



Continuous glass canopy



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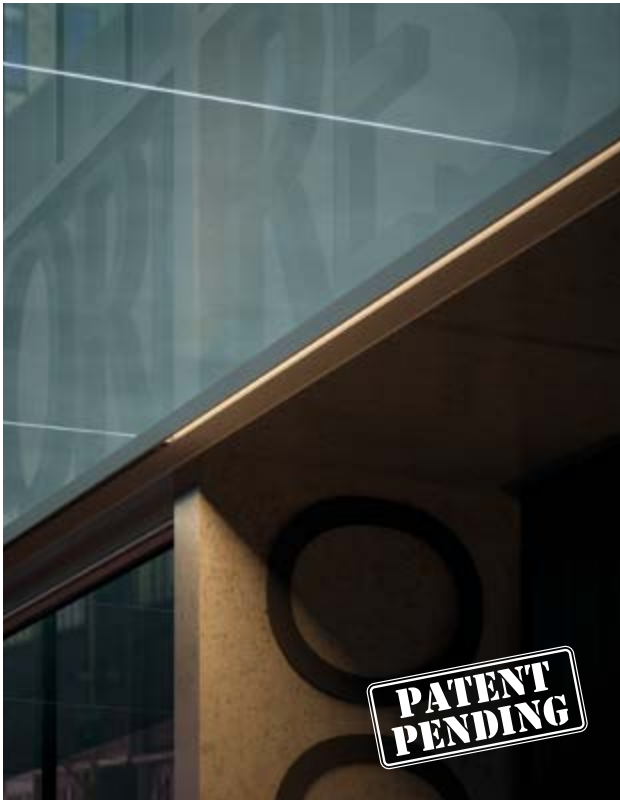


Continuous glass canopy

Unrivalled performance and revolutionary design: with its many details, LUMIA offers the most advanced technological features for glass:

- ▶ Safety and resistance
- ▶ Versatility and functionality
- ▶ Aesthetics and comfort

Find the leading system for transparent canopies designed and produced in Italy.

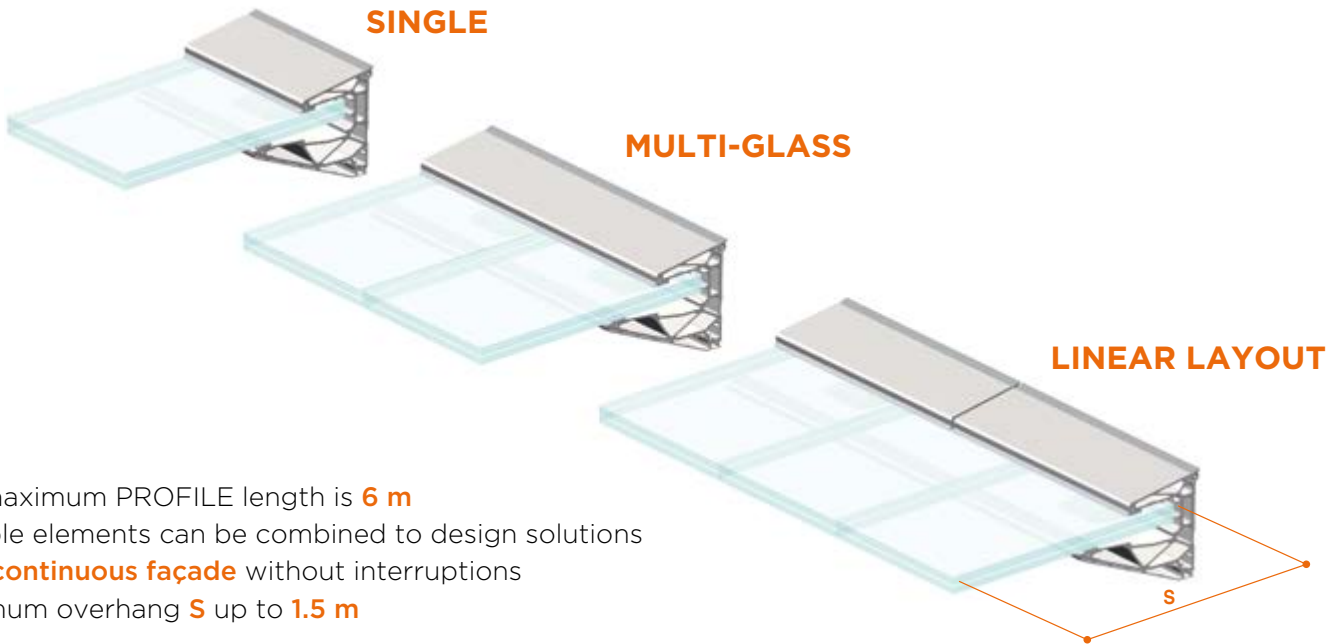






LUMIA : “Welcome home”
Lighting solutions studied
for high comfort and accessibility

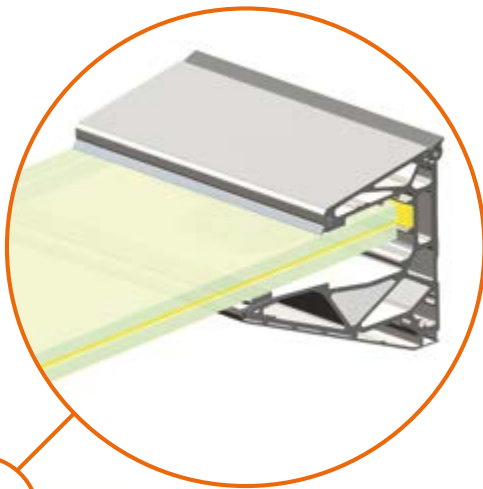
The technical solution that meets every need of installation, functional and application-related requirements



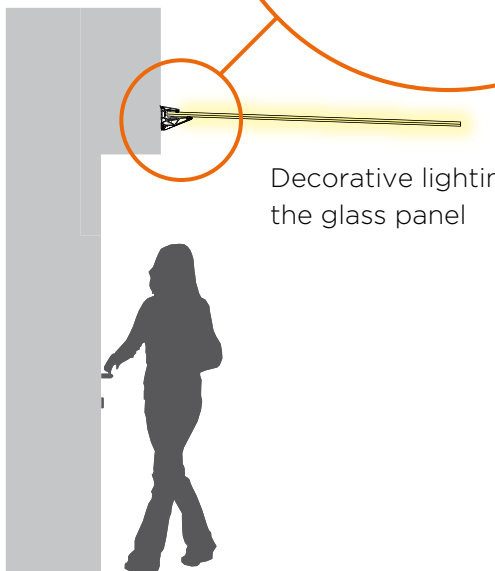
The maximum PROFILE length is **6 m**
 Multiple elements can be combined to design solutions for a **continuous façade** without interruptions
 Maximum overhang **S** up to **1.5 m**

A versatile system, which makes use of light for impressive decorative effects, while also creating high comfort lighting solutions for living environments

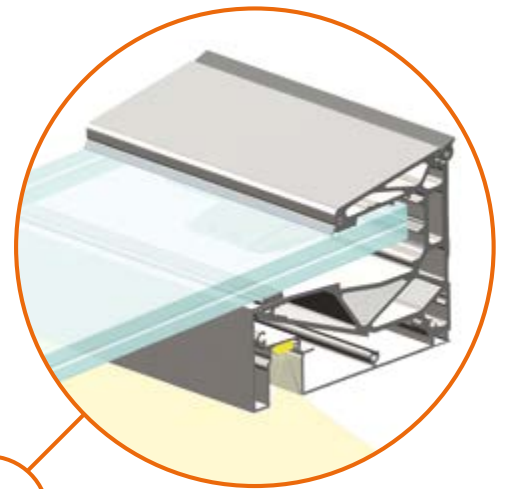
BACKLIT GLASS



Decorative lighting for the glass panel



FUNCTIONAL LIGHTING



Functional lighting of the underlying area to enhance safety and comfort





LUMIA : “Midnight walk”

Technology and design combined into a single system,
which is easy to install and adapts to all architectural needs



RESTAURANT & BISTROT



LUMIA : “Invisible shelter”

UNRIVALLED SAFETY PERFORMANCE

System designed for vertical overload
of 400 kg/m^2 , and tested with over 1000 kg/m^2 *

*values refer to tempered and laminated overhang panels of 120 cm 10+10
with Sentryglas® insert. Tests were performed with equivalent loads
at the laboratories of Politecnico di Milano.

RAL & SPECIAL FINISHES ON REQUEST



RAL 1001
POLISHED

RAL 8017
POLISHED

RAL 5000
POLISHED

RAL 3020
POLISHED

RAL 7015
MATT

RAL 9005
GRINZ

RAL RUST
GRINZ



QUALITAL

CLASS 20 Minimum anodization thickness **20 micron**
Suitable for outdoor installations,
even in aggressive environments

RAL COLOURS ON REQUEST

PROTECTIVE PACKAGING ON EACH PROFILE TO PREVENT SCRATCHES DURING DELIVERY



SPECIAL SLOTS ON REQUEST





KIT LUMIA - LUCE 1010

Kit for canopy with linear layout and functional lighting cover for glass 1010 for unprocessed glass panels

Features:

kit L = 6000 mm composed of:

- 1 pc. continuous "U" profile L= 6000 mm, predrilled Art. PENL.60
- 1 pc. lower finish cover lighting L= 6000 Art. PENLCOV05.60
- 2 pcs. finish cover strip lighting L= 100 Art. PENLCOV07.01
- 2 pcs. lower finish cover for screws L= 3000 Art. LMU11.30
- 1 pc. matt plastic profile for lighting L= 6000 Art. PENALU.60
- 10 pcs. fixing screws with cover Art. PENLVIT
- Kit 6 clamp set Art. PENLGRYKIT5
- 4 pcs. glazing bead gasket L=3000 grey Art. DFPG03.03
- 6 m TPE wall sealing gasket grey Art. PENG03
- 2 pcs. bottom caps for PENLCOV07 Art. METAP250

kit L = 3000 mm composed of:

- 1 pc. continuous "U" profile L= 3000 mm, predrilled Art. PENL.30
- 1 pc. lower finish cover lighting L= 3000 Art. PENLCOV05.30
- 2 pcs. finish cover strip lighting L= 100 Art. PENLCOV07.01
- 1 pc. lower finish cover for screws L= 3000 Art. LMU11.30
- 1 pc. matt plastic profile for lighting L= 3000 Art. PENALU.30
- 6 pcs. fixing screws with cover Art. PENLVIT
- Kit 3 clamp set Art. PENLGRYKIT5
- 2 pcs. glazing bead gasket L=3000 grey Art. DFPG03.03
- 3 m TPE wall sealing gasket grey Art. PENG03
- 2 pcs. bottom caps for PENLCOV07 Art. METAP250

kit L = 2000 mm composed of:

- 1 pc. continuous "U" profile L= 2000 mm, predrilled Art. PENL.20
- 1 pc. lower finish cover lighting L= 2000 Art. PENLCOV05.20
- 2 pcs. finish cover strip lighting L= 100 Art. PENLCOV07.01
- 1 pc. lower finish cover for screws L= 2000 Art. LMU11.20
- 1 pc. matt plastic profile for lighting L= 2000 Art. PENALU.20
- 4 pcs. fixing screws with cover Art. PENLVIT
- Kit 2 clamp set Art. PENLGRYKIT5
- 4 m TPE glazing bead gasket grey Art. DFPG03
- 2 m TPE wall sealing gasket grey Art. PENG03
- 2 pcs. bottom caps for PENLCOV07 Art. METAP250

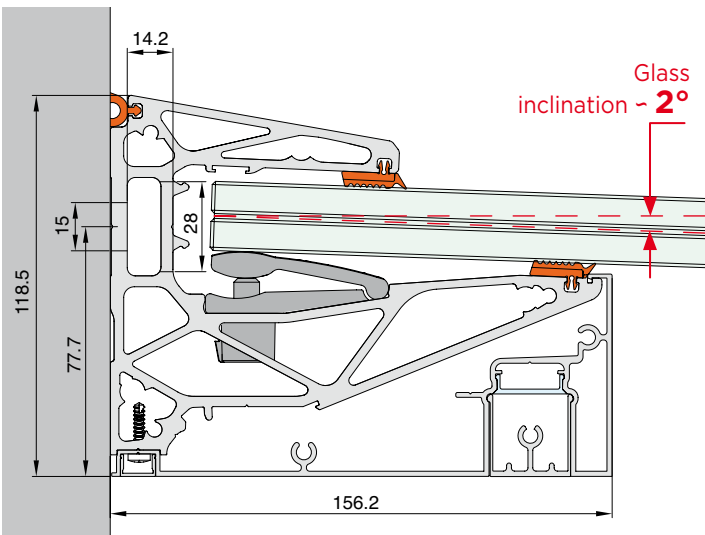
kit L = 1498 mm composed of:

- 1 pc. continuous "U" profile L= 1498 mm, predrilled Art. PENL.15
- 1 pc. lower finish cover lighting L= 1498 Art. PENLCOV05.15
- 2 pcs. finish cover strip lighting L= 100 Art. PENLCOV07.01
- 1 pc. lower finish cover for screws L= 1498 Art. LMU11.15
- 1 pc. matt plastic profile for lighting L= 1500 Art. PENALU.15
- 3 pcs. fixing screws with cover Art. PENLVIT
- 7 pcs. fixing clamps with adjustable grains Art. PENLGRY
- 3 m TPE glazing bead gasket grey Art. DFPG03
- 1.5 m TPE wall sealing gasket grey Art. PENG03
- 2 pcs. bottom caps for PENLCOV07 Art. METAP250

Finishes: Brushed steel-effect aluminium, matt aluminium, RAL 9010 (polished white), raw-finish aluminium

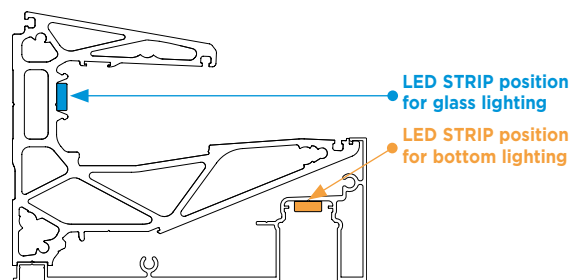
On request (not available in stock)

other colours with anodized or RAL finish



Notes:

- LED STRIP not included in the kits, articles and information on page 30 - Side caps not included in the kits; they must be ordered separately



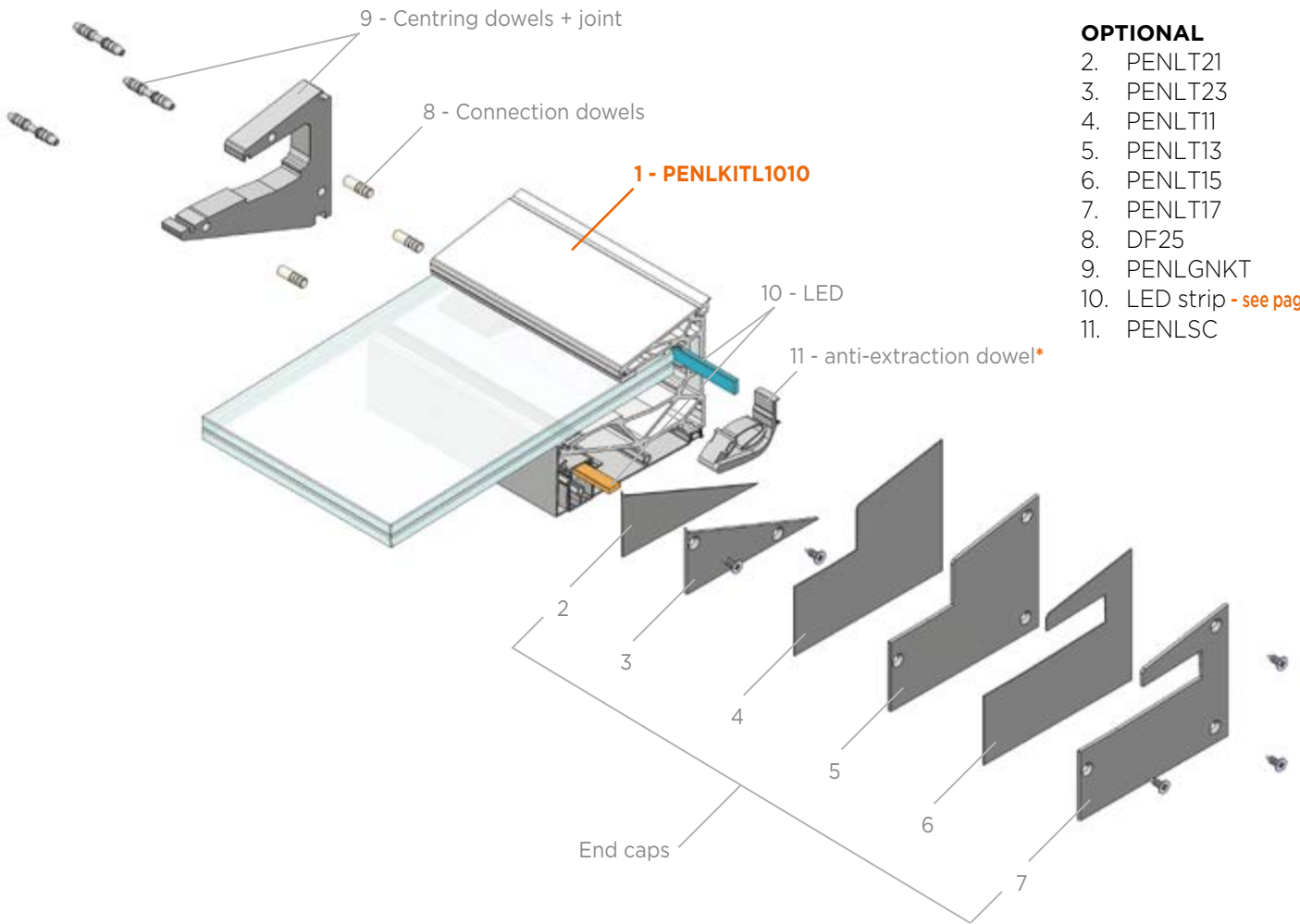
Art.	Description	Length	For glass	Q.ty
PENLKITL1010.60	Kit LUMIA LUCE 1010	6000 mm	20.76 / 23.04 mm	1 Kit
PENLKITL1010.30	Kit LUMIA LUCE 1010	3000 mm	20.76 / 23.04 mm	1 Kit
PENLKITL1010.20	Kit LUMIA LUCE 1010	2000 mm	20.76 / 23.04 mm	1 Kit
PENLKITL1010.15	Kit LUMIA LUCE 1010	1498 mm	20.76 / 23.04 mm	1 Kit

LUMIA Luce 1010

1. PENLKITL1010

OPTIONAL

2. PENLT21
3. PENLT23
4. PENLT11
5. PENLT13
6. PENLT15
7. PENLT17
8. DF25
9. PENLGNKT
10. LED strip - see page 30
11. PENLSC



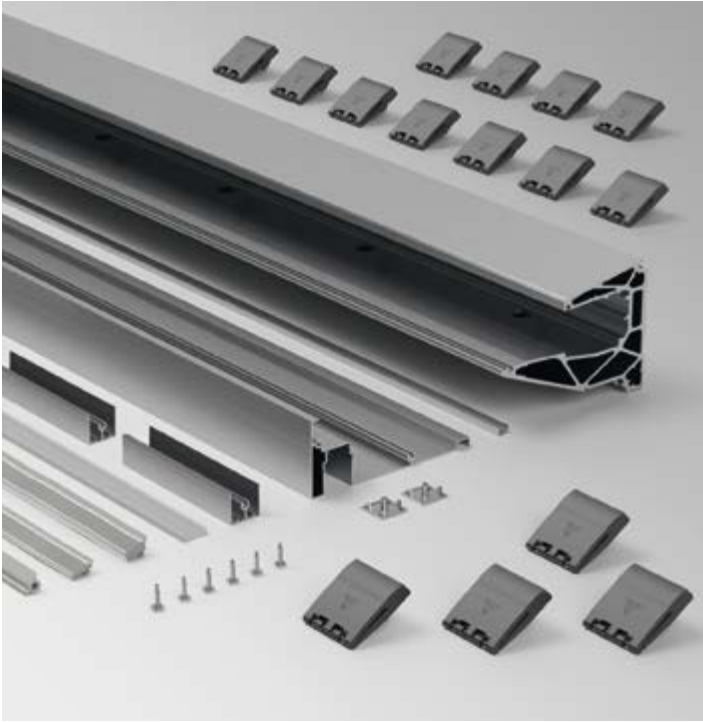
* Installation with anti-extraction dowels Art. PENLSC requires processing on the bottom glass panel



**ANCHORING TO BEARING STRUCTURE
IN REINFORCED CONCRETE**
canopy with functional lighting cover



**ANCHORING TO BEARING STRUCTURE
IN MASONRY WITH PARTITION PLATE**
canopy with functional lighting cover



KIT LUMIA - LUCE 88

Kit for canopy with linear layout and functional lighting cover glass 88 for unprocessed glass panels

Features:

kit L = 6000 mm composed of:

- 1 pc. continuous "U" profile L= 6000 mm, predrilled Art. PENL.60
- 1 pc. lower finish cover lighting L= 6000 Art. PENLCOV05.60
- 2 pcs. finish cover strip lighting L= 100 Art. PENLCOV07.01
- 2 pcs. lower finish cover for screws L= 3000 Art. LMU11.30
- 1 pc. matt plastic profile for lighting L= 6000 Art. PENALU.60
- 10 pcs. fixing screws with cover Art. PENLVIT
- Kit 6 clamp set Art. PENLGRYKIT5
- 2 pcs. glazing bead gasket L=3000 grey Art. DFIG03.03
- 2 pcs. glazing bead gasket L=3000 grey Art. DFIG82.03
- 6 m TPE wall sealing gasket grey Art. PENG03
- 2 pcs. bottom caps for PENLCOV07 Art. METAP250

kit L = 3000 mm composed of:

- 1 pc. continuous "U" profile L= 3000 mm, predrilled Art. PENL.30
- 1 pc. lower finish cover lighting L= 3000 Art. PENLCOV05.30
- 2 pcs. finish cover strip lighting L= 100 Art. PENLCOV07.01
- 1 pc. lower finish cover for screws L= 3000 Art. LMU11.30
- 1 pc. matt plastic profile for lighting L= 3000 Art. PENALU.30
- 6 pcs. fixing screws with cover Art. PENLVIT
- Kit 3 clamp set Art. PENLGRYKIT5
- 3 m TPE glazing bead gasket grey Art. DFIG03
- 1 pc. glazing bead gasket L=3000 grey Art. DFIG82.03
- 1 pc. glazing bead gasket L=3000 grey Art. DFIG03.03
- 2 pcs. bottom caps for PENLCOV07 Art. METAP250

kit L = 2000 mm composed of:

- 1 pc. continuous "U" profile L= 2000 mm, predrilled Art. APENL.20
- 1 pc. lower finish cover lighting L= 2000 Art. PENLCOV05.20
- 2 pcs. finish cover strip lighting L= 100 Art. PENLCOV07.01
- 1 pc. lower finish cover for screws L= 2000 Art. LMU11.20
- 1 pc. matt plastic profile for lighting L= 2000 Art. PENALU.20
- 4 pcs. fixing screws with cover Art. PENLVIT
- Kit 2 clamp set Art. PENLGRYKIT5
- 2 m TPE glazing bead gasket grey Art. DFIG03
- 2 m TPE upper glazing bead gasket grey Art. DFIG82
- 2 m TPE wall sealing gasket grey Art. PENG03
- 2 pcs. bottom caps for PENLCOV07 Art. METAP250

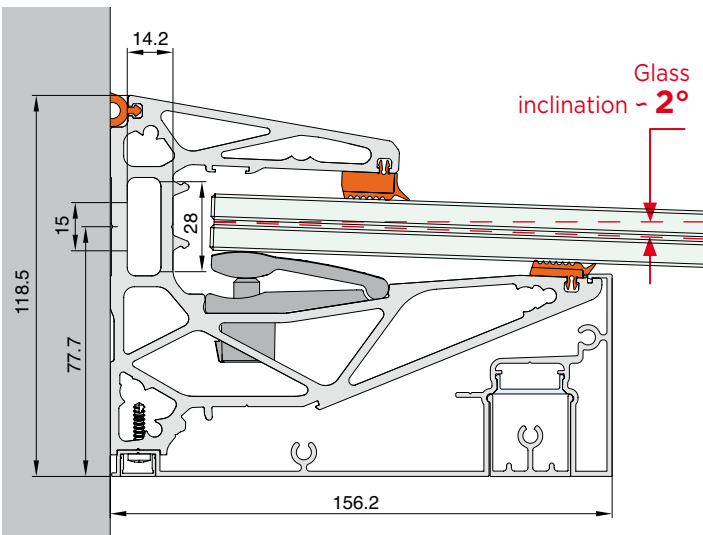
kit L = 1498 mm composed of:

- 1 pc. continuous "U" profile L= 1498 mm, predrilled Art. PENL.15
- 1 pc. lower finish cover lighting L= 1498 Art. PENLCOV05.15
- 2 pcs. finish cover strip lighting L= 100 Art. PENLCOV07.01
- 1 pc. lower finish cover for screws L= 1498 Art. LMU11.15
- 1 pc. matt plastic profile for lighting L= 1500 Art. PENALU.15
- 3 pcs. fixing screws with cover Art. PENLVIT
- 7 pcs. fixing clamps with adjustable grains Art. PENLGRY
- 1.5 m TPE glazing bead gasket grey Art. DFIG03
- 1.5 m TPE top glazing bead gasket grey Art. DFIG82
- 1.5 m TPE wall sealing gasket grey Art. PENG03
- 2 pcs. bottom caps for PENLCOV07 Art. METAP250

Finishes: Brushed steel-effect aluminium, matt aluminium, RAL 9010 (polished white), raw-finish aluminium

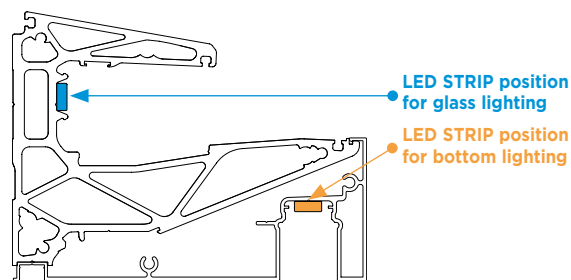
On request (not available in stock)

other colours with anodized or RALfinish



Notes:

- LED STRIP not included in the kits, articles and information on page 30 - Side caps not included in the kits; they must be ordered separately



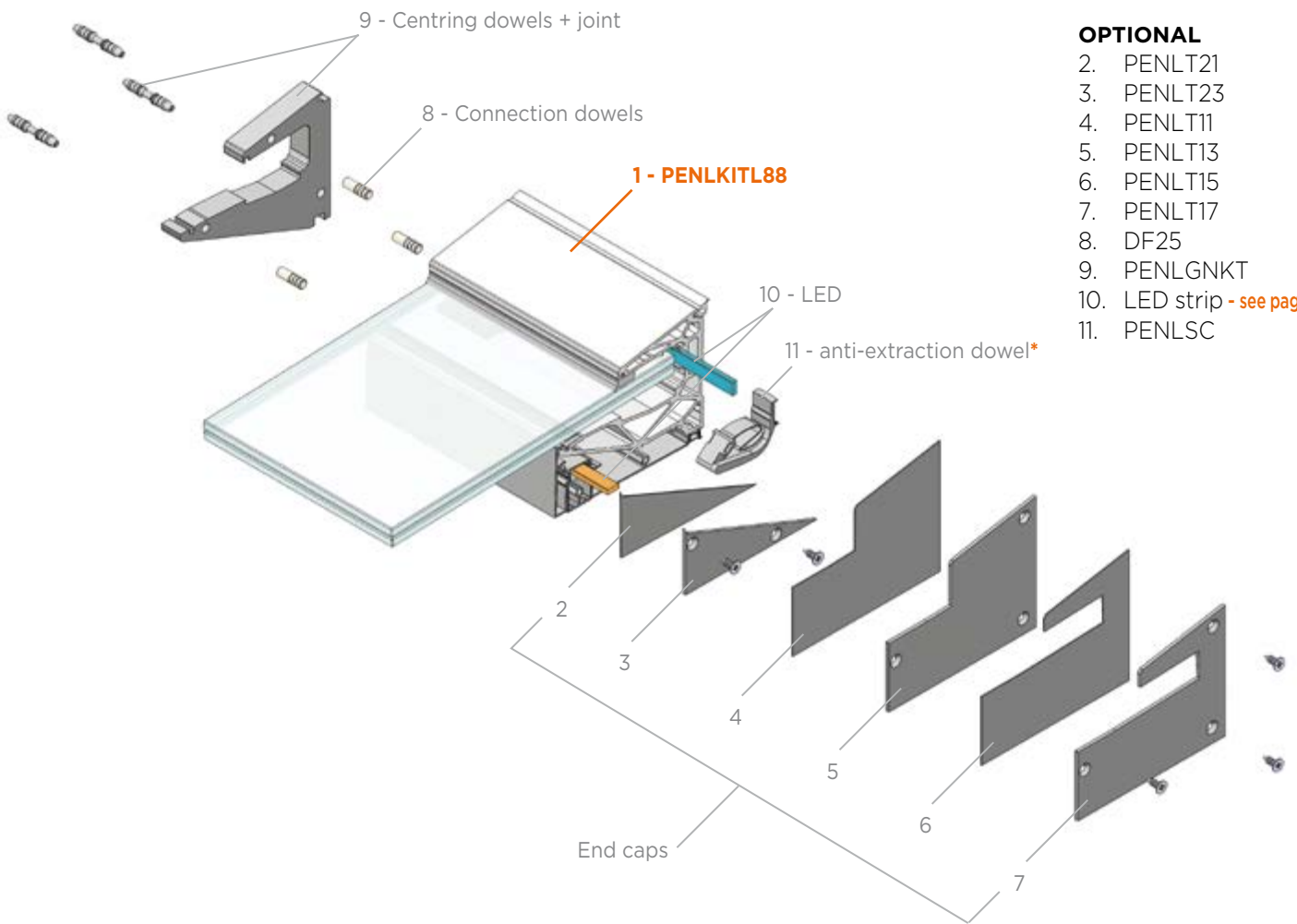
Art.	Description	Length	For glass	Q.ty
PENLKITL88.60	Kit LUMIA LUCE 88	6000 mm	16.76 / 17.52 mm	1 Kit
PENLKITL88.30	Kit LUMIA LUCE 88	3000 mm	16.76 / 17.52 mm	1 Kit
PENLKITL88.20	Kit LUMIA LUCE 88	2000 mm	16.76 / 17.52 mm	1 Kit
PENLKITL88.15	Kit LUMIA LUCE 88	1498 mm	16.76 / 17.52 mm	1 Kit

LUMIA Luce 88

1. PENLKITL88

OPTIONAL

- 2. PENLT21
- 3. PENLT23
- 4. PENLT11
- 5. PENLT13
- 6. PENLT15
- 7. PENLT17
- 8. DF25
- 9. PENLGNKT
- 10. LED strip - see page 30
- 11. PENLSC



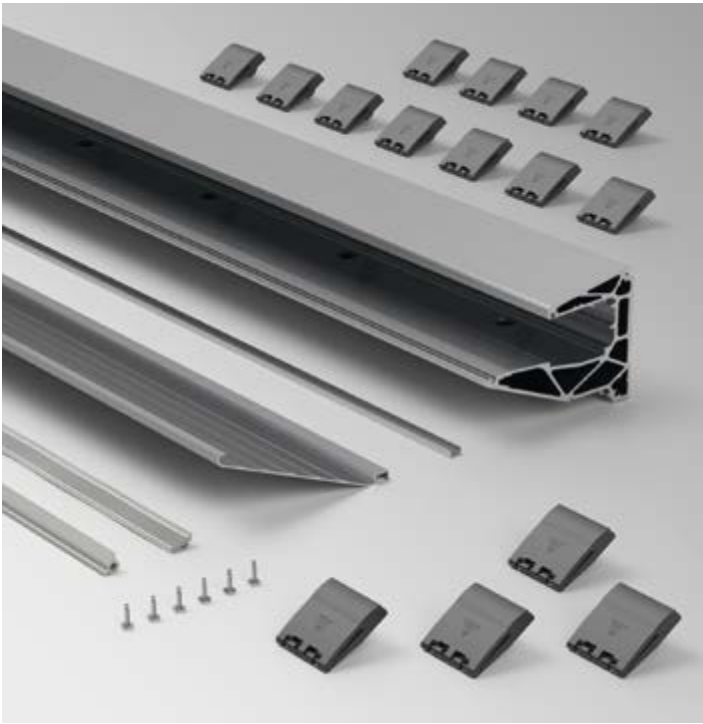
* Installation with anti-extraction dowels Art. PENLSC requires processing on the bottom glass panel



**ANCHORING TO BEARING STRUCTURE
IN STEEL**
canopy with functional lighting cover



**ANCHORING TO BEARING STRUCTURE
IN WOOD WITH PARTITION PLATE**
canopy with functional lighting cover



KIT LUMIA - 1010

Kit for canopy with linear layout for glass 1010 for unprocessed glass panels

Features:

kit L = 6000 mm composed of:

- 1 pc. continuous "U" profile L= 6000 mm, predrilled Art. PENL.60
- 1 pc. long lower finish cover L= 6000 Art. PENLCOV03.60
- 2 pcs. lower finish cover for screws L= 3000 Art. LMU11.30
- 10 pcs. fixing screws with cover Art. PENLVIT
- Kit 6 clamp set Art. PENLGRYKIT5
- 4 pcs. glazing bead gasket L=3000 grey Art. DFPG03.03
- 6 m TPE wall sealing gasket grey Art. PENG03

kit L = 3000 mm composed of:

- 1 pc. continuous "U" profile L= 3000 mm, predrilled Art. PENL.30
- 1 pc. long lower finish cover L= 3000 Art. PENLCOV03.30
- 1 pc. lower finish cover for screws L= 3000 Art. LMU11.30
- 6 pcs. fixing screws with cover Art. PENLVIT
- Kit 3 clamp set Art. PENLGRYKIT5
- 2 pcs. glazing bead gasket L=3000 grey Art. DFPG03.03
- 3 m TPE wall sealing gasket grey Art. PENG03

kit L = 2000 mm composed of:

- 1 pc. continuous "U" profile L= 2000 mm, predrilled Art. PENL.20
- 1 pc. long lower finish cover L= 2000 Art. PENLCOV03.20
- 1 pc. lower finish cover for screws L= 2000 Art. LMU11.20
- 4 pcs. fixing screws with cover Art. PENLVIT
- Kit 2 clamp set Art. PENLGRYKIT5
- 4 m TPE glazing bead gasket grey Art. DFPG03
- 2 m TPE wall sealing gasket grey Art. PENG03

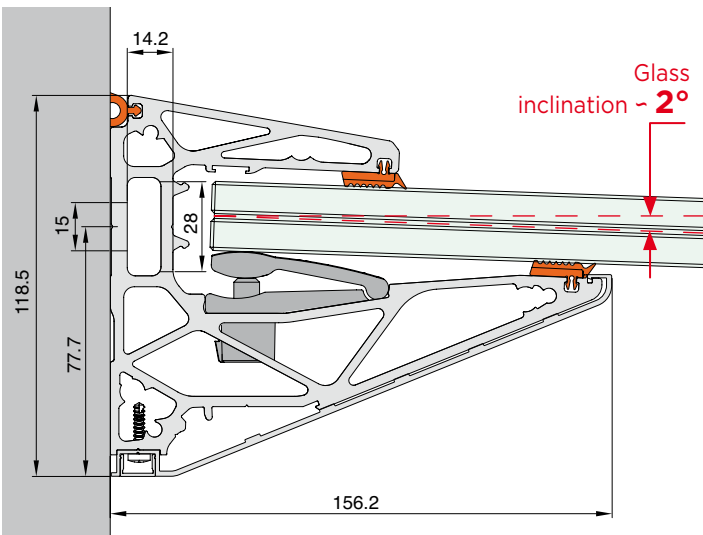
kit L = 1498 mm composed of:

- 1 pc. continuous "U" profile L= 1498 mm, predrilled Art. PENL.15
- 1 pc. long lower finish cover L= 1498 Art. PENLCOV03.15
- 1 pc. lower finish cover for screws L= 1498 Art. LMU11.15
- 3 pcs. fixing screws with cover Art. PENLVIT
- 7 pcs. fixing clamps with adjustable grains Art. PENLGRY
- 3 m TPE glazing bead gasket grey Art. DFPG03
- 1.5 m TPE wall sealing gasket grey Art. PENG03

Finishes: Brushed steel-effect aluminium, matt aluminium, RAL 9010 (polished white), raw-finish aluminium

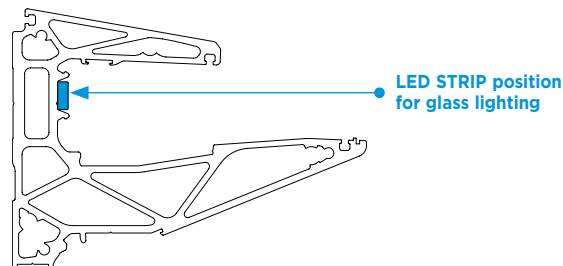
On request (not available in stock)

other colours with anodized or RAL finish



Notes:

- LED STRIP not included in the kits, articles and information on page 30 - Side caps not included in the kits; they must be ordered separately



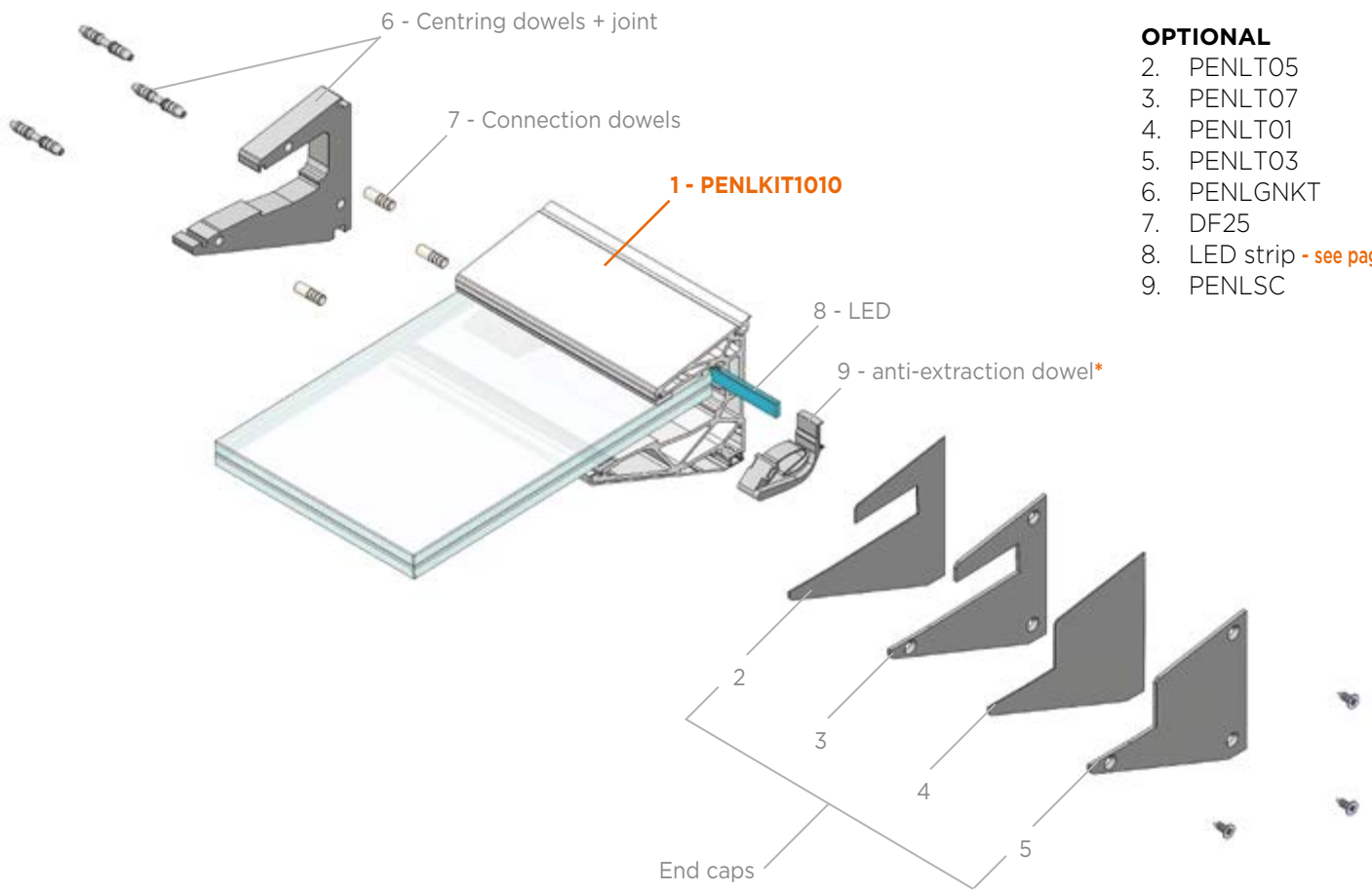
Art.	Description	Length	For glass	Q.ty
PENLKIT1010.60	Kit LUMIA 1010	6000 mm	20.76 / 23.04 mm	1 Kit
PENLKIT1010.30	Kit LUMIA 1010	3000 mm	20.76 / 23.04 mm	1 Kit
PENLKIT1010.20	Kit LUMIA 1010	2000 mm	20.76 / 23.04 mm	1 Kit
PENLKIT1010.15	Kit LUMIA 1010	1498 mm	20.76 / 23.04 mm	1 Kit

LUMIA 1010

1. PENLKIT1010

OPTIONAL

2. PENLT05
3. PENLT07
4. PENLT01
5. PENLT03
6. PENLGNKT
7. DF25
8. LED strip - see page30
9. PENLSC



* Installation with anti-extraction dowels Art. PENLSC requires processing on the bottom glass panel



**ANCHORING TO BEARING STRUCTURE
IN REINFORCED CONCRETE**
canopy with long bottom cover



**ANCHORING TO BEARING STRUCTURE
IN MASONRY WITH PARTITION PLATE**
canopy with long bottom cover



KIT LUMIA - 88

Kit for canopy with linear layout for glass 88 for unprocessed glass panels

Features:

kit L = 6000 mm composed of:

- 1 pc. continuous "U" profile L= 6000 mm, predrilled Art. PENL.60
- 1 pc. long lower finish cover L= 6000 Art. PENLCOV03.60
- 2 pcs. lower finish cover for screws L= 3000 Art. LMU11.30
- 10 pcs. fixing screws with cover Art. PENLVIT
- Kit 6 clamp set Art. ENLGRYKIT5
- 2 pcs. glazing bead gasket L=3000 grey Art. DFPG03.03
- 2 pcs. glazing bead gasket L=3000 grey Art. DFPG82.03
- 6 m TPE wall sealing gasket grey Art. PENG03

kit L = 3000 mm composed of:

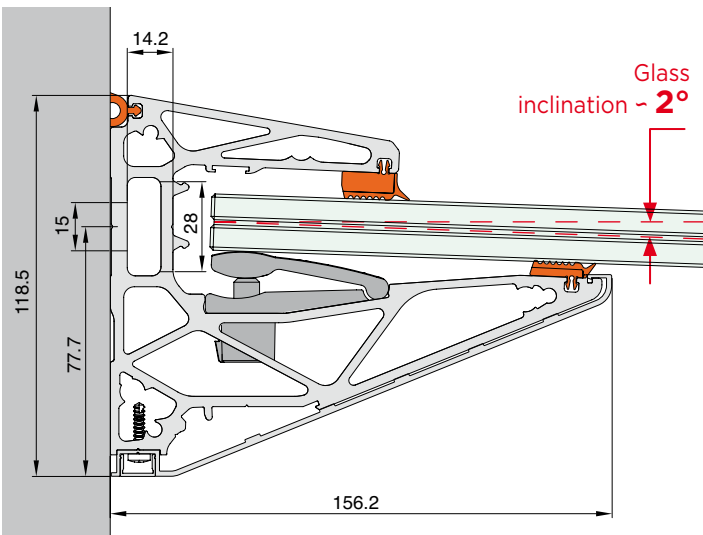
- 1 pc. continuous "U" profile L= 3000 mm, predrilled Art. PENL.30
- 1 pc. long lower finish cover L= 6000 Art. PENLCOV03.30
- 1 pc. lower finish cover for screws L= 3000 Art. LMU11.30
- 6 pcs. fixing screws with cover Art. PENLVIT
- Kit 3 clamp set Art. PENLGRYKIT5
- 1 pc. glazing bead gasket L=3000 grey Art. DFPG03.03
- 1 pc. glazing bead gasket L=3000 grey Art. DFPG82.03
- 3 m TPE wall sealing gasket grey Art. PENG03

kit L = 2000 mm composed of:

- 1 pc. continuous "U" profile L= 2000 mm, predrilled Art. PENL.20
- 1 pc. long lower finish cover L= 2000 Art. PENLCOV03.20
- 1 pc. lower finish cover for screws L= 2000 Art. LMU11.20
- 4 pcs. fixing screws with cover Art. PENLVIT
- Kit 2 clamp set Art. PENLGRYKIT5
- 2 m TPE glazing bead gasket grey Art. DFPG03
- 2 m TPE top glazing bead gasket grey Art. DFPG82
- 2 m TPE wall sealing gasket grey Art. PENG03

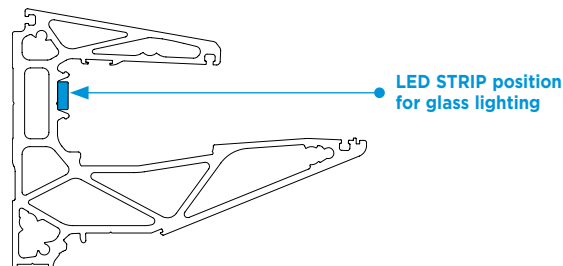
kit L = 1498 mm composed of:

- 1 pc. continuous "U" profile L= 1498 mm, predrilled Art. PENL.15
- 1 pc. long lower finish cover L= 1498 Art. PENLCOV03.15
- 1 pc. lower finish cover for screws L= 1498 Art. LMU11.15
- 3 pcs. fixing screws with cover Art. PENLVIT
- 7 pcs. fixing clamps with adjustable grains Art. PENLGRY
- 1.5 m TPE glazing bead gasket grey Art. DFPG03
- 1.5 m TPE top glazing bead gasket grey Art. DFPG82
- 1.5 m TPE wall sealing gasket grey Art. PENG03



Notes:

- LED STRIP not included in the kits, articles and information on page 30 - Side caps not included in the kits; they must be ordered separately



Finishes: Brushed steel-effect aluminium, matt aluminium, RAL 9010 (polished white), raw-finish aluminium

On request (not available in stock)

other colours with anodized or RAL finish

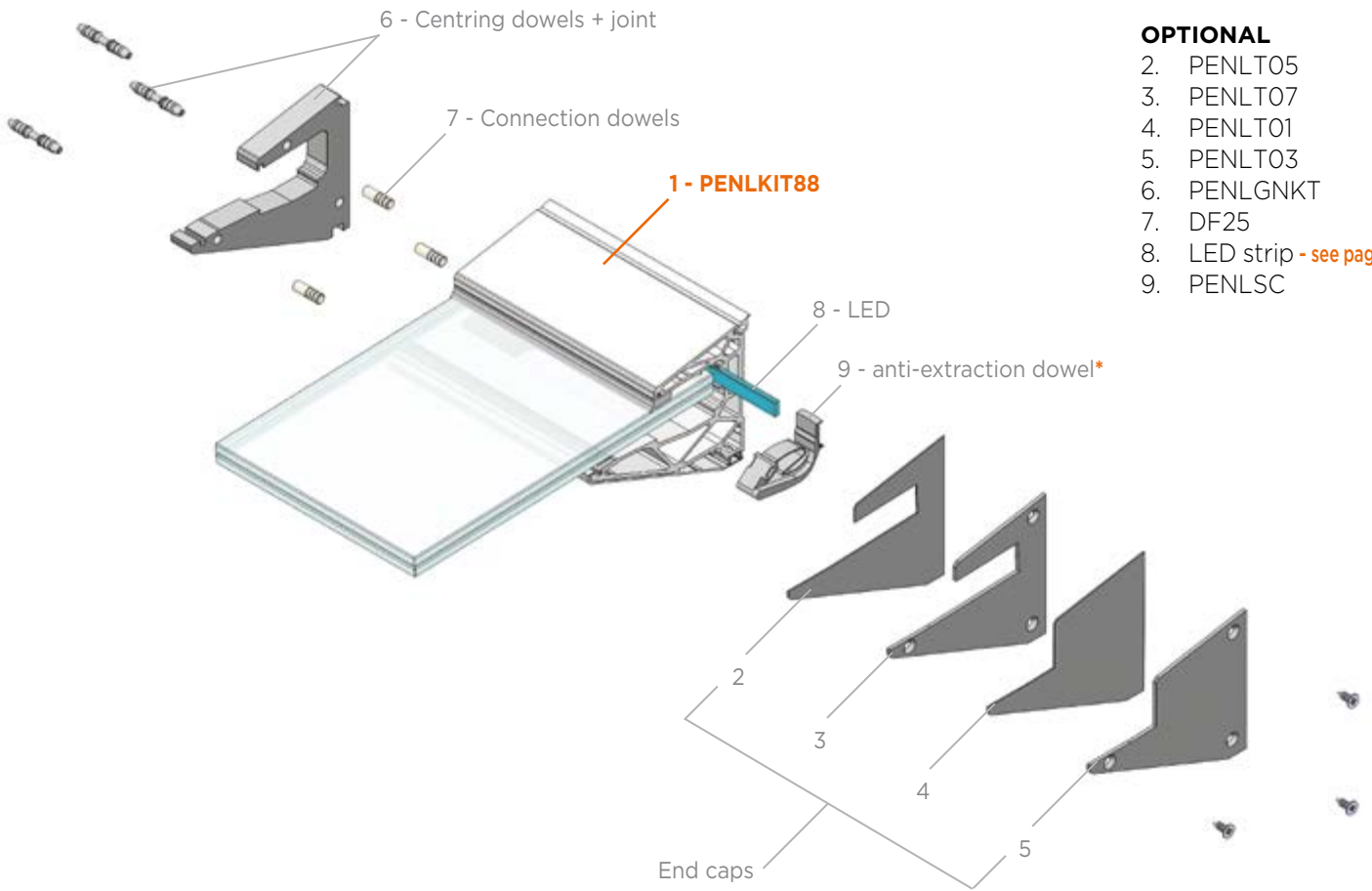
Art.	Description	Length	For glass	Q.ty
PENLKIT88.60	Kit LUMIA 88	6000 mm	16.76 / 17.52 mm	1 Kit
PENLKIT88.30	Kit LUMIA 88	3000 mm	16.76 / 17.52 mm	1 Kit
PENLKIT88.20	Kit LUMIA 88	2000 mm	16.76 / 17.52 mm	1 Kit
PENLKIT88.15	Kit LUMIA 88	1498 mm	16.76 / 17.52 mm	1 Kit

LUMIA 88

1. PENLKIT88

OPTIONAL

- 2. PENLT05
- 3. PENLT07
- 4. PENLT01
- 5. PENLT03
- 6. PENLGNKT
- 7. DF25
- 8. LED strip - see page 30
- 9. PENLSC



* Installation with anti-extraction dowels Art. PENLSC requires processing on the bottom glass panel



**ANCHORING TO BEARING STRUCTURE
IN STEEL**
canopy with long bottom cover



**ANCHORING TO BEARING STRUCTURE
IN WOOD WITH PARTITION PLATE**
canopy with long bottom cover



LUMIA : "Perspective depth"

The new technology allows to join multiple elements for continuous façade solutions without profile interruptions.



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ALUMINIUM PROFILE CANOPY LUMIA

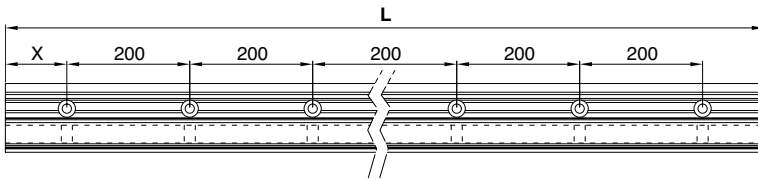
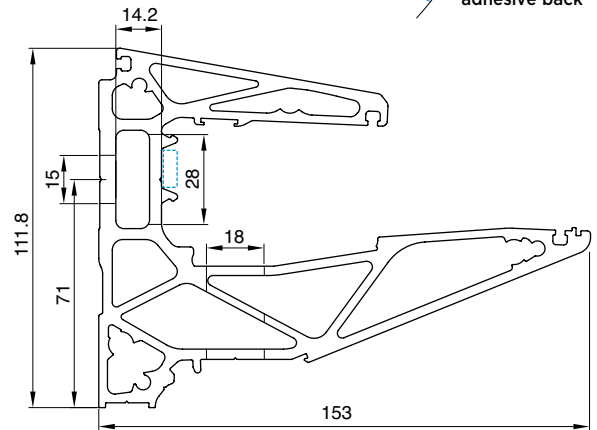
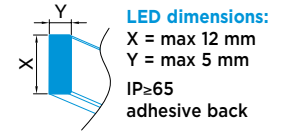
Material: aluminium (6063-T6)

Finishes: Brushed steel-effect aluminium, matt aluminium, RAL 9010 (polished white), raw-finish aluminium

On request (not available in stock)

other colours with anodized or RAL finish

Note: profiles are provided without gaskets



DRILLING DIAGRAM

Art.	Length	First hole X	Q.ty
PENL.60	L 6000 mm	100±5 mm	1 Pc
PENL.30	L 3000 mm	100±5 mm	1 Pc
PENL.20	L 2000 mm	100±5 mm	1 Pc
PENL.15	L 1498 mm	100±5 mm	1 Pc



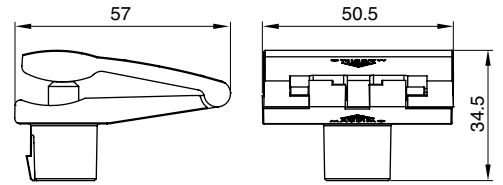
KIT NO. 5 CLAMPS WITH ADJUSTMENT GRAIN

Material: Grivory®

Art.	Description	Q.ty
PENLGRYKITS	N.5 Modular clamps with grain	1 Kit

CLAMP WITH ADJUSTMENT GRAIN

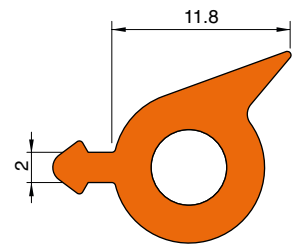
Material: Grivory®



Art.	Description	Q.ty
PENLGRY	No. 1 Modular clamp with grain	1 Pc

WALL SEALING GASKET

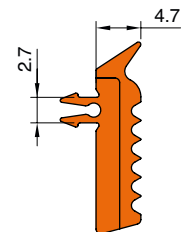
Material: TPE
Colour: grey



Art.	Length	Q.ty
PENG03	Per linear metre	Per m
PENG03.03	PROFILE 3 m	1 Pc
PENG03.60	ROLL 60 m	1 Pack

FLAT GASKET

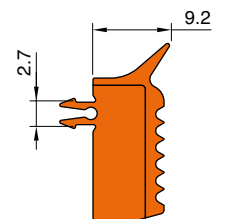
Material: TPE
Colour: black, grey



Art.	Length	Q.ty
DFPG03	Per linear metre	per m
DFPG03.03	PROFILE 3 m	1 Pc
DFPG03.60	ROLL 60 m	1 Pack

LARGER FLAT GASKET

Material: TPE
Colour: black, grey



Art.	Length	Q.ty
DFPG82	Per linear metre	Per m
DFPG82.03	PROFILE 3 m	1 Pc
DFPG82.60	ROLL 60 m	1 Pack



LONG LOWER FINISH COVER FOR PENL

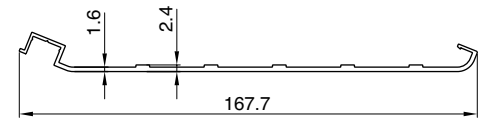
Material: aluminium

Finishes: Brushed steel-effect aluminium, matt aluminium, RAL 9010 (polished white), raw-finish aluminium

On request (not available in stock)

other colours with anodized or RAL finish

Note: install by using PENLVIT fixing screws



Art.	Dimensions	Q.ty
PENLCOV03.60	167.7 x 13.5 x L 6000	1 Pc
PENLCOV03.30	167.7 x 13.5 x L 3000	1 Pc
PENLCOV03.20	167.7 x 13.5 x L 2000	1 Pc
PENLCOV03.15	167.7 x 13.5 x L 1498	1 Pc



LOWER FINISH COVER LIGHTING FOR PENL

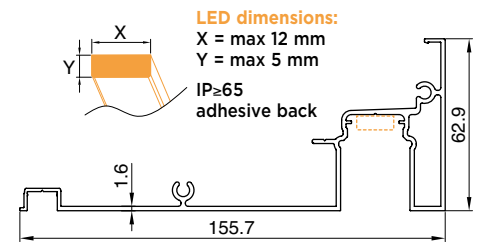
Material: aluminium

Finishes: Brushed steel-effect aluminium, matt aluminium, RAL 9010 (polished white), raw-finish aluminium

On request (not available in stock)

other colours with anodized or RAL finish

Note: install by using PENLVIT fixing screws



Art.	Dimensions	Q.ty
PENLCOV05.60	155.7 x 62.8 x L 6000	1 Pc
PENLCOV05.30	155.7 x 62.8 x L 3000	1 Pc
PENLCOV05.20	155.7 x 62.8 x L 2000	1 Pc
PENLCOV05.15	155.7 x 62.8 x L 1498	1 Pc



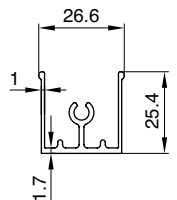
LOWER FINISH COVER STRIP LIGHTING FOR PENL

Material: aluminium

Finishes: Brushed steel-effect aluminium, matt aluminium, RAL 9010 (polished white), raw-finish aluminium

On request (not available in stock)

other colours with anodized or RAL finish



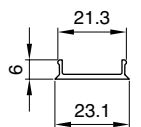
Art.	Dimensions	Q.ty
PENLCOV07.60	26.6 x 25.4 x L 6000	1 Pc
PENLCOV07.30	26.6 x 25.4 x L 3000	1 Pc
PENLCOV07.20	26.6 x 25.4 x L 2000	1 Pc
PENLCOV07.15	26.6 x 25.4 x L 1498	1 Pc



MATT PLASTIC LOWER PROFILE LIGHTING FOR PENL

Material: PC

Finishes: matt transparent



Art.	Dimensions	Q.ty
PENALU.60	23 x 6 x L 6000	1 Pc
PENALU.30	23 x 6 x L 3000	1 Pc
PENALU.20	23 x 6 x L 2000	1 Pc
PENALU.15	23 x 6 x L 1500	1 Pc



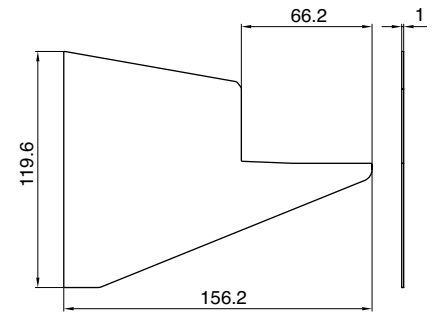
PENLT01DX

FINISHING CAP FOR PENL

Material: aluminium
 Finishes: Brushed steel-effect aluminium, matt aluminium, RAL 9010 (polished white), raw-finish aluminium

On request (not available in stock)
 other colours with anodized or RAL finish

Note: install by applying silicone on the entire edge of the finishing cap.



Art.	Dimensions	Q.ty
PENLT01DX	119.6 x 156.2 mm - Th. 1 mm	1 Pc
PENLT01SX	119.6 x 156.2 mm - Th. 1 mm	1 Pc

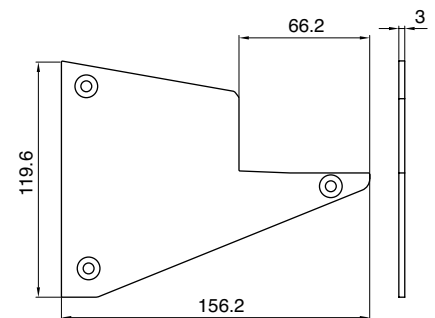


PENLT03DX

FINISHING CAP WITH SCREWS FOR PENL

Material: aluminium, steel
 Finishes: Brushed steel-effect aluminium, matt aluminium, RAL 9010 (polished white), raw-finish aluminium

On request (not available in stock)
 other colours with anodized or RAL finish



Art.	Dimensions	Q.ty
PENLT03DX	119.6 x 156.2 mm - Th. 3 mm	1 Set
PENLT03SX	119.6 x 156.2 mm - Th. 3 mm	1 Set



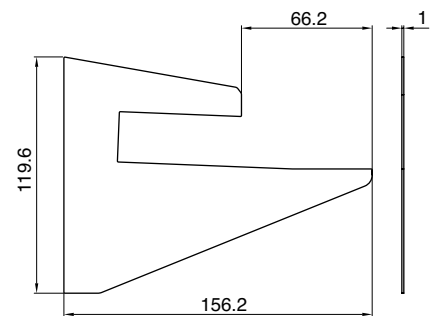
PENLT05DX

OPEN FINISHING CAP FOR PENL

Material: aluminium
 Finishes: Brushed steel-effect aluminium, matt aluminium, RAL 9010 (polished white), raw-finish aluminium

On request (not available in stock)
 other colours with anodized or RAL finish

Note: install by applying silicone on the entire edge of the finishing cap.



Art.	Dimensions	Q.ty
PENLT05DX	119.6 x 156.2 mm - Th. 1 mm	1 Pc
PENLT05SX	119.6 x 156.2 mm - Th. 1 mm	1 Pc

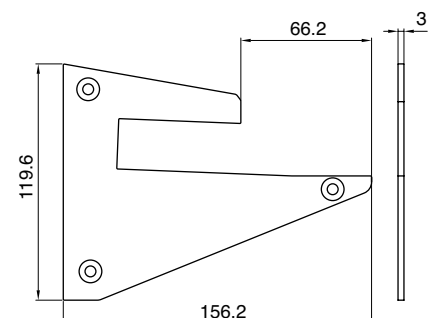


PENLT07DX

OPEN FINISHING CAP WITH SCREWS FOR PENL

Material: aluminium, steel
 Finishes: Brushed steel-effect aluminium, matt aluminium, RAL 9010 (polished white), raw-finish aluminium

On request (not available in stock)
 other colours with anodized or RAL finish



Art.	Dimensions	Q.ty
PENLT07DX	119.6 x 156.2 mm - Th. 3 mm	1 Set
PENLT07SX	119.6 x 156.2 mm - Th. 3 mm	1 Set

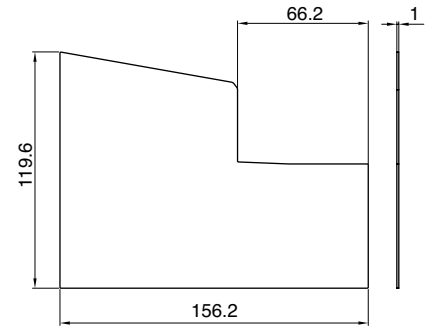


PENLT11DX

LED COVER FINISHING CAP FOR PENL

Material: aluminium
 Finishes: Brushed steel-effect aluminium, matt aluminium, RAL 9010 (polished white), raw-finish aluminium
On request (not available in stock)
 other colours with anodized or RAL finish

Note: install by applying silicone on the entire edge of the finishing cap.



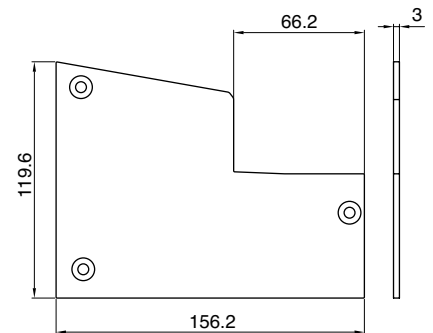
Art.	Dimensions	Q.ty
PENLT11DX	119.6 x 156.2 mm - Th. 1 mm	1 Pc
PENLT11SX	119.6 x 156.2 mm - Th. 1 mm	1 Pc



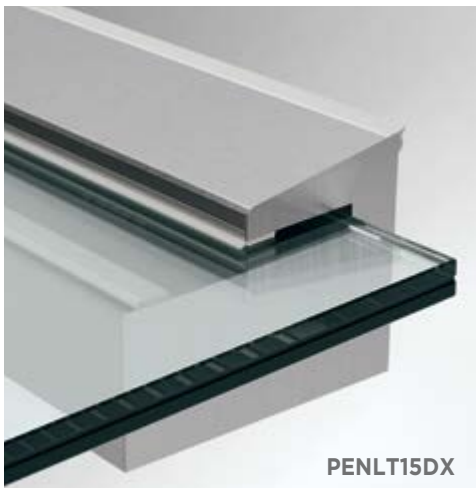
PENLT13DX

LED COVER FINISHING CAP WITH SCREWS FOR PENL

Material: aluminium, steel
 Finishes: Brushed steel-effect aluminium, matt aluminium, RAL 9010 (polished white), raw-finish aluminium
On request (not available in stock)
 other colours with anodized or RAL finish



Art.	Dimensions	Q.ty
PENLT13DX	119.6 x 156.2 mm - Th. 3 mm	1 Set
PENLT13SX	119.6 x 156.2 mm - Th. 3 mm	1 Set

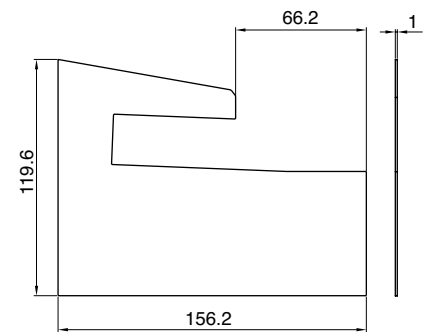


PENLT15DX

OPEN LED COVER FINISHING CAP FOR PENL

Material: aluminium
 Finishes: Brushed steel-effect aluminium, matt aluminium, RAL 9010 (polished white), raw-finish aluminium
On request (not available in stock)
 other colours with anodized or RAL finish

Note: install by applying silicone on the entire edge of the finishing cap.



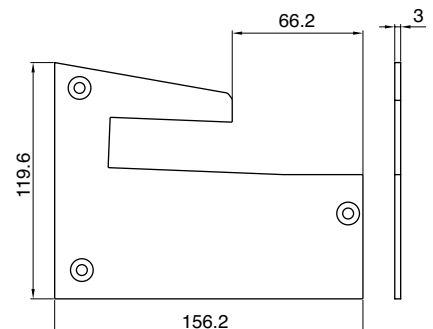
Art.	Dimensions	Q.ty
PENLT15DX	119.6 x 156.2 mm - Th. 1 mm	1 Pc
PENLT15SX	119.6 x 156.2 mm - Th. 1 mm	1 Pc



PENLT17DX

OPEN LED COVER FINISHING CAP WITH SCREWS FOR PENL

Material: aluminium, steel
 Finishes: Brushed steel-effect aluminium, matt aluminium, RAL 9010 (polished white), raw-finish aluminium
On request (not available in stock)
 other colours with anodized or RAL finish



Art.	Dimensions	Q.ty
PENLT17DX	119.6 x 156.2 mm - Th. 3 mm	1 Set
PENLT17SX	119.6 x 156.2 mm - Th. 3 mm	1 Set



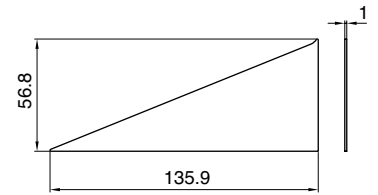
PENLT21DX

LOWER LED COVER FINISHING CAP FOR PENL

Material: aluminium
 Finishes: Brushed steel-effect aluminium, matt aluminium, RAL 9010 (polished white), raw-finish aluminium

On request (not available in stock)
 other colours with anodized or RAL finish

Note: install by applying silicone on the entire edge of the finishing cap.



Art.	Dimensions	Q.ty
PENLT21DX	59.8 x 135.9 mm - Th. 1 mm	1 Pc
PENLT21SX	59.8 x 135.9 mm - Th. 1 mm	1 Pc



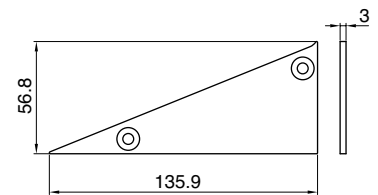
PENLT23DX

LOWER LED COVER FINISHING CAP WITH SCREWS FOR PENL

Material: aluminium, steel
 Finishes: Brushed steel-effect aluminium, matt aluminium, RAL 9010 (polished white), raw-finish aluminium

On request (not available in stock)
 other colours with anodized or RAL finish

Note: install by applying silicone on the entire edge of the finishing cap.



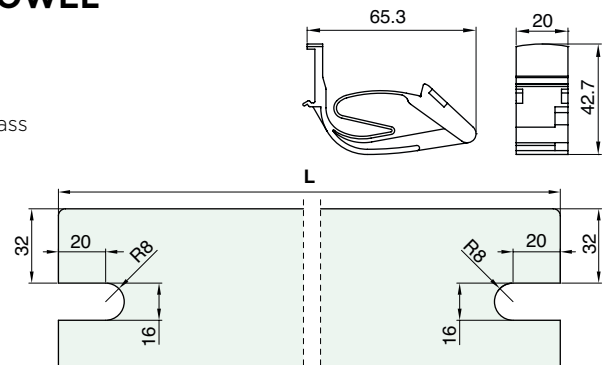
Art.	Dimensions	Q.ty
PENLT23DX	59.8 x 135.9 mm - Th. 3 mm	1 Set
PENLT23SX	59.8 x 135.9 mm - Th. 3 mm	1 Set



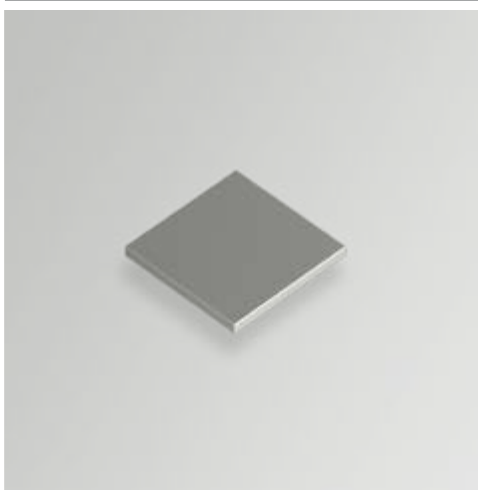
ANTI-EXTRACTION DOWEL

Material: POM

Note: for installation create dedicated notches on the glass

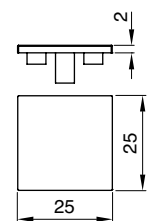


Art.	Dimensions	Q.ty
PENLSC	42.7 x 65.3 x 20 mm	1 Cp



FINISHING CAP FOR PENLCOV07

Material: POM
 Finish: grey, black.

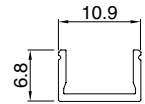


Art.	Dimensions	Q.ty
METAP250	25 x 25 x h 2 mm	1 Pc



SNAP-ON LOWER PROFILE FOR COVERING SCREWS FOR PENL

Material: aluminium
 Finishes: Brushed steel-effect aluminium, matt aluminium, RAL 9010 (polished white), raw-finish aluminium
On request (not available in stock)
 other colours with anodized or RAL finish



Note: matching profile for
 Art. PENLCOV03 and PENLCOV05

Art.	Dimensions	Q.ty
LMU11.30	6.8 x 10.9 x L 3000	1 Pc
LMU11.20	6.8 x 10.9 x L 2000	1 Pc
LMU11.15	6.8 x 10.9 x L 1498	1 Pc



DF25 CENTRING DOWELS

Material: aluminium
 Finish: aluminium

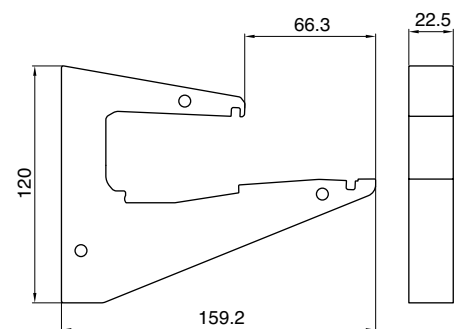
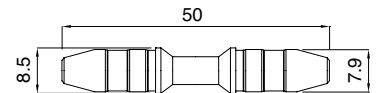


Art.	Dimensions	Q.ty
DF25	Ø8 x 25 mm	1 Pair



THERMAL EXPANSION JOINT WITH CENTRING DOWELS

Material: POM / EPDM
 Finish: black



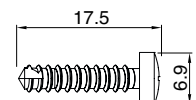
Art.	Dimensions	Q.ty
PENLGNKT	Dowels Ø8.5 x 50 mm Joint 120 x 159.2 mm - Th. 22.5 mm	1 Kit



SELF-DRILLING SCREWS

Material: steel

Note: recommended for anchoring
 with Art. PENLCOV03 and PENLCOV05



Art.	Dimensions	Q.ty
PENLVIT	17.5 x 6.9 PH2	1 Pc



FLEXIBLE SCREWDRIVER FOR ADJUSTMENTS

Art.	Description	Q.ty
DFFLEX06	Screwdriver with hexagon insert size CH4	1 Pc



MAKITA GUN SCREWDRIVER

- Double speed - Release clutch - LED lighting - Reversible
TIGHTENING TORQUE = 2.9 nm with ring in pos. 21 (recommended for tightening Defender 88 pressing devices)

Voltage: 7.2V	Dimensions: 218x44x142 mm
Capacity: 1.2Ah	Weight (EPTA): 0.55 kg
Vacuum velocity: 200 - 650 rpm	Metal drilling: 5 mm
Hard coupling tightening torque: 5.6 Nm	Wood drilling: 6 mm
Flexible coupling tightening torque: 3.6 Nm	Torque adjustment: 21

Art.	Q.ty
DFMAK21	1 Pc



FLEXIBLE EXTENSION FOR ELECTRIC SCREWDRIVER

Usable in combination with MAKITA electric screwdriver art. DFMAK21 or similar

Art.	Description	Q.ty
DFFLEX07	flexible extension with hexagon insert size CH4	1 Pc
DFFLEX04	Hexagon insert size CH4	1 Pc



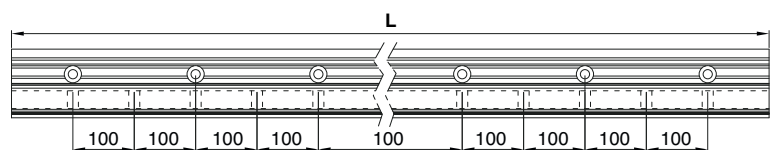
CUSTOM CUTTING FOR PEN / PENL PROFILES

Art.	Description	Q.ty
PENTAGLIO	Custom cutting for PENL profile	1 Pc



LUMIA ALUMINIUM PROFILE ADDITIONAL HOLE DRILLING FOR CLAMPS WITH DISTANCE 100 mm

Note: The articles only refer to processing, which needs to be added to the profiles with standard holes.



DRILLING DIAGRAM

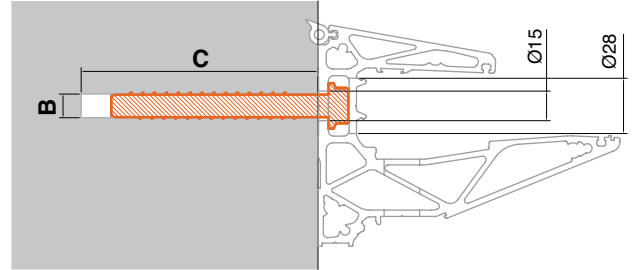
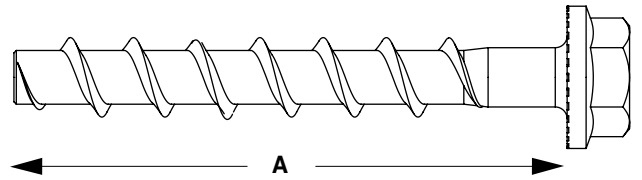
Art.	Dimensions	No. holes	Q.ty
PENL.60FORO	L 6000	59	1 Pc
PENL.30FORO	L 3000	29	1 Pc
PENL.20FORO	L 2000	19	1 Pc
PENL.15FORO	L 1500	14	1 Pc
PENL.FORO	Additional hole Ø18		1 Pc

CONCRETE ANCHOR

Material: galvanised steel / A4 stainless steel

Features: High performance mechanical anchor for concrete with resistance class from C20/25 to C50/60, cracked and non-cracked.

Package: 15 pcs.



Art.	A - Anchor length	B - hole Ø	Hole depth	Tightening wrench	Material	Q.ty
DFFH10ZN	100 mm	10 mm	110 mm	SW16	Galvanised steel	1 Set
DFFH10A4	100 mm	10 mm	110 mm	SW16	A4 stainless steel	1 Set
DFFH12ZN	110 mm	12 mm	120 mm	SW17	Galvanised steel	1 Set
DFFH12A4	110 mm	12 mm	120 mm	SW17	A4 stainless steel	1 Set

	Recommended nominal tightening torque of impulse screwdriver [Nm]	Maximum tightening torque with dynamometric wrench or ratchet wrench [Nm]
DFFH10ZN	300	40
DFFH10A4	300	40
DFFH12ZN	450	60
DFFH12A4	450	60

	Cracked concrete				Non-cracked concrete			
	Permissible traction load [kN]	Permissible shear load [kN]	Minimum anchor centre distance [mm]	Minimum distance from edge [mm]	Permissible traction load [kN]	Permissible shear load [kN]	Minimum anchor centre distance [mm]	Minimum distance from edge [mm]
DFFH10ZN	7.6	16.2	70	70	13.5	16.2	70	70
DFFH10A4	7.6	19.0	70	70	13.5	19.0	70	70
DFFH12ZN	12.3	20.0	80	80	17.2	20.0	80	80
DFFH12A4	12.3	23.3	80	80	17.2	23.3	80	80

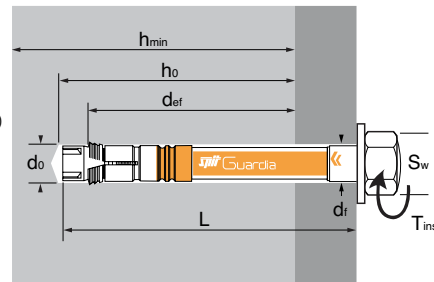
Further technical information available on www.loglimassimo.it

SPIT GUARDIA ANCHOR

Material: **A4** stainless steel (for outdoors) / Zinc-electroplated steel

Features: torque control expansion anchor (with expansion shell)

Indications for use: compressed concrete (non-cracked): Ø12 - Concrete from C20/25 to C50/60



ATE Option 7
n° 07/0047

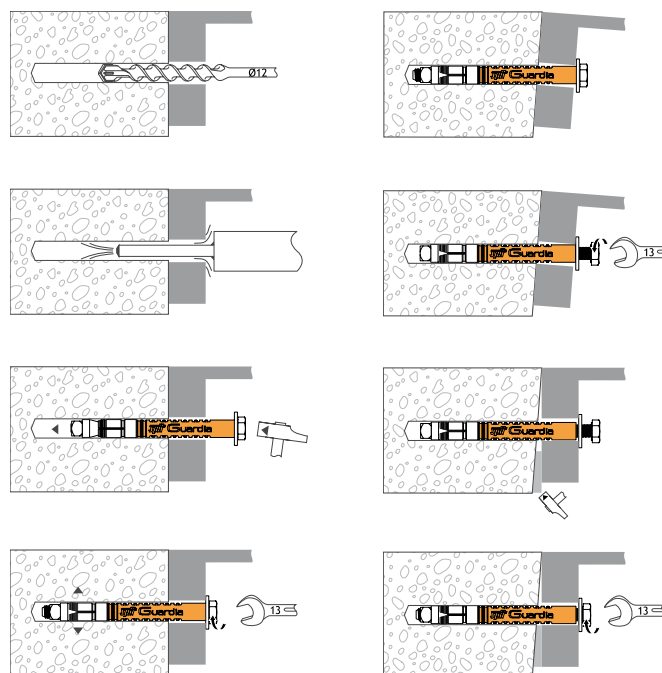
TECHNICAL FEATURES

SPIT GUARDIA	Anchor depth torque min. (mm)	Thickness of anchor (mm)	Anchor max hole depth (mm)	Anchor min. support thickness (mm)	Ø Total hole (mm)	Ø Pass through (mm)	Total length (mm)	Max tightening torque (Nm)
	h_{ef, min}	t_{fix}	h_o	h_{min}	d_o	d_f	L	T_{inst}
DFTASA4	70	20	100	150	12	14	110	25
DFTAS	70	20	95	150	12	14	104	35

MECHANICAL PROPERTIES OF THE ANCHOR

Cone	DFTASA4	DFTAS
f_{uk} (N/mm ²) Min. tensile strength	500	1000
Body	DFTASA4	DFTAS
f_{uk} (N/mm ²) Min. tensile strength	700	550
W_{el} (mm ³) Bending inertia module	50	50
M⁰_{Rk,s} (Nm) Characteristic bending moment	26	33
M (Nm) Permissible bending moment	10.8	13.7

INSTALLATION METHOD

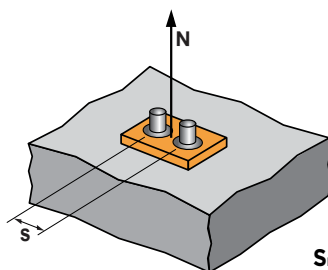


SPIT CC METHOD (VALUES DETECTED BY ETA)

INFLUENCE OF THE CENTRE DISTANCE ON THE TENSILE STRENGTH OF THE CONCRETE CONE

CENTRE DISTANCE **s** Coefficient Ψ_s
ANCHOR DEPTH MIN.

70	0.67
80	0.69
90	0.71
100	0.74
110	0.76
120	0.79
130	0.81
140	0.83
160	0.88
190	0.95
210	1.00



$$\Psi_s = 0,5 + \frac{s}{6 \cdot h_{ef}}$$

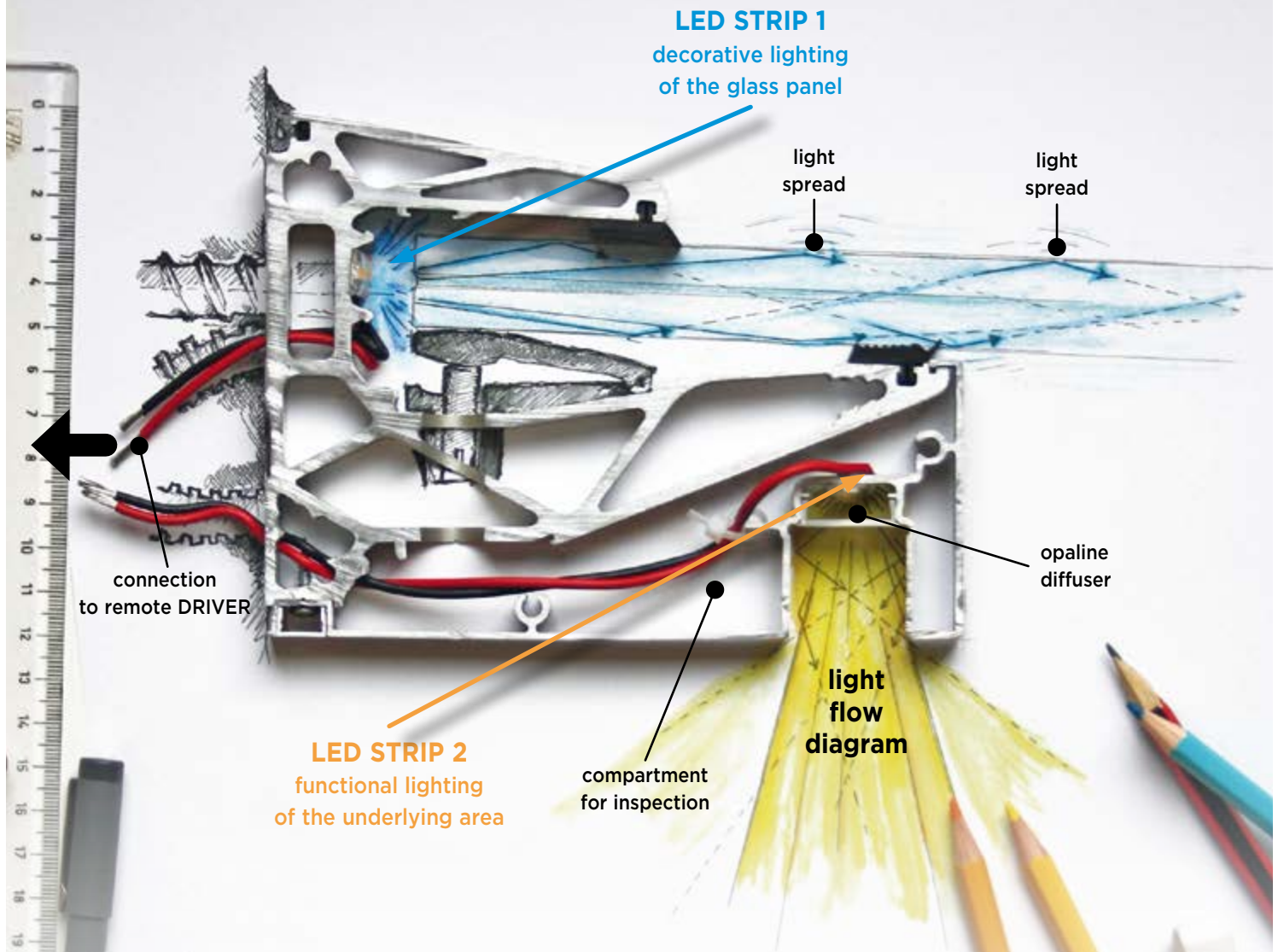
$s_{min} < s < s_{cr,N}$

$s_{cr,N} = 3 \cdot h_{ef}$

Ψ_s evaluated in accordance with the centre distance

Art.	Description	Dimensions	Q.ty
DFTASA4	A4 - For indoor and outdoor installation	12x110/20	1 Pc
DFTAS	For indoor installation	12x105/20	1 Pc

LUMIA: TECHNOLOGY AT THE SERVICE OF LIGHTING



For applications in excess of 5 linear metres of LED STRIP, the use of multiple power supply units is recommended to reduce the effects of natural voltage drops. Applications with multiple derivations are allowed using DRIVERS with the appropriate size.

When appropriate, silicone for outdoor use is recommended to ensure adequate protection for cables against atmospheric agents.

The intervention of a qualified technician is recommended for the connection to the LED STRIP network.

LED STRIP 1 : decorative lighting of the glass panel (recommended LEDST001)

The decorative lighting effect of glass can enhance the defects present on the surface and inside the panels, which generate the diffuse light effect. These defects become more evident as the light intensity increases. The utmost care is recommended during production and use of the LED STRIP with moderate light intensity.

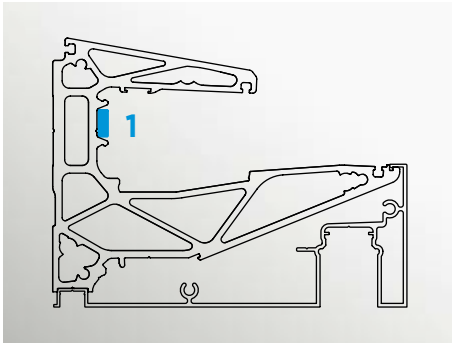
Checking the function of every LED STRIP is recommended prior to installation.

LED STRIP 2 : functional lighting of the underlying area (recommended LEDST003)

The recommended LED STRIP allows to obtain correct lighting effect of the walking surface for installations at a height of ca. 3 m. Lighting intensity is lower if the installation height increases.

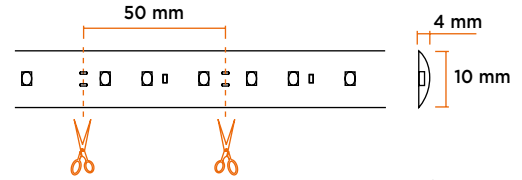
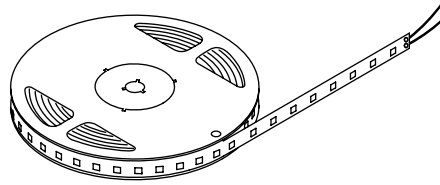
The lighting compartment and LED STRIP must be accessible for inspection.

LED STRIP 1 24V DC IP66 FOR BACKLIT GLASS 9.6 W/m 140 LED/m



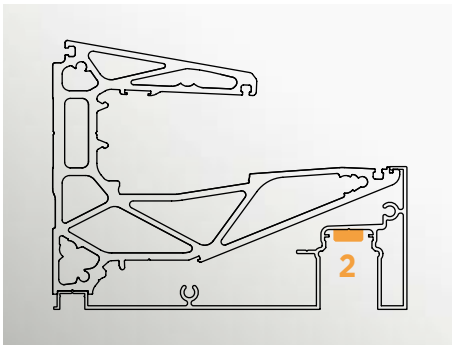
ALSO SUITABLE FOR OUTDOOR USE

LED strip 24V DC IP 66, wattage 9.6 W/m 140 LED/m
CCT 4000K - lm/m 922 - lm/W 96



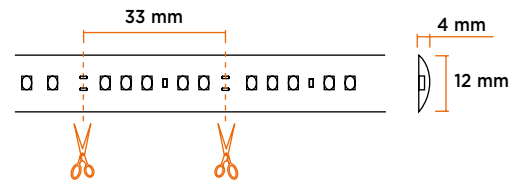
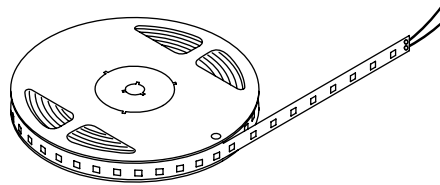
Art.	Description	Q.ty
LEDST001	LED STRIP 24V DC IP66 for backlit glass 9.6 W/m 140 LED/m - L. 5000 mm	1 Pc

LED STRIP 2 24V DC IP66 FOR FUNCTIONAL LIGHTING 14.4 W/m 210 LED/m



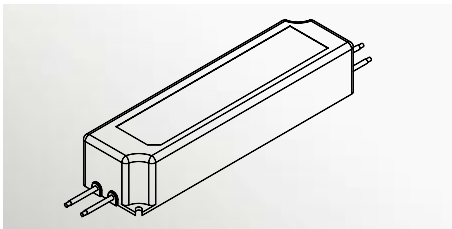
ALSO SUITABLE FOR OUTDOOR USE

LED strip 24V DC IP 66, wattage 14.4 W/m 210 LED/m
CCT 4000K - lm/m 1324 - lm/W 92



Art.	Description	Q.ty
LEDST002	LED STRIP 24V DC IP66 for functional lighting 14.4 W/m 210 LED/m 5000 mm	1 Pc

24Vdc power supply units



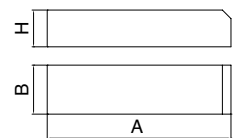
ALSO SUITABLE FOR OUTDOOR USE

Power supply unit 24Vdc 35W to 150W

IP67

IN/OUT cables - Protection rating 2

Function 100-240V



Art.	Description	Dimensions	Q.ty
LED24035IP	Power supply unit 24Vdc 35W IP67	A=150 mm - B=40 mm - H=30 mm	1 Pc
LED24060IP	Power supply unit 24Vdc 60W IP67	A=162 mm - B=42 mm - H=32 mm	1 Pc
LED24100IP	Power supply unit 24Vdc 100W IP67	A=190 mm - B=52 mm - H=37 mm	1 Pc
LED24150IP	Power supply unit 24Vdc 150W IP67	A=222 mm - B=68 mm - H=38 mm	1 Pc

- Pay attention to the electric polarity of products.
- Only use stabilised power supply units with 24v dc voltage.
- After calculating the total absorption of devices to be installed, choose a power supply unit that always has a power margin, which is 15-20% higher than the one calculated.
- In case of maintenance, remove voltage.

Connecting multiple devices in parallel:

To avoid damaging the LED lights, complete all connections before switching on the power.
Max continuous length 5 m

Example: STRIP length 3 m

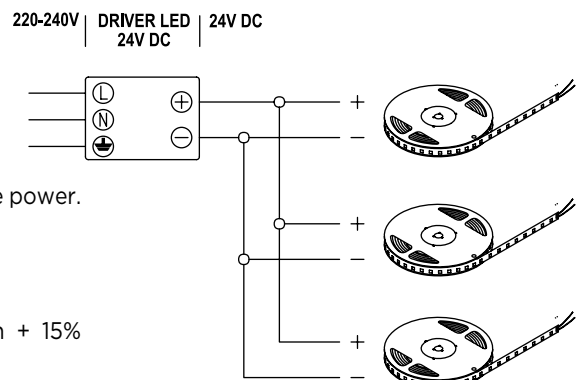
type LED STRIP 1 24 Vdc MAX 9.6 W/m (Art.LEDST001)

Choosing the power supply unit DRIVER: absorption type LED x LED length + 15% (minimum increase due to voltage drop) 9.6 x 3 x 1.15 = 33.15 W (MIN)

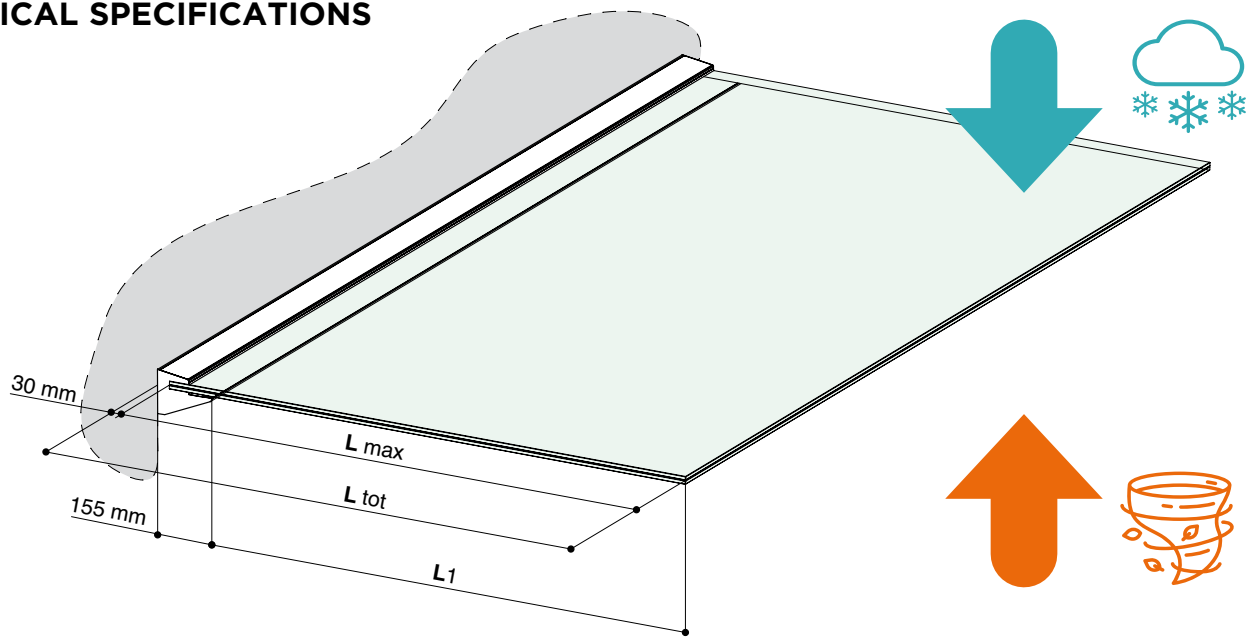
The power supply unit DRIVER to be chosen: 24 Vdc 35 W (Art. LED24035IP)

Complete list of items: LEDST001 1 pc. - LED24035IP 1 pc.

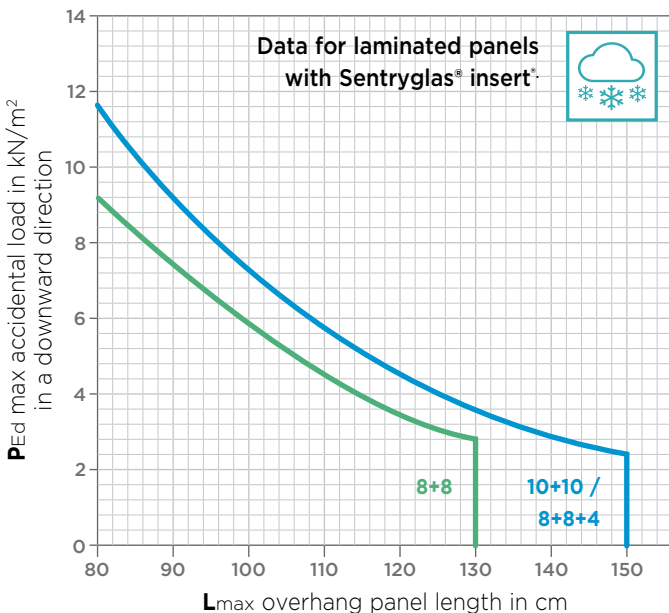
CONNECTION DIAGRAM - PARALLEL CIRCUIT



TECHNICAL SPECIFICATIONS



PERFORMANCE - SNOW-LOADED OVERHANG



L _{max} [cm]	P _{Ed} [kN/m ²]	
	10+10 8+8+4	8+8
80	11.6	9.26
90	8.77	7.02
100	6.83	5.46
109	5.43	4.34
120	4.39	3.51
130	3.59	2.86
140	2.97	
150	2.48	

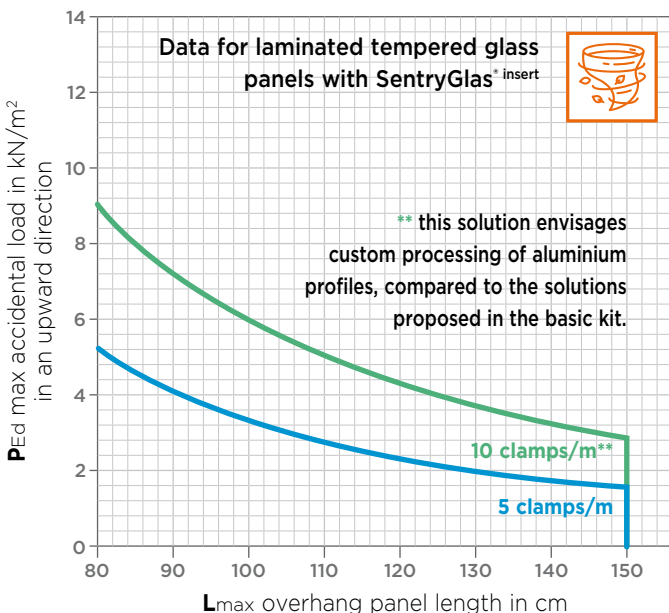
L_{max} = panel length

L_{tot} = L_{max} + 30 mm

L₁ = L_{tot} - 155 mm

The maximum load of project P_{Ed} refers to the combined sum of all the variable loads acting in a downward direction, including the relative safety and combination coefficients. Panel weight is already considered and must not be added. Results refer to tempered laminated EN 12150-1 standard glass with double layer 10+10 mm or 8+8 mm or triple layer 8+8+4 mm, laminated with 1.52 mm stiff SentryGlas® insert. In the triple layer configurations, the thinnest layer faces the top part of the installation. The results take into account the reduction in resistance generated by processing, if any, of the bottom panel to insert the safety dowel (art. PENLSC). Different inserts can be used, taking into account the reductions in performance and any limitations in the minimum height of overhead installation. Complete information for the system's detailed design can be found on the website www.loglimassimo.it or by contacting the Technical Customer Care Service of Logli Massimo Saint-Gobain (ufficio.tecnico@loglimassimo.it).

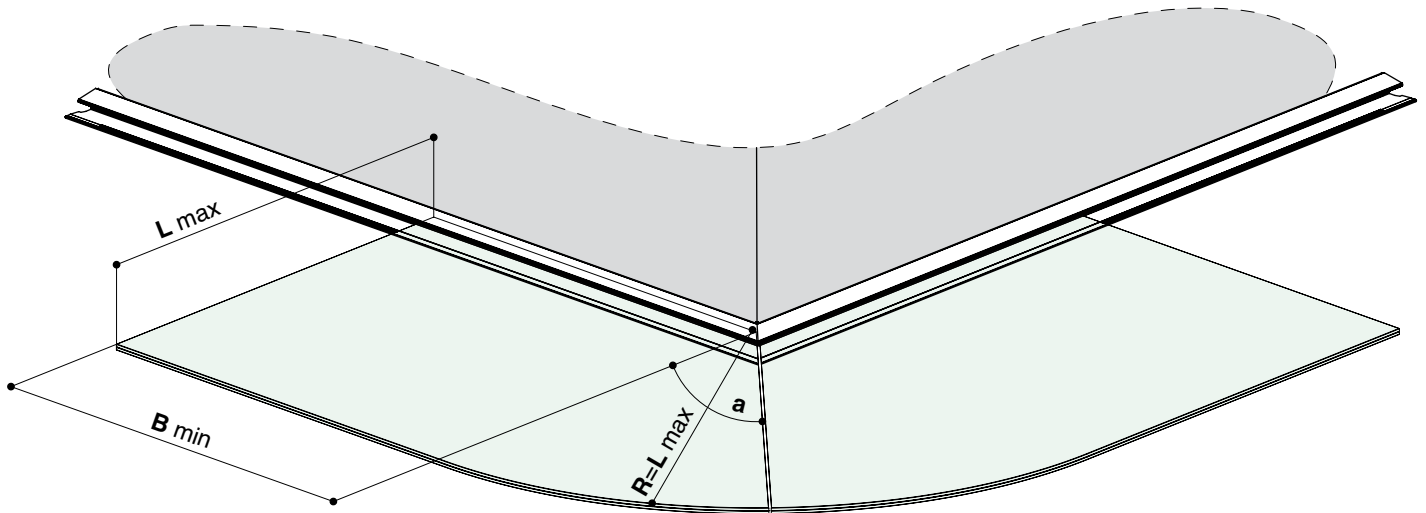
PERFORMANCE - GLASS RAISING OVERHANG



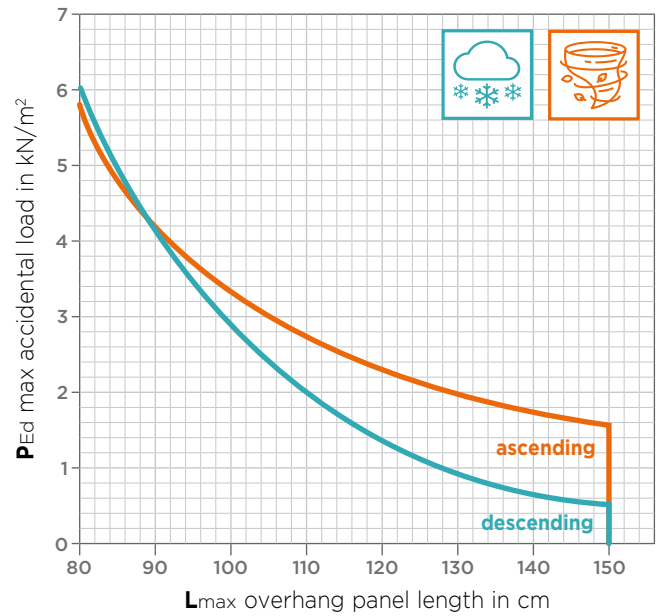
L _{max} [cm]	no. clamps/m	
	5	10
80	5.10	8.71
90	4.12	6.93
100	3.37	5.68
109	2.84	4.76
120	2.44	4.07
130	2.13	3.54
140	1.90	3.12
150	1.71	2.79

SentryGlas®
trademark of Kuraray America, Inc.
Trademarks may not be applied for or registered in all countries.

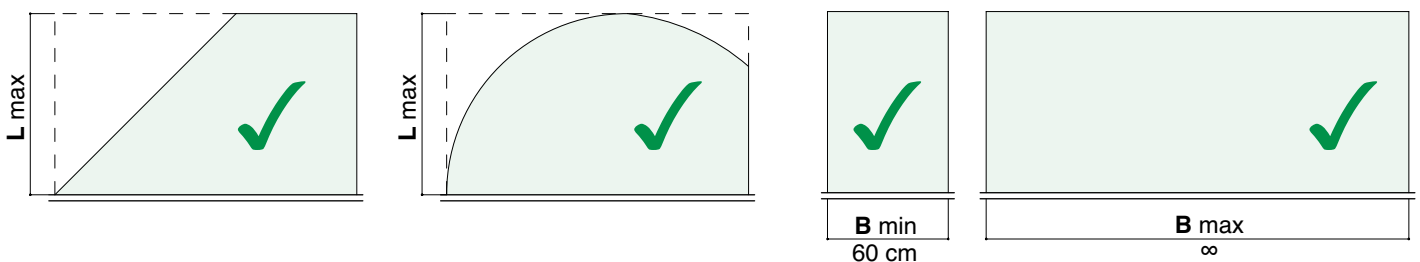
CORNER SOLUTIONS



PERFORMANCE - OVERHANG

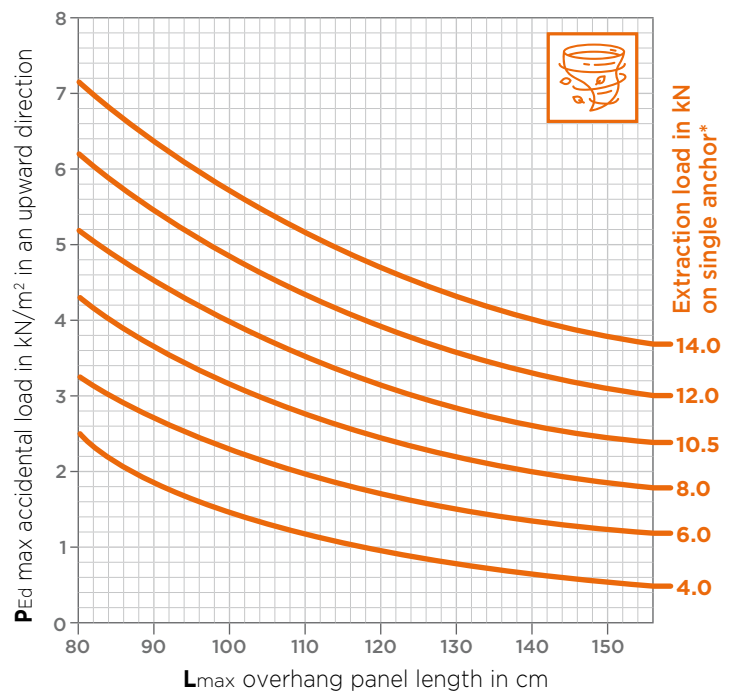
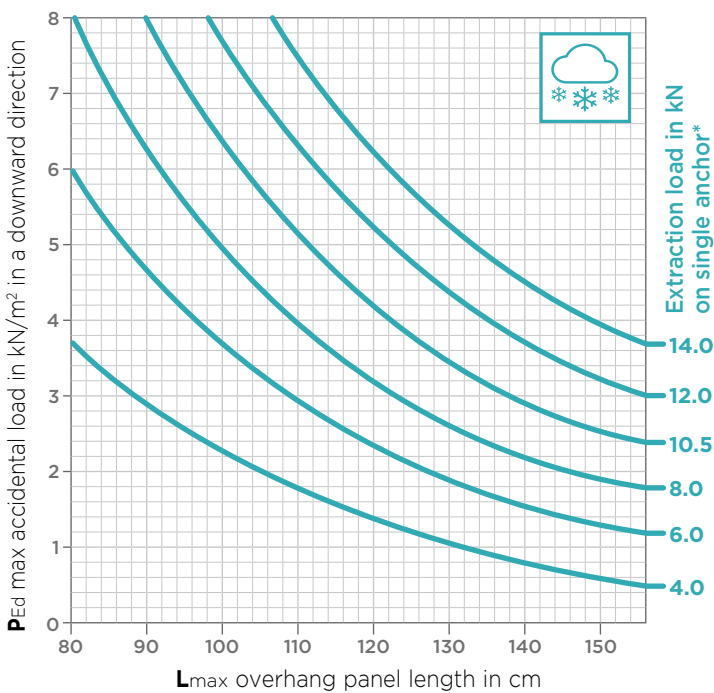
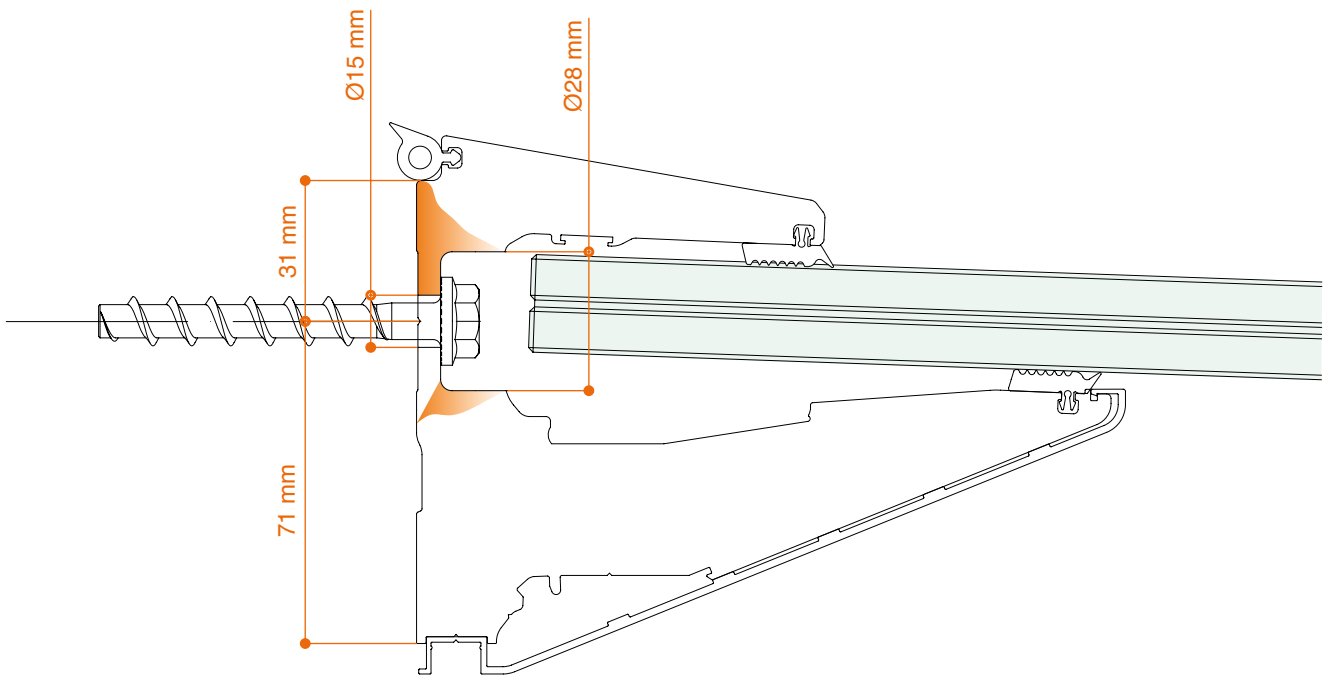


NON-STANDARD SOLUTIONS



CONNECTION TO THE STRUCTURE

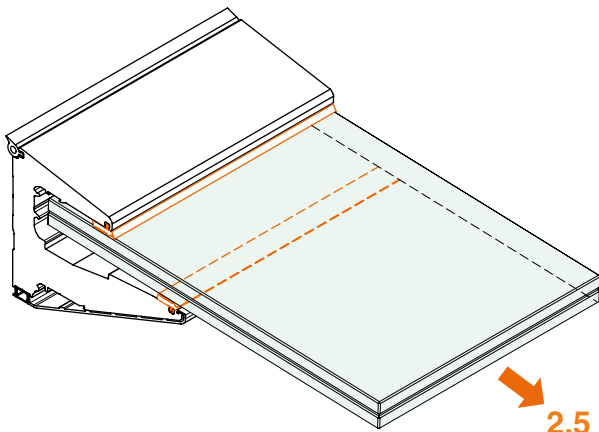
ABACUSES FOR PRE-DIMENSIONING OF ANCHORING SYSTEMS



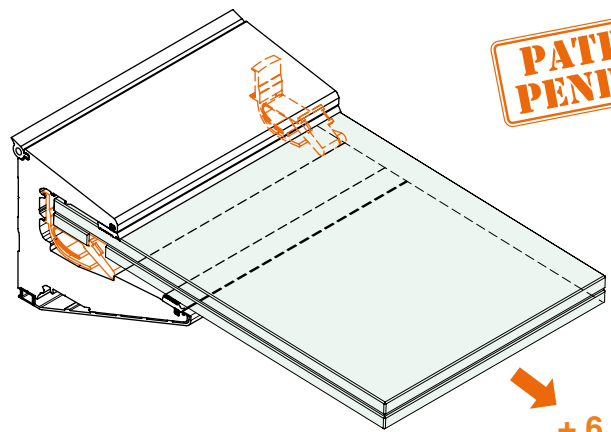
* The extraction load at the single anchor point is stated for pre-dimensioning and identification of the most suitable anchor type for the structure. Values are stated taking into account a standard centre distance of the anchors of 200 mm (this corresponds to installing an anchor for each hole). The reference to the project load P_{Ed} stated is already inclusive of the weight of the panel. No abacuses relative to the evaluation of cutting forces on anchors are reported, as in most cases they are not dimensioning. The assessment of the type of anchors suitable for the structure, for the centre distance relative to project loads, and system compliance with the global safety requirements of the project shall be assigned to a qualified technician, who shall check the applicability of the data provided at the actual installation conditions (loads on the system, characteristics of the support, etc.). For installations in construction settings, which envisage the presence of insulation cladding with low structural impact, the utmost care is recommended when producing sub-structures with adequate characteristics for the division and transmission of loads from the system.

SAFETY DOWELS (OPTIONAL)

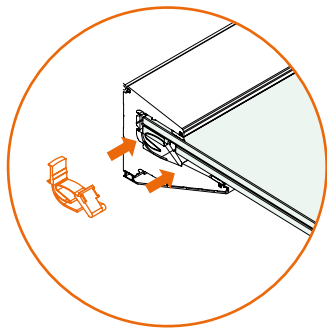
ANTI-EXTRACTION SAFETY DEVICE, REQUIRES DEDICATED PROCESSING OF THE LOWER PART OF THE OF THE LAMINATED GLASS



Standard kit 5 clamps/m

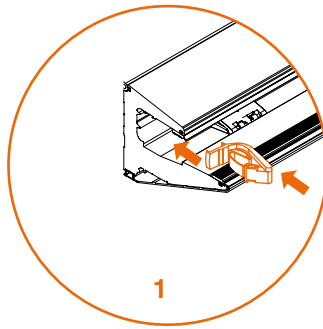


addition of 2 anti-extraction dowels (optional)

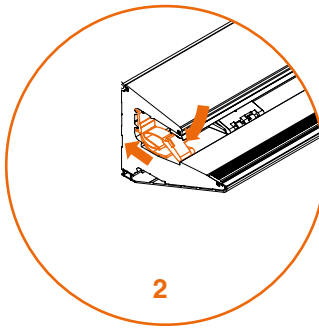


Option 1

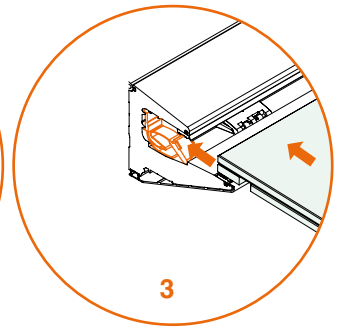
Lateral insert with glass already in its position



1



2

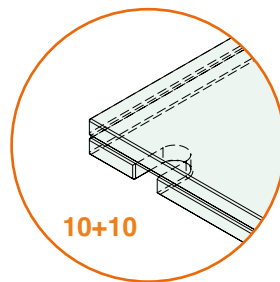
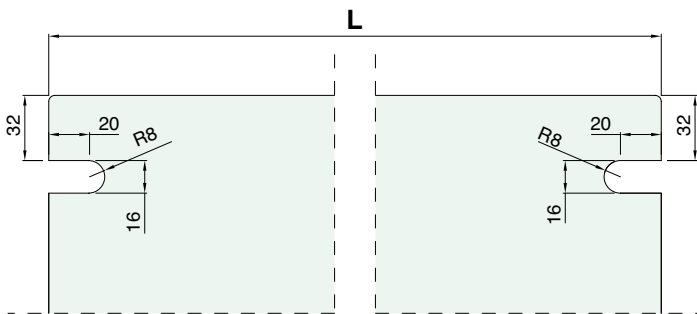


3

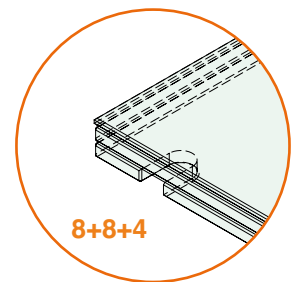
Option 2

Front insert of glass with anti-extraction dowel in place

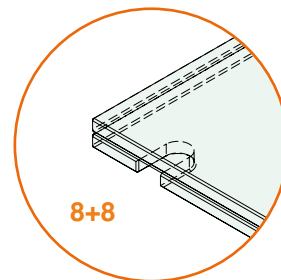
The innovative system with «spring» function of the safety dowel allows frontal insertion of the panels. This allows to use the anti-extraction device even when the lateral areas are not accessible due to the presence of an adjacent wall or previously installed panels.



10+10



8+8+4



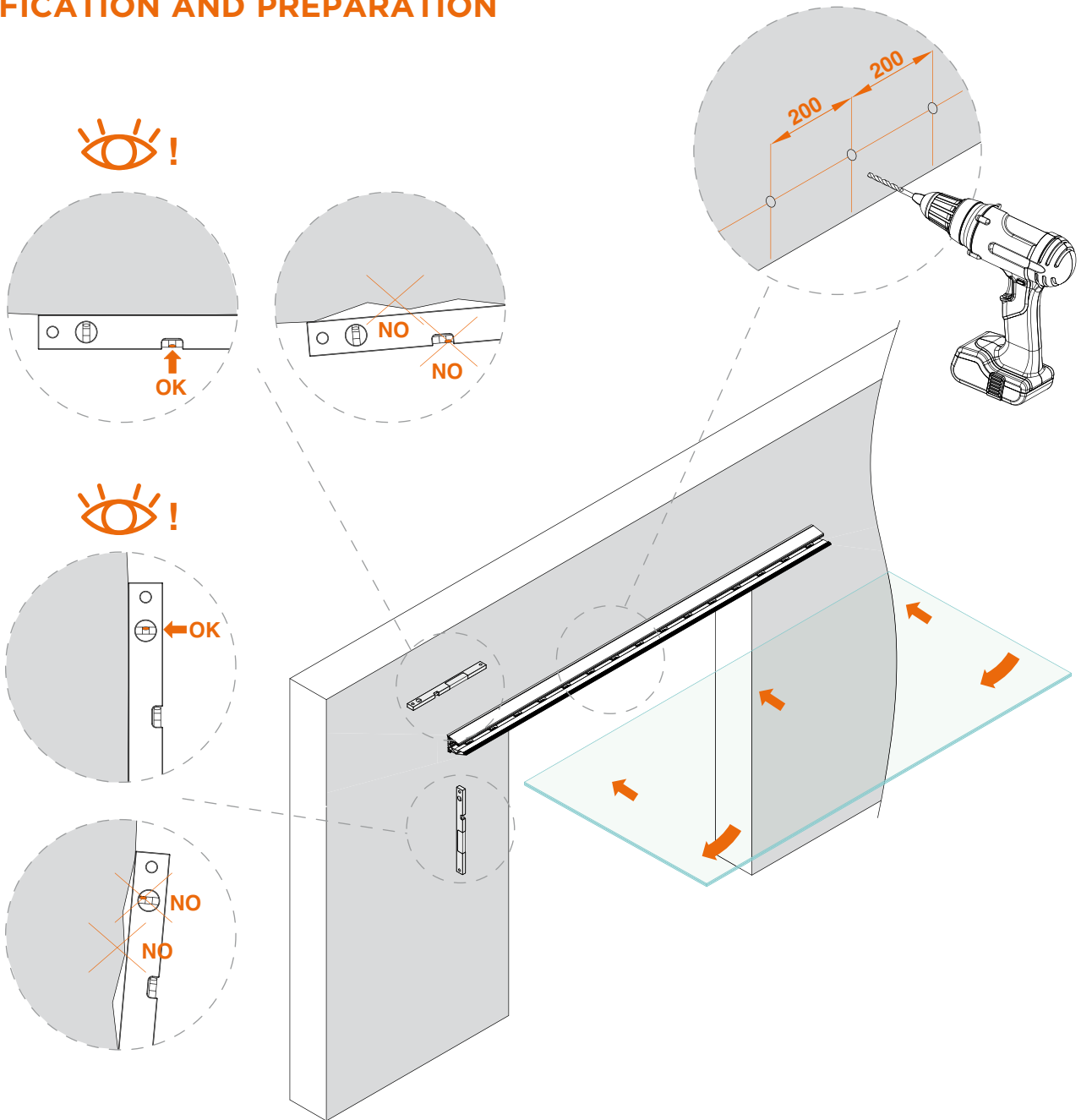
8+8

Processing of the laminated glass must only be performed on the lower layer.

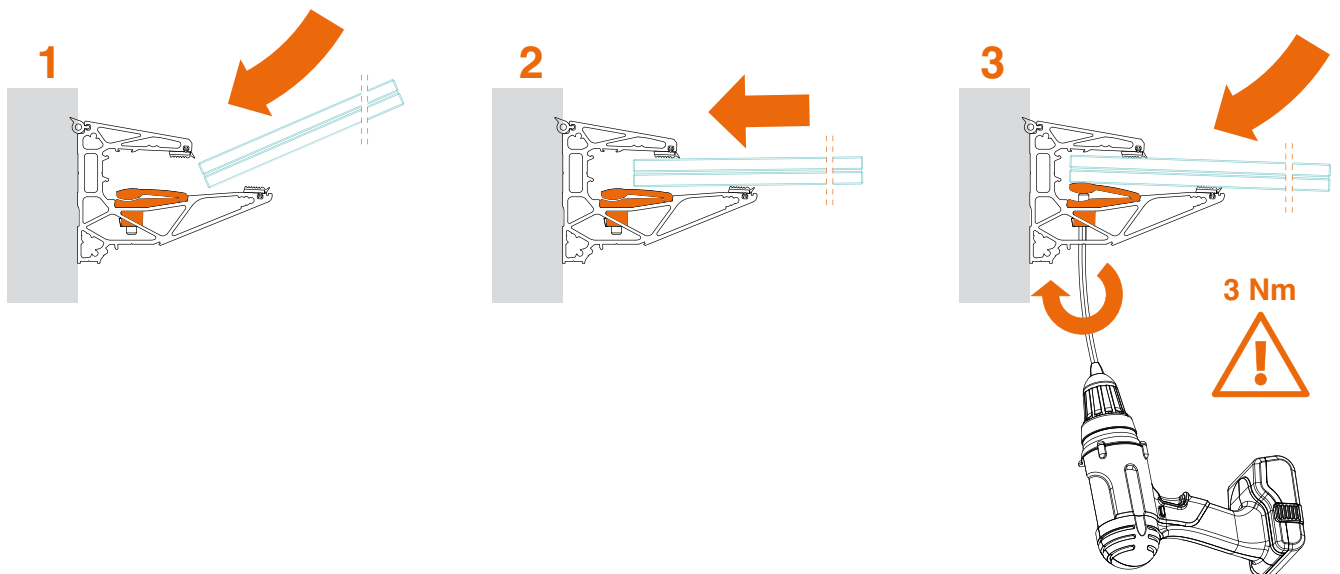
Processing geometry is the same for all thicknesses.

Resistance to panel removal from the system was evaluated experimentally with tests in accordance with EAD 220025-00-0401:2016 Annex B for BR.4 «Safety and accessibility during use». The experimental evaluation of extraction resistance was performed in cases of installations with and without the safety dowel. The values stated include safety coefficients applied to characteristic resistance values obtained during the test phase.

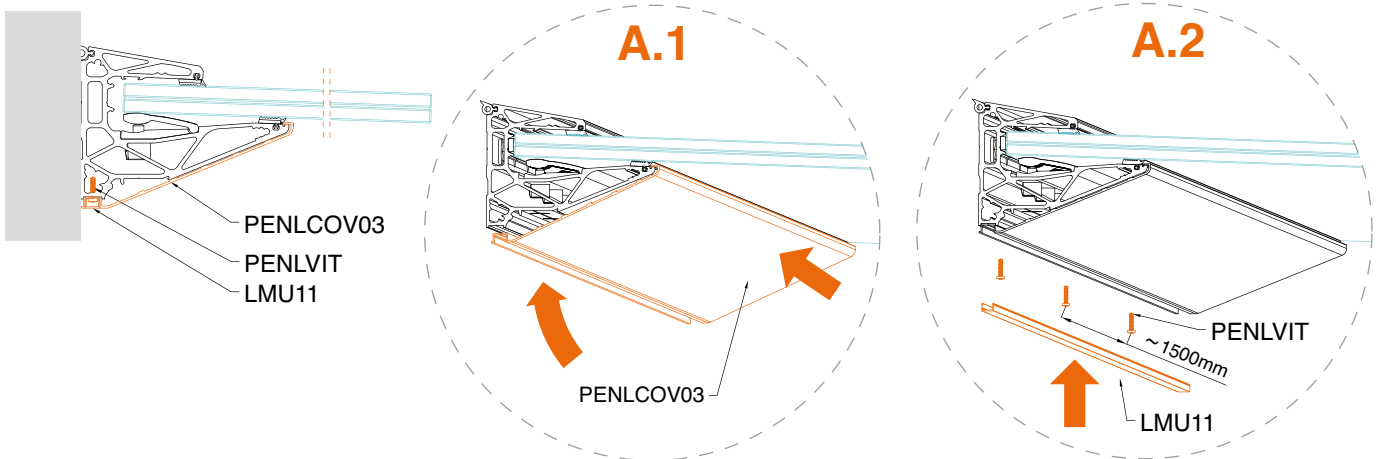
VERIFICATION AND PREPARATION



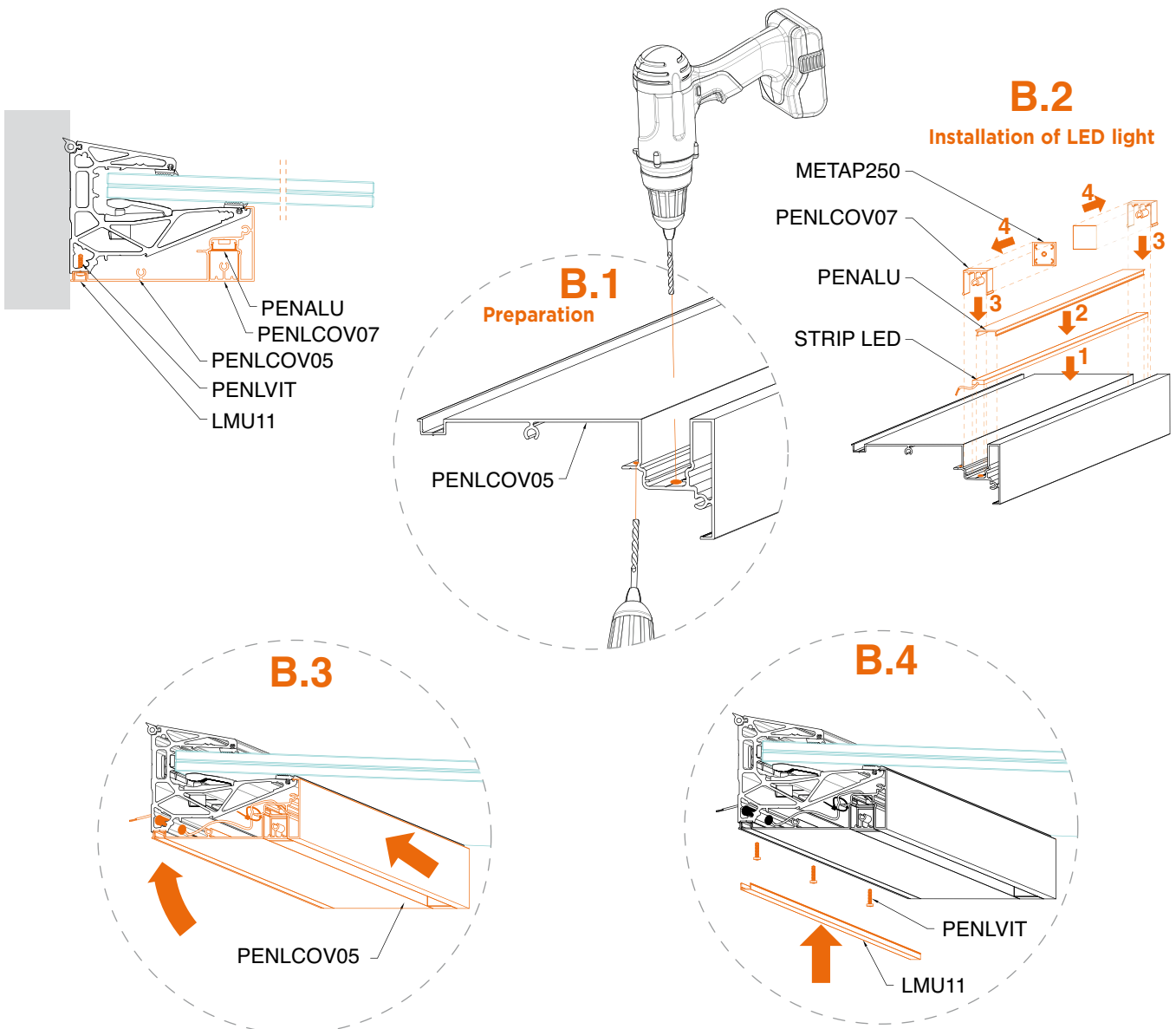
GLASS INSTALLATION



A INSTALLATION COVER PENLCOV03



B INSTALLATION COVER PENLCOV05 + LED LIGHT





LUMIA : “Inside out”
Lumia allows to merge both
outdoor and indoor environment by enhancing
comfort and the livability of your spaces

OUR SERVICES ARE AT YOUR DISPOSAL

CUSTOMISATION:



CUSTOMER CARE:



RAPID ORDER PROCESSING AND DISPATCH:



Disclaimer: the following is only for information purposes and is subject to revisions and updates.

INSTRUCTIONS FOR INSTALLATION

The following precautions are recommended during installation:

- Turpentine can be used to remove dirt, greasy stains and residue of adhesives. Never use abrasive materials.
- To protect slots and holes made after anodization from corrosion, use sealants (e.g., silicone or butyl), paints (e.g., metallic zinc spray) or other suitable inhibitors of corrosion.

If installation is performed in winter, it is recommended to take into account the thermal expansion that will take place in summer due to the increased temperature, providing appropriate expansion joints.

The thermal expansion coefficient of aluminium is $2.3 \times 10^{-5} \text{ }^\circ\text{C}^{-1}$: for example, if the increase in temperature is equal to 35°C , the dilation of a 3 m bar amounts to $2.3 \times 10^{-5} \text{ }^\circ\text{C}^{-1} \times 35^\circ\text{C} \times 3 \text{ m} = 2.4 \times 10^{-3} \text{ m}$ or 2.4 mm.

ANODIZATION

Anodization (also called anodic oxidation) is an electro-chemical process by which the formation of oxide (alumina) is induced on the extruded aluminium surface. **This treatment provides the product with the following characteristics:**

- resistance to corrosion
- surface hardness
- resistance to abrasion

The colour applied on the products has a purely aesthetic impact and does not alter the protective action of anodization.

The raw-finish aluminium profiles, specifically without anodizing or painting, sold by Logli Massimo S.p.A. are intended for suitable coating to be applied by the customer. The customer exempts Logli Massimo S.p.A. from all liability for any problems resulting from using raw finish material. Furthermore, the customer accepts all liability regarding the finish applied by them to the raw finish profile.

Note: Galvanic corrosion: the phenomenon can develop at the interface between two different metals when there is an electrolyte (e.g., water, especially if salted). It is an electrochemical process that causes the metal with lower electric potential to dissolve. In the most common metal combinations, it is almost always aluminium that plays the role of anode and thus undergoes corrosion. Obviously this only occurs when aluminium is bare.

MAINTENANCE AND CLEANING

Regular cleaning of the product is decisive to preserve the original aspect. In a marine environment or in an urban environment (polluting emissions into the atmosphere), cleaning the surfaces at least once every three months is recommended. In relatively cleaner outdoor environments, washing every six months is recommended. Even for indoor installations, cleaning the product at least once a year is recommended. Washing can be performed with warm water and neutral soap. Use a soft cloth or a non-abrasive sponge. Rinse thoroughly with clean water. Dry with a soft cloth.

Logli Massimo S.p.A reserves the right to make any changes at any time and without notice changes of any kind to one or more products, as well as to cease production.

SPONSOR



Fornitore Ufficiale

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