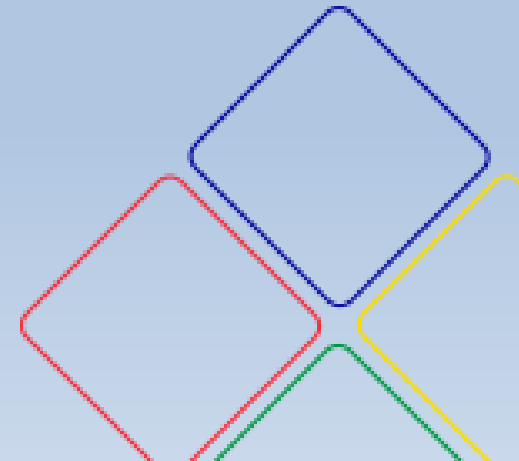


LUCOLED

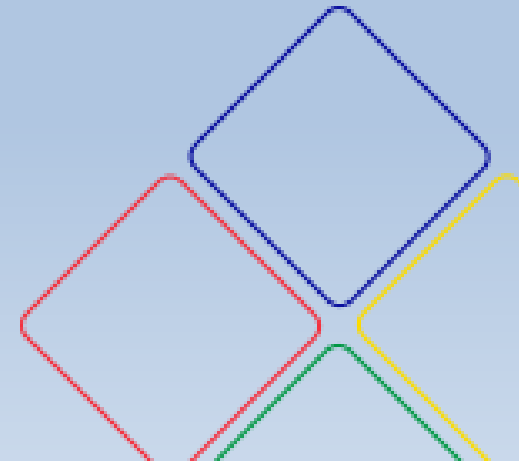
Installing Lucoline



STEP 1

Planning

Building Layout



Building Layout for Lucoline

Calculating sections

2 sections of 2950 mm:

$2950/2370 = 1.25$: 1 section 2370 and 1 section 1186 cut to approx 550.

1 section of 20000 mm:

$20000/2370 = 8.44$: 8 sections 2370 and 1 section 1186 cut to approx 1042.

Totals:

10 x 2370 sections

3 x 1186 sections, but maybe 2 as cut piece can be reused if cut < 550.

20000 mm

2950 mm

2950 mm



LUCOLED

Experience Lighting

Building Layout for Lucoline

Calculating optional accessories

Totals:

10 x 2370 sections

3 x 1186 sections

3 sides need to be cut so 3 pieces L-x-END endcaps needed plus 1 tube glue.
1 outside corner so 1 piece L-x-CRN-OUT is needed.

10 L-x-JNT joint covers are needed to cover the gap between sections.

20000 mm

2950 mm

2950 mm



LUCOLED

Experience Lighting

Building Layout for Lucoline

Calculating Power

Total $25.9 \text{ m} \times 5 \text{ W/m} = 129.5 \text{ W}$:

1 x PP24150 power supply (max recommended load 90% = 135 W).

The L-CAB-Y-1.5 cable can drive 2 x 4 2370 sections, that means powering from the middle 4 sections left and 4 right. 96 W per cable.

In this case we go for a separate cable for the isolated 2950 section and that leaves 12 sections for which we need 2 cables.

So a total of 3 cables are needed. All connected to the power supply. Additional cable (2.5 mm²) will be needed and waterproof connectors, Skotchlok 314 gel filled or similar.

20000 mm

2950 mm

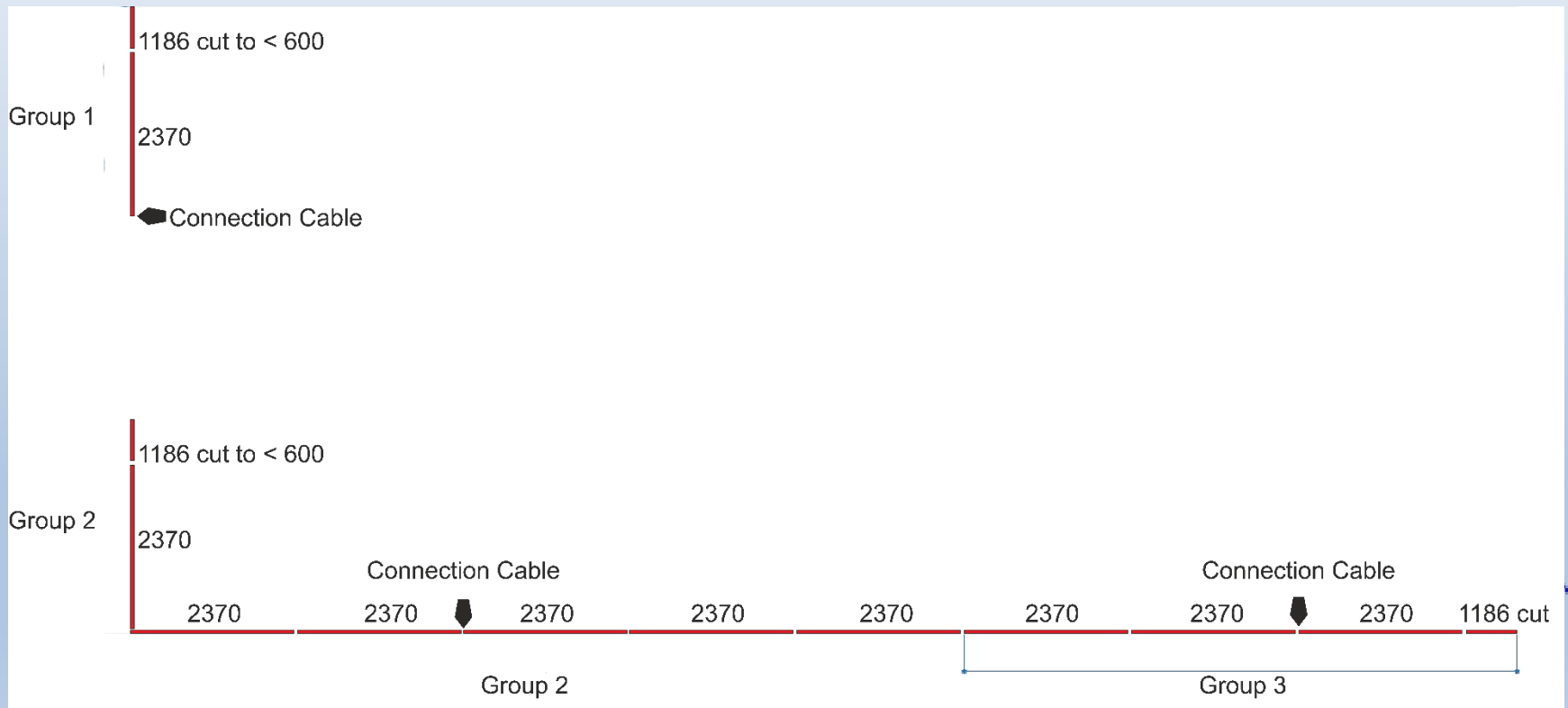
2950 mm



LUCOLED

Experience Lighting

Lucoline Layout

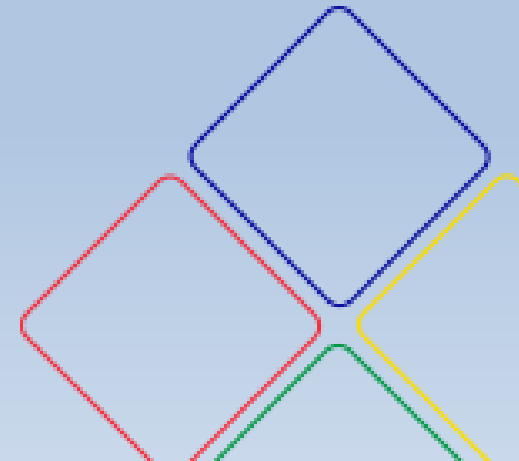


LUCOLED

Experience Lighting

Step 2

Installing



Prepare installation



TIP:

Unpacking and laying out sections on the roof makes installation go faster.



LUCOLED

Experience Lighting

Establish position fixed clip



Establish the position of the fixed clip (L-CLIP-F) that is mounted in the middle of each section to prevent the section from sliding on the building under temperature influences.



LUCOLED

Experience Lighting

Establish position Lucoline



Establish the height of the Lucoline relative to the edge of the roof.
Use a rotating laser line to mark this position when this is not possible.



LUCOLED

Experience Lighting

Fix clip



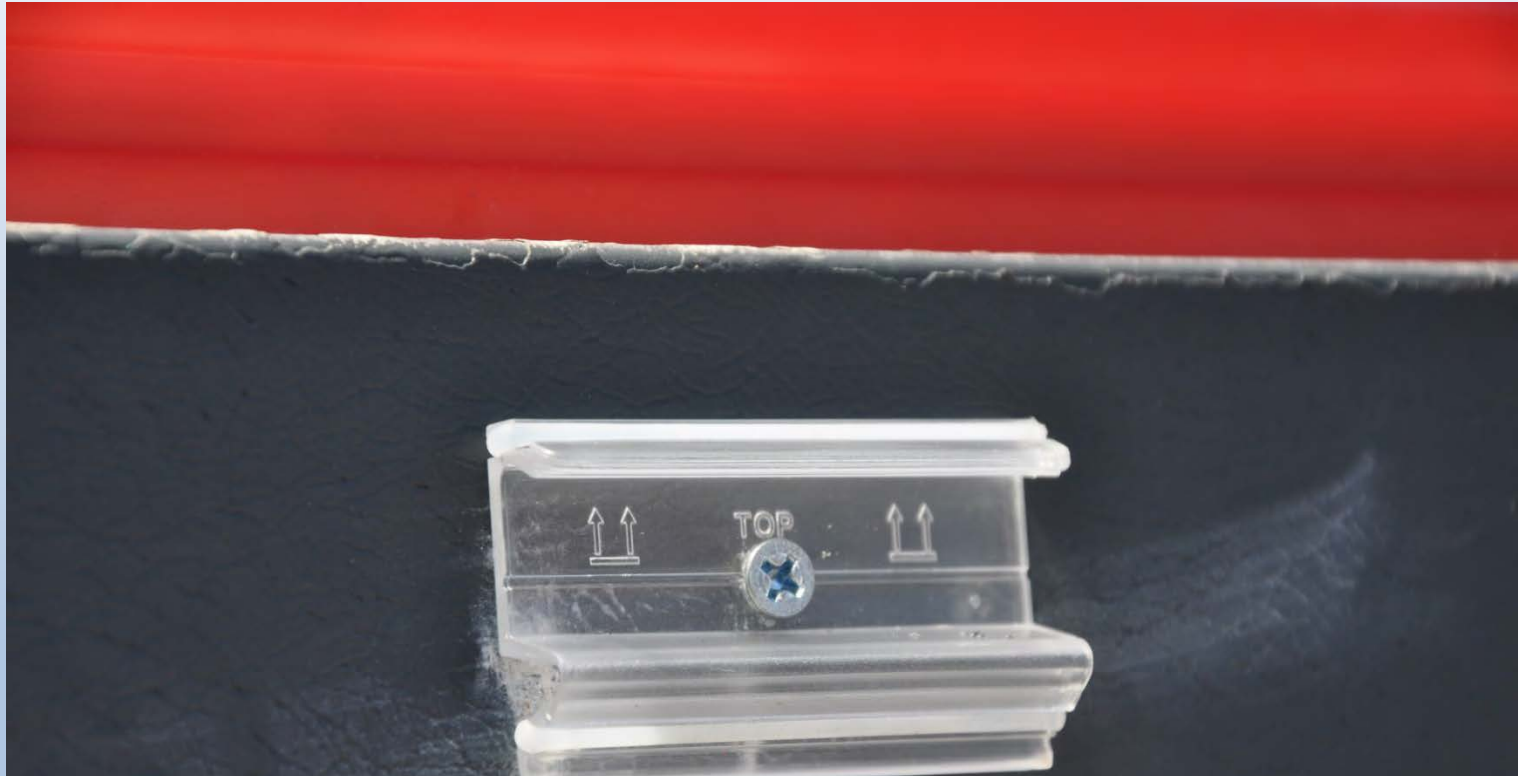
Fix the clip with self tapping screws. Use mounting method suitable for the underground the clips are mounted to.



LUCOLED

Experience Lighting

Fix clip right side up



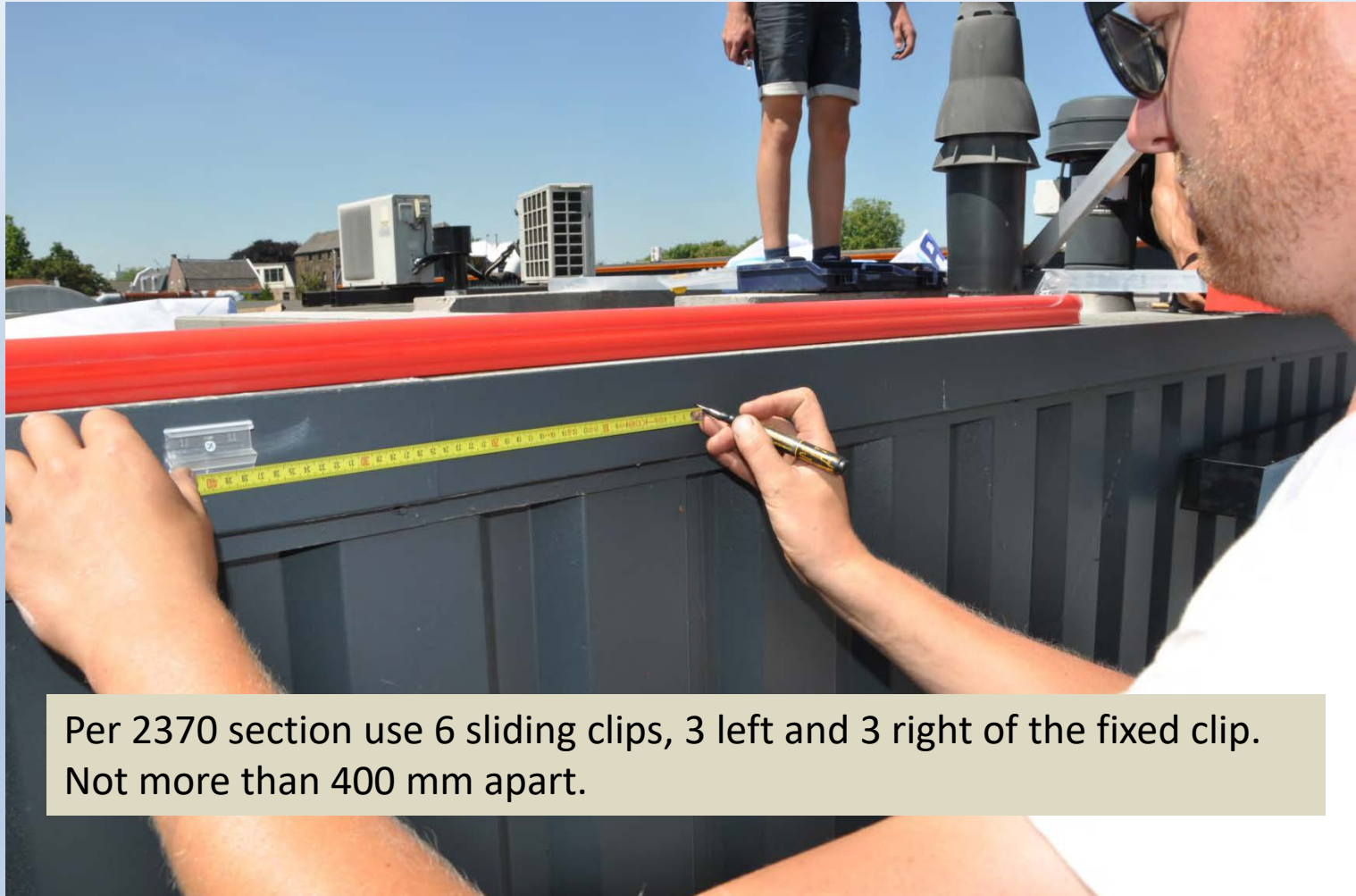
Make sure you fix the clip with the arrows pointing up and TOP readable. Spring section on bottom. Note the silicon bands around the clip for the fixed clip.



LUCOLED

Experience Lighting

Position sliding clips



Per 2370 section use 6 sliding clips, 3 left and 3 right of the fixed clip.
Not more than 400 mm apart.



LUCOLED

Experience Lighting

Install sliding clips



Per 2370 section use 6 sliding clips, 3 left and 3 right of the fixed clip.
Not more than 400 mm apart.
Sliding clips (L-CLIP-S) do not have silicon rubber.



LUCOLED

Experience Lighting

Click Lucoline on clips



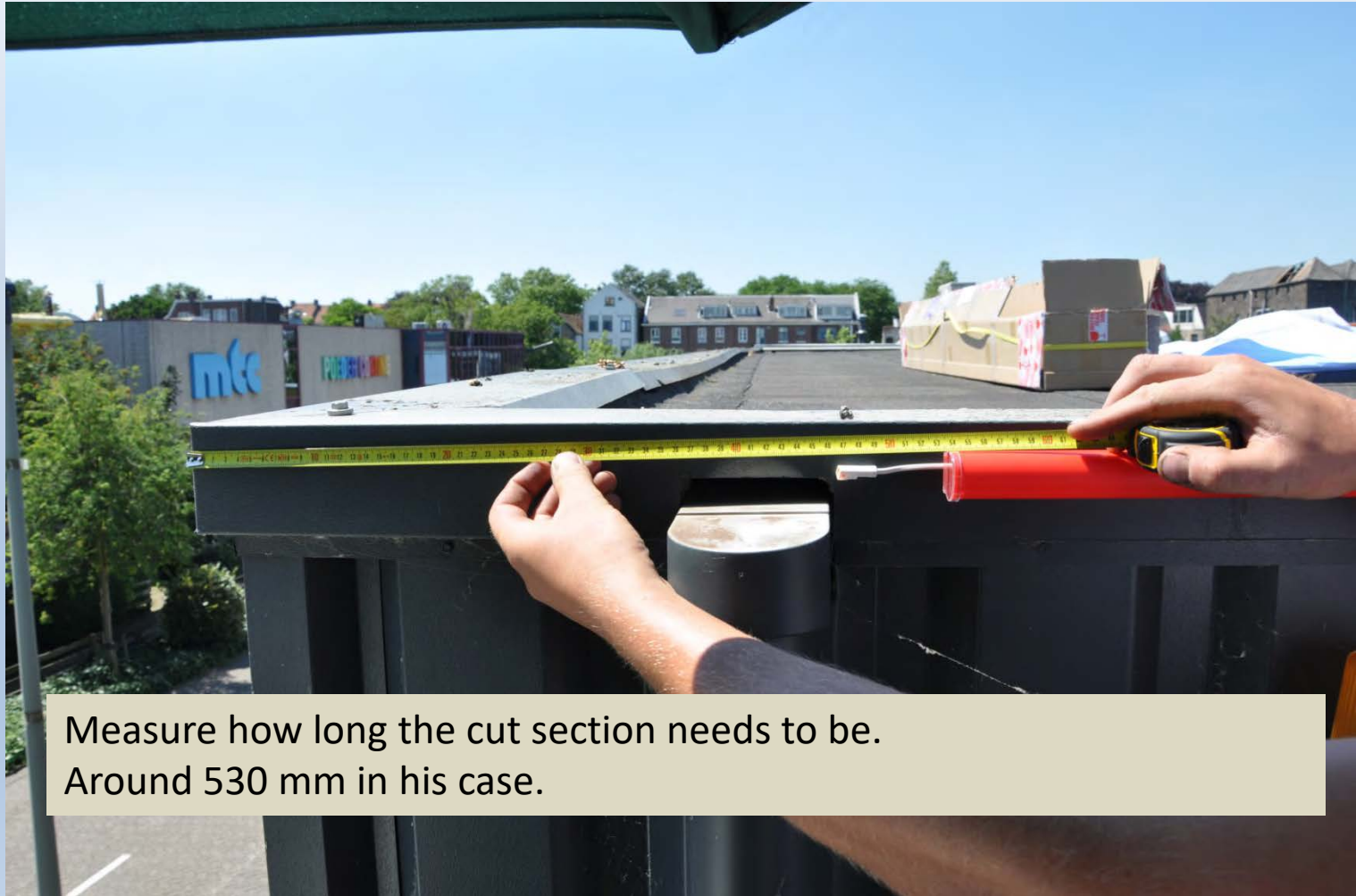
Click the Lucoline section on the clips.
Hang the tube in the top of the clips and push downwards.
Make sure all clips are connected and closed.



LUCOLED

Experience Lighting

Measure cut section



Measure how long the cut section needs to be.
Around 530 mm in his case.



LUCOLED

Experience Lighting

Identify closest cut mark



Measure on the section that needs to be cut where the closest cut mark is. Make sure you measure from the side with the connector that fits the connector of the last full section!



LUCOLED

Experience Lighting

Mark closest cut mark



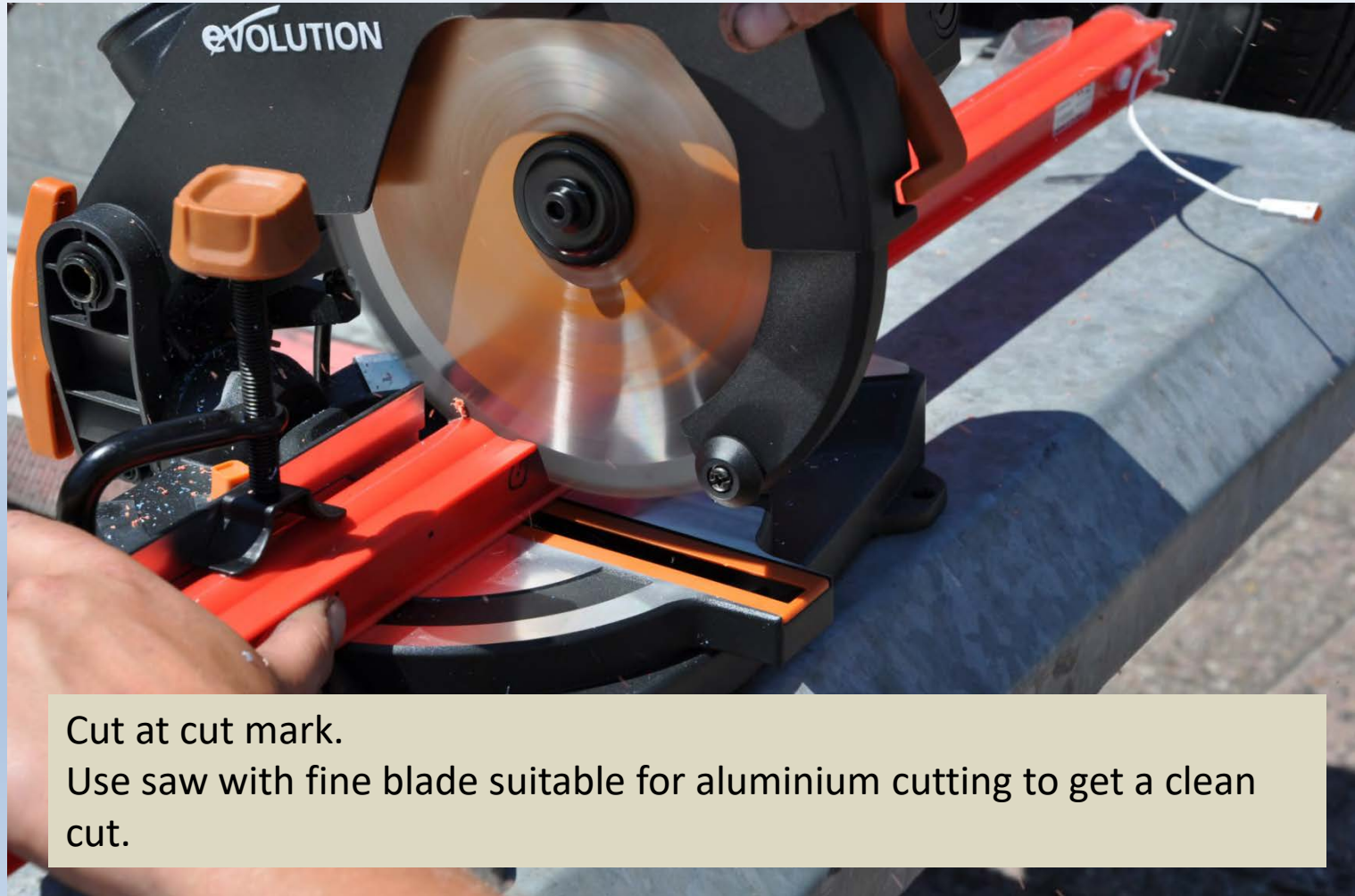
Mark closest cut mark.



LUCOLED

Experience Lighting

Cut at cutmark



Cut at cut mark.

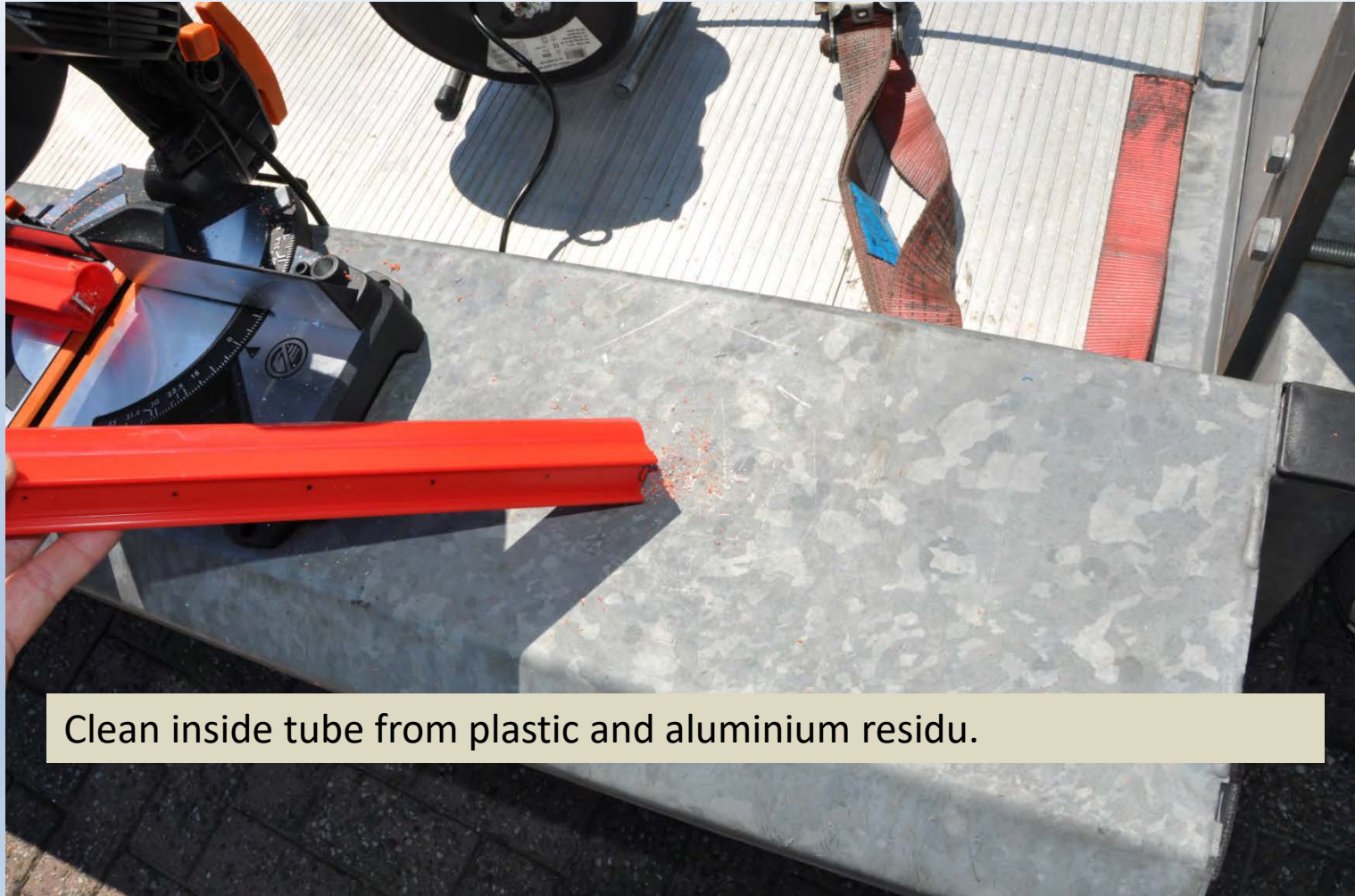
Use saw with fine blade suitable for aluminium cutting to get a clean cut.



LUCOLED

Experience Lighting

Clean inside tube



Clean inside tube from plastic and aluminium residu.



LUCOLED

Experience Lighting

Sand edges tube and PCB



Sand the edge of the tube with fine sandpaper.



LUCOLED

Experience Lighting

Sand edges tube and PCB



LUCOLED

Experience Lighting

Push PCB back in tube



Push PCB back in tube.



LUCOLED

Experience Lighting

Fill edge of endcap with glue



Fill the edge of the endcap with glue. Weldon 16 or equivalent



LUCOLED

Experience Lighting

Install endcap on tube



Install the endcap.



LUCOLED

Experience Lighting

Install endcap on tube



LUCOLED

Experience Lighting

Install cut section



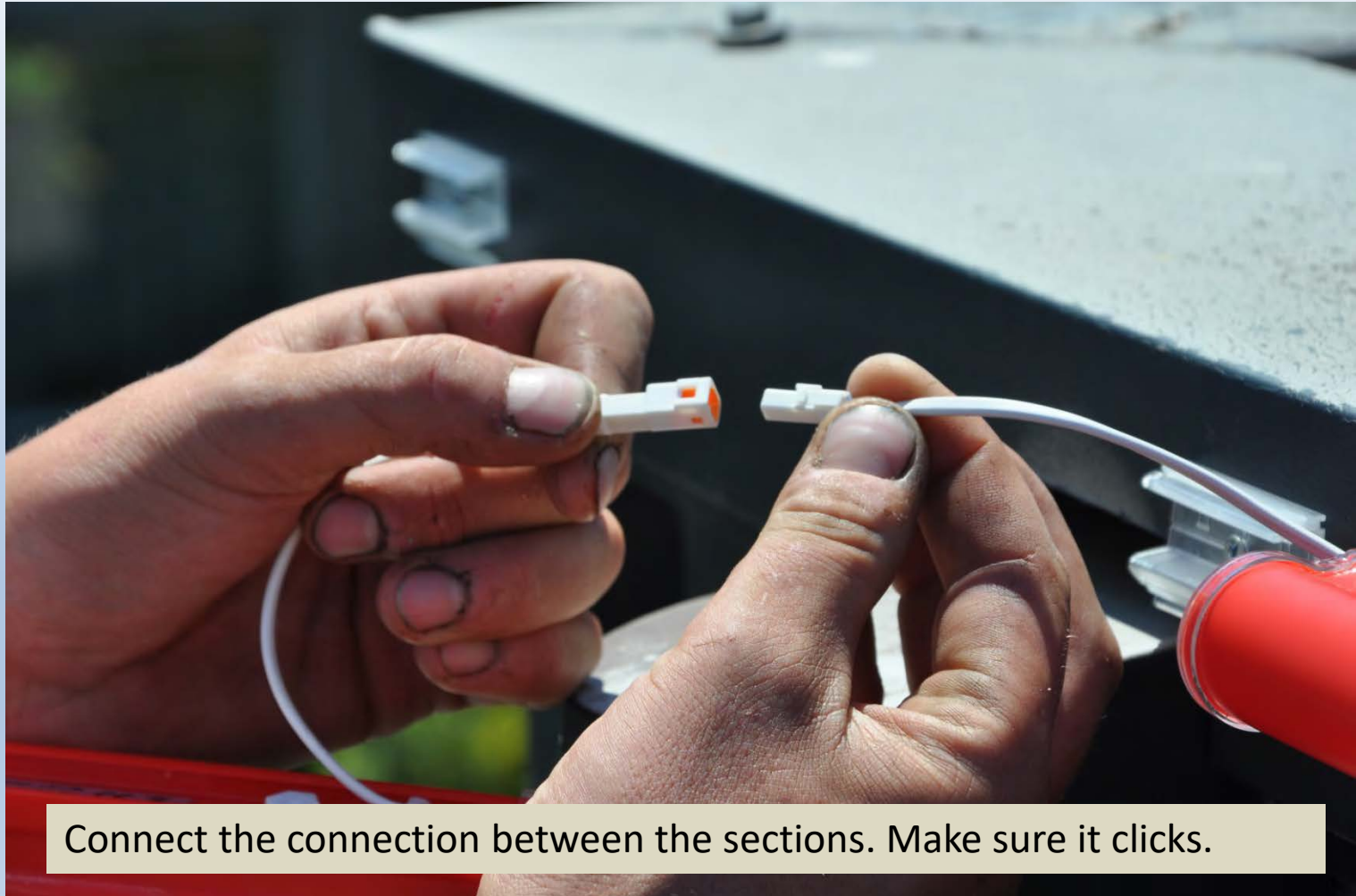
Install the cut section. Again use 1 fixed clip.



LUCOLED

Experience Lighting

Electrical connection



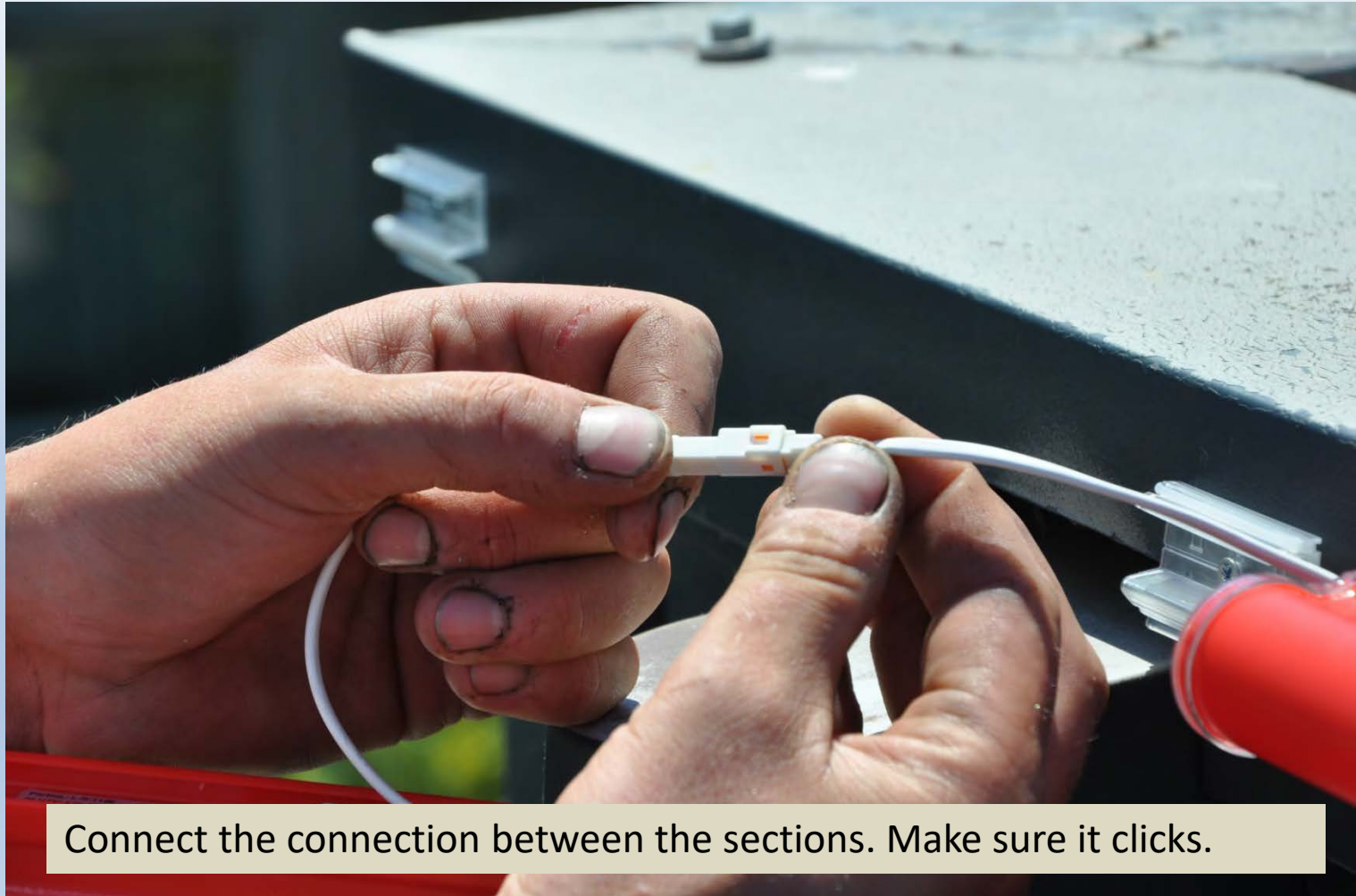
Connect the connection between the sections. Make sure it clicks.



LUCOLED

Experience Lighting

Electrical connection



Connect the connection between the sections. Make sure it clicks.



LUCOLED

Experience Lighting

Electrical connection



Connect the connection between the sections. Make sure it clicks.



LUCOLED

Experience Lighting

Gap between section



Leave a gap between sections to allow for thermal expansion.
This should be 10-15 mm when installing in temperatures $> 10^{\circ}\text{C}$.



LUCOLED

Experience Lighting

Install joint cover



Install the joint cover.



LUCOLED

Experience Lighting

Install joint cover



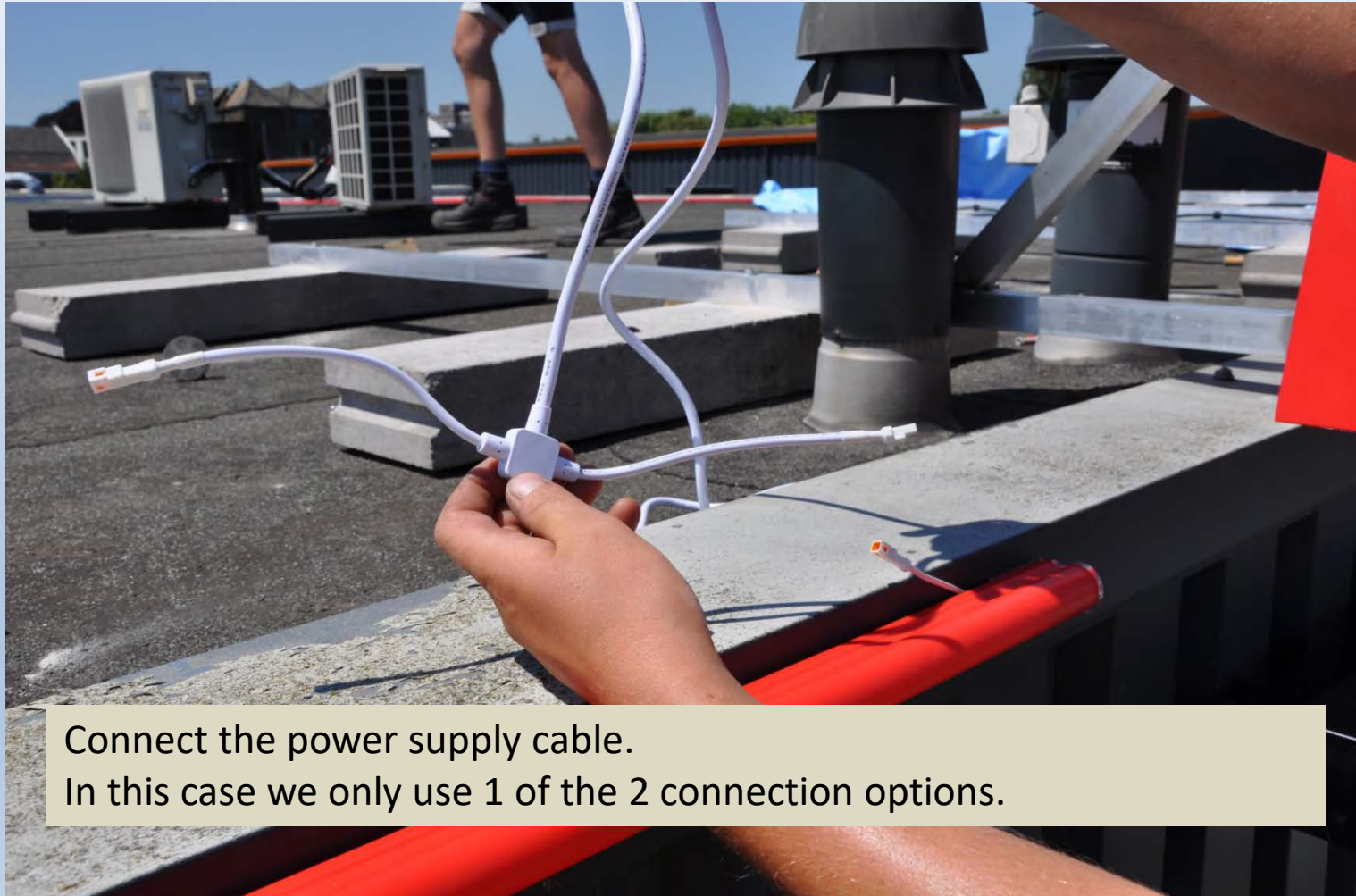
Install the joint cover.



LUCOLED

Experience Lighting

Electrical connection



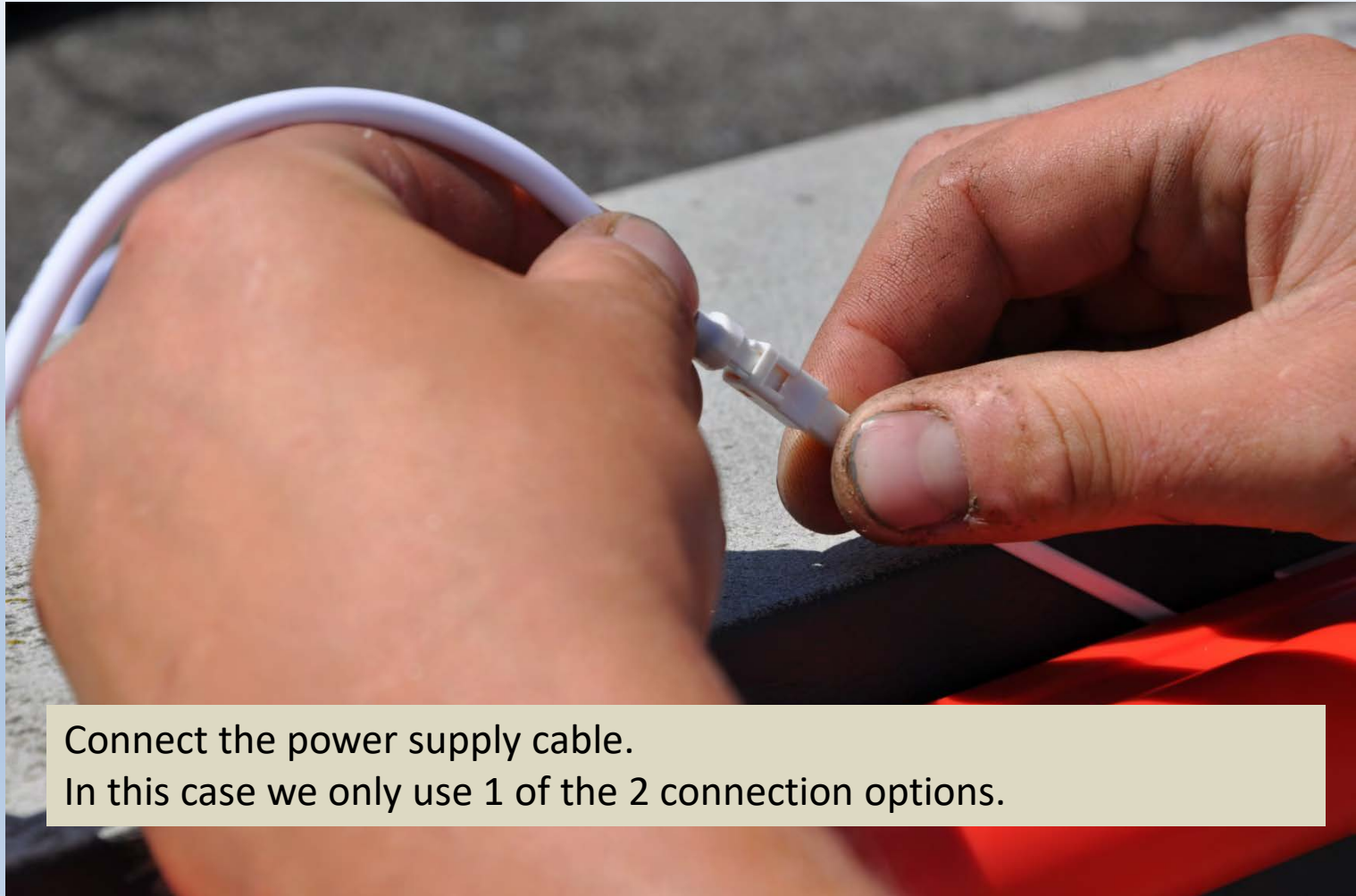
Connect the power supply cable.
In this case we only use 1 of the 2 connection options.



LUCOLED

Experience Lighting

Electrical connection



Connect the power supply cable.
In this case we only use 1 of the 2 connection options.



LUCOLED

Experience Lighting

Blanking connector



IMPORTANT!

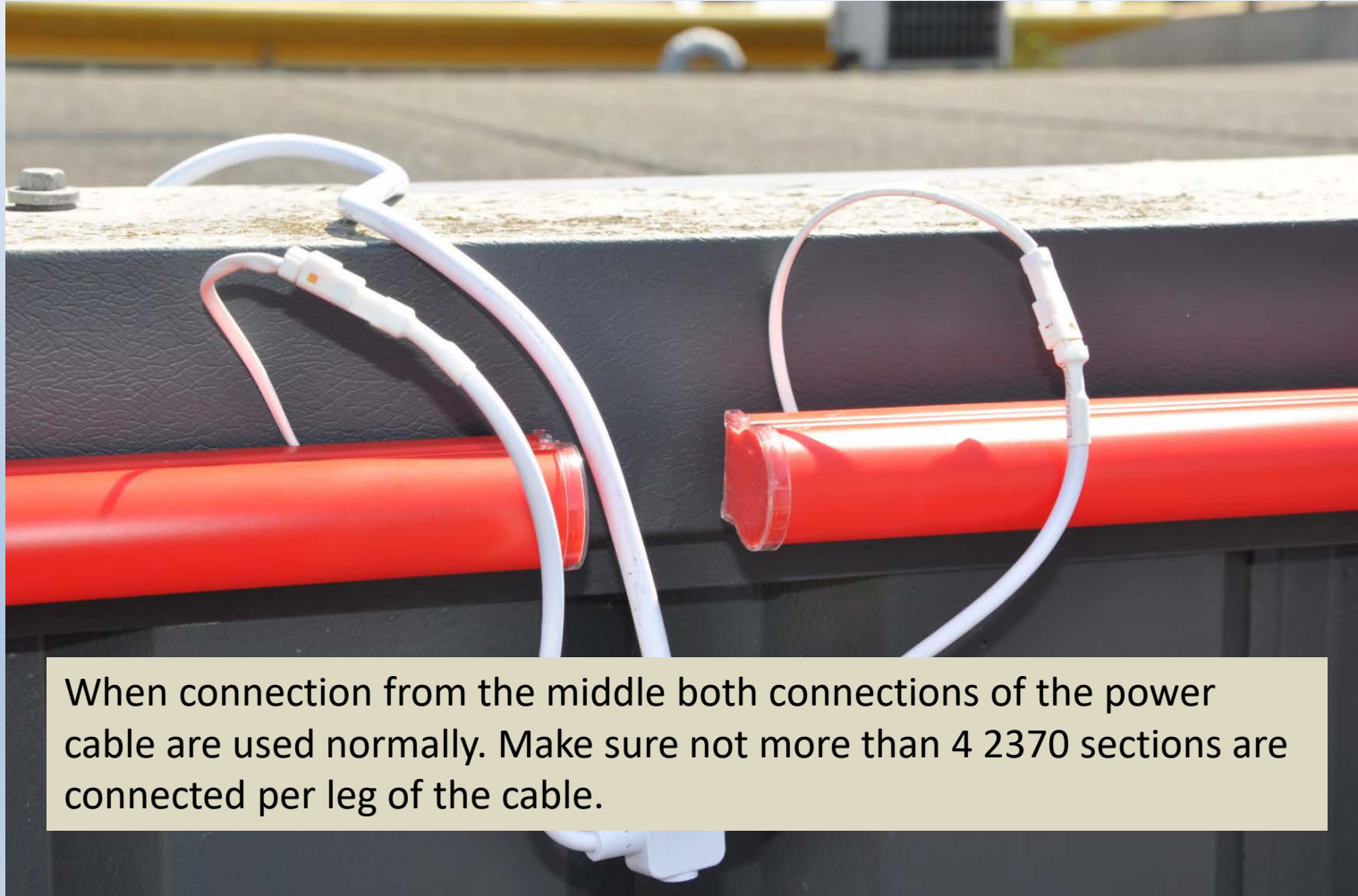
All open connectors in the installation need to be closed waterproof by using an appropriate male or female blanking connector.



LUCOLED

Experience Lighting

Electrical connection 2 sides



When connection from the middle both connections of the power cable are used normally. Make sure not more than 4 2370 sections are connected per leg of the cable.



LUCOLED

Experience Lighting

Minimizing waste



In this particular install we need another cut piece that is about 500 mm long. Which is less than the leftover piece of the first cut piece, so we can reuse that when we make sure we install the full sections with the right connector at the side of the cut piece.



LUCOLED

Experience Lighting

Minimizing waste



After cutting the already cut piece to the correct size this is all waste that is left. By doing so you save an extra 1186 section.



LUCOLED

Experience Lighting

Installing corner



Let the individual sections overlap as in the picture.



LUCOLED

Experience Lighting

Installing corner



LUCOLED

Experience Lighting

Finished install



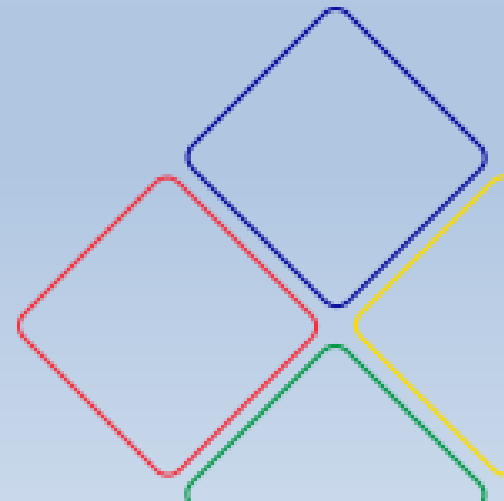
LUCOLED

Experience Lighting

LUCOLED

For more info:

info@lucoled.com
+3213292829



LUCOLED

Experience Lighting

LUCOLED

With special thanks to:

Verbeek Reclame
and
Chris Glas

