

## City Hall

### Instructions for Assembly of the HO scale kit

v1.1



#### Kit Contents:

5 ea. Sheets of laser cut .090 acrylic parts  
56 Laser cut .090 acrylic parts  
34 ea. Laser cut .060 acrylic parts  
6 ea. Pages printed window details  
6 ea. Window glazing  
6" Plastic coated wire  
3/32" x 1" Styrene tube  
US flag printout  
Instructions with diagrams

Thank you for purchasing this kit. Please read these instructions completely before beginning and take your time. Allow parts to dry after painting or gluing and do not try to build this in one day.

You will need the following items to assemble your model: hobby knife, fine sand paper, file, paint (see "Painting Your Model"), paint brushes, glue (see "Gluing Acrylic"), modeling putty.

Drawings of all the parts are included for identification.

Practice gluing the acrylic together if you have never done it before.

Dry fit (test fit without glue) all the parts prior to assembly. Some of the parts fit behind others so the order of assembly is critical.

If a part is missing or broken, please email us indicating the kit name, scale, and part number and we will send you a replacement at: [info@cmrtrain.com](mailto:info@cmrtrain.com)

Please note: Parts of the kit have been painted gray in the assembly photos so that new parts can easily be seen and identified. This is only for ease of identifying parts and seeing them clearly in the photos. We recommend gluing all parts together prior to painting unless otherwise noted.

Pre-production models were used in these instructions; your parts may vary slightly.

## About this Kit

Our kit is based on a 1950's building built from limestone and granite. It is ten stories high. The kit is the same front and back.

Parts are labeled in the instructions inside parentheses. The first number is the unit number and the second is the part number. For instance (C-3) would be part three in the center unit. The kit is made up of five units: one center unit, two mirrored wing units and two mirrored lower wing units.

Many parts have engraved details on them. Be sure that these are facing out when gluing the parts together. It is easy to install these backwards by mistake.



## **Adhesives**

### *Gluing Acrylic*

Always glue acrylic in a well-ventilated area, and read the glue manufacturer's label for instructions.

We recommend using Scalecoat brand "Probond", Plastruct brand "Bondene Solvent Cement" or "Plastic Weld Cement". Most hobby shops carry these products. Or they may be ordered directly from the manufacturer.

Acrylic must be glued together using a solvent that will melt the two edges and literally fuse them together. To do this, place the two pieces to be joined together and run a bead of solvent down the edge. Capillary action will suck the solvent into the joint and after several seconds the pieces will be fused. After only a few minutes the pieces will be strong enough to work with. The bond will be completely dry within twenty-four hours using the above-mentioned products.

Solvent can be dispensed two ways.

Typically the solvent comes in a small bottle with a brush in the lid. The brush allows you to dispense a drop or two of solvent at a time.

You may want to use a polyethylene bottle or syringe with a blunt needle dispenser. This allows larger amounts of solvent to be dispensed quickly and cleanly. Be sure the bottle you are using is approved for the solvent you are using or you may melt through it. These bottles may be purchased from CMR.

### *Cyanoacrylate (CA) Super Glue*

Parts that are not plastic or are painted prior to gluing must be glued together using a non solvent based glue. This means the parts are held together by the glue and not the process of fusing or welding them together with solvent. For this we recommend using CA where noted in the instructions.

### *Craft Glue*

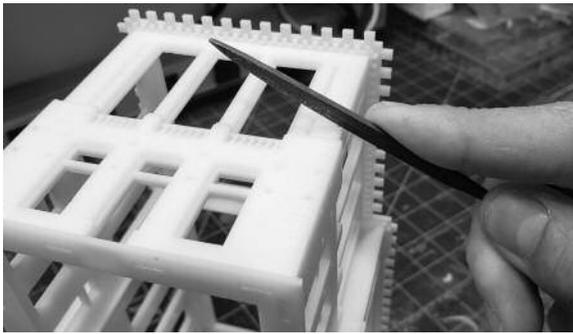
Some parts are easier to glue using craft glue such as "Sobo". We use craft glue to stick previously painted parts together when we want a little working time.

## Preparing Your Model for Painting

We recommend lightly sanding all parts to remove the raised edge created during the laser cutting process. In order to hide the seams we recommend using “hobbyist putty” such as Squadron Modeling Putty. Do this in a very well-ventilated area. Apply the putty over the seams and allow to dry overnight. Once the putty has dried, place a sheet of fine sandpaper on a flat surface and sand smooth. You may need to apply a second coat of putty and sand again.

You may choose to “wrap” the engraved lines around the corners with a small triangular jewelers file or razor saw.

See Figure 1.



*Figure 1*

## Painting Your Model

We painted our model after the walls were assembled but before the windows were installed. We primed the wall structure inside and out with Krylon Gray Spray Primer. Then we airbrushed it with a mix of acrylics to create a very light gray stone color. Then a black wash was applied to accent the engraved lines.

The sidewalks and stairs were painted a concrete color using a brush.

The window frames were primed with Krylon Gray Spray Primer and then with Krylon Silver spray paint.

The flat roofs were painted black.

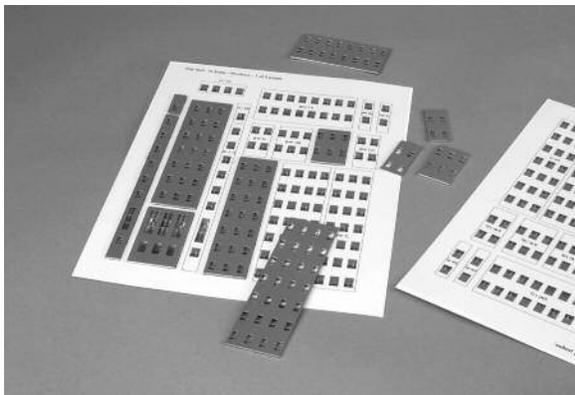
## Window Glass

There are printed window shades included with your kit. These are designed to be laminated with the included acetate sheets then glued to the acrylic window frames prior to installing in your model.

Prime and paint the window frames.

Lightly spray glue the window shade pages on the printed side with spray mount and apply a sheet of acetate to them. Press in place. We used 3M Spray Mount part number 6065 which is available at craft and office supply stores. Glue these to the back of the window frames using super glue (CA). The engraved side of the window frame should be facing out.

When the glue is dry use a hobby knife to trim the window frames from the window glass sheet. Be sure the edges are completely straight and free of paper and acetate, or the windows will not fit properly in your model.



It is recommended to lightly spray the back of the window shade pages with a clear sealer such as matte spray or laquer. This will keep the paper from buckling due to changes in humidity. See Figure 2

*Figure 2*

## Building Assembly

The front and side center tower walls will need to be assembled. You will need a very flat work area preferably with a no stick surface. At CMR we use a piece of laminated plywood like a kitchen cabinet shelf.

Be sure that when gluing the parts together that the engraved side is facing up.

Place (C-1A) and (C-1B) next to each other so that the tabs on the parts mesh and glue together. Do the same with Parts (C-2A) and (C-2B). Repeat with all four center tower walls. Now... walk away and let them dry overnight.

See Figure 3

Next glue parts (C-3A) and (C-3B) to the (C-1) assembly. This is the front wall. Use the window openings for alignment. The tabs on part (C-1A) should stick out below the assembly. Repeat for the other side.

See Figures 4 and 5

Glue part (C-4) to the front of part (C-2) assembly. The bottom of part (C-4) should be flush with the top of the opening on the inside of part (C-2B). The top of part (C-4) will extend higher than the top of part (C-2B). Repeat on the other side of the model.

See Figure 5

Check the engraved lines in the walls. If any have filled in from glueing the walls sections together then you should re-engage them by scraping the back of a hobby knife along the lines using a straight edge as a guide.

See Figure 6.

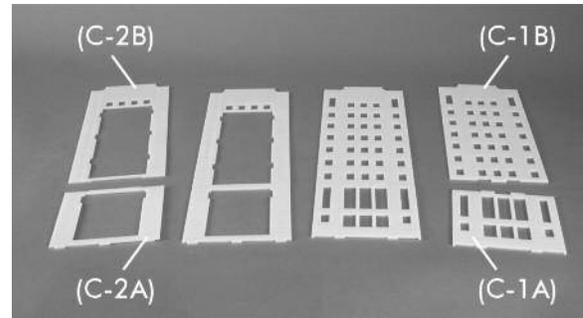


Figure 3

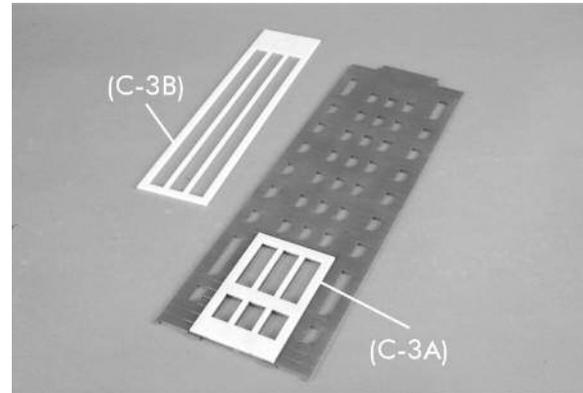


Figure 4

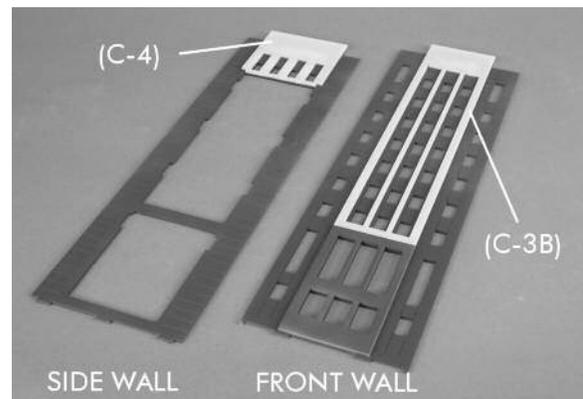


Figure 5



Insert the tabs of front and side wall assemblies into the slots on part (BASE) with the engraved sides facing out and glue in place. Check that all the tabs are seated properly, that the edges are flush, and that the assembly is square.

See Figure 7

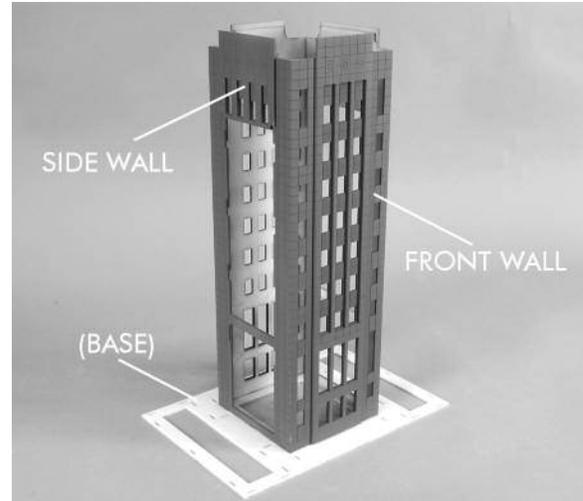


Figure 7

Test fit the center roof piece (R-3) on top of the assembly. It should rest on top of parts (C-1B) and (C-2B) and inside of parts (C-3B) and (C-4). Then remove and set aside for later.

Glue parts (LW-1) and (LW-6) to the base and the side of the center tower. Use the slot for alignment. Be sure the engraved side is facing out. Repeat for the other side.

See Figure 8

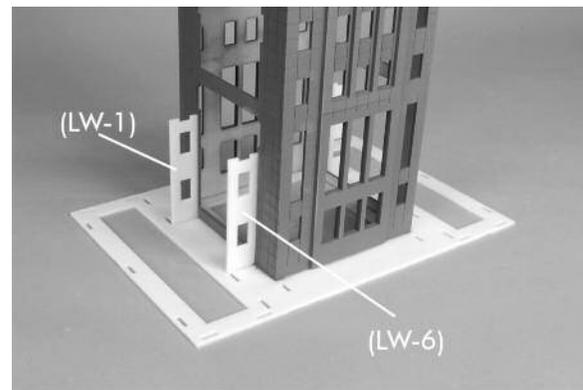


Figure 8

Working your way around the model glue parts (LW-2) and (LW-5) in place. Then glue parts (LW-3) x 2 in place and finally part (LW-4). Be sure the engraved sides of the parts are facing out. Check that the assembly is square and that the tabs are properly seated in the base. Repeat for the other side.

See Figure 9

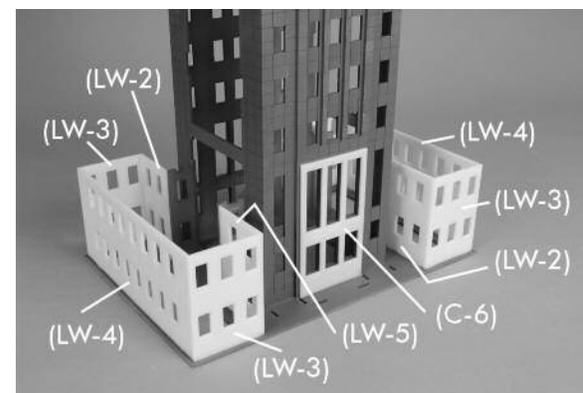


Figure 9

Glue the lower wing roofs (R-1) on top of the walls assemblies. Make sure everything is perfectly square and flush. You may need to file the corners to get them perfectly flush.

See Figure 10

Glue part (C-6) to the front of (C-3A).

See Figure 10

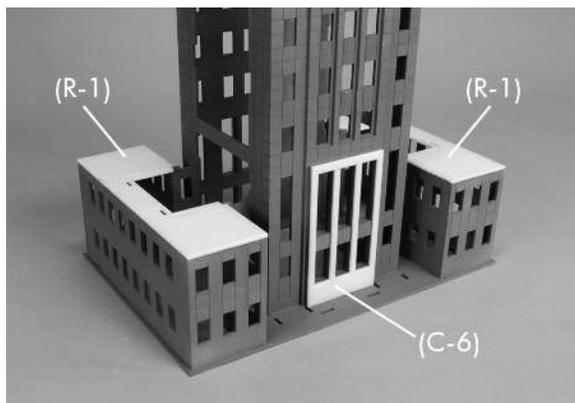


Figure 10

There are two identical wings units on either side of the center unit. Assembly is identical for both.

Insert the tabs of walls (W-1), (W-2) and (W-3) into the slots on part (R-1) with the engraved sides facing out and glue in place. Check that all the tabs are seated properly, that the edges are flush, and that the assembly is square. The back of parts (W-1) and (W-3) should be flush with the edge of the inside opening on part (C-2).

Test fit the wing roof part (R-2) to check that the parts are square at the top. Remove when done and set aside for later.

Repeat for the opposite wing.  
See Figure 11

Begin gluing the second layer of walls on the building.

Glue parts (LW-7), (LW-8), (LW-10), (LW-11) and (LW-12) to the lower wing walls. Be sure to install the walls in the correct orientation. Note that the bottom is wider than the top. Be especially careful with the orientation of parts (LW-7) and (LW-12). There is one side with a long engraved panel that goes on the side where the next wall part overlaps it.

Glue parts (LW-9) in place. Be sure the entire assembly is square and the parts are flush to each other.

Repeat for the opposite wing.  
See Figures 12 & 13

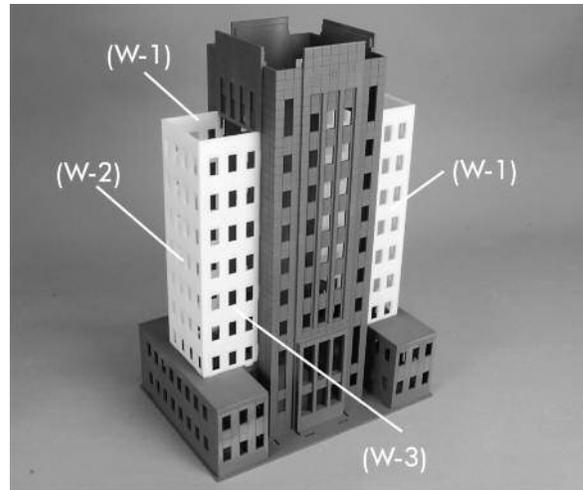


Figure 11

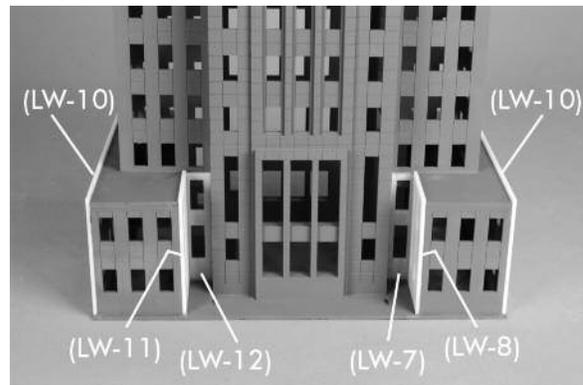


Figure 12

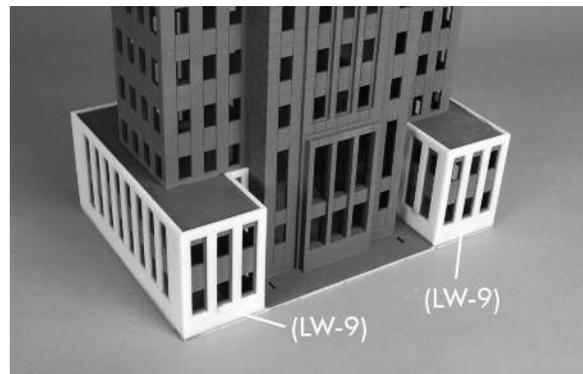


Figure 13

Glue parts (W-4), (W-5) and (W-6) to the wings.

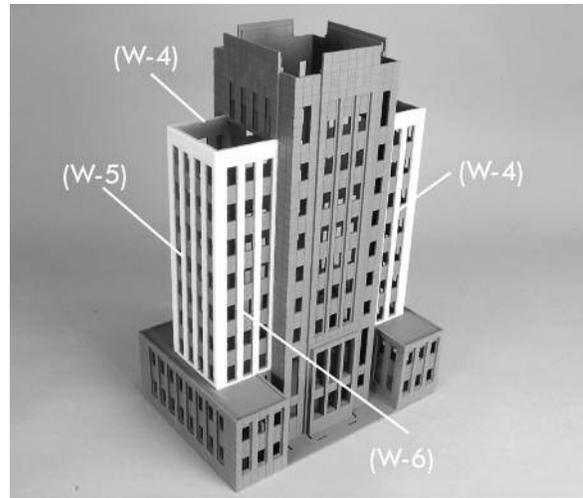
Repeat for the opposite wing.

See Figure 14

Check that all edges are flush, and that the assembly is square. You may need to fill and file the edges to achieve a perfect corner. See “Preparing Your Model For Painting”.

Glue parts (C-5) x4 in place behind the window openings at the top of the center tower. Use the window opening for alignment. Be sure the engraved side is facing out.

See Figure 15



*Figure 14*



*Figure 15*

## Balconies

Assemble the roof balconies. There is a right and left for each side of the building. Build a total of four balconies.

Glue parts (BR-1) and (BR-2) to part (BR-3) to make a right balcony.

Glue parts (BL-1) and (BL-2) to part (BL-3) to make a left balcony.

See Figure 16

Glue the balconies to the building. The top of each balcony wall will be flush with the top of the inside wall on each side. The front wall on each side will extend a little higher than the balcony wall.

See Figure 17

Test fit the center roof piece on top of the assembly. It should rest on top of the interior wall parts and the balcony walls. Then remove and set aside for later.

## Stairs

Test fit all the parts prior to gluing in place.

Stack the stair pieces (S-1) thru (S-6) in front of the main entrances. Make sure they do not cover the slots on either side of the stairs. Glue in place. See Figure 18

Glue the small wing wall parts (S-7) x2 on either side of the stairs using the slot in the base for alignment. The engraved side should be facing away from the stairs.

See Figure 19

Glue part (S-8) x2 in front of the stairs. There is an alternate part (S-8) that you may use if you do not want the building to be a City Hall.

See Figure 19

Repeat for the other side.

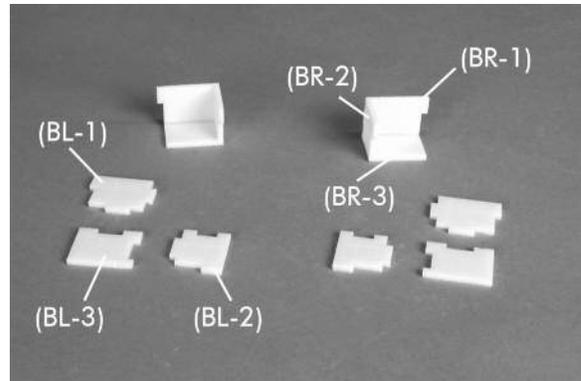


Figure 16

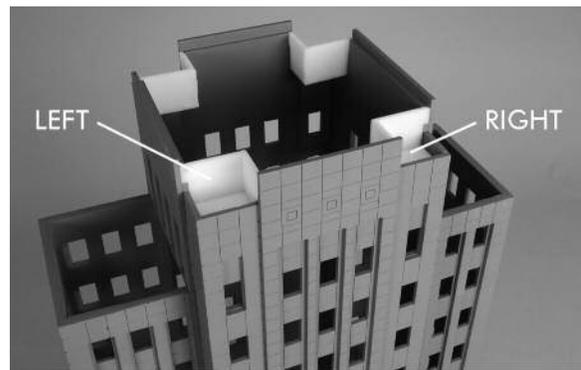


Figure 17

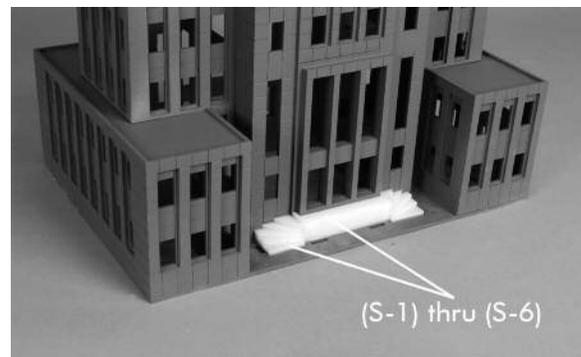


Figure 18

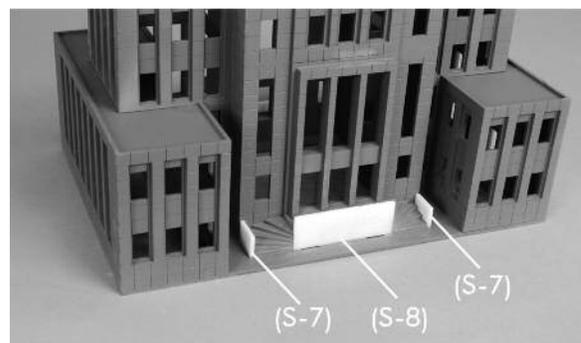
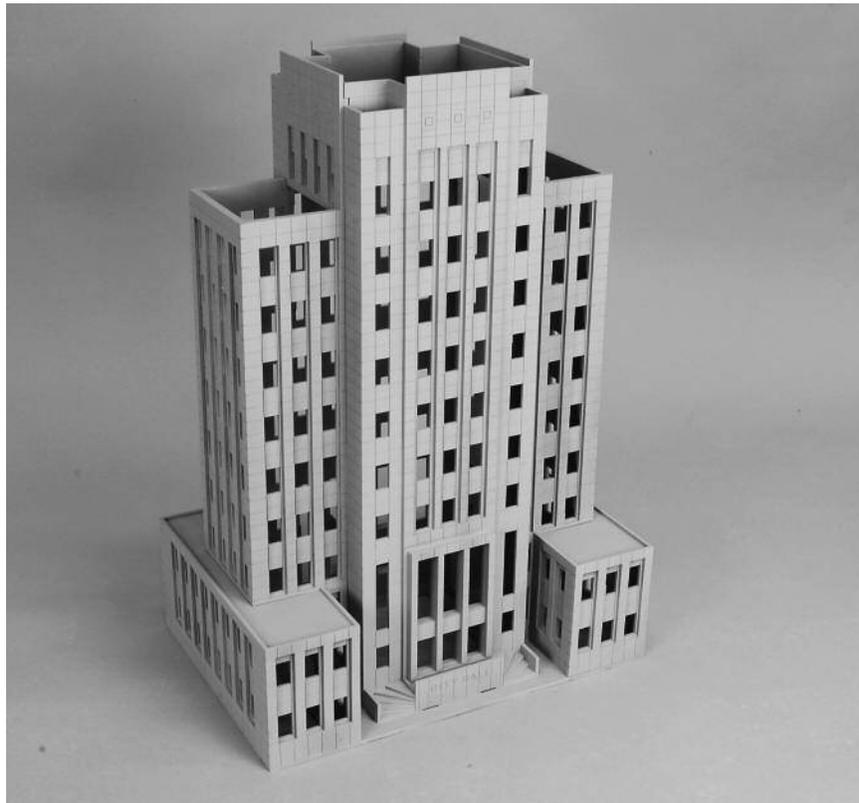


Figure 19

Your model should now look like Figure 20. Prime and paint your model. See “Painting Your Model”.



*Figure 20*

### **Windows**

Prime and paint the windows. See “Painting Your Model” and “Window Glass”. Install the assembled windows and doors behind the walls using super glue (CA).

See Figure 21

### **Roofs**

Prime and paint the roofs black and glue in place. The center roof will require some hand painting to match the front edge of it to your wall color.

See Figure 21



*Figure 21*

## Final Assembly of the Building

You may choose to assemble the flags to place on top of your municipal building.

Stack the flag pole base parts on top of each other using the 1" styrene tube as a guide and glue together. Cut the plastic coated wire to about 4" - 5" and glue to the flag pole base. Paint silver or white.

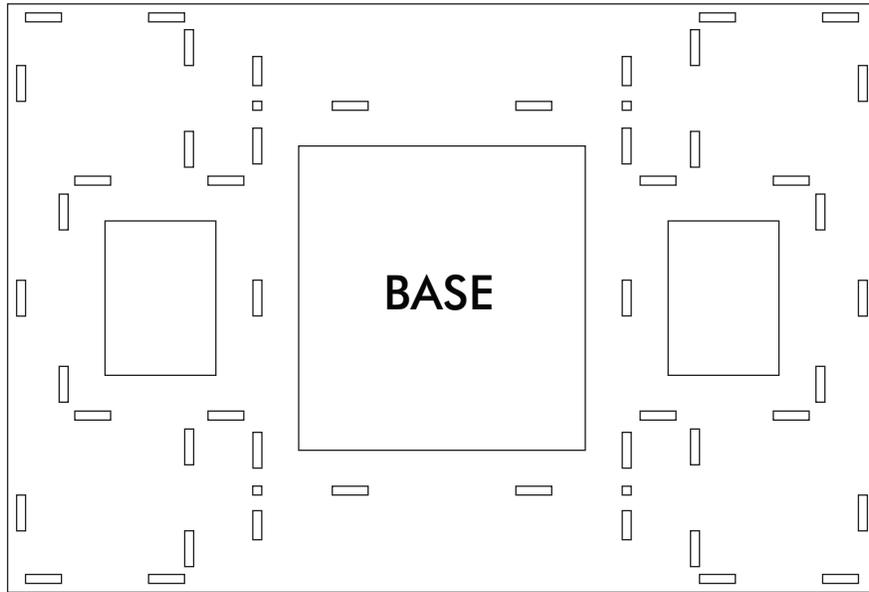
Spray the flag with Matte Spray to seal the inkjet print. Score the center of the flags with a paper clip using a ruler to create a score line. Trim out the flag and fold in half. Glue together using craft glue. Glue the flag to the flag pole. Place the flag pole on the roof of the building.



*Figure 22*

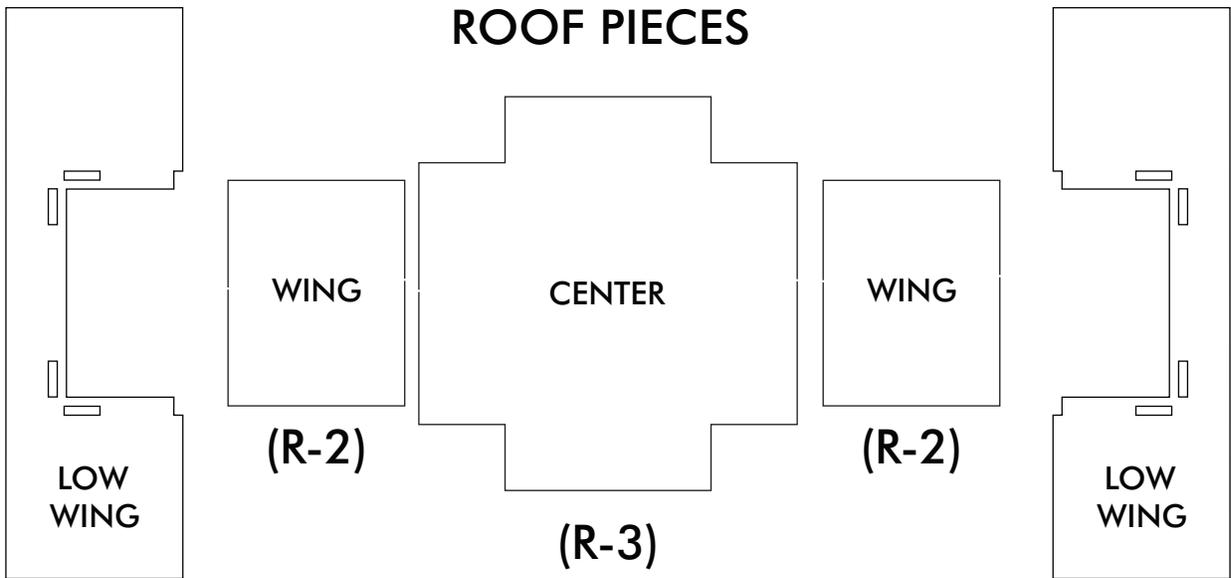
Your building is finished and ready to install on your layout. You may add lights and other details. We thank you for purchasing this kit from CMR and hope that you have enjoyed building it. Be sure to visit our website to see our other kits at [cmrtrain.com](http://cmrtrain.com).





(B-1)

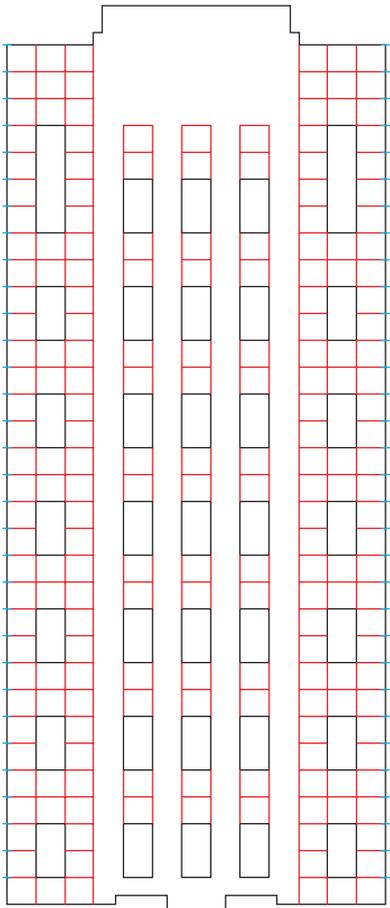
**ROOF PIECES**



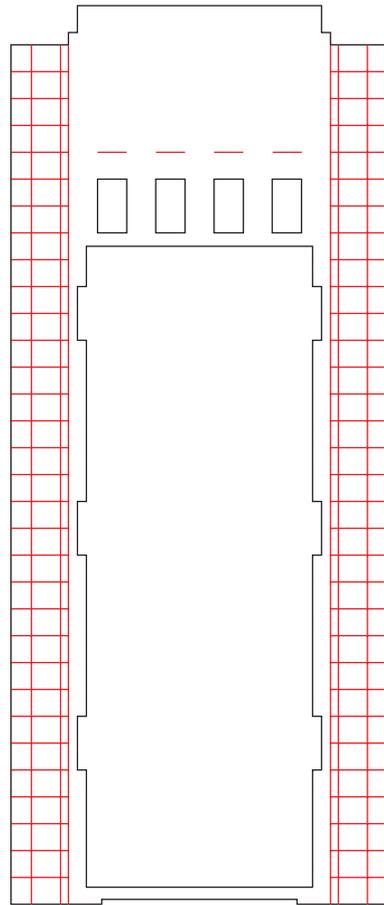
(R-1)

(R-1)

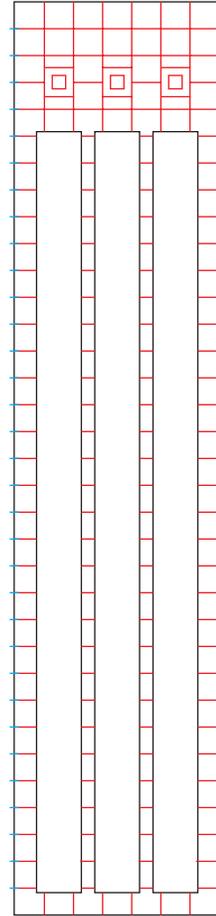
Center Tower



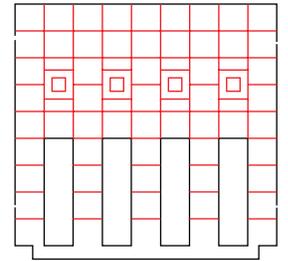
(C-1B) x2



(C-2B) x2



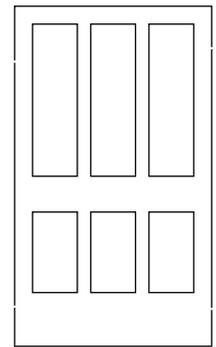
(C-3B) x2



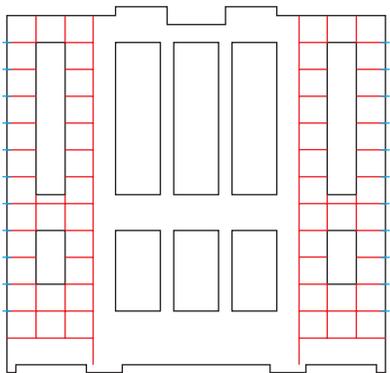
(C-4) x2



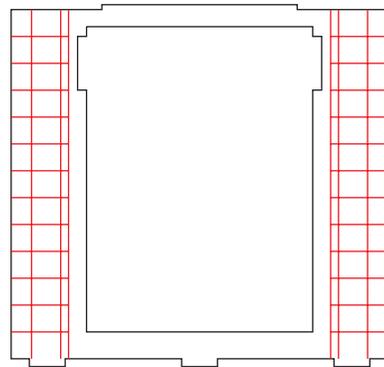
(C-5) x4



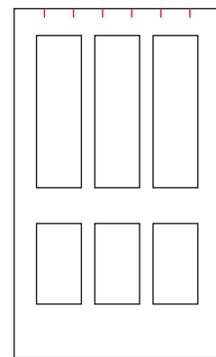
(C-6) x2



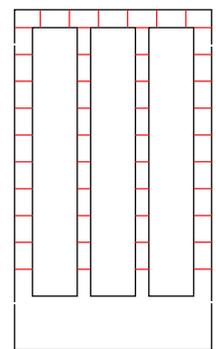
(C-1A) x2



(C-2A) x2

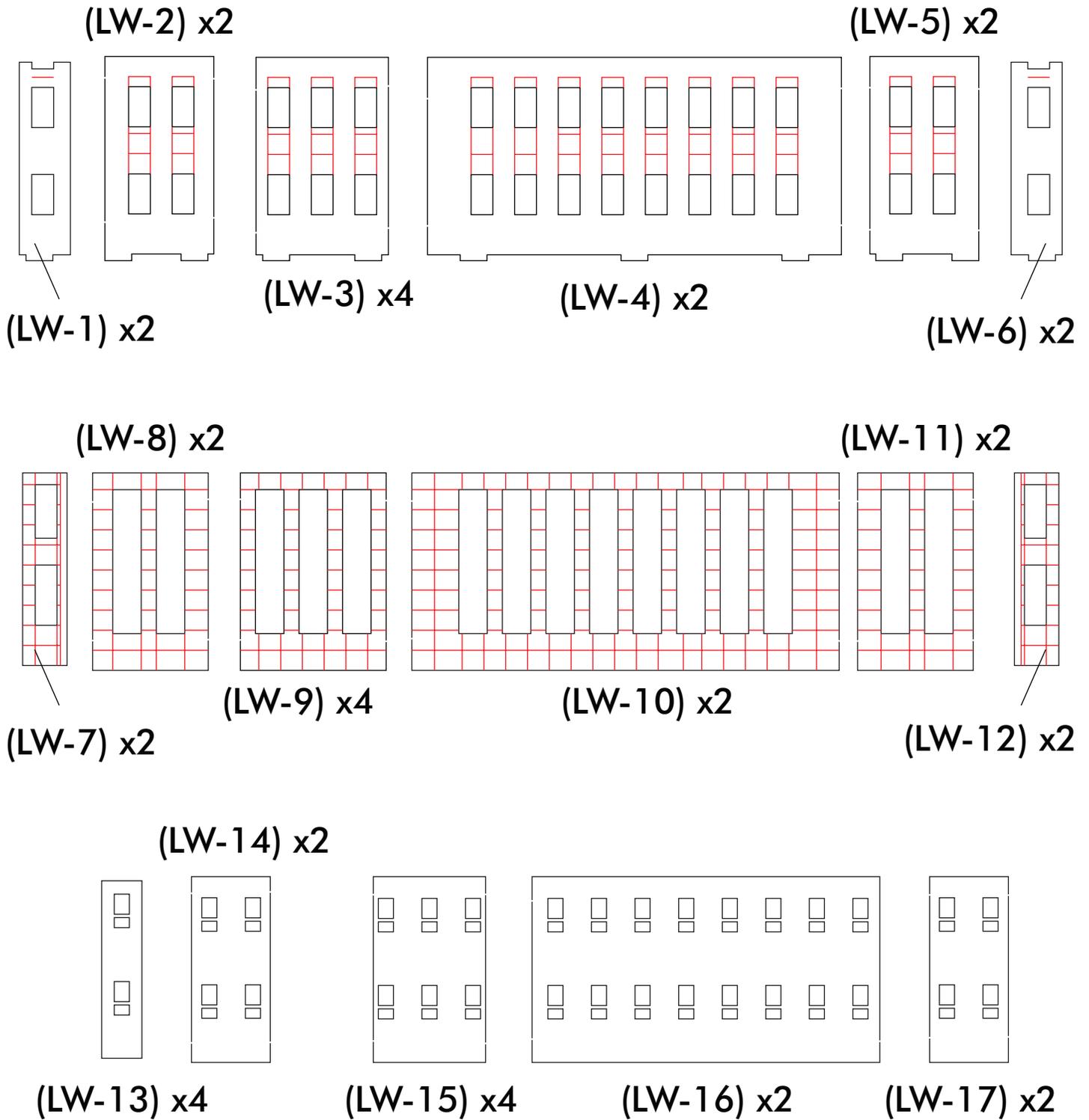


(C-3A) x2

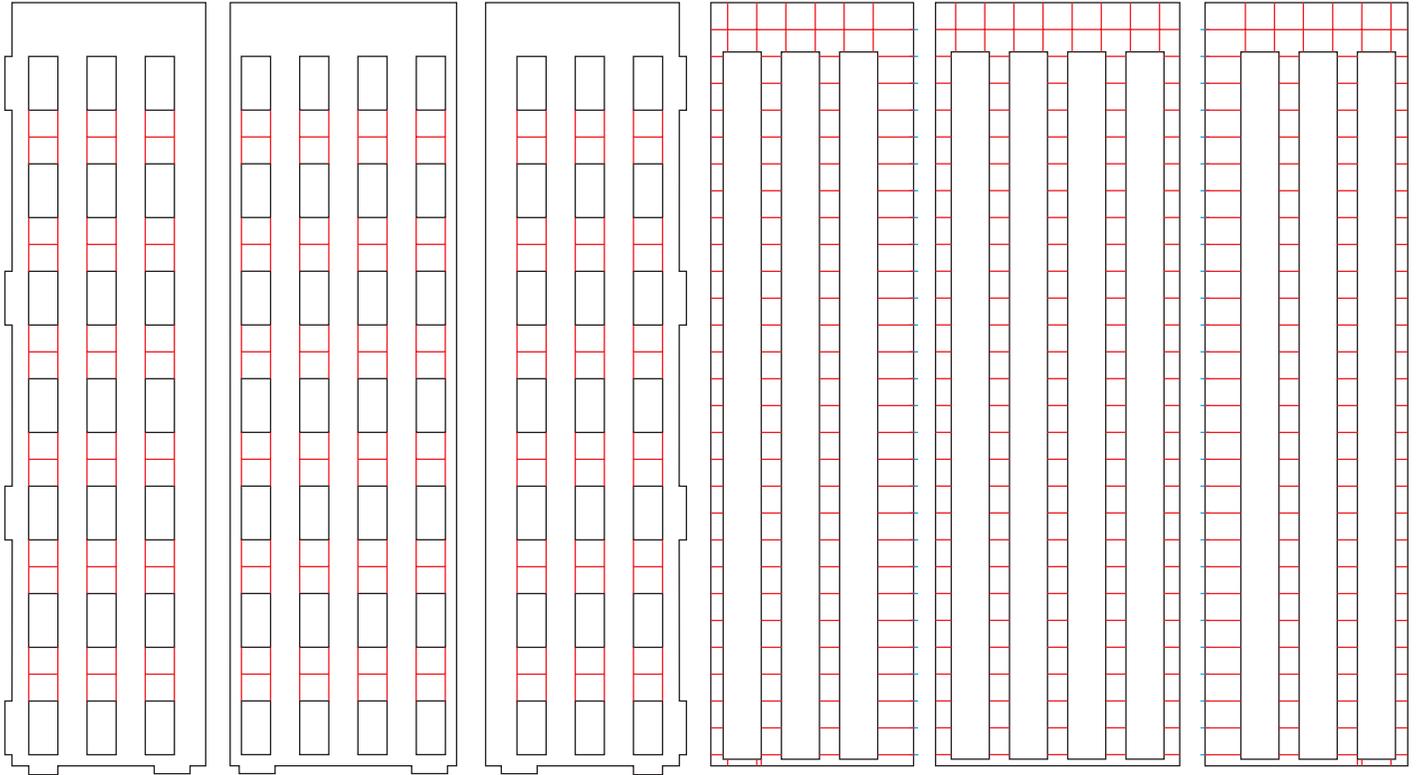


(C-7) x2

Low Wings



Wings



(W-1) x2

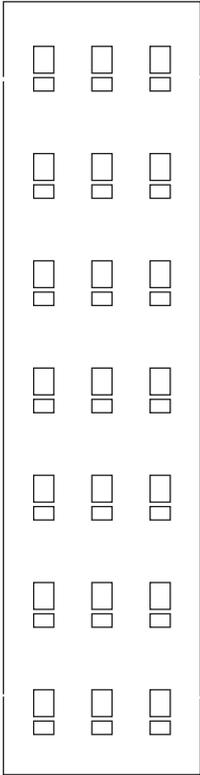
(W-2) x2

(W-3) x2

(W-4) x2

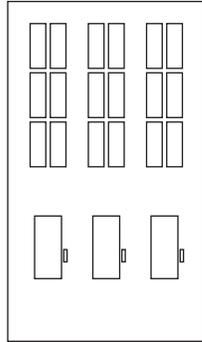
(W-5) x2

(W-6) x2



(C-8) x2

Center Tower Windows



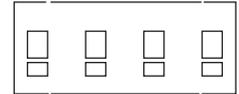
(C-9) x2



(C-10) x4



(C-12) x4

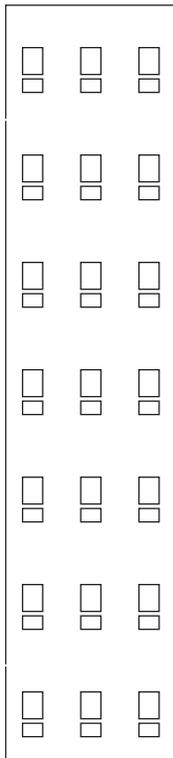


(C-13) x2

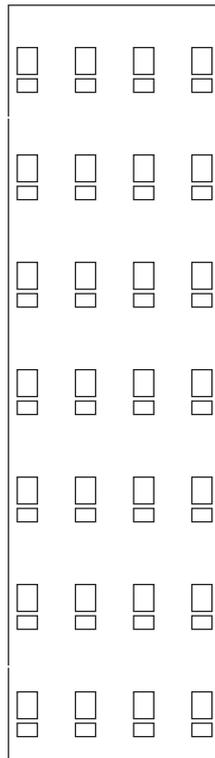


(C-11) x4

Wing Windows



(W-7) x4



(W-8) x2



(W-9) x4

