

INSTALLATION MANUAL

FRAME SCREEN

LEONARDO



ORIGINAL INSTRUCTIONS IN ITALIAN LANGUAGE
Translation into English language

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In order to guarantee the best performances of your screen, please
READ CAREFULLY this installation manual.

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1.0 GENERAL INFORMATION

1.1 FRAME SCREEN DESCRIPTION

The frame screen LEONARDO is entirely manufactured in Italy, with high quality materials and projection cloths that guarantee to your system excellent quality performances in compliance with CE legislation.

The screen is designed specifically for home cinema or professional projections. The LEONARDO screen is available in different formats and with different projection surfaces.

1.2 MANUFACTURER'S RIGHTS

Copyrights of this installation manual are exclusively of:

EUROSCREEN SRL

Via Stiria 45/16
33100 Udine - Italy

Tel. +39 0432 522755

Fax +39 0432 524000

info@screenint.com

www.screenint.com

1.3 CONTENTS AND MAP OF THIS MANUAL

This installation manual contains the description of "frame screen" as it is produced by the manufacturer. This manual contains information about installation, use and maintenance of the screen.

It also contains the information about the technical features and safe use of the product.

The installation manual is composed from:

- 1.0 General information
- 2.0 Frame screen description
- 3.0 Assembly
- 4.0 Installation

1.4 WARNINGS

Before assembling and installing the frame screen read carefully the installation manual. Please, store this installation manual so that you can consult it whenever necessary.

When opening the screen packaging, USE VERY CAREFULLY EVENTUAL CUTTERS OR SHARP TOOLS that can damage its content. It is recommended to wear working gloves during the opening of the packaging and the installation of the product.

According to the weight of the product it has to be handled by two or three or more people, based on the relation KG/PERSON: MALE 25 kg. - FEMALE 15 kg.

Install the screen in a location with a temperature between 20°C and 24°C.

The manufacturer does not take responsibility for any damage to property or personal injury if the screen is used outside of recommended specifications or in case of incorrect/poor quality installation.

1.5 WARRANTY - GENERAL INFORMATION

This projection screen is guaranteed 2 years from the purchase date for manufacturing defects.

Responsibility is limited to repairing or substitution of the defected components and without any other charge at our expense.

Components that show obvious signs of normal wear and tear caused by particular environmental and installation situations are excluded from warranty.

Warranty is officially voided if:

- 1) the screen has been dismantled or it is returned with collision damage or defective due to incorrect installation;
- 2) the screen results damaged due to repairing or modifications made by non authorized people;
- 3) the sticker regarding the serial number of the product has been altered, deleted, removed or is illegible.

DO NOT install this screen nearby or over heating or air conditioning systems.

DO NOT install this screen either facing direct sun light or blocking a window.

We advise you to wait 2 hours for the screen to acclimatize before using the screen after delivery, especially if screen is brought into a warm environment from cold.

DO NOT WASH the projection surface with alcohol or solvent nor with commercial cleaners. Every now and then, dust the surface with a dry and clean duster. Please, be very careful because any kind of stain on the cloth is inerasable.

DO NOT HANG TO THE SCREEN and DO NOT HANG ANY OBJECT to it. Please take care that children DO NOT PLAY with the screen as they can get severely injured.

The manufacturer will not accept returns of screens for repair without manufacturer's authorization (RMA number) and without a suitable packaging.

1.6 SCREEN LABELS

This screen is equipped with product identification labels that indicate its essential technical specifications.

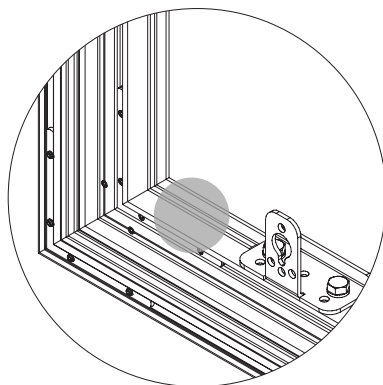
1.6.1 Label n. 01

This label reports the following information:

A) Serial number

1.6.2 Label position

Looking at the screen from the front it. The label is stuck on the rear side of the frame, on the bottom right hand side.

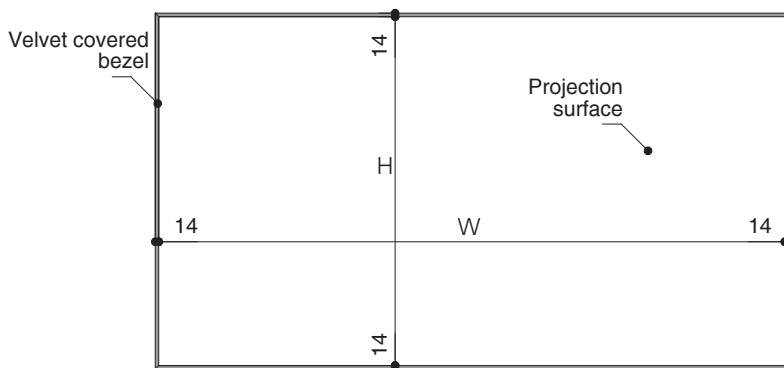


2.0 FRAME SCREEN DESCRIPTION

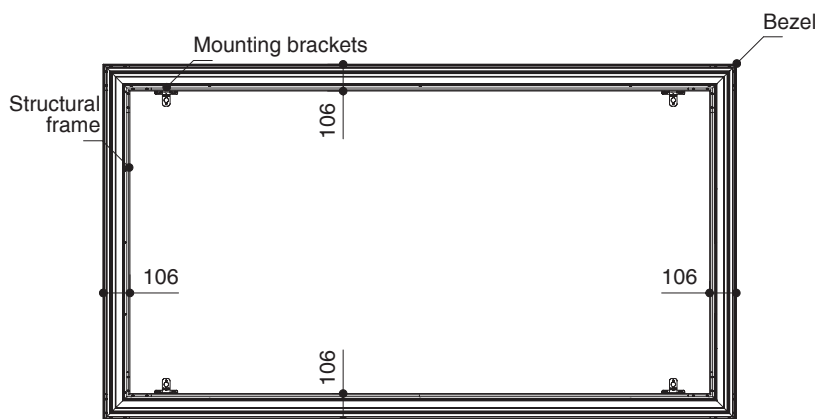
2.1 GENERAL DESCRIPTION

The figures below describe the main elements of the product.

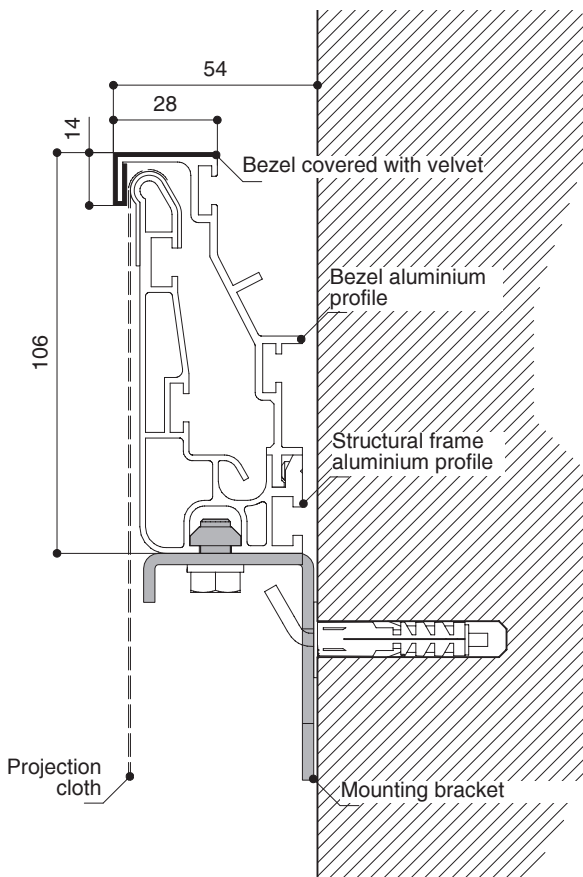
Front view



Rear view



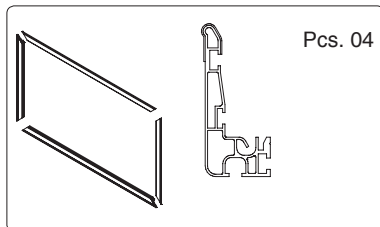
Profiles combination



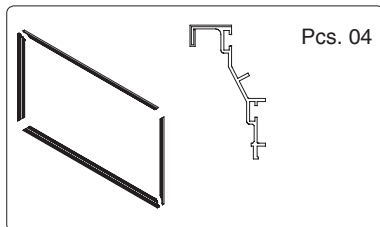
3.0 ASSEMBLY

3.1a LEONARDO WITH OYSTER SURFACE PACKAGING CONTENT:

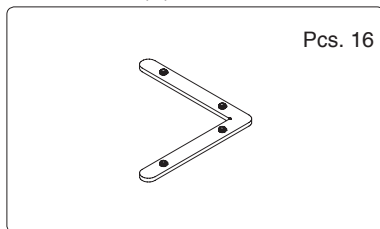
Structural frame segments (A)



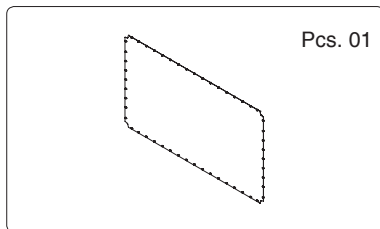
Bezel segments (B)



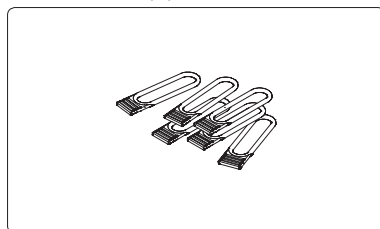
Metal corners (C)



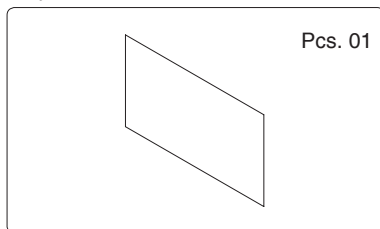
Projection surface (D)



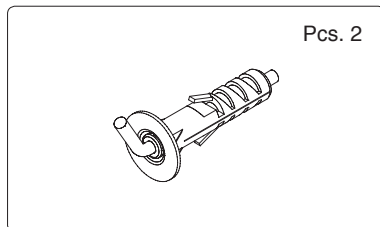
Rubber bands (E)



Projection cloth



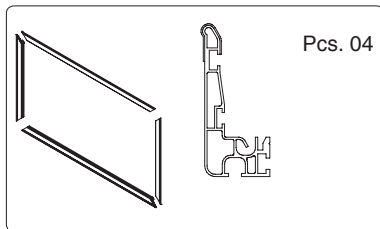
Screws + wall plugs (G)



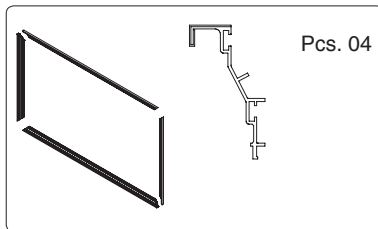
3.1b LEONARDO WITH PVC SURFACES PACKAGING CONTENT:

Pvc surfaces: White, HD Performer, Microperforated,
Lumi Grey Microperforated, Lumi Grey

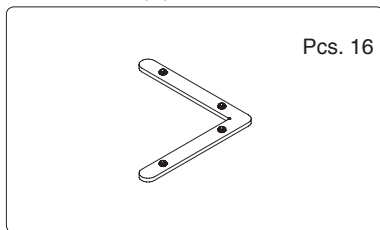
Structural frame segments (A)



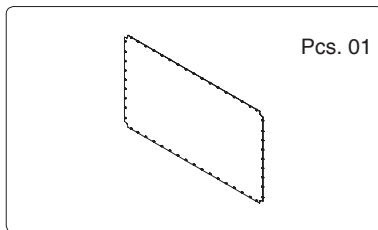
Bezel segments (B)



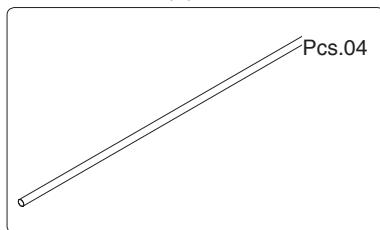
Metal corners (C)



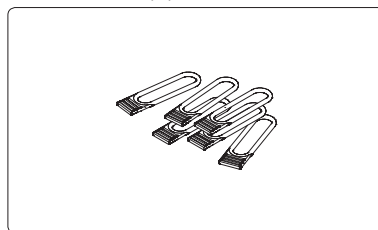
Projection surface (D)



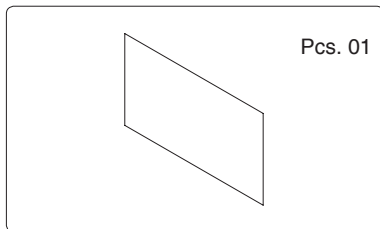
Galvanized rods (E)



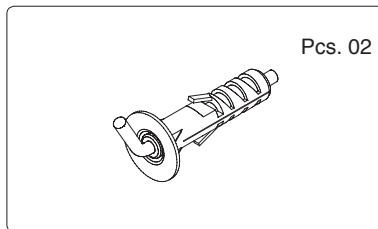
Rubber bands (E)



Projection cloth



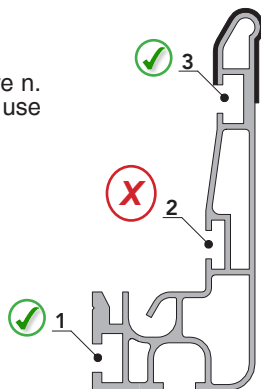
Screws + wall plugs (G)



3.2 STRUCTURAL FRAME ASSEMBLY

The first step of Leonardo screen installation consists in assembling the structural frame.

The slots to be used to insert the metal corners (C) are n. 1 and n. 3 as shown in the drawing on the right. Do not use slot n. 2 because this is for the cursors only.



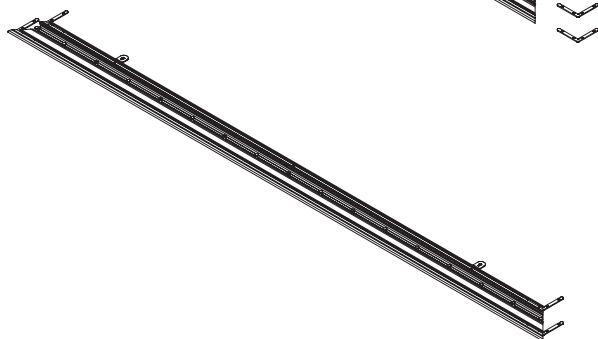
Step 1a

Place the metal corners (C) near the slots n. 1 e n. 3 of one long structural frame segment (A).



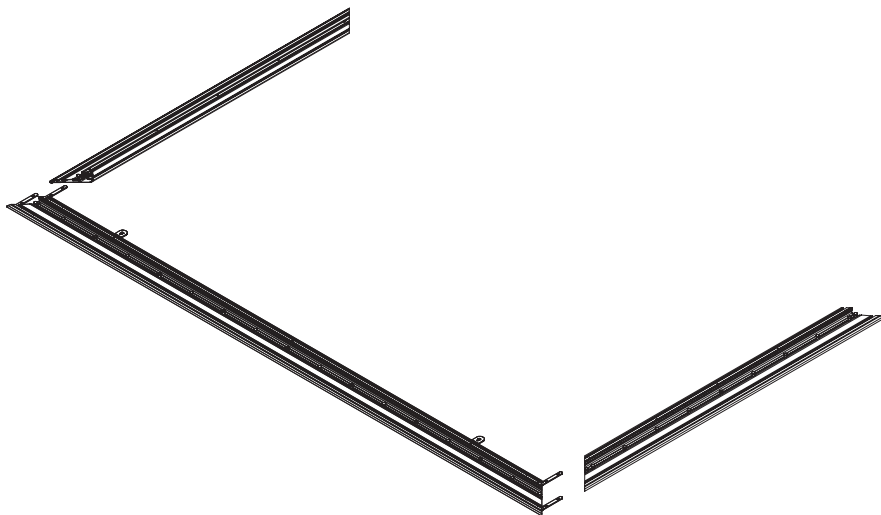
Step 1b

Insert the metal corners (C).



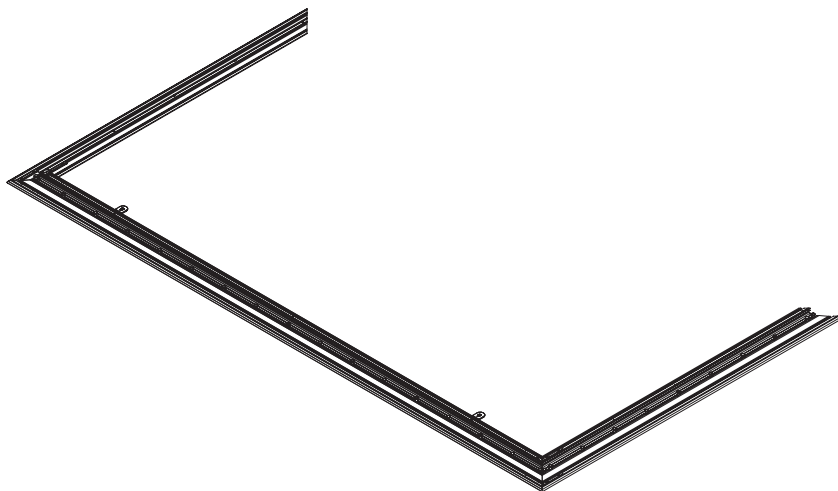
Step 2a

Put the short structural frame segments (A) close to the metal corners (C).



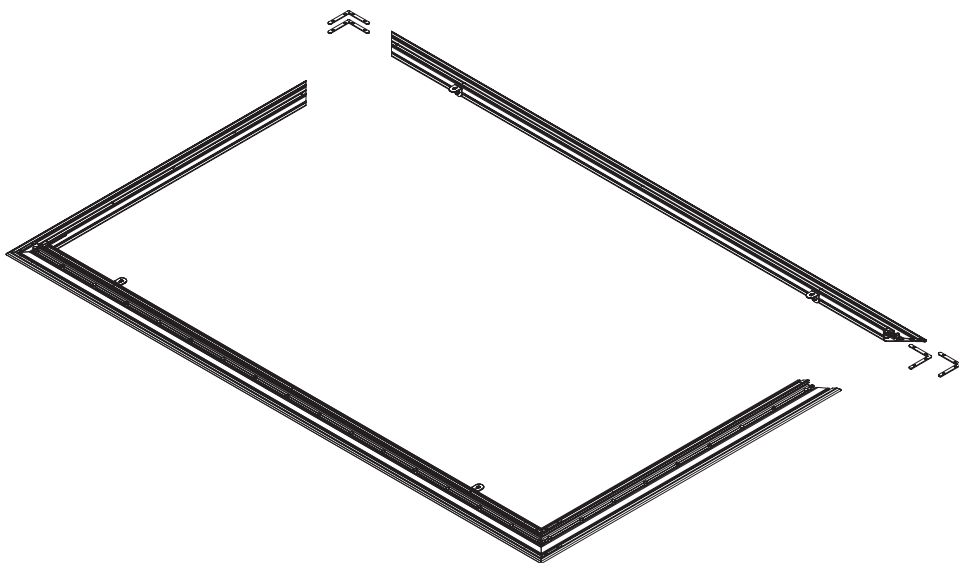
Step 2b

Insert the short structural frame segments (A).



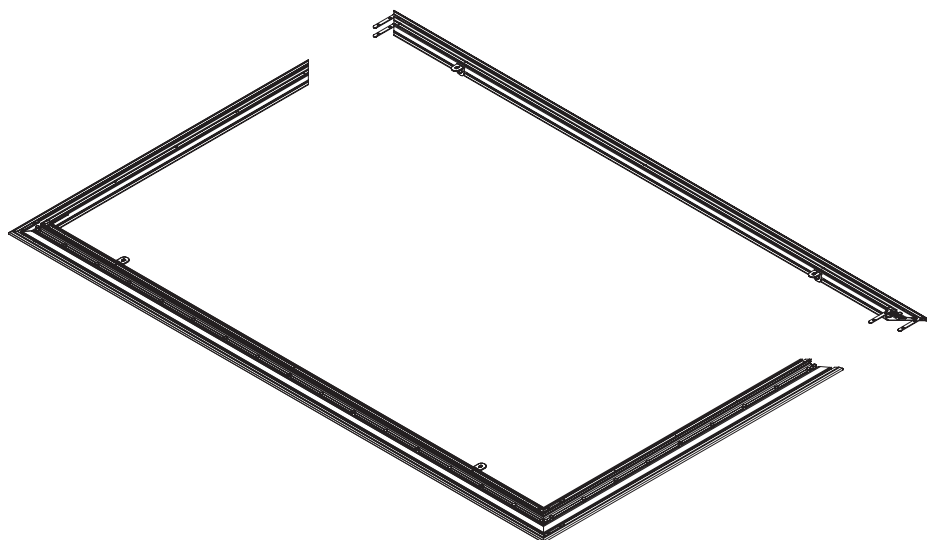
Step 3a

Place the remaining metal corners (C) close to the remaining long structural frame segment.



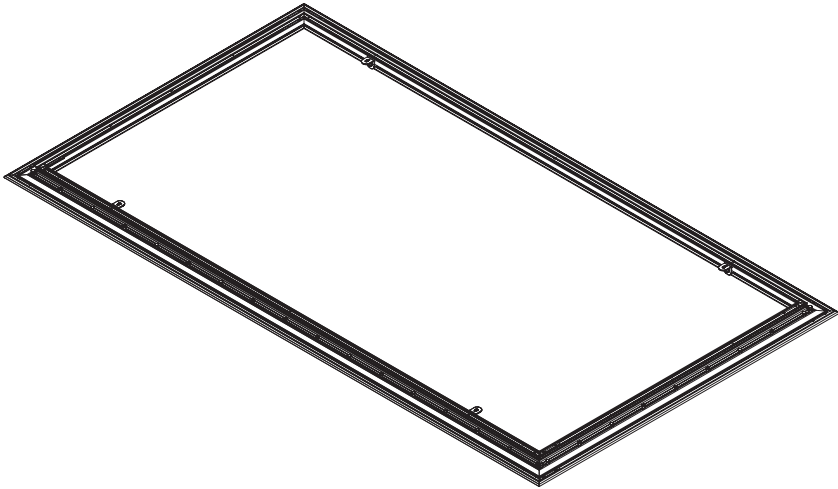
Step 3b

Insert the metal corners (C) to this frame segment.



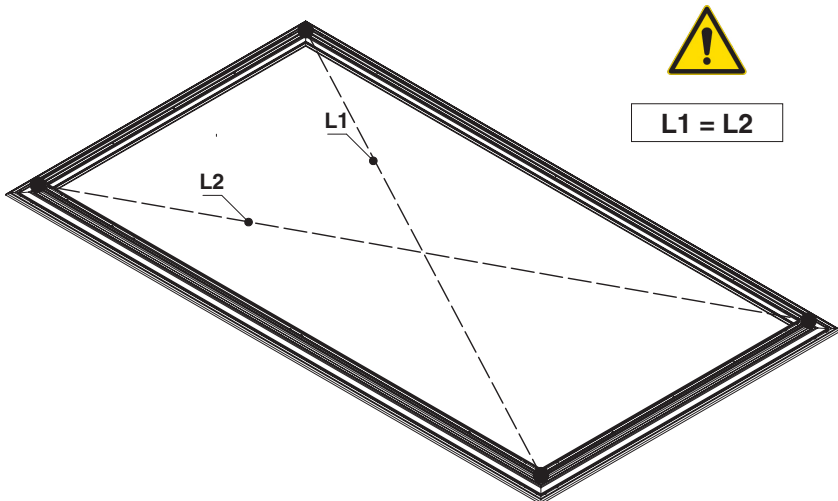
Step 4a

Insert the long structural frame segment, in order to complete mounting of the frame.

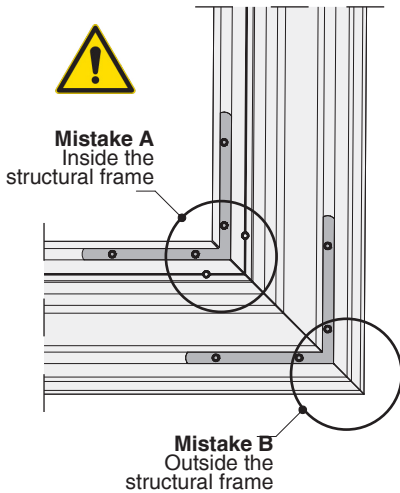


Step 4b

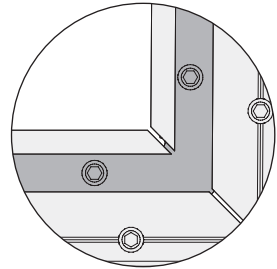
Before tightening all the dowels, in order to perfectly close the metal corners to the structural frame segments, check that the measurements L1 and L2 are the same. The maximum tolerance is 2 mm.



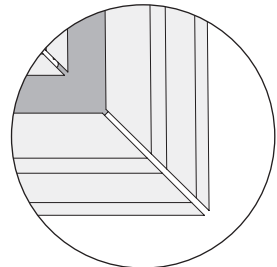
For a perfect assembly, it is necessary to check carefully the fixing of the metal corners (C), because, as shown in the figures below, mistakes will compromise the whole installation, causing permanent damages to the cloth.



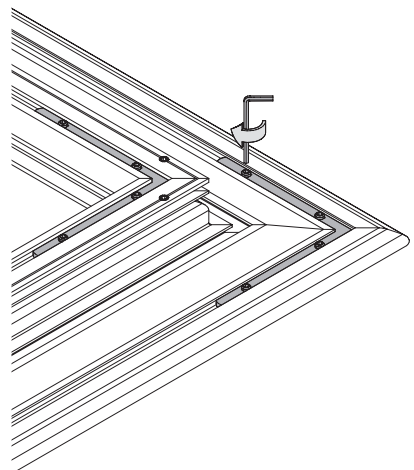
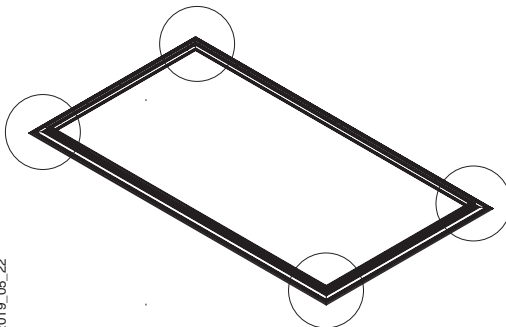
Mistake A
Internal corner
OPEN



Mistake B
External corner
OPEN



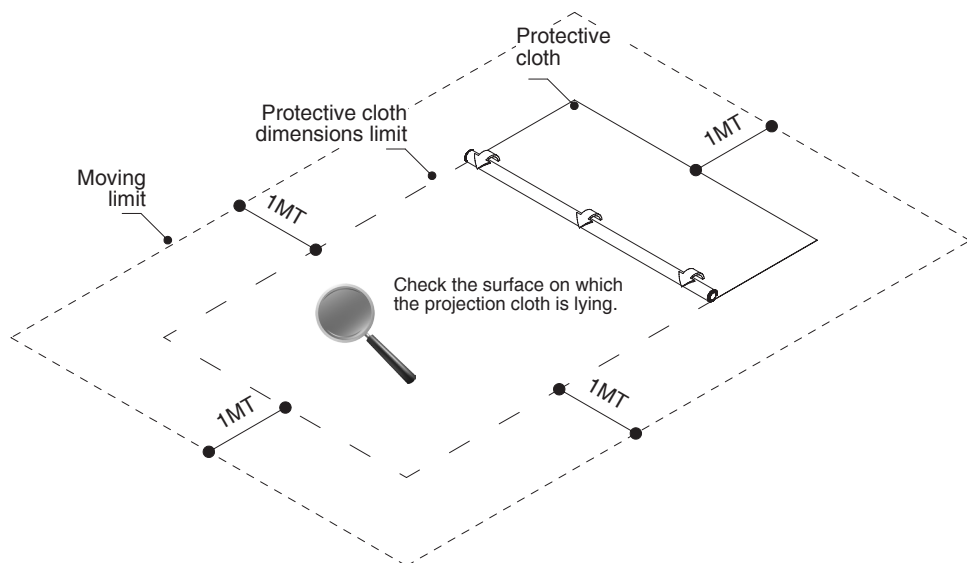
Check carefully as above and proceed with tightening the dowels on each corner.



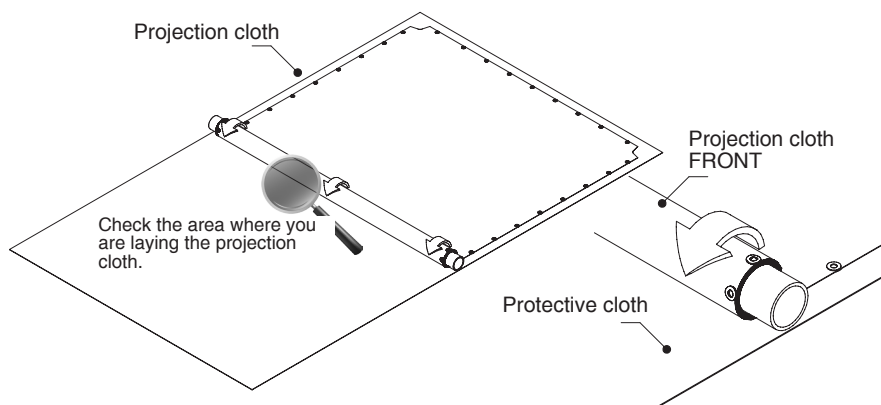
3.3 PROJECTION SURFACE MOUNTING

3.3a OYSTER SURFACE MOUNTING

Before fixing the cloth, make sure to have enough moving space for all the operations, as indicated by the figure below. Before laying the projection cloth down, make sure that the **floor where you will lay is perfectly clean and smooth**. It is mandatory to lay a protective equipment cloth over the floor, before laying on it the projection cloth.

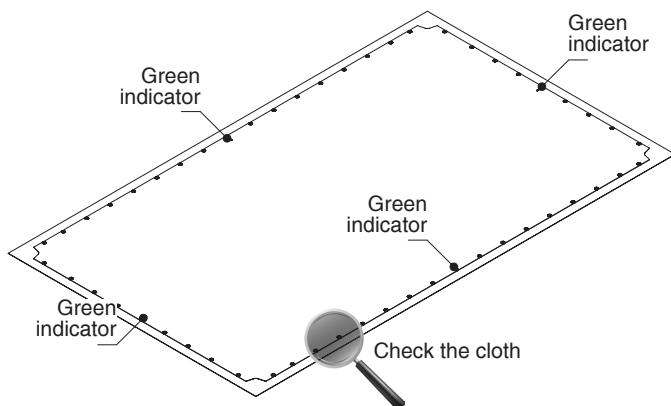


Handling of the projection cloth has to be carried out by at least two people. The cloth has to be layed down with the projection side facing downward.
Do not move the projection cloth once it is layed down.



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After laying the protective cloth, make sure that the projection cloth is not damaged. Moreover, it is advised to leave the cloth layed down for at least 10 minutes, before proceeding with fixing it to the pre-assembled structural frame, as per chapter 3.2.

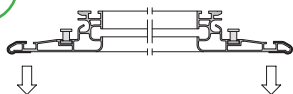


Check that every green centre indicator on each frame corresponds to the central ring on the projection surface.

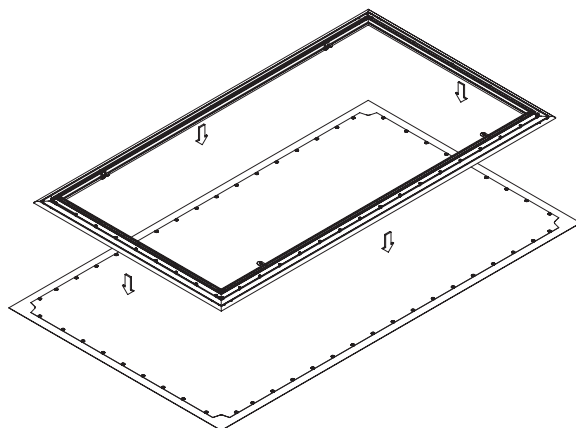
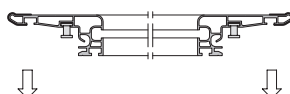
Now, lay the pre-assembled structural frame on the projection cloth, making sure that the rear side of the frame is facing upwards.



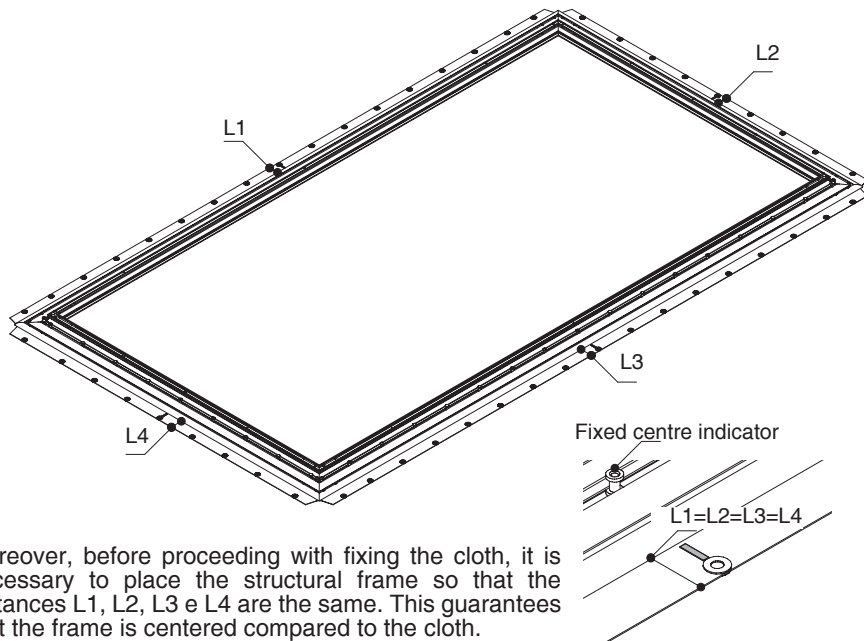
Correct position
cursors facing upwards



Wrong position
cursors facing downwards

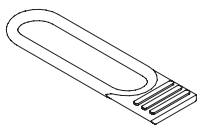


For an easy installation of the projection cloth to the structural frame, this frame has to be centered in the most precise way, pairing the green centre indicators applied on the cloth and the fixed centre indicator.

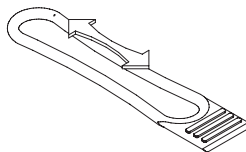


Moreover, before proceeding with fixing the cloth, it is necessary to place the structural frame so that the distances L1, L2, L3 e L4 are the same. This guarantees that the frame is centered compared to the cloth.

Now we are ready to fix the first 4 rubber bands. In order to soften them, it is necessary to stretch them as shown on the figures below.



Press strongly the rubber bands extremities



Stretch the rubber band moving it from the centre to the extremities

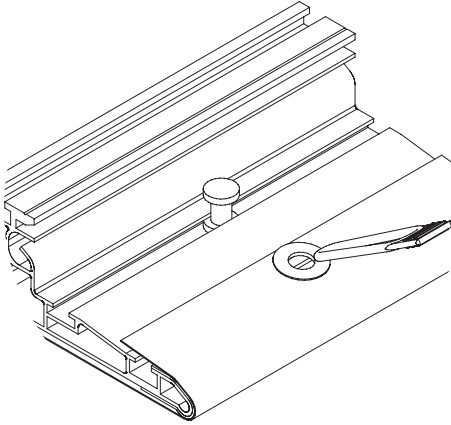
At the end of this procedure, you will notice that the rubber band is softer and its length is increased of about 5 mm.

This procedure has the aim to make the screen fixing and eventual regulations easier.

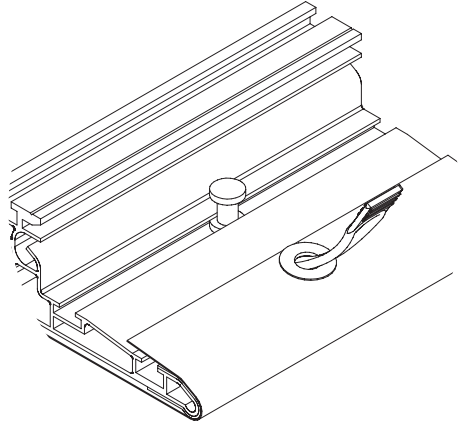
Proceed now with fixing the screen to the structural frame.
The drawings below describe how to fix the rubber bands.

This operation has to be carried out by at least two professional people, taking care that the Oyster surface is very delicate and any damage on it will be permanent.

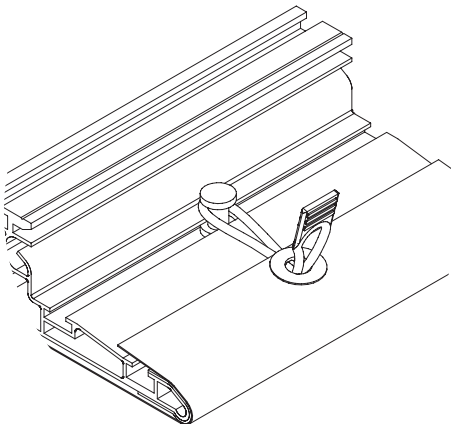
Step 1



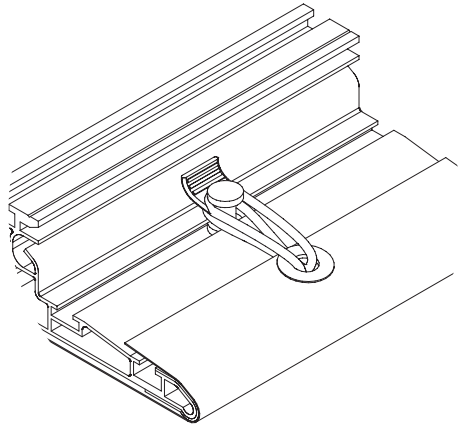
Step 2



Step 3



Step 4

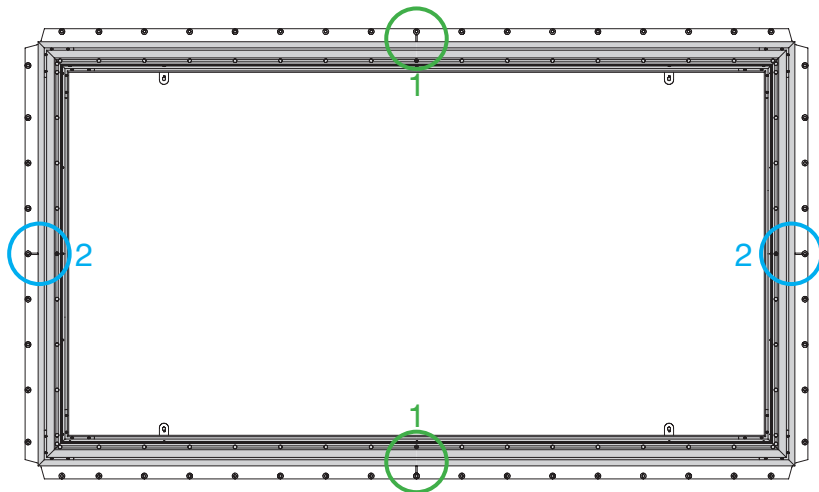


IMPORTANT:

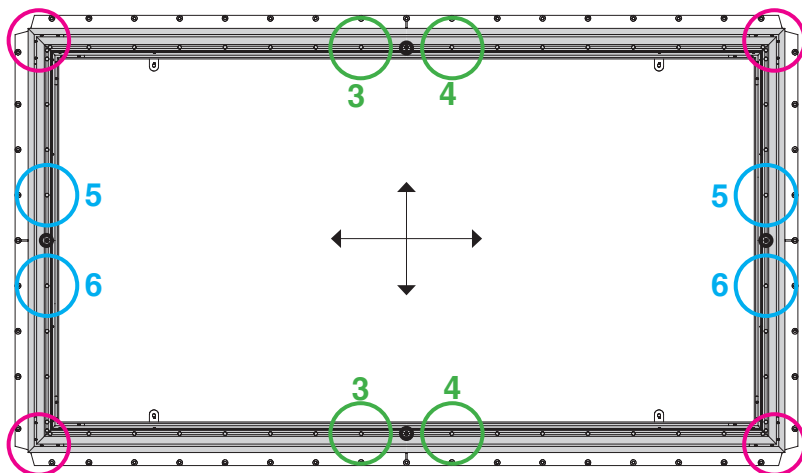
The sequence for fixing the rubber bands is shown below.

The first rubber bands that have to be fixed are those necessary for centring the cloth.

It is important that fixing is carried simultaneously starting from the opposite sides because this defines the exact central position of the cloth.



After having checked the exact centre, proceed with fixing all the rubber bands, following the sequence indicated below: from the centre outwards and the rubber bands on the corner have to be fixed as last ones.

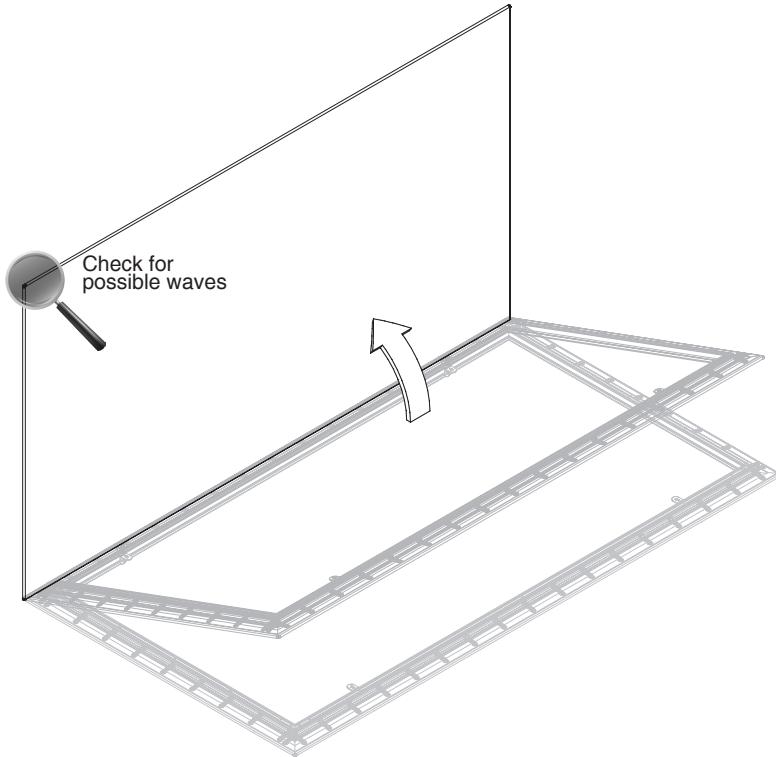


After having fixed the cloth to the structural frame, lift the screen in vertical position, as shown by the figure below and check that there are not waves or folds on the projection cloth.

If there are waves it is enough to detach and fix again the rubber bands.

Waves can appear because of different factors, among the others the wrong centring and the wrong sequence of the rubber bands fixing.

For example: waves can appear, if the sequence of rubber bands fixing is carried out from the sides towards the centre.

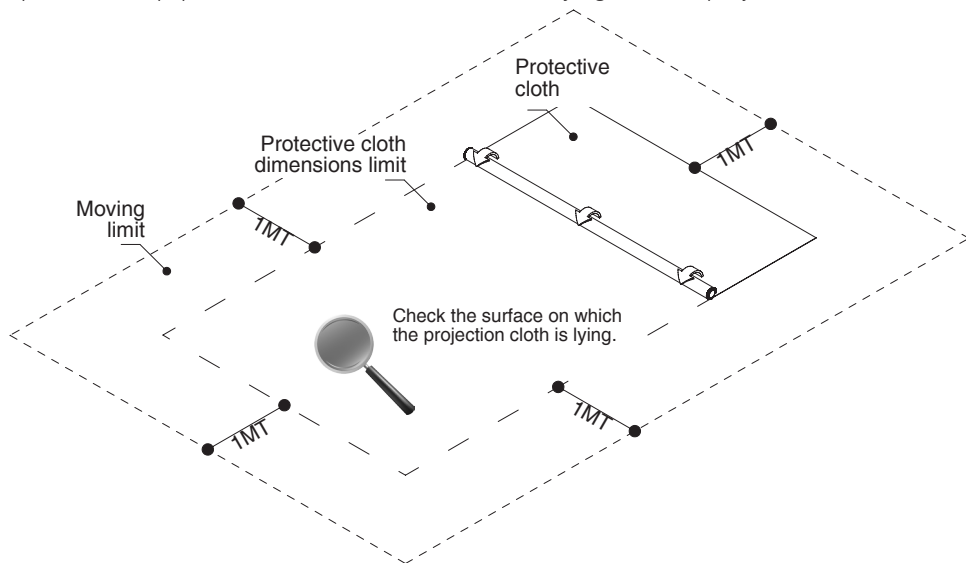


Before proceeding with the bezel assembly, it is mandatory to wait for about 10 minutes. During this time, both the screen and the bands have time to settle.

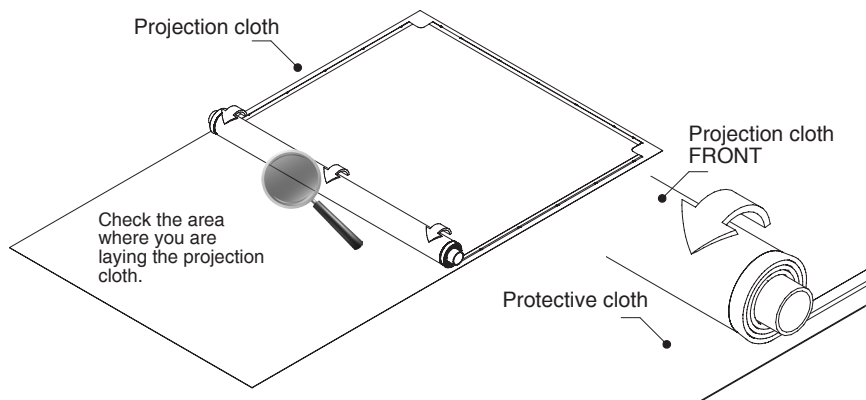
This time is necessary because, after the bezel is mounted on the structural frame, it is not possible to make adjustments on the rubber bands any more.

3.3 b PVC SURFACES MOUNTING

Before fixing the cloth, make sure to have enough moving space for all the operations, as indicated by the figure below. Before laying the projection cloth down, make sure that the **floor where you will lay is perfectly clean and smooth**. It is mandatory to lay a protective equipment cloth over the floor, before laying on it the projection cloth.

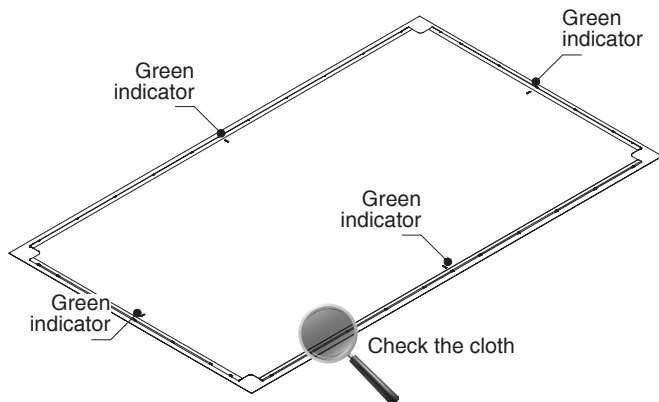


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Do not move the projection cloth once it is layed down.



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After laying the protective cloth, make sure that the projection cloth is not damaged. Moreover, it is advised to leave the cloth layed down for at least 10 minutes, before proceeding with fixing it to the pre-assembled structural frame, as per chapter 3.2.

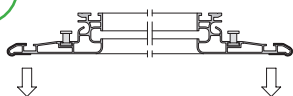


Check that every green centre indicator on each frame corresponds to the central ring on the projection surface.

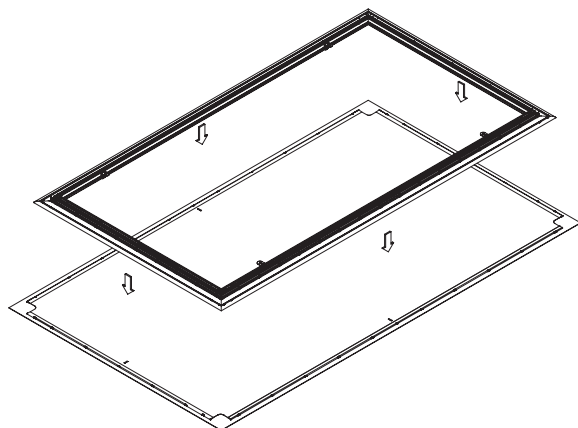
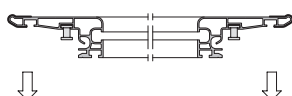
Now, lay the pre-assembled structural frame on the projection cloth, making sure that the rear side of the frame is facing upwards.



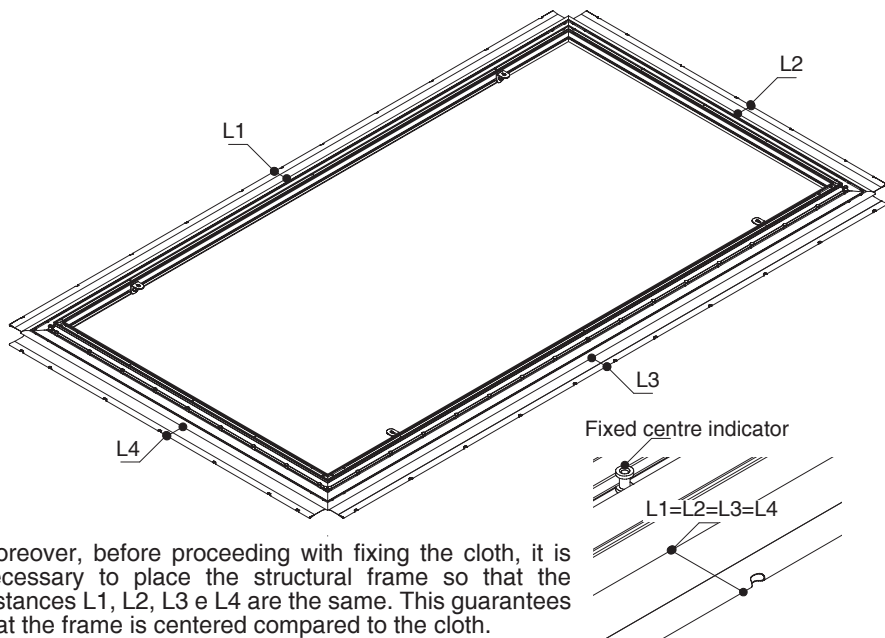
Correct position
cursors facing upwards



Wrong position
cursors facing downwards

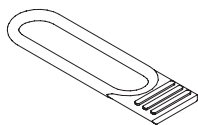


For an easy installation of the projection cloth to the structural frame, this frame has to be centered in the most precise way, pairing the green centre indicators applied on the cloth and the fixed centre indicator.

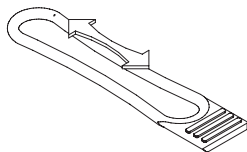


Moreover, before proceeding with fixing the cloth, it is necessary to place the structural frame so that the distances L1, L2, L3 e L4 are the same. This guarantees that the frame is centered compared to the cloth.

Now we are ready to fix the first 4 rubber bands. In order to soften them, it is necessary to stretch them as shown on the figures below.



Press strongly the rubber bands extremities



Stretch the rubber band moving it from the centre to the extremities

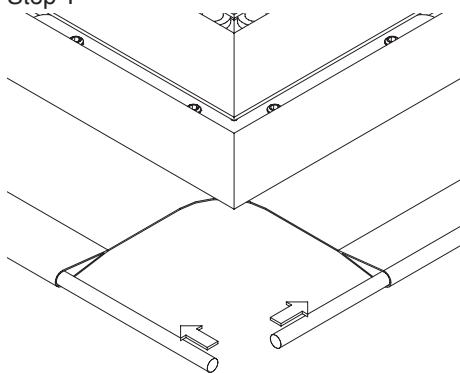
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This procedure has the aim to make the screen fixing and eventual regulations easier.

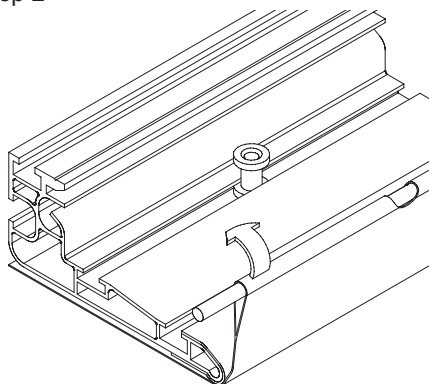
Proceed now with fixing the screen to the structural frame.
The drawings below describe how to fix the rubber bands.

This operation has to be carried out by at least two professional people, taking care that the Oyster surface is very delicate and any damage on it will be permanent.

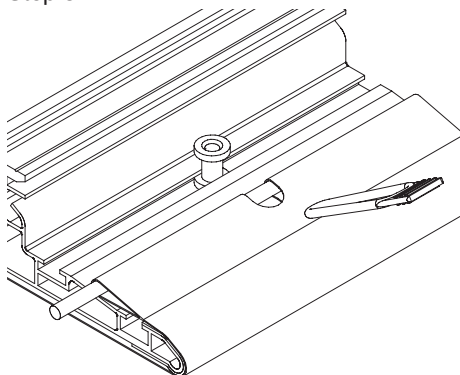
Step 1



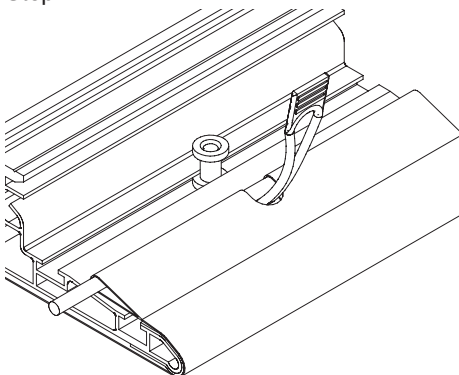
Step 2



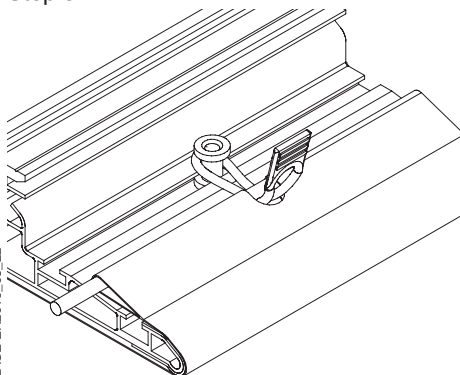
Step 3



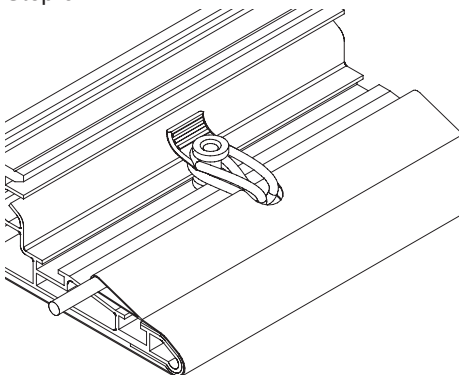
Step 4



Step 5

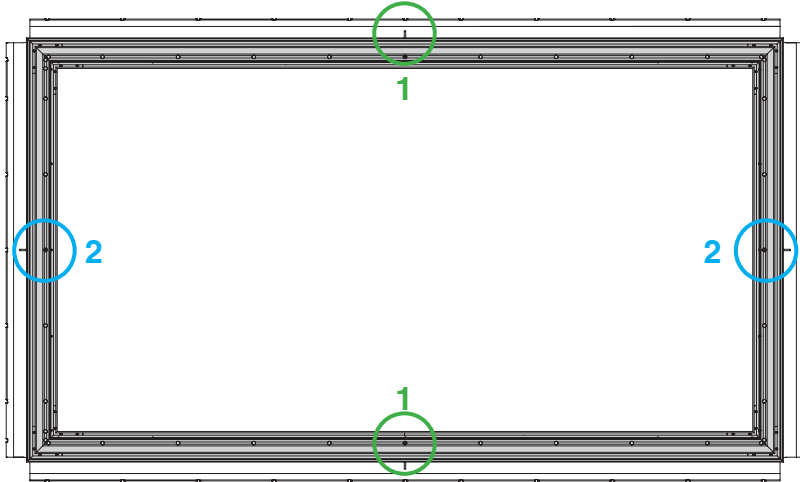


Step 6

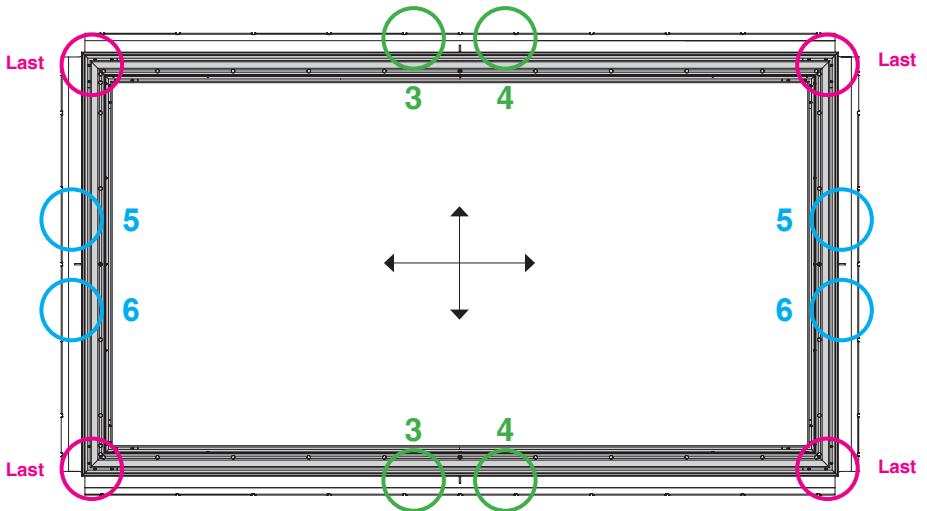


IMPORTANT:

The sequence for fixing the rubber bands is shown below.
 The first rubber bands that have to be fixed are those necessary for centring the cloth.
 It is important that fixing is carried simultaneously starting from the opposite sides because this defines the exact central position of the cloth.



After having checked the exact centre, proceed with fixing all the rubber bands, following the sequence indicated below: from the centre outwards and the rubber bands on the corner have to be fixed as last ones.

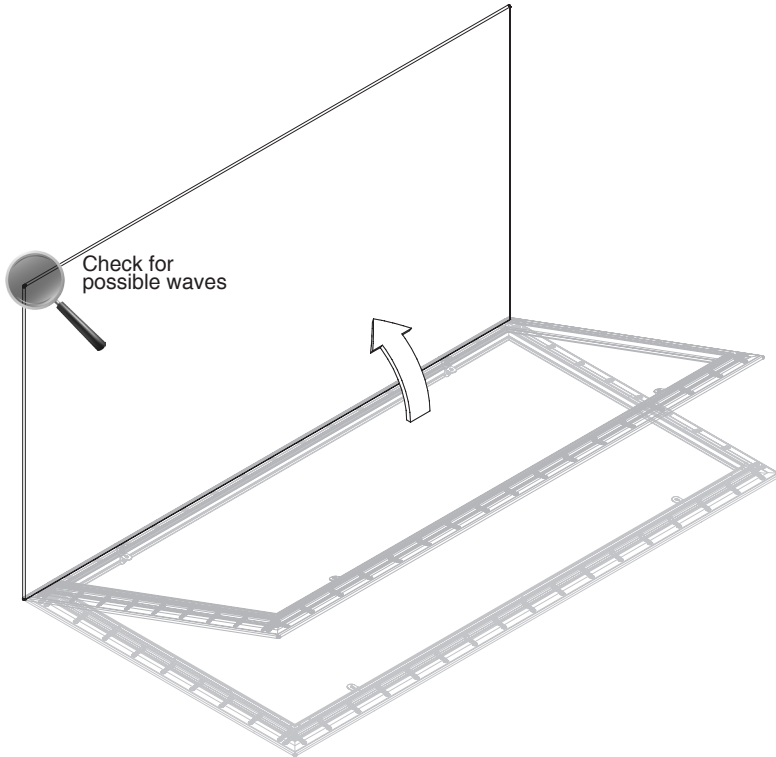


After having fixed the cloth to the structural frame, lift the screen in vertical position, as shown by the figure below and check that there are not waves or folds on the projection cloth.

If there are waves it is enough to detach and fix again the rubber bands.

Waves can appear because of different factors, among the others the wrong centring and the wrong sequence of the rubber bands fixing.

For example: waves can appear, if the sequence of rubber bands fixing is carried out from the sides towards the centre.

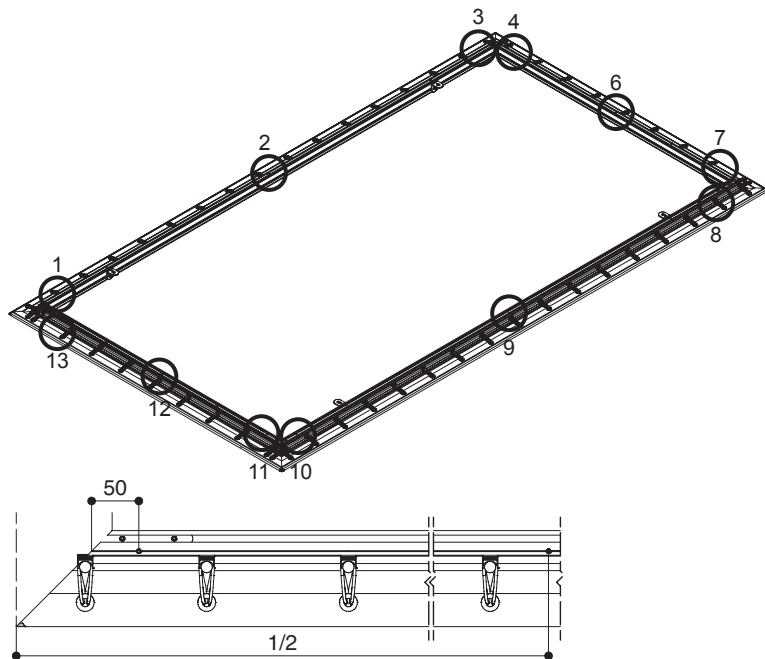


Before proceeding with the bezel assembly, it is mandatory to wait for about 10 minutes. During this time, both the screen and the bands have time to settle.

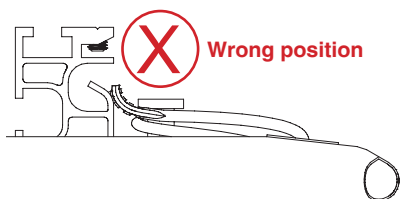
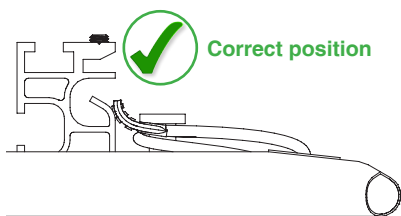
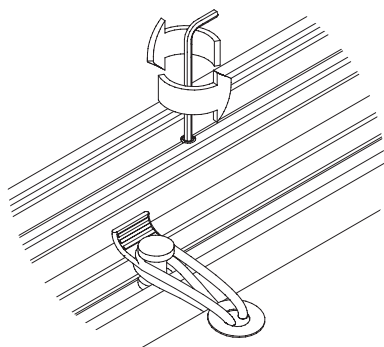
This time is necessary because, after the bezel is mounted on the structural frame, it is not possible to make adjustments on the rubber bands any more.

3.4 THIN BEZEL ASSEMBLY

Before proceeding with mounting the bezel segment (B), loosen the pre-mounted dowels on the structural profile, in order to assemble easily the structural frame to the bezel segments. Depending on the size of the screen, the dowels will always be on the extremities and in the centre of the profile at the distances shown in the figure below.



With a suitable Allen key, loose the dowels turning counterclockwise.

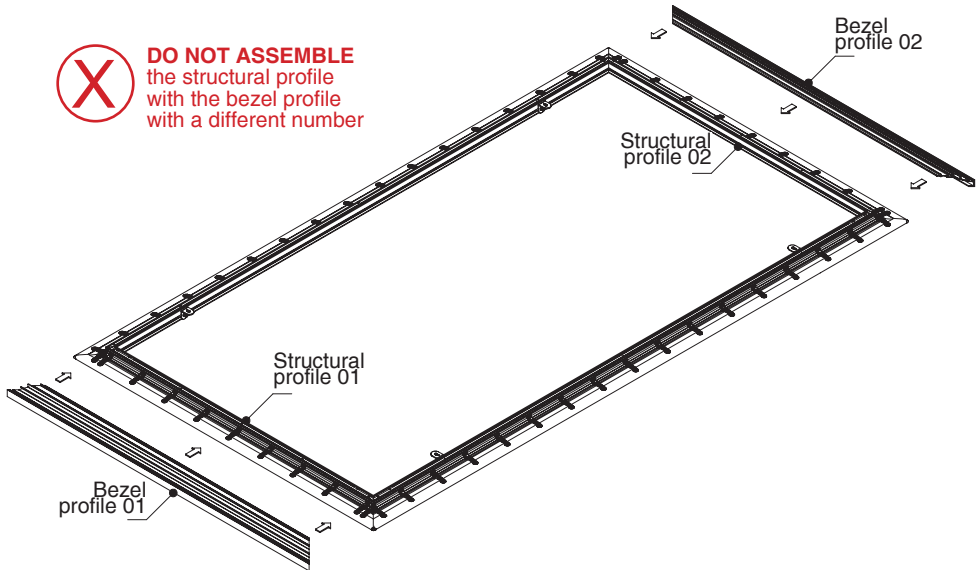


At this point, proceed with fixing the bezel segments.

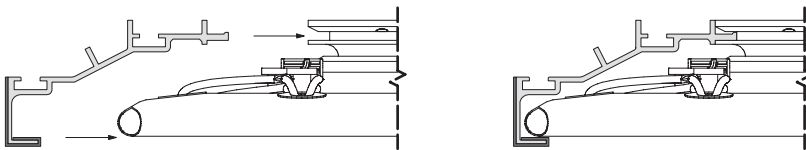
Take the frame profile rods with the same number and move them close to the structural profile and insert them. To insert them, lift gently the affected side.



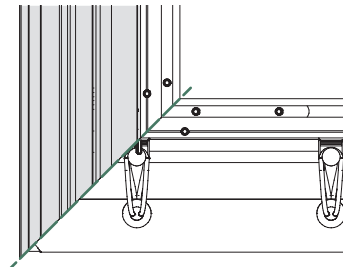
DO NOT ASSEMBLE
the structural profile
with the bezel profile
with a different number



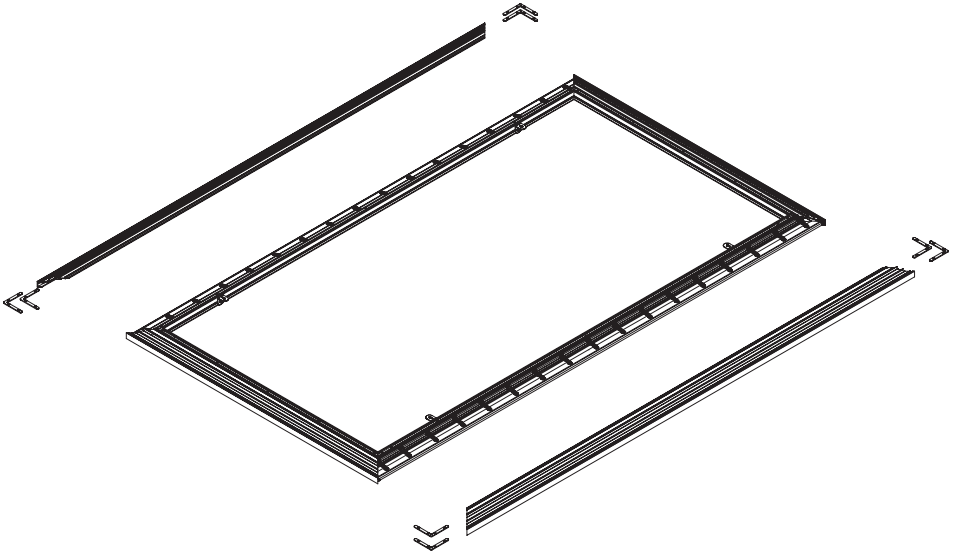
The figure below indicates how to fix the bezel profile to the structural profile.



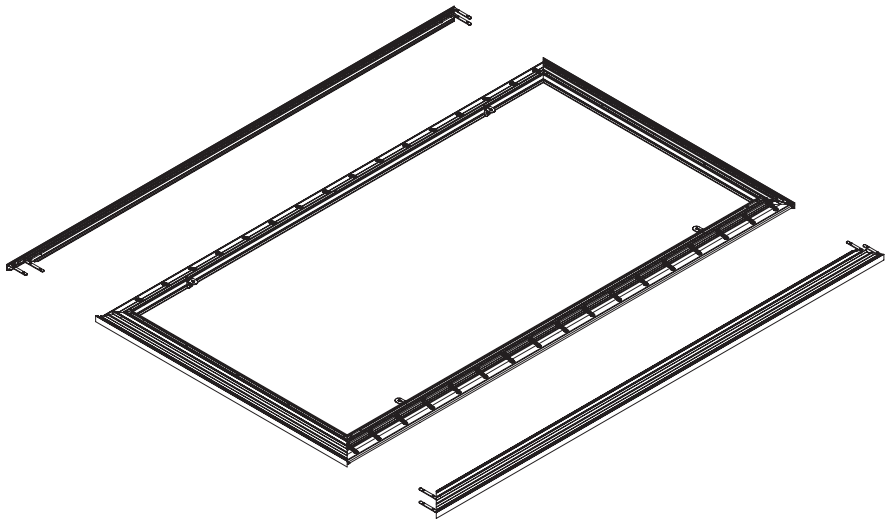
Before fixing the bezel, make sure that it is **PERFECTLY** aligned with the structural frame.
Now tighten the dowels.



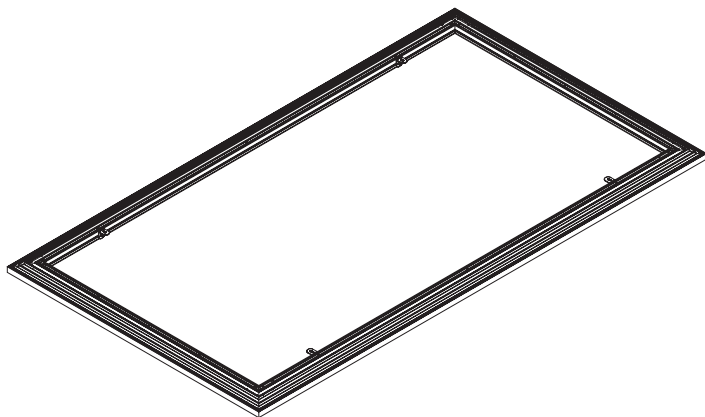
Once the short bezel segments are placed and fixed, proceed with taking the bezel long segments and prepare the metal corners (C) to be fixed.



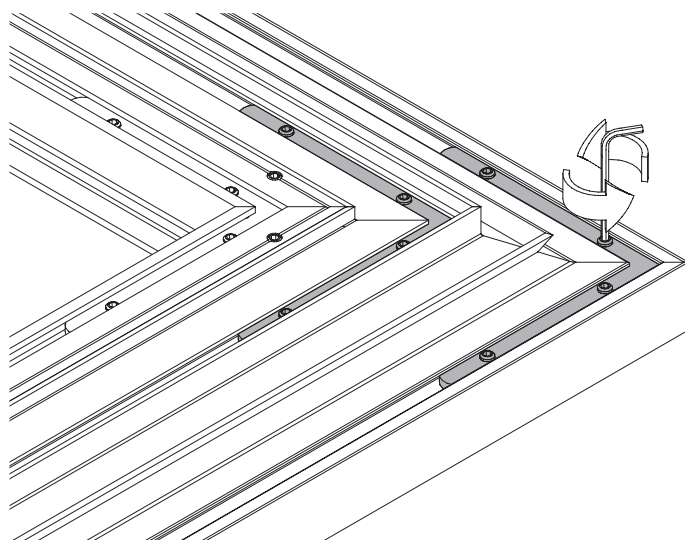
Insert the metal corners without tightening them, making sure that the dowel is loose and but not completely unscrewed.



Insert the metal corners carefully to the short sides and place the long bezel profiles close.



At this point, screw tightly the dowels.



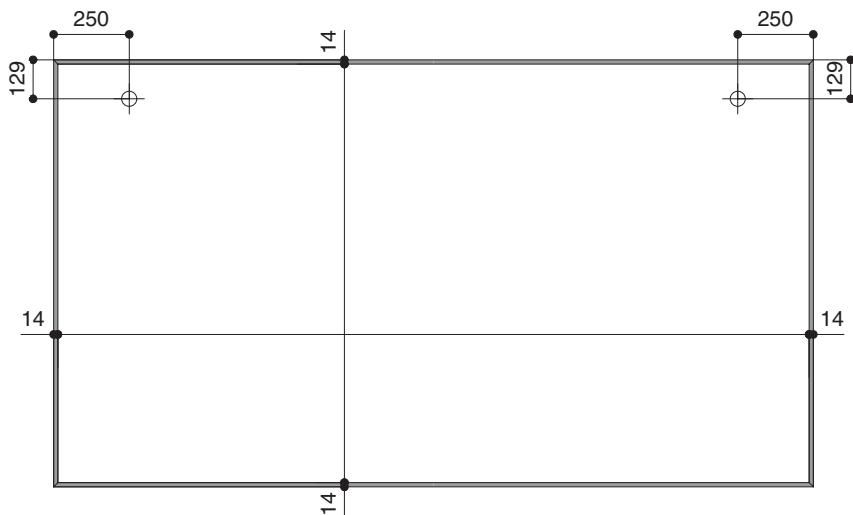
4.0 INSTALLATION

4.1 WALL MOUNTING

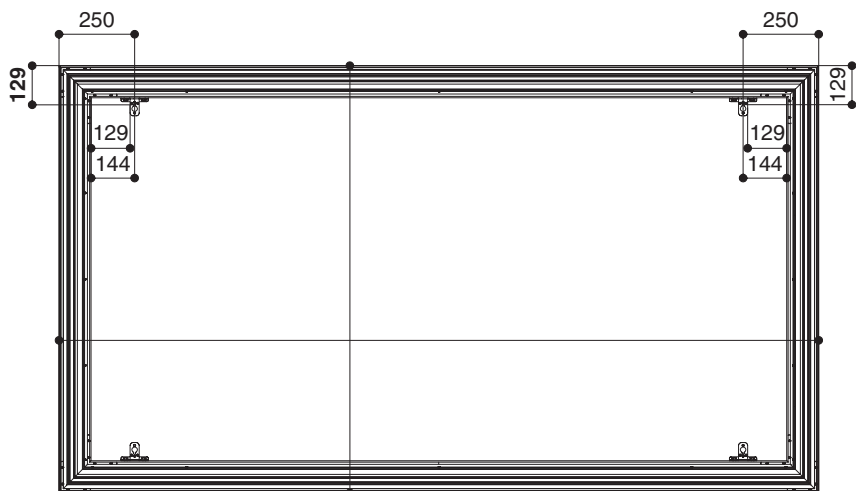
The mounting brackets position is shown in the figures below.

The mounting brackets are already fixed to the structural profile, in order to ease the installation.

Front view



Rear view



Mounting brackets details.

