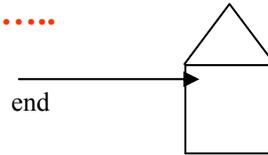


Making a Jigstone building without a pattern

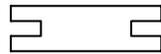
Blocks made out of Quikrete anchoring cement must cure a full 30 days before you can seal your building, therefore it is advisable that you wait that period before you start assembling your building. Molds are available from www.jigstones.com

Read these instructions through before you begin.....



Making a Jigstone building without a pattern is quite simple. Start by making one that is fairly small and make sure your ends have a 45 degree angle. By ends I mean the ends of your building. This will simplify your roof line also. When you get more experienced you can attempt something more complicated.

Some thoughts you should keep in mind with this method



Assembling the building using your blocks is a fairly simply thing although you should remember the following:
To sand your blocks: Wrap a small piece of sand paper 50 grit or 80 grit around the end of a flat file and use this to sand the insides of your blocks

Use a sheet of 50 or 80grit sandpaper and sand the top and bottom and back of the block if necessary. Doing one row at a time, start at one end of the building, place your blocks all around your building. They are not glued at this time, this is only to assure that they are in their proper place and level.

Now insert your fill in blocks sanding them if necessary to make them fit. Remember you will be putting mortar fix on the insides of your blocks, so the fill in blocks should fit in a little loose. The next step is to make your life easier when applying the mortar:

take all your fill in blocks out and place them on the plywood in front of the row you are working on and in the same directions you took them out. (because you have sanded them to fit they will go in easier if you put them back in the same way you took them out.

Starting at one corner (with a popsicle stick) put your mortar fix (use a generous amount) on the top, sides, back, and fill in the indentations where the fill in blocks will be applied. Take the excess off with your popsicle stick. Do not put mortar on the bottom because that will glue your blocks down. You want to be able to move your building off of your plywood so you can

Special note

When you apply your blocks to the Plexiglas make sure you press the blocks down and against the Plexiglas applying quite a bit of pressure to make sure your blocks are in tight in all directions.

Do not apply more than two rows of blocks at one sitting. Let the two rows dry overnight before proceeding to the next two.

When you are finished assembling the building there is one extremely important step to follow:

Make sure your building has dried overnight after your last block was in place.

This step will make your building look very good by sealing all the cracks .

Turn you building on its side so that you can work on a level plane

Sprinkle quite heavily (about 1/16” thick) some of your dry anchoring cement.

Have on hand a spray bottle filled with water.

Spray a small area of water onto the anchoring cement and take a small tooth brush and make a paste, brush it all over into the cracks. Continue to do this until the building is all done in this manner including the underneath of the blocks and around the window openings.

Now immediately upon completing this step, go back to the starting point and use a wire brush and brush off the excess. Use a vacuum cleaner close by to handle the dust. Brush until you see the block . The cracks will be filled in.

DO NOT LET THE BUILDING DRY EVEN ONE HOUR BEFORE YOU BRUSH IT OFF OR IT WILL BECOME IMPOSSIBLE TO DO SO. THIS CEMENT DRIES ROCK HARD!

After you have brushed it all off let it dry overnight.

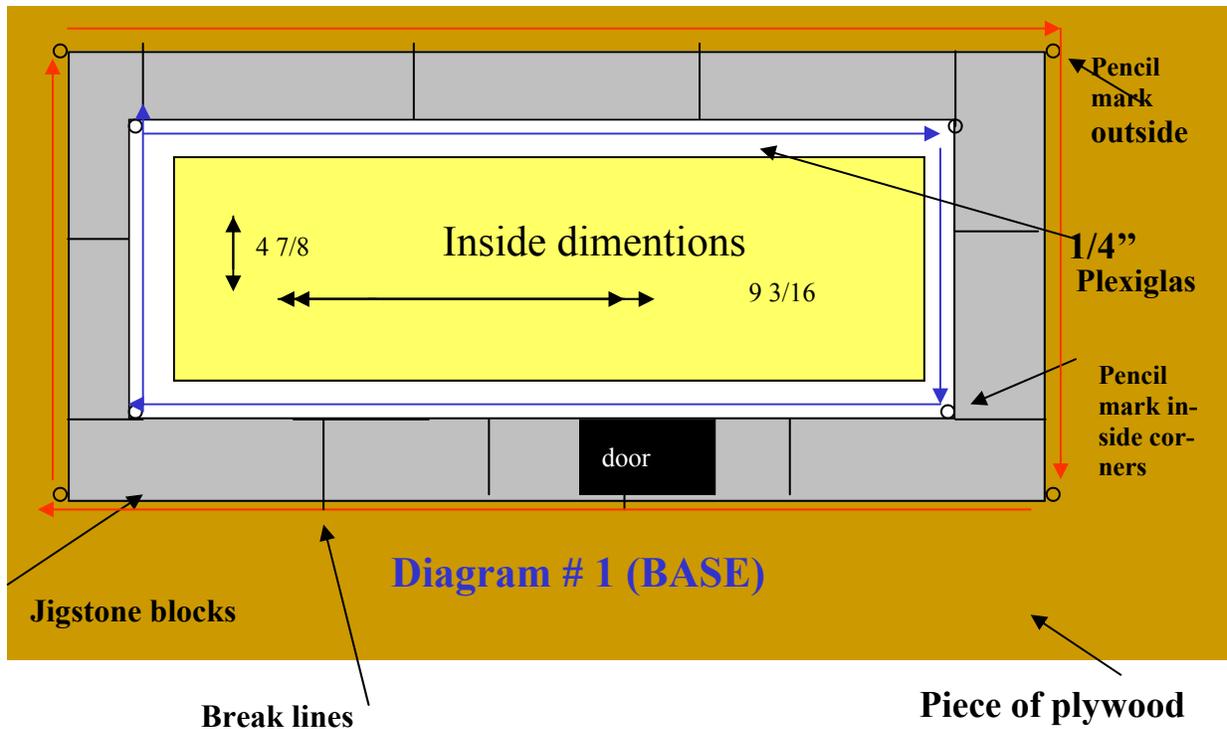
CRUCIAL STEP (assuming your blocks have cured for 30 days)

The next day, brush on at least 5 coats of cement sealer (wait 3 hours between coats.)

I use Quikrete anchoring cement sealer and I have found it works very well.

Your building will look shiny and will make it look like an old stone building. More important it will be sealed against water damage. Remember to seal the top and the bottom of your blocks!

What I have included in the first two pages are some general information, the next few pages are the instructions.



Set up should be placed on a table which is level and somewhere , where you won't have to move it.

Put a piece of plywood down on a lazy susan (it should be larger then your proposed building)

Put a large piece of paper to fit over the plywood

Step 1

Put your blocks down forming whatever dimensions you would like, for the purpose of this clinic, I have chosen a simple rectangle. Play with your base until you are satisfied of the size of your building. This only determines the outside dimensions of your building. This step will form the base of your building. (see diagram 1)

Step 2

Mark the inside corners of the blocks with a pencil mark. Mark the outside corners also (with pencil). Remove the blocks. (see diagram 1)

Step 3

Using a square connect the dots to make the grey area within which your "Jigstone" blocks will be placed. (see diagram 1)

Step 4

Measure 1/4" all the way around inside (from the grey area) and draw another line to denote

the area where you will place the Plexiglas in. (see white area in diagram 1)

Step 5

Put the blocks back in the area where they will be going and mark the “break” lines showing where individual blocks stop and start. It is at this point you will determine where the door should be placed. (see diagram 1)

Step 6

Plexiglas (following dimensions are for this clinic)

I use 1/4” Plexiglas for strength. You can use thinner material if you wish. The Plexiglas gives your building strength, gives you something to glue your blocks to and since it is not a porous material it is perfectly suited for outdoor conditions. The Plexiglas is also clear which allows you to put real glass in your windows and not have to cut any openings for the windows. It’s main function however, is to keep your building square and level.

Cut two ends exactly the same.

Width is $4 \frac{7}{8}$

Height is measured as follows:

Measure 6” (now you have a square)

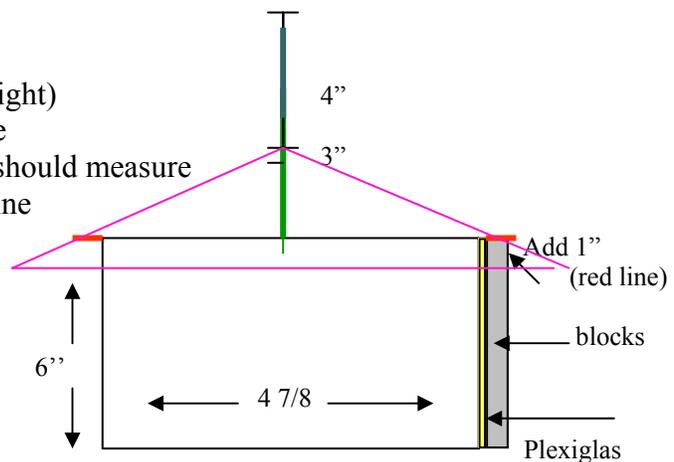
Add 1” at each end (in red) at the top (height)

Measure distance from the beginning of the left red line to the end the right red line , it should measure

$6 - 14/16$ ” now, mark the middle (green) line

each side should measure $3 \frac{7}{16}$ ”

Diagram # 2 ENDS



Using a square make a line up to about 5” (green)

Now, determine how high your roof should be

I choose to go to 3” Put a right angle with the point at the 3” mark and each side should reach the ends of both red lines. This gives you a right angle.

NOTE the reason why you add 1” on each side (the red extensions) is because you must allow 1/4 inch for your Plexiglas and 3/4” for your blocks which adds up to 1” **If you use thinner Plexiglas allow 3/4” for your blocks and whatever the thickness of your Plexiglas is.**

Now cut your two other sides $9 \frac{3}{16}$ ” by 6” high

Plexiglas is easy to cut if you know how. Use a table saw but either reverse the blade on the saw or simply turn the saw around so that you are putting in your material from the back of the saw. This prevents the Plexiglas from coming back onto itself and “gumming” the blade or melting onto itself. It does make a mess however because the bits of Plexiglas are flying ahead of the blade.

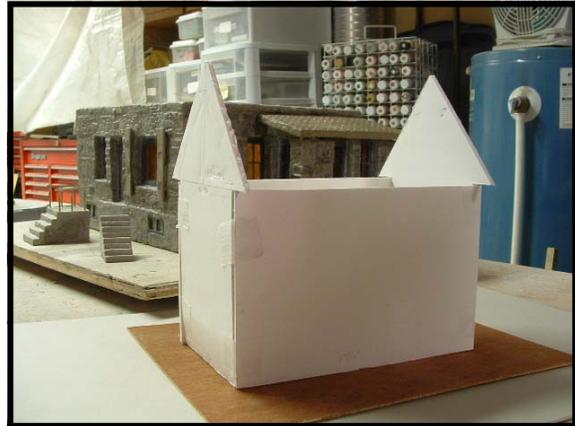
:You can also use a hand saw with small teeth or a jig saw but this requires that you put a piece of masking tape over and under the cut to minimize the mess. And go slow! It is also useful in this case to follow a guide. The cut however won’t be as smooth as it would be using a table saw, therefore it won’t fit as well.

Step 7

Using an exterior construction adhesive such as PL Premium

glue your four sides putting the ends inside the two longer pieces.

It should look like photo at right (I used foam core for demonstration purposes, yours would be in Plexiglas of course

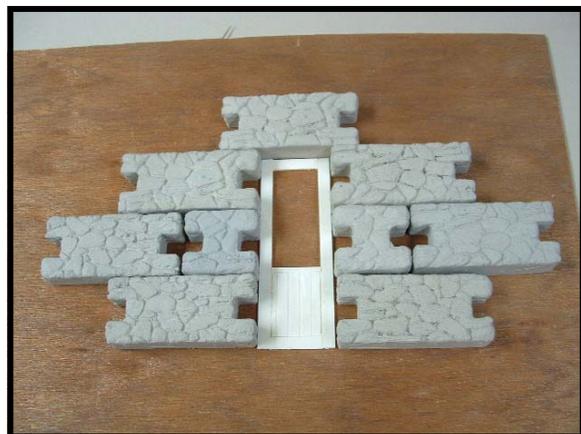
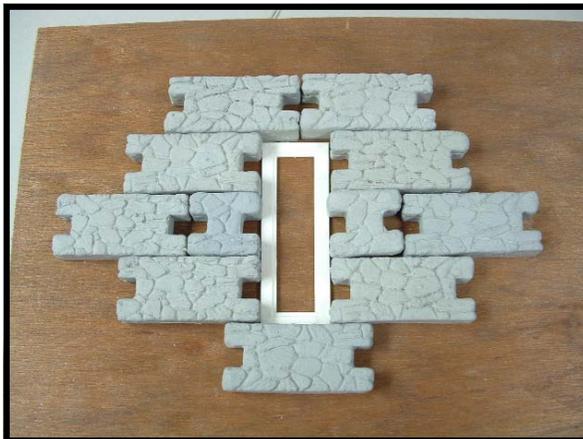


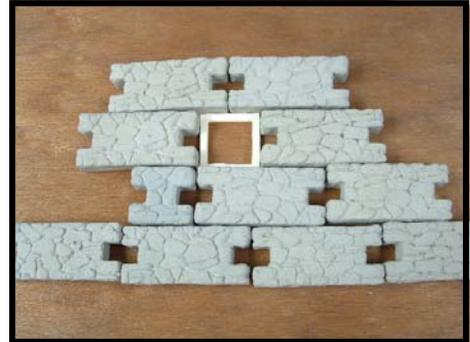
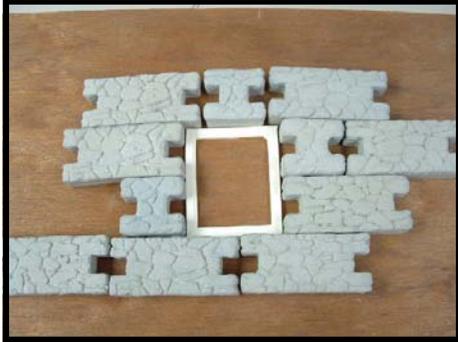
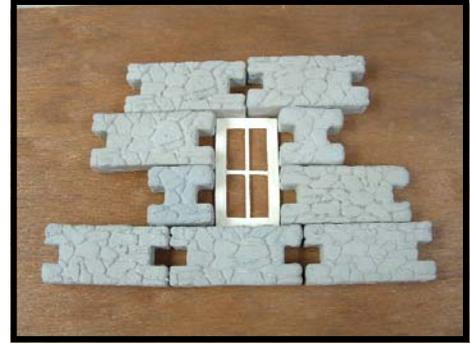
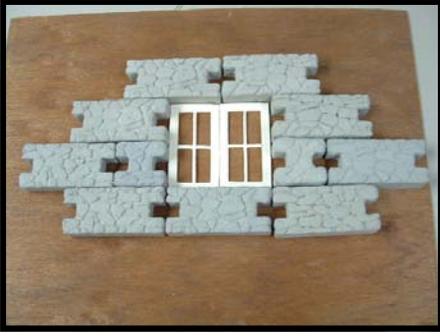
You should take note that the outside dimensions of your diagram would be the exact size of your foundation. Diagram in question is on front page of this article.

I almost always make a 1" foundation with an opening in the middle to allow for lighting. For this step I use an ordinary sand mix cement available from any building supply store.

Windows & Doors

You can make your own windows & doors any style any shape as long as you remember that windows & doors for Jigstone buildings must fit within the blocks therefore look at the following photos and decide what kind of windows & doors will be going in your building. You can make any combination, any size as long as you respect the height of the blocks.





You will note that in all the photos the height of the window equals either one, two or three blocks high! Including the door! You may make any kind of window as long as you respect the height of the blocks.

HERE'S HOW

scrap piece of styrene
Scrap pieces of styrene glued down on piece #1

You will make your windows inside this square (Blue) the inside dimensions are the exact size of your window

If you are making several windows of the same size, this guarantees that all your windows will be the same size.

To make windows you will use "Plastruct" strips of styrene they come in different widths and thicknesses

Using a small mitre box and a hobby saw cut your first piece of styrene cutting ends at a 45 degree angle. Continue in this fashion until all 4 pieces have been cut.

Using smaller narrower pieces of styrene cut pieces to fashion the edge and mullions

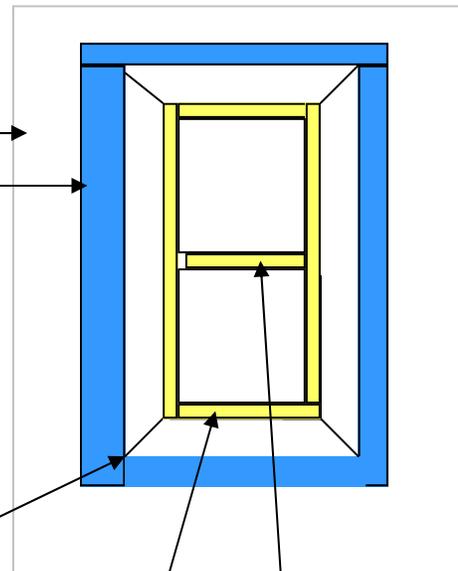
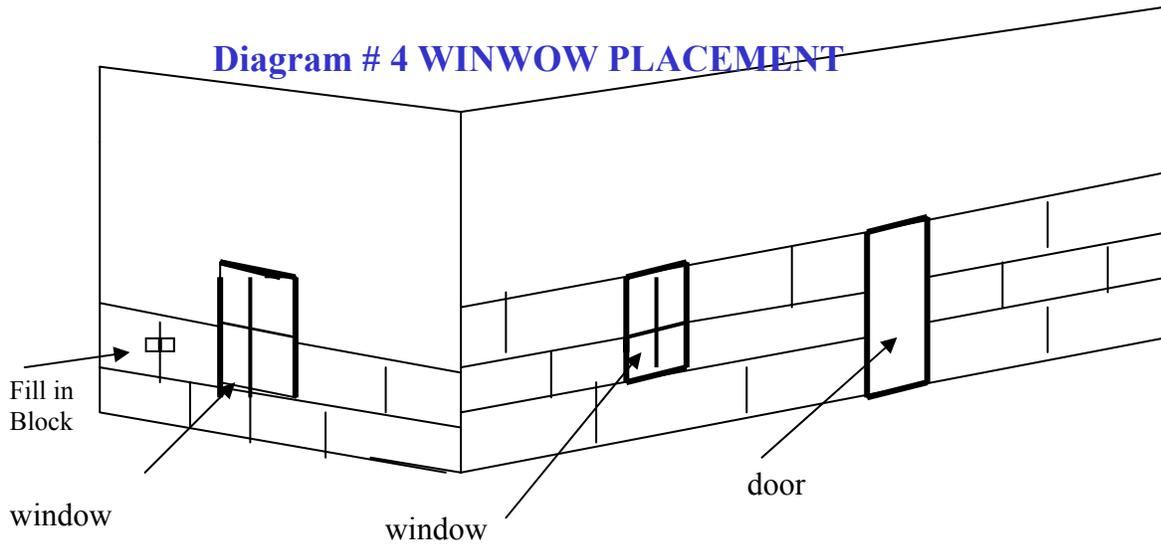


Diagram # 3 WINDOWS

Window placement



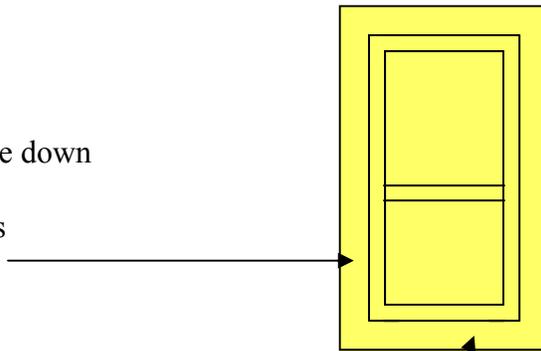
The diagram above shows the windows being two blocks high and the door 3 blocks high

Gluing the windows

Diagram # 5

You are looking at the window face down

Yellow is the piece of stained glass



Cut a piece of stained glass (available at any stained glass studio) almost the same size as your window

I use amber glass with a pattern on it which lets the light shine through but doesn't allow you to see the inside of the building. I also put the glass in upside down, smooth side is facing the outside of the building. This way dust cannot adhere to the glass since the smooth side is facing out. The pattern is still effective but since the pattern side is inside the building it will not attract dust and dirt.

Using clear silicone apply it to the smooth side of the glass on the very edge of the glass all the way around and place it on the window frame. Let this completely dry.

Apply a bead of silicone to the outside edge of pattern side of the glass here all the way around, (take care that the silicone is on the outside edges!) turn the window right side up and place it on your Plexiglas, do not move it! Let this dry completely.

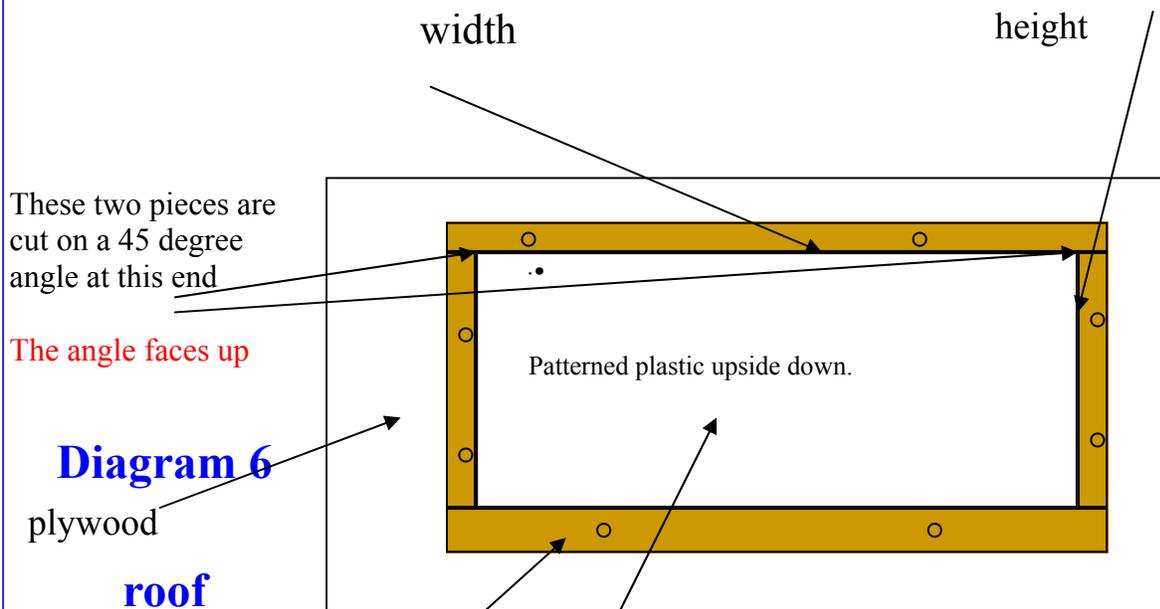
This step guarantees that when you place your window on the Plexiglas the silicone will make a seal assuring that you will not get any mortar seeping through to the inside of the windows. .

Start assembling your blocks as explained in the front of this article until you reach the top of your walls. When your building is completely dry, clean if necessary, and fill in the cracks as explained in the front of this article. The next day apply your sealer coats. Follow the directions well and you will be pleasantly surprised at the outcome.

ROOF

Measure the width of your building from outside edges of your blocks and add 2 inches.

Measure the height from the top of the Plexiglas peak to the ends and add 1 inch



Cut a piece of "Precision sheet Plastic" (eg: roof shingles) the exact size of the white area which is the exact size of one half of your roof. Put this down inside the plywood jig wrong side up. Use any vegetable oil and brush it on the plastic. Wipe the excess off.

Cut a piece of hardware cloth slightly smaller than your piece of plastic and keep it handy.

Mix some sand mix cement, with water to which you have added "Welbond" glue (mix is about 1/4 cup of glue to one cup of water. This step adds strength to your cement.

Put down 1/4 inch of cement on the plastic, make sure all areas are covered with cement, add the piece of hardware cloth and put down another 1/4 inch of cement. Trowel smooth .

Let this dry at least two days !

Unscrew the jig and put your piece somewhere safe to cure.

Repeat with the other half of your roof

Let these two pieces cure for 30 days.

Once the 30 days are up you may glue your roof together with “PL Premium” outside construction adhesive and place it on your building. Now seal the roof with 5 coats of concrete sealer. Let this dry.

Because it is cement it has a lot of weight and does not need to be glued down. The added benefit is that if you light your building you will be able to change the light bulb by simply removing the roof.

If you have gaps at the roof line you may use “window glazing tape” available in the window or paint departments This tape comes in 1/2” width and is very sticky on both sides. The tape is applied to the building and the roof is then placed on it. You will be able to remove the roof to change the light bulb, however, you will have to reapply the tape. This tape never hardens, it remains pliable for years. When it compresses it seals and fills the gaps.

Place your building on the foundation and voila! This building will last for years! I would caution you that since you spent a lot of time constructing this building **please take the time to seal it again once a year in the fall to protect it even more for the winter months.**

Note: please light your buildings, they look so much better

GOOD LUCK!