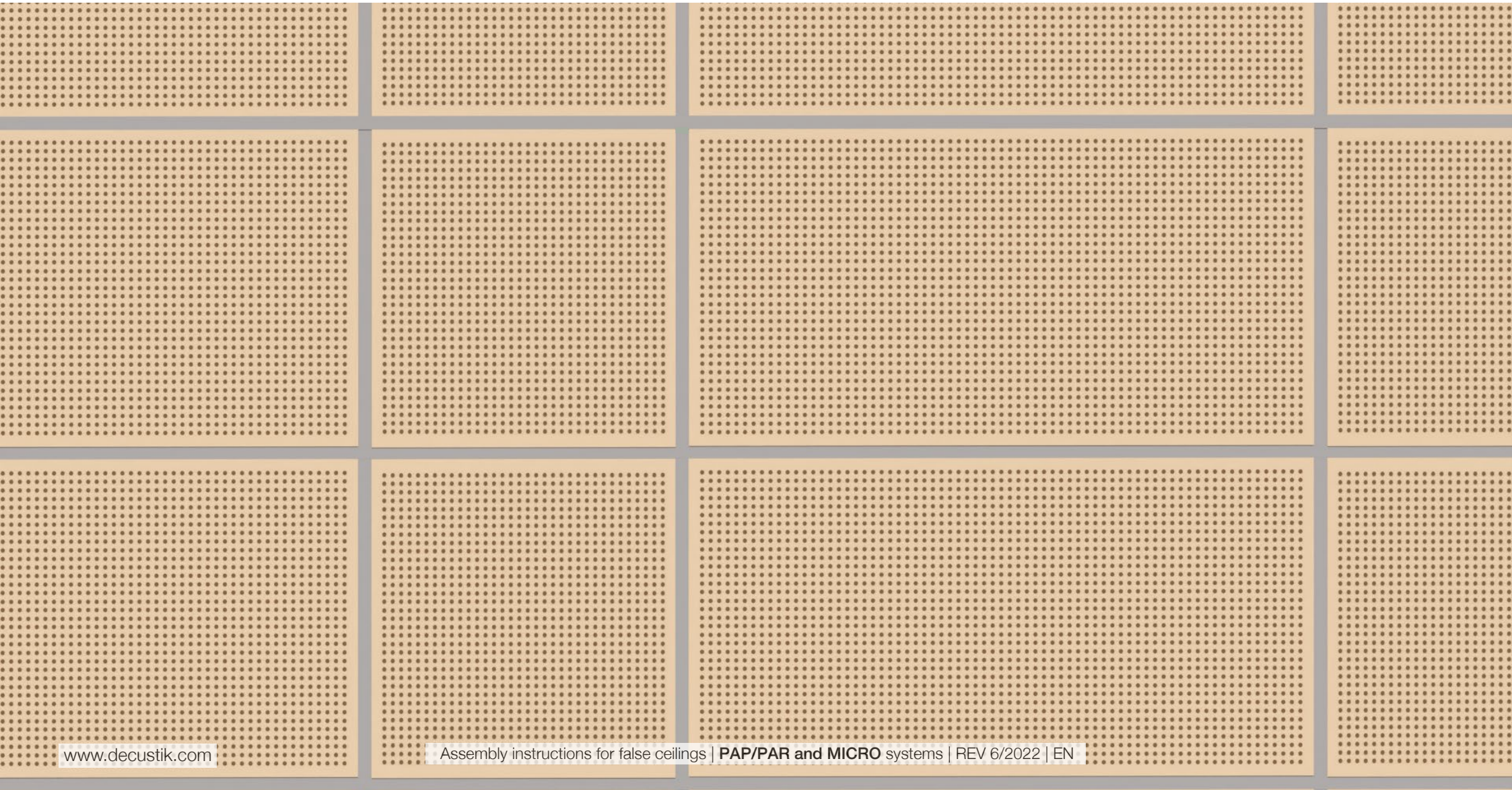
Assembly instructions for false ceilings PAP/PAR and MICRO systems

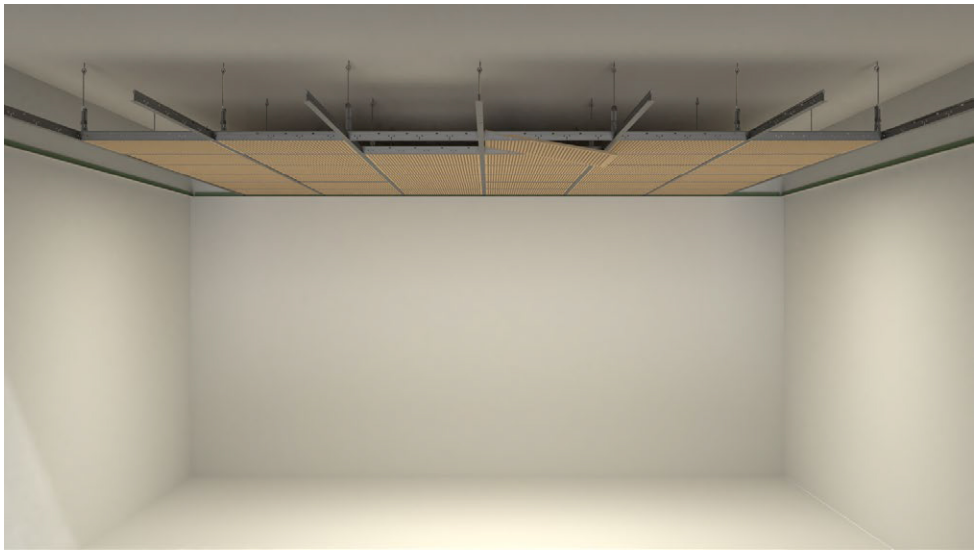


Assembly instructions for Decustik acoustic panels for false ceilings

Prerequisites for the installation

Before assembly starts, check that the prerequisites required on the site for installation are met (consult the document “TRANSPORT, STORAGE, INSTALLATION and MAINTENANCE conditions” published on our website).

To achieve the acoustic absorption coeficients equivalent to those obtained in our laboratory tests, you must leave a space above the ceiling tiles according to the technical data sheet for every model, usually 200 mm, and cover with a layer of mineral wool, model ISOVER ARENA APTA BASIC with a density of 21 kg/m3 and a thickness of 48 mm or equivalent. You must take care that mineral wool is in contact with the back face of the panels.



Assembly on false ceiling

Manufacture of our acoustic panels is customised to allow them to adapt to the majority of standard false ceiling profiles on the market, with versions for profiles 24mm and 15mm wide, among other sizes.

Reframe the primary profiles such that the perimeter sheet cuts are as large as possible.

Install the perimeter profile, perfectly aligned, at the desired height and firmly fixed to the wall.

Mark the position of the ceiling hooks on the framework, generally every 1200 mm, or (where applicable) at the distance and in the number suited to the weight of the panels to be installed. Use the fixing system suited to each type of framework.

Install the ceiling hooks and cut to the desired height. Install the primary profiles. For the final cuts of the primary profiles, leave a tolerance of 5 mm.

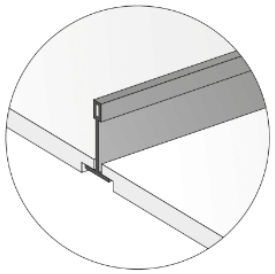
Install the secondary profiles and then install the panels and mineral fibre on the rear side.

When cutting perimeter panels, use cutting tools suitable for joinery work to prevent splinters and scratches on the panels’ surfaces.

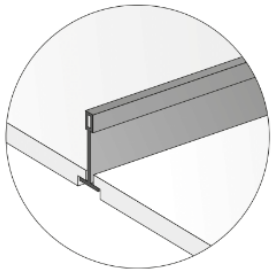
Assembly instructions for Decustik acoustic panels for false ceilings

Perimeter designs for panels

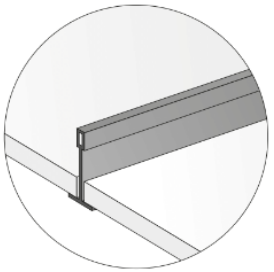
Decustik false ceiling panels are manufactured to be installed with the main profile frameworks available on the market. The most common profile framework systems are the T24 and T15 visible or semi-visible, T15 fine line, and T24 V6 concealed adjustable with a 6 mm groove. Other special solutions are possible on request.



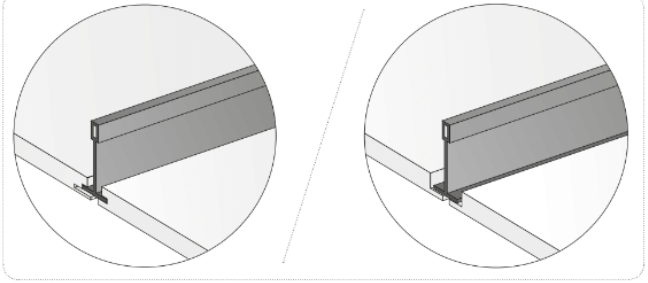
T24 semi-visible



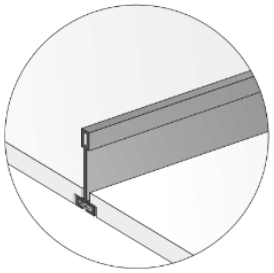
T15 semi-visible



T24 visible



T24 V6 concealed adjustable with a 6 mm groove



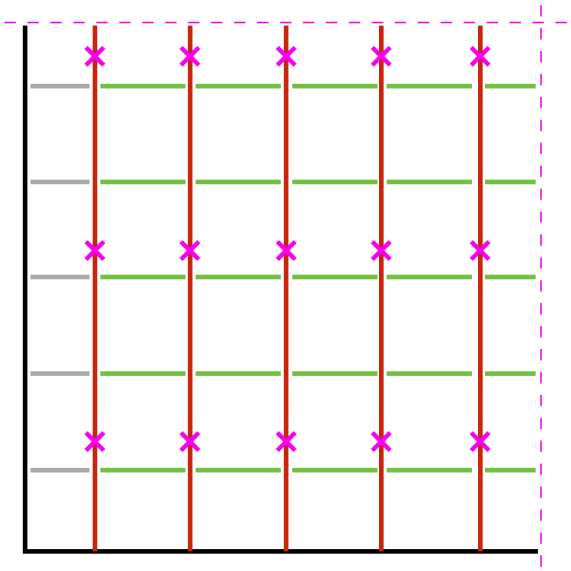
T15 Fine line

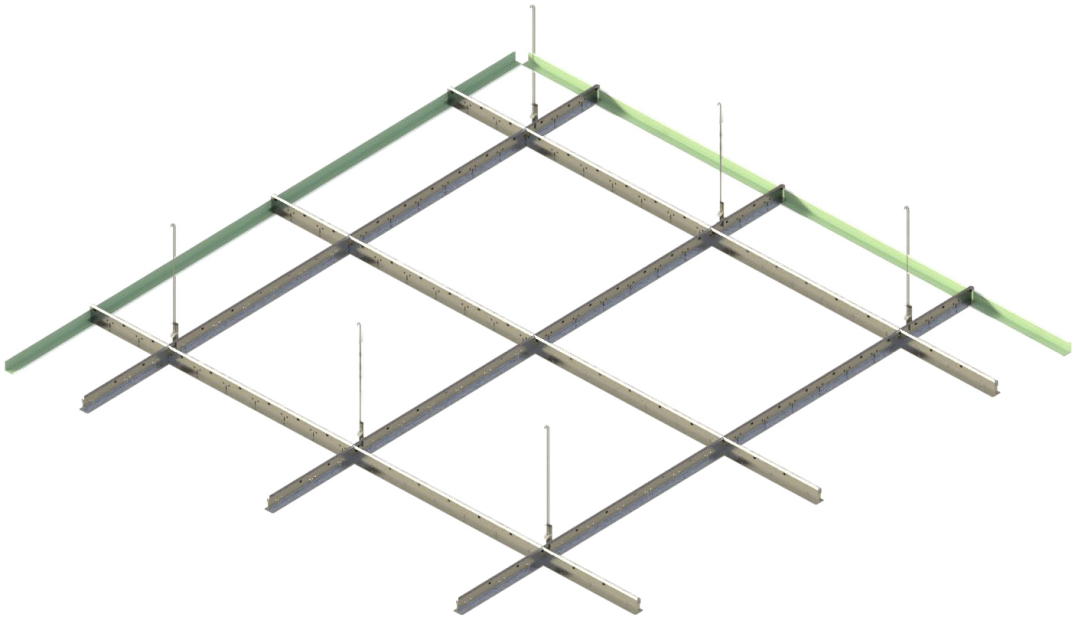
Detailed view of false ceiling structure assembly

Assembly of the T24 structure forming a 600x600mm structure

600x600 panel with visible, semi-visible or T24 V6 profile

- Cut secondary profiles
- 600mm secondary profiles
- Angular perimeter profiles
- Primary profiles
- Adjustable hook rail



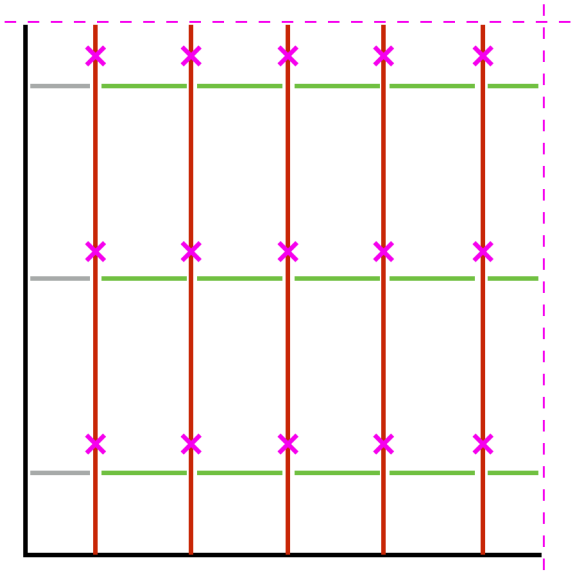


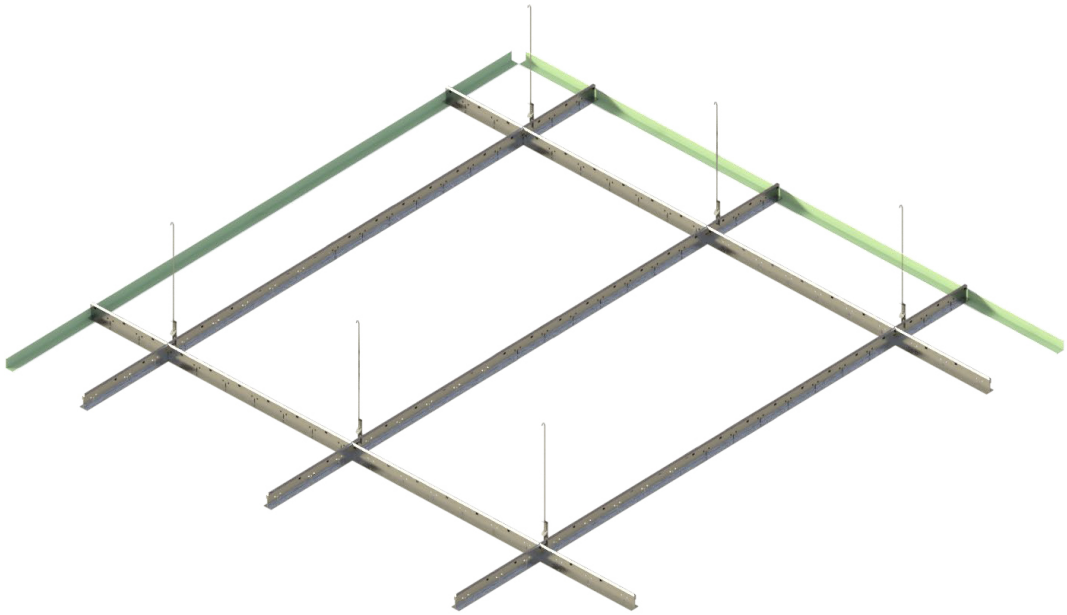
Detailed view of false ceiling structure assembly

Assembly of the T24 structure forming a 1200x600 mm structure

1200x600 panel with visible, semi-visible or T24 V6 profile

- Cut secondary profiles
- 600 mm secondary pro iles
- Primary profiles
- Angular perimeter profiles
- Adjustable hook rail

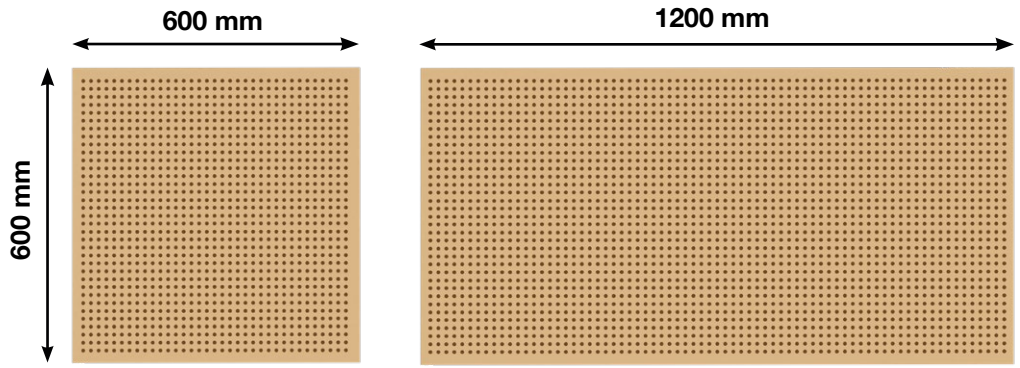




Assembly instructions for Decustik acoustic panels for false ceilings

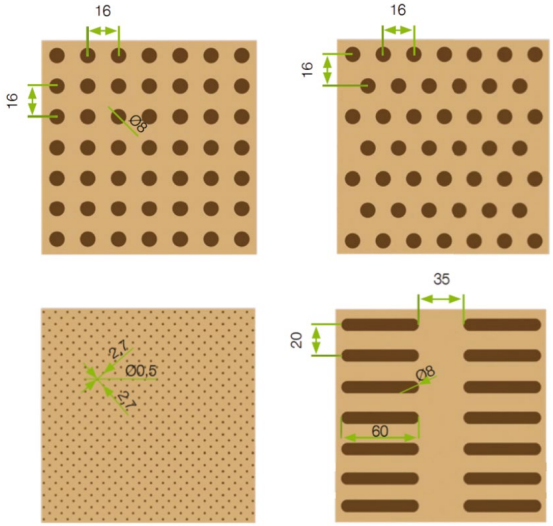
Panel dimensions

Decustik acoustic panels for false ceilings are manufactured to adapt to the most commonly used profile systems. The most common differences between profile axes are 1200x600 mm and 600x600 mm. Thicknesses, depending on models and materials, are usually between 12 and 16 mm. Other measurements and options are possible. Please enquire.



Note: the indicated panel dimensions are the nominal differentiation measurements for the profile system's centre. The real size of the panel is a few millimetres smaller and may vary depending on each model and type of profile system.

Assembly instructions for Decustik acoustic panels for false ceilings



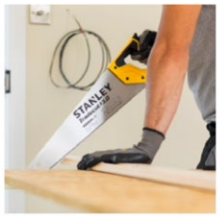
Types of perforations

Essentially, there are two types of perforations: aligned and staggered. Each perforation diameter and pattern correspond to a model in our catalogue and a different absorption coefficient. The different absorption coefficients and curves are specified in each model's technical data sheet.

Customised perforation patterns are also possible, provided that the gap between perforation centres is kept within multiples of 16 mm.

In general, panels can be ordered with perforations right to the edge of the panel or with an unperforated gap around the perimeter, except for microperforated panels, which are always perforated from edge to edge.

Panels without perforations can also be ordered.



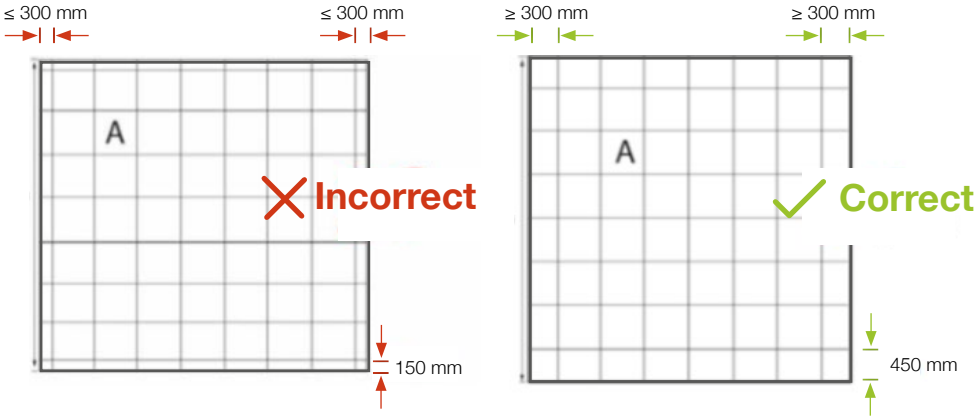
Materials and finishes. Panel handling and cutting

Our acoustic panels are generally made with fibreboard or MDF coated in different finishes, such as melamine, laminates or wood veneers, varnishes and lacquers.

They can be manufactured with different performance levels in terms of fire resistance and formaldehyde emissions certificates.

If they are to be cut, use cutting tools suitable for joinery work. Protect the surfaces from scratches and use cutting elements correctly to avoid splinters. Check the angles of the cut by making a small bevel with medium grain sandpaper.

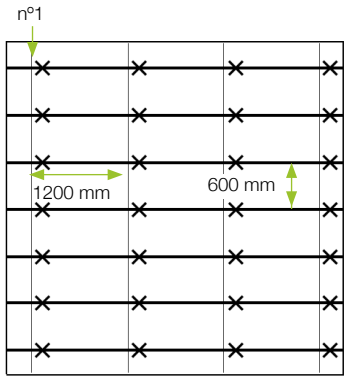
Assembly process

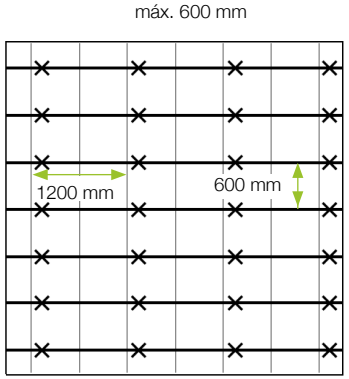


Plan the structure's installation

From the various possible options for installing the structure, select those that allow the perimeter cuts of panels to be as large as possible.

As the offcuts will be sufficiently large, this will facilitate their installation and help them to remain in position without the need for additional fixing elements.





Plan the position of the adjustable hook rails and primary profiles.

Make sure that the structure, hangers and fixings are adequate for the weight of the panels. The hanging rods always hold the primary profiles, which are the ones that will support the weight of the false ceiling.

Position the adjustable hook rails in the shape of a square at a maximum distance of 600 mm from the walls, 600mm between primary profiles and 1200 mm between hooks. In the case of very heavy panels, and following the instructions of the manufacturers of the profiles, it will be necessary to reduce the distance between hooks.

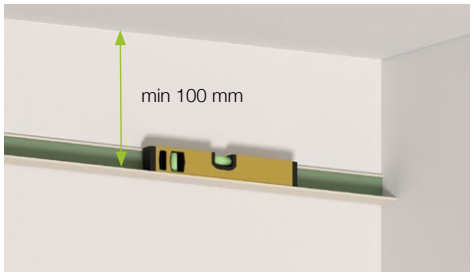
Hang from hooks the primary profiles at a maximum distance of 600 mm from the walls and 600 mm from each other.

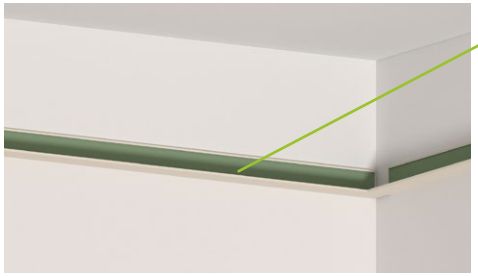
Then install the secondary profiles of 600 mm every 600 or 1200 mm according panel dimmensions.

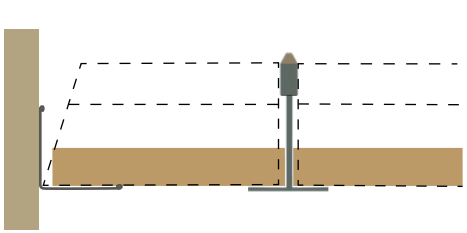
Assembly process

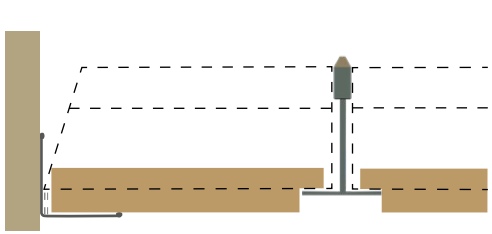
Perimeter profile installation

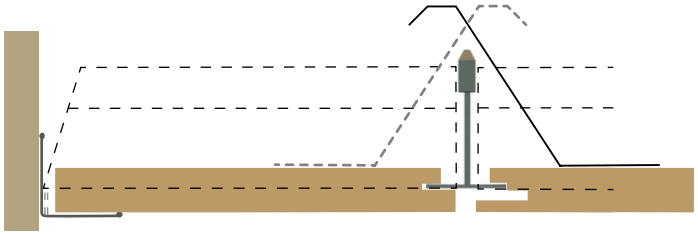
Install the perimeter profile, perfectly aligned, at the desired height and firmly fixed to the wall.





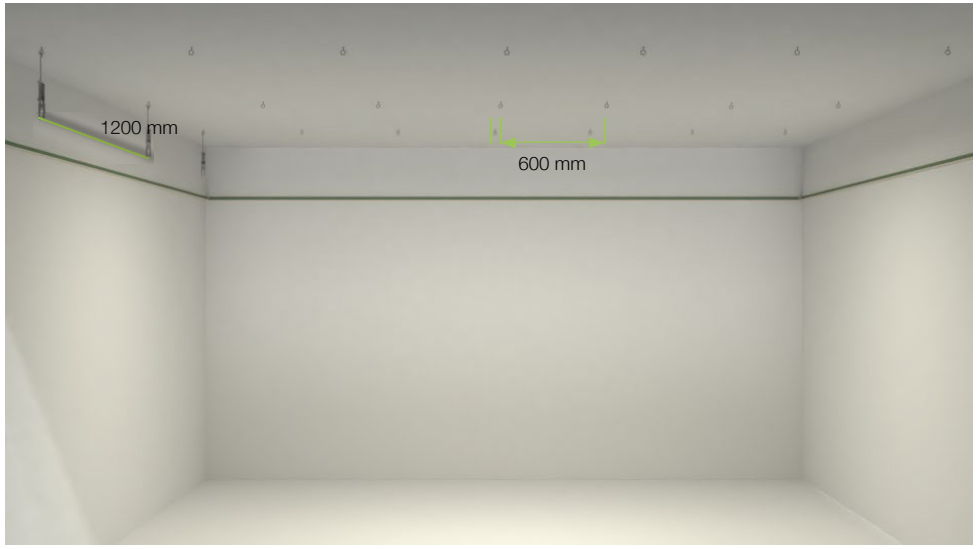






Assembly process

Install adjustable hook rails

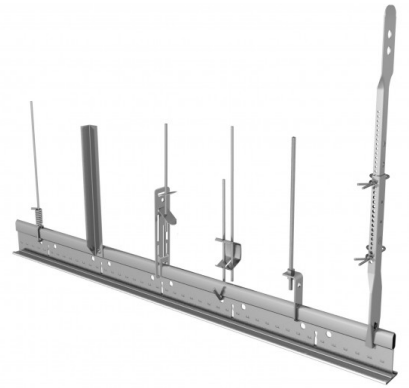


Mark the position of the ceiling hooks on the framework, generally every 600mm between main runners and 1200 mm between hook rails. Use the fixing system suited to each type of framework and the weight of the false ceiling.

Install the ceiling hooks and cut to the desired height.

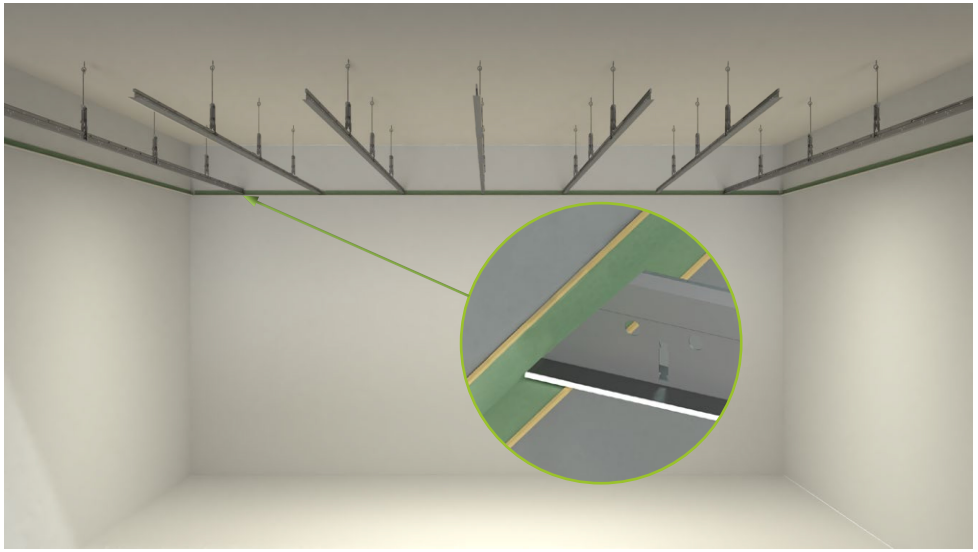
Types of adjustable hook rails

Different profile system manufacturers have various adjustable hook rail models available. The type of hook rail to be used does not matter, provided that it is compatible with the profile manufacturer and it complies with appropriate installation regulations in each country.



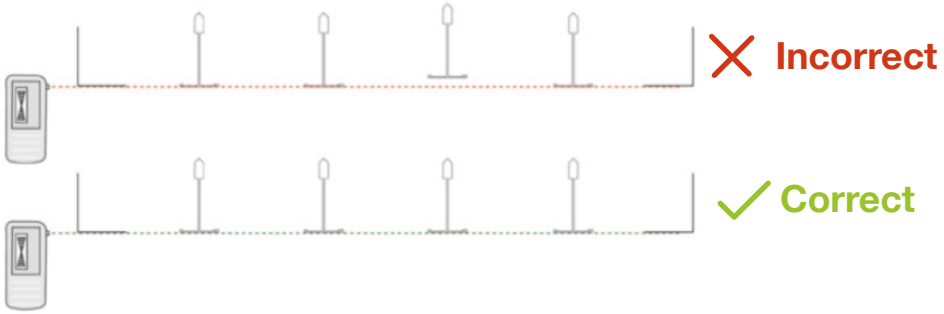
Assembly process

Cutting and installation of primary profiles



Install the primary profiles every 600 mm. Leave a tolerance of 5 mm at the end cuts of the primary profiles that are supported by the angular perimeter profiles.

Levelling of primary profiles

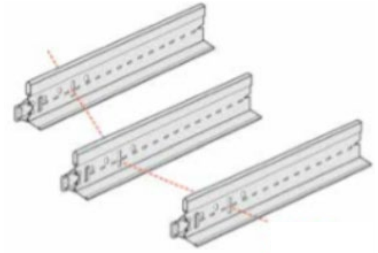


Ensure the primary profiles are level when installed.

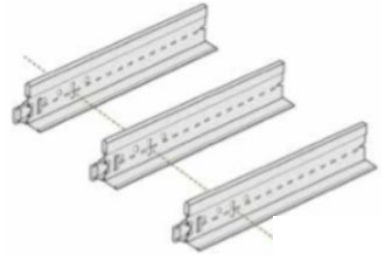
Assembly process

Primary profile alignment

Ensure that the perforations of the primary profiles are aligned with each other so that when the secondary profiles are positioned, they form an exact 90º angle.



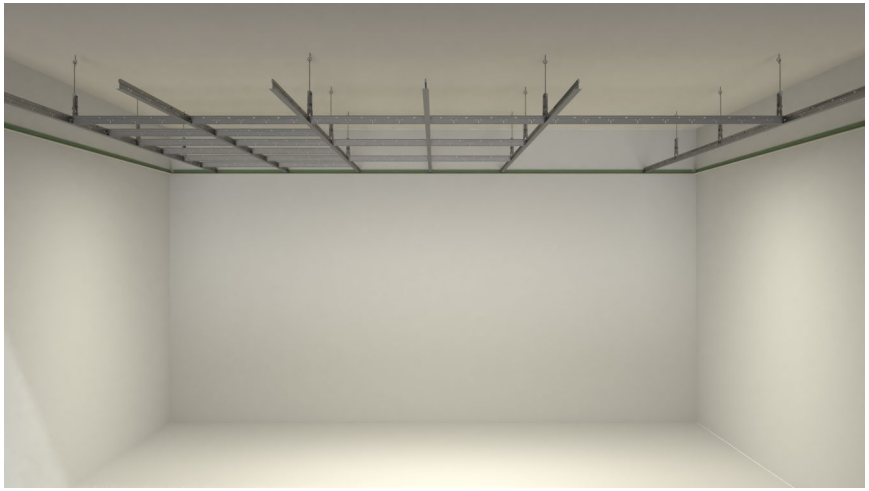
✕ **Incorrect**



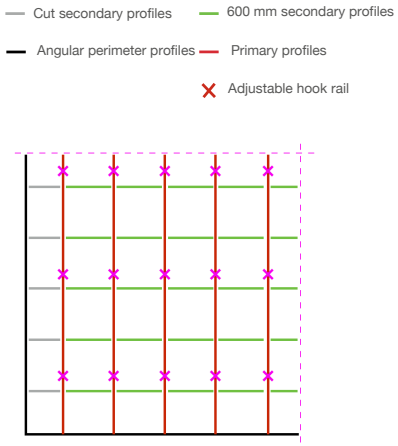
✓ **Correct**

Secondary pro ile installation

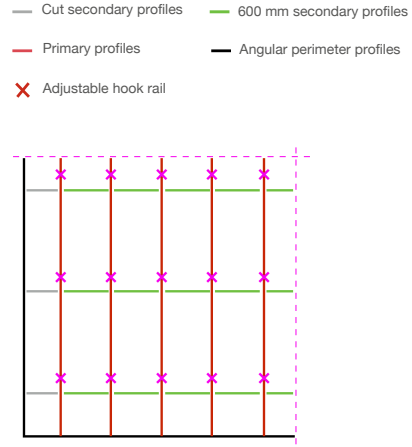
Install the secondary profiles of 600mm every 1200 mm. If a 600x600 mm frame is being used, install secondary profiles every 600 mm.



Grid 600x600 mm



Grid 1200x600 mm



Assembly process

Cutting and installation of secondary profiles at the installation's perimeter

Once the central part of the structure has been assembled, proceed to cut the secondary profiles that are supported by the perimeter profile, leaving a tolerance of 5mm.

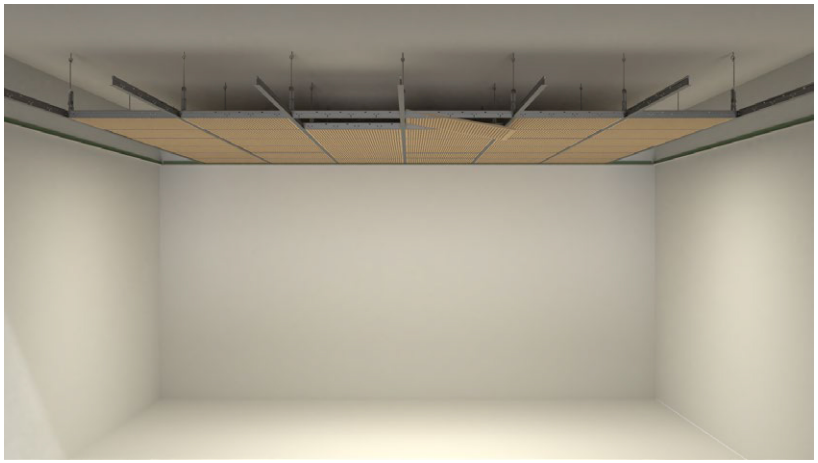
Secondary profile joint systems

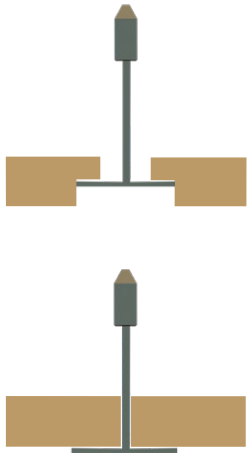
Different profile manufacturers have different joint types available, either with hooks or click-together joints.

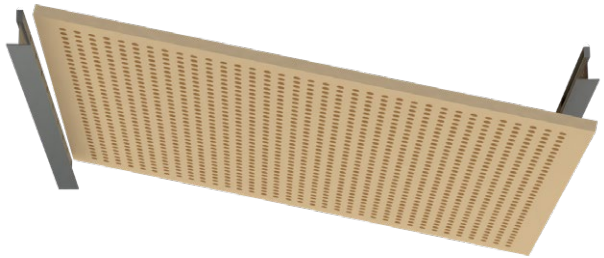
It is important not to mix profiles from different models and manufacturers in a single section of false ceiling given their incompatibility.

Installation of full panels (for different types of panels)

Once the profile system has been installed, it is time to install the panels. To achieve the acoustic absorption specified in the technical data sheets, a layer of ISOVER ARENA APTA BASIC mineral wool with a density of 21 kg/m3 and a thickness of 48 mm, or equivalent, must be installed on the rear side.



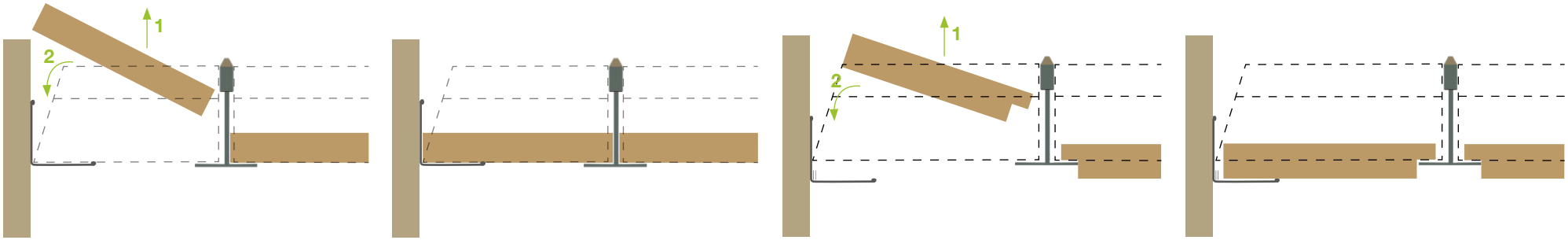




Assembly process

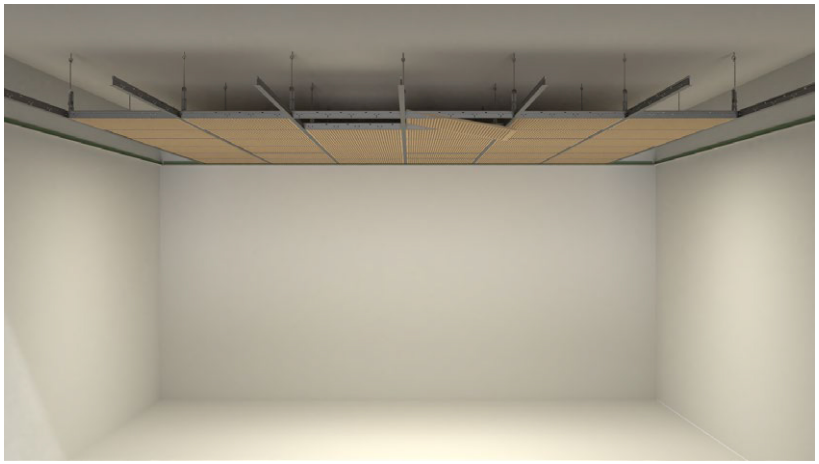
Installation of cut panels at the installation's perimeter (for different types of panels)

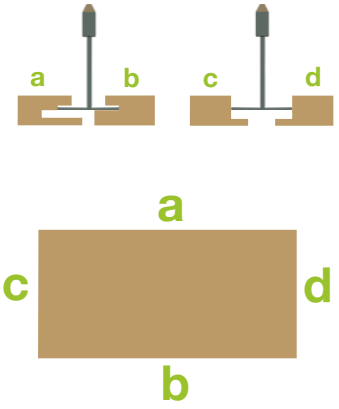
When cutting perimeter panels, use cutting tools suitable for joinery work to prevent splinters and scratches on the panels' surfaces.

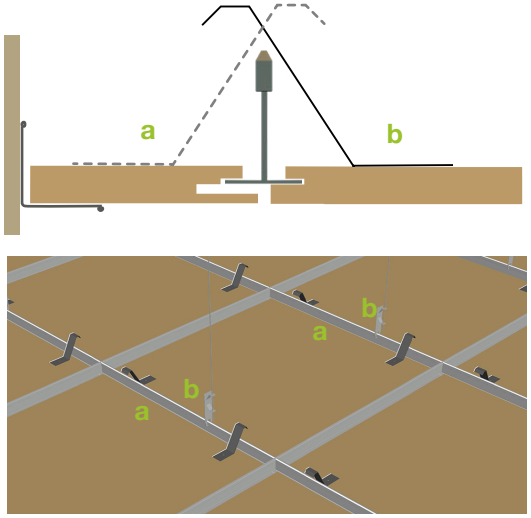


Installation of full panels (for T24 V6 system)

In the T24 V6 model, the profile is recessed and practically hidden, with only 6 mm visible. The panels should be installed from bottom to top, following the movement indicated in the figure below. The profile is only supported on edges a and b. Edges c and d are machined such that they only cover the profile. For greater security, in the T24V6 system it is mandatory to install security clips.



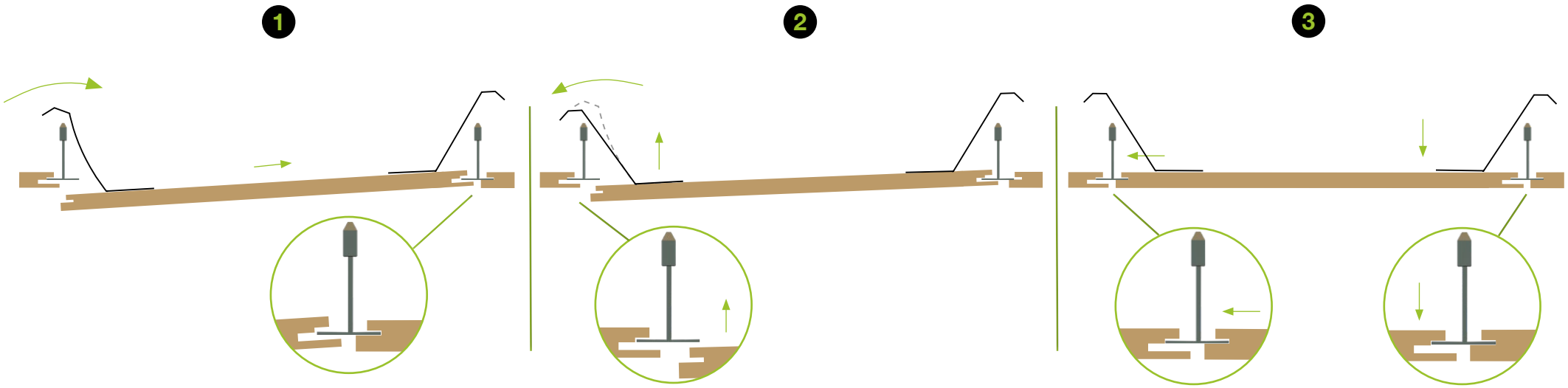




Assembly process

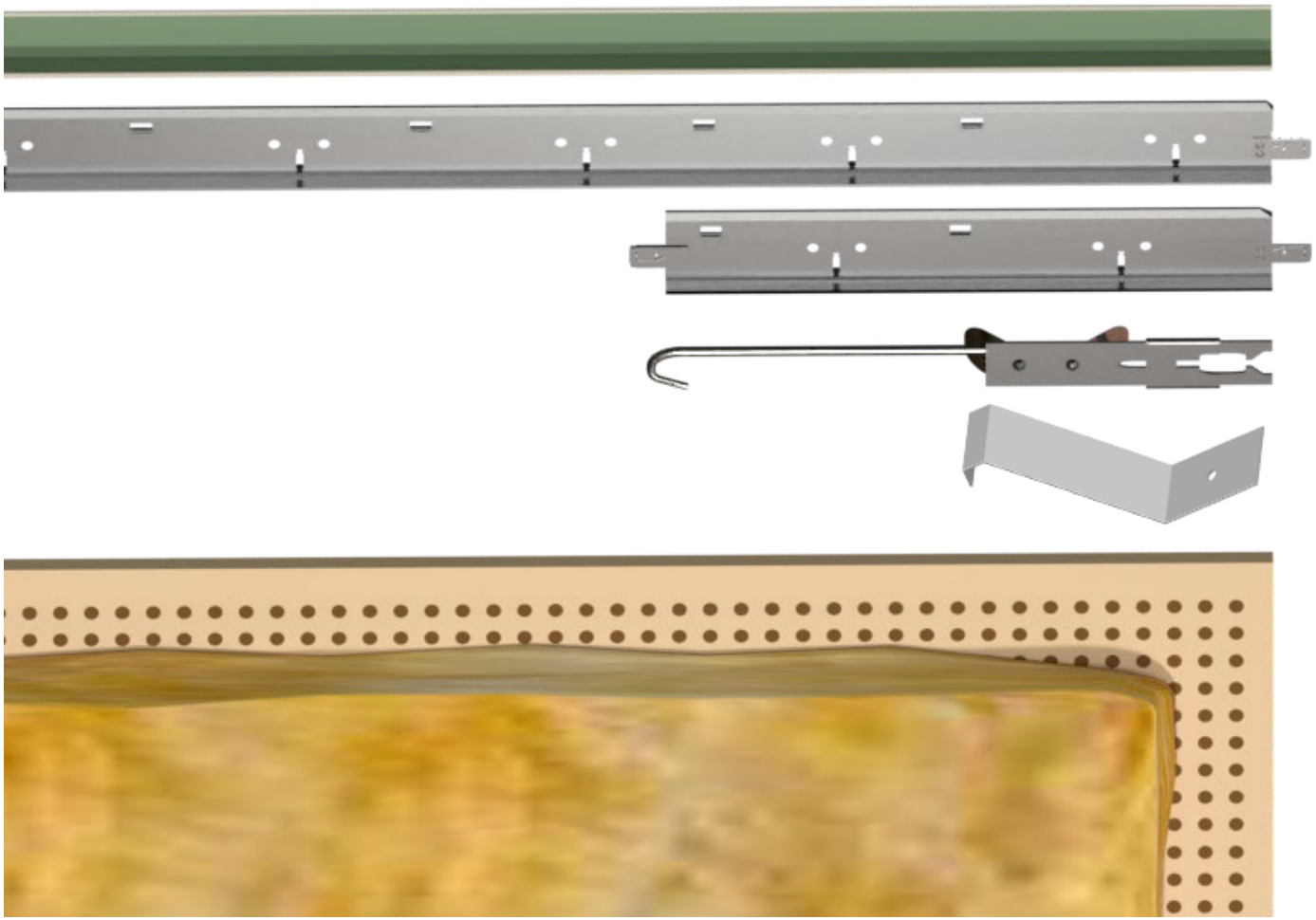
Installation of full panels (for T24 V6 system)

The panels in the T24 V6 system are installed from bottom to top and with a lateral movement until the panel falls within the internal step of the groove and remains stable in its position.



Detailed view of panel assembly for false ceilings

Necessary components



1. Angular perimeter profile
2. Primary profile
3. Secondary profile 600 mm
4. Hook rail
5. Security clip
6. Panels of different models and sizes 1200x600 or 600x600 mm
7. ISOVER ARENA APTA BASIC mineral wool with a density of 21 kg/m3 and a thickness of 48 mm or equivalent

Important

For the correct installation of our products you must follow these assembly instructions, in addition to accomplissing with the transport, storage, installation and maintenance conditions published on our website.

The images in this manual are only illustrative of the diferent installation concepts and recommendations; therefore the dimmensions, scales and proportions shown may vary for a better understanding of the installation systems proposed. Illustrations have been completed with accessories not included.

Due to the high customization of our products, the information described in this documentation may vary.

The company is not responsible for eventual errors in writing, printing, technical data and translations.

Possible updates of this document available at www.decustik.com.

This installation recommendations must be corroborated and adapted in each case by the technical management of each project.

ASSEMBLY INSTRUCTIONS PAP/PAR MICRO REV 6 2022 / EN

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TRANSPORT, STORAGE, INSTALLATION AND MAINTENANCE CONDITIONS FOR DECUSTIK ACOUSTIC AND DECORATIVE PANELS

MECAkim | decustik®
Mecanitzats de la fusta Kim, s.l.

1) TRANSPORT CONDITIONS

The general transport conditions by default for all our sales are FCA on your means of transport at our factory in Torelló (Barcelona).
The carrier contracted by the customer has to be suitable for the type of product, generally covered and closed means or vehicles, in order to protect the boxes containing the product from bad weather (rain, damp and extreme temperatures).
Keep the product in the original packaging supplied by the manufacturer throughout transport.
Arrange transport means which minimise as far as possible the number of transfers.
We always recommend an exclusive lorry or container load rather than part loads.
The transport boxes need to be handled with suitable lifting machines to avoid impact.
Do not climb onto the boxes or put loads on top of them.

2) STORAGE CONDITIONS

On receipt of the material, if it is not for immediate installation, it should be stored indoors, protected from extreme temperatures and humidity.

Store the packets of panels, according to the form of supply, in a flat position, unopened.

The original packaging does not protect the material from weather conditions such as rain and damp, nor from impact, falling, etc. Never place any load on top of the packages.

Storage out of doors is totally prohibited.

3) MANIPULATION AND INSTALLATION OF PANELS

The surfaces where the panels are to be installed have to be level, dry and fairly solid, with sufficient load capacity. Where surfaces are uneven they should be levelled before installing the panel fixing system.

We recommend opening the boxes and putting the panels in the area where they are to be installed at least 3 days before installation, to allow them to adapt to the temperature and humidity conditions of the building. Where there are very large differences between the storage point and the installation place, this acclimatisation time will need to be extended.

The panels need to be handled with care to prevent knocks and grazing or friction. Avoid direct contact between the panels and the ground or with damp, both in handling and once installed. Install with a minimum distance of 5 mm from the ground.

Our panels need to be installed during the final stages of the works, in closed areas and with ambient temperature and humidity conditions as close as possible to the final conditions of use in the premises. Once the installation is done, no task which can noticeably increase the degree of humidity of the premises should be started. Very particularly, work with concrete and plaster needs to be finished and completely dry. Relative humidity in the premises at the time of installation should not exceed 60%.

The panels should be put up when the premises are closed and glazed so that there are no large variations in humidity and rain is kept out.

During installation it is recommended that temperature is maintained between 10º and 30ºC. To achieve these conditions may require the use of special means (heaters, humidifiers, etc.) which are kept going for the time necessary.

The premises must always have appropriate temperature, humidity and ventilation levels. Elements such as open windows, heating or air conditioning, which can cause significant variations in ambient temperature and/or humidity can affect the material, causing the panels to contract or expand.

⚠ **The panels must not be installed in areas where they may suffer water splashes or in rooms or areas with lasting humidity (sauna, small bathrooms, etc.).**

4) POSSIBLE COLOUR VARIATIONS

Finishes veneered in natural wood can show variations in tone between panels.

In manufacturing with natural woods it is not possible to guarantee their exact colour or surface patterning. To obtain the finest results we recommend following these instructions:

1. Arrange the whole order of wood for a single consignment.
2. Unpack all the panels before starting installation.
3. Combine the panels by areas according to colour tones and surface patterning.

It is also very advisable to order some extra pieces in order to deal with inequalities in colour or incidents occurring during assembly, since it will be very difficult to obtain exactly the same tones and texture in the wood in a future replacement order.

With the passing of time and due to the natural ageing process, the initial colour of the wood will change. To minimise these variations do not expose the panels to direct sunlight or moonlight.

5) POSSIBLE VARIATIONS IN MEASUREMENTS

Following the conditions of use recommended by the manufacturer, the tolerances in dimensions per sheet can vary by +/- 0.4% in both length and width, as indicated by the manufacturer of the support used.

6) MAINTENANCE

As a general rule cleaning is done best with a slightly dampened cloth, without using abrasive, acid or caustic products or any containing silicones. Always pass the cloth in the same direction as the design of the wood and never use circular movements. Then dry with a fresh dry cloth.

7) EXPANSION JOINTS

Acoustic and decorative panels are made of a material based on wood fibres which, like natural wood, also expands depending on climatic conditions. During the summer the panels expand considerably due to high humidity in the air and to temperature.

⚠ **It is important to maintain a space (called the "expansion joint") between the edges of the cladding and all the walls and fixed objects in the room.**

Expansion joints have to be provided **all round the perimeter of the installed surface** and, on large scale walls, every **6 or 8 linear metres**. As a general rule joints of 1.5mm per linear metre have to be provided all round the perimeter of the wall and also every 6 or 8 linear metres.

The expansion joints can be concealed with framing or special sections.