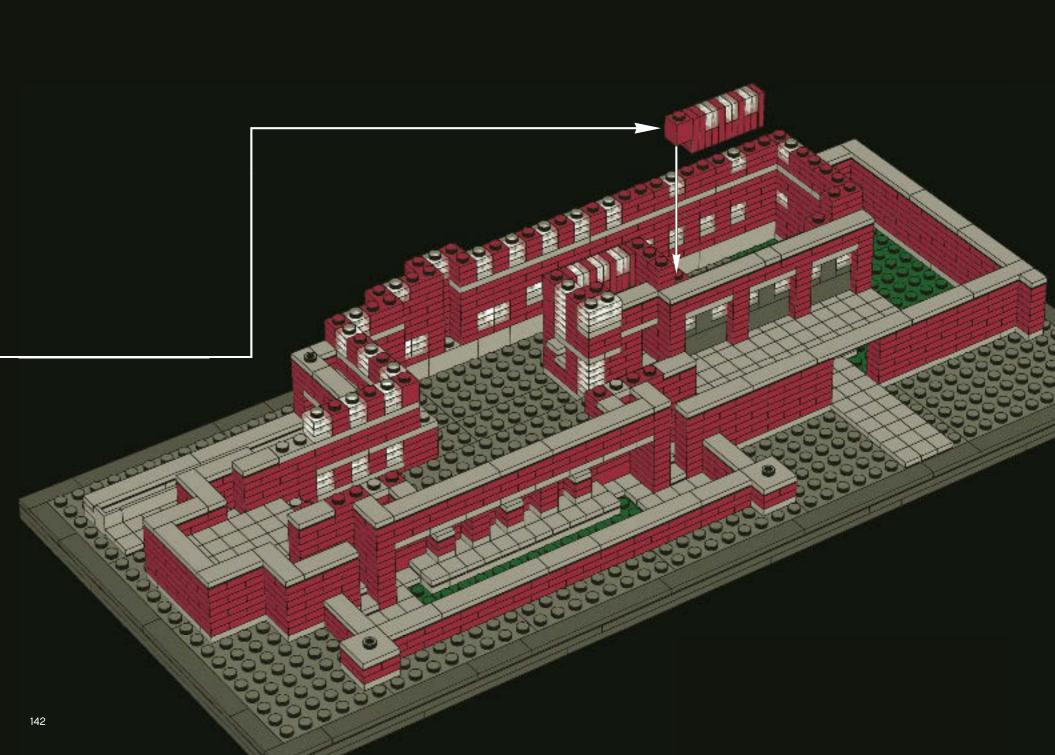




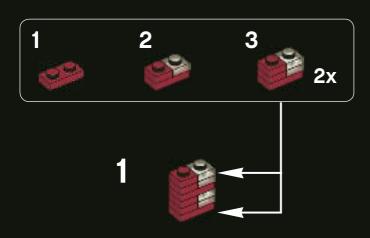




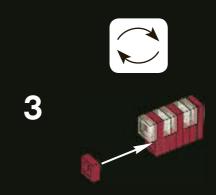


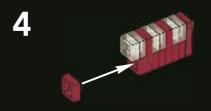


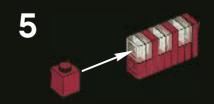


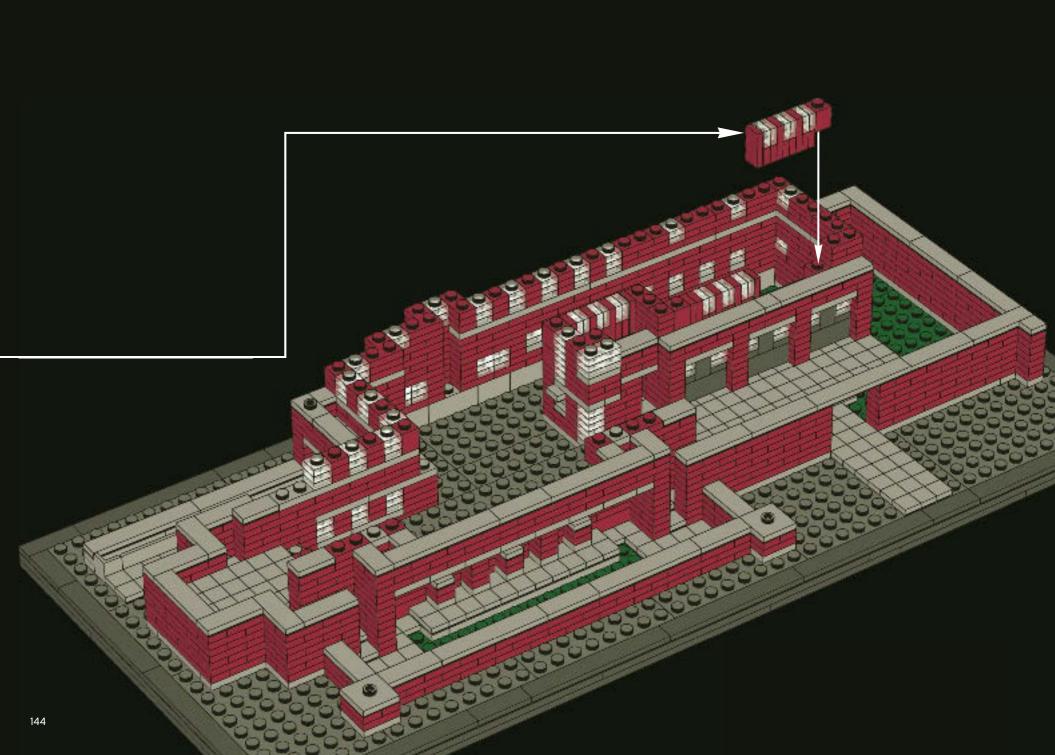


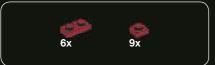




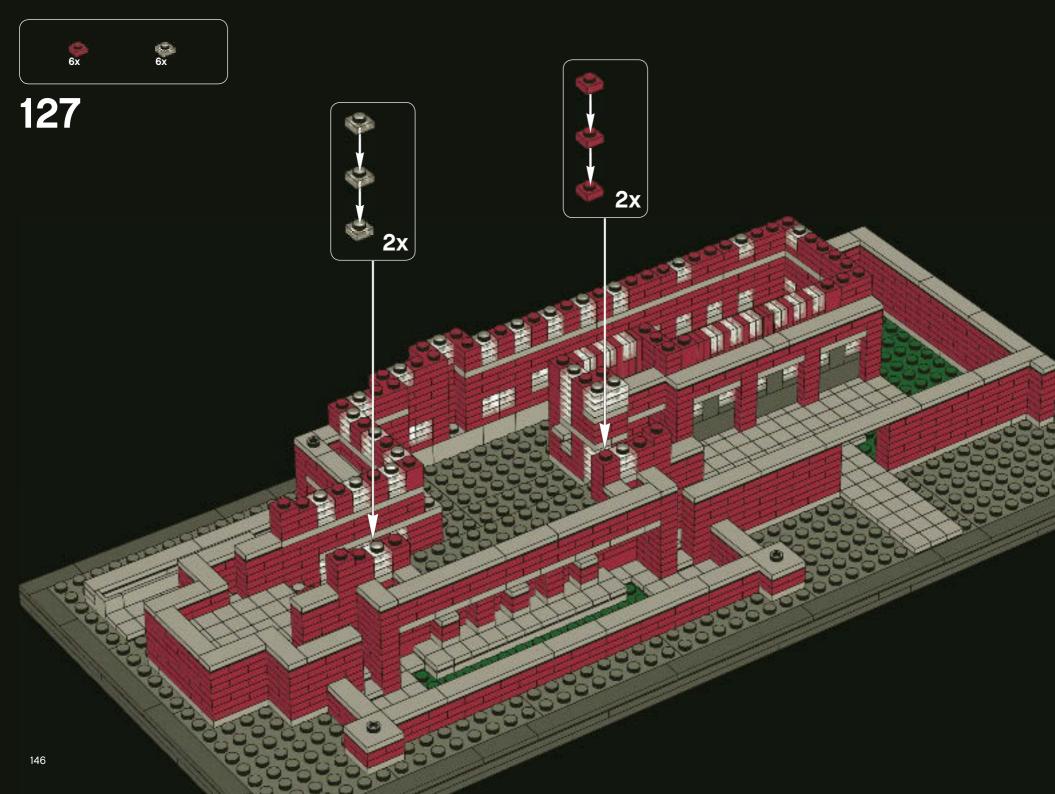


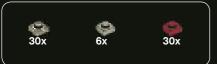


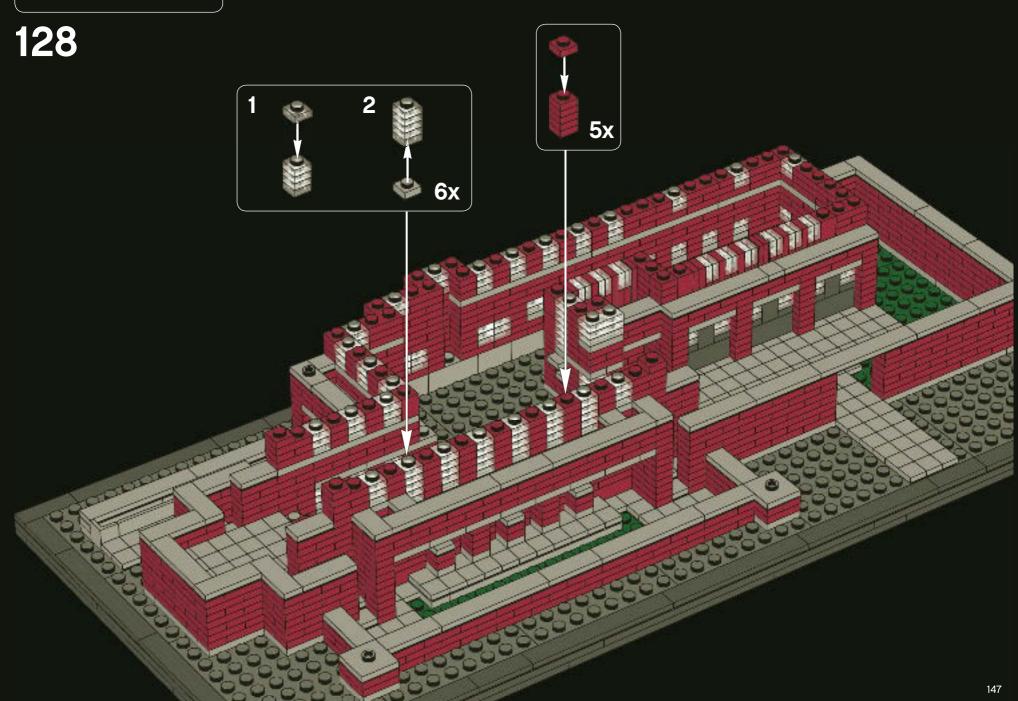


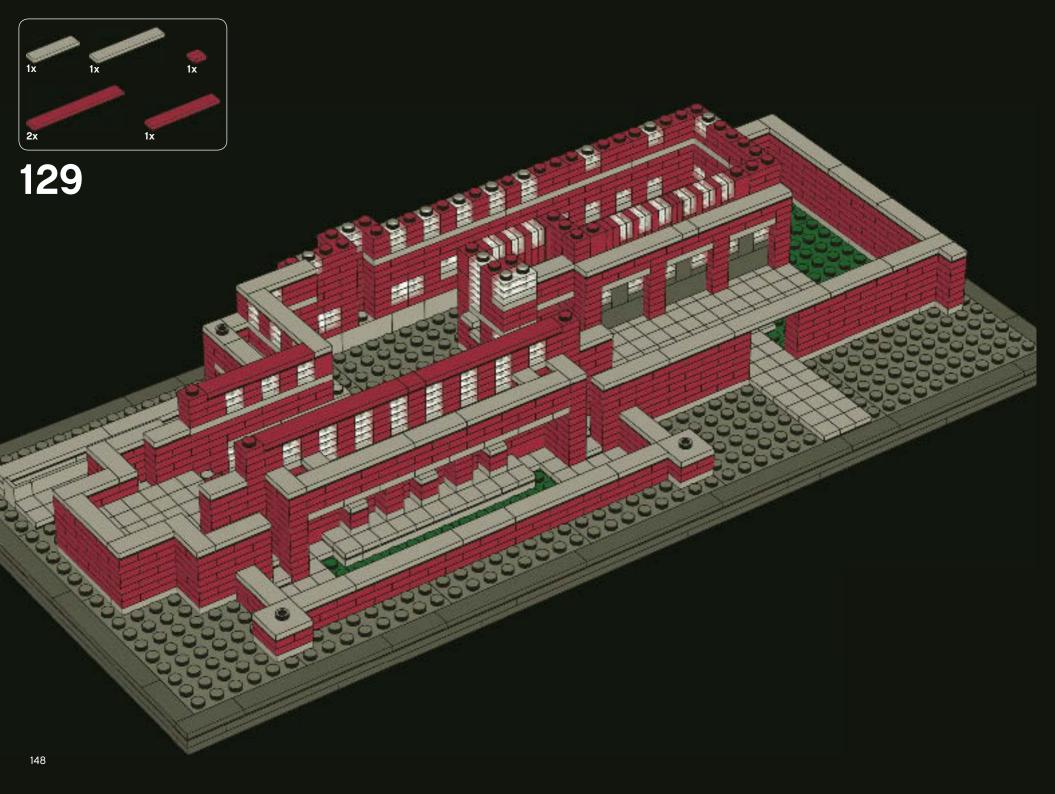


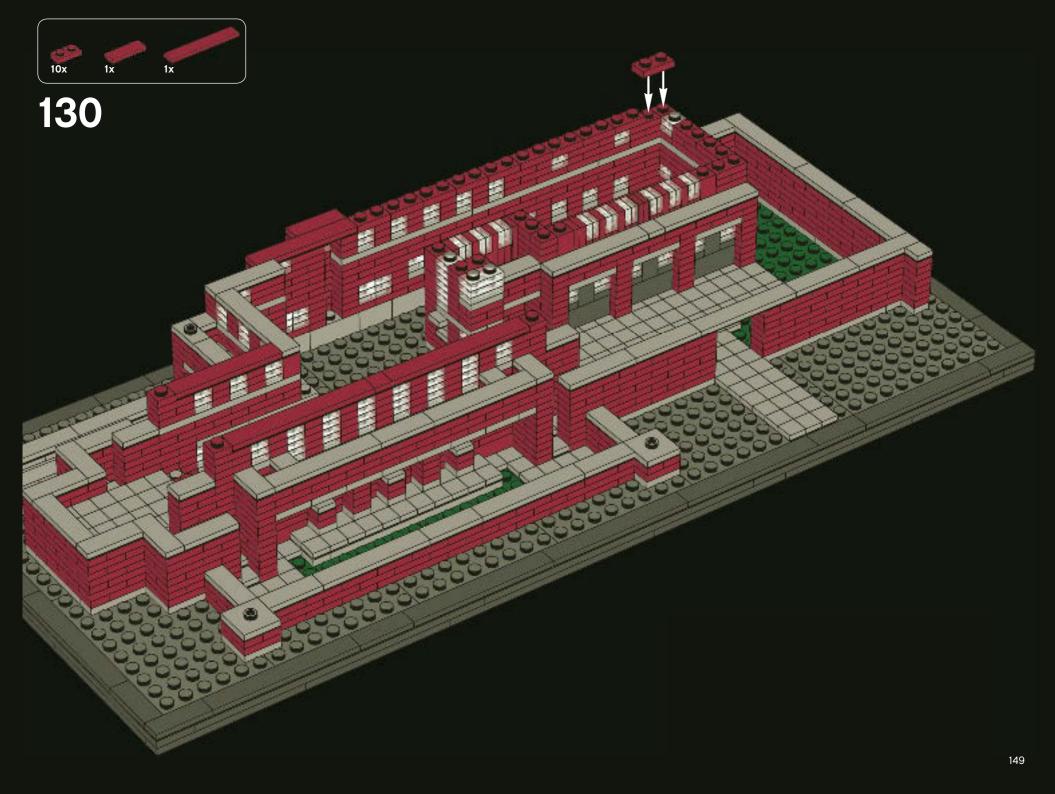
x



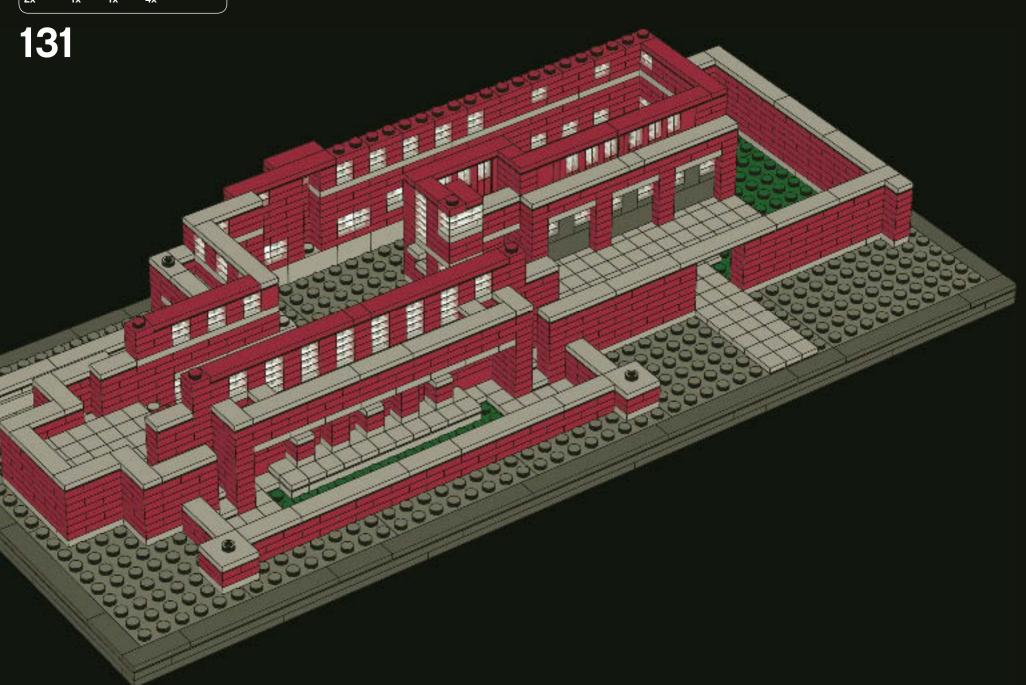










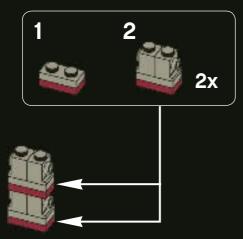












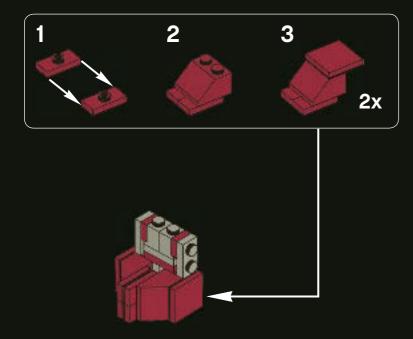


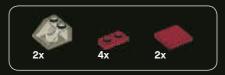


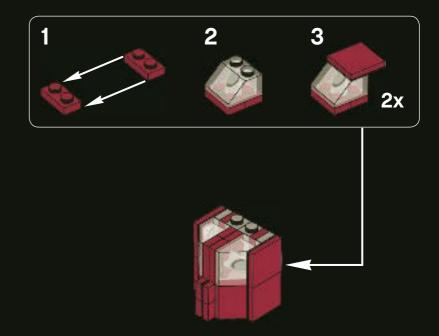


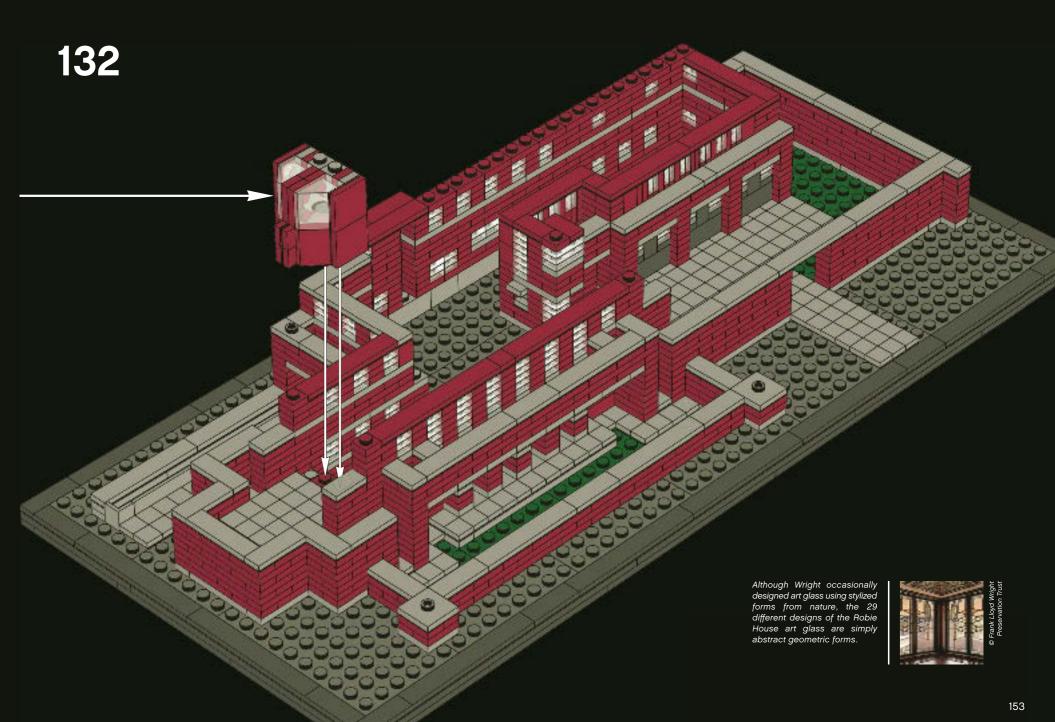




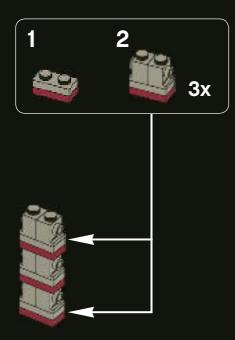




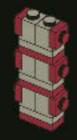








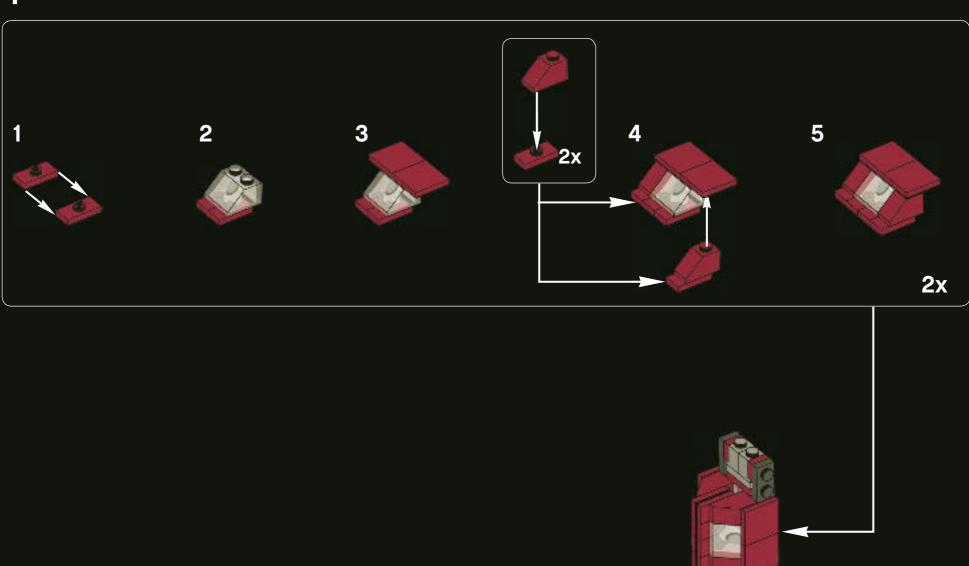




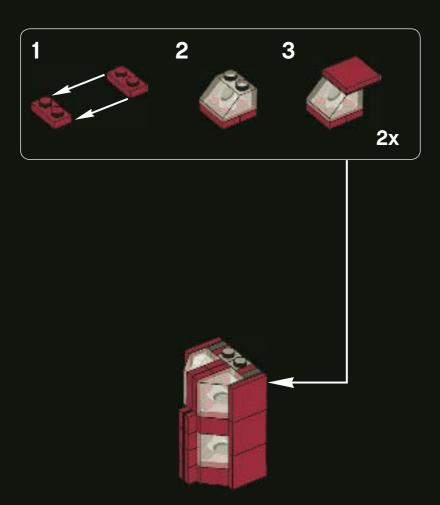


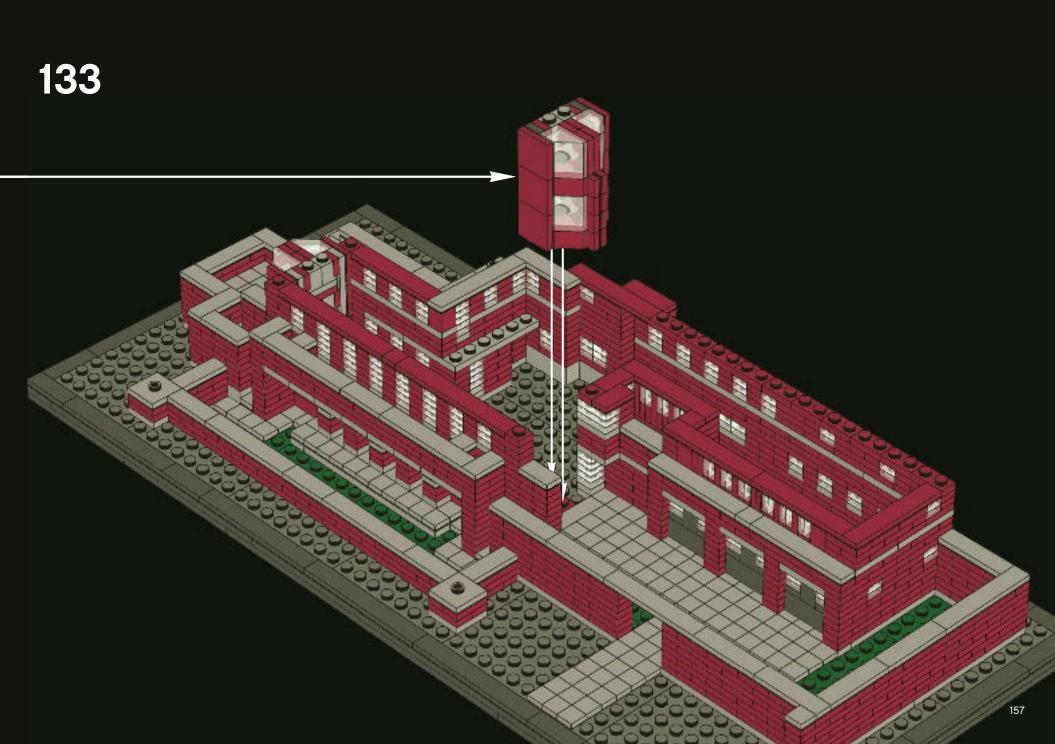


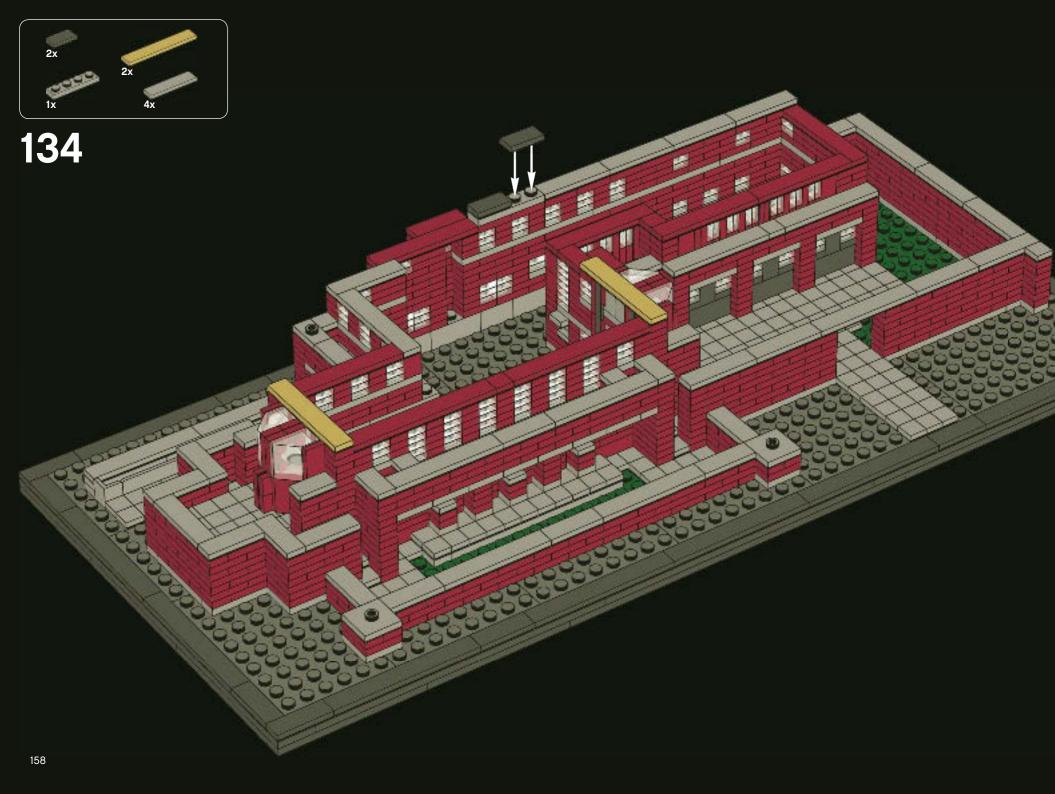




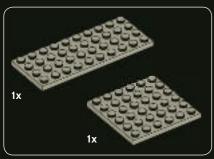


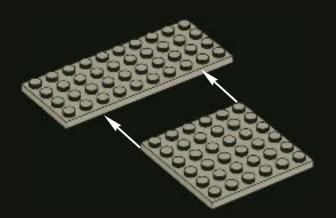




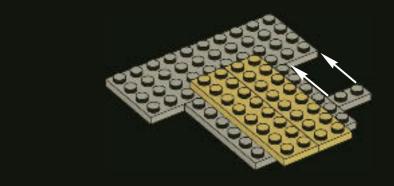




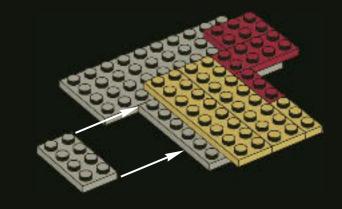


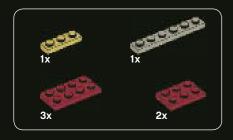


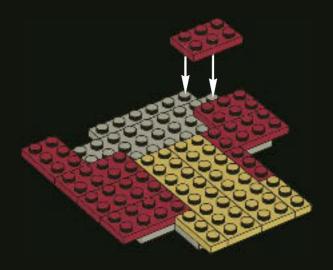




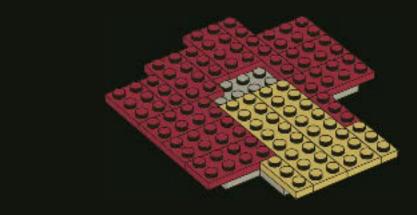


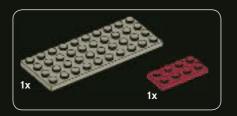


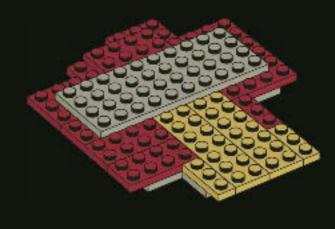




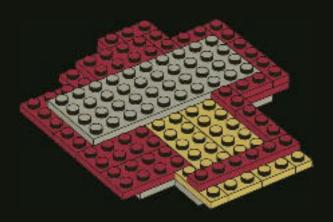




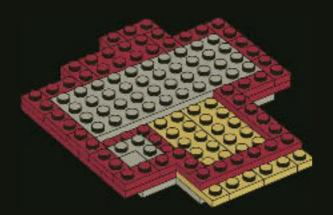


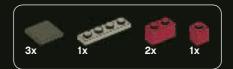


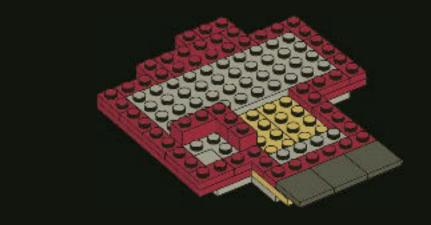


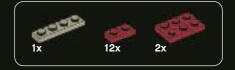


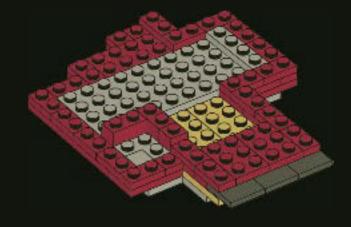


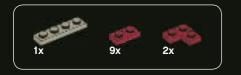


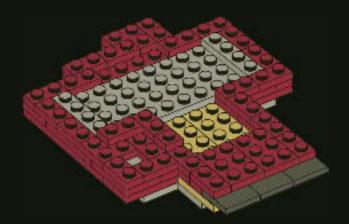




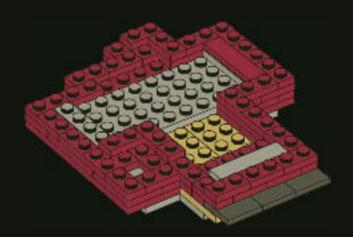




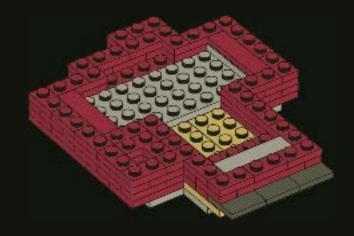


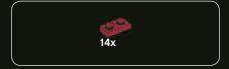


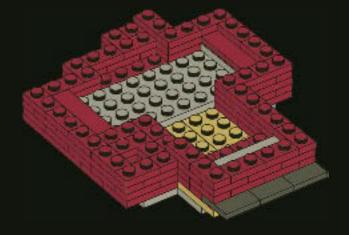




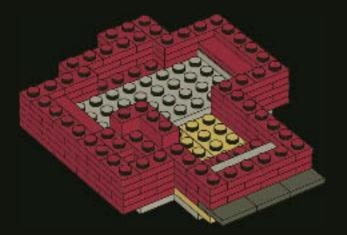


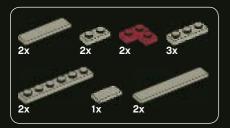


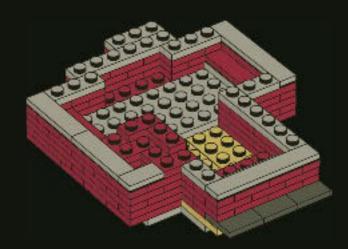




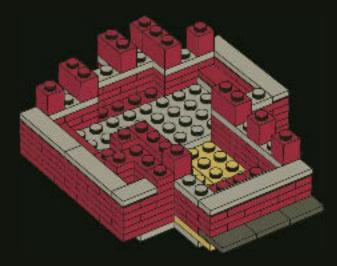


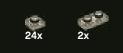




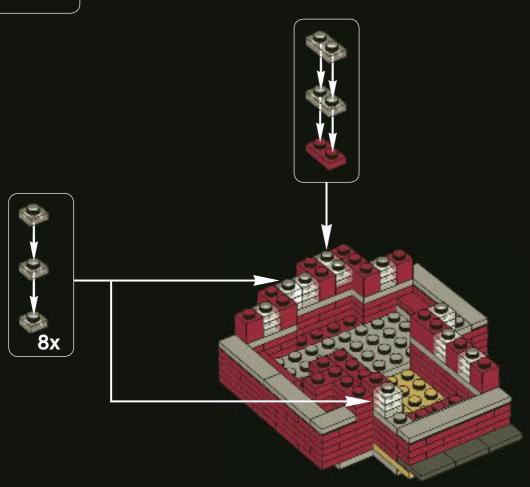




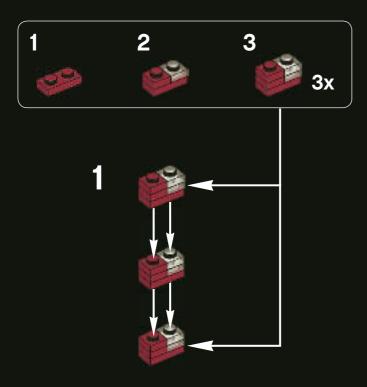




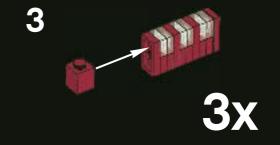


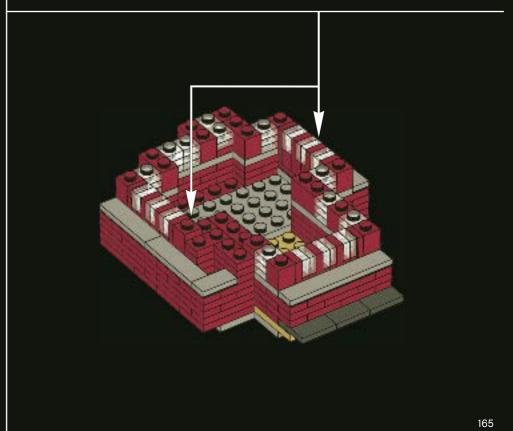


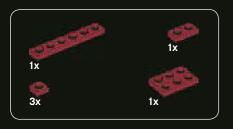


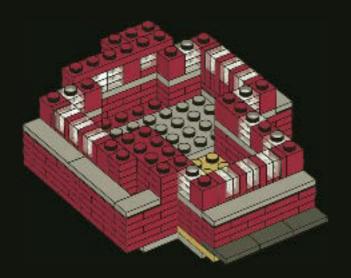


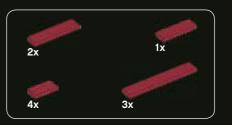


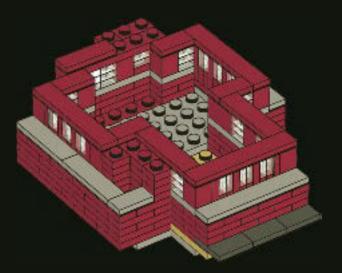




















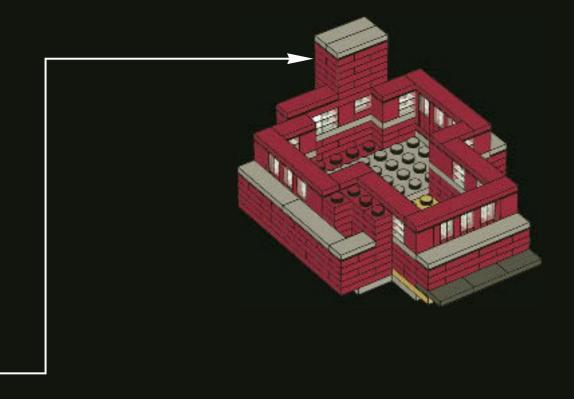




















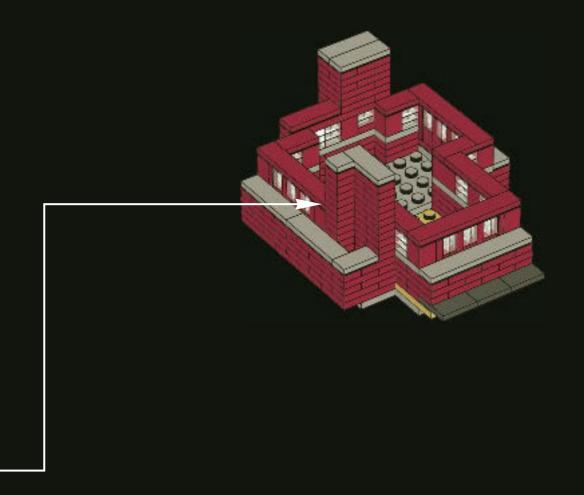


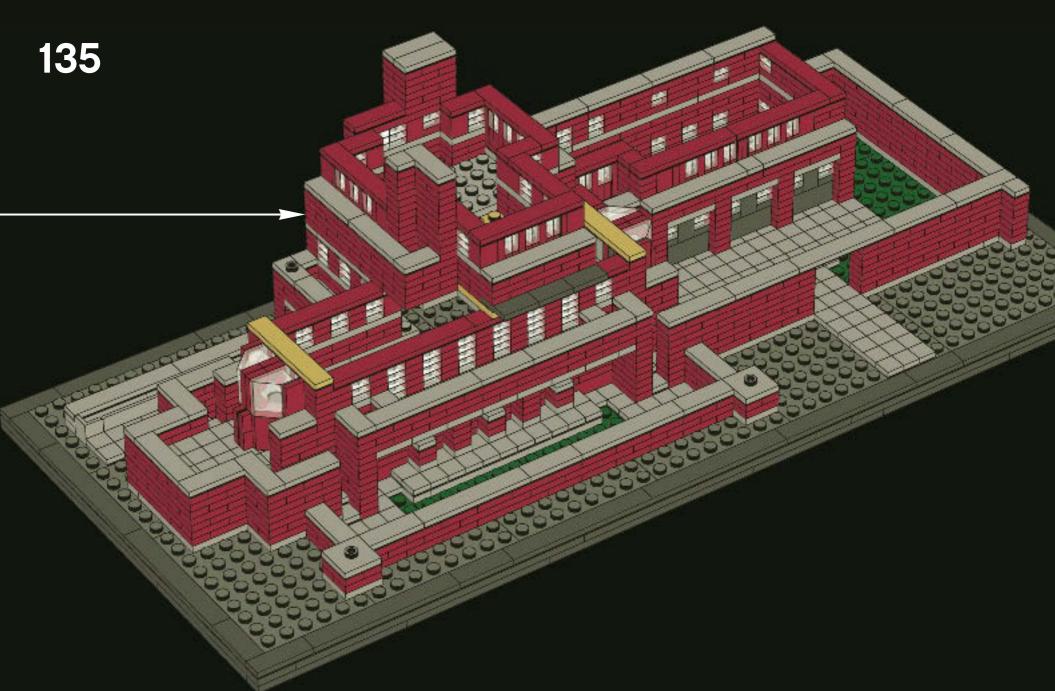


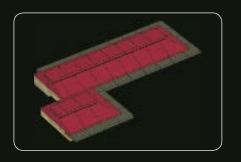




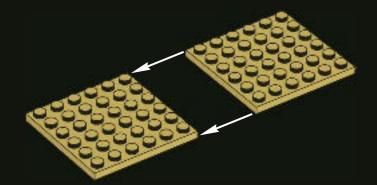




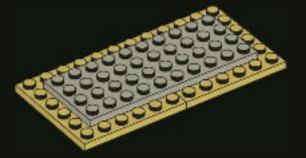




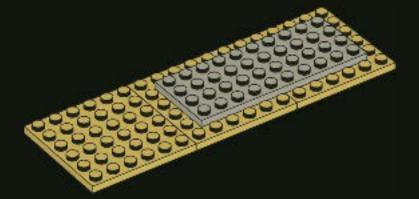




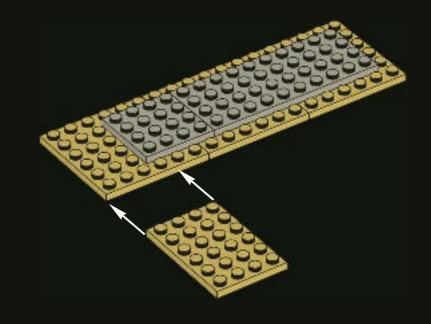




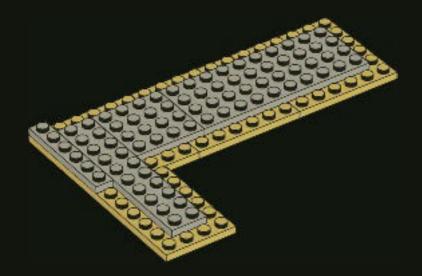


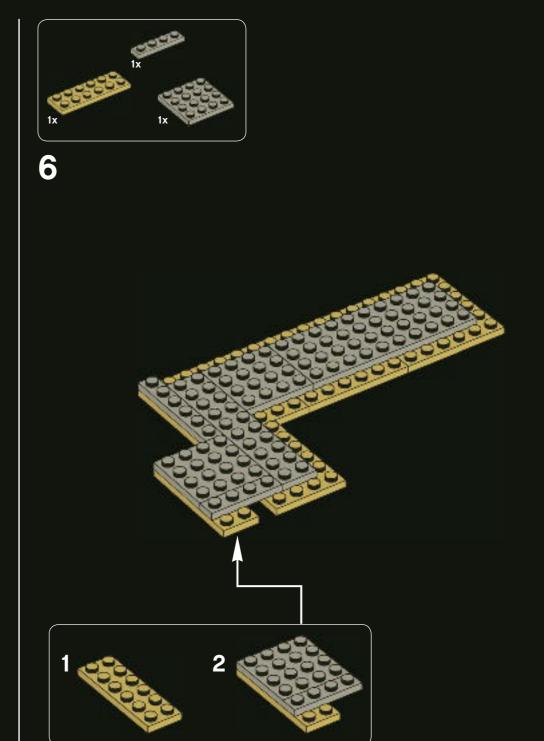




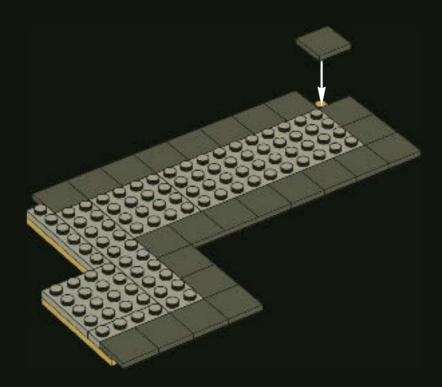




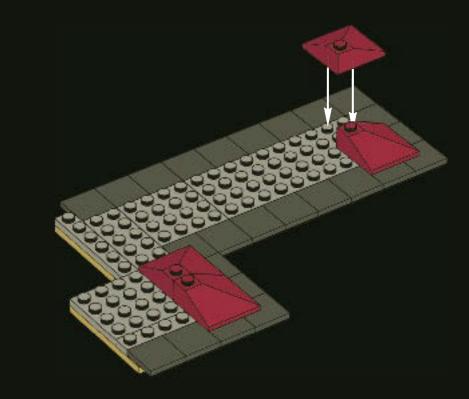




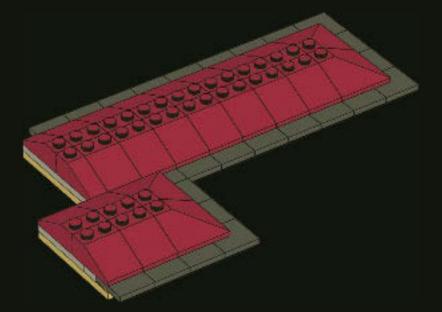




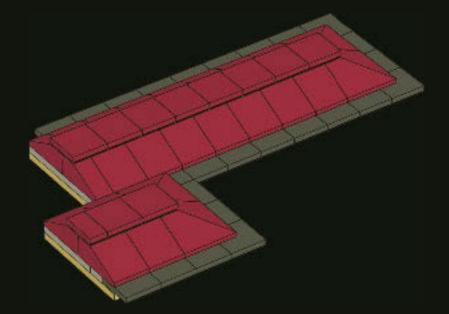




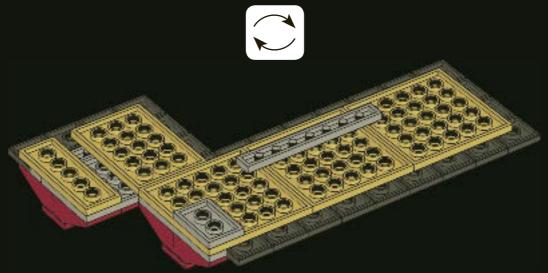


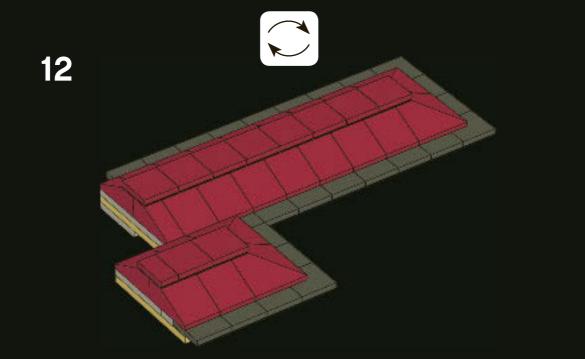


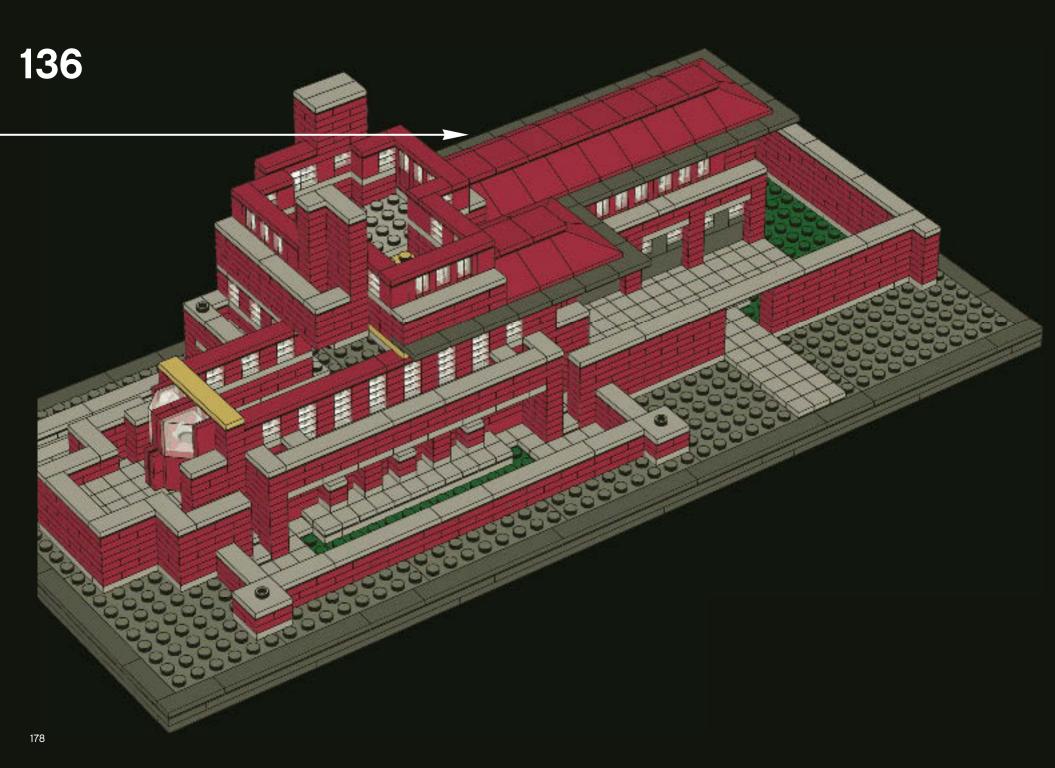






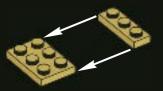














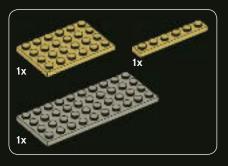




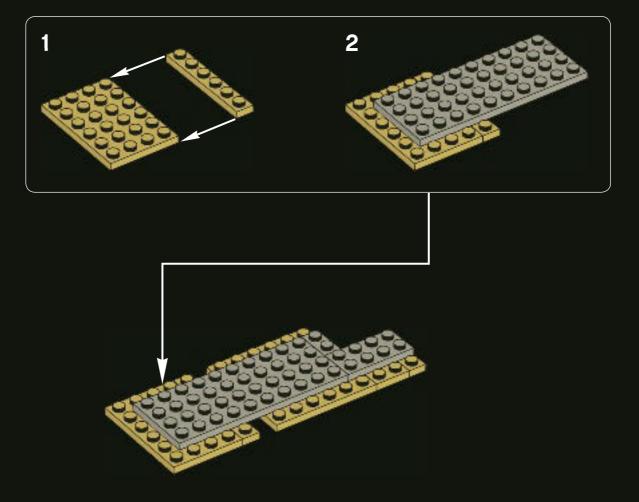


Restoring the roof back to its 1910 appearance was only made possible by the discovery of a small number of original tiles that had been stored in the house's wine cellar. The custom-made reproduction "hip" and "ridge" tiles fit tightly to the planes of the roof deck, as they would have done when the house was first built.

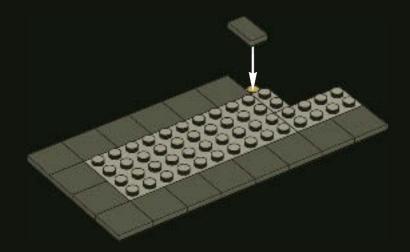




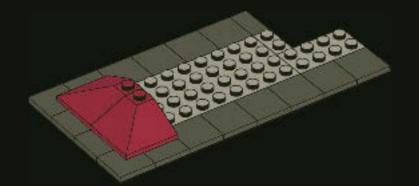




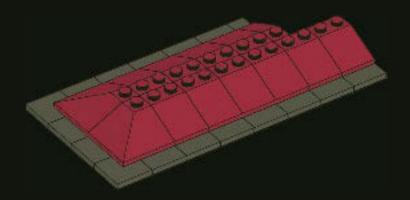






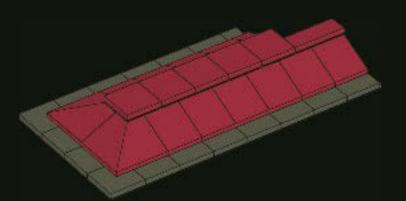




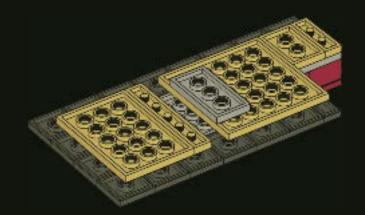


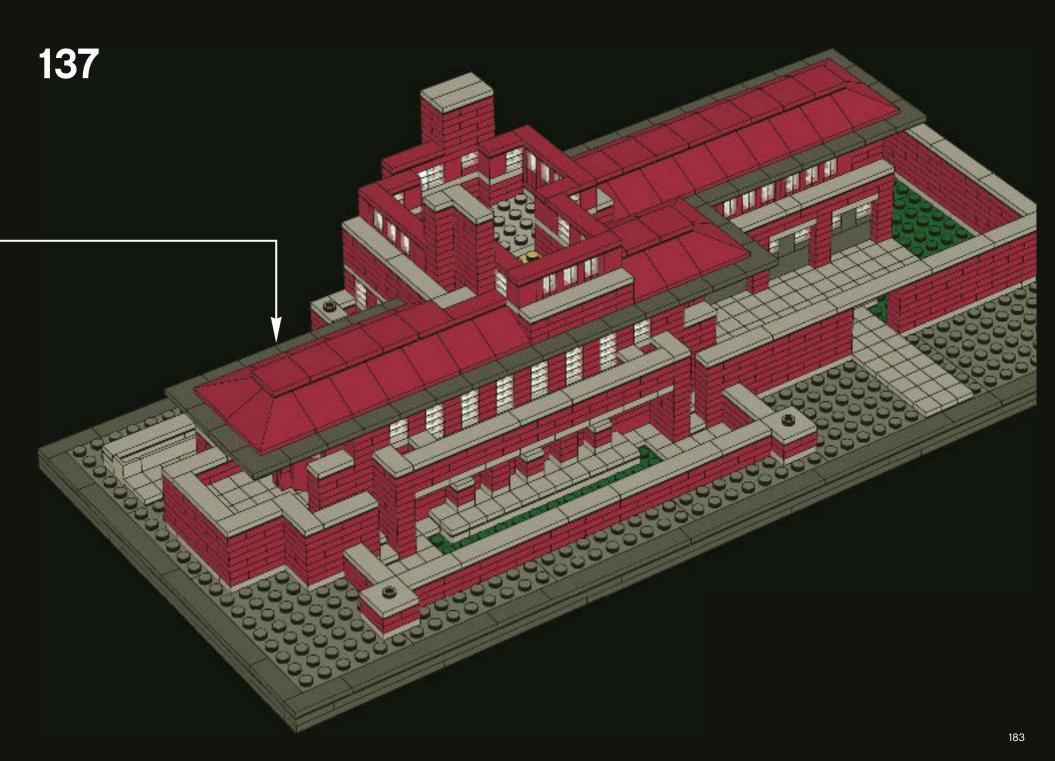


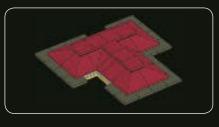




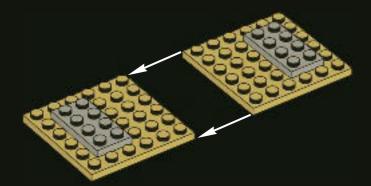




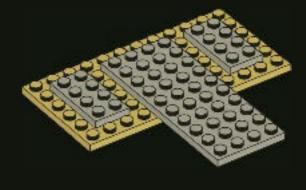


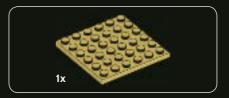


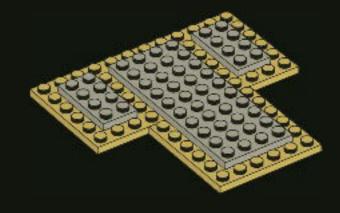


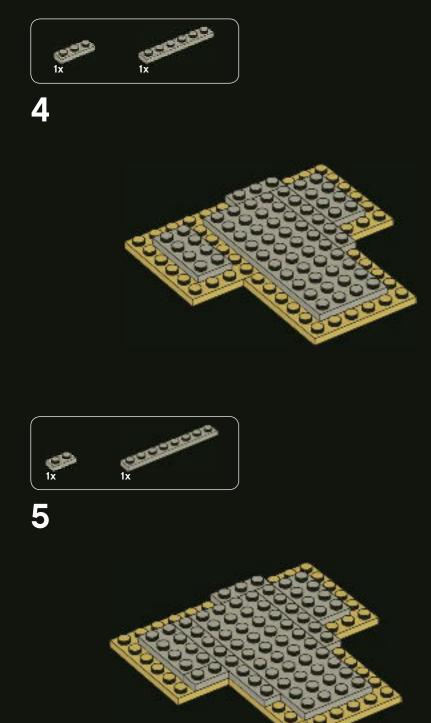


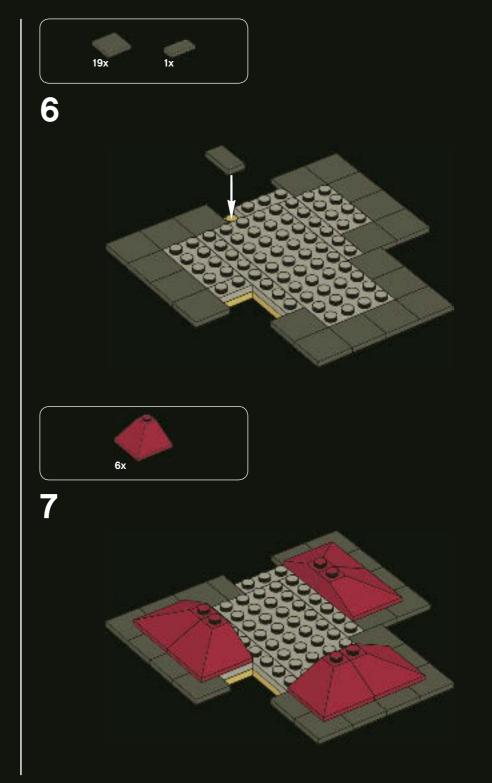




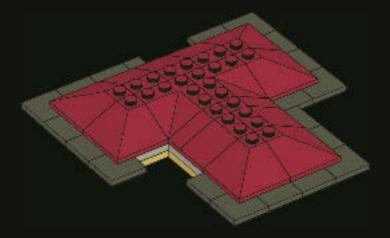




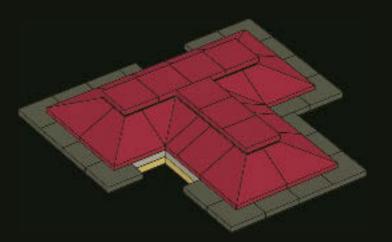


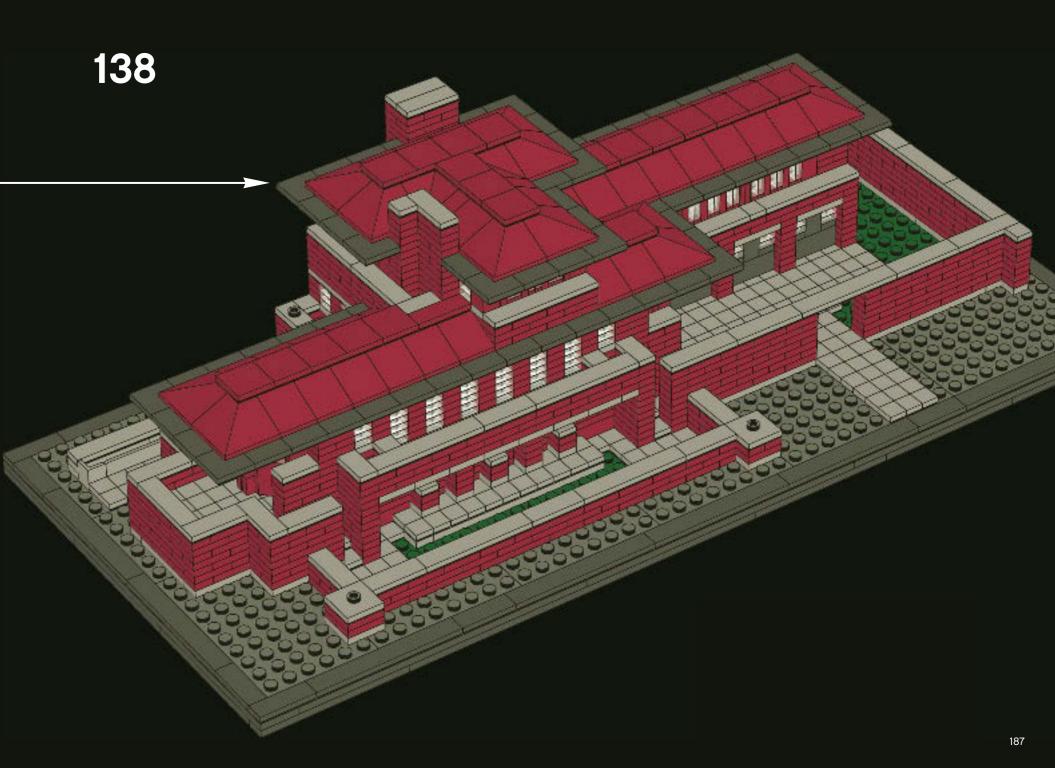








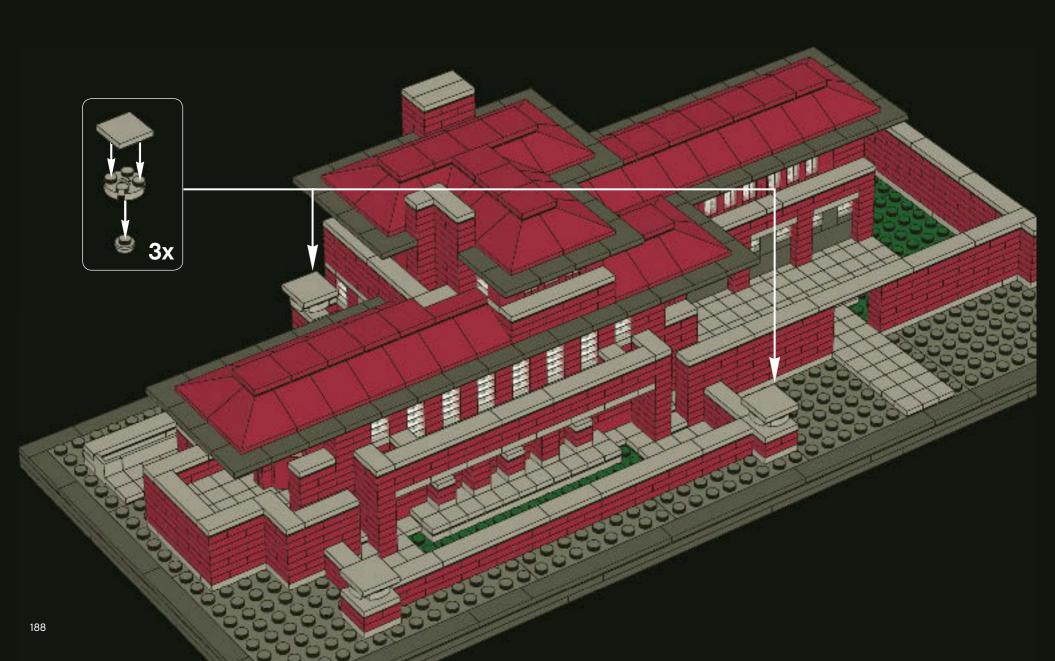


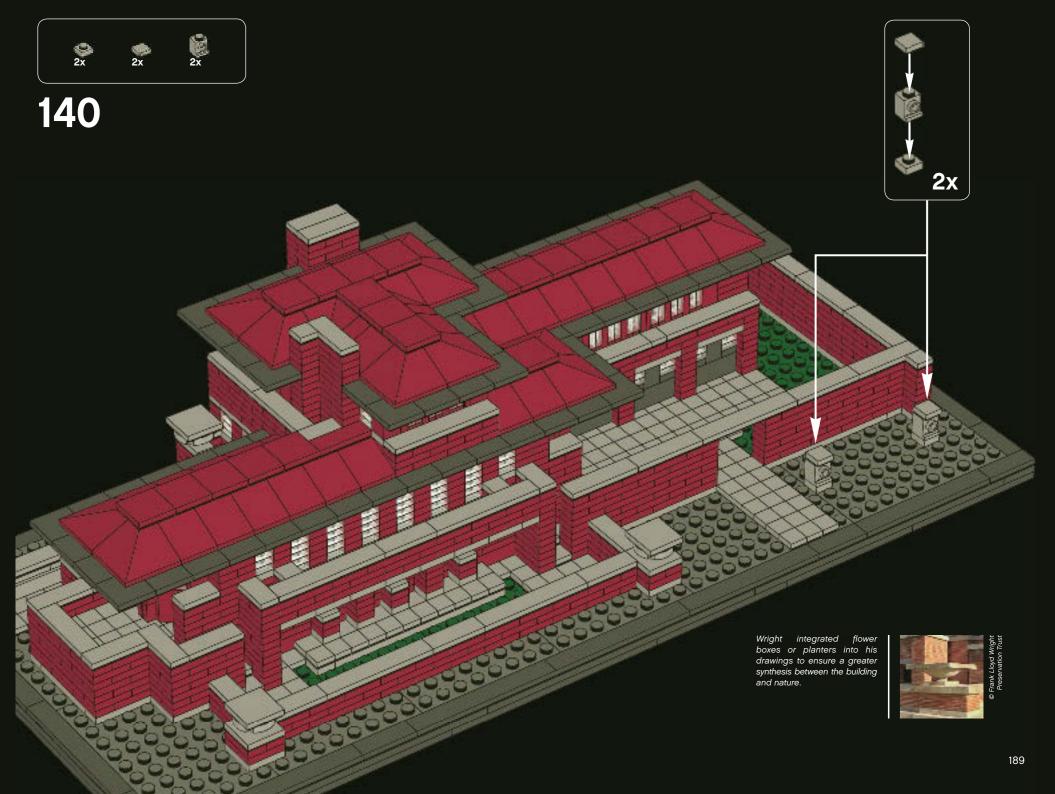


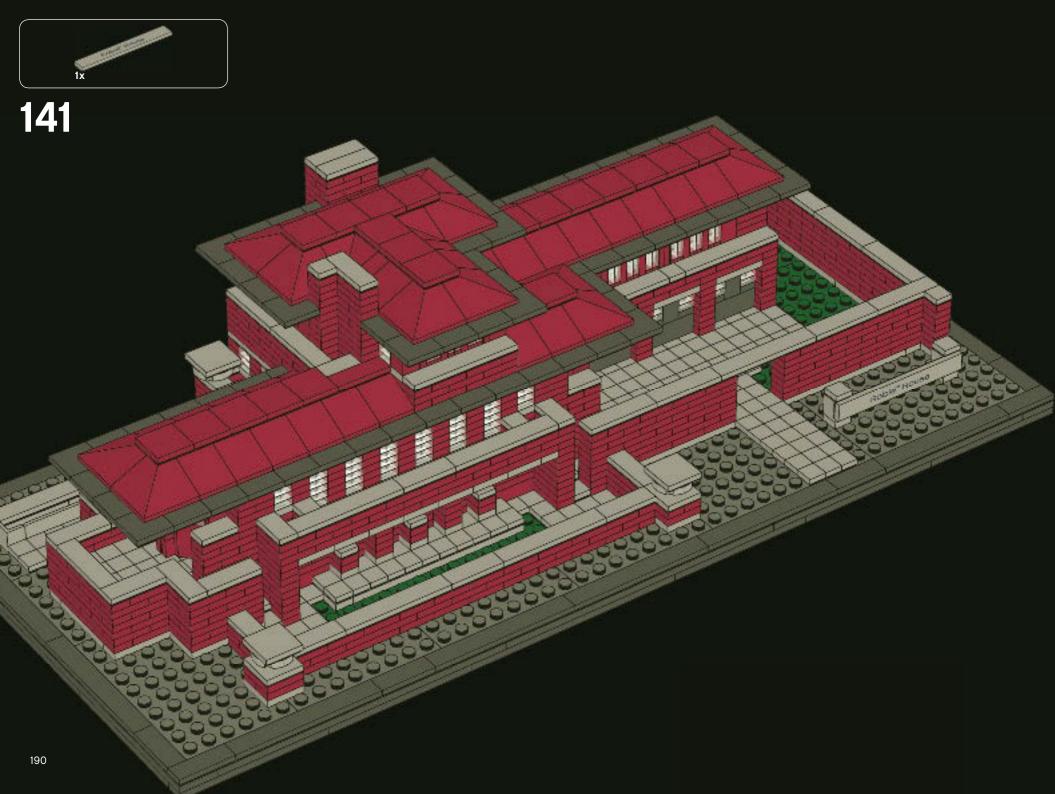














A Word from the Artist

As an architectural Artist my desire is to capture the essence of a particular architectural landmark into its pure sculptural form. I first and foremost do not view my models as literal replicas, but rather my own artistic interpretations through the use of LEGO® bricks as a medium. The LEGO brick is not initially thought of as a material typically used in creating art or used as an artist's medium. I quickly discovered the LEGO brick was lending itself as naturally to my applications as paint to a painter or metal to a blacksmith. As I explore how to capture these buildings with the basic shapes of the bricks and plates, I find the possibilities and challenges they offer almost magical.

Robie™ House

Our third architecturally significant home, after Fallingwater and Farnsworth, the Robie™ House sets itself apart as being the largest, most detailed set in the LEGO Architecture line to date. This model has been nearly 3 years in the making; starting back in 2008 this structure was originally being considered alongside Fallingwater and a few other Wright masterpieces. Due to the complex forms, specific architectural proportions and subtle accents it became evident that an accurate representation would take some time to develop.

The entire model is based on the 33-degree LEGO roof slope element. One of the most identifiable characteristics of the structure is its shallow roof pitch, lending to the strong expressive horizontality. This one piece would establish the scale and thus the level of detail. Some of the details required sideways construction to achieve upper window placements and the iconic vertical wedge-shaped points found at each end. Other notable details include the use of 1x2 plates to show the texture of the brick façade and its coursing wrapping the entire home and the sunken courtyard highlighted by 1x1 tile steps.

Lastly, this model was originally and intentionally left open inside so that a flameless tea light or small battery-powered light bulb could be used to illuminate the 88 windows from within.





- Adam Reed Tucker

The 'Scale Model' line-LEGO® Architecture in the 1960s

The history of current LEGO® Architecture series can be traced back to the beginning of the 1960s when the LEGO brick's popularity was still steadily increasing. Godtfred Kirk Christiansen, the then owner of the company, began looking for ways to further expand the LEGO system, and asked his designers to come up with a set of new components that would add a new dimension to LEGO building.

Their answer was as simple as it was revolutionary: five elements that matched the existing bricks, but were only one third the height. These new building 'plates' made it possible to construct more detailed models than before.

This greater LEGO flexibility seemed to match the spirit of the age; where modernist architects were redefining how houses looked, and people were

taking an active interest in the design of their dream home. It was from these trends that the LEGO 'Scale Model' line was born in early 1962.

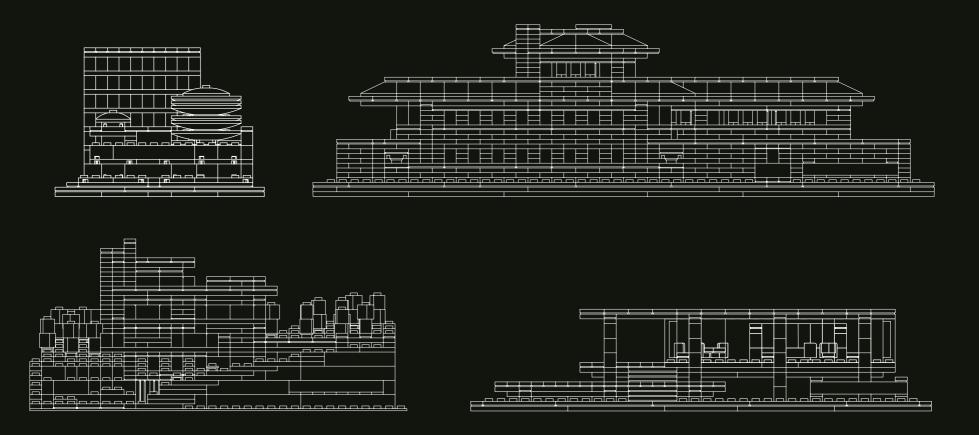
The name itself was a direct link to the way architects and engineers worked, and it was hoped that they and others would build their projects 'to scale' in LEGO elements. As with LEGO Architecture today, the original sets were designed to be different from the normal brightly colored LEGO boxes, and also included *An Architectural Book* for inspiration.

Though the five elements remain an integral part of the LEGO building system today, the 'Scale Model' line was phased out in 1965-it would be over 40 years before its principles would be revived in the LEGO Architecture series we know today.

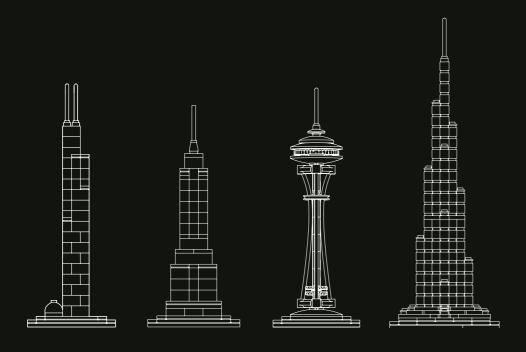




Architecture series



Landmark series



References

Text credits:

Frank Lloyd Wright Preservation

Frank Lloyd Wright Foundation

Image credits:

Frank Lloyd Wright Preservation Trust

Frank Lloyd Wright Foundation

