

EPS.LUMI MAXX

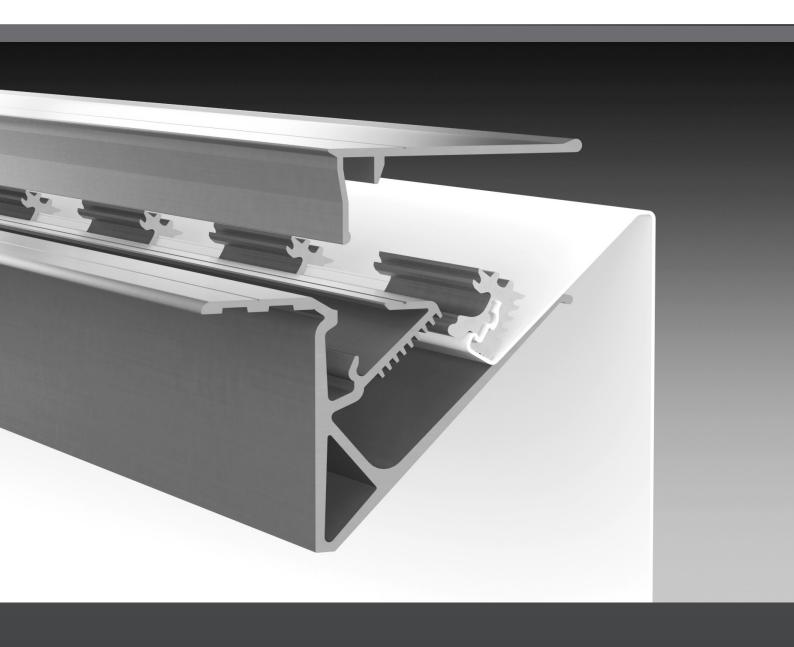
Technical Documentation 07.2023

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Basic knowledge Fabric tensioning

System description LUMI MAXX



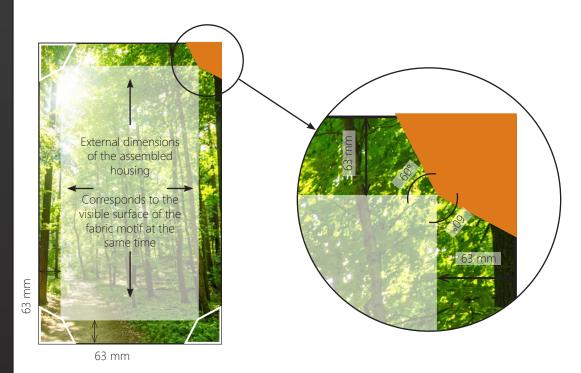
The fabric allowance applies for the Retrofit, Joint profile and Corner profile

The fabric is clamped and unclamped at the side.



Fabric allowance and fabric cutting

Please note the range of backlit fabrics on offer. We gladly assist you in selecting the fabric for your project.



Add 63 mm to the external dimensions of the housing.

Remove the orange area of the fabric.

The mass per unit area of a PVC coated polyester fabric should be at least 550 grams/square metre. In the event of a lower mass per unit area, the edge may need to be reinforced because the flexholder does not grip.

For formats with a length > 4 m, we recommend cutting the precise fabric allowance on site when in a half-tensioned state and them clamping the flex holders into place since temperature differences may influence the size of the fabric. If the fabric is still too long, release the flex holders with the flex holder pliers and cut the fabric down again.

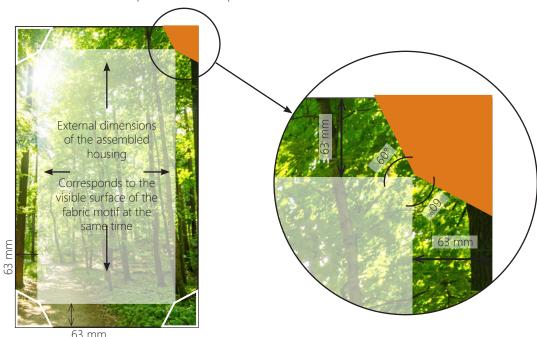
System description LUMI MAXX



Fabric allowance and fabric cutting for profiles EPS 1-019, EPS 1-150 and EPS 1-151



Add <u>63 mm fabric allowance</u> to the outer dimension of the assembled housing all around. The fabric is clamped and unclamped at the side.



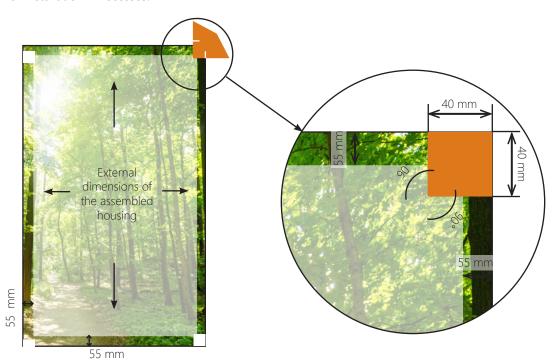
Add 63 mm to the external dimensions of the housing.

Remove the orange area of the fabric.

Tuchzugabe und Gewebezuschnitt bei Profil EPS 1-152

Add <u>55 mm fabric allowance</u> to the outer dimension of the assembled housing all around. The profile can be equipped from the front and is particularly suitable for installation in recesses.





Add 55 mm to the external dimensions of the housing.

Remove the orange area of the fabric.



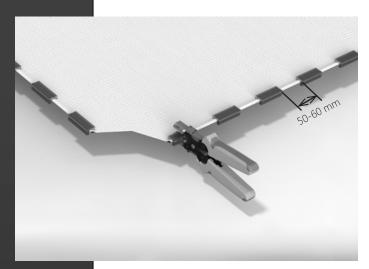
Notes on the mass per unit area of the fabric

The mass per unit area of a PVC coated polyester fabric should be at least 550 grams/square metre. In the event of a lower mass per unit area, the edge may need to be reinforced because the flexholder does not grip.

For formats with a length > 4 m, we recommend cutting the precise fabric allowance on site when in a half-tensioned state and them clamping the flex holders into place since temperature differences may influence the size of the fabric. If the fabric is still too long, release the flex holders with the flex holder pliers and cut the fabric down again.

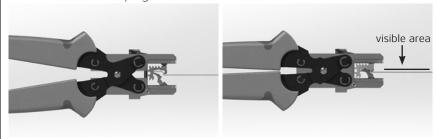
Attachement of flex holders



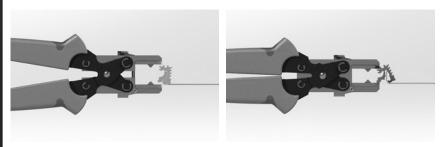


Starting from the corner of the fabric, the flex holders are applied with gaps of 50 - 60 mm between them. In order to achieve optimum tension: the larger the fabric area, the smaller the gaps between the holders.

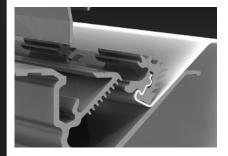
Using the flex holder pliers, compress the flex holder on the fabric until it engages perceptibly. Important: The flex holder must, as shown, have the finely toothed side facing the visible area of the fabric when clamping.



To open the flex holder, the clamping lug of the flex holder must be bent open in the opposite direction.



In order to be able to clamp the fabric correctly, the flex holder is folded once in the direction of the visible area and then inserted in the clamping channel of the profile!



Tensioning the fabric



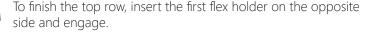
When installing PVC coated fabric a minimum ambient temperature of 8° Celsius should be ensured. In the event of lower temperatures, the fabric may buckle or be damaged in other ways. For small and medium formats, do not tension the fabric too firmly.

For formats with a length > 4 m, we recommend cutting the precise fabric allowance on site when in a half-tensioned state and them clamping the flex holders into place since temperature differences may influence the size of the fabric. If the fabric is still too long, release the flex holders with the flex holder pliers and cut the fabric down again.

Do not equip the frames with fabric when they are lying down since the fabric sags as a result of its own weight and you will thus have difficulties engaging the flex holders in the LUMI profile. In order to ensure optimum tensioning, always ensure the frame is upright.



Insert the first three flex holders on the sides and the top edge and engage into the first or second tooth of the profile. When inserting each flex holder pull the fabric firmly away from the starting point in order to prevent wrinkles.





Finish inserting the side flex holders and engage into the first or second tooth.



Insert the bottom flex holders and engage into the first or second tooth.

Only when this step is completed may you start actually tensioning using tensioning tools.



Use a tensioning fastener to push the flex holders on the left and right deeper into the profile and thus to tension the flex.



Then push the flex holders along the top and bottom edges deeper into the profile. If necessary, go round all flex holders again and tension further.

Tensioning the fabric



Minimum tensioning depth of the flex holder

In order to ensure that the fabric is provided with optimum and secure tension when you have completed tensioning, the flex holders should be engaged in the middle section of the toothing of the tensioning profile.

The fabric can be tensioned in two ways:

1. With the tensioning tool



Insert the nipple at the centre tip of the tensioning tool into the profile groove above the tensioning channel. Press down the left or right tip of the tensioning tool to engage the flex holder in the teeth of the tensioning channel and tension the fabric. Then seal the tensioning channel with the cover profile and use screws to prevent it from springing off unintentionally.

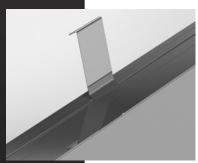
Important: The tensioning tool cannot be used with LUMI GRIP profiles.

2. Tensioning with flex holder fastener and rubber hammer



In order to securely tension the fabric, apply the flex holder fastener like a chisel to the flex holder and use the mallet to drive it deeper into the profile. For small and medium formats, do not tension the fabric too firmly. Then seal the tensioning channel with the cover profile and use screws to prevent it from springing off unintentionally.

Releasing the fabric

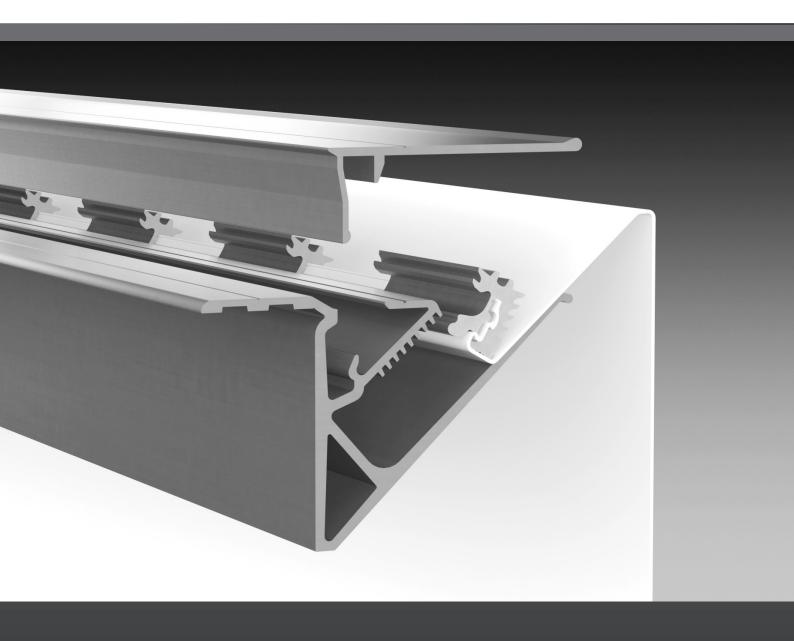


The cover profile can be removed from the profile using the profile remover. To release the flex holder, use a wide screwdriver to lever the flex holder from the tensioning profile, thus disengaging it and allowing it to be removed from the tensioning profile along with the fabric.

IMPORTANT NOTE:

When using black or dark fabrics, as well as those where the entire surface has dark print or lettering, the heat generated as a result of direct sunlight may cause wrinkles to appear.





Assembly Boxes

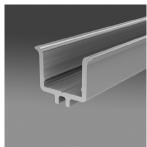
Assembly Joint profile



Please note:

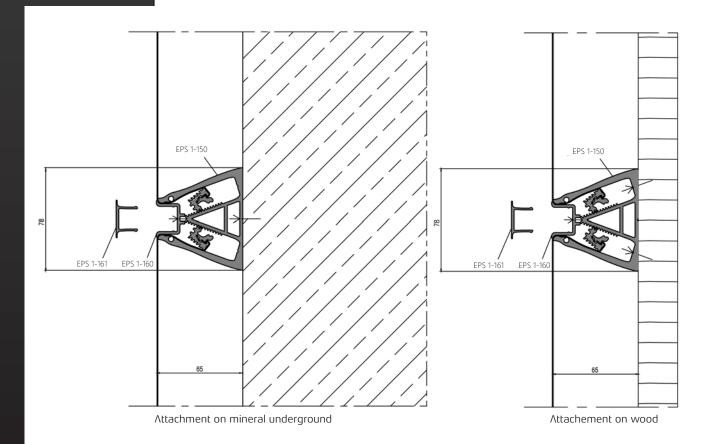
- Fabric allowance circumferential 63 mm
- Always secure the cover profile with screws.
- Can be combined with Cover profile EPS 1-160 and Clip-on Cover profile EPS 1-161







Vertical section wall detail

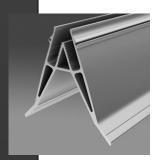


Assembly External coerner profile



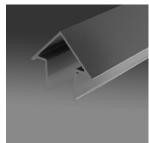
Please note:

- Fabric allowance circumferential 63 mm
- Always secure the cover profile with screws.
- Can be combined with Cover profile EPS 1-160, Clip-on Cover profile EPS 1-161 and Clip-on Cover profile 90° EPS 1-162

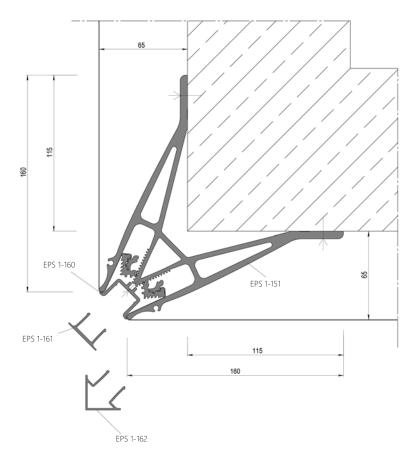








Horizontal section detail 90°, outer corner



Assembly Closure profile



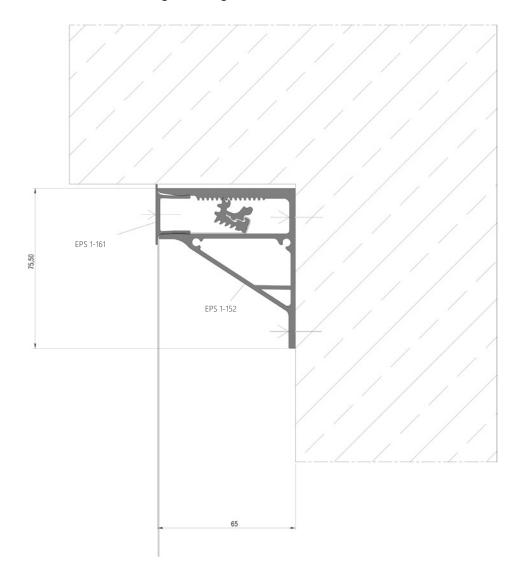
Please note:

- Fabric allowance circumferential 55 mm
- Always secure the cover profile with screws.
- Can be combined with Clip-on Cover profile EPS 1-161





Vertical section detail, building overhang



Assembly Retrofit AP 97



Please note:

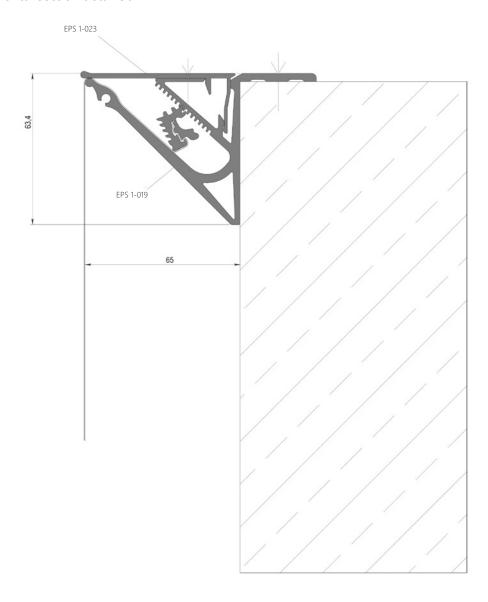
- Fabric allowance circumferential 63 mm
- Always secure the cover profile with screws.
- Can be combined with Cover profile EPS 1-023 and Moulding cover EPS 1-025







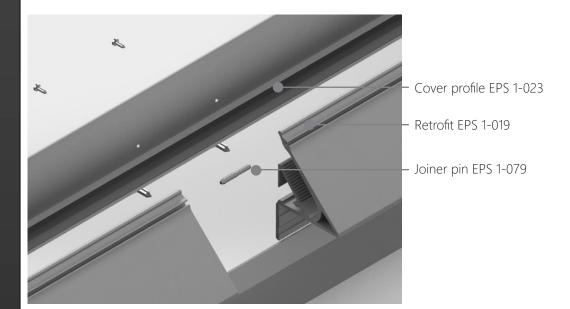
Horizontal section detail 90°

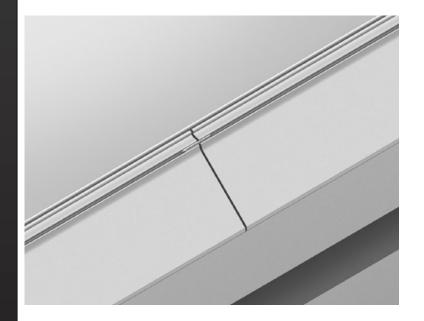


Profile joint Box S-97

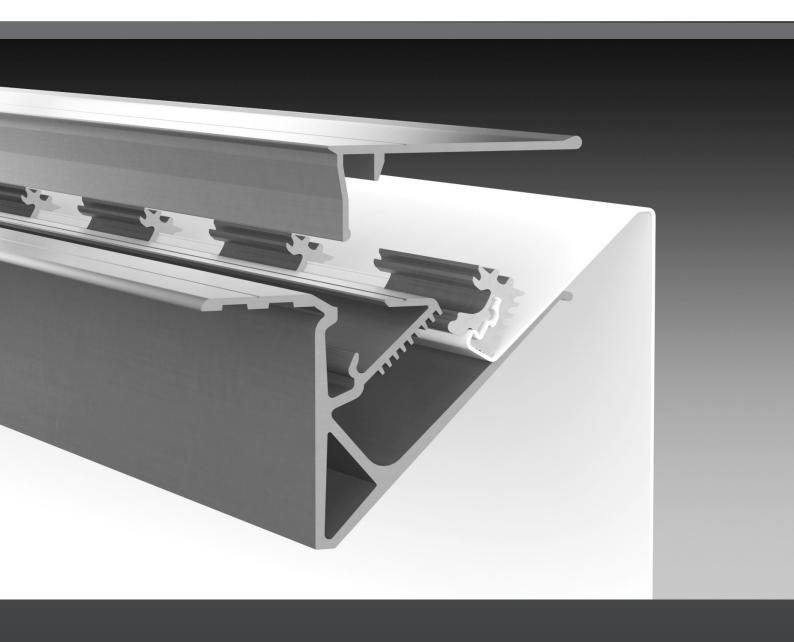


For the connection of the Retrofits EPS 1-019, the Joiner pin EPS 1-079 can be used.









Technical additional information

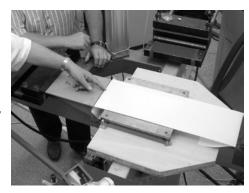
Statics and special designs



Static

For large format flex systems and exposed placements on high buildings or in the vicinity of the coast, you will require precise information regarding the performance capabilities of our tensioned profile systems.

We have subjected our profiles to comprehensive testing by independent test institutes and will be happy to assist you with our knowledge, expertise and static values regarding tension testing.



Special profiles

If you can not find the right profile in our product range, we also offer the possibility of project-related special profiles.

We are happy to advise you on these topics.



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