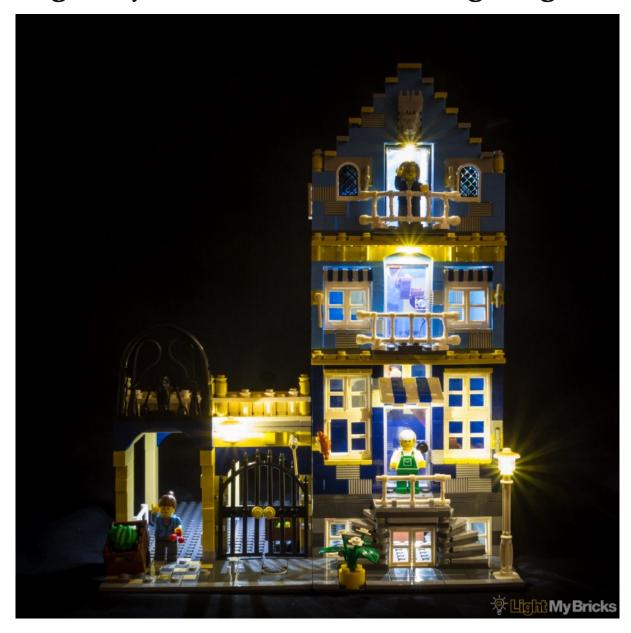
# **Light My Bricks: Market Street Lighting Kit**



Here is the instructions document for the LEGO Market Street LED lighting kit. Please read and follow the steps carefully to ensure this lighting kit is installed properly.

If you run into any issues, please refer to the troubleshooting guide.

## Package contents:

- 1x LEGO Lamp Post with White Bit Light Installed
- 4x White 15cm Bit Lights
- 6x White Strip Lights
- 5x LEGO Plates 1×6
- 2x 6 Port Expansion Boards
- 7x 15cm Connecting Cables
- 8x Adhesive Squares
- 1x Battery Pack (requires 3x AA Batteries)
   OR
- 1x USB Power Cable

Note – Battery Pack will be replaced with USB Power Cables from mid April 2020

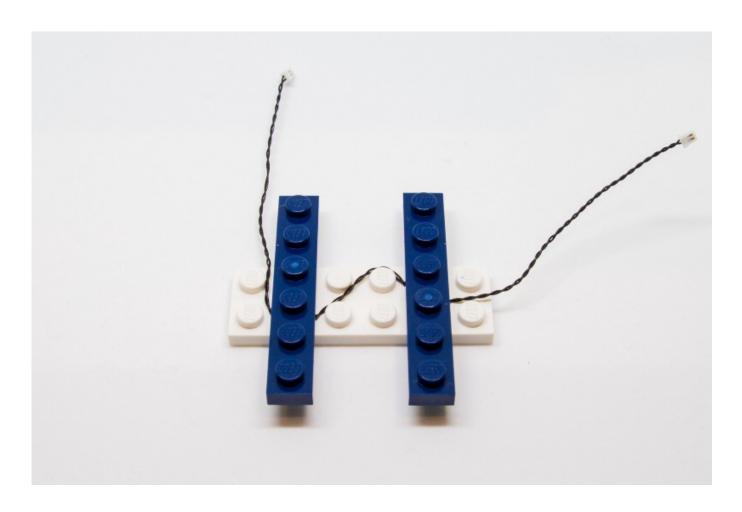
## Important things to note:

#### Laying cables in between and underneath bricks

Cables can fit in between and underneath LEGO® bricks, plates, and tiles providing they are laid correctly between the LEGO® studs. Do NOT forcefully join LEGO® together around cables; instead ensure they are laying comfortably in between each stud.







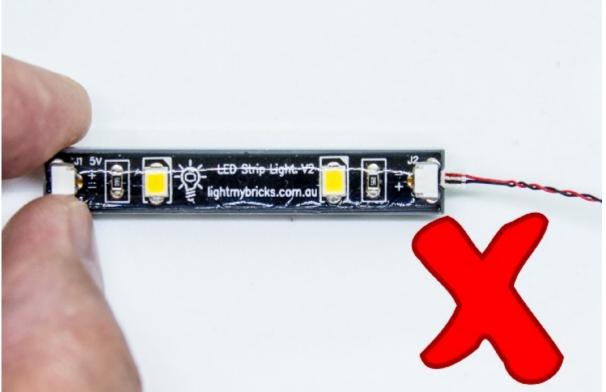


CAUTION: Forcing LEGO® to connect over a cable can result in damaging the cable and light.

## **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.





**Connecting cable connectors to Expansion Boards** 

Take extra care when inserting connectors to ports of Expansion Boards. Connectors can be inserted only one way. With the expansion board facing up, look for the soldered "=" symbol on the left side of the port. The connector side with the wires exposed should be facing toward the soldered "=" symbol as you insert into the port. If a plug won't fit easily into a port connector, do not force it.



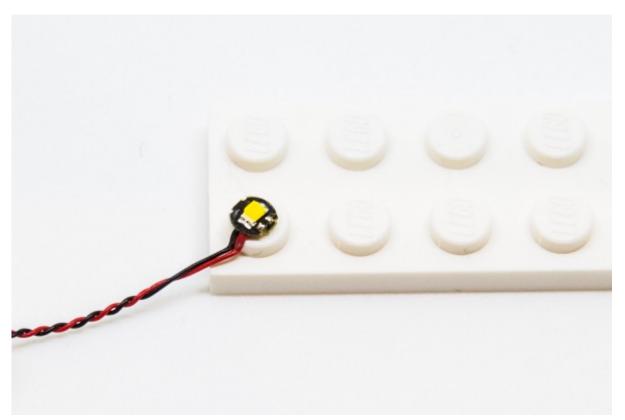


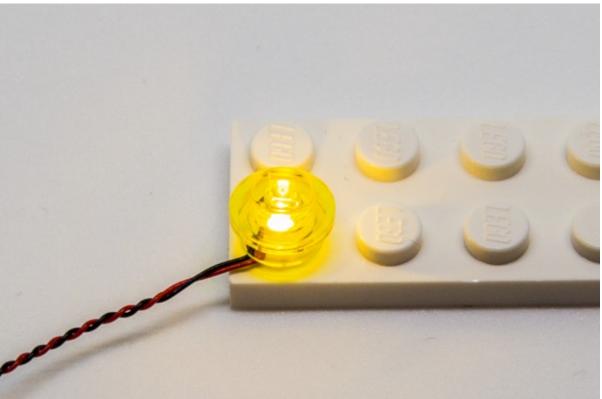


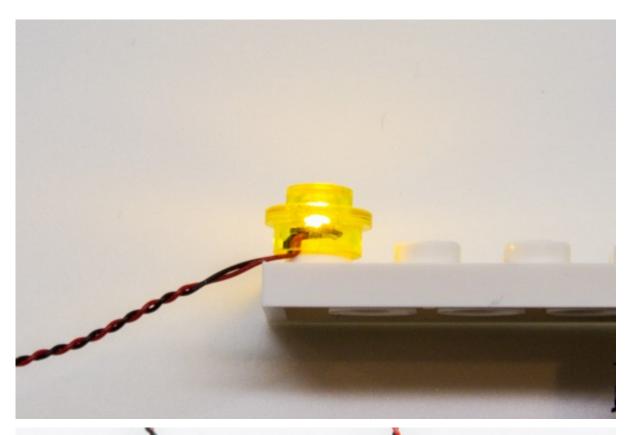
Incorrectly inserting the connector can can result in bent pins inside the port or possible overheating of the expansion board when connected.

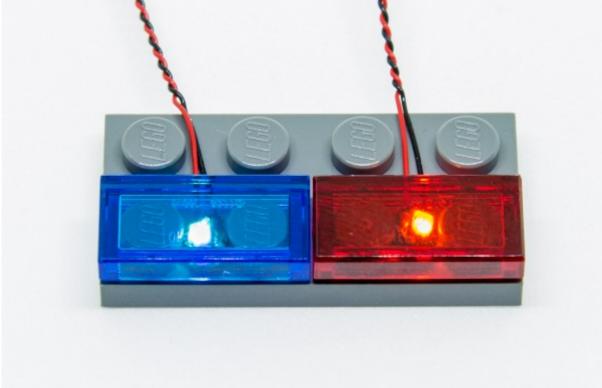
## Installing Bit Lights under LEGO® bricks and plates.

When installing Bit Lights under LEGO® pieces, ensure they are placed the correct way up (Yellow LED component exposed). You can either place them directly on top of LEGO® studs or in between.









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.

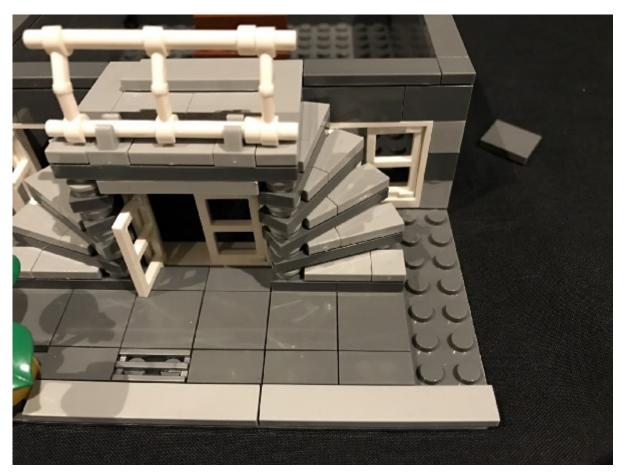




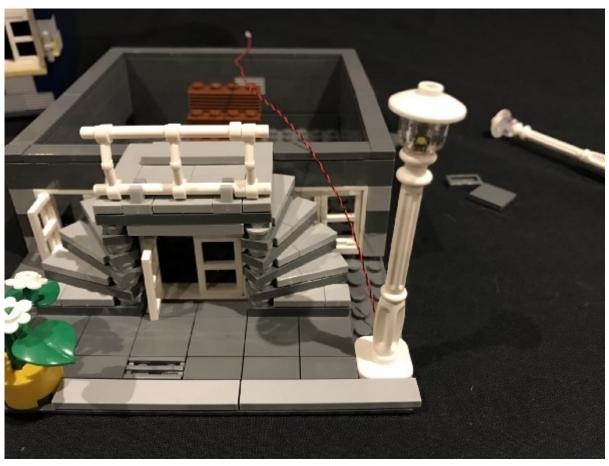


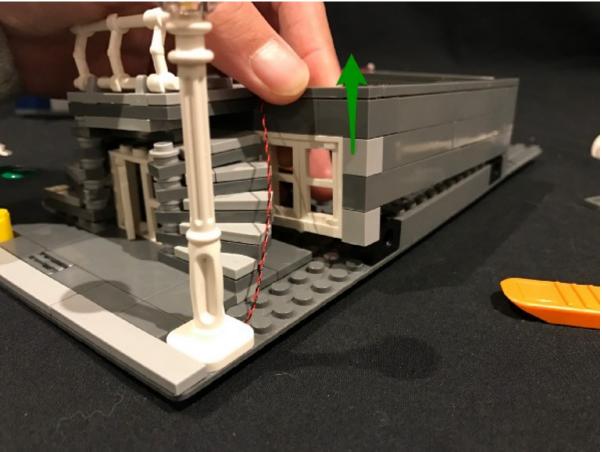


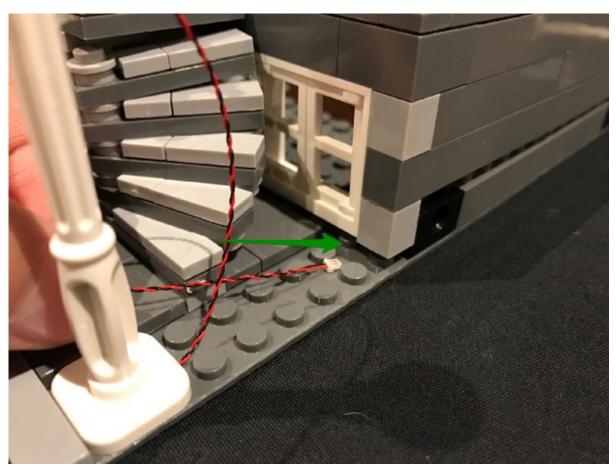


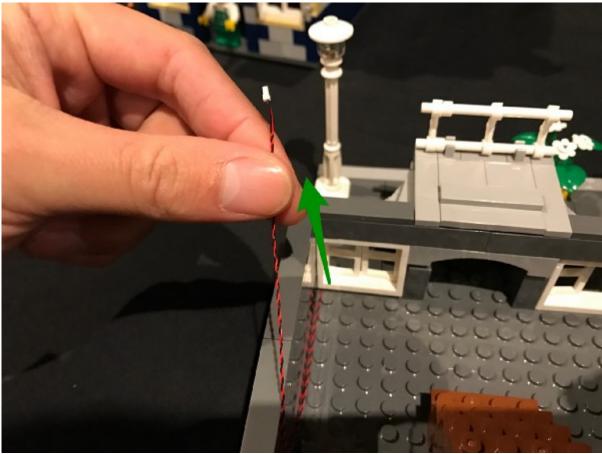


2.) Replace the stock lamp post with the Light My Bricks lamp post with Bit Light installed and ensure the lamp post cable is facing toward the back. Carefully disconnect the wall from the base plate to allow you to thread the lamp post cable underneath the wall. Ensure the cable is laid in between the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





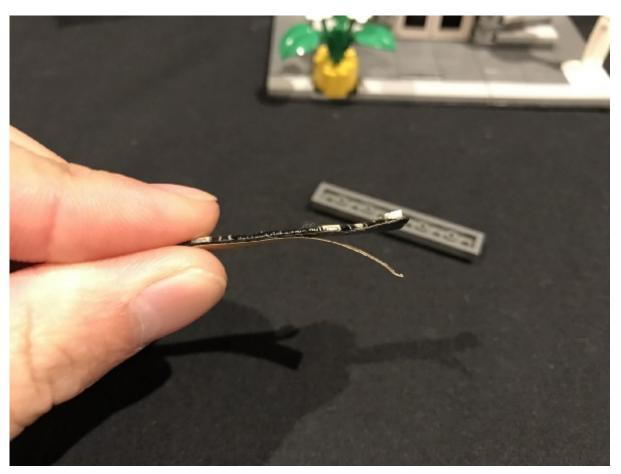




Reconnect the front wall to the base plate as well as the tiles.

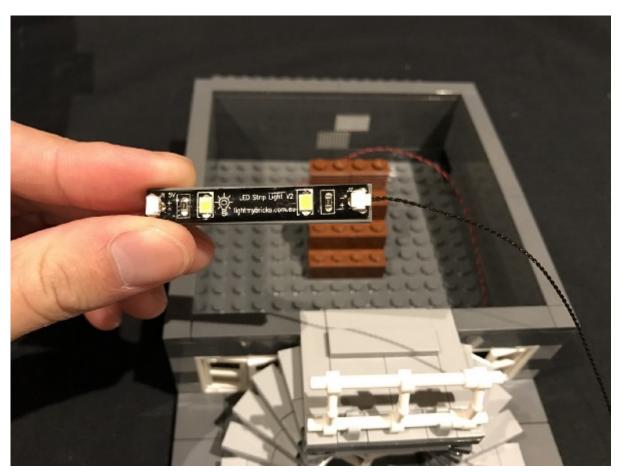


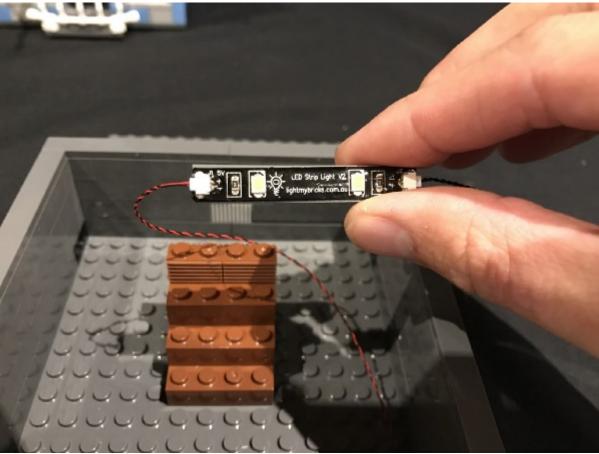
3.) Take a **White Strip Light** and then stick it onto the base of a **LEGO 1×6 Plate** using the adhesive backing. We will identify this strip light as **striplight#1**.





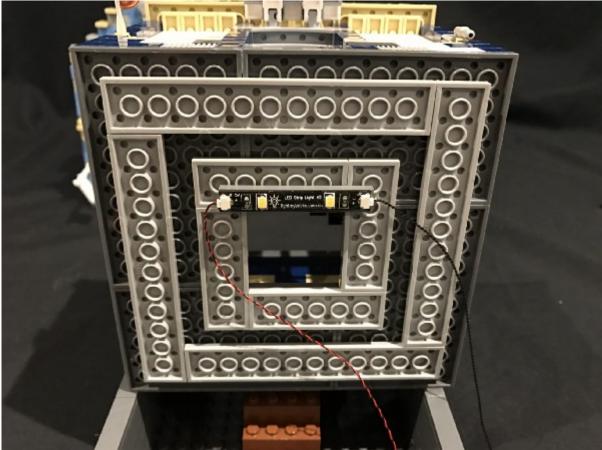
Take a **15cm Connecting Cable** and connect it to the right port on the strip light ar then connect the lamp post cable to the left port.





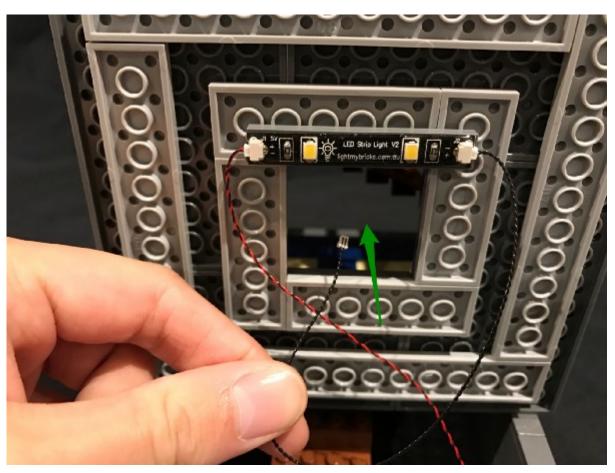
Take the 1st floor over the ground floor and then turn over on it's back to allow us  $t^r$  mount the strip light to the following position.

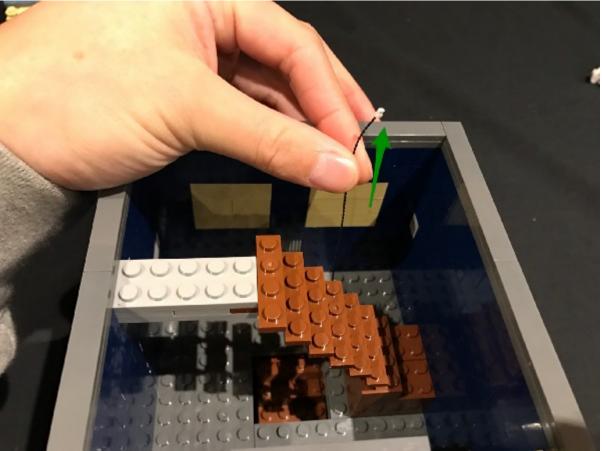


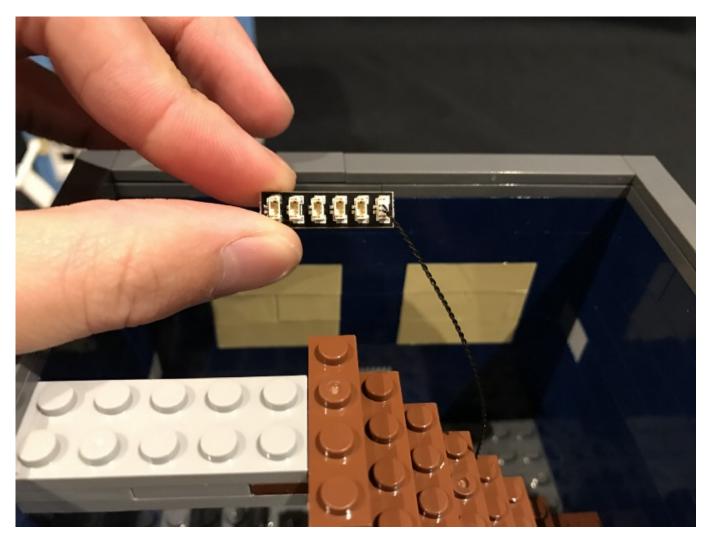


Thread the other end of the 15cm cable up the space which leads to the 1st floor, then pull the cable up from the top and connect it to a **6-Port Expansion Board**.

Securely reconnect the 1st floor to the ground floor.





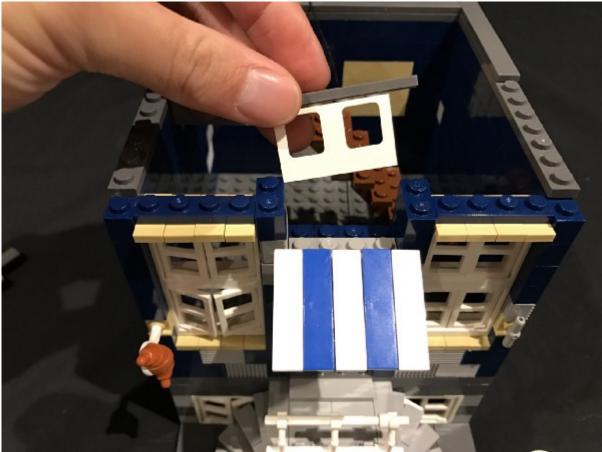


4.) Disconnect the following pieces on the top of the 1st floor and then remove the following section of the veranda.







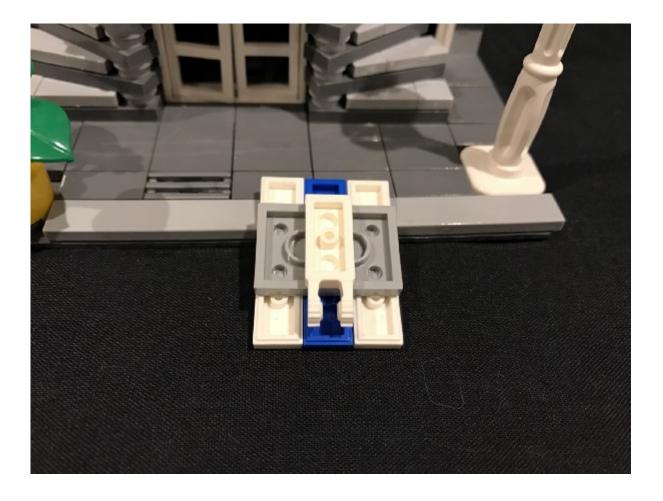


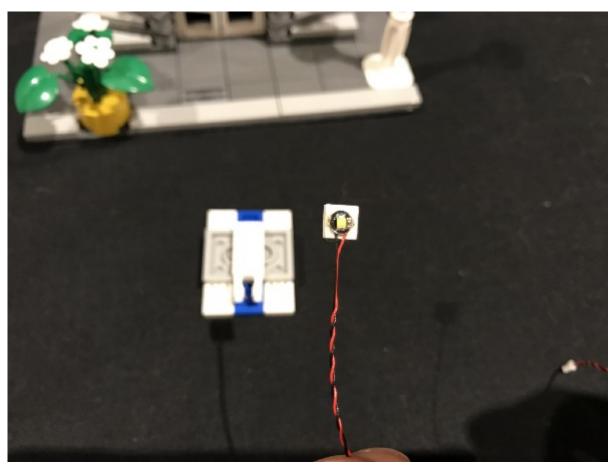


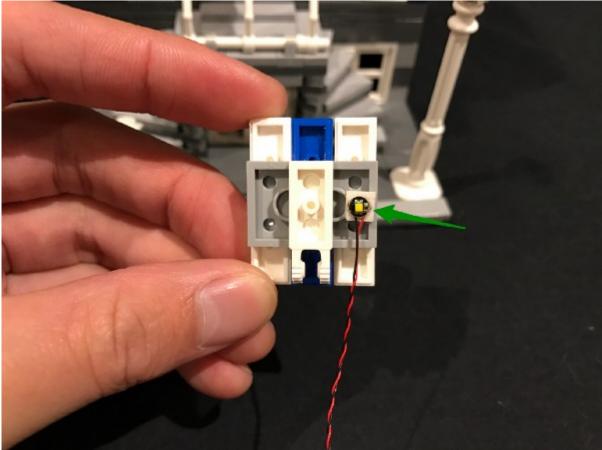


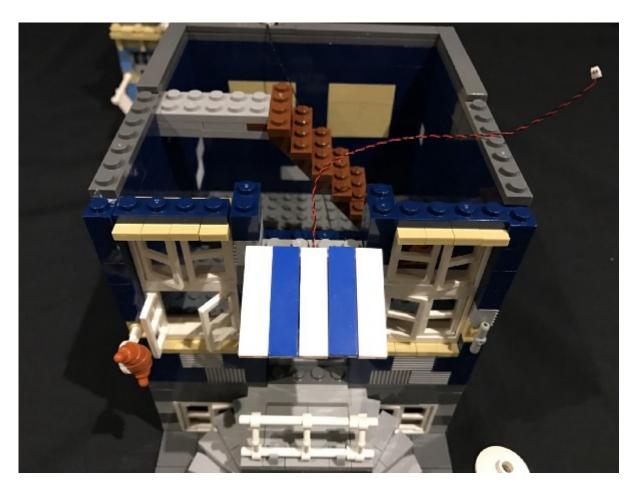
Turn this section of the veranda over and then take a **White 15cm Bit Light** and sti<sup>/</sup> it to the following position using an **adhesive square**. Reconnect this section of the

veranda back to the front of the building and ensure cable is laid behind in between studs.

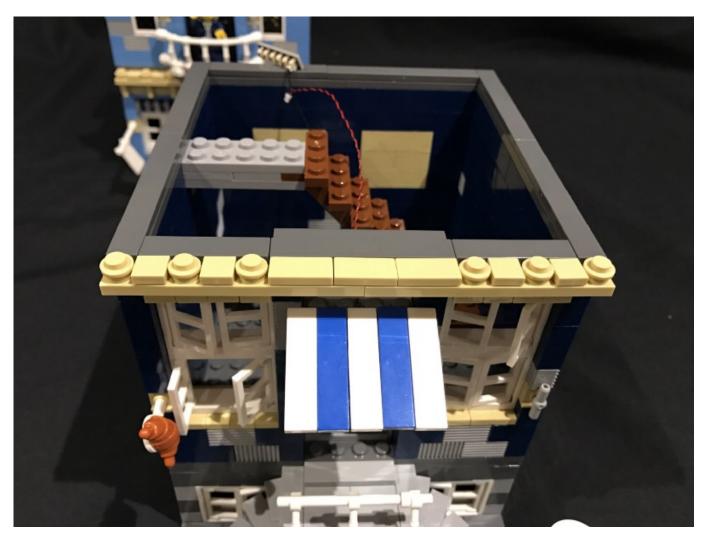




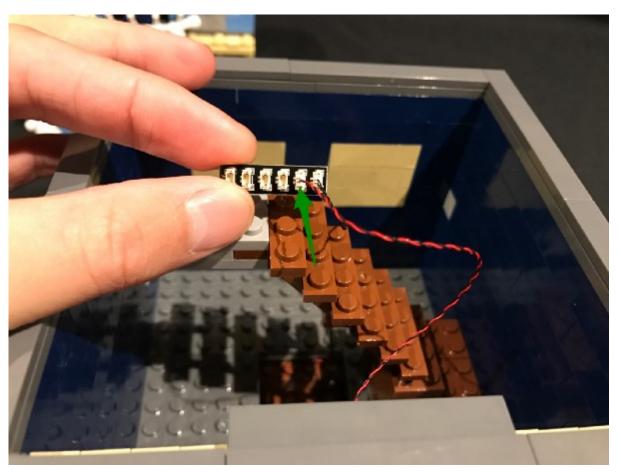


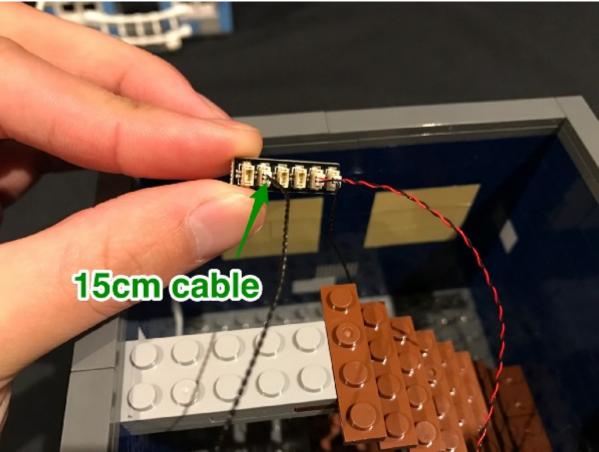


Reconnect the pieces we removed earlier.

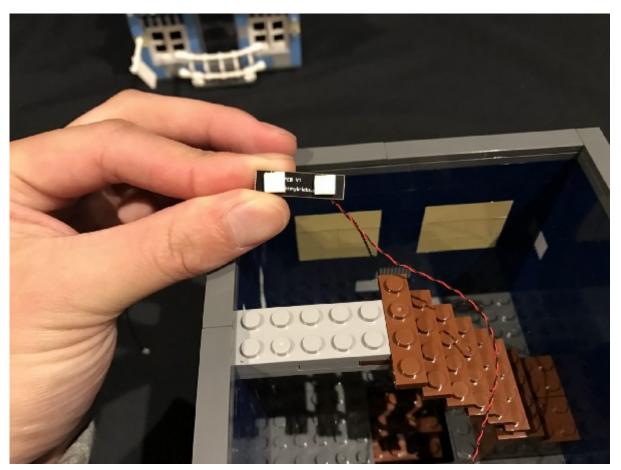


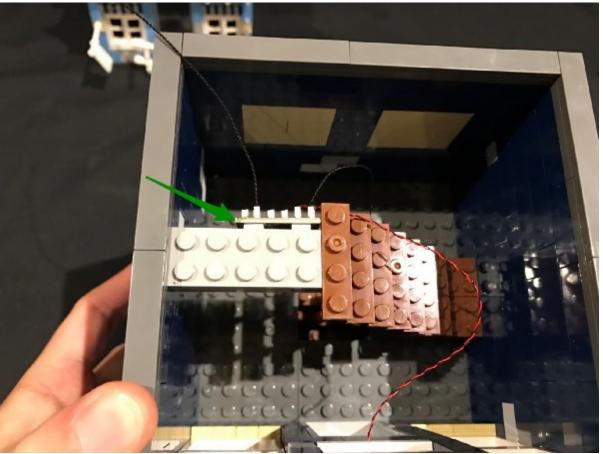
Connect the Bit Light cable to the next available port on the 6-port Expansion Board and then connect another **15cm connecting cable** to the next port.



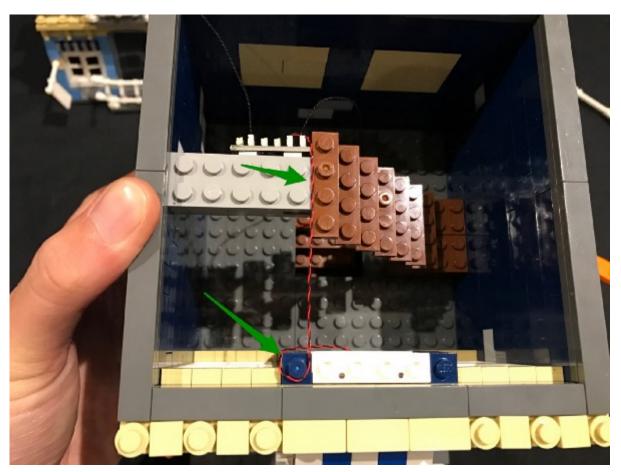


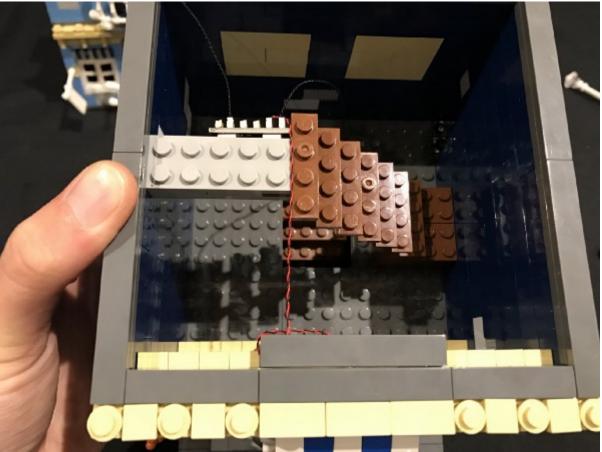
5.) Use 2x **adhesive squares** to mount the expansion board behind the staircase as per below





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



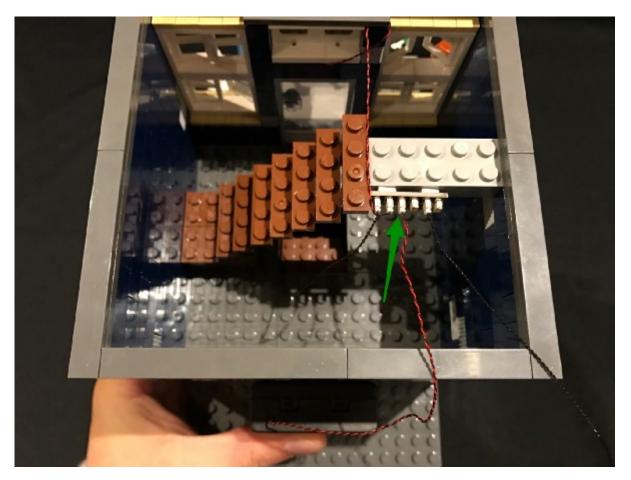


6.) Take the **AA Battery Pack** and insert 3x AA batteries to it. Place the battery pack at the back of the building and then connect the battery pack cable to the 6-port

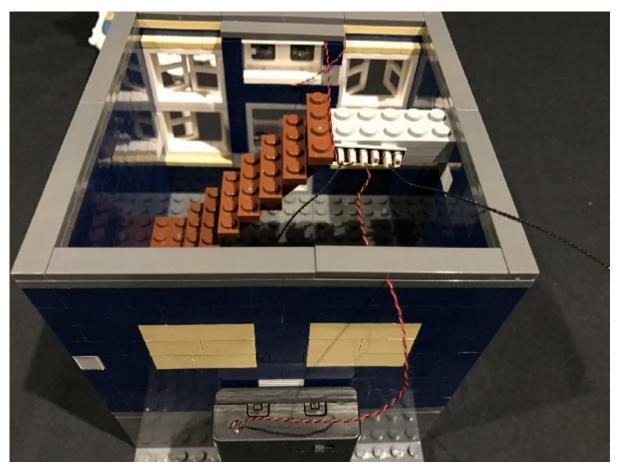
expansion board.

If you're using the **USB Power Cable**, connect this to the board this instead of the battery pack, and connect the other end to a **USB Power Bank** or **wall adaptor** (sold separately) and turn it ON to test the front lights are working OK.





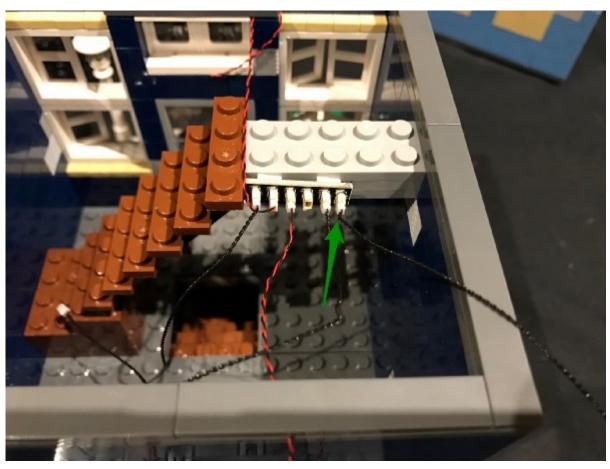
Secure the battery pack cable/usb cable underneath the tile and then turn the battery pack on the test all the lights installed so far are working OK.

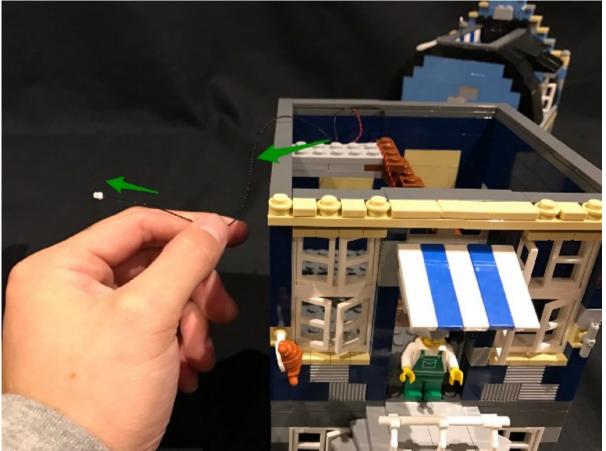




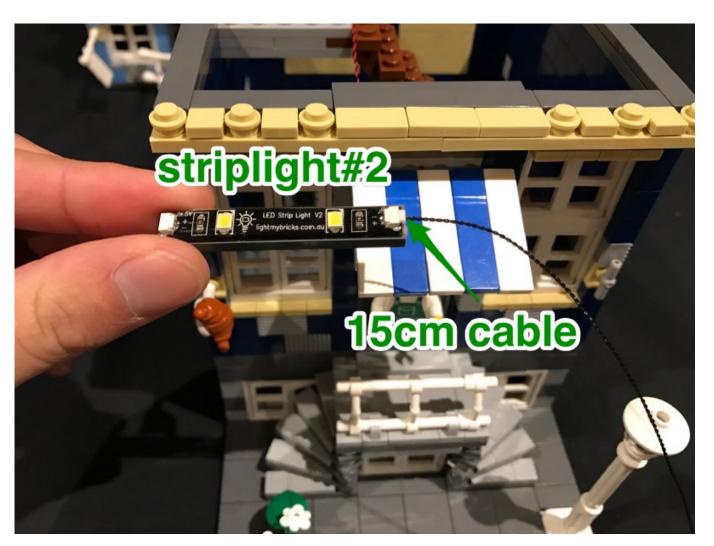
Take another **15cm Connecting Cable** and connect it to the next port on the 6-por' expansion board. The other end of this cable will be used to connect the left section

of this building so set this aside to the left for now.

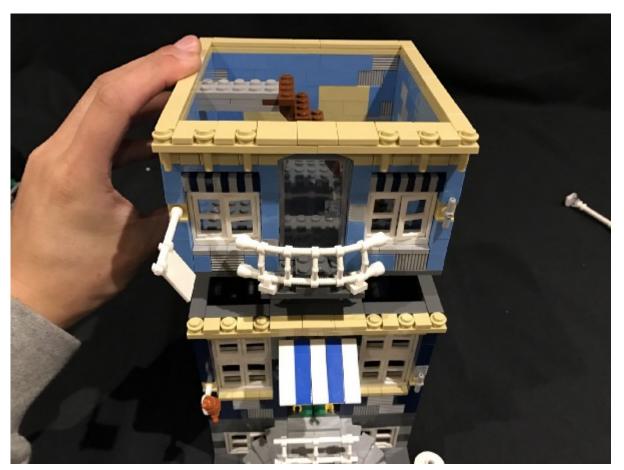


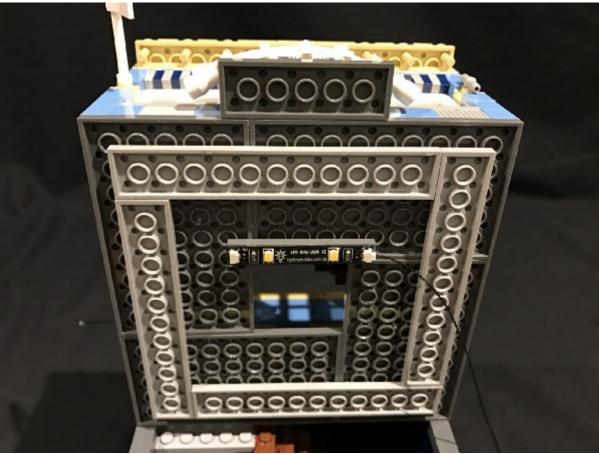


7.) Take a **White Strip Light** (striplight#2) and then stick it to a LEGO 1×6 Plate. Connect another **15cm Connecting Cable** to the right port.

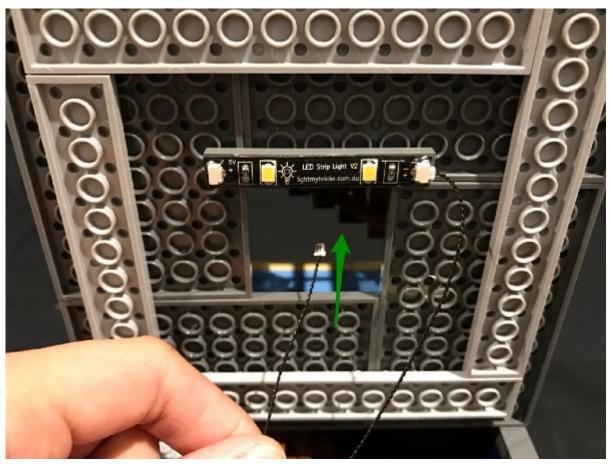


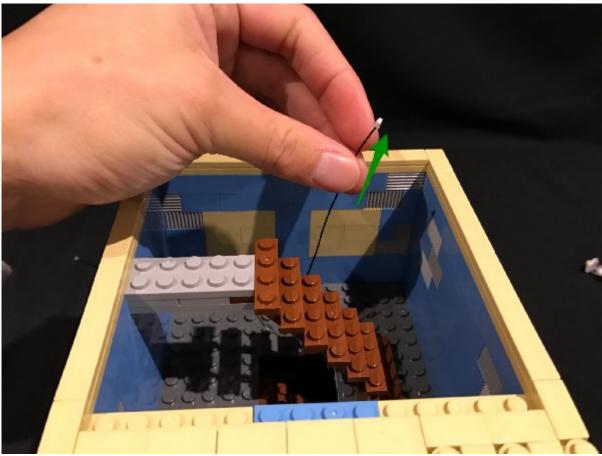
Take the entire 2nd floor over the 1st floor and then mount striplight#2 underneath in the following position.

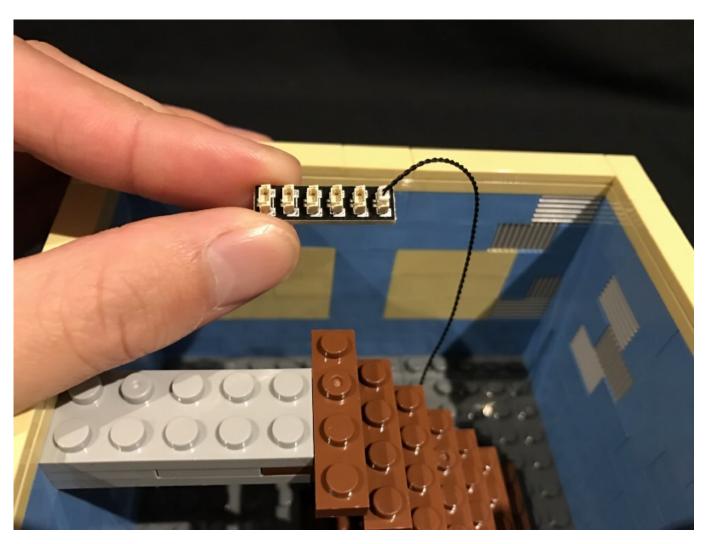




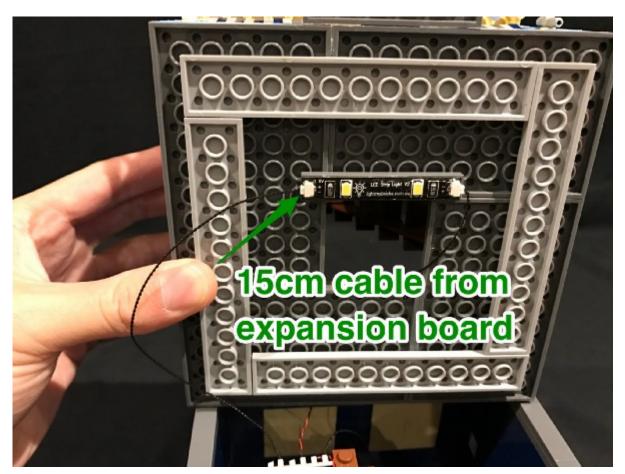
Thread the 15cm cable up through the space that leads to the 2nd floor and then pull the cable up from the other side and connect to a new **6-port Expansion Boaru.** 





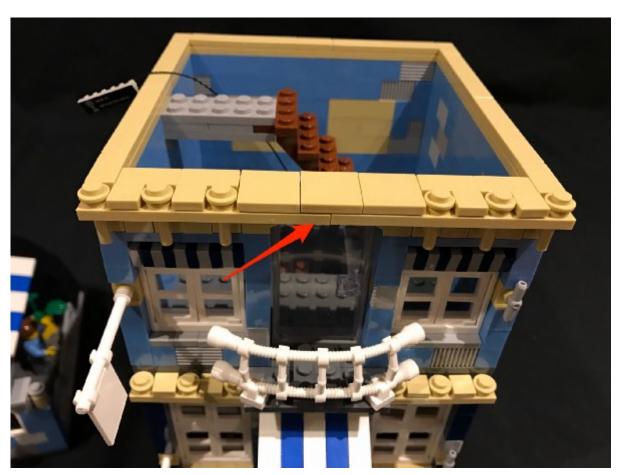


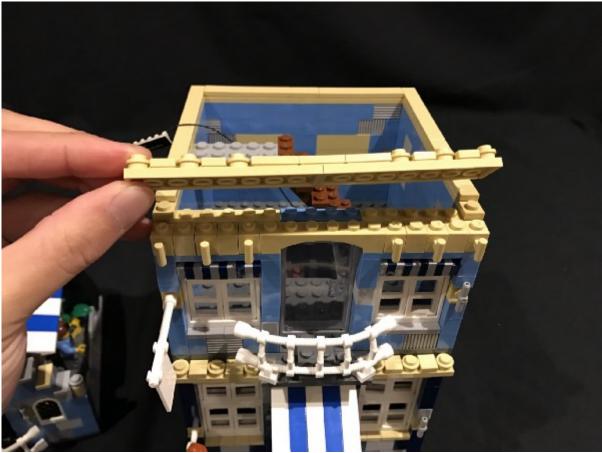
Locate the 15cm cable we connected to the expansion board earlier. Connect this into the left port on striplight#2 and then securely reconnect the 2nd floor on top of the 1st floor.

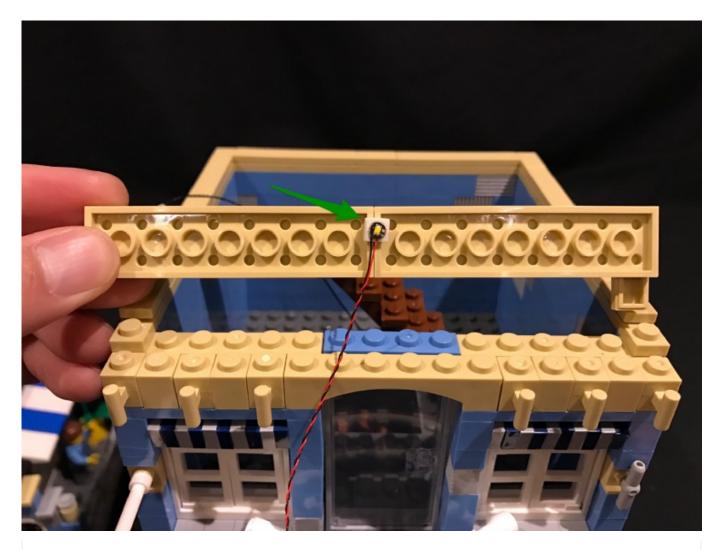




8.) Remove the following section on the top of the 2nd floor and then install anoth/ White 15cm Bit Light (using an adhesive square) underneath this section in the

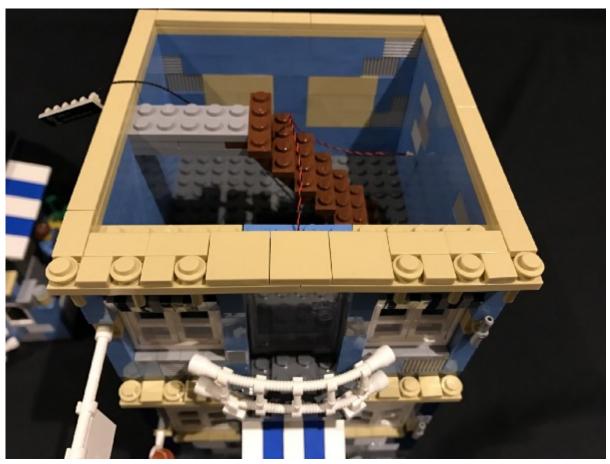


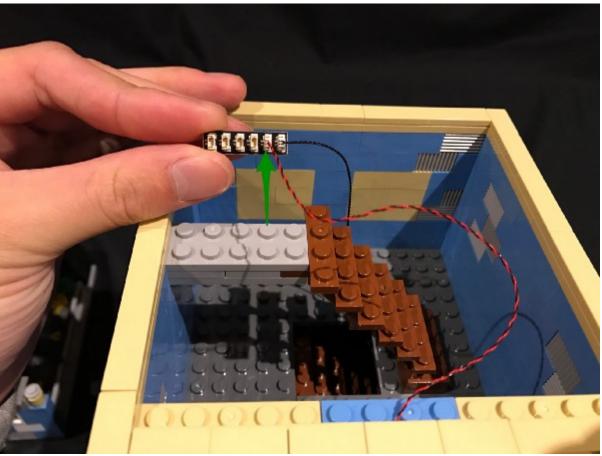




Ensure the Bit Light is stuck to the exact position as shown above

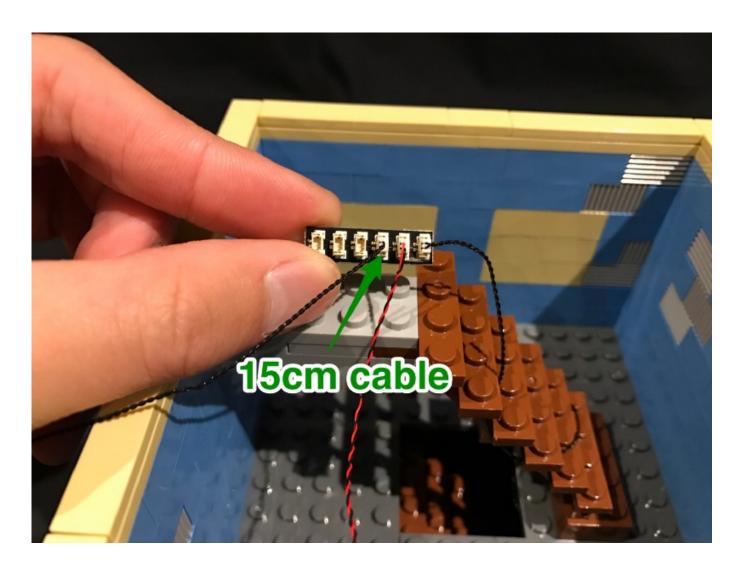
Reconnect this section ensuring the cable is neatly laid behind and then connect it to the next port on the 6-port expansion board.

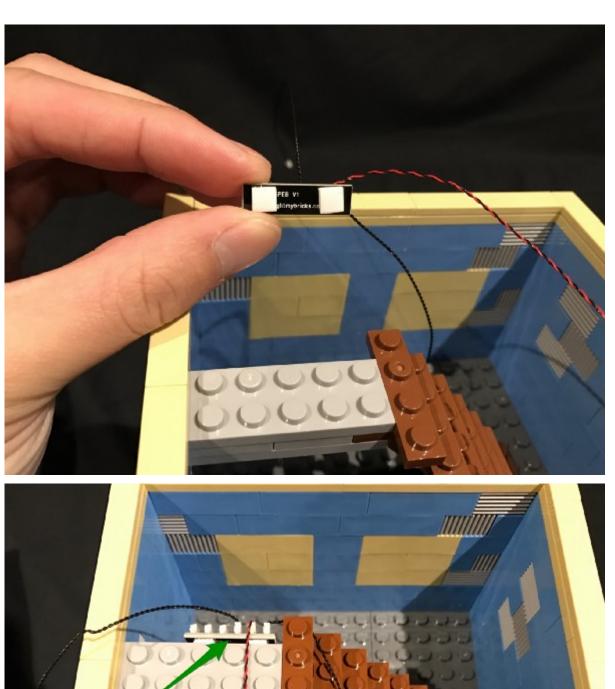


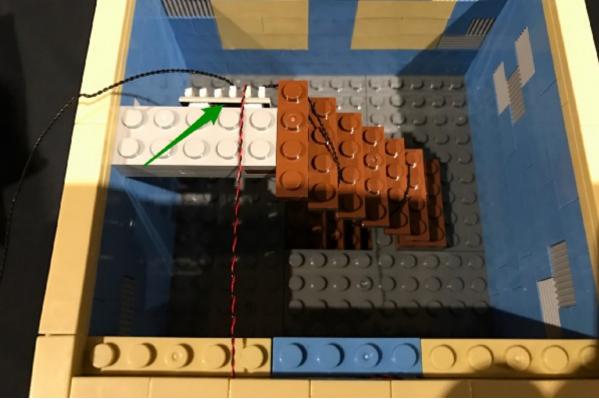


9.) Connect another **15cm Connecting Cable** to the next port on the expansion bor and then use another 2x **adhesive squares** to mount the expansion board behind

the staircase.

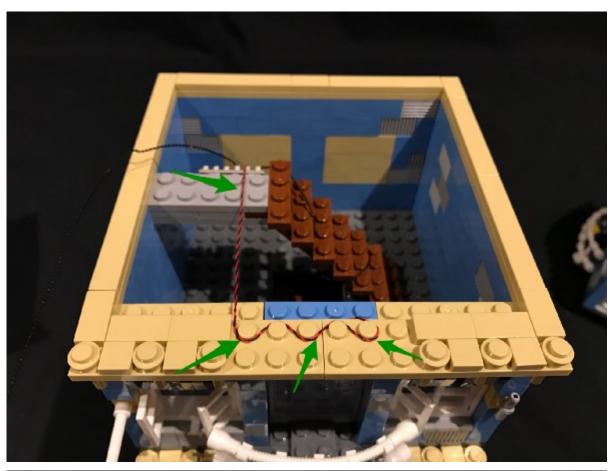


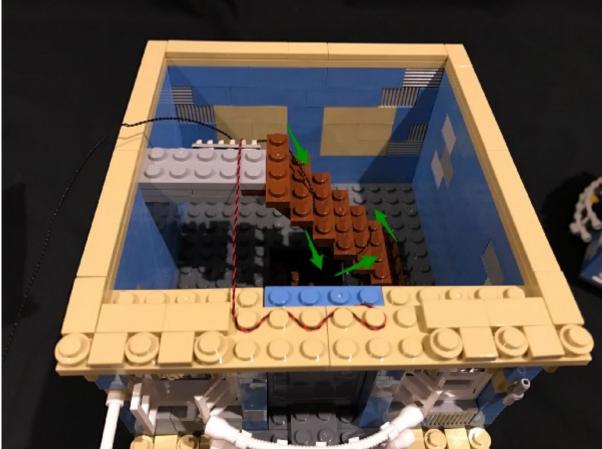


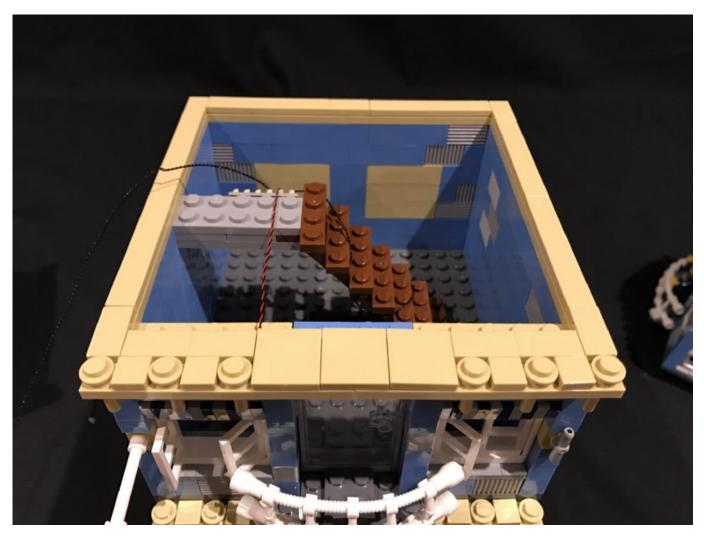


To prevent the bit light cable from being seen from the outside looking in, hide the cable by laying them in between studs underneath tiles. Loop the 15cm cable

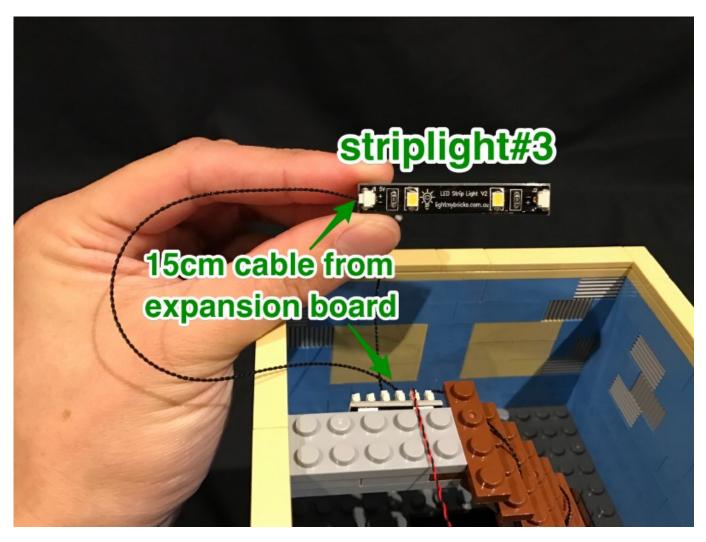
around the staircase.





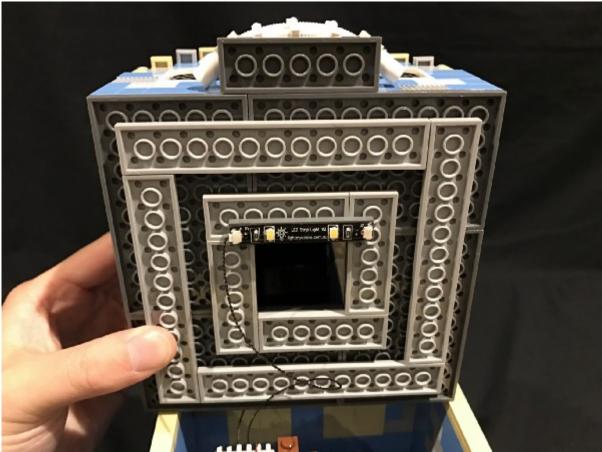


10.) Take another **White Strip Light** (**striplight#3**) and stick it to a LEGO 1×6 Plate. Take the other end of the 15cm connecting cable from the expansion board below and connect it to the left port of striplight#3.



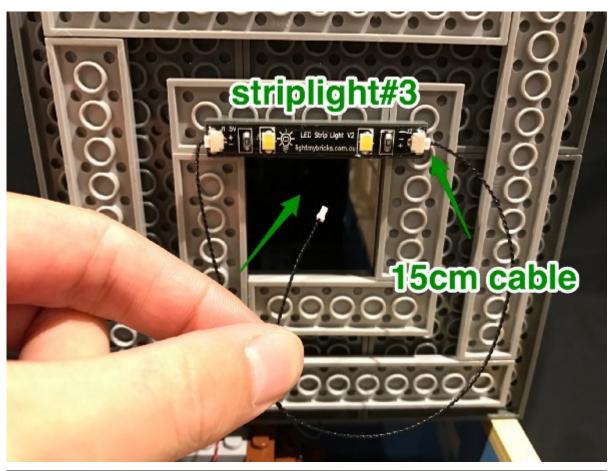
Take the entire top floor over the 2nd floor and then mount striplight#3 underneath to the following position

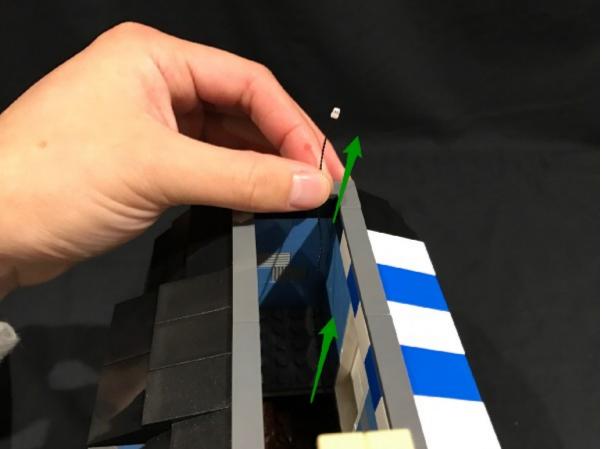




Take another **15cm Connecting Cable** and connect it to the right port on striplight and then thread the other end of it up the space which leads to the top floor.

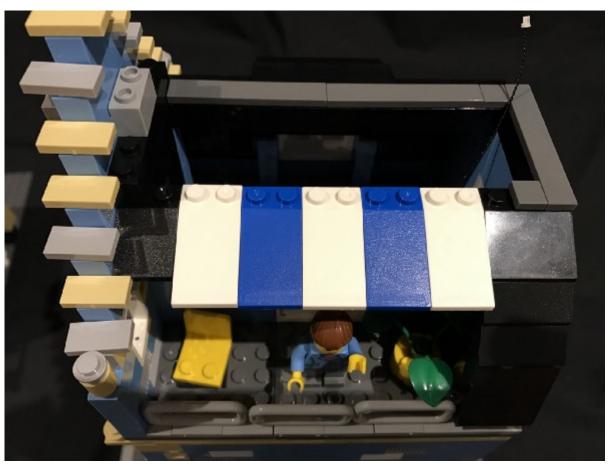
Remove the roof off the top floor and then pull the cable up from underneath.

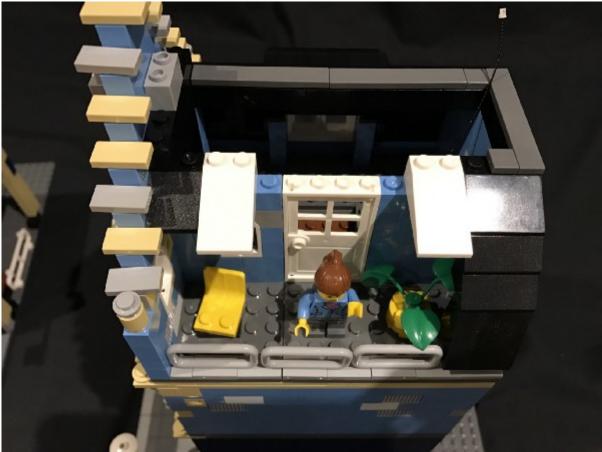


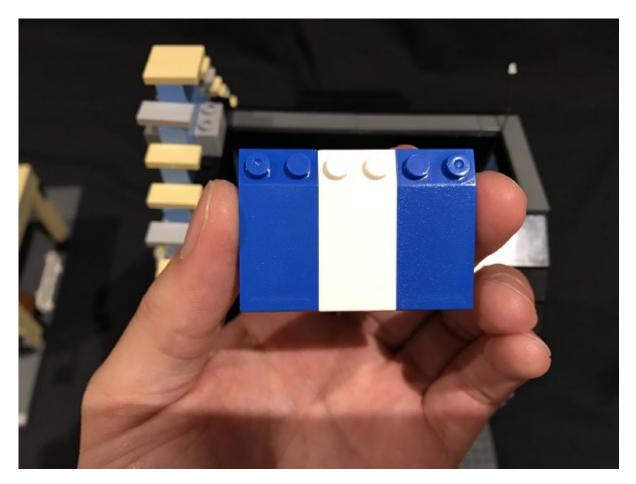


11.) Turn the building to the side and then disconnect the following sections to allow us to remove 3 veranda pieces as per below.



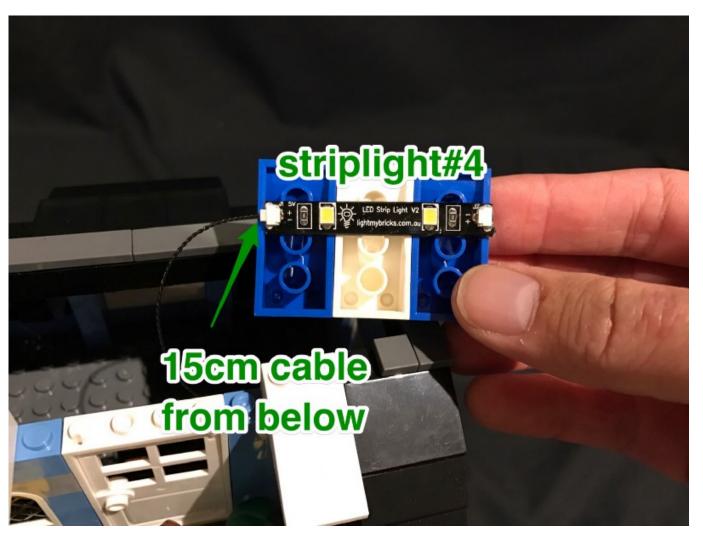






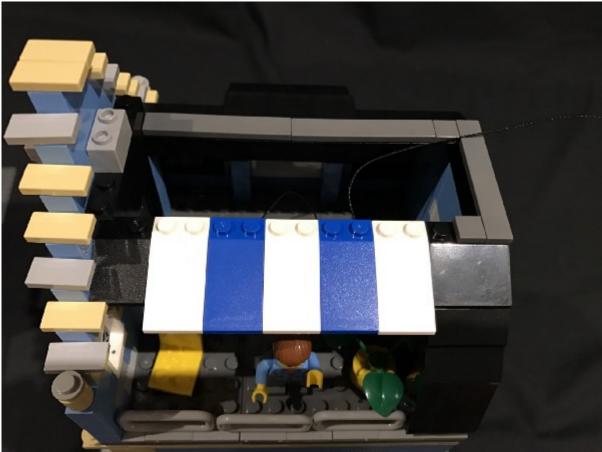
Take a **White Strip Light** (**striplight#4**) and stick it underneath the 3 LEGO pieces in the following position and then locate the 15cm cable from below and connect to the left port on striplight#4

Note: We do not require a LEGO 1×6 plate for this strip light.

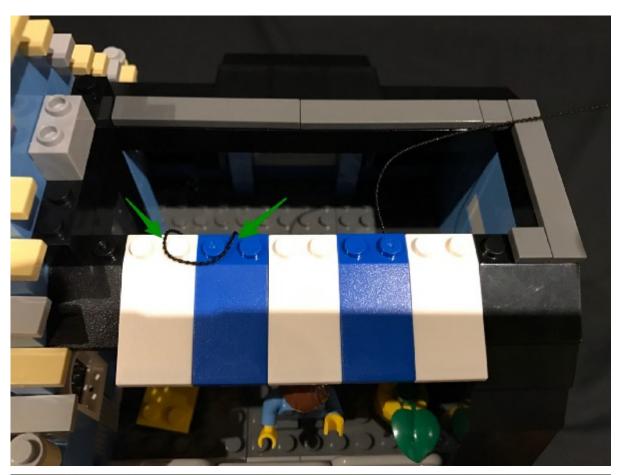


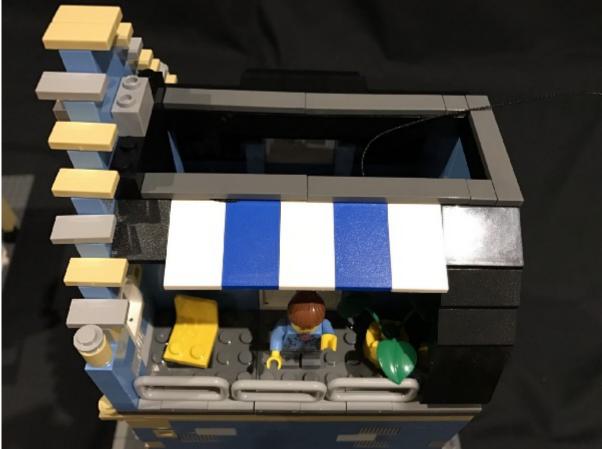
Take another **15cm Connecting Cable** and connect it to the right port on striplight#4 before reconnecting this section back to the roof ensuring you carefully lay both connecting cables behind.



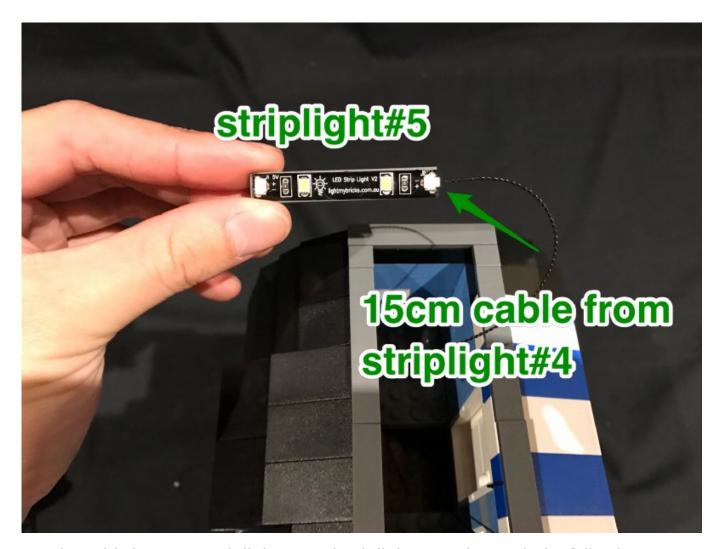


Before we reconnect the tiles we removed earlier, loop the cable we pulled up from below around study to prevent dangling cables from being seen from the outside

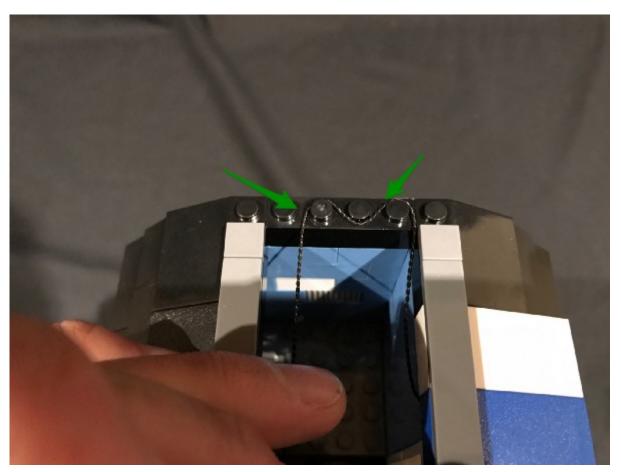


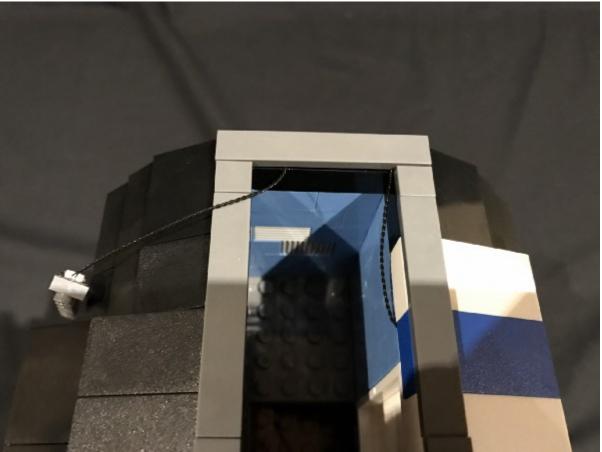


12.) Take another **White Strip Light** (**striplight#5**) and stick it to a LEGO 1×6 Plate. Connect the 15cm cable from striplight#4 to the right port on striplight#5.



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.



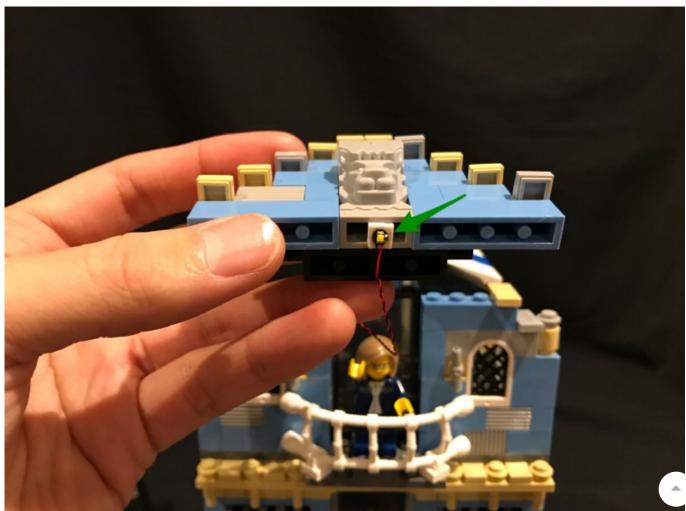


13.) Remove the following LEGO section from the very top of the building and take **White 15cm Bit Light** and stick it underneath this LEGO section (using an adhesive

square) to the following position.



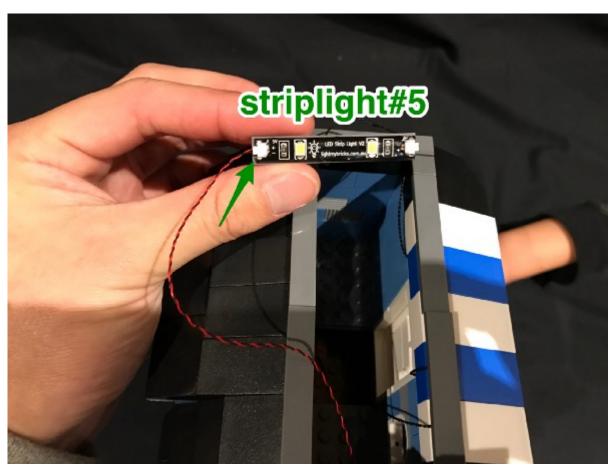


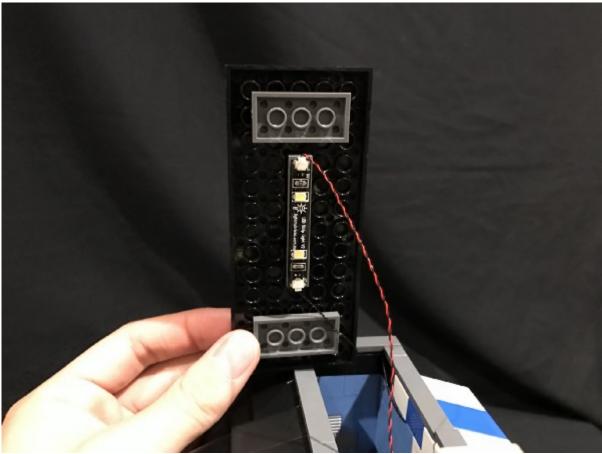


Reconnect this section to the building ensuring the cable is neatly laid behind.



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





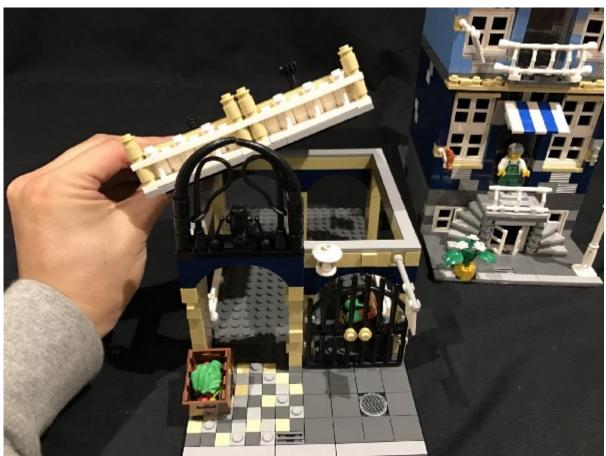
Securely reconnect the roof and then turn on the battery pack to test all the lights we have installed so far.

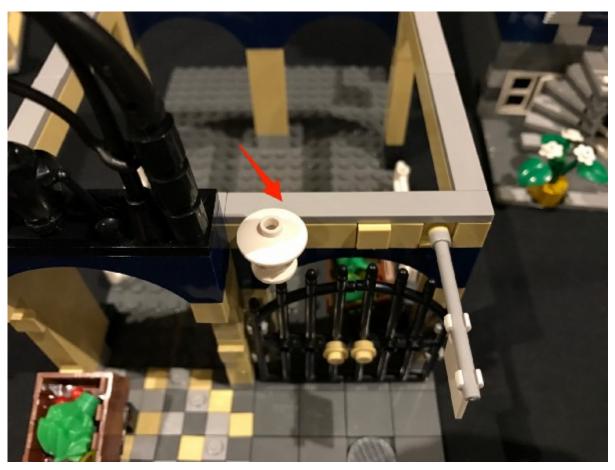




14.) Take the left section of Market Street and remove the roof as well as tiles to allow us to remove the lamp connected to the 1×1 brick.



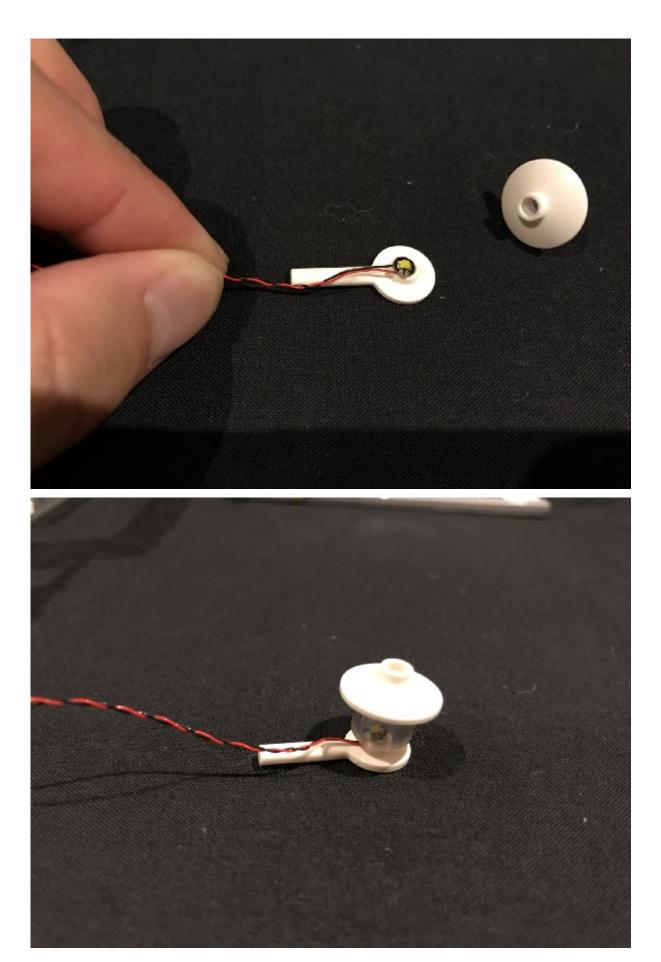




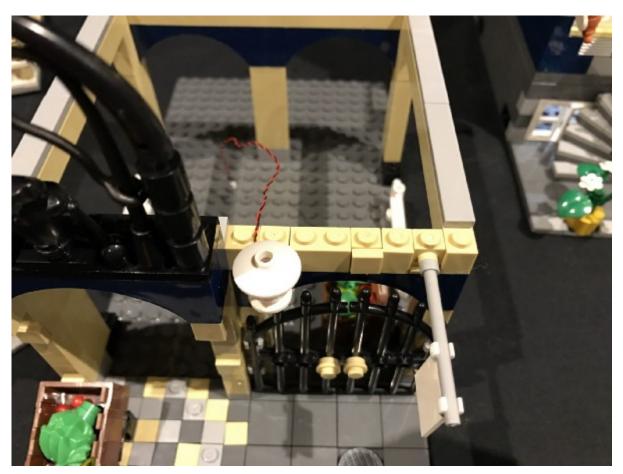


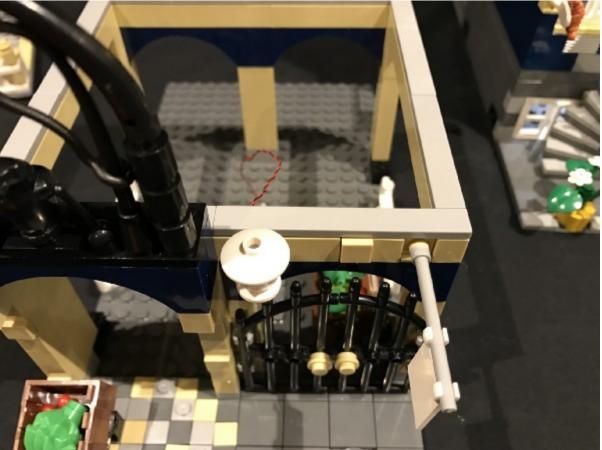


Remove the lamp base from the brick and then take the last **White 15cm Bit Light** and place it directly over the white stud ensuring the cable is facing the back. Secure the Bit Light in place by reconnecting the lamp bulb directly over the top.



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

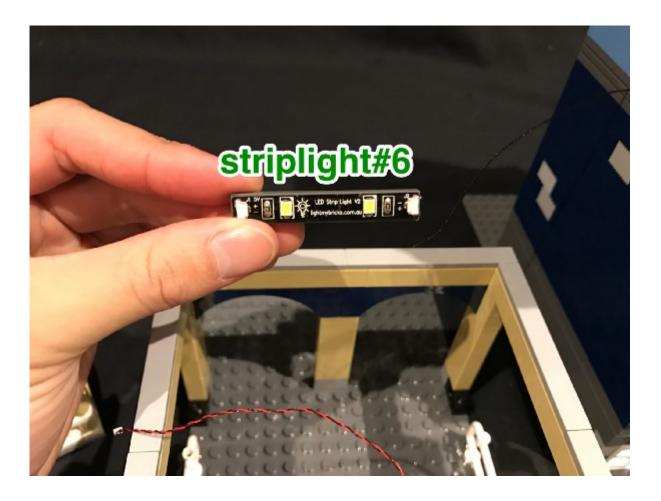


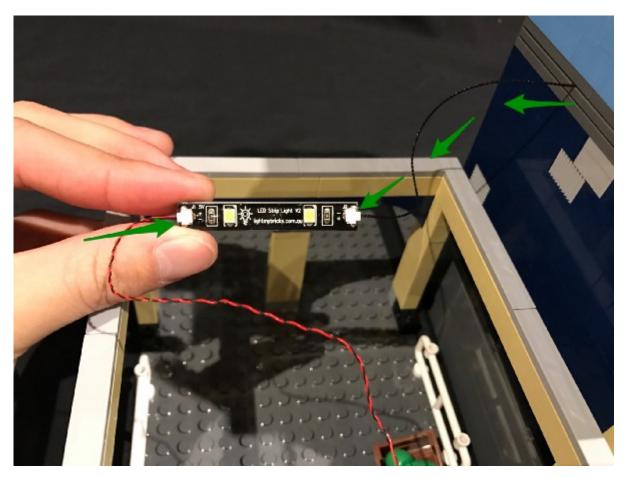


15.) Take the last **White Strip Light** (**striplight#6**) and stick it to a LEGO 1×6 Plate.

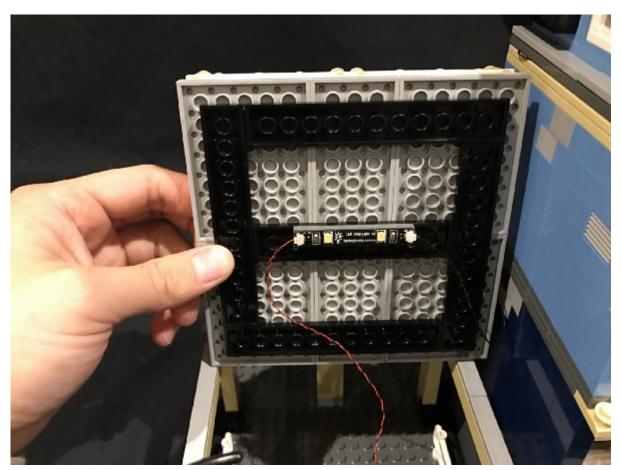
Connect the cable from the lamp to the left port on striplight #6 and then locate the

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 Light My Bricks LEGO Market Street Lighti Kit. Now, turn on your light kit and ENJOY!



