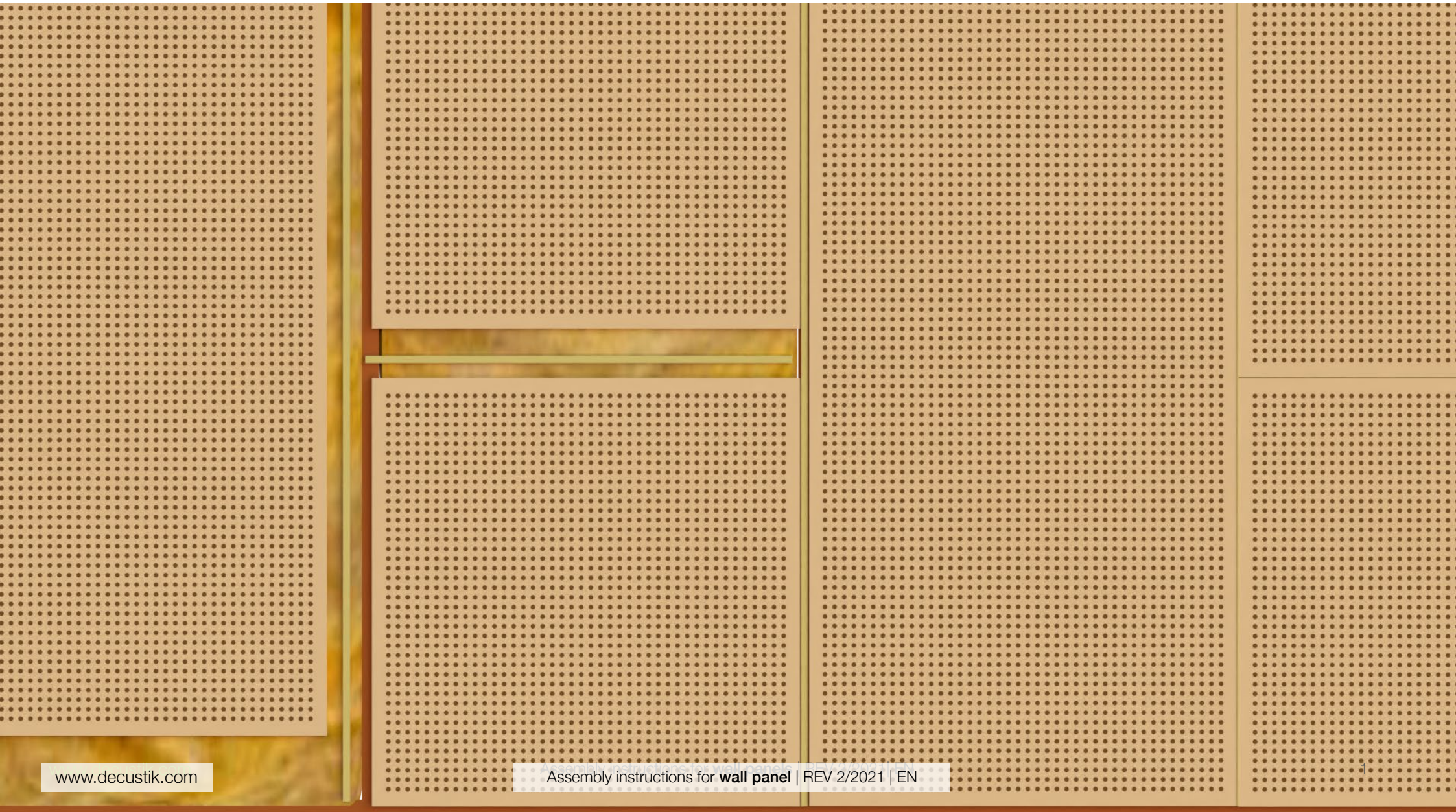
Assembly instructions for acoustic wall panels

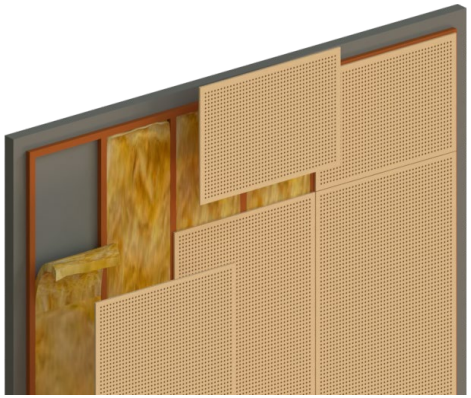


Assembly instructions for acoustic wall panels

Pre-installation conditions

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 behind the slats according to the technical data sheet for every model, usually 40 mm or 200 mm, and install inside 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 panel.



Wall assembly

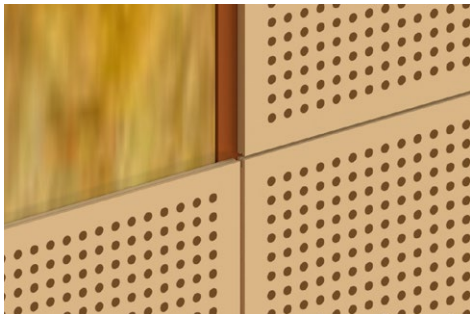
Install on a firm, well-levelled structure on the wall, leaving the required space behind for mineral wool.

Install upright posts every 600mm at minimum.

Install the panels from the bottom up, well-levelled, using any of the recommended assembly systems.

Do not have panels directly supported by the floor to prevent issues with humidity.

Protect the bases using skirting boards or other elements.



Expansion joints

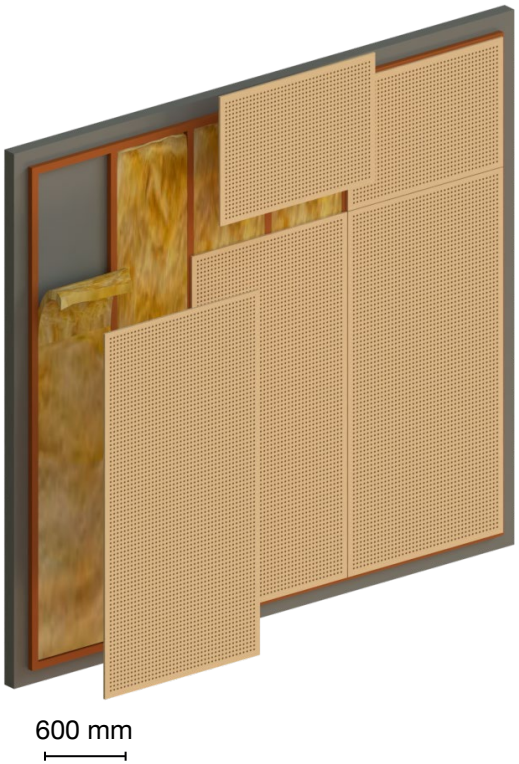
It is mandatory to create a gap (called an “expansion joint”) between the perimeter of the cladding and all the walls and fixed elements in the room.

Expansion joints are required all around the cladding and, on large walls, every 6 or 8 linear meters. As a general rule you must allow a 1.5 mm for each linear meter around the cladding and also every 6 or 8 linear meters.

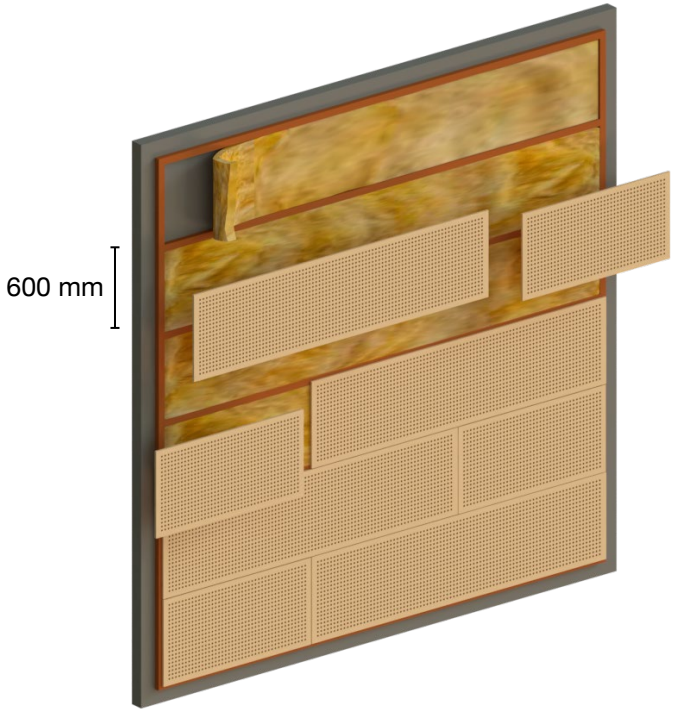
Expansion joints can be sheltered with cover profiles or leave as an integral part of the design (recommended).

Panels in different sizes
Multiple sizes and assembly options

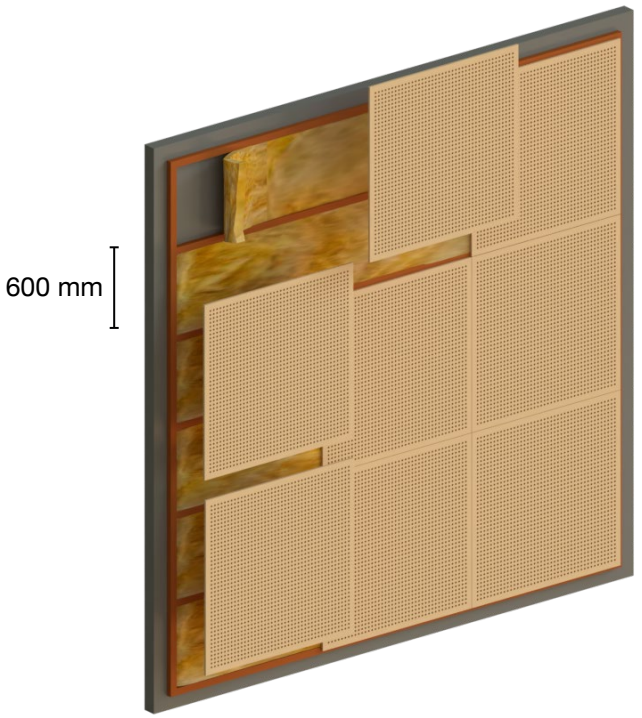
Perfect alignment of the panels and joints is essential in all assembly configurations. All cuts must be clean - carried out using appropriate tools - and free from bumps and splinters.



Panels 2400x1200x16 mm



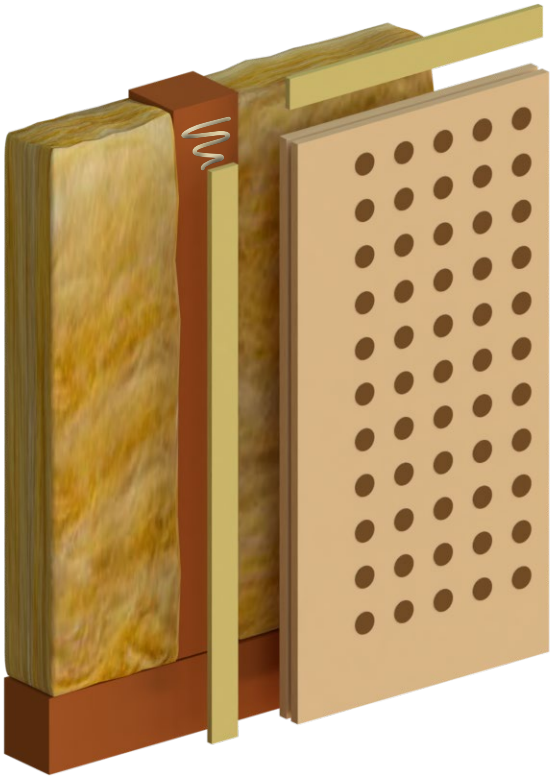
Panels 2400x600x16 mm



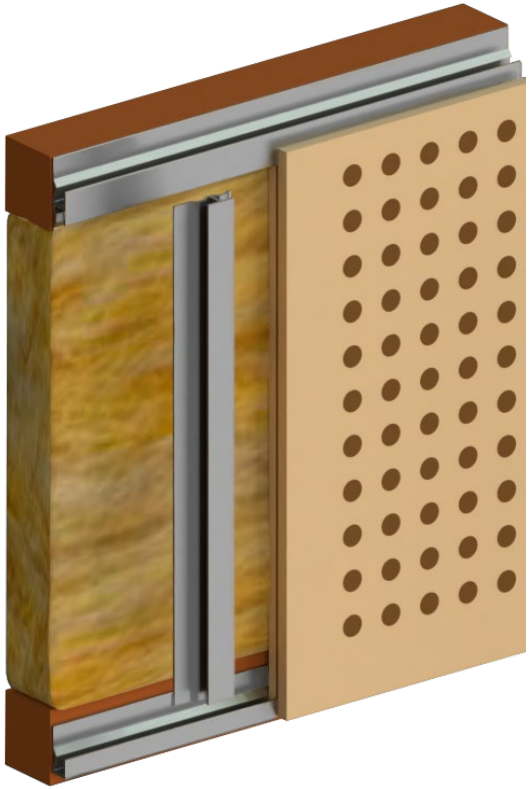
Panels 1200x1200x16 mm

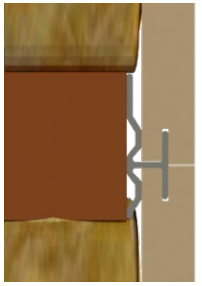
Recommended wall assembly systems

System 1: Tongue and groove
Easy to assemble. Highly resistant assembly.
Flexibility of options. Non-removable.



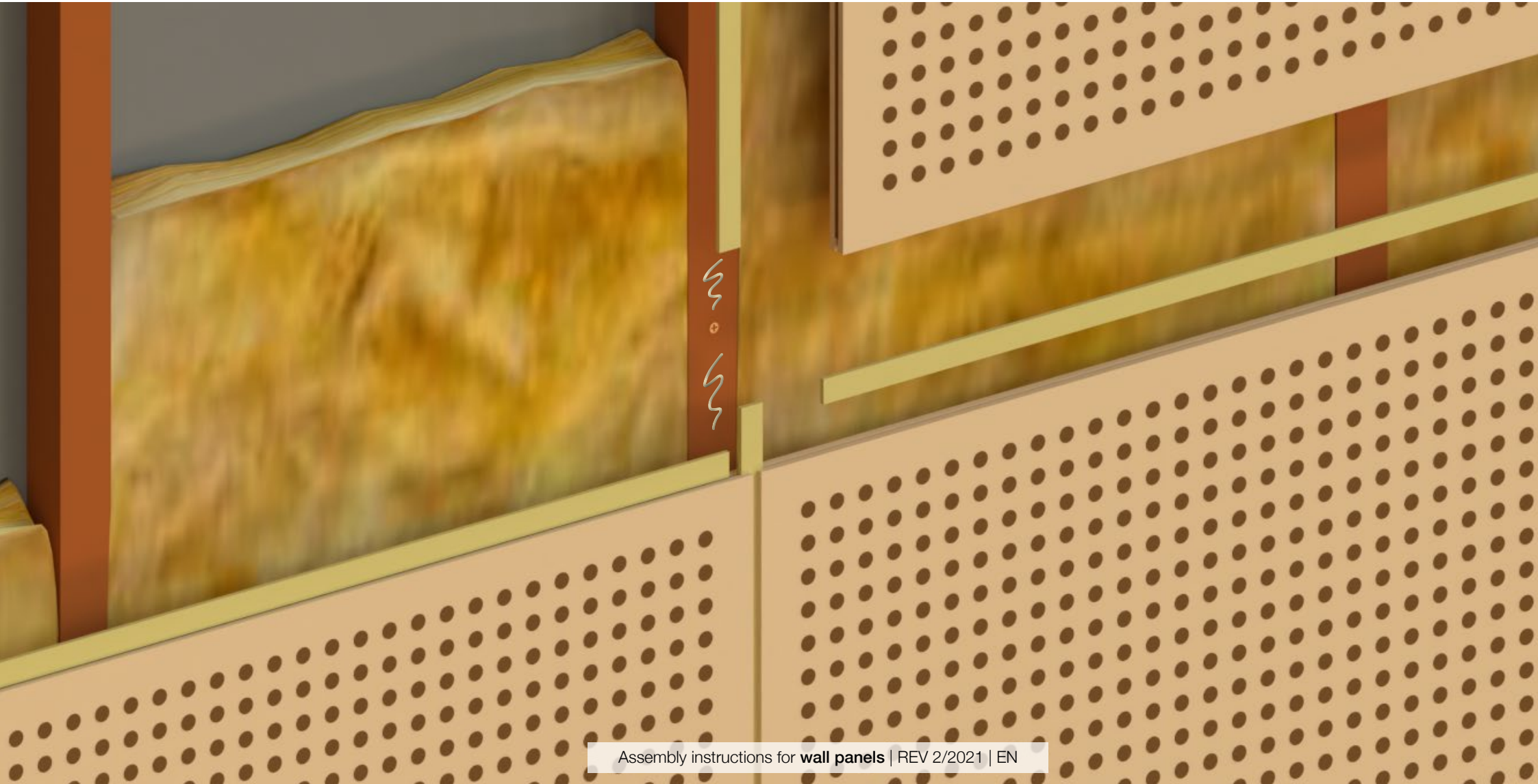
System 2: Aluminium profile
Fast, economic assembly. Easy to assemble
and removable.



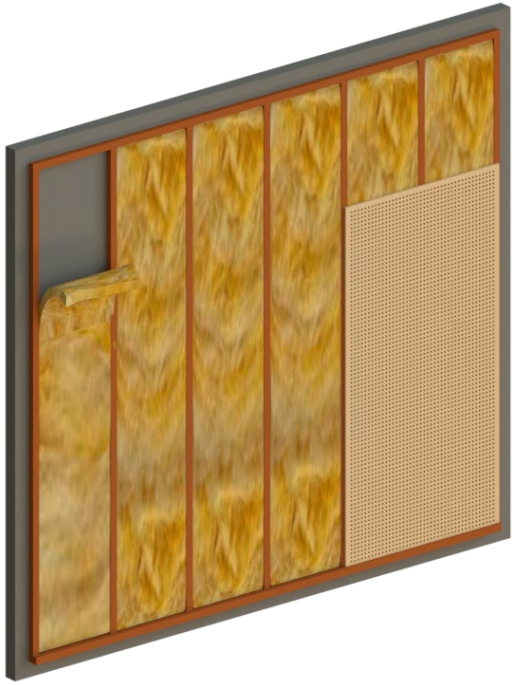


Detailed view of wall panel assembly

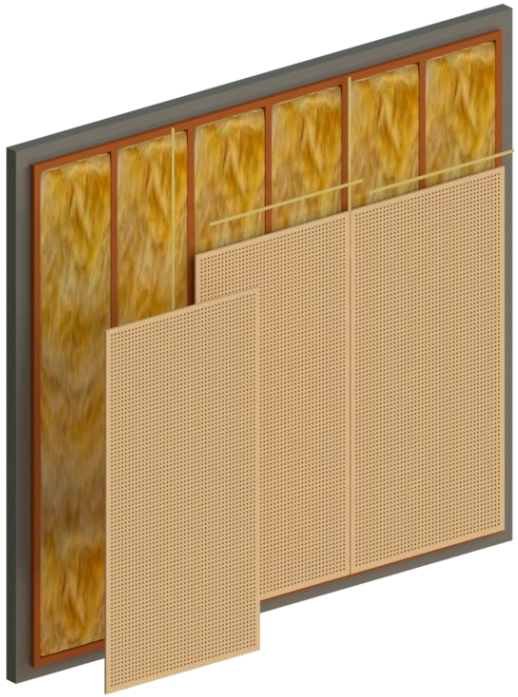
System 1: tongue and groove



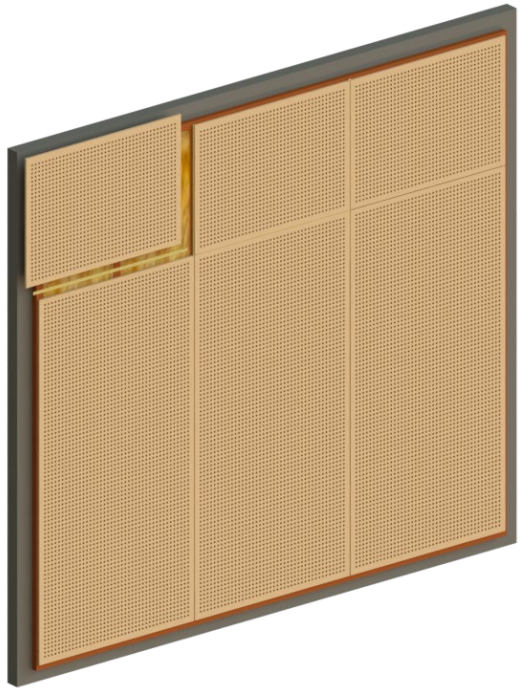
Example of assembly
System 1: Tongue and groove



Perfectly level the wall by positioning battens every 600 mm between axes. Install ISOVER ARENA APTA BASIC mineral wool with a density of 21 kg/m3 and a thickness of 48 mm, or equivalent, between the battens. Reframe the panelling to detect possible unevenness in the walls, ceiling and floor. In the case of natural wooden panels in particular, check that the panels to be installed on a single wall have a homogeneous texture and tone with no discontinuities. Start to install panels from one end or from the centre, depending on the case in question, using glue, and pin nails in the tongues and grooves.



Continue to install the panels from one end to the other and from bottom to top, using glue, pin nails and the tongue-and-groove system. Check that the panels are level and firmly fixed to the structure. If installations are to be completed behind the panels, install ducts before panelling.



Repeat this operation until the wall is completed. In general, the battens at the side and ceiling must be cut to ensure perfect adjustment. Be extremely careful when cutting and sand down to finish.

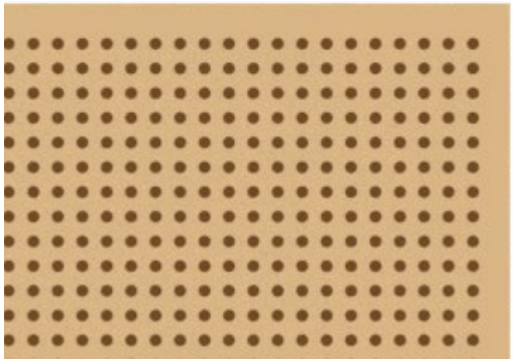
Necessary components

System 1: tongue and groove

1 ISOVER ARENA APTA BASIC mineral wool with a density of 21 kg/m3 and a thickness of 48 mm, or equivalent

2 MDF 45x40 mm battens

3 MDF 18x4 mm tongues



4 Decustik panel with perimeter grooves 10x4 mm

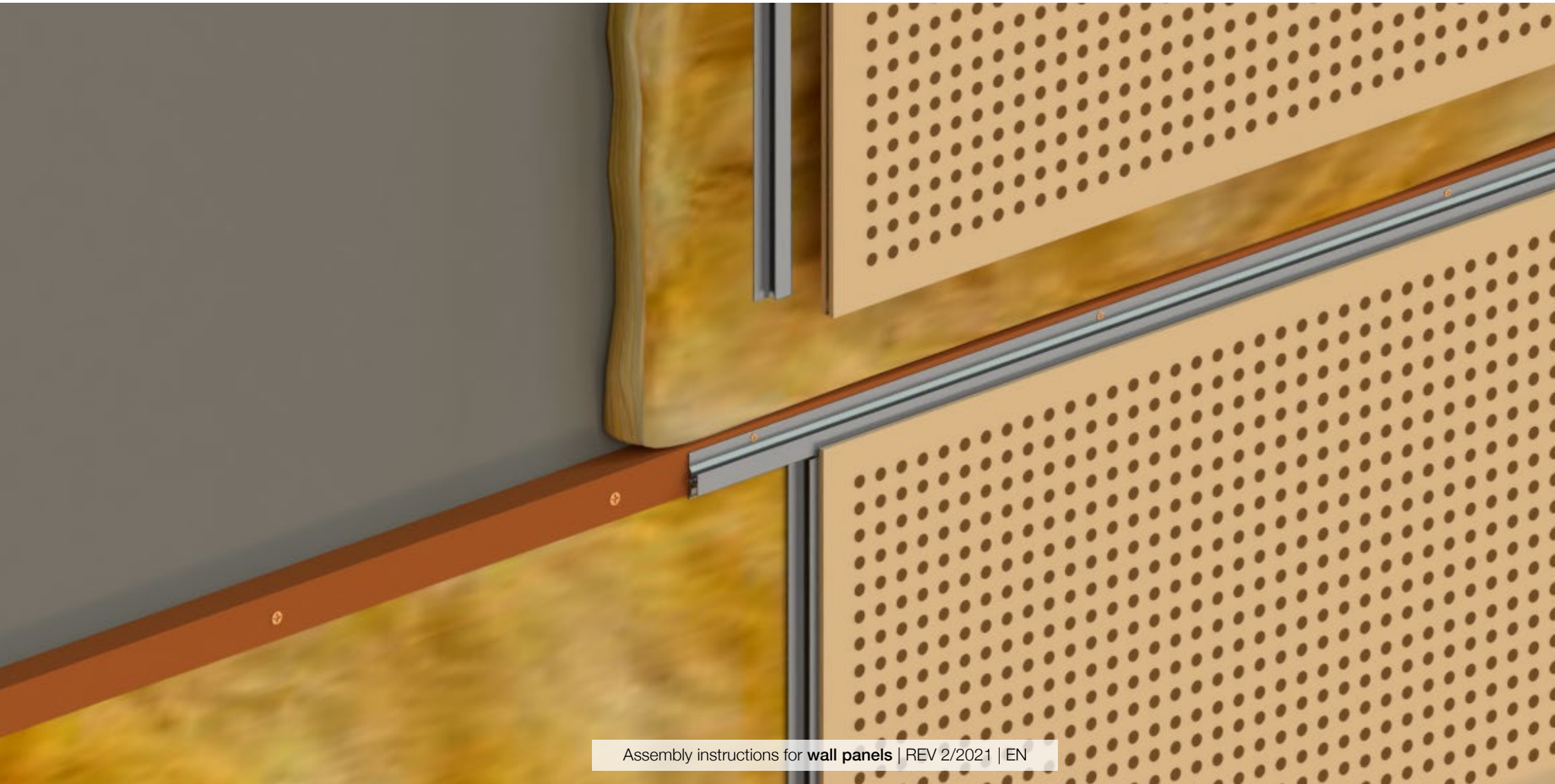
5 Assembly glue, e.g. SOUDAL HT or equivalent

6 Nail gun and PIN 06 pin nails of 25 or 30 mm, according to batten thickness

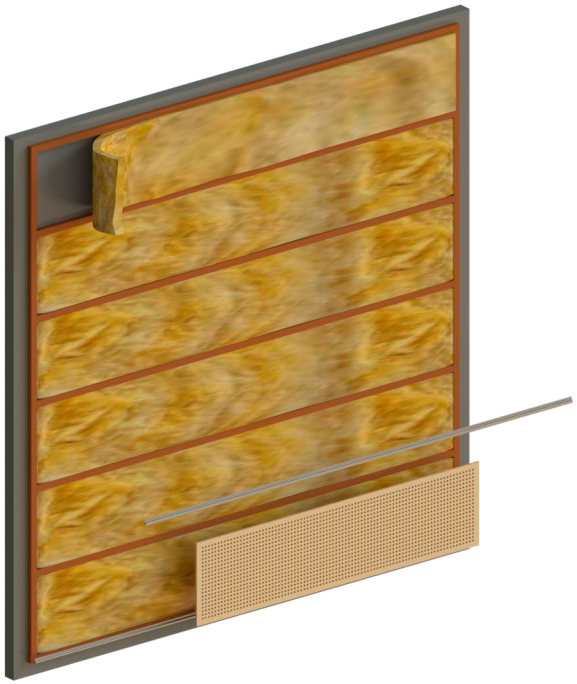
7 5x80 mm tapered screws to fix 40 mm batten to wall

Detailed view of wall panel assembly

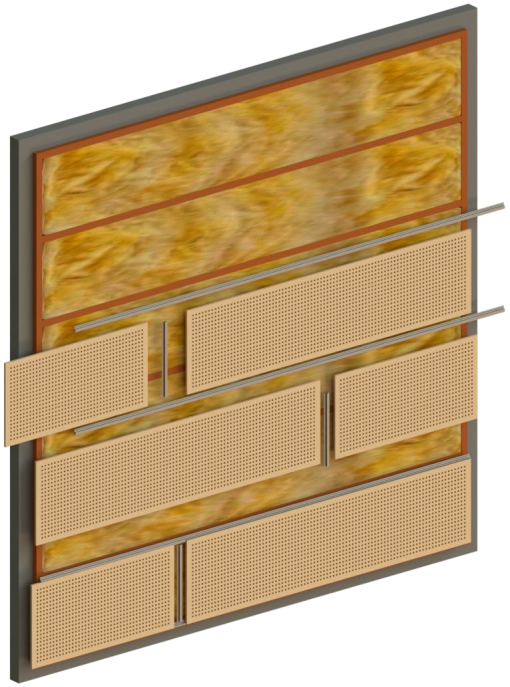
System 2: Aluminium profile



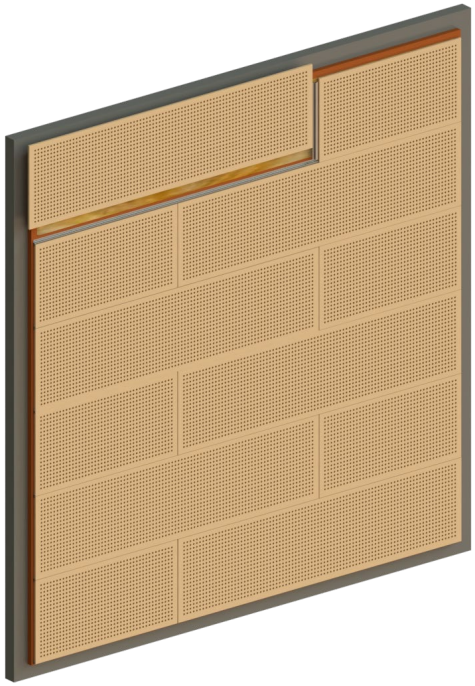
Example of assembly
System 2: Aluminium profile



Perfectly level the wall by positioning battens horizontally every 600 mm between axes. Install ISOVER ARENA APTA BASIC mineral wool with a density of 21 kg/m3 and a thickness of 48 mm, or equivalent, between the battens. In the case of natural wooden panels in particular, check that the panels to be installed on a single wall have a homogeneous texture and tone with no discontinuities. Install the starting profile at the base, leaving a gap between it and the floor to prevent issues with humidity. Start to install panels from one end or from the centre, depending on the case in question, forming the bottom row using the aluminium profiles.



Continue to install the panels from one end to the other and from bottom to top, using the standard profiles screwed to the battens. Check that the panels are level and firmly fixed to the structure. If installations are to be completed behind the panels, install ducts before panelling. Segments of the same profile should be installed on the transversal sections to align the panels' surfaces.



Repeat this operation until the wall is completed. In general, the battens at the side and ceiling must be cut to ensure perfect adjustment. Be extremely careful when cutting and sand down to finish. The last row of panels can be screwed or fixed with assembly glue.

Necessary components

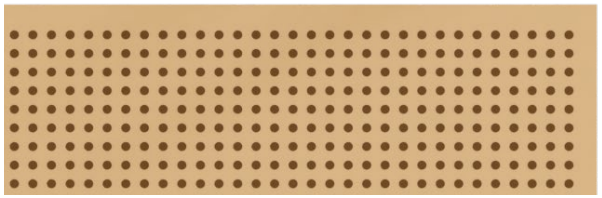
System 2: Aluminium profile

1 ISOVER ARENA APTA BASIC mineral wool with a density of 21 kg/m3 and a thickness of 48 mm, or equivalent

2 MDF 45x40 mm battens

3 Standard aluminium profile

4 Starting aluminium profile



5 Decustik panel with perimeter grooves specifically for the aluminium profile

6 3.5x25 mm tapered screws to fix the aluminium profile to the batten

7 5x80mm screws to screw the 40 mm batten to the wall

Dimensions of wall panels

Most common standard dimensions

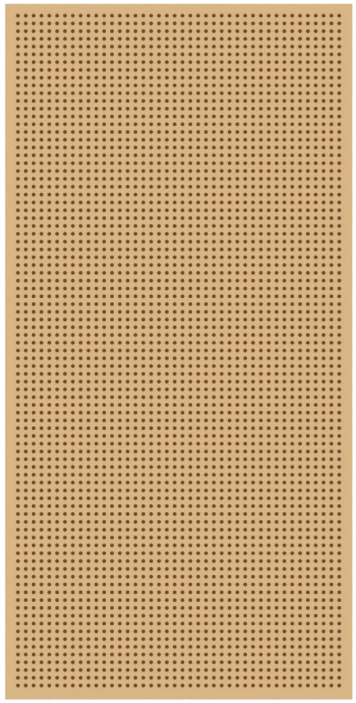
Standard dimensions of most common wall panels

2400x1200 x16 mm

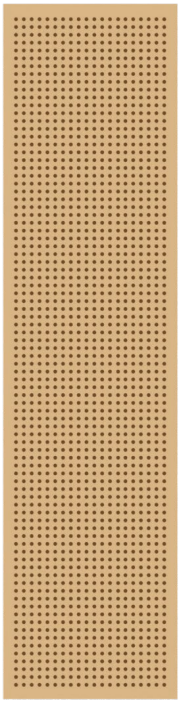
1200x1200x16 mm

2400x600x16 mm

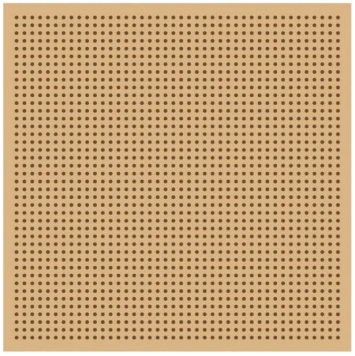
For other measurements, please enquire



2400x1200x16 mm



2400x600x16 mm



1200x1200x16 mm

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 FOR WALL PANELS REV 2 2021 / 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.