

## MARKET\_STREET\_10190 LED Lighting Kit

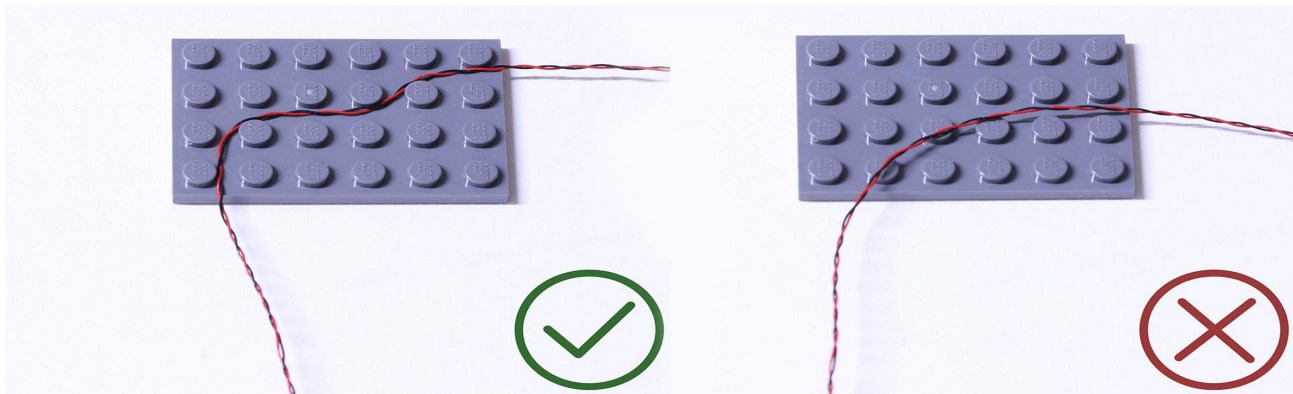
### Package contents:

- 1x LEGO Lamp Post with White Dot Light Installed
- 4x White 15cm Dot Lights
- 6x White Strip Lights
- 5x LEGO Plates 1x6
- 2x 6 Port Expansion Boards
- 7x 15cm Connecting Cables
- 1x AA Battery Pack
- 8x Adhesive Squares

### Note:

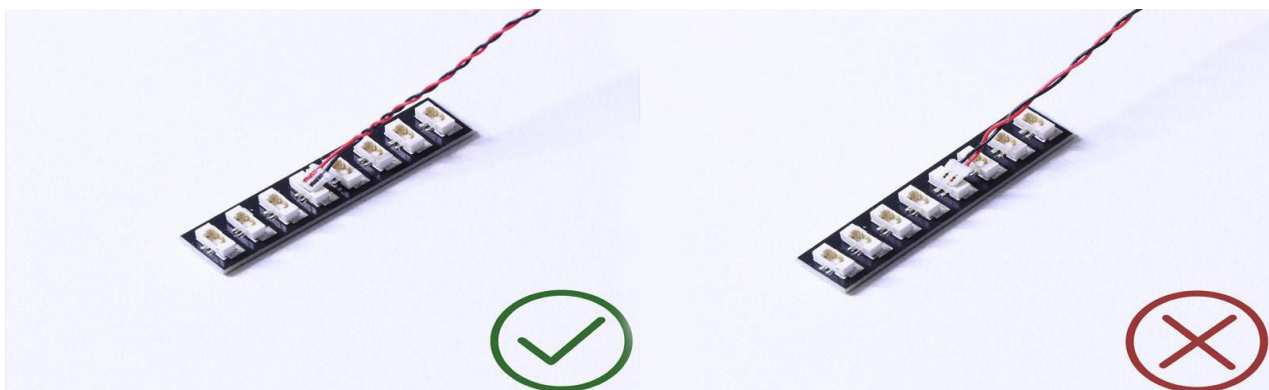
Place wires on the surface or under the LEGO building blocks.

The wire can be place between the building blocks or under the block, but they should be placed between the studs correctly.

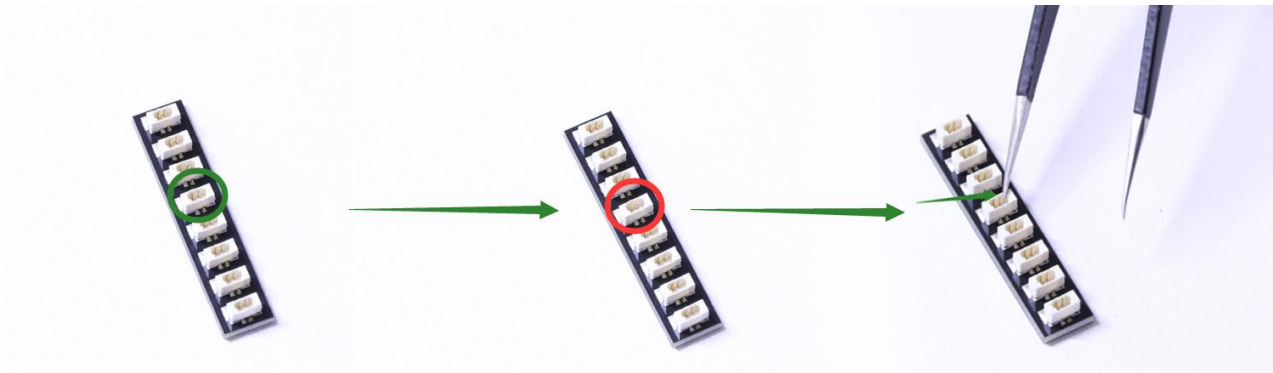


Insert the connectors to the ports.

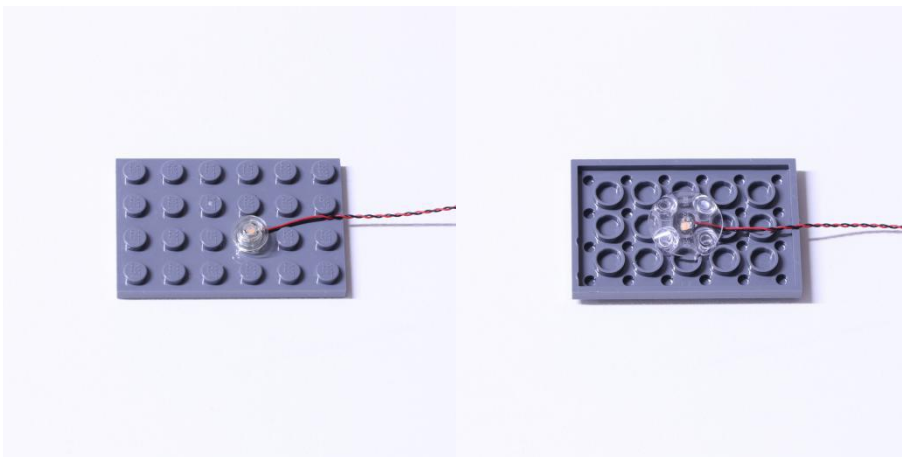
Be careful when you are operating, there's only one correct way to insert, make sure the expansion board is upward, find the soldered "=" sign on the left of the port. When you are inserting, the side which the wires can be seen should be faced to the "=" sign and if you feel hard to insert, please stop, and don't force it, for that may result in bent pins inside the port or overheating of the expansion board.



At this point, use the tweezers to straighten the bentpins.

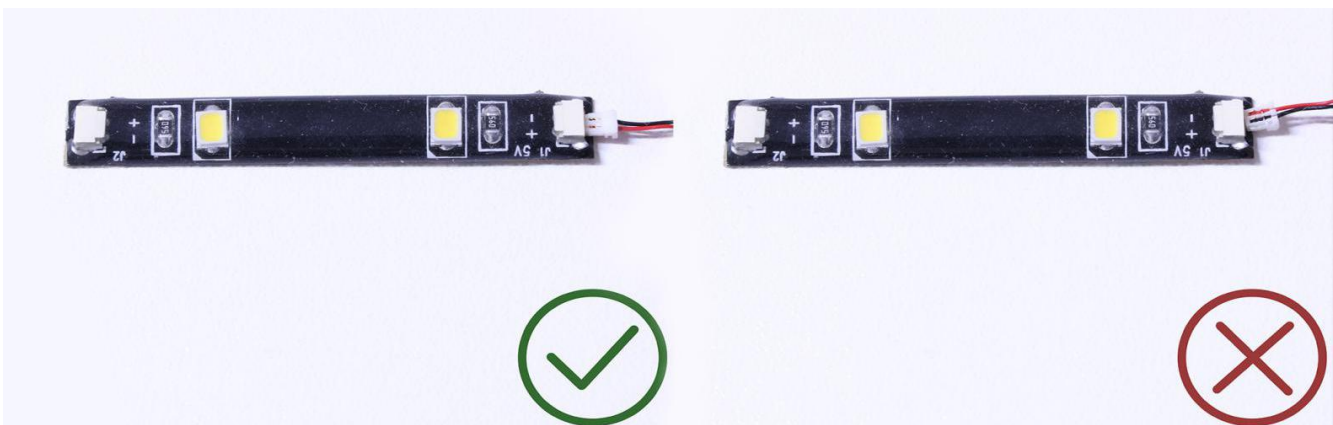


When installing dot lights, make sure they are correctly placed (Yellow LED package is exposed). You can put them either on the top of the studs or between studs.

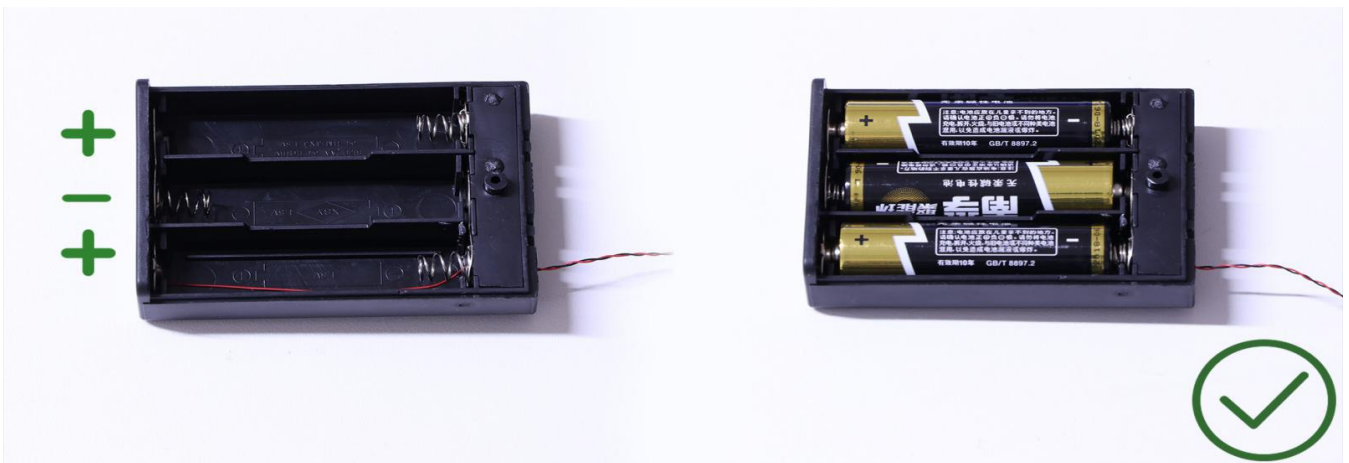


## Connecting cable connectors to Strip Lights

Take extra care when inserting connectors to ports on the Strip Lights. Connectors can be inserted only one way. With the Strip Light facing up, ensure the side of the connector with the wires exposed is facing down. If a plug won't fit easily into a port connector, don't force it. Doing so will damage the plug and the connector.



Finally, please pay attention to the positive and negative terminals of the battery when installing the battery case.

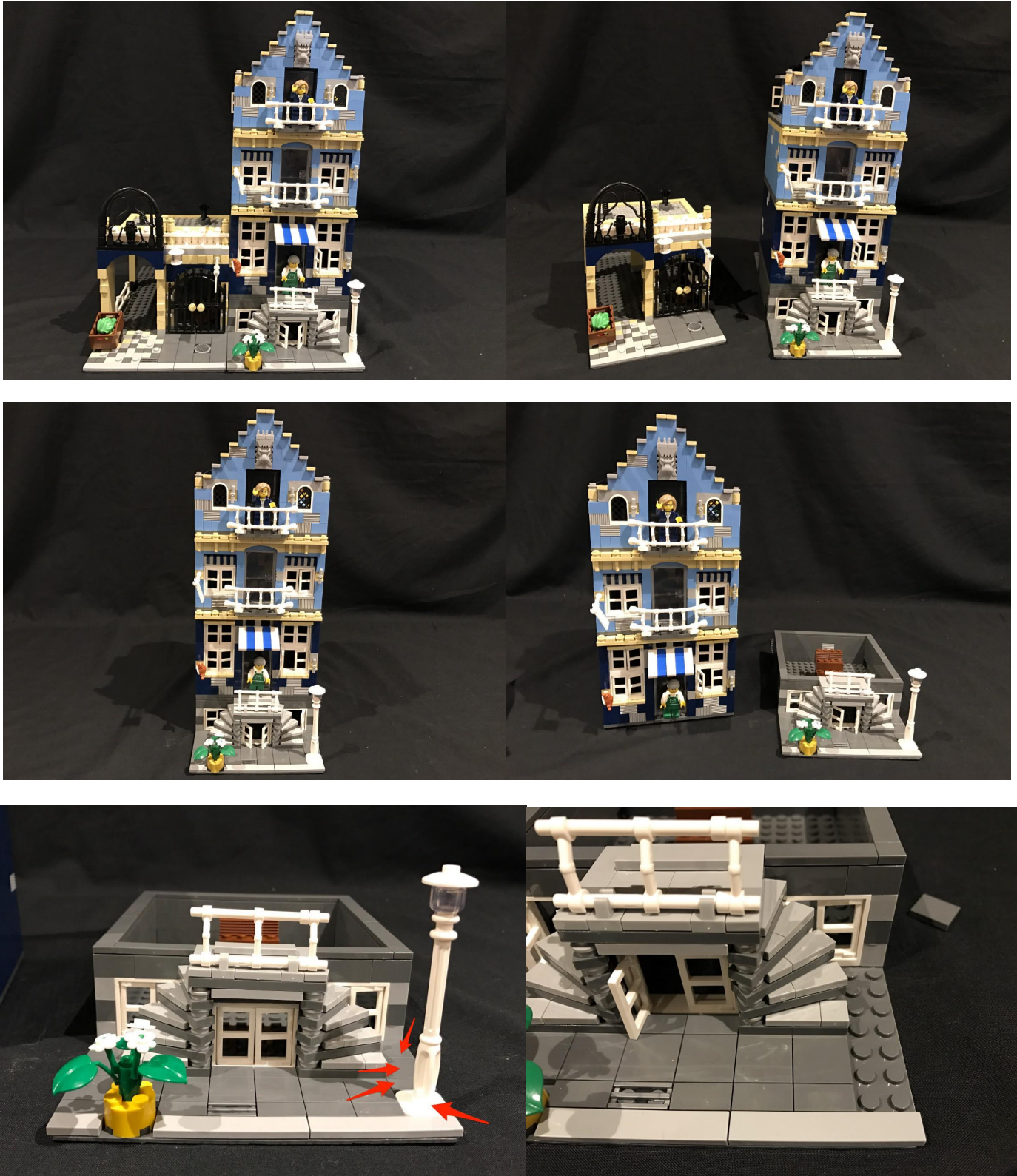


OK, Let's Begin!

## Instructions for installing this kit

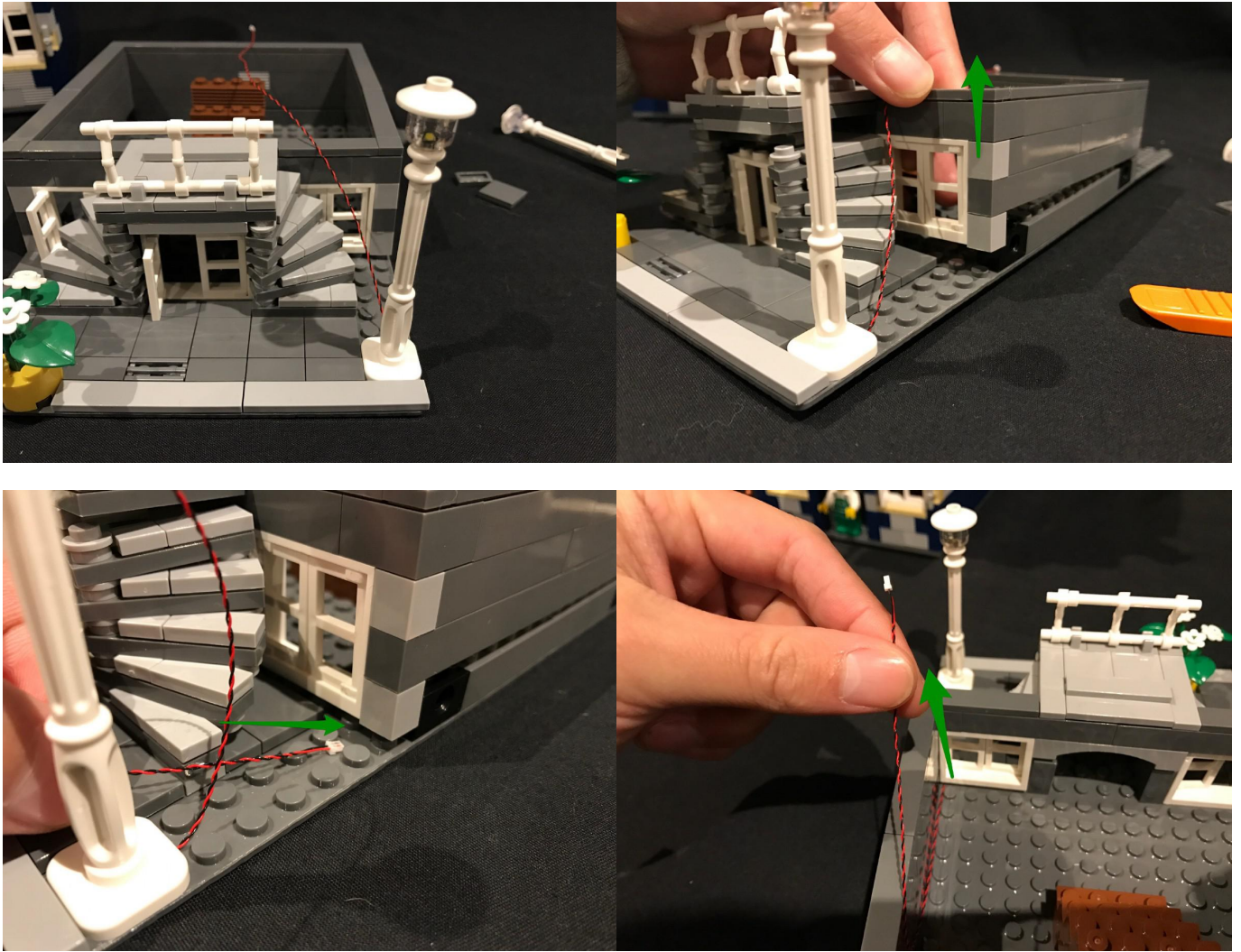
1.) We will start installing lights to the right section of the building. First detach and remove the upper levels from the ground floor, followed by the lamp post and floor tiles as pictured below.





2.) Replace the stock lamp post with the Vonado lamp post with Dot Light installed and ensure the lamp post cable is facing toward the back. Carefully disconnect the wall from the base plate to allow you to thread the lamp post cable underneath the wall. Ensure the cable is laid in between the studs of the base plate and then pull the cable up from the inside of the building.

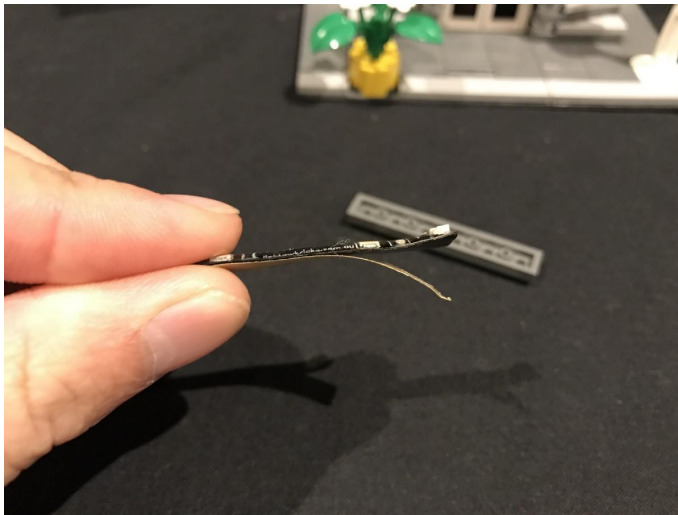




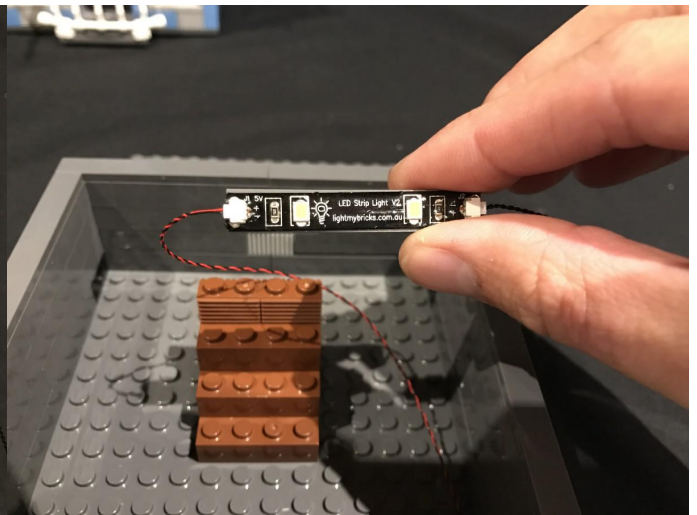
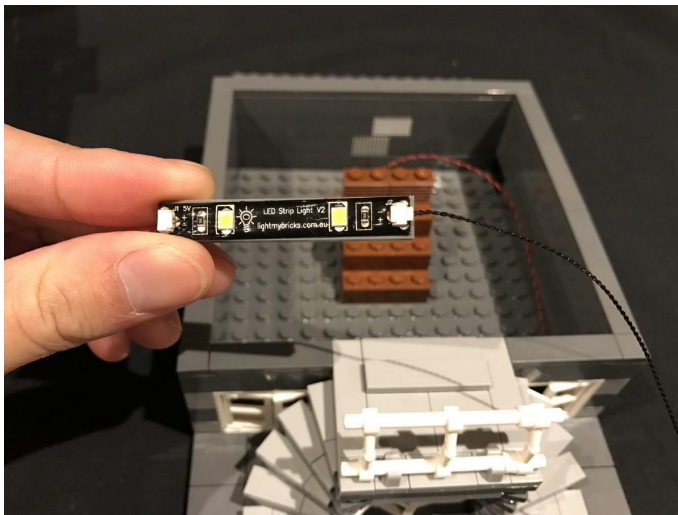
Reconnect the front wall to the base plate as well as the tiles.



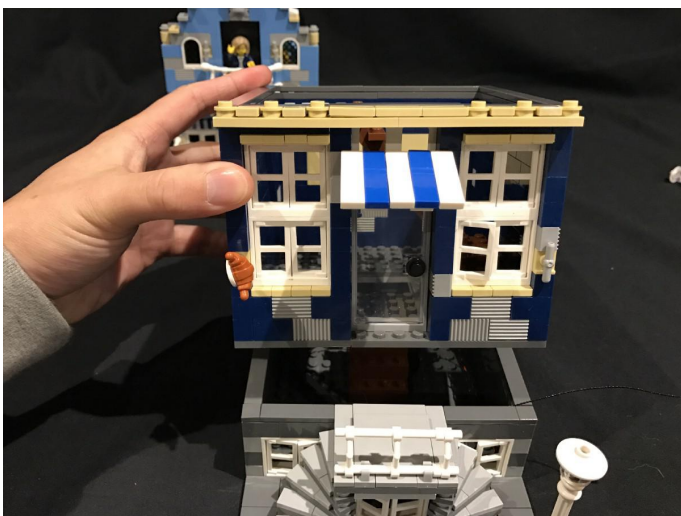
3.) Take a White Strip Light and then stick it onto the base of a LEGO 1x6 Plate using the adhesive backing. We will identify this strip light as striplight#1.



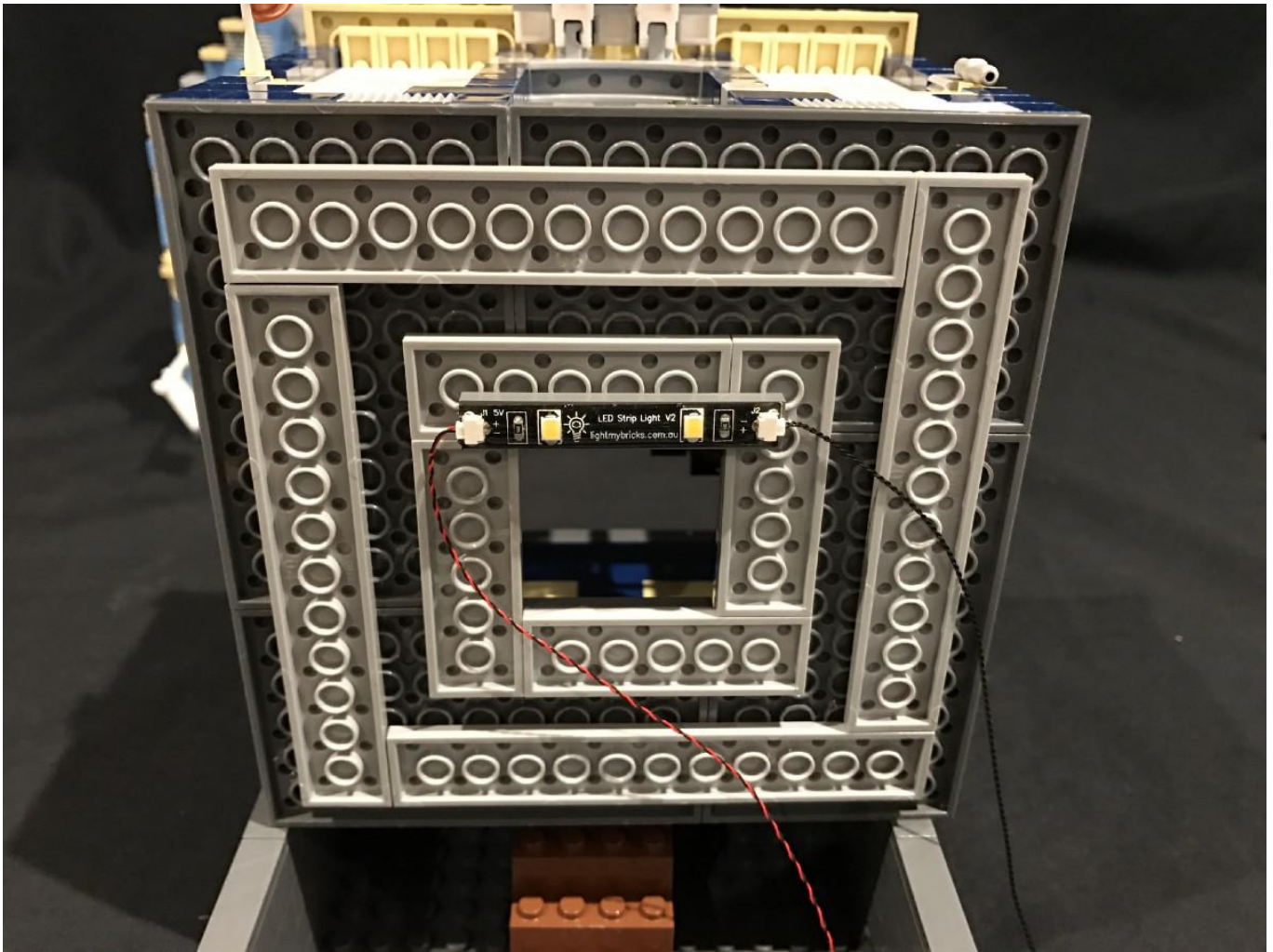
Take a 15cm Connecting Cable and connect it to the right port on the strip light and then connect the lamp post cable to the left port.



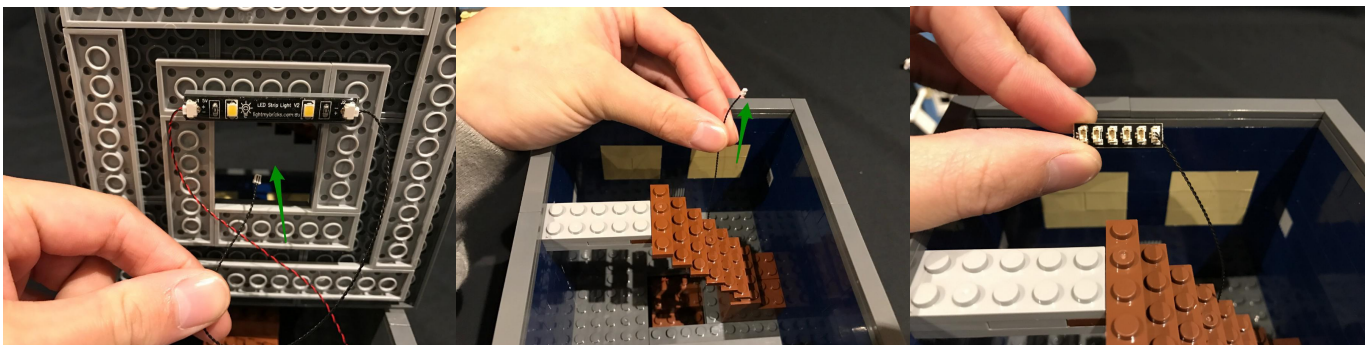
Take the 1st floor over the ground floor and then turn over on it's back to allow us to mount the strip light to the following position.





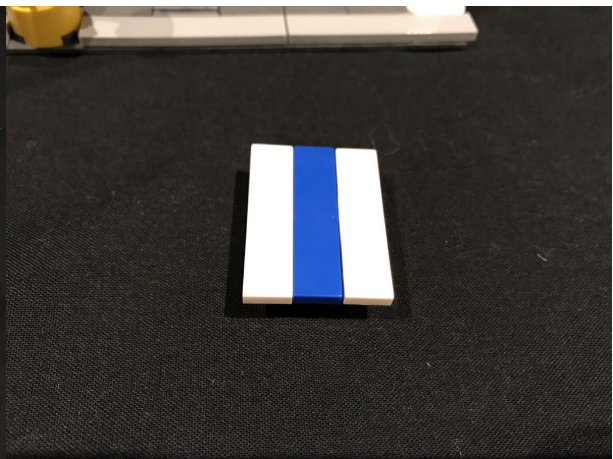
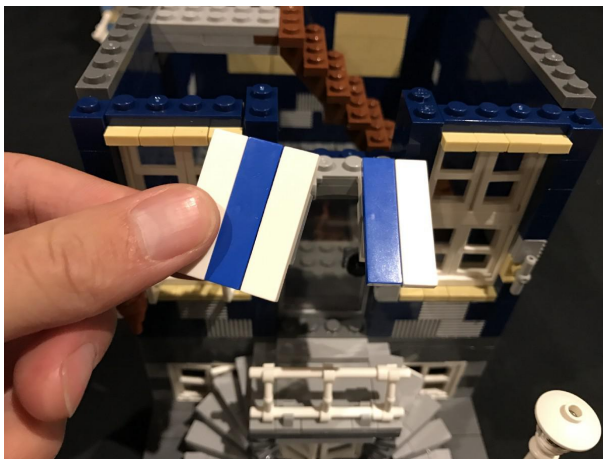
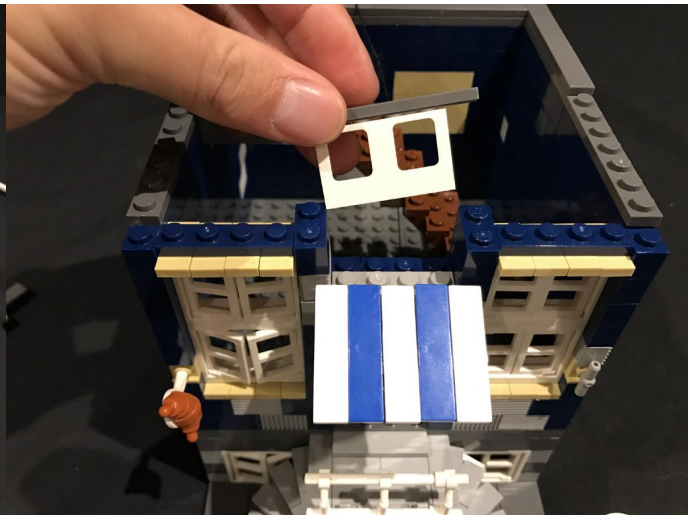


Thread the other end of the 15cm cable up the space which leads to the 1st floor, then pull the cable up from the top and connect it to a 6-Port Expansion Board. Securely reconnect the 1st floor to the ground floor.

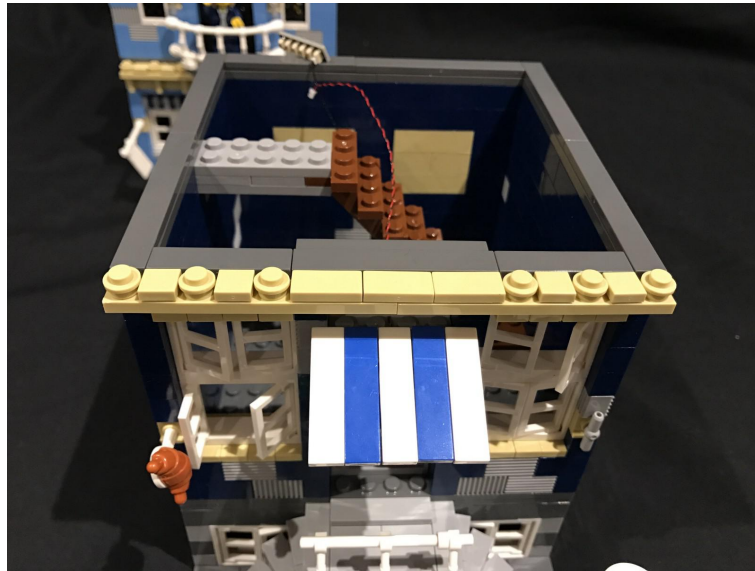


4.) Disconnect the following pieces on the top of the 1st floor and then remove the following section of the veranda.

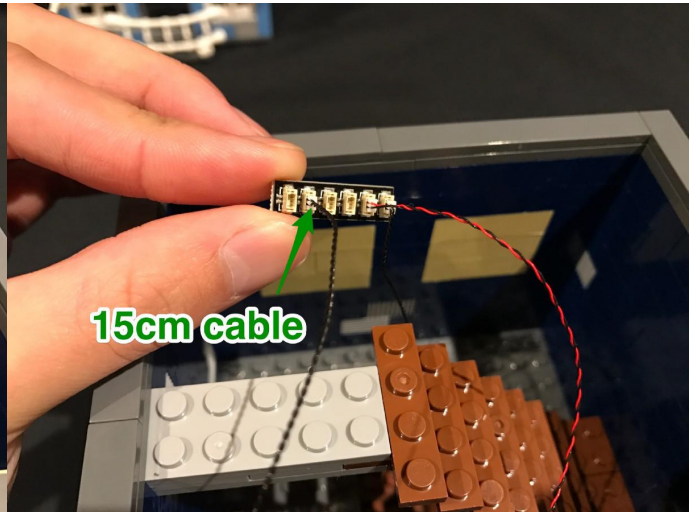
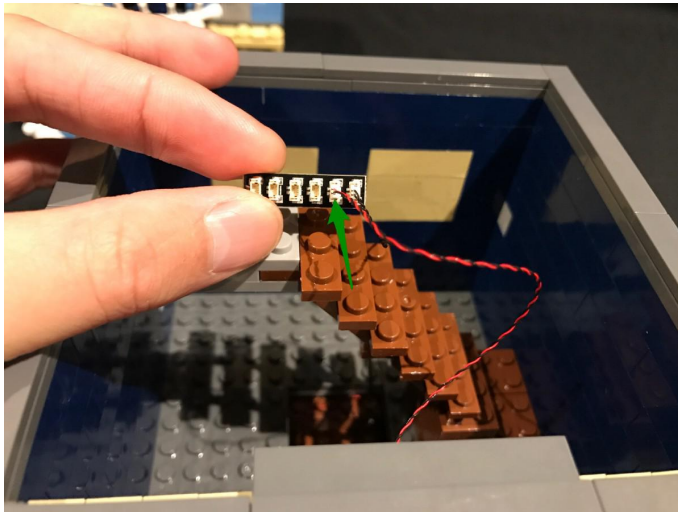




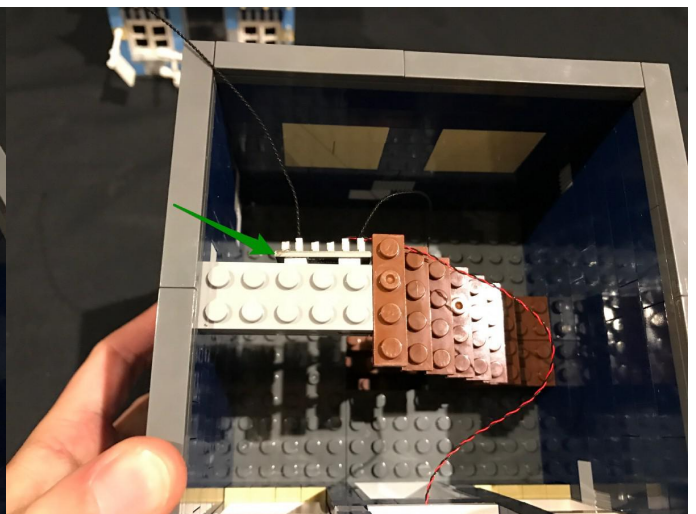
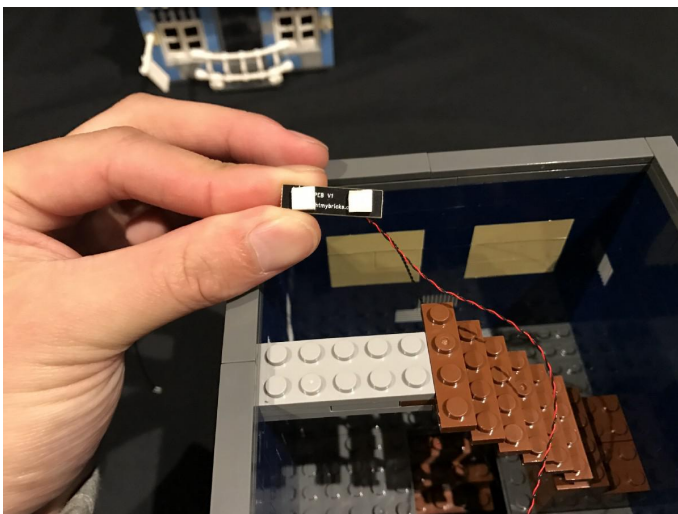
Turn this section of the veranda over and then take a White 15cm Dot Light and stick it to the following position using an adhesive square. Reconnect this section of the veranda back to the front of the building and ensure cable is laid behind in between studs.



Connect the Dot Light cable to the next available port on the 6-port Expansion Board and then connect another 15cm connecting cable to the next port.

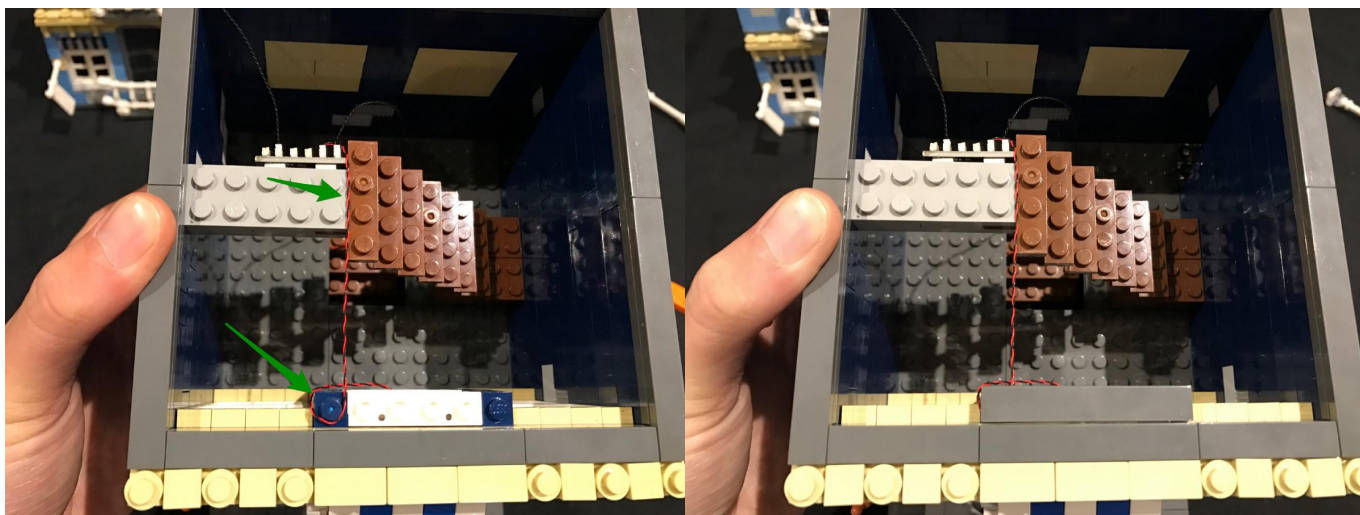


5.) Use 2x adhesive squares to mount the expansion board behind the staircase as per below

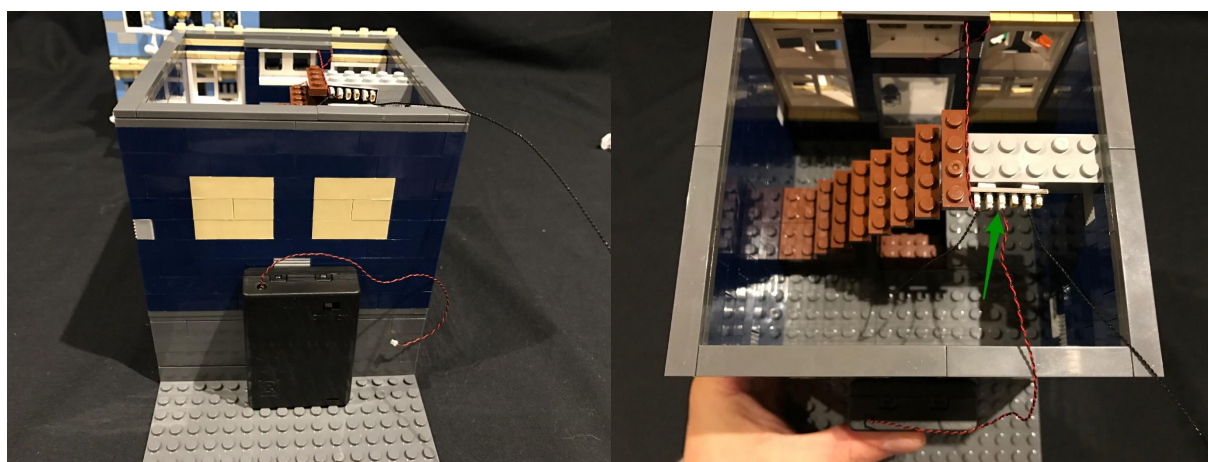


To prevent the Dot Light cable from being seen from the outside looking in, hide the cable by laying them in between studs underneath tiles .

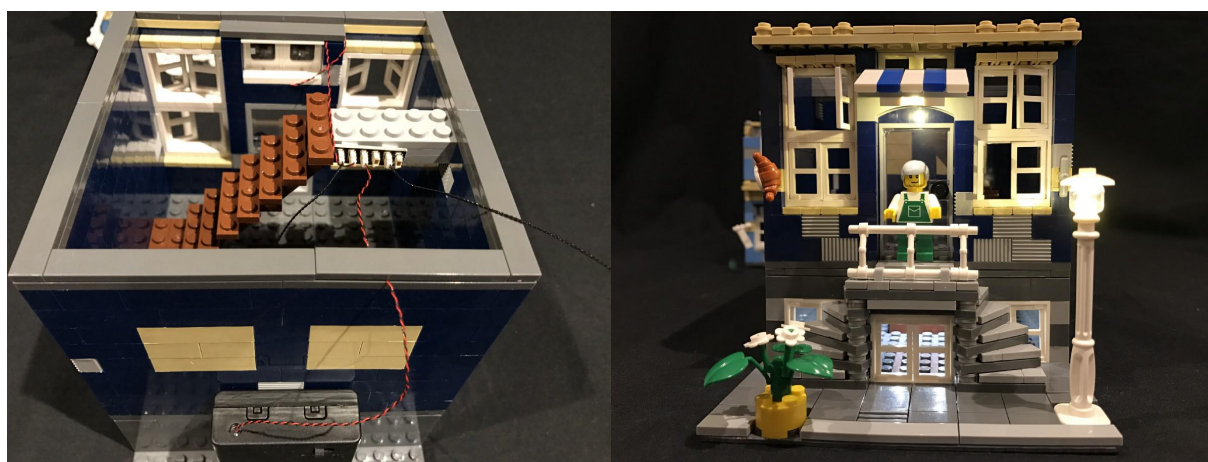




6.) Take the AA Battery Pack and insert 3x AA batteries to it. Place the battery pack at the back of the building and then connect the battery pack cable to the 6-port expansion board.

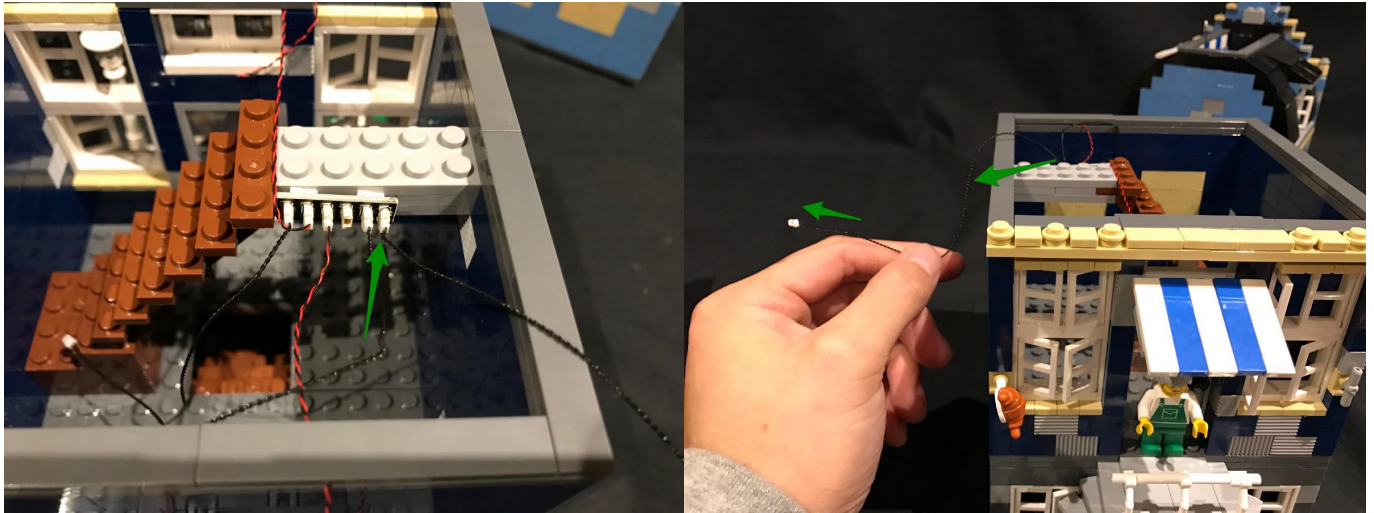


Secure the battery pack cable underneath the tile and then turn the battery pack on to test all the lights installed so far are working OK.

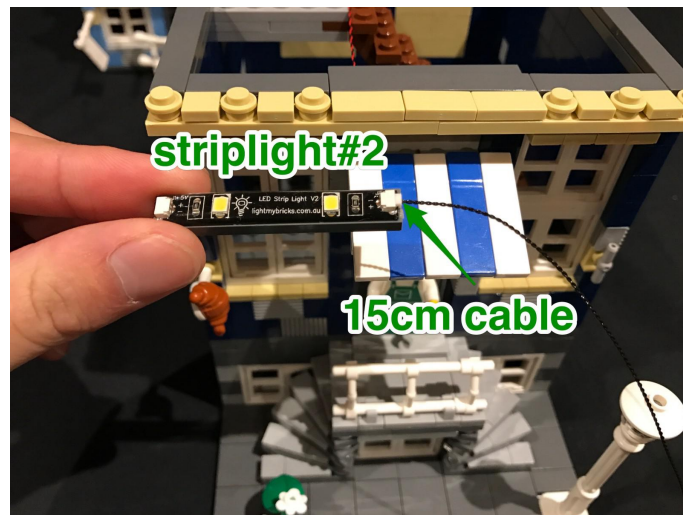


Take another 15cm Connecting Cable and connect it to the next port on the 6-port expansion board. The other end of this cable will be used to connect the left section of this building so set this aside to the left for now.

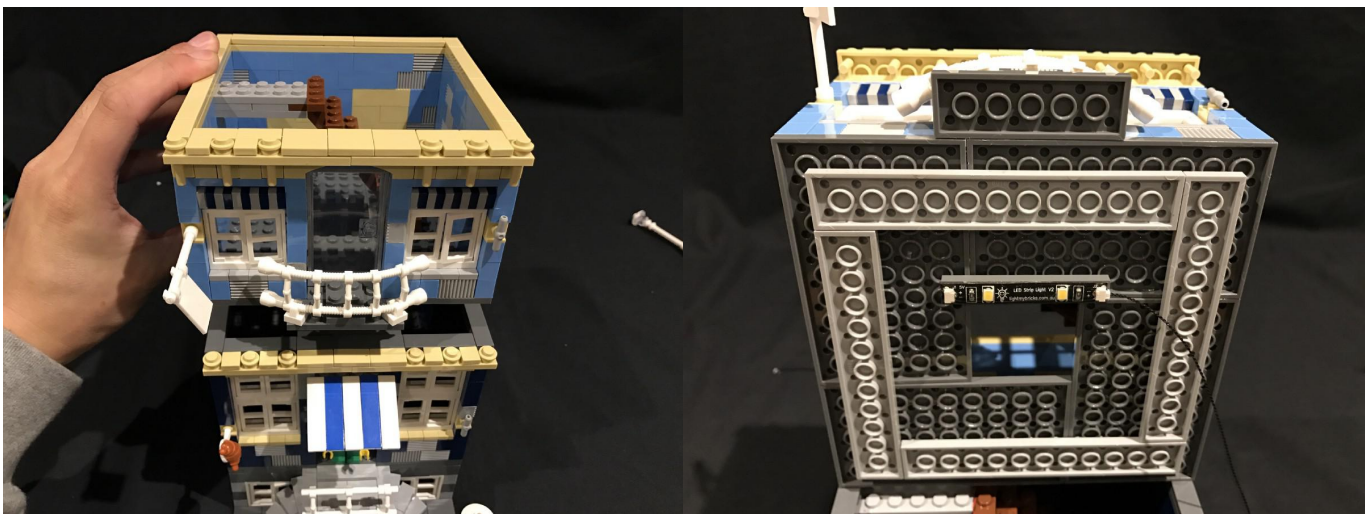




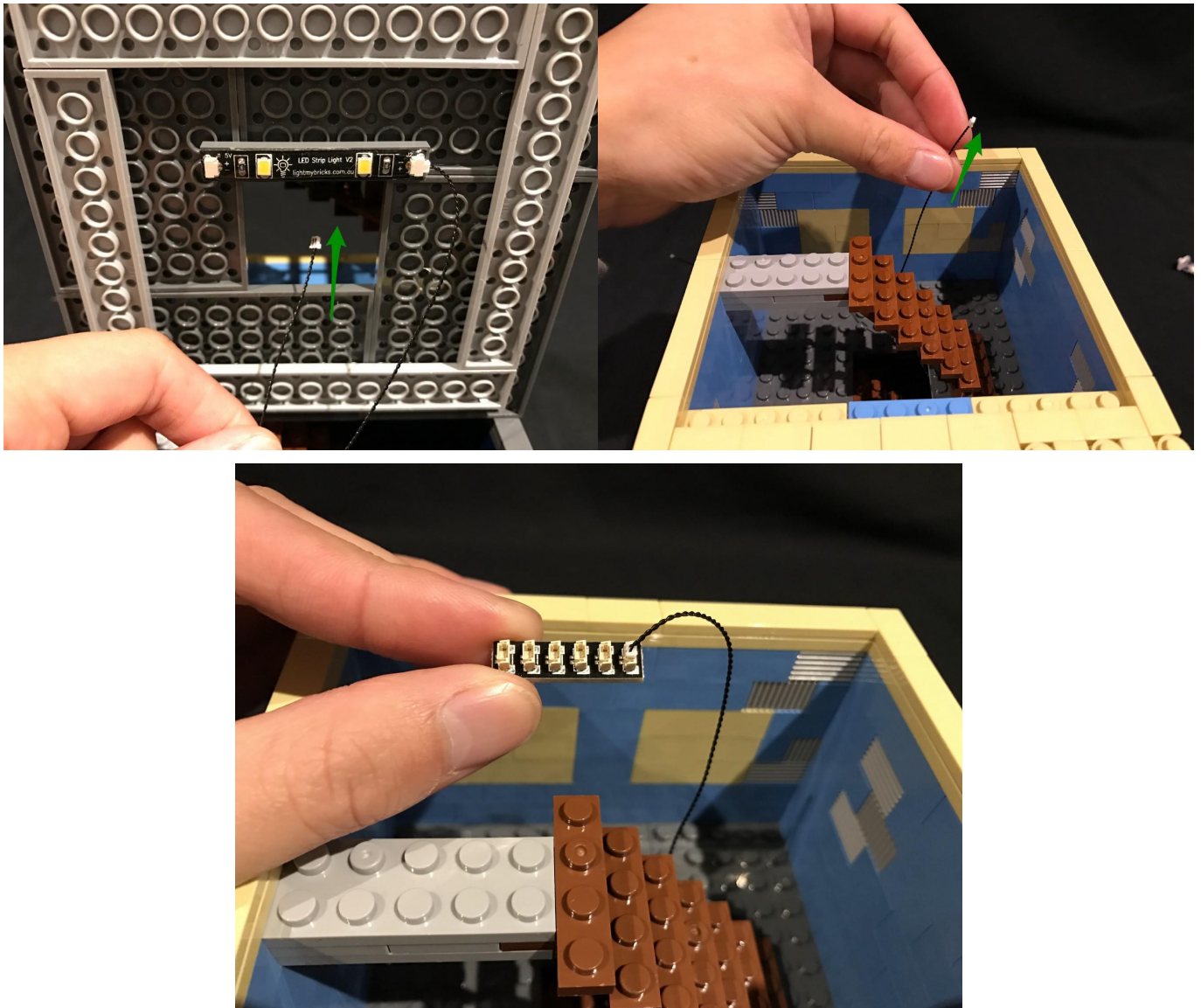
7.) Take a White Strip Light (striplight#2) and then stick it to a LEGO 1x6 Plate. Connect another 15cm Connecting Cable to the right port.



Take the entire 2nd floor over the 1st floor and then mount striplight#2 underneath in the following position.



Thread the 15cm cable up through the space that leads to the 2nd floor and then pull the cable up from the other side and connect to a new 6-port Expansion Board.

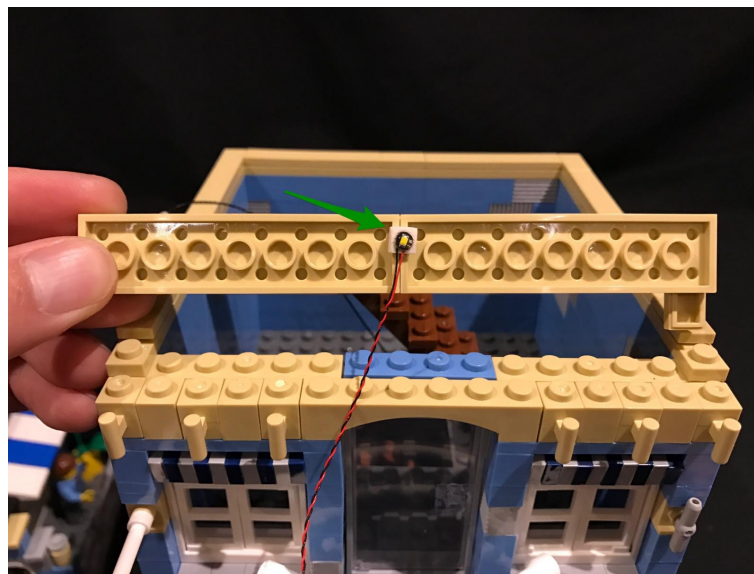
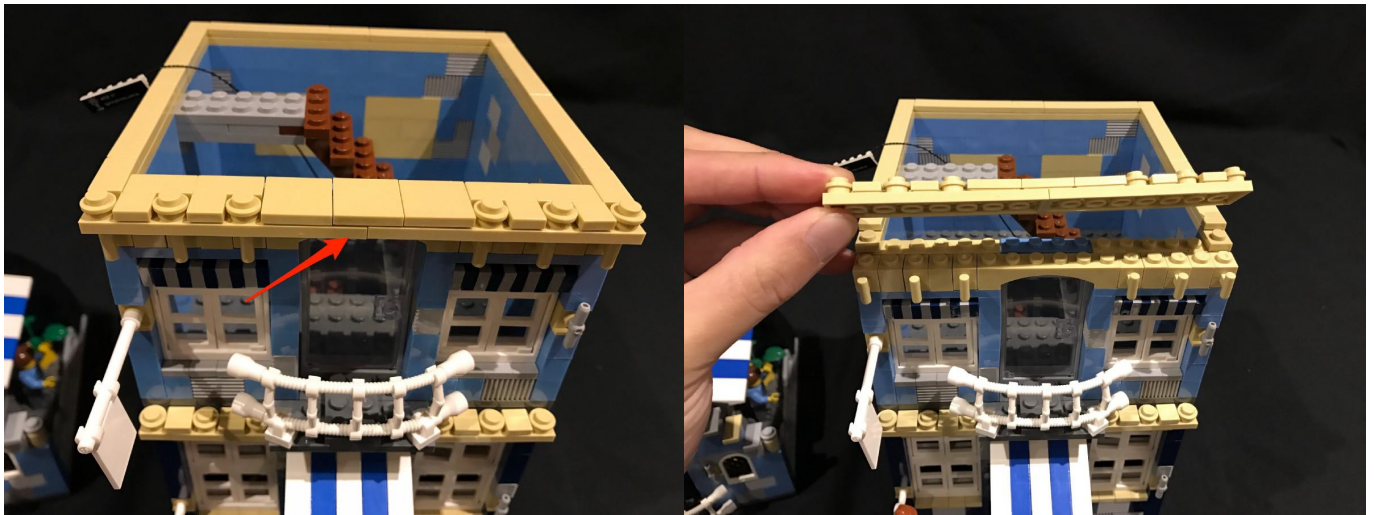


Locate the 15cm cable we connected to the expansion board earlier. Connect this into the left port on striplight#2 and then securely reconnect the 2nd floor on top of the 1st floor.



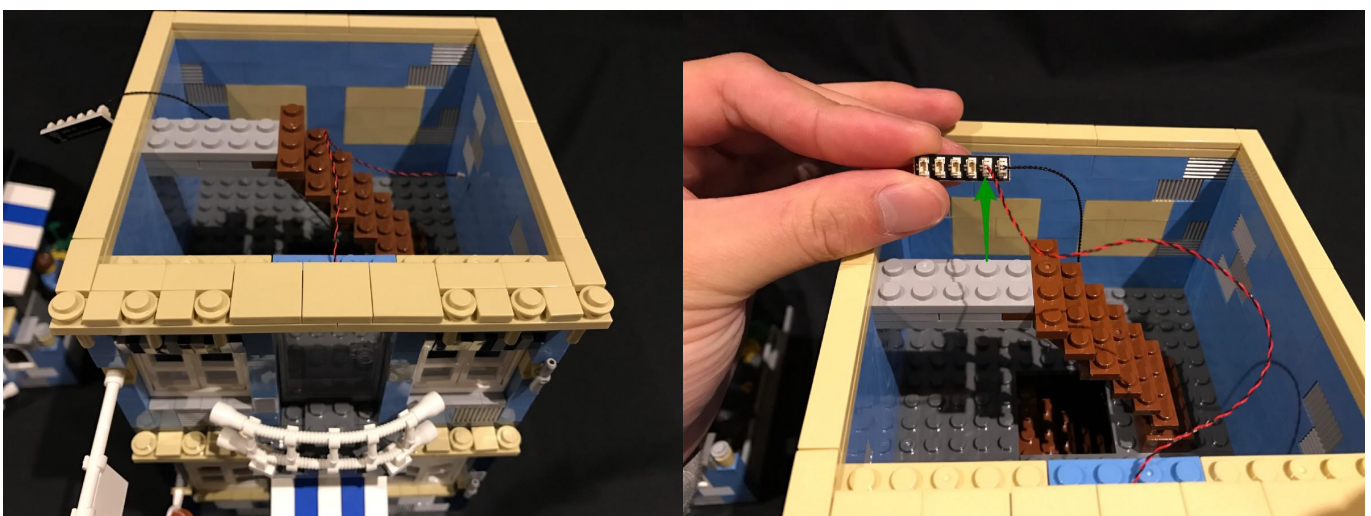
8.) Remove the following section on the top of the 2nd floor and then install another White 15cm Dot Light (using an adhesive square) underneath this section in the following position





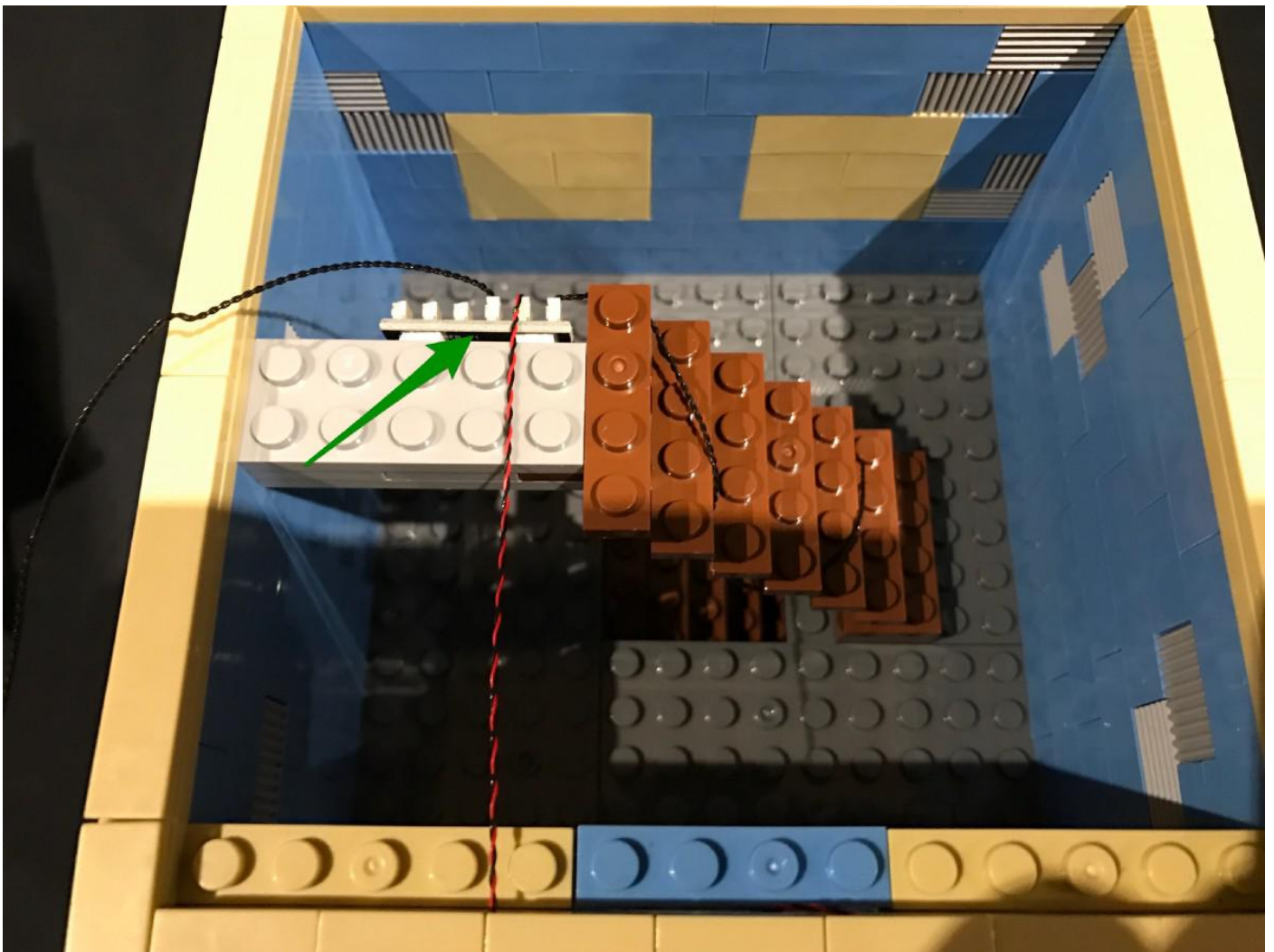
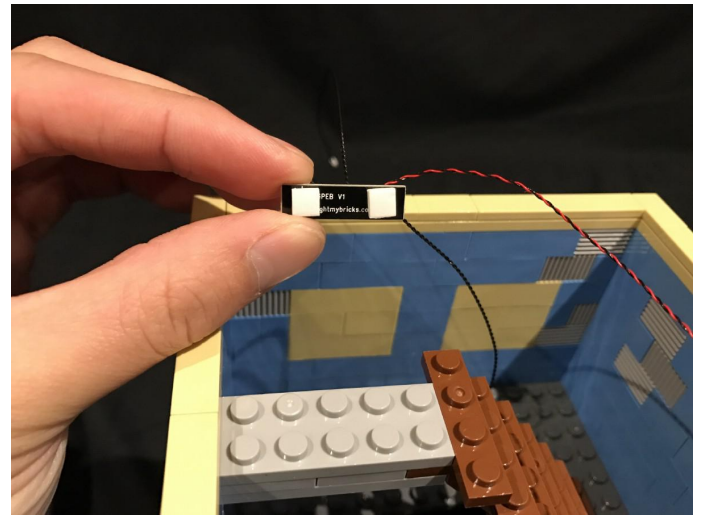
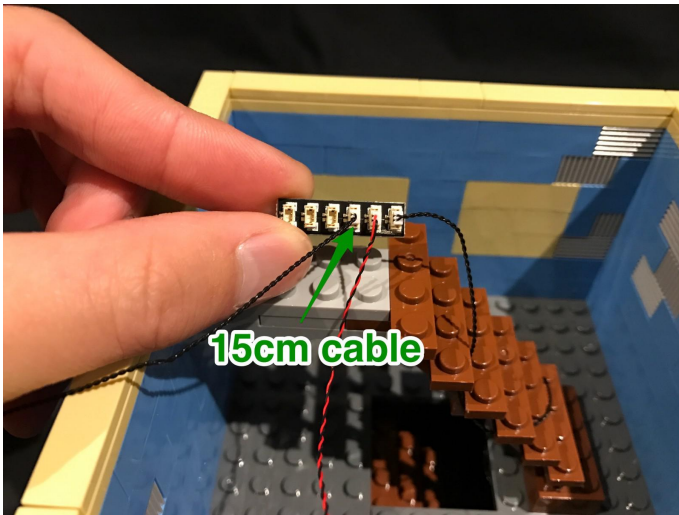
Ensure the Dot Light is stuck to the exact position as shown above

Reconnect this section ensuring the cable is neatly laid behind and then connect it to the next port on the 6-port expansion board.

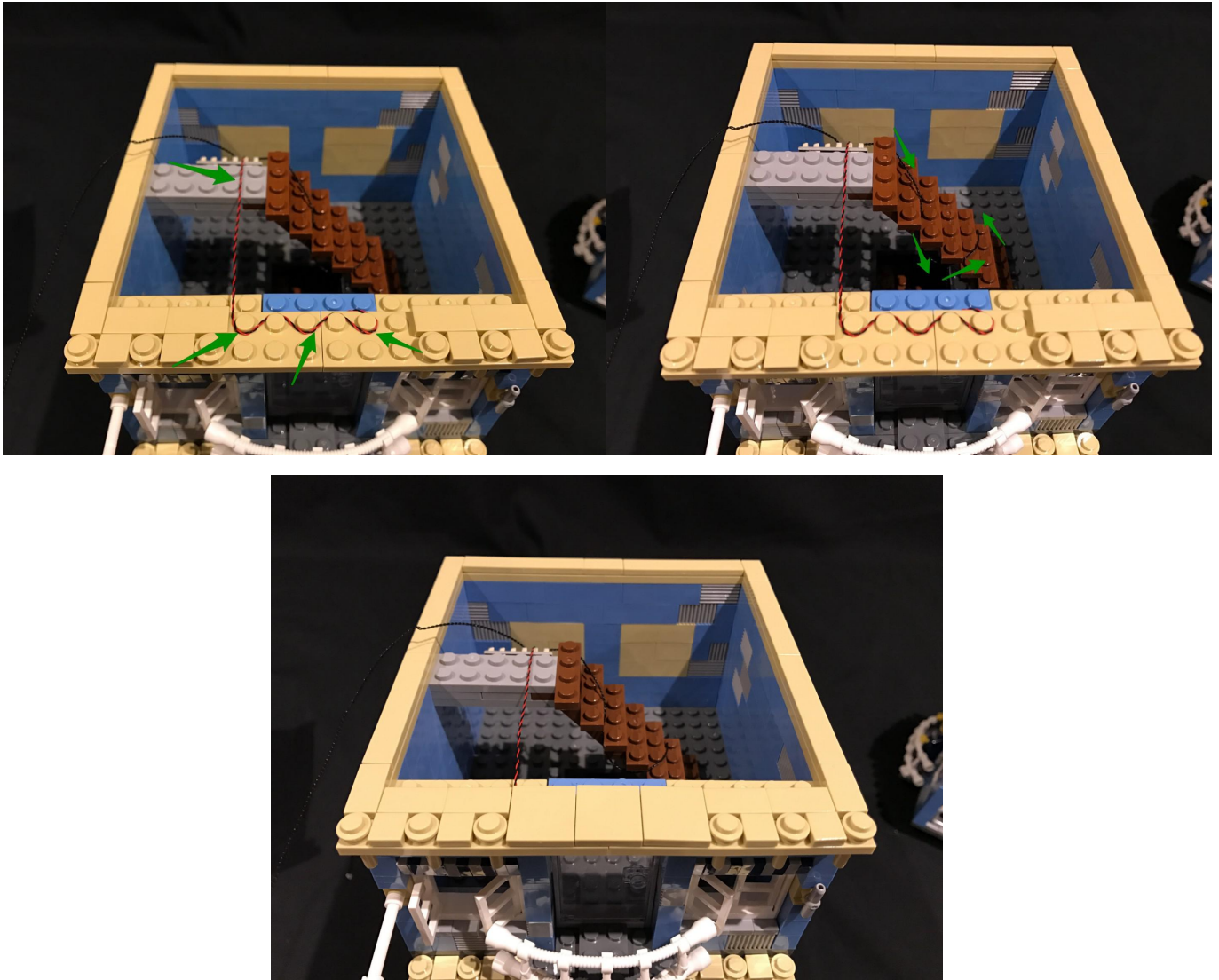


9.) Connect another 15cm Connecting Cable to the next port on the expansion board and then use another 2x adhesive squares to mount the expansion board behind the staircase.

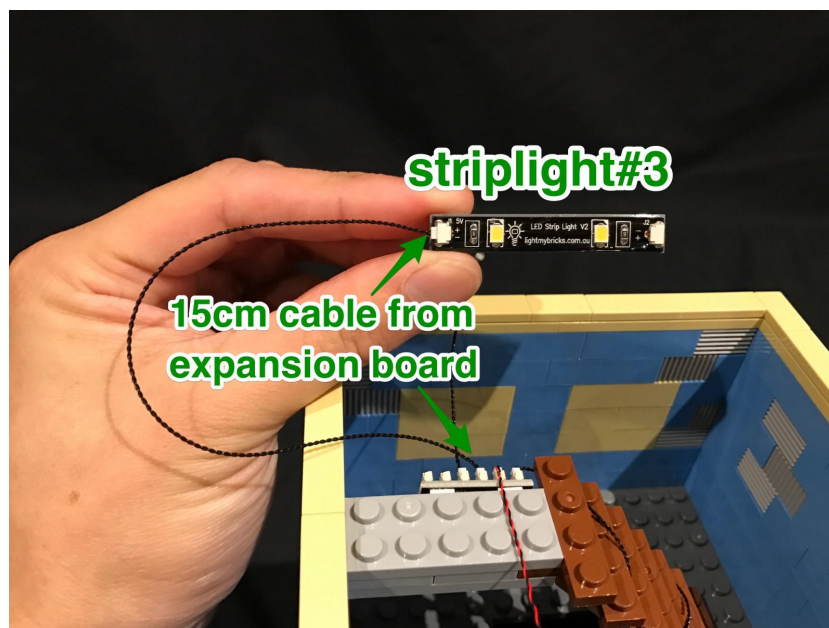




To prevent the Dot Light cable from being seen from the outside looking in, hide the cable by laying them in between studs underneath tiles. Loop the 15cm cable around the staircase.

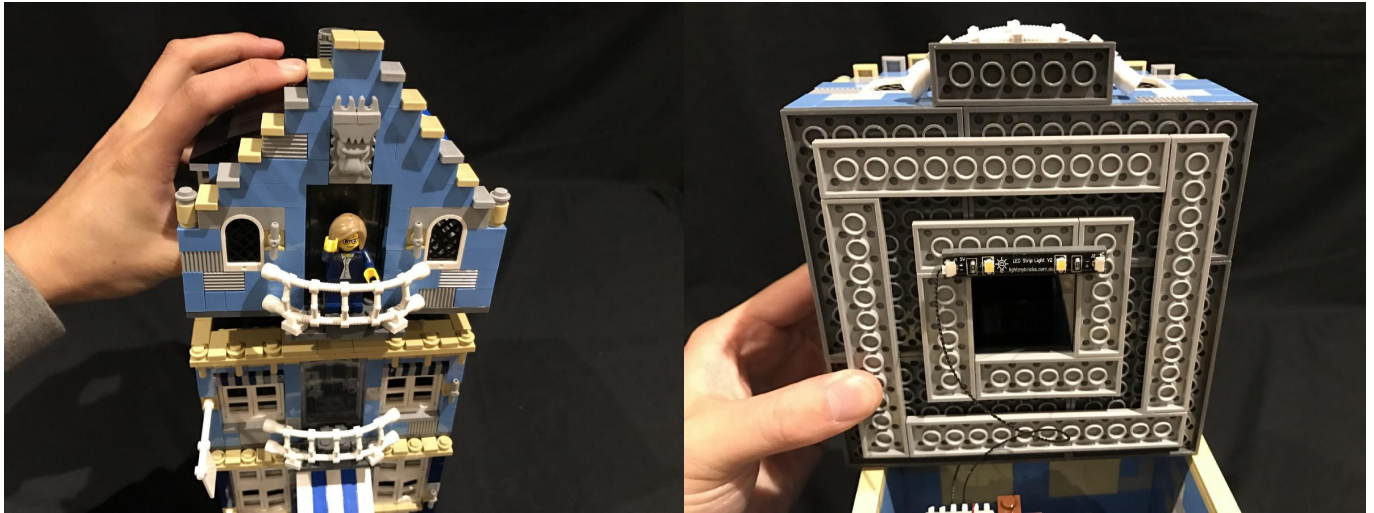


10.) Take another White Strip Light (striplight#3) and stick it to a LEGO 1x6 Plate. Take the other end of the 15cm connecting cable from the expansion board below and connect it to the left port of striplight#3.

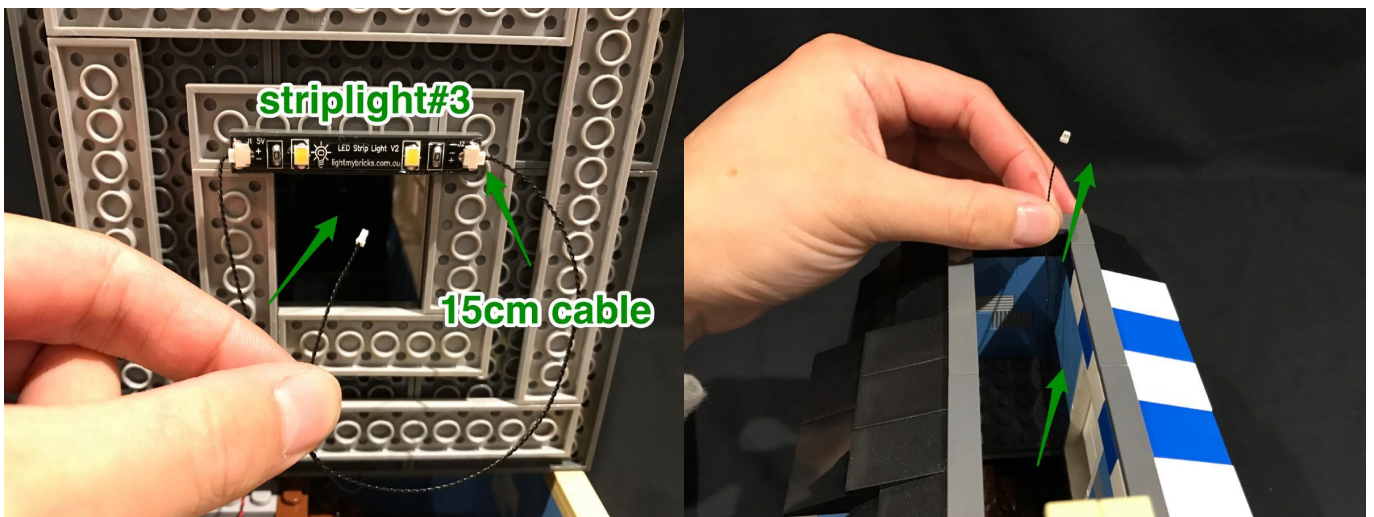


Take the entire top floor over the 2nd floor and then mount striplight#3 underneath to the following position

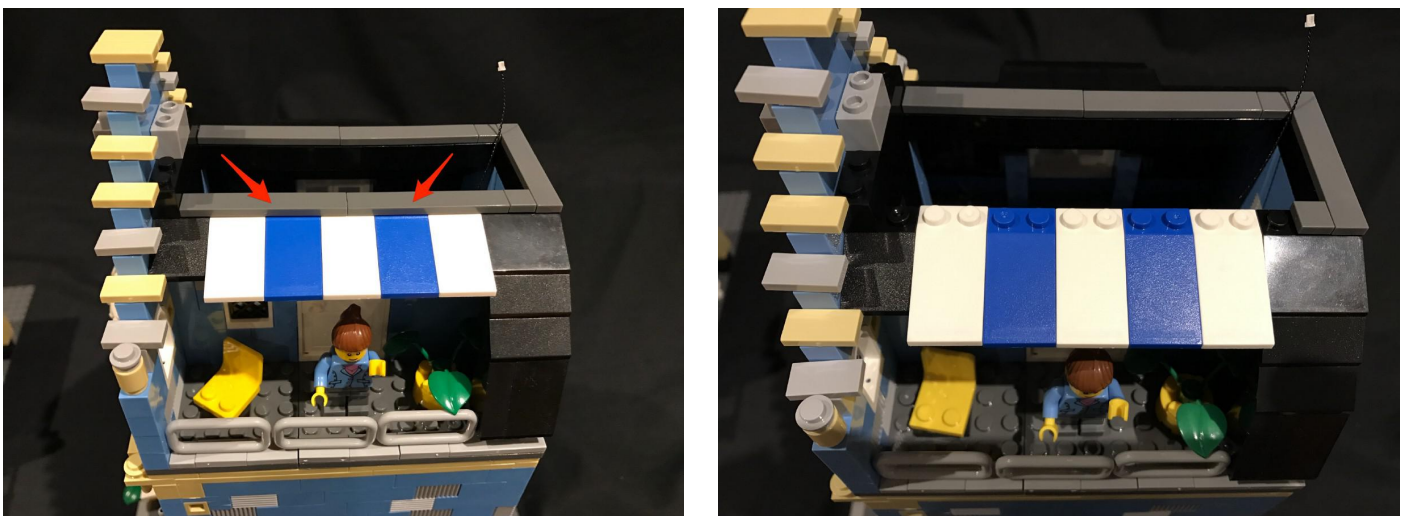




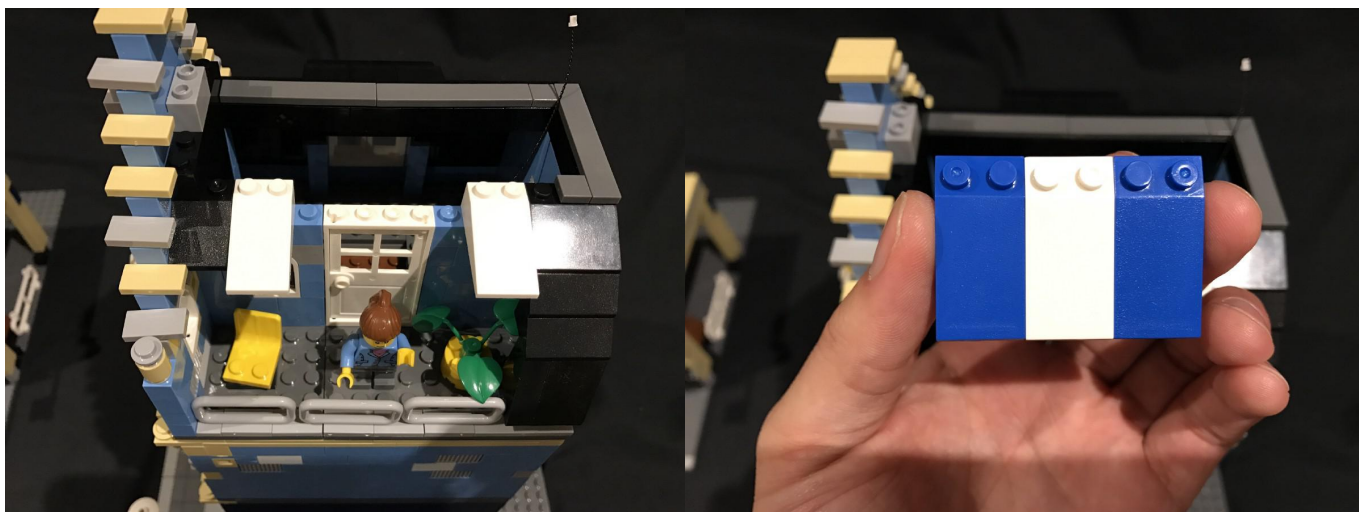
Take another 15cm Connecting Cable and connect it to the right port on striplight#3 and then thread the other end of it up the space which leads to the top floor. Remove the roof off the top floor and then pull the cable up from underneath.



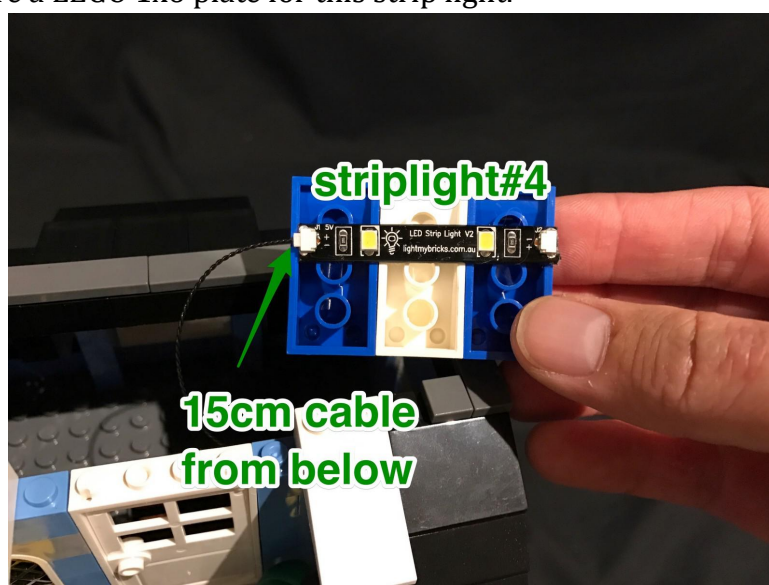
11.) Turn the building to the side and then disconnect the following sections to allow us to remove 3 veranda pieces as per below.



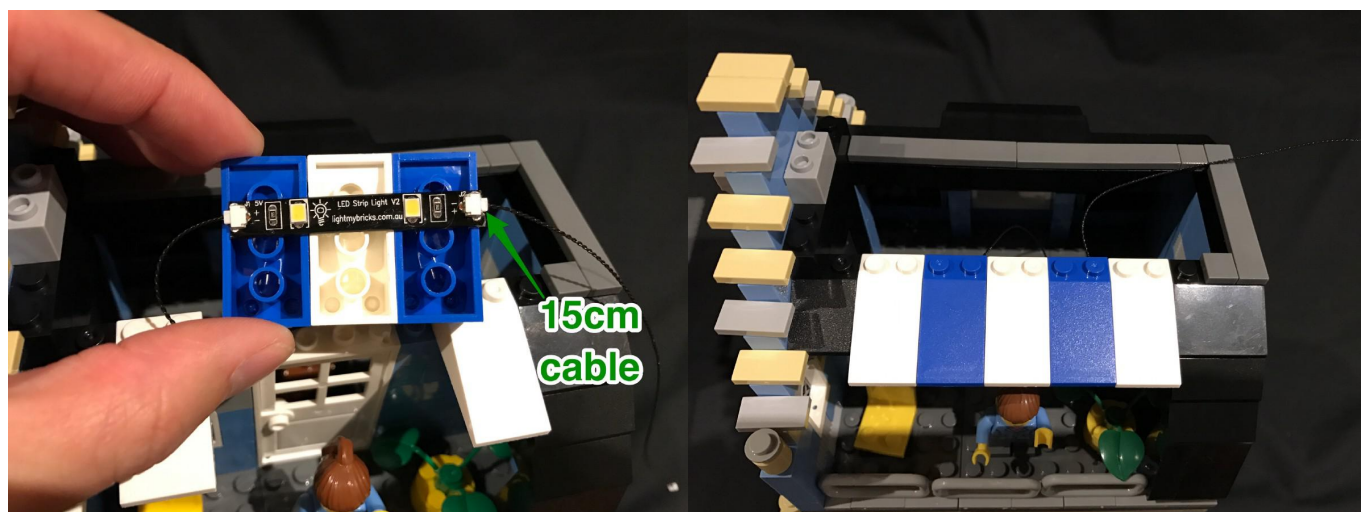




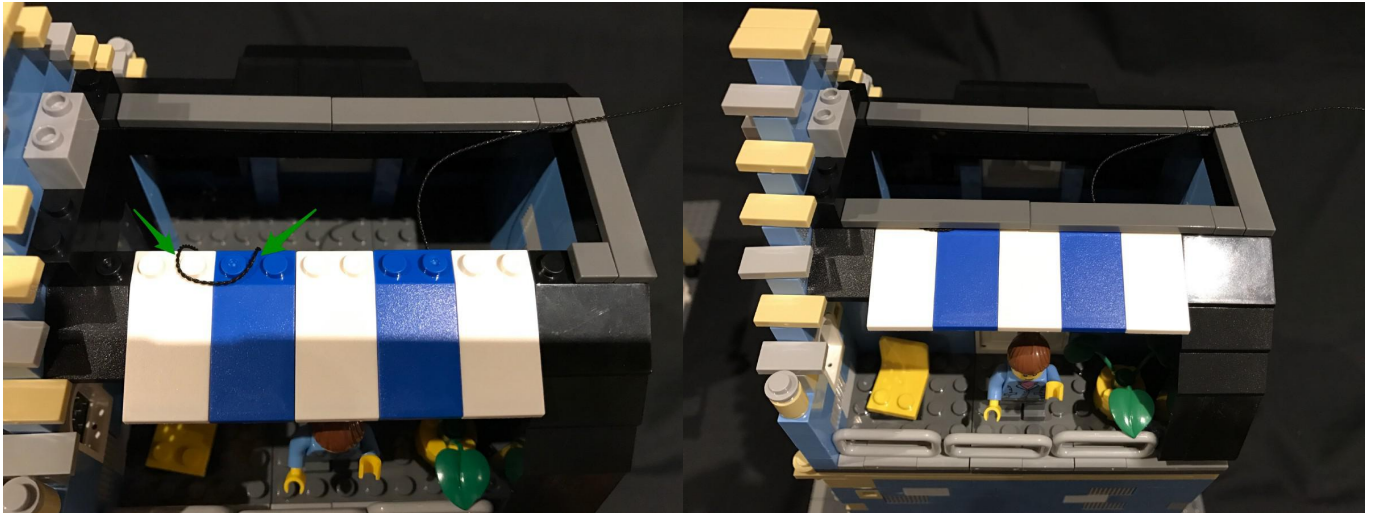
Take a White Strip Light (striplight#4) and stick it underneath the 3 LEGO pieces in the following position and then locate the 15cm cable from below and connect to the left port on striplight#4  
 Note: We do not require a LEGO 1x6 plate for this strip light.



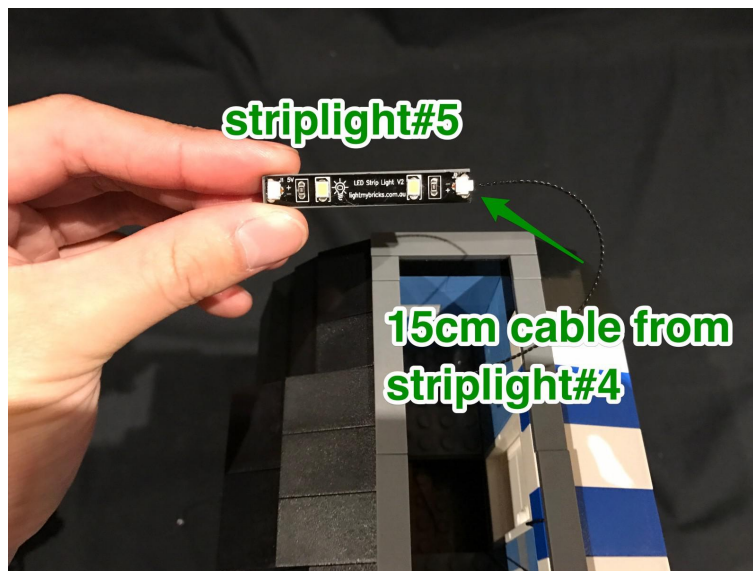
Take another 15cm Connecting Cable and connect it to the right port on striplight#4 before reconnecting this section back to the roof ensuring you carefully lay both connecting cables behind.



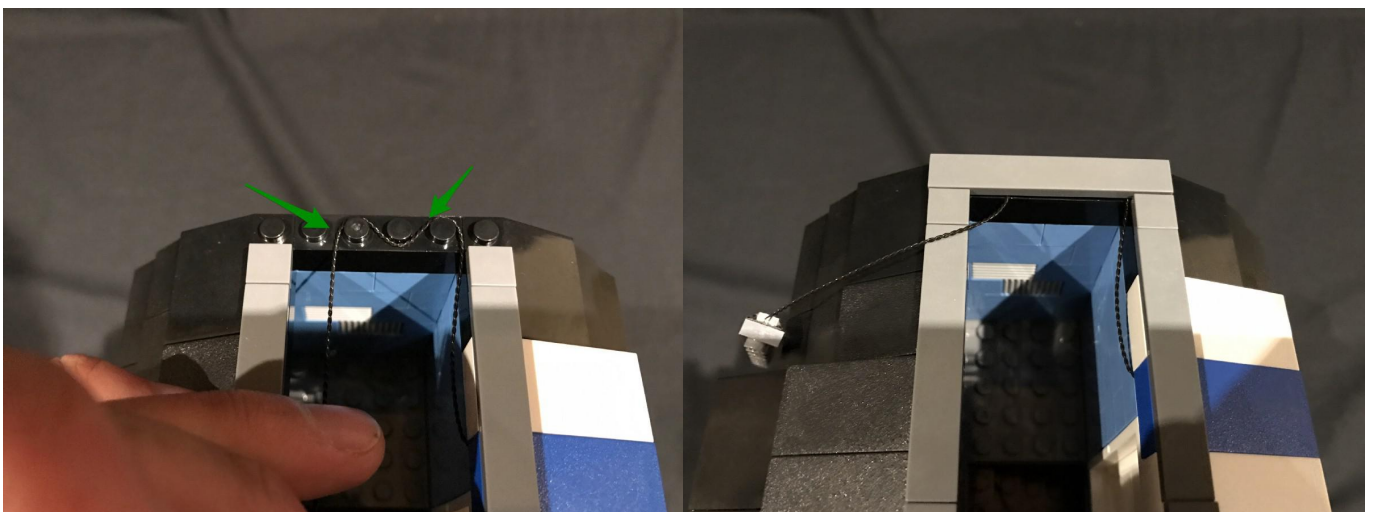
Before we reconnect the tiles we removed earlier, loop the cable we pulled up from below around studs to prevent dangling cables from being seen from the outside looking in.



12.) Take another White Strip Light (striplight#5) and stick it to a LEGO 1x6 Plate. Connect the 15cm cable from striplight#4 to the right port on striplight#5.



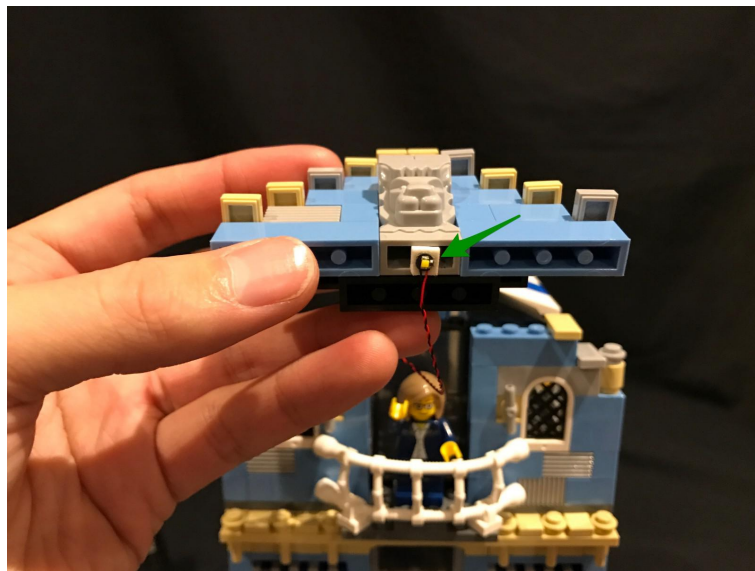
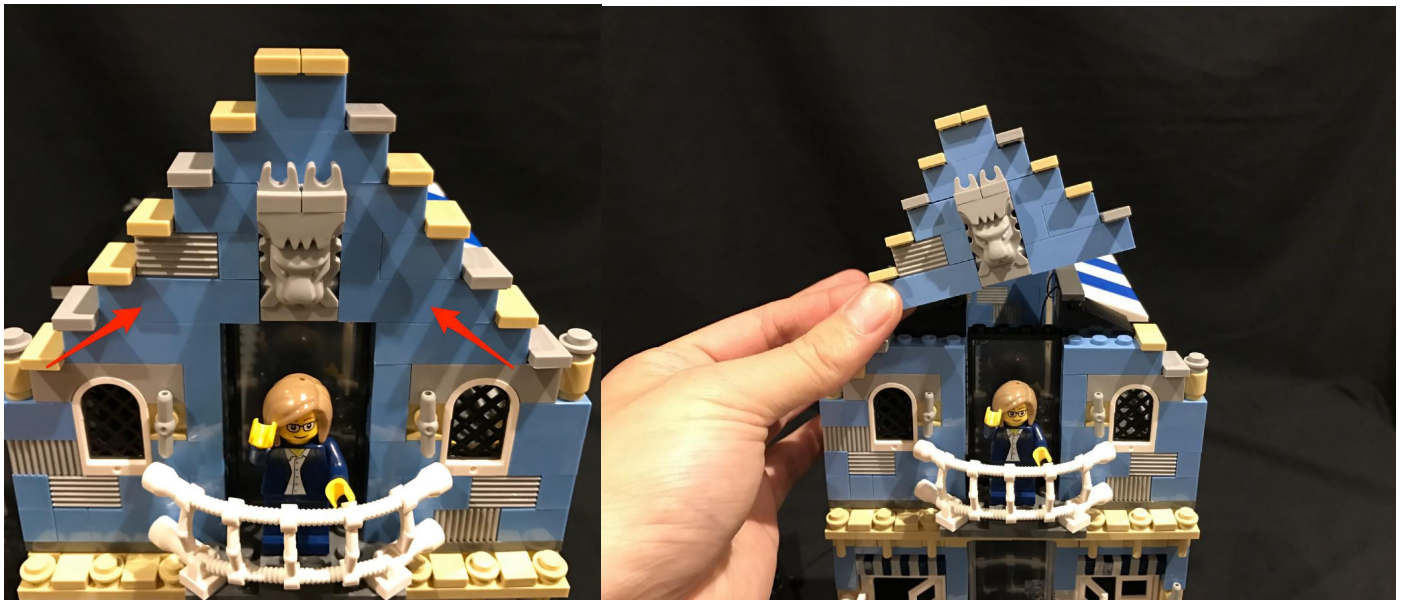
Lay the cable between striplight#4 and striplight#5 underneath the following LEGO tile in between studs. Ensure you have enough cable length to mount striplight#5 to the roof later.



13.) Remove the following LEGO section from the very top of the building and take a White 15cm Dot



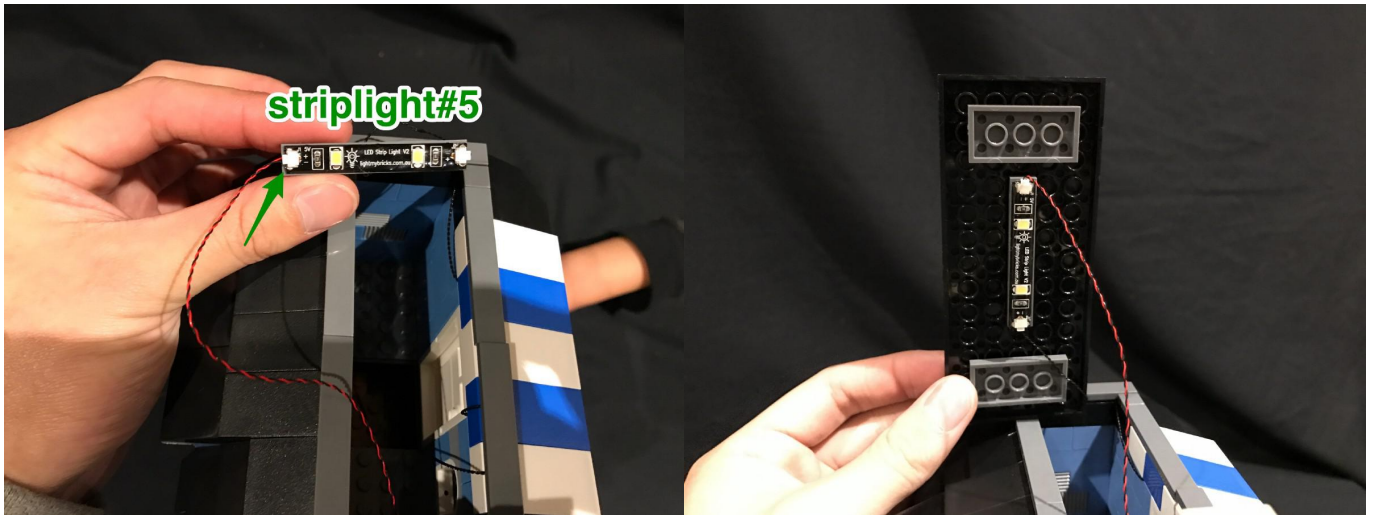
Light and stick it underneath this LEGO section (using an adhesive square) to the following position.



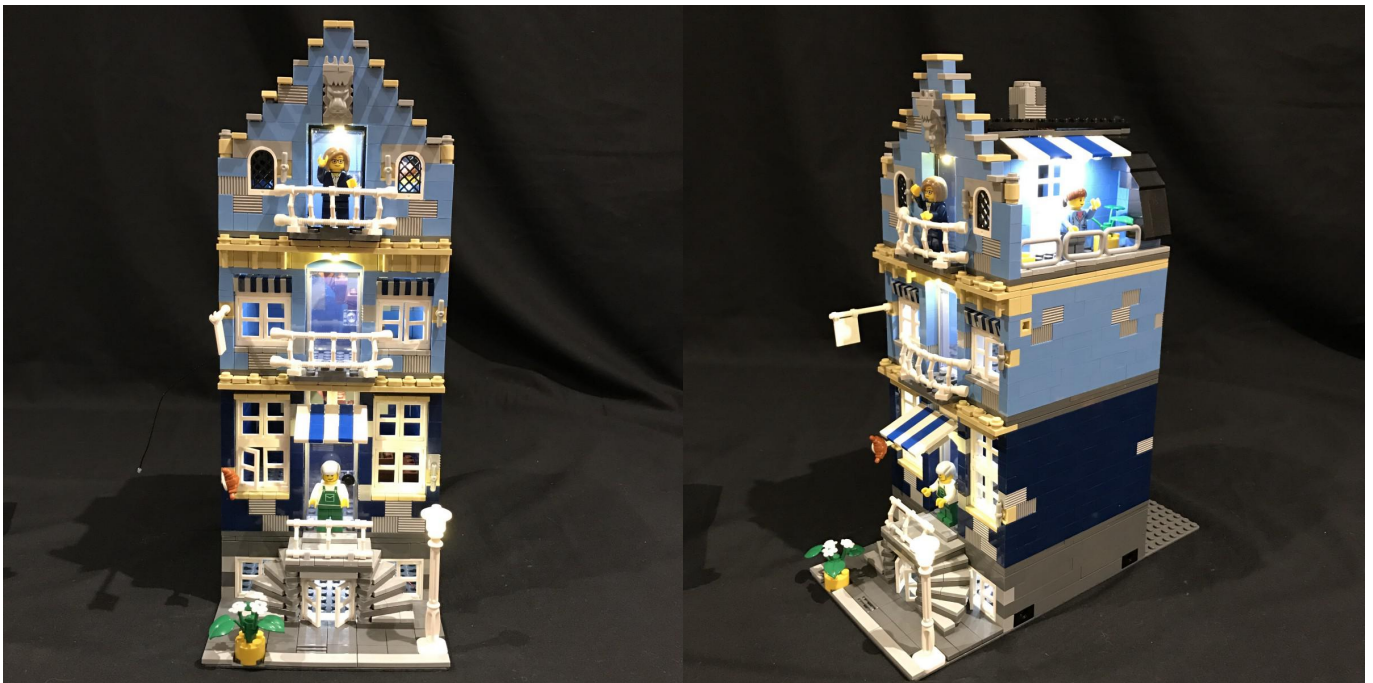
Reconnect this section to the building ensuring the cable is neatly laid behind.



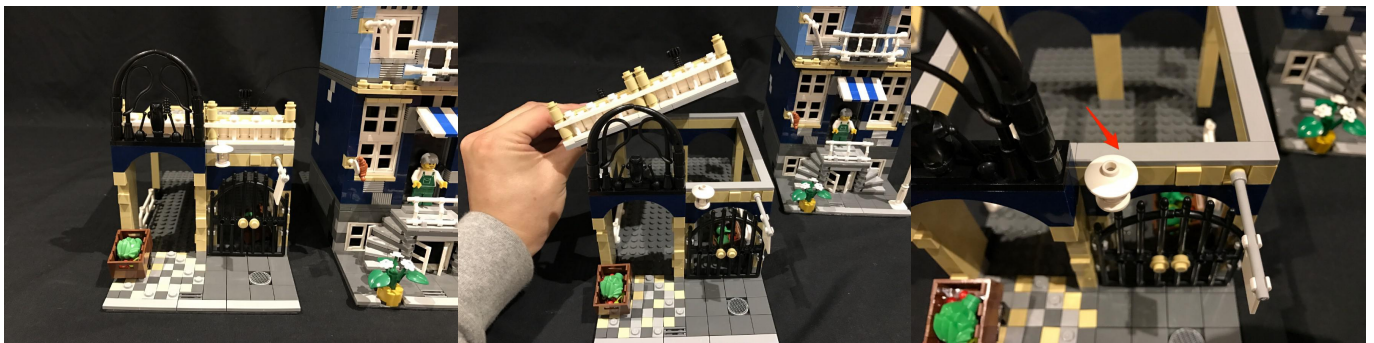
Connect the Dot Light cable to the left port on striplight#5 and then mount the striplight underneath the roof as per below.



Securely reconnect the roof and then turn on the battery pack to test all the lights we have installed so far.



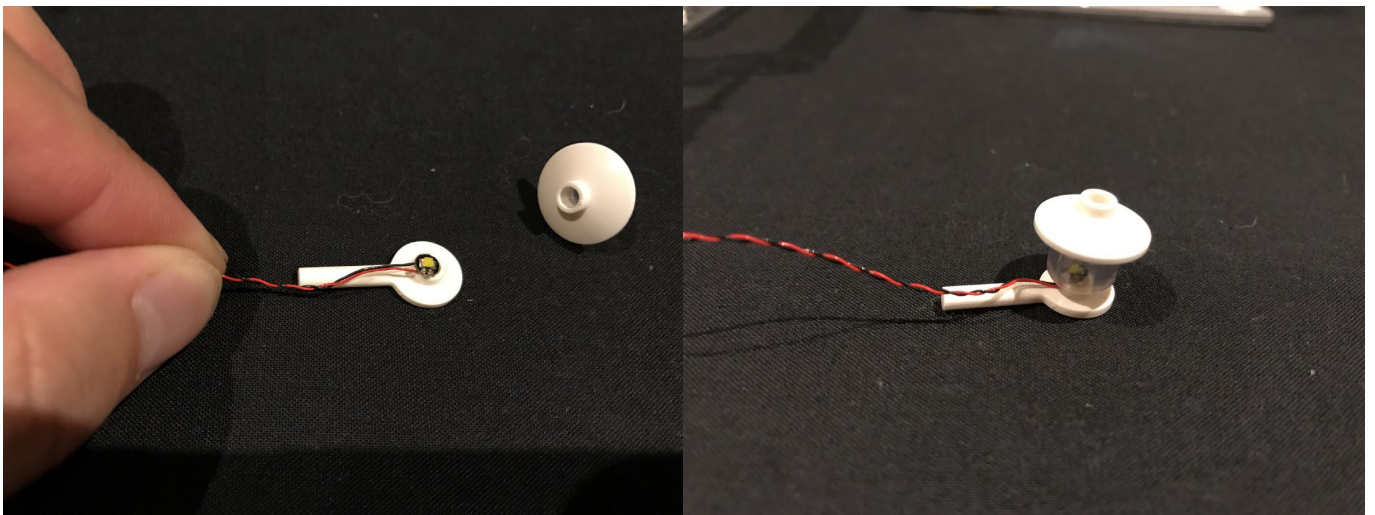
14.) Take the left section of Market Street and remove the roof as well as tiles to allow us to remove the lamp connected to the 1x1 brick.







Remove the lamp base from the brick and then take the last White 15cm Dot Light and place it directly over the white stud ensuring the cable is facing the back. Secure the Dot Light in place by reconnecting the lamp bulb directly over the top.

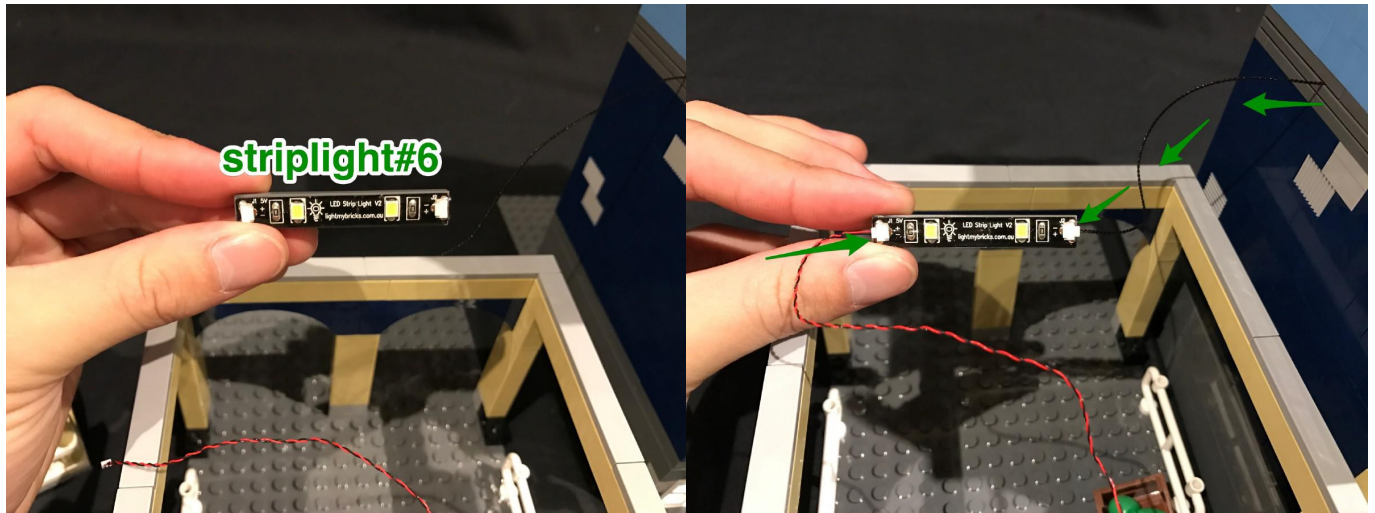


Reconnect the lamp to the 1x1 brick and then reconnect this section back to the building as well as surrounding pieces ensuring the cable is laid in between studs.

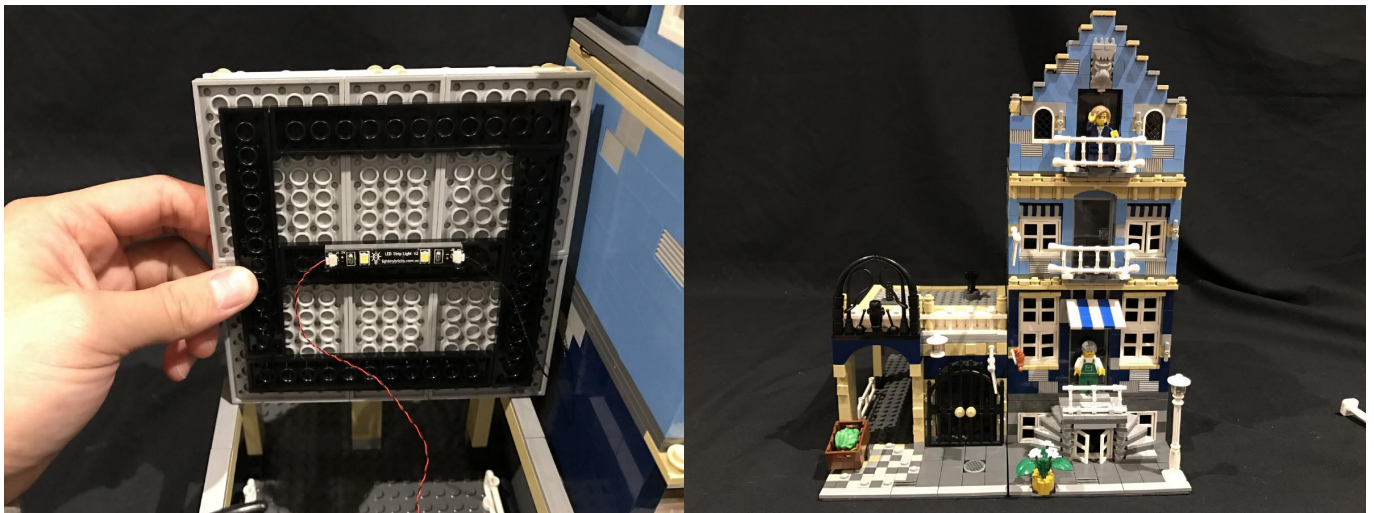


15.) Take the last White Strip Light (striplight#6) and stick it to a LEGO 1x6 Plate. Connect the cable from the lamp to the left port on striplight #6 and then locate the 15cm connecting cable from the

right building (which we connected at the end of step 6) and connect it to the right port on striplight#6



Mount striplight#6 underneath the roof of this section in the following position and then securely reconnect everything.



This finally completes installation of the Vonado LEGO Market Street Lighting Kit. Now, turn on your light kit and ENJOY!