



Self-supporting Ceilings & Frames

Technical Guide

CLIPSO[®]
so different

Warnings



The Clipso Technical Guide is solely for the use of CLIPSO approved fitters, distributors and partners.

This guide has been created using our know-how in the field of assembling CLIPSO self-supporting ceilings and frames, and its content is not exhaustive.

The installation of CLIPSO products is the responsibility of the fitters and must comply with the conditions for execution, arrangement and intervention found in standards NF DTU 58.2 P1-1 & DTU 59.4.

CLIPSO does not accept any responsibility in the event that the assembly conditions described in this guide are not observed.

To discover all the possibilities for creating and installing CLIPSO products under the best possible conditions, we recommend that you undertake the training provided by CLIPSO.

This guide may not under any circumstances be used as a training tool for the installation of our products. Please contact us for further details of the training programme and costs.

Any unauthorised reproduction of this Technical Guide, in part or as a whole, will be regarded as illegal. The content and photos may be modified without prior warning.

If you have any suggestions or remarks, please let us know at: info@clipso.com.

CLIPSO also offers two other technical guides: «Stretch Ceilings and Walls» and «CLIPSO Design».

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Introduction to frames

In addition to stretch walls and ceilings, CLIPSO also produces frames.

They can create different shapes (using straight cuts, angled cuts, bending etc.) in conjunction with the suitable profiles. These frames are then covered with CLIPSO coverings.

CLIPSO also offers two other technical guides: «Stretch Ceilings and Walls» and «CLIPSO Design».

Specific features and advantages of frames

- Creation of different shapes which can then be covered.
- A wide range of various profiles to suit the requirements of your project.
- Easy installation and covering of frames.
- Capable of meeting acoustic requirements (together with a sound absorber).
- Retain all the benefits of the covering range.
- Suitable for all environments.
- Comply with all EC standards and ensure product resistance.
- Can integrate all types of light fittings and be used as a support for back-lighting (spotlight mounts).
- Suitable for both walls and ceilings.
- Wide selection of sizes, ideal for large surfaces.
- Compatible with all styles.

Examples of different uses

Different atmospheres:



Categories of frames

Wall frames

Wall frames are designed to personalise wall decoration, offering an artistic touch with a structure which enables easy reconfiguration.



► Suitable profiles:

- P-CEP18: a very thin profile for very light wall frames. Not compatible with light fittings or sound absorbers.
- P-CRA68: a profile with a rounded edge. Compatible with sound absorbers.
- P-CPA67: a profile with a flat edge. Compatible with sound absorbers.

Totems - Partitions

Totems and partitions aim to decorate and give structure to spaces.

Mostly used in public places, this type of partition can be used to vary the appearance of spaces, or as communication media and/or decorative elements.

These partitions can be adapted to suit different fabrics, allowing easy personalisation.



► Suitable profiles:

- P-CRA68: a profile with a rounded edge. Compatible with sound absorbers. Fabric covering on both sides. Can be suspended.
- P-CRA67: a profile with a flat edge. Compatible with sound absorbers. Fabric covering on both sides. Can be suspended or attached to a base.
- P-CAC140: a wide profile. Compatible with sound absorbers. Fabric covering on both sides. Fitted with light fittings. Can be suspended or attached to a base.

Self-supporting frames

Self-supporting frames aim to personalise your decoration while meeting your specifications in terms of acoustics, lighting etc.



► Suitable profiles:

- P-CRA68: a profile with a rounded edge. Compatible with sound absorbers and light fittings. Can be suspended.
- P-CRA67: a profile with a flat edge. Compatible with sound absorbers and light fittings. Can be suspended.
- P-CAC140: a wide profile. Compatible with sound absorbers and fitted with light fittings. Can be suspended.
- P-CDA25: a thin profile to create simple tiles. Not compatible with light fittings. For medium-sized frames. Can be suspended.
- P-CDA35: a more robust profile. Compatible with sound absorbers. Not compatible with light fittings. For large frames. Can be suspended.

Back-lit frames

Back-lit frames are highly stylish. In addition to the advantages of the classic model, they enhance the translucent CLIPSO covering with the lighting included in the frames' structures to create direct or indirect lighting. They can be adapted to include different types of lighting, including strip LEDs, neon lighting etc.



► Suitable profiles:

- P-CRA68: a profile with a rounded edge. Indirect lighting or back-lighting with a translucent covering. Can be suspended.
- P-CPA67: a profile with a flat edge. Indirect lighting or back-lighting with a translucent covering. Can be suspended.
- P-CAC140: a wide profile. Indirect lighting or back-lighting with a translucent covering. Can be suspended.
- P-CDA25: a thin profile to create simple tiles. For medium-sized frames. Can be suspended.
- P-CDA35: a more robust profile. Indirect lighting. For large frames. Can be suspended.

Acoustic frames

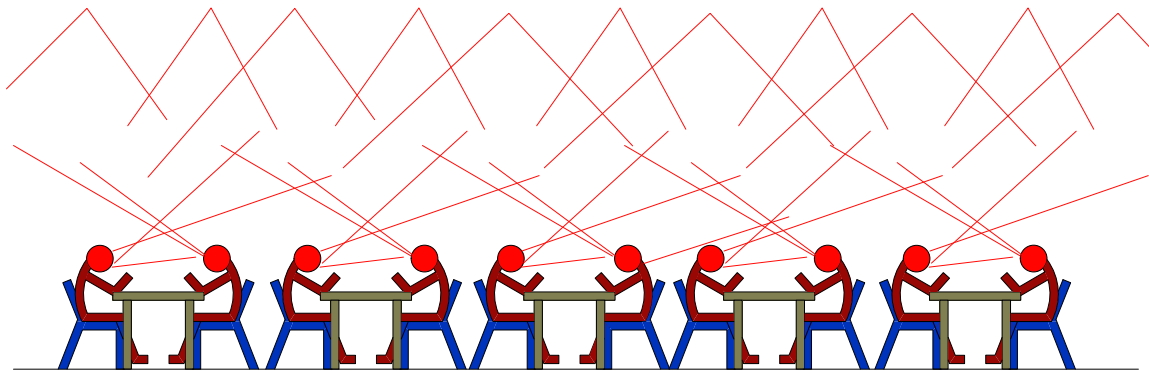
CLIPSO acoustic frames improve acoustic comfort within a wide range of spaces by regulating sound reverberations and by increasing the degree of sound absorption.

Acoustic frames can be created in various shapes and can be personalised without any effect on their acoustic performance.

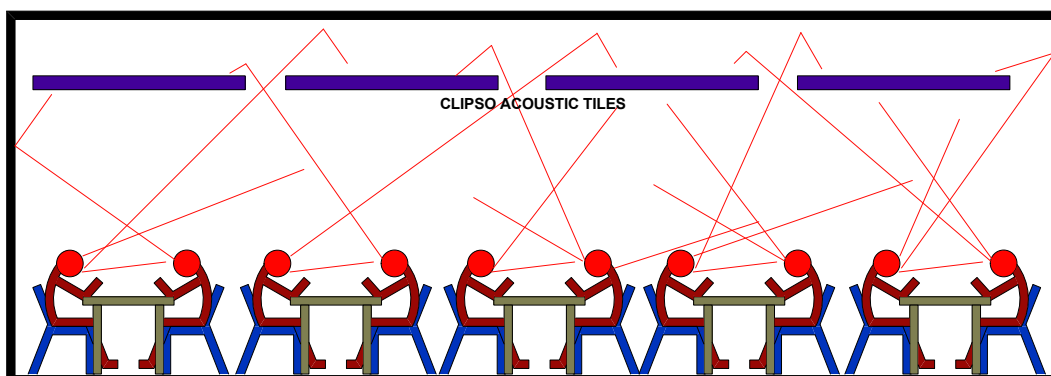
CLIPSO frames are made up of an acoustic fabric and with an absorber of varying thickness which is placed within the metallic structure of the frame. The larger the plenum (empty) space, the better the acoustic performance of your frame.



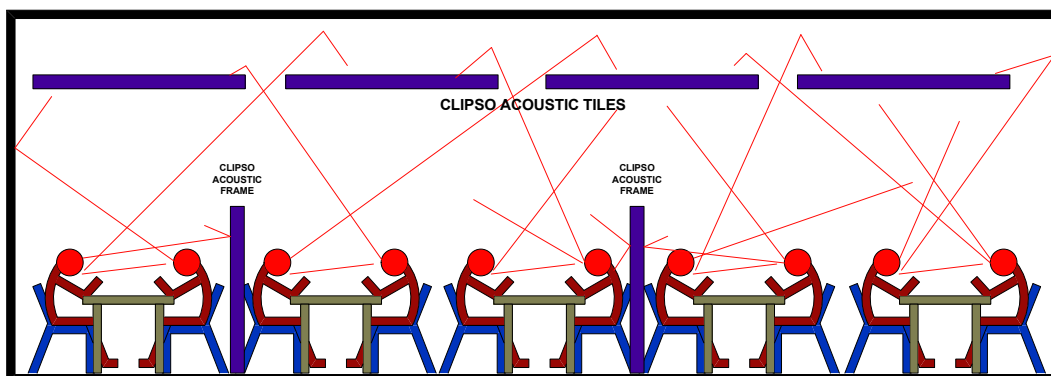
Reverberation principle



RESTAURANT, NO ACOUSTIC TREATMENT



RESTAURANT WITH CLIPSO ACOUSTIC TILES



RESTAURANT WITH CLIPSO ACOUSTIC TILES AND FRAMES

This diagram explains the reverberation effect, using the example of a restaurant dining room. The undesirable effects of sound reverberation, also called the «cocktail party effect», can be negated through the different configurations used and frame solutions installed.

► Suitable profiles:

- P-CRA68: a profile with a rounded edge. Compatible with sound absorbers. Can be suspended.
- P-CRA67: a profile with a flat edge. Compatible with sound absorbers. Can be suspended.
- P-CAC140: a wide profile. Compatible with sound absorbers. Can be suspended.
- P-CDA35: a thin profile. Compatible with sound absorbers. Can be suspended.

«NatureForms» shaped frames

CLIPSO has developed NatureForms, a new range of shaped frames.

These profiles are bent to produce the desired shape with the required size (depending on technical capabilities).

These frames may be acoustic, back-lit or printed.

These shapes may be suspended, fixed to a wall or even placed on the floor upon a stand.



► Suitable profiles:

- P-CRA68: a profile with a rounded edge. Compatible with sound absorbers. Direct lighting or back-lighting with a translucent covering.
- P-CRA67: a profile with a flat edge. Compatible with sound absorbers. Direct lighting or back-lighting with a translucent covering.
- P-CAC140: a wide profile. Compatible with sound absorbers and light fittings. Direct lighting or back-lighting with a translucent covering.

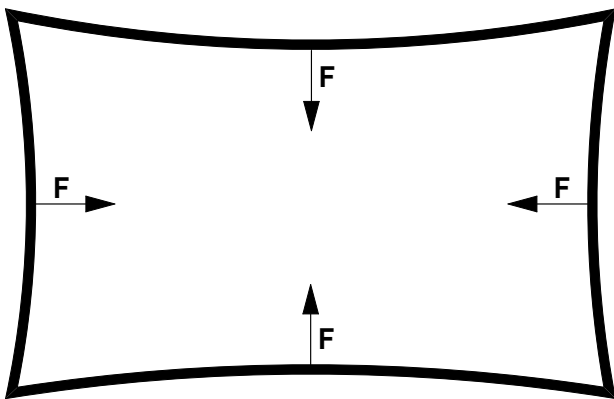
Calculating reinforcements

Introduction

Please send any requests for frames and shapes other than those listed below (i.e. other than squares or rectangles) to commercial@clipso.com. A study will be carried out and then you will receive a cost assessment from 72 hours to 1 week afterwards, depending on the project.

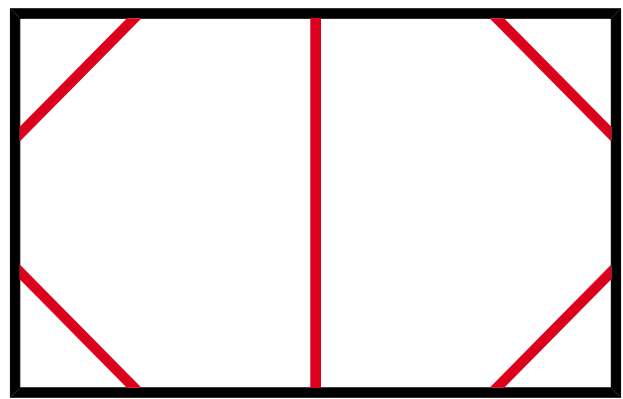
Cadre de longueur X non renforcé

A profile may bend when forces are applied to it. This force is applied by the fabric as can be seen in the diagram below.



Frame of length X reinforced

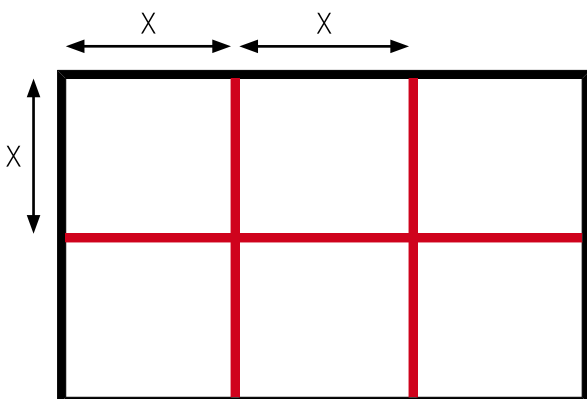
In order to prevent bending, the frame must be reinforced.



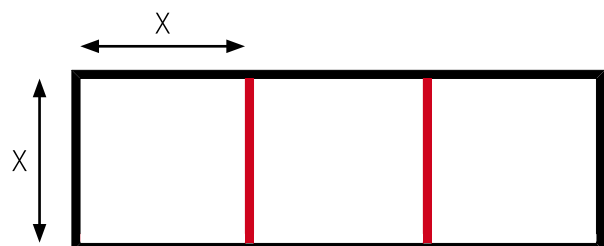
Each frame must be reinforced according to its size. In order to avoid any bending, the location of each reinforcement must be calculated.

To ensure efficient reinforcement, each frame must be reinforced every **0.80m or 1.20/1.30m** minimum depending on the profile and according to the following diagrams:

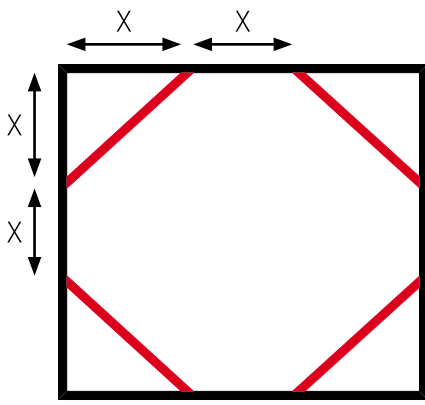
The 4 reinforcement methods



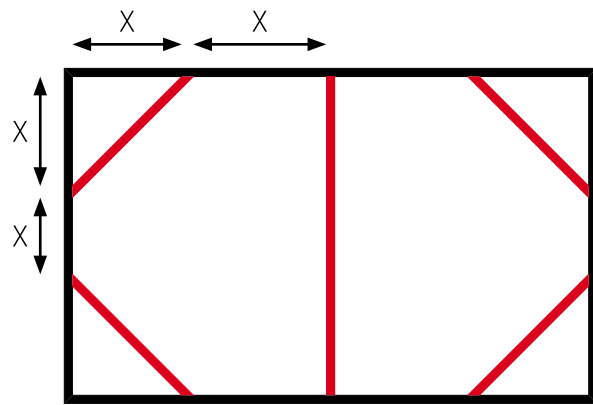
Crossed method



90° method



45° method



Mixed method

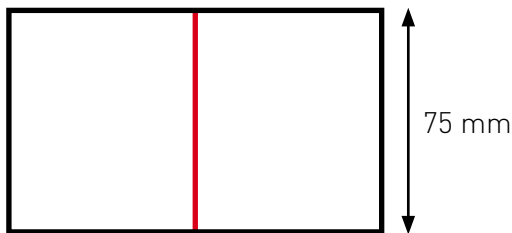
Whichever method you choose, the distance «X» depends on the profile used.

► For further details: see the technical sheets for profiles on pages 10 to 19.

How do I define the length of the reinforcements?

90° and crossed reinforcements

All you need to do is take the overall dimensions of the frame and subtract the thickness of the frame (and of the reinforcement in the case of a crossed reinforcement) multiplied by two.

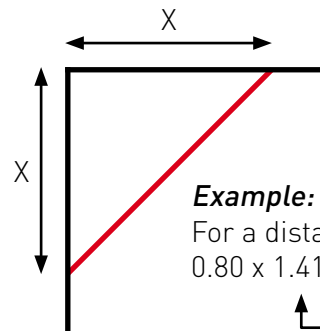


Example:

For a P-CPA67 frame, the length of the P-RA01 reinforcement is:
 $75 - (2 \times 19) = 37\text{mm}$

45° reinforcements

To calculate the length of the reinforcement, multiply X by 1.41.



Example:

For a distance X of 0.80m:
 $0.80 \times 1.41 \times 1.12\text{m}$

↑ the constant for a 45° reinforcement

Table of profile thicknesses for calculating reinforcement lengths

P-CPA67	P-CRA68	P-CEP18	P-CDA25	P-CDA35	P-RA01	P-RA02	P-RA03	P-RA04	P-CAC 140
19 mm	Outside edge 41 mm	30 mm	30 mm	35 mm	Edge 10 mm	Edge 10 mm	Edge 31 mm	Edge 31 mm	19 mm
	Inside edge 18 mm				Flat side 20 mm	Flat side 20 mm	Flat side 70 mm	Flat side 70 mm	

► For further details: see the technical sheets for profiles on pages 10 to 19.

P-CPA67 product sheet

Product description

Aluminium profile for self-supporting frame.

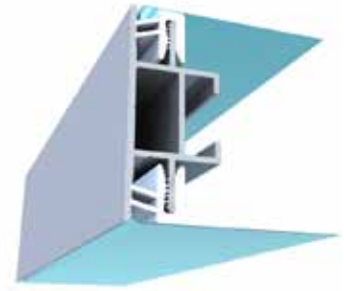
Weight: 430g/m.

Cross-section: 43.2mm x 19mm.

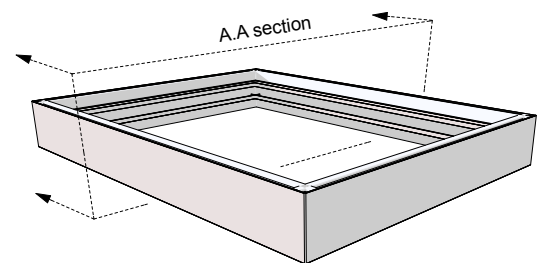
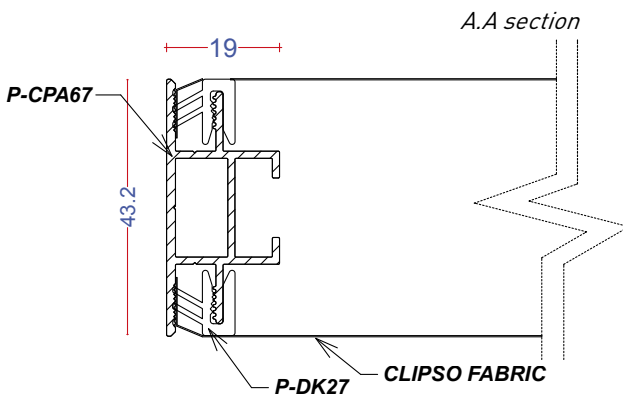
Single or double fabric covering

Types of use: wall, suspended or as a partition.

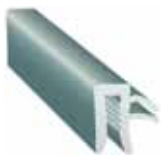
Available in several finishes: untreated, anodised, lacquered white or lacquered black aluminium.



Technical drawing



Stretching clip



P-DK27
The P-DK27 clip stretches the fabric over the profile.

Accessories

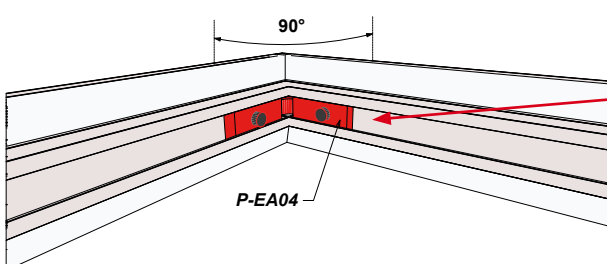


P-E3D
Bracket used for suspended frames with any type of sling.



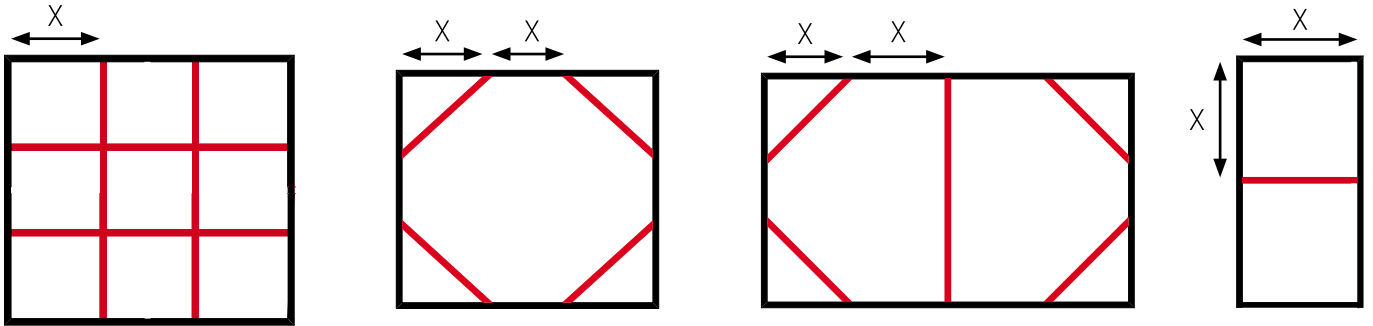
P-SCV02
Wall fixation support compatible with reinforcements P-RA01 and P-RA02.

Assembling the frame



The frame is assembled using a 90° angle bracket in thick steel with two hex head screws.

Frame reinforcements



«X» distance of 80cm maximum

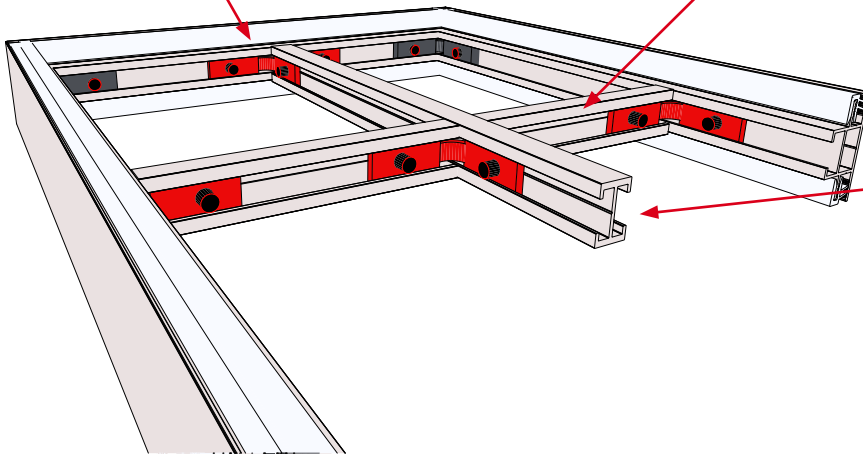
Crossed and 90° reinforcements



Steel bracket of 90° with two hex head screws holding the reinforcements in place.

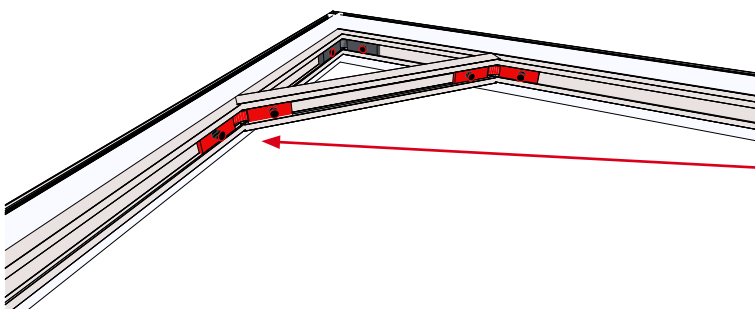


Simple frame reinforcement held in place by a steel angle bracket of 90°.



Middle reinforcement held in place by a steel angle bracket of 90°. This reinforcement holds all sides of the frame in place.

45° reinforcements



P-CRA68 product sheet

Product description

Aluminium profile for self-supporting frame.

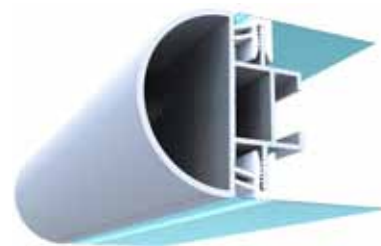
Weight: 700g/m.

Cross-section: 43.2mm x 40.9 mm.

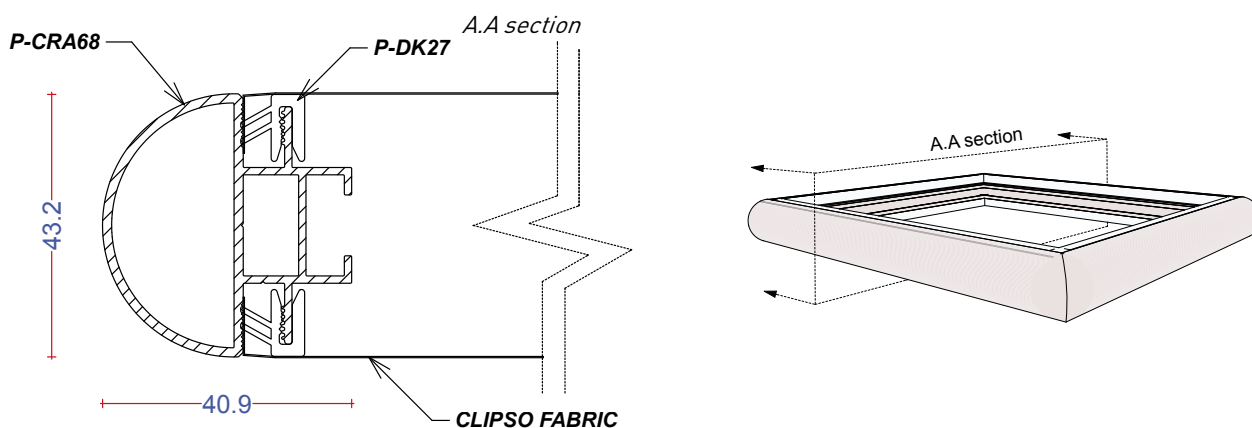
Single or double fabric covering.

Types of use: wall, suspended or as a partition.

Available in several finishes: untreated, lacquered black, lacquered white or anodised aluminium.



Technical drawing



Stretching clip, Assembling the frame and Accessories

- ▶ **For further details:** see the P-CPA67 technical sheet on page 10.

Frame reinforcements

- ▶ **For further details:** see the P-CPA67 technical sheet on page 10.



«X» distance of 80cm maximum

P-CEP18 product sheet

Product description

Aluminium profile for wall frames and suspended frames.

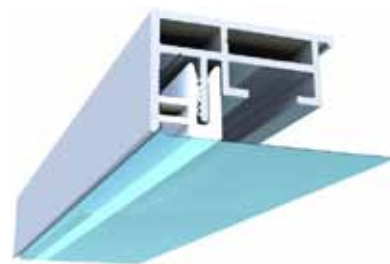
Weight: 450g/m.

Cross-section: 33 mm x 18 mm.

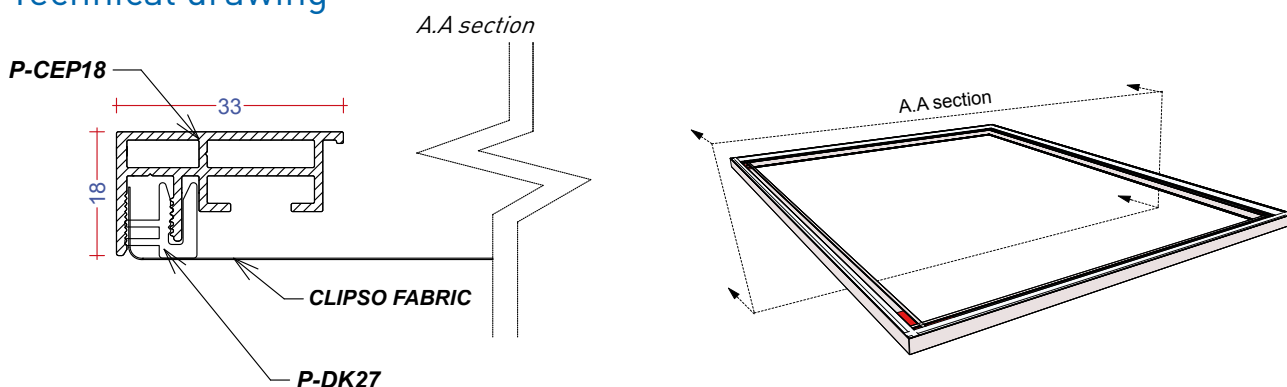
Single fabric covering.

Type of use: wall.

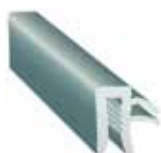
Available in several finishes: untreated, lacquered black, lacquered white or anodised aluminium.



Technical drawing



Clip de tension



P-DK27

The P-DK27 clip stretches the fabric over the profile.

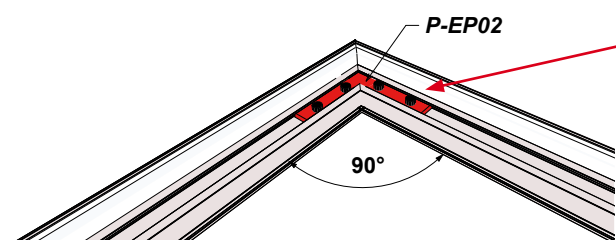
Accessoires



P-SCM01

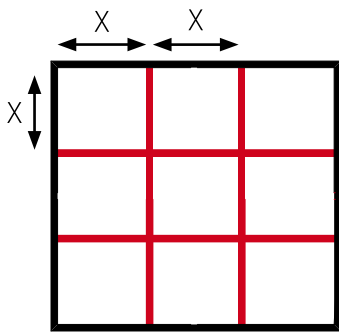
Wall support for frame P-CEP18.

Assembling the frame



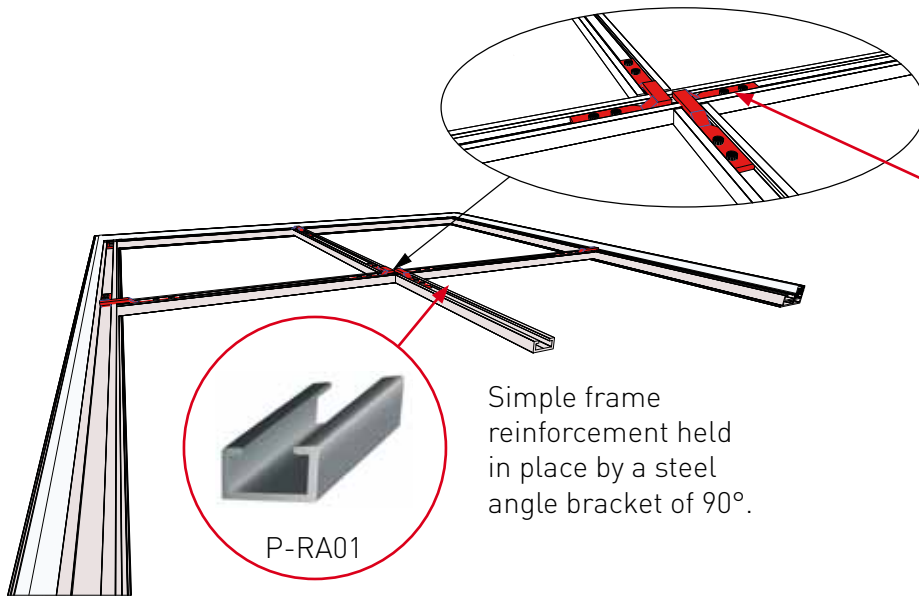
The frame is assembled using a flat steel fixing bracket and hex head screws.

Frame reinforcements



«X» distance of 80cm maximum

Crossed reinforcements



P-RA01

Simple frame reinforcement held in place by a steel angle bracket of 90°.

P-E3D2

Steel bracket for frame reinforcement. Used to create junctions between reinforcements and profiles.

P-CDA35 product sheet

Product description

Aluminium profile for self-supporting frame.

Weight: 900g/m.

Cross-section: 35 mm x 35 mm.

Single fabric covering.

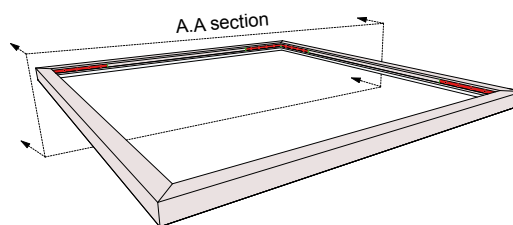
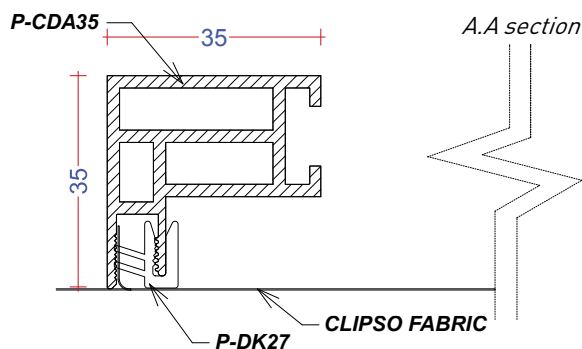
Type of use: suspended.

Advantages of this profile: high resistance, reinforcement every 1.3m.

Available in several finishes: untreated, lacquered black, lacquered white or anodised aluminium.



Technical drawing



Stretching clip



P-DK27

The P-DK27 clip stretches the fabric over the profile.

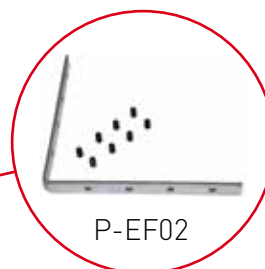
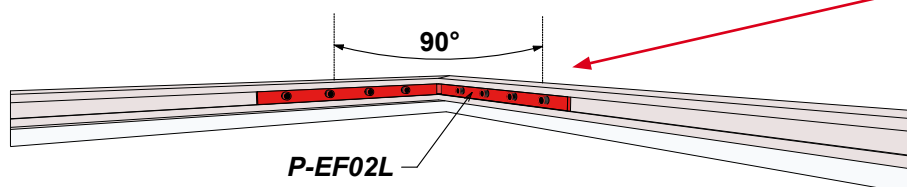
Accessories



P-E3D

Bracket used for suspended frames with any type of sling.

Assembling the frame



P-EF02

The frame is assembled using a long steel angle bracket of 90°.

Frame reinforcements

► For further details: see the P-CPA67 technical sheet on page 10.



«X» distance of 130cm maximum

P-CDA25 product sheet

Product description

Aluminium profile for self-supporting frame.

Weight: 580g/m.

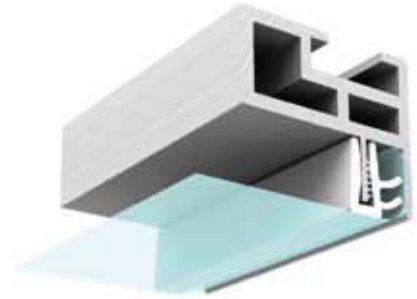
Cross-section: 30 mm x 25 mm.

Single fabric covering.

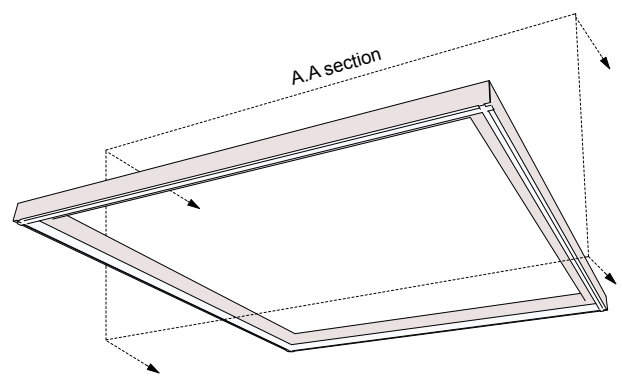
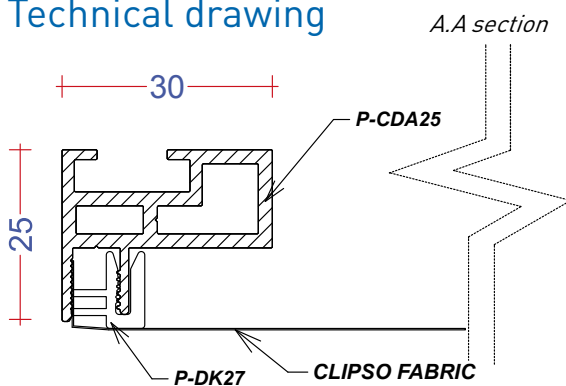
Type of use: suspended.

Advantages of this profile: high resistance, reinforcement every 1.2m.

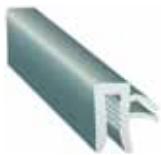
Available in several finishes: untreated, lacquered black, lacquered white or anodised aluminium.



Technical drawing



Stretching clip



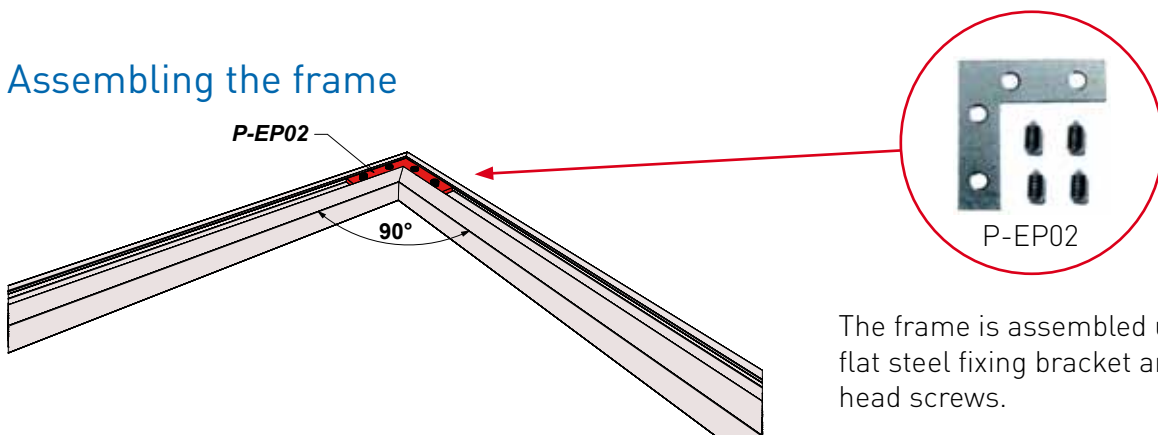
P-DK27
The P-DK27 clip stretches the fabric over the profile.

Accessories



P-EF01
Bracket used for suspended frames with any type of sling.

Assembling the frame



The frame is assembled using a flat steel fixing bracket and hex head screws.

Frame reinforcements

► For further details: see the P-CEP18 technical sheet on page 13.



«X» distance of 120cm maximum

P-CAC140 product sheet

Product description

Aluminium profile for self-supporting frame.

Weight: 1.56kg/ml.

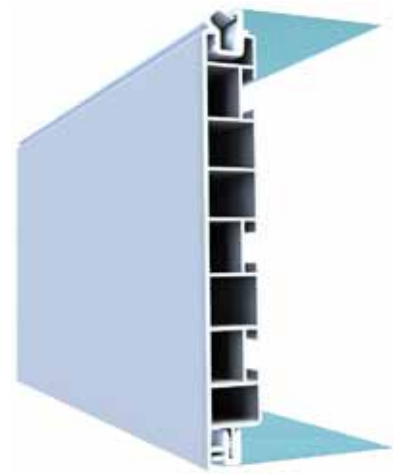
Cross-section: 140 mm x 19mm.

Single or double fabric covering

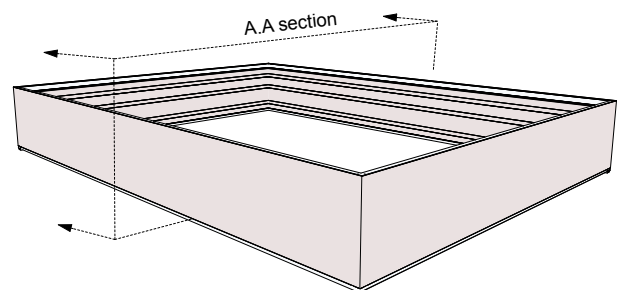
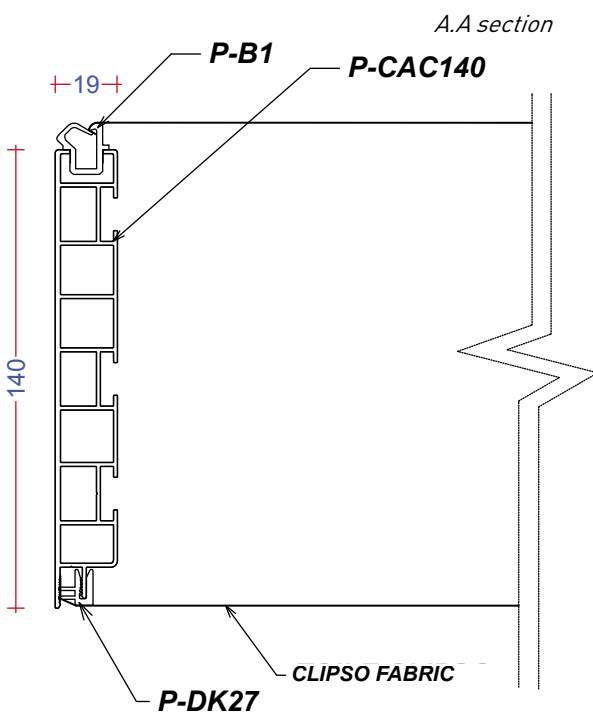
Types of use: wall, suspended or as a partition.

Advantages of this profile: high resistance, extra-wide, reinforcement every 1.2m, can be used in various ways.

Available in several finishes: untreated, lacquered black, lacquered white or anodised aluminium.



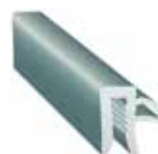
Technical drawing



Stretching clip



P-B1
The P-B1 clip is a complement which enables double fabric covering.



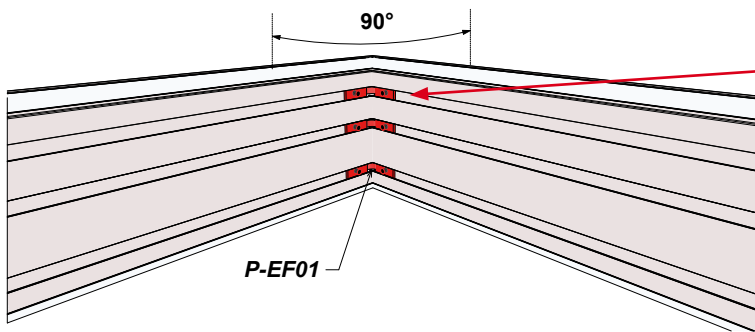
P-DK27
The P-DK27 clip stretches the fabric over the profile.

Accessories



P-E3D
Bracket used for suspended frames with any type of sling.

Assembling the frame



P-EF01

Steel bracket of 90° with two hex head screws holding the reinforcements in place.

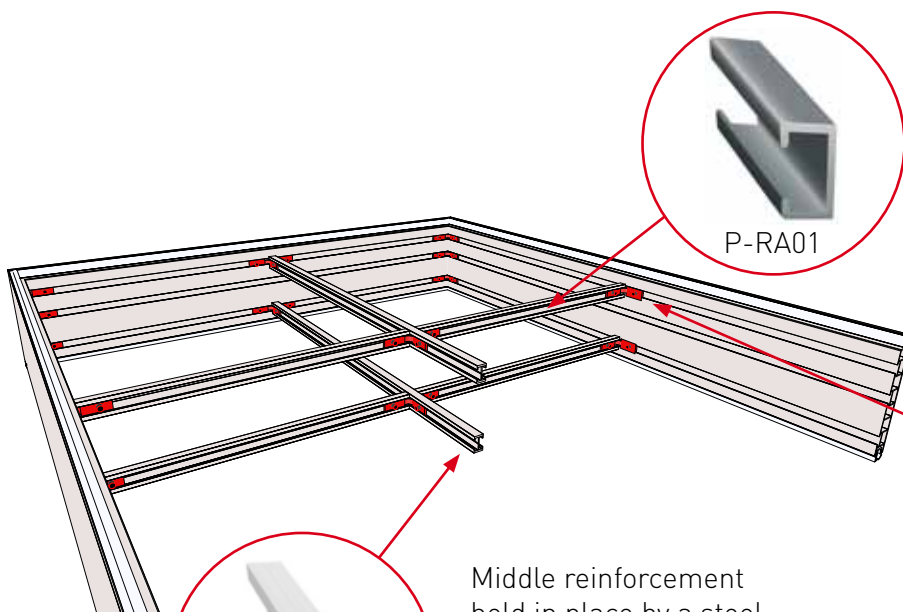
Frame reinforcements

► For further details: see the P-CPA67 technical sheet on page 10.



«X» distance of 120cm maximum

Crossed reinforcements (up to 2m) with P-RA01 and P-RA02



P-RA01

Simple frame reinforcement held in place by a steel angle bracket of 90°.



P-RA02

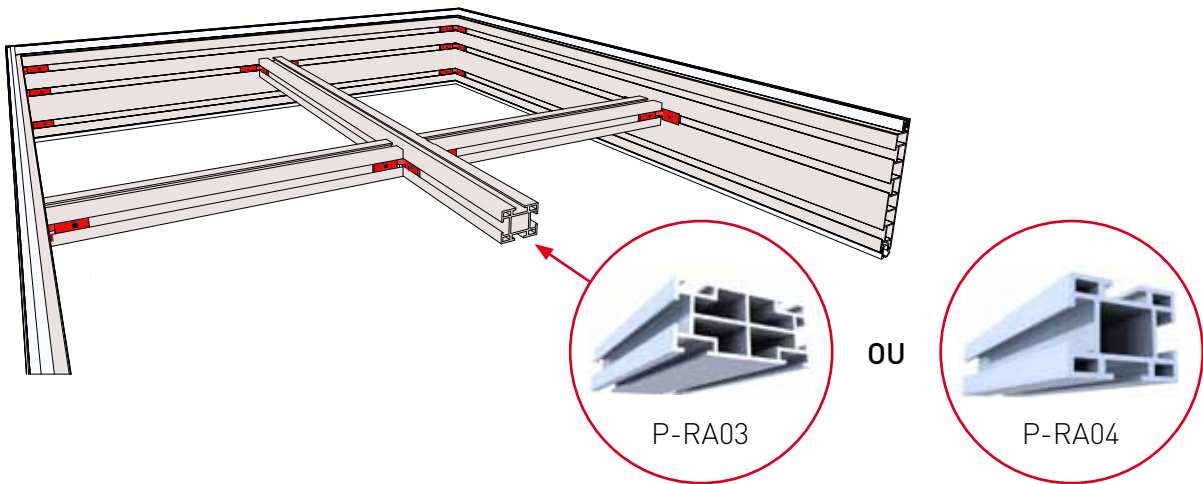
Middle reinforcement held in place by a steel angle bracket of 90°. This reinforcement holds all sides of the frame in place.



P-EF01

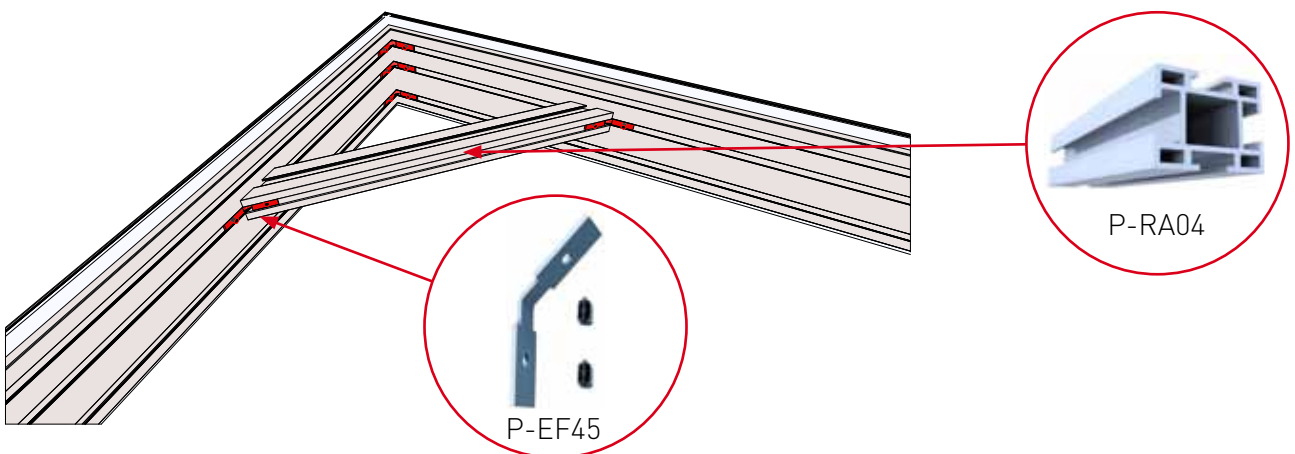
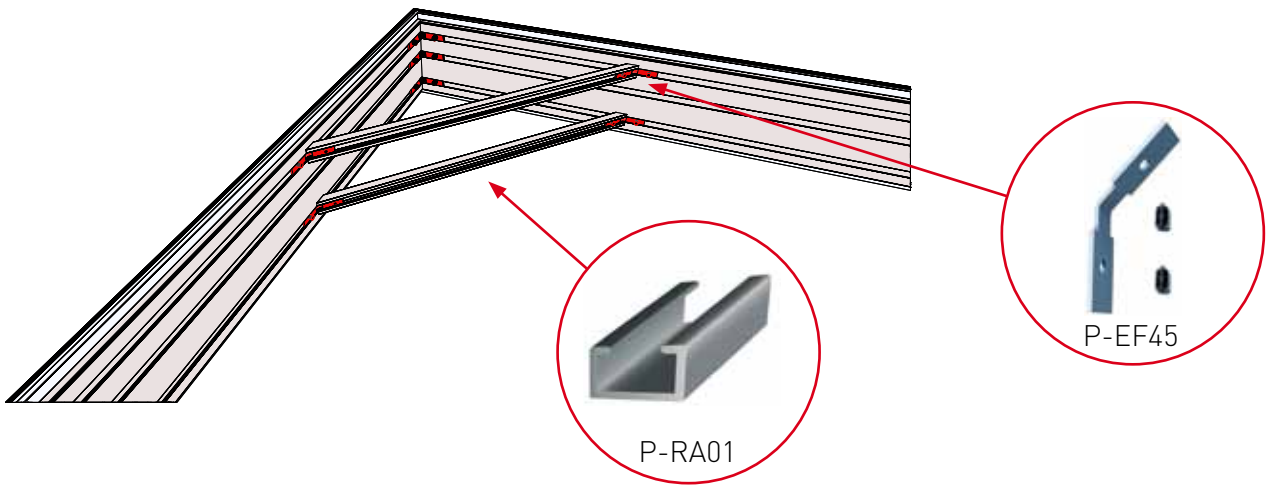
Steel bracket of 90° with two hex head screws holding the reinforcements in place.

Crossed reinforcements (larger than 2m) with P-RA03 and P-RA04



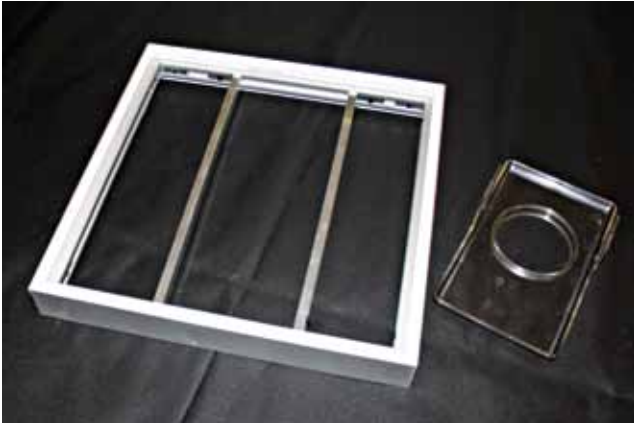
P-RA03 and P-RA04 reinforcements can be used to reinforce large frames.

45° reinforcements



Installation of the spotlight holder

A spotlight holder can be installed into a frame as follows:



P-CPA frame with reinforcements P-RA01 + spotlight holder



Installation of the spotlight holder

Reinforcements must be positioned apart at a distance equal to the width of a spotlight holder. The reinforcements will then be drilled in order to attach the holder to them.



Covering a frame with fabric



1. Position the putty knife



2. Clip the fabric into the profile



3. Tilt the putty knife by 90°



4. Do this for the whole frame



5. Prepare to trim the fabric



6. Trim the entire fabric leaving the safety margin



7. Tuck the margin into the profile



8. Locate the spotlight holder



9. Cut a hole in the fabric



10. Fit the spotlight



Covered frame with spotlight

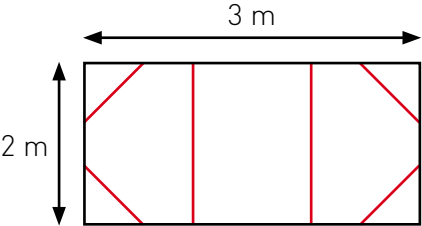


Covered frame with spotlight

PURCHASE ORDER

FOR FRAMES AND SELFSUPPORTING CEILINGS

CLIPSO
so different

<u>YOUR DRAWINGS</u>	 <p style="margin: 0;">3 m</p> <p style="margin: 0;">2 m</p>
-----------------------------	--

Draw a diagram of the frame to which the order form applies.

<u>YOUR DRAWINGS</u>	
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<u>YOUR DRAWINGS</u>	
-----------------------------	--

Delivery type	Please tick the box	Your signature, date and stamp
I organize the collection	Yes <input type="checkbox"/>	
By carrier	Yes <input type="checkbox"/>	
By plane	Yes <input type="checkbox"/>	
By maritime carrier	Yes <input type="checkbox"/>	
By express mode ⁽¹⁾	Yes <input type="checkbox"/>	

Certifications and labels

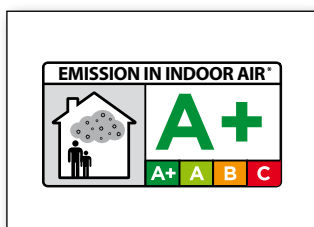
Certified enviro-labelled products.

A limited number of companies benefit from product certification - this includes CLIPSO. CLIPSO products meet safety standards so that your installation can be carried out compliant to standards. This requirement, based on technical advances, is confirmed through certification and testing established by official French and international organisations.



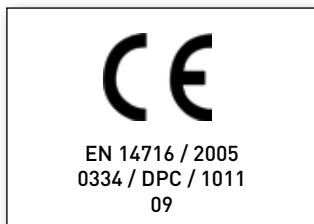
ISO 9001 - 2008 Certification

In 2010, thanks to its commitment to the continued improvement of the quality of its work and services, CLIPSO Productions is certified ISO 9001. This quality system covers the following areas of validity: design, manufacture and marketing of innovative textile coverings for stretch ceilings and walls for buildings.



A+ Labelling

The entire range of CLIPSO coverings is labelled A+ : the best score. This labelling, which gives information about the level of VOCs (or volatile organic compounds) emitted by CLIPSO coverings, has been compulsory for construction and decorative products since 1 January 2012 in accordance with the French decree no. 2011-321.



CE Standard

The CE marking was made compulsory for ceilings in public and residential places from 01 October 2007 onwards. CLIPSO products are CE certified, which means that all products can be marketed on the European market, meet all regulatory requirements, can circulate freely on the French territory and in the European Economic Area, and are certified compliant with safety standards.



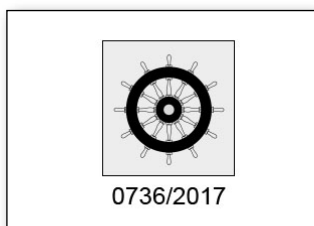
Oeko-Tex Standard 100

Oeko-Tex Standard 100 is the world's foremost textile label for textiles having undergone testing for undesirable substances. CLIPSO coverings bearing this label ensure your well-being, because they are free of cancer-causing agents (CMTs) and volatile organic compounds (VOCs).



Sanitized

In order to guarantee further calmness and comfort, CLIPSO has joined forces with Sanitized, the world leader in textile protection. Thanks to Sanitized treatment, the covering 705 AB has benefited from an anti-microbial and anti-mildew protection, which provides long-lasting protection from the appearance of stains and mildew.



IMO

This certification is awarded after having successfully passed non-flammability testing methods and smoke and toxicity tests. IMO certification only concerns merchant ships and fishing boats, but is not compulsory for sailing boats.

Warnings



The Clipso Technical Guide is solely for the use of CLIPSO approved fitters, distributors and partners.

This guide has been created using our know-how in the field of assembling CLIPSO self-supporting ceilings and frames, and its content is not exhaustive.

The installation of CLIPSO products is the responsibility of the fitters and must comply with the conditions for execution, arrangement and intervention found in standards NF DTU 58.2 P1-1 & DTU 59.4.

CLIPSO does not accept any responsibility in the event that the assembly conditions described in this guide are not observed.

To discover all the possibilities for creating and installing CLIPSO products under the best possible conditions, we recommend that you undertake the training provided by CLIPSO.

This guide may not under any circumstances be used as a training tool for the installation of our products. Please contact us for further details of the training programme and costs.

Any unauthorised reproduction of this Technical Guide, in part or as a whole, will be regarded as illegal. The content and photos may be modified without prior warning.

If you have any suggestions or remarks, please let us know at: info@clipso.com.

CLIPSO also offers two other technical guides: «Stretch Ceilings and Walls» and «CLIPSO Design».

Self-supporting Ceilings & Frames

Technical Guide

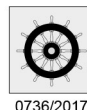
ISO 9001
BUREAU VERITAS
Certification



EN 14716 / 2005
0334 / DPC / 1011
09



Tested for harmful substances
according to Oeko-Tex® Standard 100
CQ 976/1
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