

Assembly instructions for the mile-high *Illinois*

About the *Illinois*

In the 1950s Frank Lloyd Wright was nearing the end of a long, brilliant and often controversial career. His visionary designs for buildings such as *Falling Water* and the Guggenheim Museum in New York City had secured his reputation as America's greatest architect.

In 1956 the 89-year-old Wright unveiled one of the most audacious designs in modern architecture: a mile-high office tower known as the *Illinois*. At over five thousand feet this would have been by far the tallest structure ever built. The figures associated with the *Illinois* are impressive; it would have soared 528 floors, with 18 million square feet of floor space accommodating 100,000 people and parking for 15,000 cars and 150 helicopters.

The *Illinois* was in appearance a slender, multi-sided spike, with the outer surfaces to be sheathed in gold-tinted metal. Emerging from the tapering sides of the building were vertical elevator housing structures. A concrete 'tap root' foundation extending deep underground served to anchor the tower.

The *Illinois* was of course never built, and critics have pointed out several problems with Wright's plan. The high, narrow building would require a great number of elevators to move people in and out with reasonable speed, reducing the usable floor space. Wright proposed using five-story elevators with a capacity of 100 people to partially address this difficulty. It is also questionable whether it was even possible to construct such a structure using the building materials of the time. Nevertheless it remains a powerful work of imagination, and fifty years later no tower in the world reaches beyond half the height of the *Illinois*.

The Model

This model is a 1:1700 scale replica of the *Illinois*, and stands approximately 40 inches (1 metre) tall.

Print out the parts document on 8.5"x11" or A4 size white paper card stock suitable to your printer. 67 lb. cover stock (approx. 8.5 thousandths of an inch or 0,2 mm thick) is recommended.

A word of caution: this model is not suitable for assembly by young children, due to the use of sharp tools and the complexity of some assembly steps. Previous experience with card modeling is strongly recommended. If you have any comments or suggestions regarding this kit, you can contact me by email at models@currell.net.

Tools

Before beginning, you will need the following tools and materials:

- white glue
- a glue applicator such as a small paintbrush, and a container of water or glue solvent on hand to rinse the brush after use
- a sharp knife for cutting
- a flat cutting surface
- a ruler or straight edge
- a scoring tool or blunt knife for creasing the fold lines
- a flat piece of wood or foam core (7.5 x 10 inches or larger) for a base
- (optional) spray adhesive for attaching the ground surface to the base

Hints

- Select a well-lit, comfortable work area that will remain undisturbed when you are not there.
- Keep your hands and tools clean when working, to avoid getting glue on visible parts of the model.
- It's easier to stay organized if you only cut out those parts you need for each step.
- Make sure your knife is sharp. When cutting straight lines, use a straight-edge.
- Study the diagrams carefully, and always test-fit the parts before applying glue.

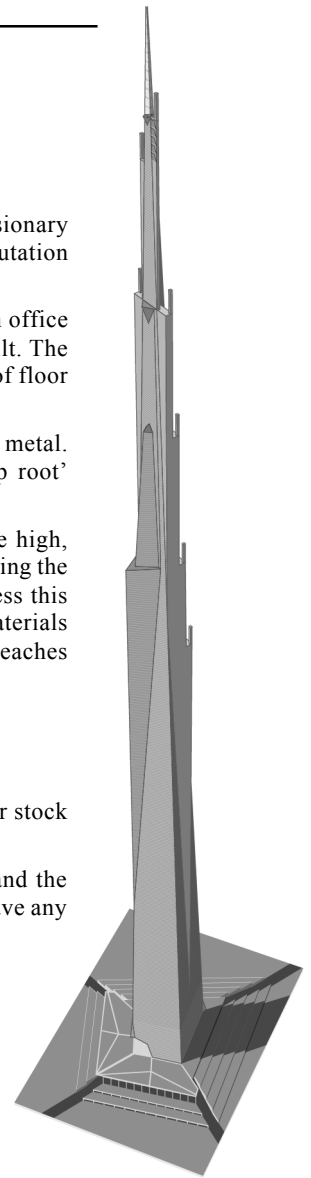
Assembly

In these instructions, the front of the building is the corner with the main entrance recess at the base. Left and right refer to the sides of the building when viewed from the front. Scoring of parts is indicated by thin black lines outside the part's outline, and by dashed or shaded lines on the part's surface. Score parts *before* cutting them out. In the diagrams, subassemblies are identified by a number within a circle (e.g. ②), corresponding to the step in which it was assembled.

Step 1: a flat, rigid base is strongly recommended for this model. A piece of foam core or wood, 7.5 x 10 inches or larger is suitable. Attach the ground surface K1 to the base, adding the nameplate B6 if desired.

The parking garage is assembled in **steps 2–6**. Fold each wall/roof piece into 'steps' and glue the corresponding inner support to maintain the shape. Note the letters 'A', 'B' and 'C' indicate matching corners. Fold the road ramps to shape and glue them between the wall/roof assemblies, such that the edge of the wall/roof rests on the edge of the ramp wall. Glue the completed structure to the base, such that the printed roads on the base line up with the ramps.

Join the lower section walls using the connecting strips (**step 7**), first joining the three sections forming each half, then joining the left and right halves. Ensure the pieces are scored before this is done. Attach the connecting strips to the left side elevator housing pieces (**step 8**). Fold the



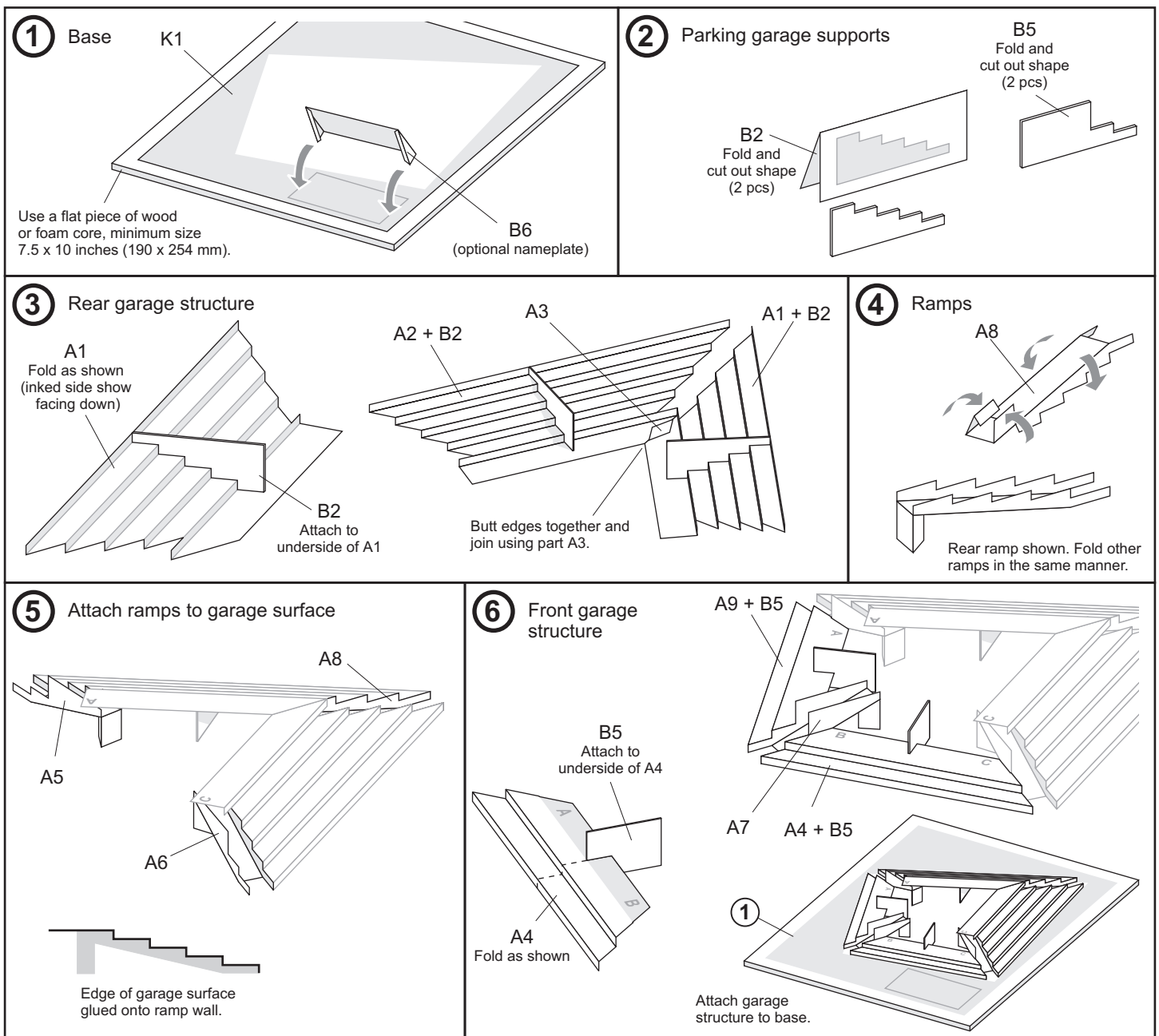
Assembly (continued)

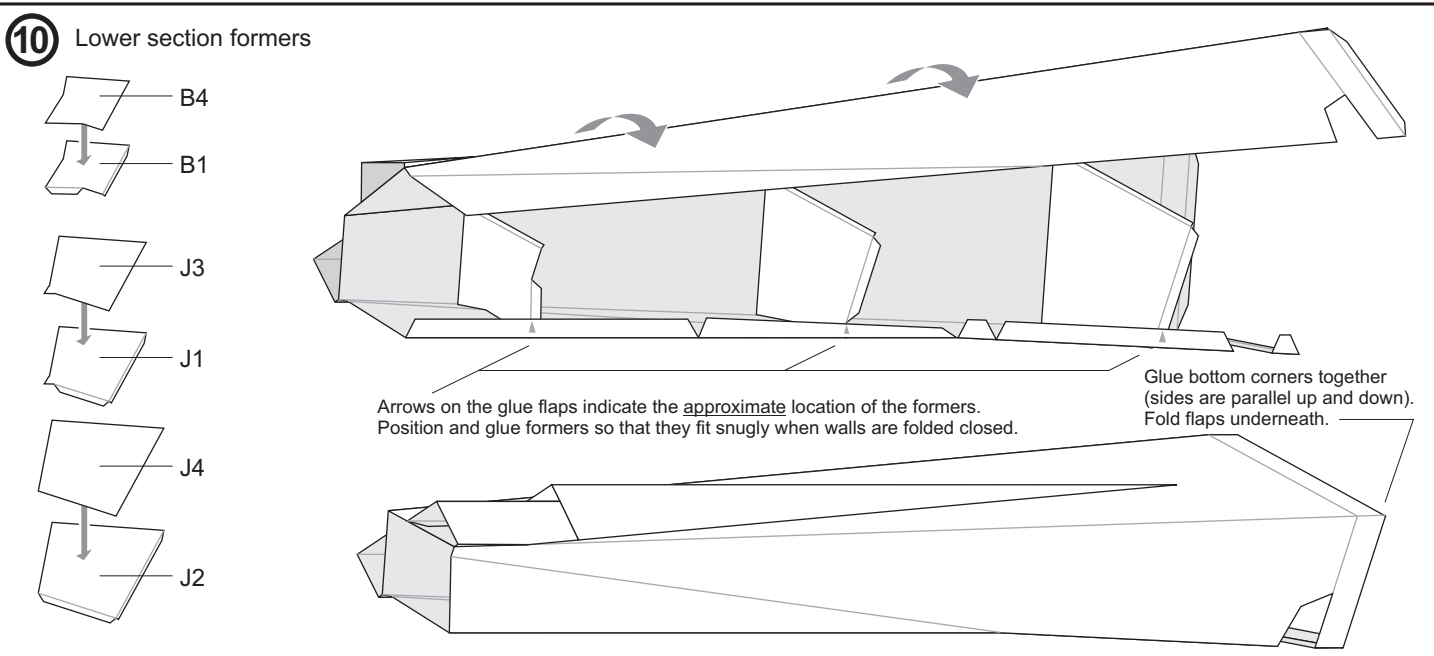
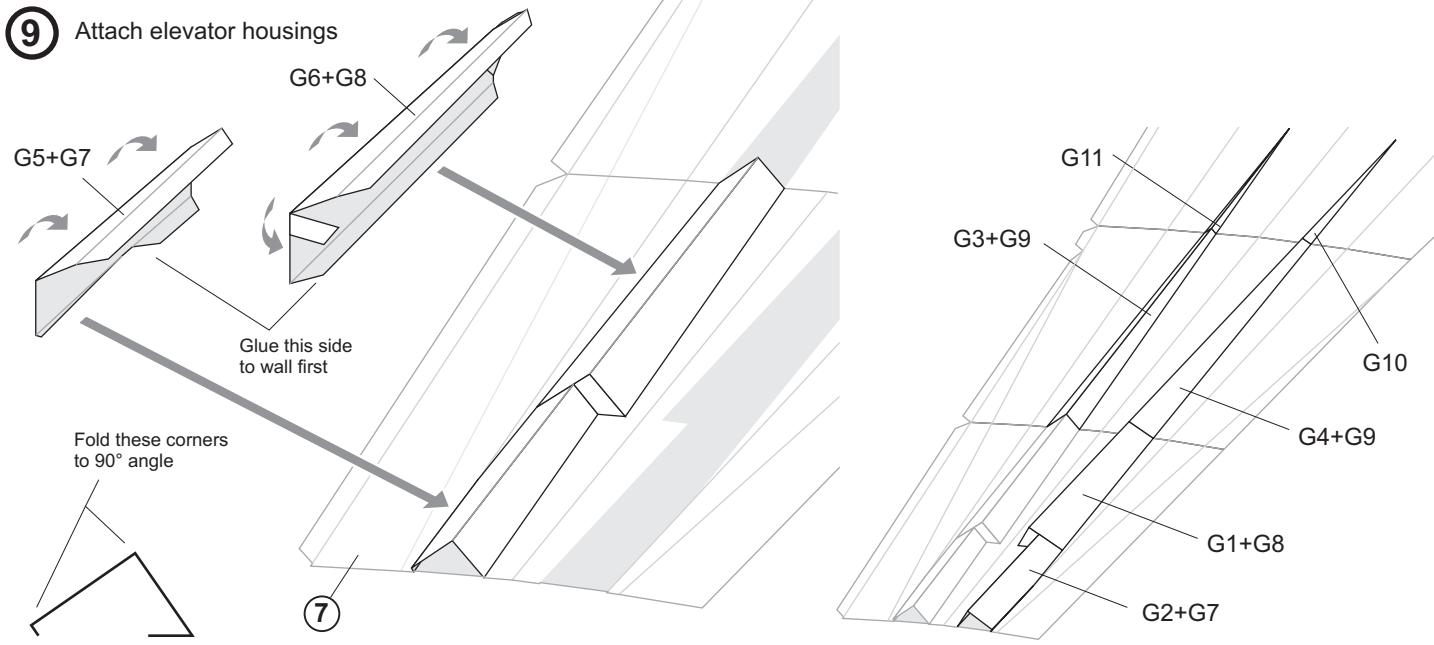
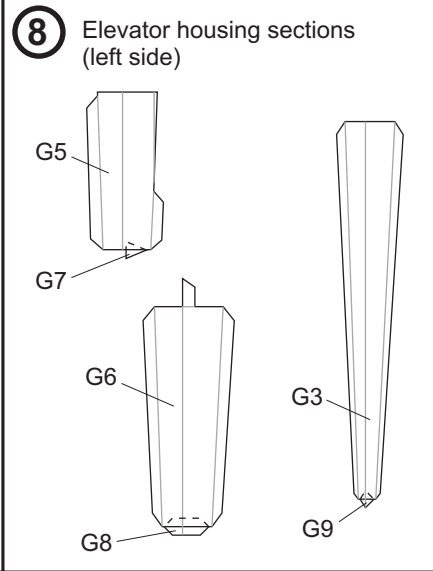
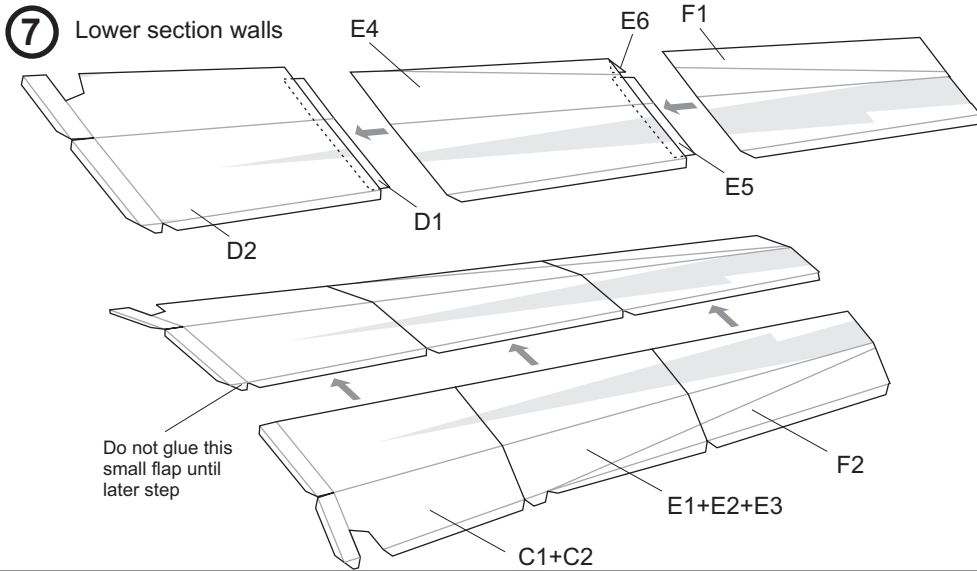
housings to shape then glue to the wall assembly (**step 9**), working from the top (narrow end of walls) to the bottom. Repeat for the right side elevator housings. Assemble the lower section formers (**step 10**) and fold the lower section approximately to shape. Attach the formers inside the section, such that they will fit snugly when the walls are folded closed. (The small arrows printed on the glue flaps indicate the *approximate* location of the formers, but this may vary depending on factors such as paper thickness.) Glue the lower section closed.

Assemble the lower section roof (**step 11**) and insert into the top of the lower section such that the roof surface is level with the top of the walls. Form the front entrance surface D5 as shown and glue into the opening at the bottom of the lower section (**step 12**). Attach the small projection C7 just above the entrance. Fold the front terrace B3 and attach to the lower section such that the triangular tab of the terrace nests inside the front entrance (**step 13**). Glue the lower section to the base and attach the outer flaps of the terrace to the parking garage. Attach the rear entrance C6.

Assemble the middle section elevator housings (**step 14**) and attach to the middle section wall (ensure the wall piece is scored before this is done). Fold and attach the central projection J9 between the elevator housings (**step 15**), then fold and glue the middle section closed as shown. Insert the formers into the ends of the middle section (**step 16**) such that their surface is level with the edge of the walls, and attach support H6 beneath the roof overhang.

Fold and glue the top section (**step 17**) then insert the bottom former J5, triangular projection J7 and the balcony J10/J11. Fold and glue the spire J8 and attach to the top of the top section, with the seam facing the rear. Attach the top section to the middle (**step 18**), then add the elevator machine rooms to the top of the elevator housings as indicated by blue locating marks (ten places). The upper sections attach to the lower section and base. Do not glue if you wish to disassemble for transport or storage.





11 Lower section roof

C3
Fold to double thickness and cut out shape.

C5

Roof is inserted with surface level with top of walls.

10

12 Front entrance

C7
Attach to printed shape on walls.

D5
Inked surface this side

11

13 Attach lower section to base

B3

12

C6

6

14 Middle section elevator housings

H4
Inked surface shown facing down

H1

H3

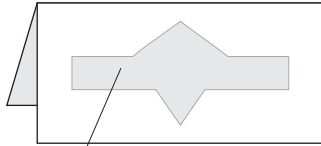
Glue this side to wall first

H2+H5

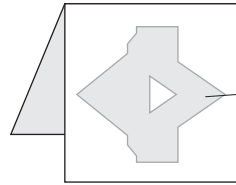
15 Fold middle section to shape

J9

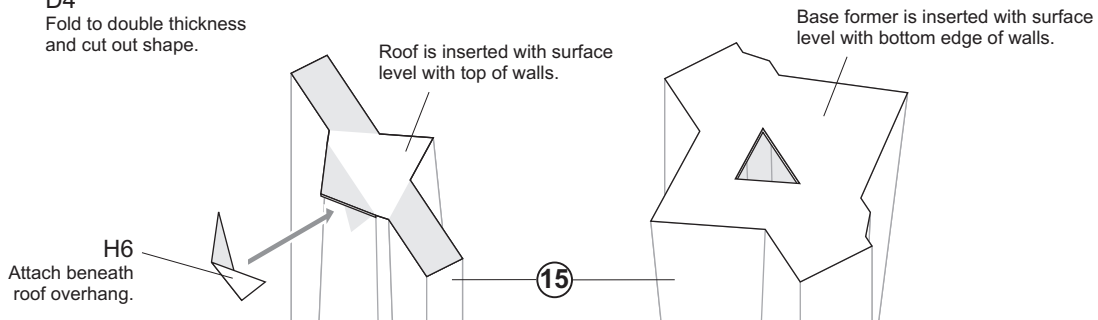
16 Middle section end formers



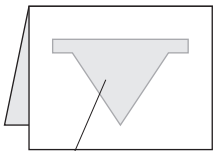
D4
Fold to double thickness
and cut out shape.



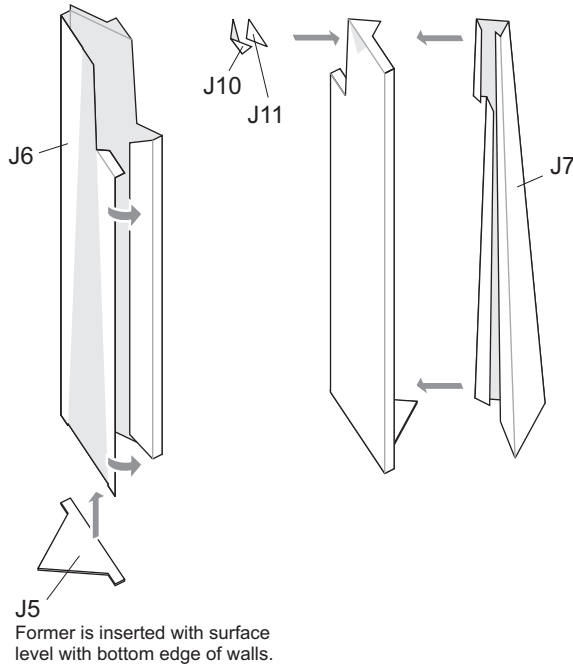
C4
Fold to double thickness
and cut out shape.



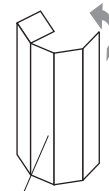
17 Top section



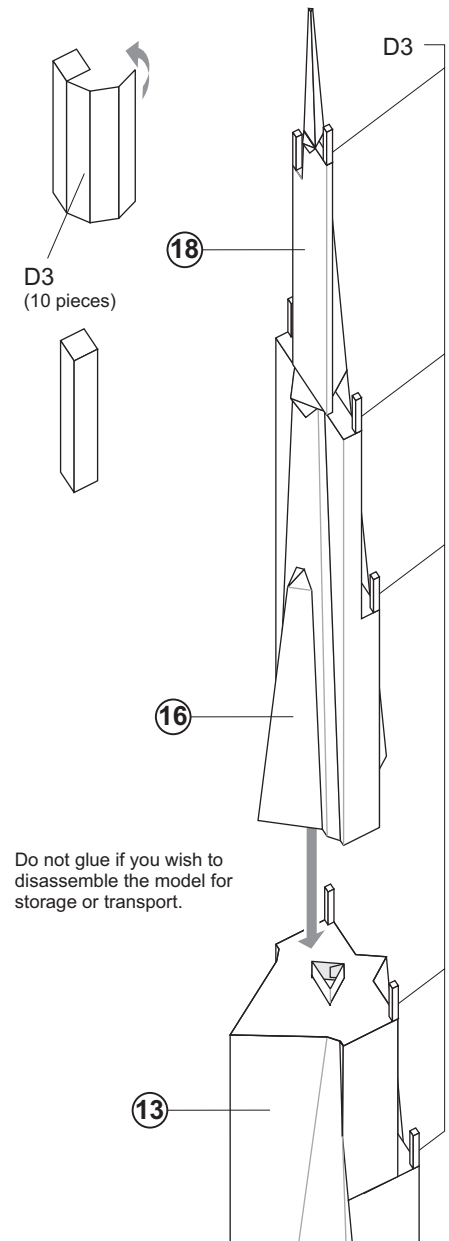
J5
Fold to double thickness
and cut out shape.



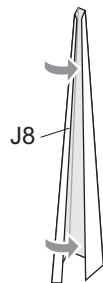
19 Elevator machine rooms
and final assembly



D3
(10 pieces)



18 Spire



J8

