

Hilite II Survey Guide

This document is intended to provide the information required to produce an accurate list of the parts required for a hilite II installation. Using an example site plan, it will explain what measurements are required, as well as look at various options for the treatment of internal and external corners. For details on the installation process itself, please refer to the installation guide.

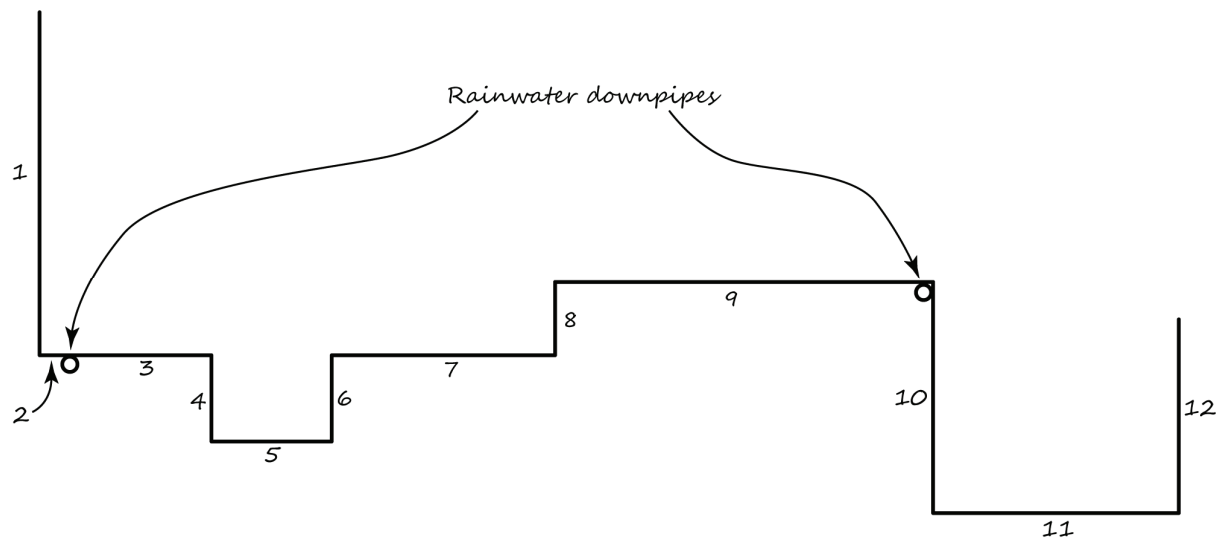


Figure 1

No.	Length (mm)
1	10000
2	659
3	3900
4	2600
5	3500
6	2600
7	6500
8	2125
9	10473
10	6181
11	7150
12	5615

In our example site we want to provide a key line of blue hilite II accent tubing to the front of a building. The tube will return down each side, but not run across the back.

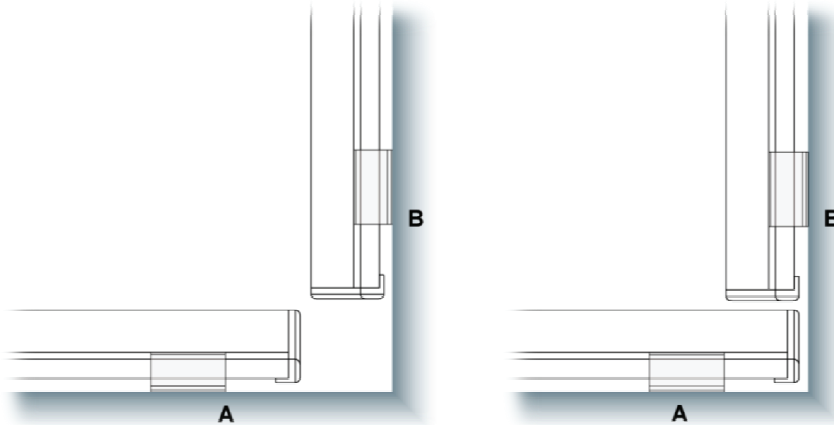
Firstly, sketch a plan of the required installation and number each separate elevation required (Figure 1 above). Note the position of any obstructions in the tube run, such as rainwater down pipes, cable ducts etc. Where such a feature necessitates a break in the run, treat each side as a separate elevation.

Carefully measure the length of each numbered elevation. Dimensions taken from building drawings are not normally accurate enough. Take your measurements in millimetres and record in a table like the one shown in our example on the left.

Corner Treatment

If your site includes any internal or external corners, you must decide how these are to be treated. The diagrams below show the possible options for internal and external corners.

Internal Corners

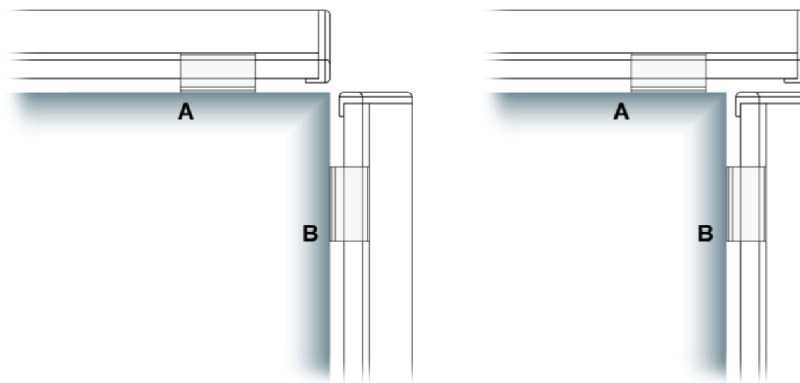


Internal corner Option 1

Internal corner Option 2

To achieve option 1, subtract 50mm from both elevation A and elevation B.
 To achieve option 2, subtract 50mm from elevation B. Leave elevation A as measured.
 The preferred method is option 1. This generally looks better as it is symmetrical.

External Corners



External corner Option 1

External corner Option 2

For external corners, to achieve option 1, leave both elevations A and B as measured.

To achieve option 2, add 50mm to elevation A and leave elevation B as measured.

The preferred method is option 1. As with internal corners, this generally looks better as it is symmetrical. Because the ends of hilite 2 tube illuminate you will not usually see a dark spot at the corner.

Add a column to your table of elevation lengths, and adjust each one to take into account your chosen corner scheme. In our example we have chosen to use option 1 for both internal and external corners. Remember if an elevation has a corner at both ends, you will need to apply any adjustment twice.

No:	Length (mm)	Length adjusted for corners (mm)
1	10000	10000
2	659	659
3	3900	3850
4	2500	2450
5	3500	3500
6	2500	2450
7	6500	6450
8	2125	2075
9	10473	10423
10	6181	6181
11	7150	7150
12	5615	5615

You can now send these elevation lengths to Visive for quotation and/or manufacture.

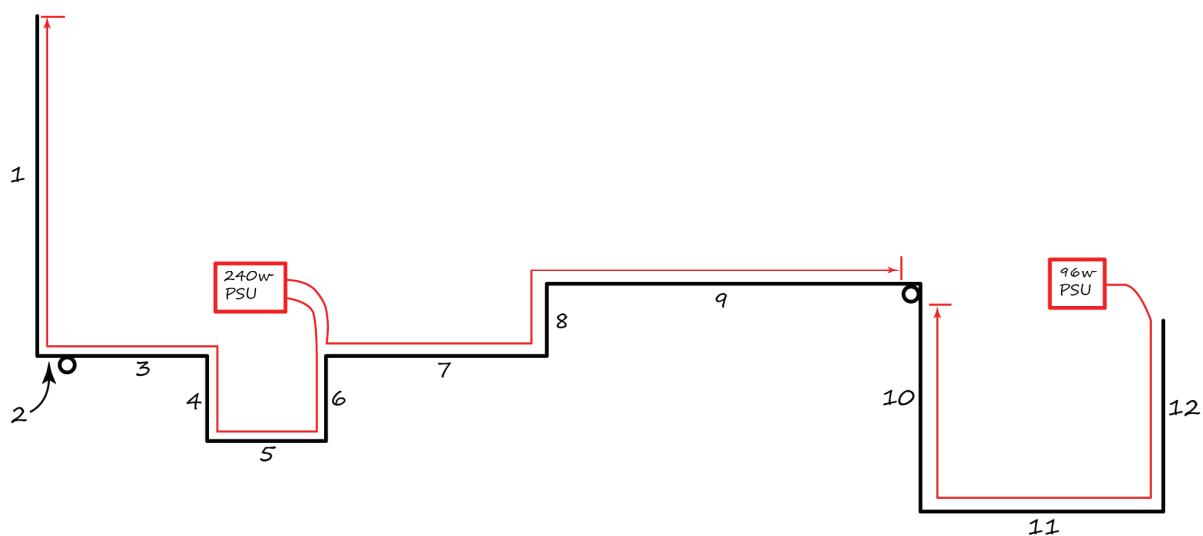
Note that hilite is manufactured in lengths from 2400mm down to 100mm. Any elevations longer than 2400mm will be made up from a number of 2400mm lengths, plus a make-up section. Any elevations shorter than 100mm cannot be manufactured. If you have an elevation where the makeup section required is less than 100mm, as in our example elevation numbers 4 and 6 above, a 1200mm section will be used. So elevations 4 and 6 would be supplied as 1 x 1200mm and 1 x 1250mm. An elevation list will be supplied with your order detailing how each of your elevations is made up.

Power Supply Requirements and Positioning

Now that you have the length of each elevation defined, you must consider the quantity and positioning of the power supply units. Add up the total length of all the required elevations. Referring to the table below, work out the required quantity of each type of power supply.

Colour	Part Number	Max. length (96W PSU)	Max length (240W PSU)
Red	HL2-AS-R1-x	16m	40m total – 20m per output
Orange	HL2-AS-O1-x	16m	40m total – 20m per output
Yellow (lemon)	HL2-AS-Y1-x	20m	50m total – 25m per output
Yellow (mustard)	HL2-AS-Y2-x	16m	40m total – 20m per output
Green (light)	HL2-AS-G1-x	24m	60m total – 30m per output
Green (dark)	HL2-AS-G2-x	24m	60m total – 30m per output
Blue	HL2-AS-B1-x	20m	50m total – 25m per output
Purple	HL2-AS-P1-x	20m	50m total – 25m per output
White	HL2-AS-W1-x	20m	50m total – 25m per output

In our example we have a total of 61.103 metres of blue tube, so we will need 1 x 240W unit and 1 x 96W unit. Referring back to your sketched plan, along with your elevation table, decide on suitable locations for each power supply and the elevations they will power. In our example we have split each supply circuit at the ends of elevations. There is no particular requirement to do this, and circuits can begin and end anywhere along an elevation. Note that the power supply connection cables are 10m in length, and these must not be extended.



Here the 240W PSU has been selected to power elevations 1 to 6 on one output channel, and 7 to 9 on the other output channel. A 96 W PSU powers the remaining elevations 10, 11 and 12.

Jumper Cables

Finally we must consider any gaps in the tube run which must be bridged by a jumper cable. In our example we have the down pipe between elevations 2 and 3. If this gap is less than 200mm, the cables from the tubes will connect directly and a jumper cable is not required. For gaps greater than 200mm, order a suitable jumper cable. The standard jumper cable length is 3 metres, but they can be ordered in any length as required. Because we have elected to run elevations 9 and 10 on different electrical circuits, we do not need to connect them together so we do not need to bridge around the down pipe that separates them.

Additional Information

Note that all hilite II tube lengths are quoted as *nominal* lengths. In other words the length given is the gap which the tube section is designed to fill. This is different from any *measured* tube length. Because hilite II tubes can expand and contract with temperature variations, the actual measured length of a tube will vary. For example a standard 2400mm nominal length will measure approximately 2390mm at 20°C. At lower temperatures it will measure slightly shorter, and at higher temperatures slightly longer. At the highest operating temperature of the tube, normally 60°C, the measured length will equal the designated nominal length.

For further advice on surveying your site, or to discuss any other aspect of hilite II, please contact Visive by emailing technical@visivegroup.com