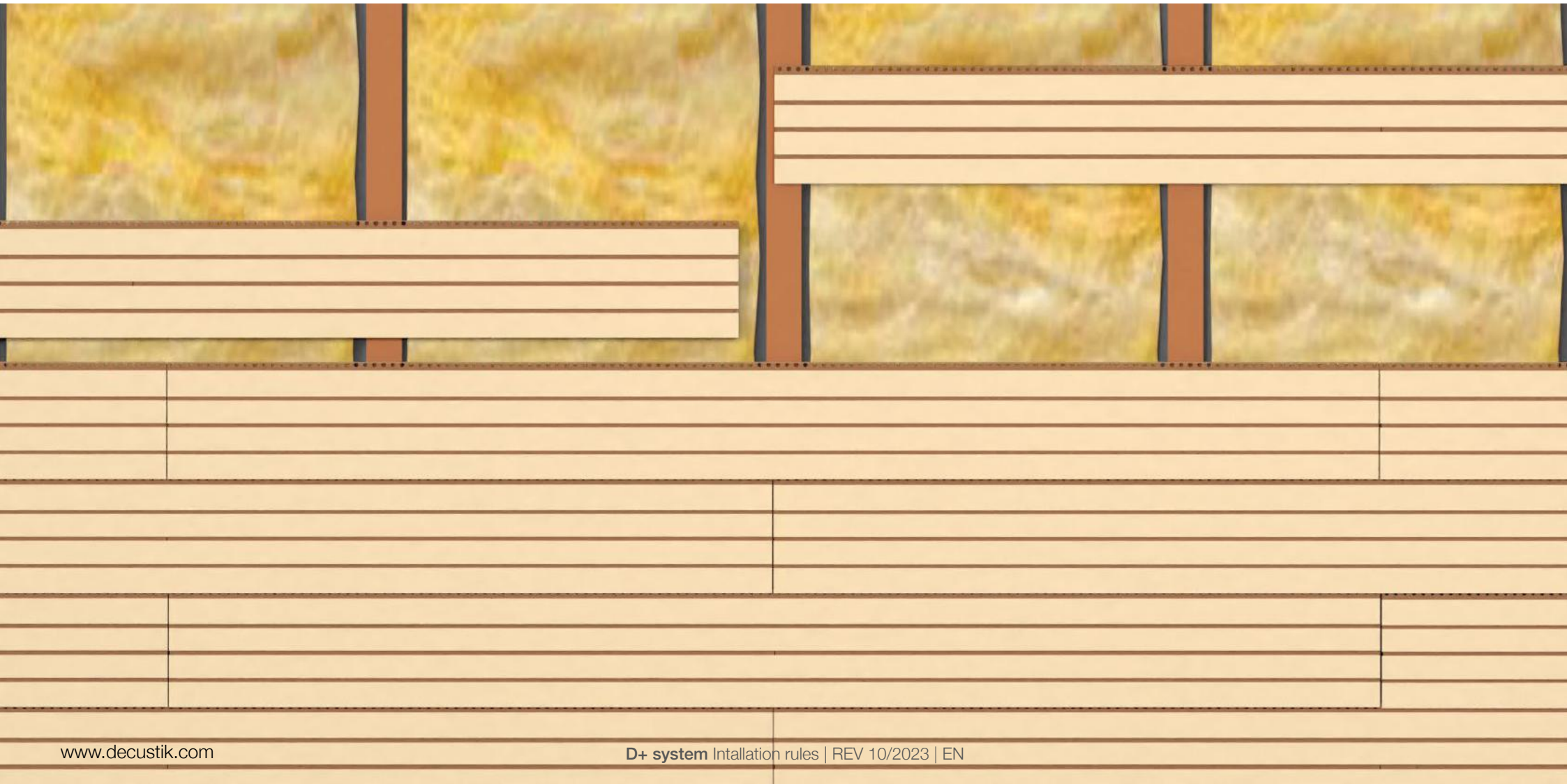


D+ system installation rules for walls

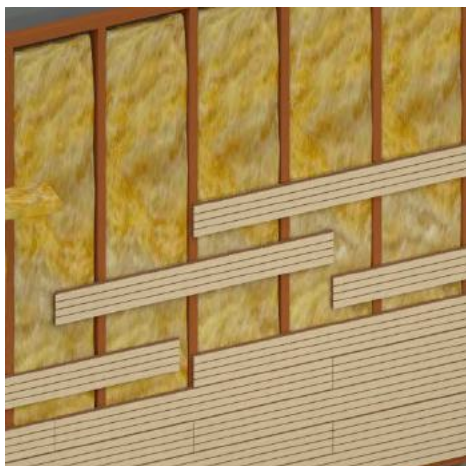


D+ system installation rules for walls

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 coefficients 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 BASIC 45 mm, or equivalent. You must take care that mineral wool is in contact with the back face of the panel.



Wall Installation

Install a structure, leveled and firmly attached to the wall, leaving behind the required space for the mineral wool.

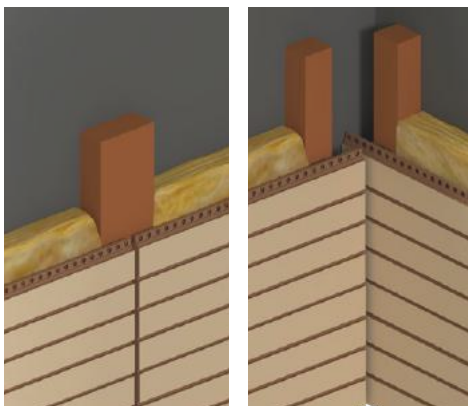
Place one strut at least every 600 mm.

Always install the slats upwards following one of the recommended installation systems.

Prevent direct contact of slats with the floor to avoid moisture problems.

It is recommended to protect the baseboards with plinths or other elements.

It is essential to perfectly level the first row of slats to obtain an optimal result in the assembly.



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.

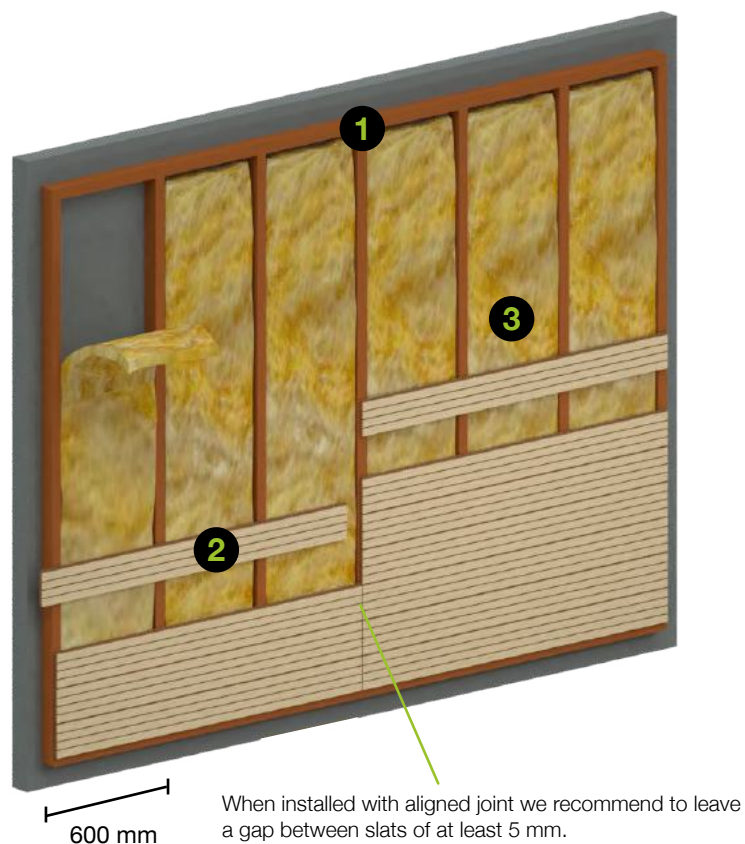
Expansion joints can be sheltered with cover profiles.

Slats installed in horizontal position

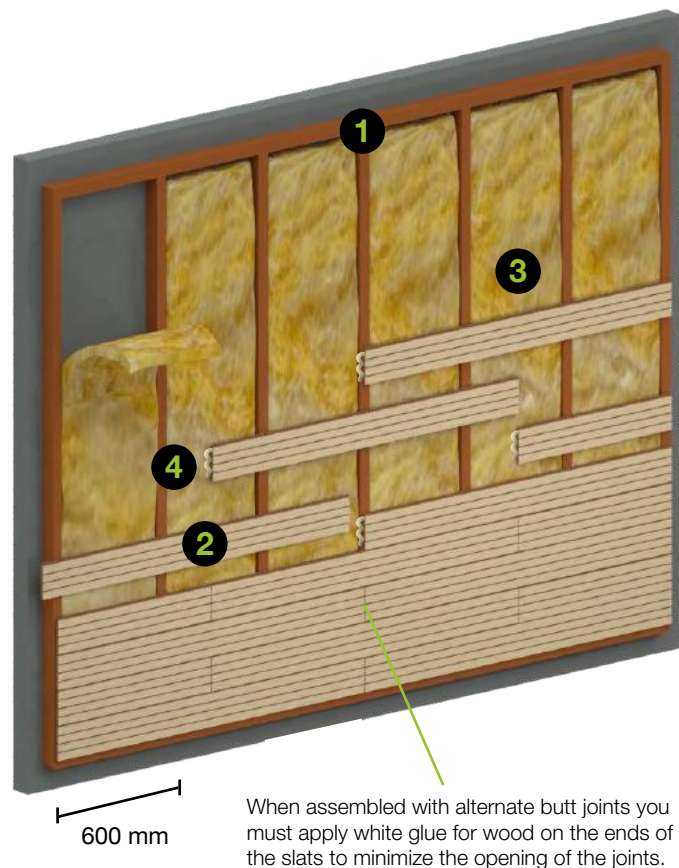
The slats can be installed with aligned or alternated joints

For any configuration, the perfect alignment of the slats and joints is essential. All cuts must be clean, made with the appropriate tools, avoiding nicks or chips.

Aligned



Alternated

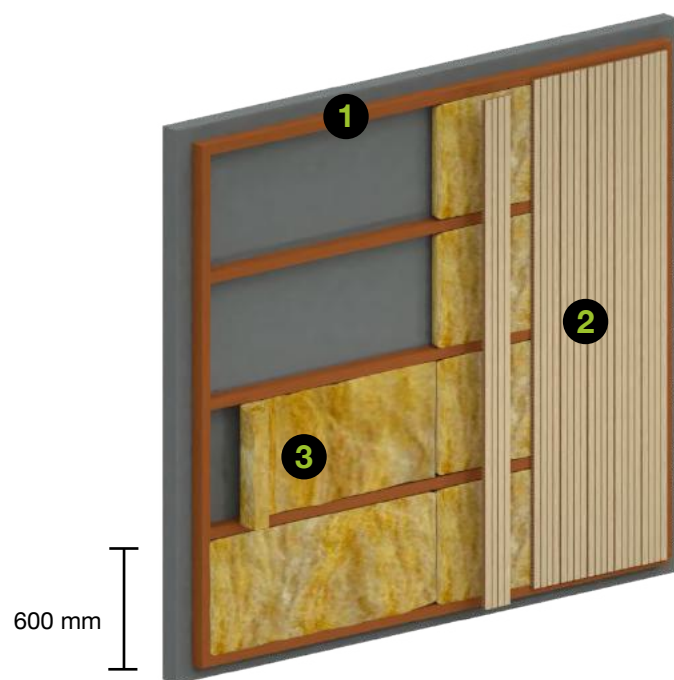


- 1 45x40 mm battens
- 2 Slats
- 3 Mineral wool
- 4 White glue

Wall installation

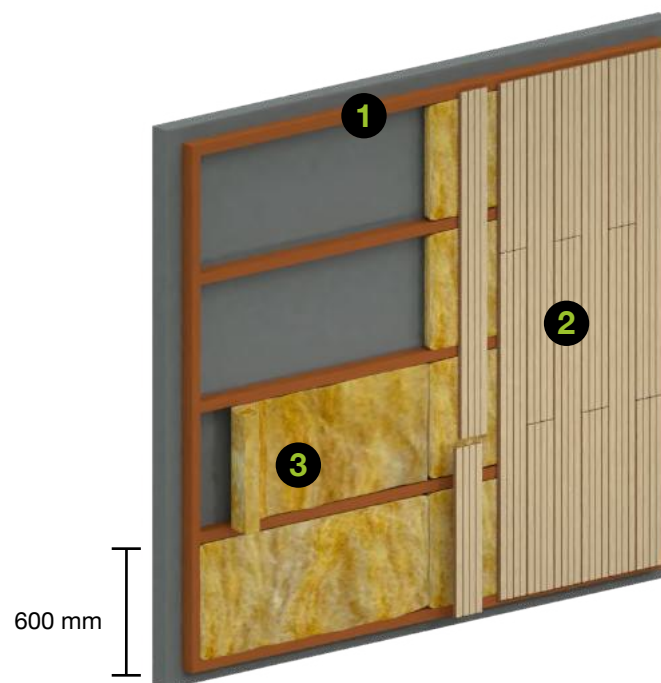
Vertical position

Aligned

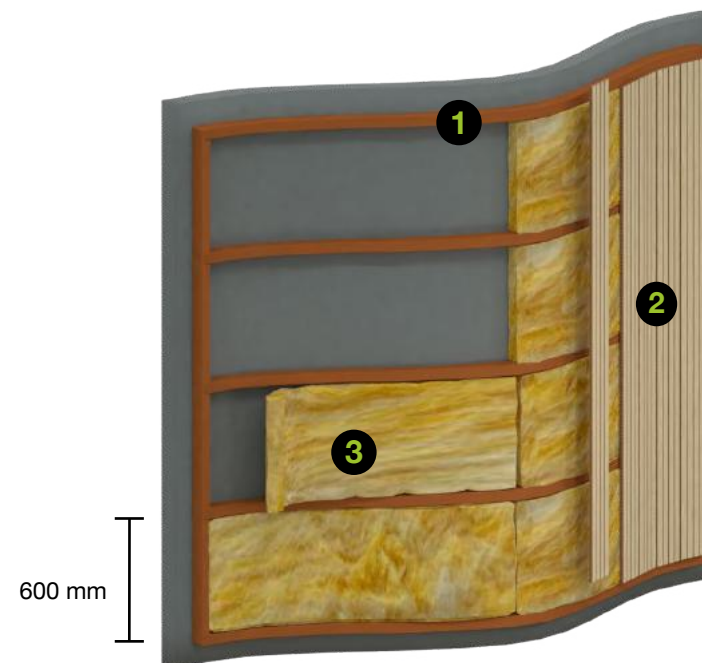


When installed vertically with plates, you must additionally fix the slats to avoid vertical sliding, either by means of glue and needles, or a fit in the lower batten.

Alternated



Curved



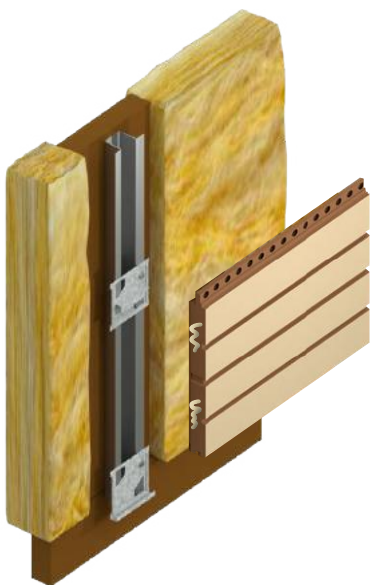
Our standard slats can be installed following the direction shown in the image, adapting to a minimum curve of radius 2000 mm. For a radius smaller than 1000 mm you must order special manufacturing.

For a smaller radius please consult us.

D+ wall installation system details

3 possible installation options

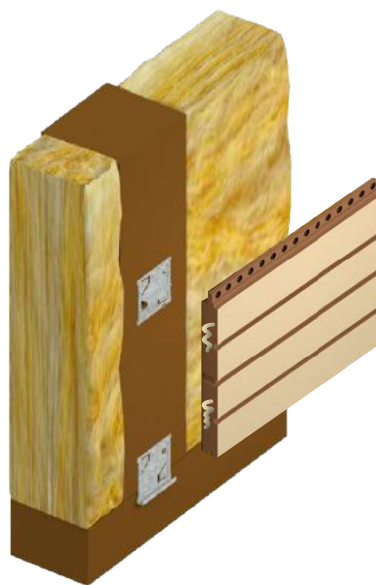
Installation system 1: with Omega profiles



To fix the plate on the omega profile, use a 3.5x95 self-tapping screw, rivet head, pozi model wurth ref 0208303595 or equivalent. You must ensure that the screw head does not protrude from the edges of the clip. See detail on page 16.

Apply white glue for wood on the ends of the slats to minimize the opening of the joints.

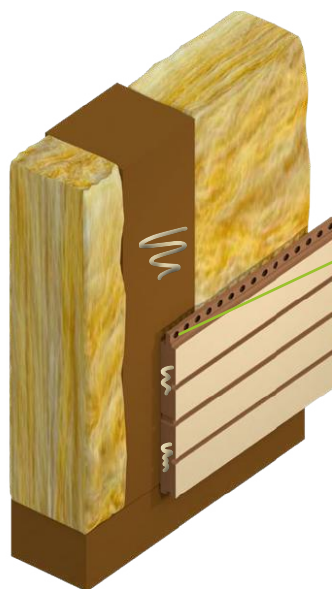
Installation system 2: with plates



To fix the plate on the wooden batten, use a 2.5x16 conical head screw with a wooden thread or equivalent. You must ensure that the screw head does not protrude from the edges of the clip.

Apply white glue for wood on the ends of the slats to minimize the opening of the joints.

Installation system 3: nailed and glued



PIN 06. Fix to the batten with Soudal HT-type adhesive and PIN 06 type needles.

Apply white glue for wood on the ends of the slats to minimize the opening of the joints.

D+ system installation rules for walls

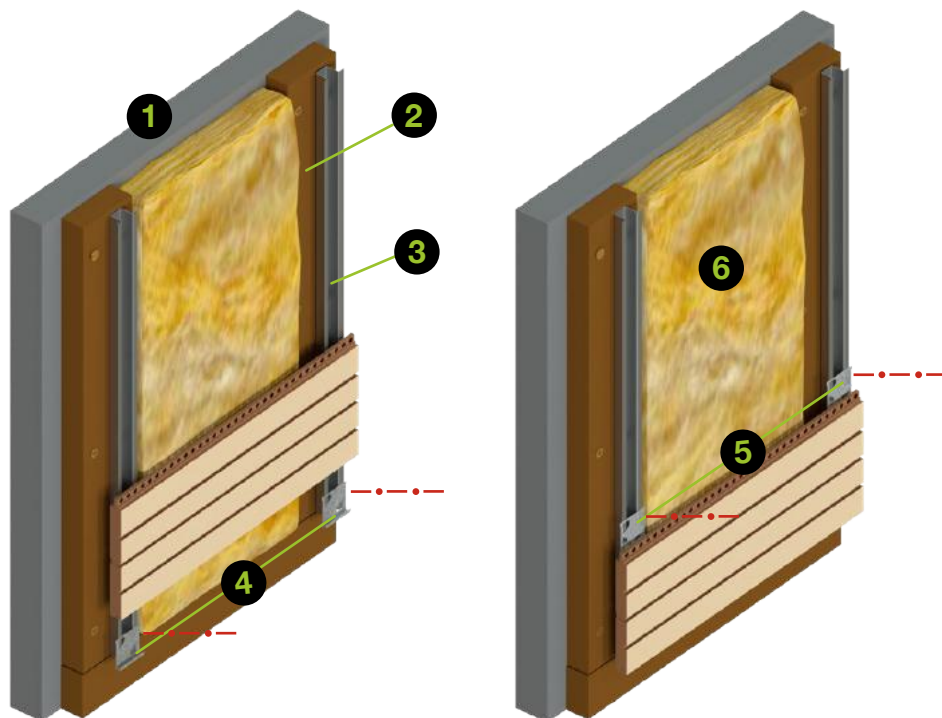
System 1: with Omega profiles

The system is installable on metal structures and / or Omega profiles.

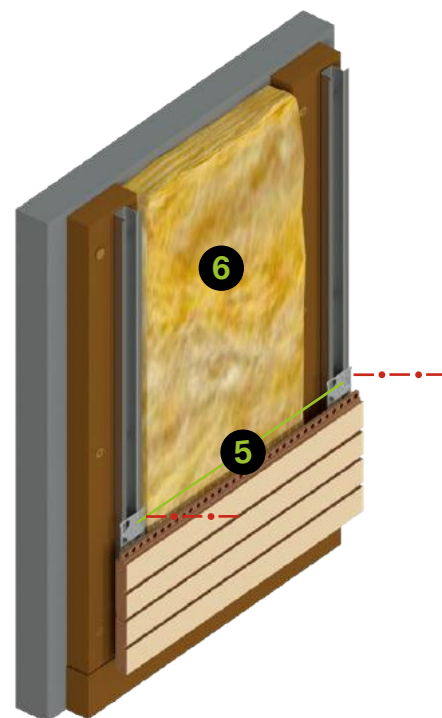


Installation example

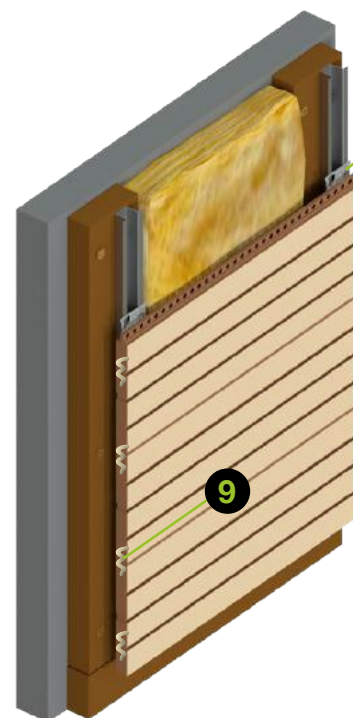
System 1: with Omega profiles



For greater agility in assembly, the omega profiles can be screwed beforehand onto the wooden battens, working on a workbench. Level the wall by placing these battens every 600 mm. Fix the start plate in the lower position with a self-tapping screw leaving a minimum gap of 5 mm to prevent direct contact with the floor. Place mineral wool ISOVER ARENA BASIC 45 mm or similar between the battens.



Install the lower row of slats ensuring perfect alignment and fix it with a clip at each intersection with an Omega Profile. Always install the slats upwards, preventing direct contact of slats with the floor by leaving a minimum of 5 mm. For greater stability, it is mandatory to fix one of every 3 plates using the recommended self-tapping screw 3.5x95 rivet head, pozi, model wurth ref 0208303595.



Apply white glue for wood on the ends of the slats to minimize the opening of the joints. On large walls, create an expansion joint approximately every 6 m.

Repeat the operation until the wall is completed. If there is not enough space to place the upper slat, it can be cut and fixed using mounting glue.

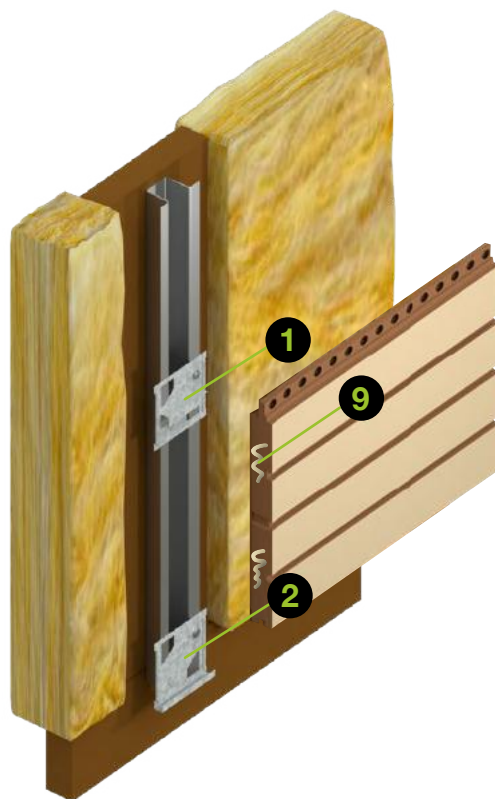


- 1 Structural wall
- 2 Wood batten
- 3 Omega profile
- 4 Start plate with wings
- 5 Intermediate plate with wings
- 6 Mineral wool
- 7 Self-tapping screw with rivet head
- 8 Position of screws — — — — —
- 9 Wood glue to reduce joint movement

Bill of materials for installation system 1

System 1

Wood battens, omega profile and plates



Bill of materials sq.m. (approx.)

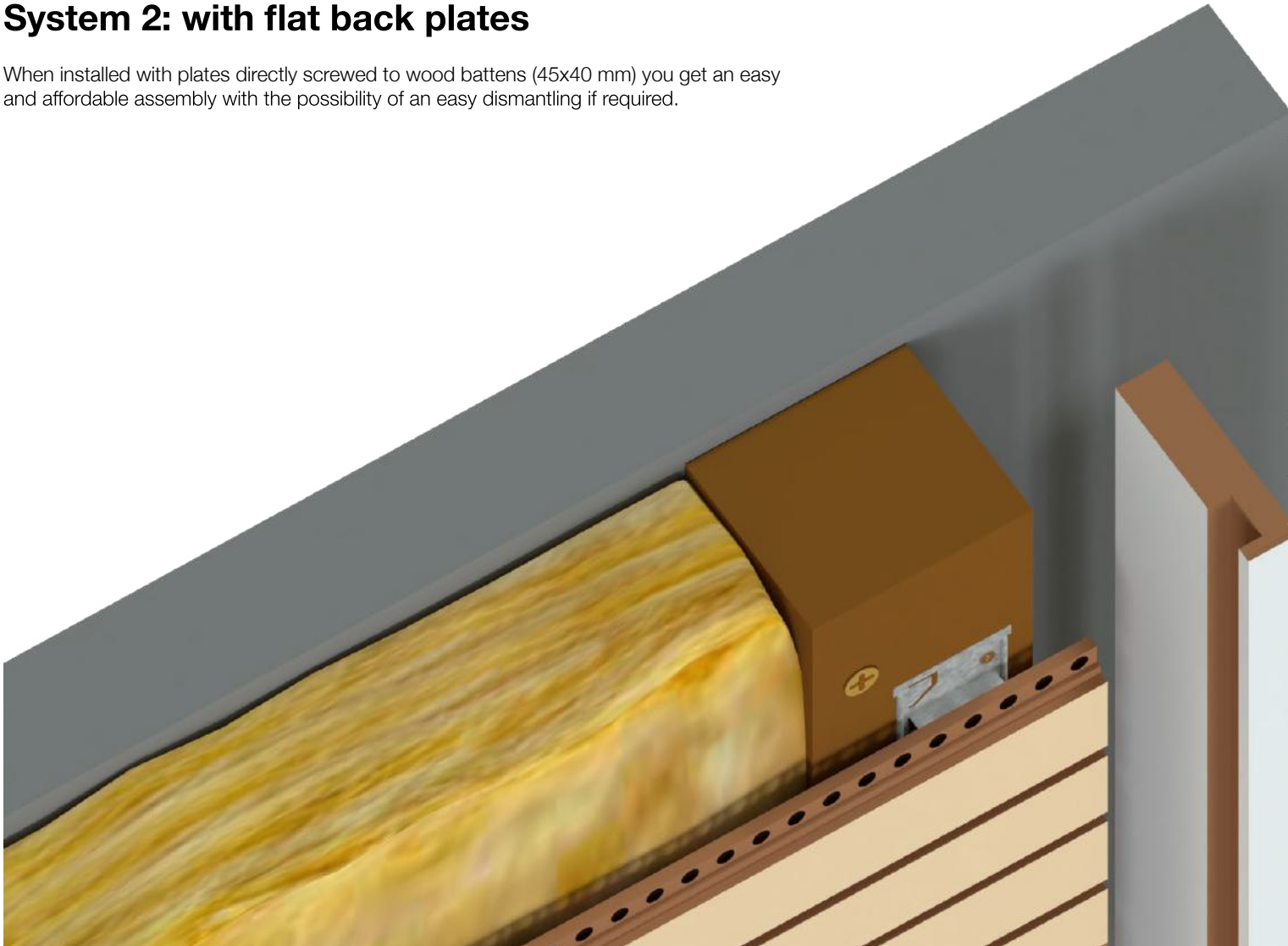
MDF thickness 45x19 mm	1,95 ml
Omega Profile 25x20 mm	1,95 ml
Start plates with wings	1 u
Intermediate plates with wings	15 u
Screw 4,5x60 conical head for wood batten 19 mm	4 u
Nylon plug Ø6 mm for wall	4 u
4x16 wood threaded screw for Omega Profile	4 u
Self tapping screw 3,5x95 rivet head pozi wurth ref. 0208303595	16 u
45 mm ISOVER BASIC mineral wool	1 m ²
Wood glue	
D+ slats	1,05 m ²

- 1** Plate with wings for Omega profile
- 2** Start plate for Omega profile
- 9** Wood glue to reduce joint movement

D+ system installation rules for walls

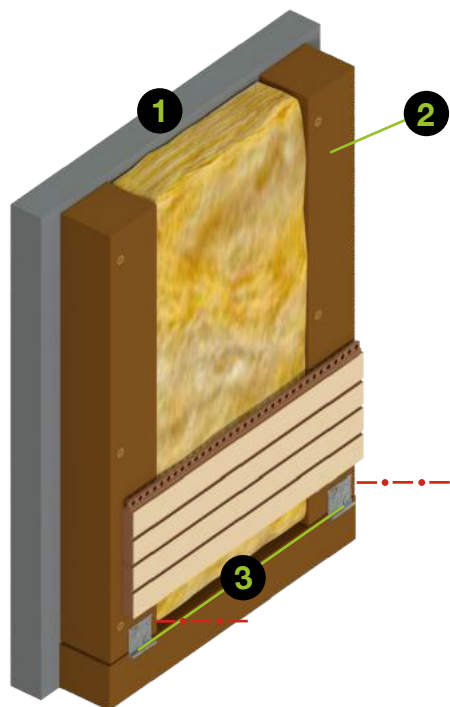
System 2: with flat back plates

When installed with plates directly screwed to wood battens (45x40 mm) you get an easy and affordable assembly with the possibility of an easy dismantling if required.

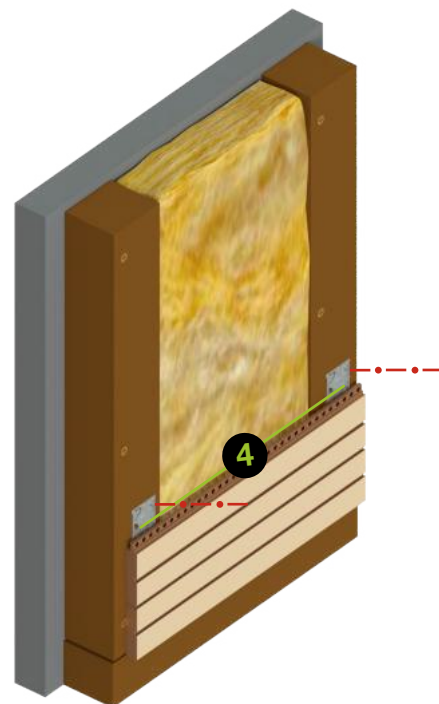


Installation example

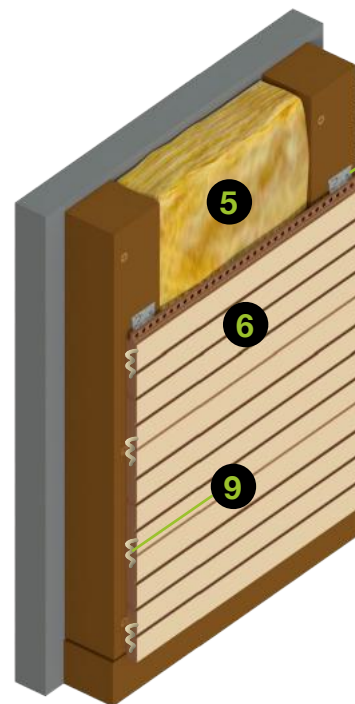
System 2: with flat back plates



Level the wall by placing 45x40 mm wood battens (for 40 mm plenum) every 600mm. Fix the starting plate in the lower position with a screw, leaving a distance (minimum 5 mm) to prevent direct contact with the floor. Place mineral wool ISOVER ARENA BASIC 45 mm or similar between the battens.



Install the lower row of slats ensuring perfect alignment and fix with a plate at each intersection with a wood batten. Always install the slats upwards, preventing direct contact of slats with the floor by leaving a minimum gap of 5 mm.



Apply white glue for wood on the ends of the slats to minimize the opening of the joints. On large walls, create an expansion joint approximately every 6 m.

Repeat the operation until the wall is completed. If there is not enough space to place the upper slat, it can be cut and fixed using mounting glue.

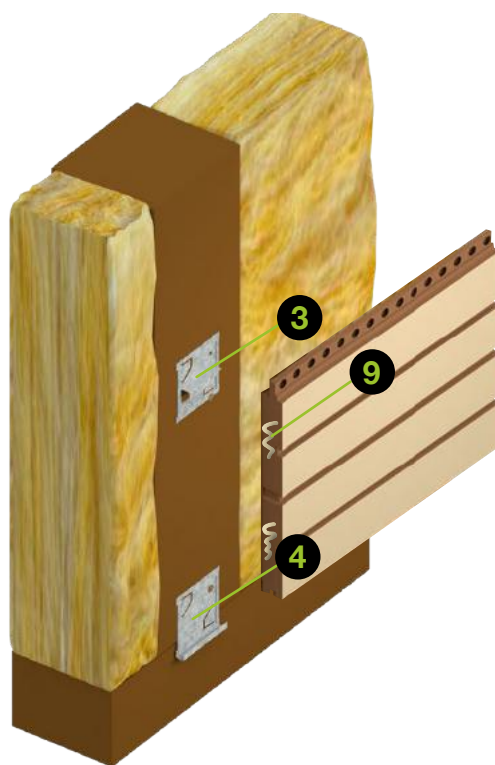


- 1 Structural wall
- 2 Wood batten
- 3 Start plate
- 4 Flat back plate
- 5 Mineral wool
- 6 D+ slat
- 7 Screw for plate to wood batten
- 8 Screw position — — — —
- 9 Wood glue to reduce joint movement

Bill of materials for installation system 2

System 2

Wood battens and plates



Bill of materials sq.m. (approx.)

MDF thickness 45x40 mm	1,95 ml
Start plate	1 u
Flat back plate	15 u
Conical head screw 5x80 for wood batten 40 mm thick	4 u
Nylon plug Ø6 mm for wall	4 u
2,5x16 wood threaded screw with conical head to secure plates	16 u
45 mm ISOVER BASIC mineral wool	1 m ²
Wood glue	
D+ slats	1,05 m ²

- 3** Flat back plate
- 4** Flat back start plate
- 9** Wood glue to reduce joint movement

D+ system installation rules for walls

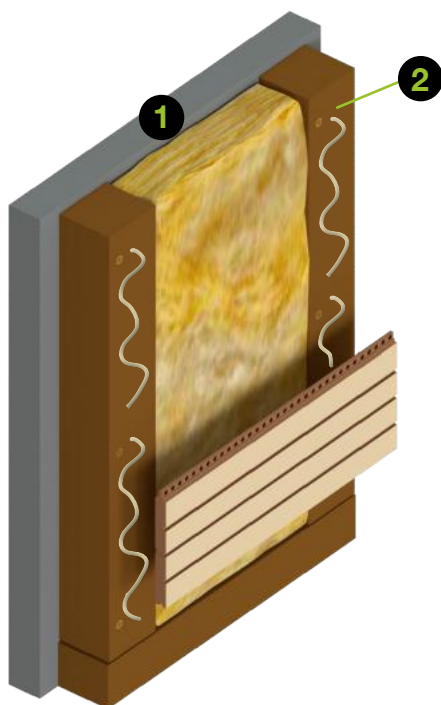
System 3: gluing and nailing

Mounting by gluing and nailing directly to the batten with a needle gun is highly professional, fast and very stable. This system is not removable.

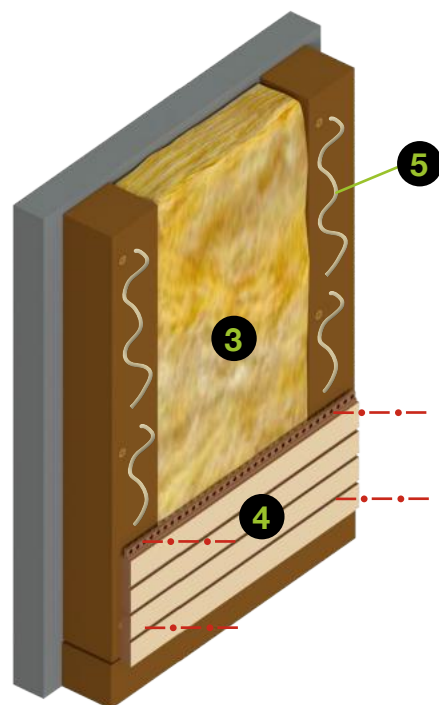


Installation example

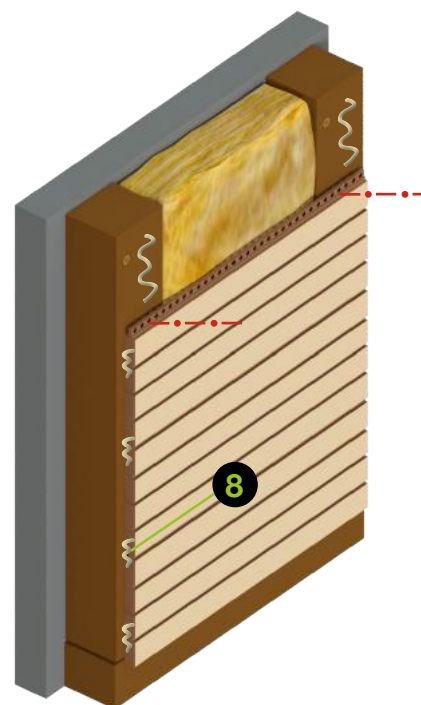
System 3: gluing and nailing



Level the wall by placing 45x40 mm battens (for 40 mm plenum) every 600 mm. Leave a distance (minimum 5 mm) to prevent direct contact with the floor. Place mineral wool ISOVER ARENA BASIC 45 mm or similar between the battens.



Install the lower row of slats ensuring perfect alignment and fix with glue and needles at each intersection with a wood batten. Always install the slats upwards, preventing direct contact of slats with the floor by leaving a minimum gap of 5 mm.



Apply white glue for wood on the ends of the slats to minimize the opening of the joints. On large walls, create an expansion joint approximately every 6 m.

Repeat the operation until the wall is completed. If there is not enough space to place the upper slat, it can be cut and fixed using mounting glue.

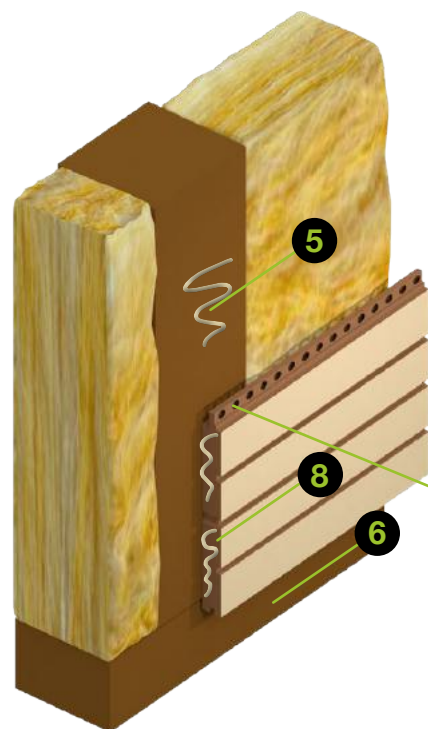


- 1** Structural wall
- 2** Wood batten
- 3** Mineral wool
- 4** D+ slat
- 5** Fix to the batten with Soudal HT-type adhesive and PIN 06 type needles.
- 6** Needle gun
- 7** Needle position — · — · —
- 8** Wood glue to reduce joint movement

Bill of materials for installation system 3

System 3

Wood battens, needles and glue



Bill of materials for sq.m. (approx.)

MDF thickness 45x40 mm	1,95 ml
Conical head screw 5x80 for wood batten 40 mm thick	4 u
Nylon plug Ø6 mm for wall	4 u
Needle gun	
45 mm ISOVER BASIC mineral wool	1 m ²
Soudal HT type adhesive and PIN 06 type needles	
Wood glue	
D+ slats	1,05 m ²



- 5** Fix to the batten with SOUDAL HT-type adhesive and PIN 06 type needles.
- 6** Horizontal wood batten at the bottom to prevent mineral wool from coming out
- 7** Needle gun
- 8** Wood glue to reduce joint movement

Installation battens

Types and dimensions of installation battens

D+ acoustic slats are installed on battens screwed directly to the wall, leaving a space of 40 mm filled with mineral wool. This mineral wool filling is necessary for the correct absorption of the acoustic panels.



**45x19 mm
batten for type 1
installation with
20x25 mm omega
profile (40 mm
plenum).**



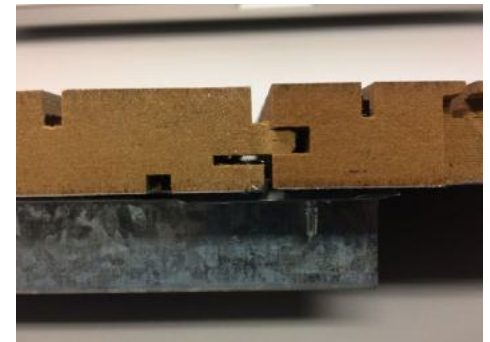
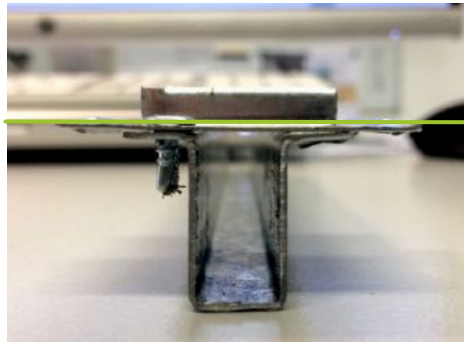
**45x40 mm batten
for installation
type 2 with
plates or type 3
nailed and glued
(plenum 40 mm).**

Very important

**This recommendation is applicable for all models of installation plates.
It is mandatory to ensure that the screw head does not interfere with the slat.**

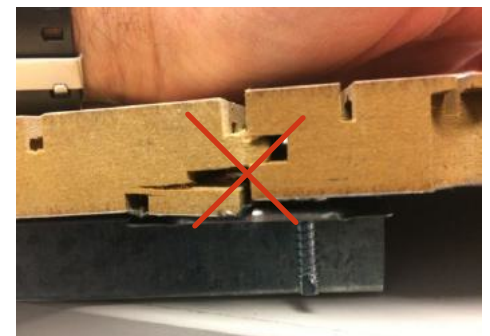
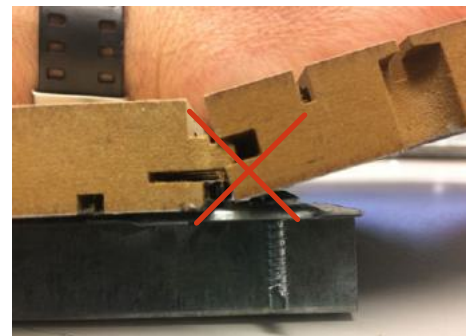
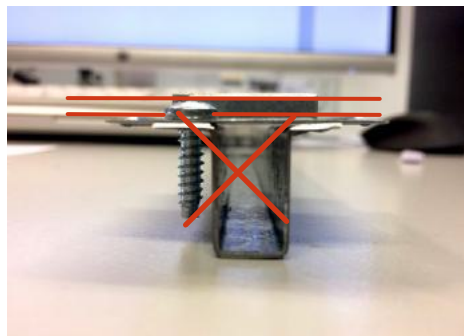
Right

Very important: the screw head must not protrude from the edges of the plate. Use the recommended screws for each installation system.

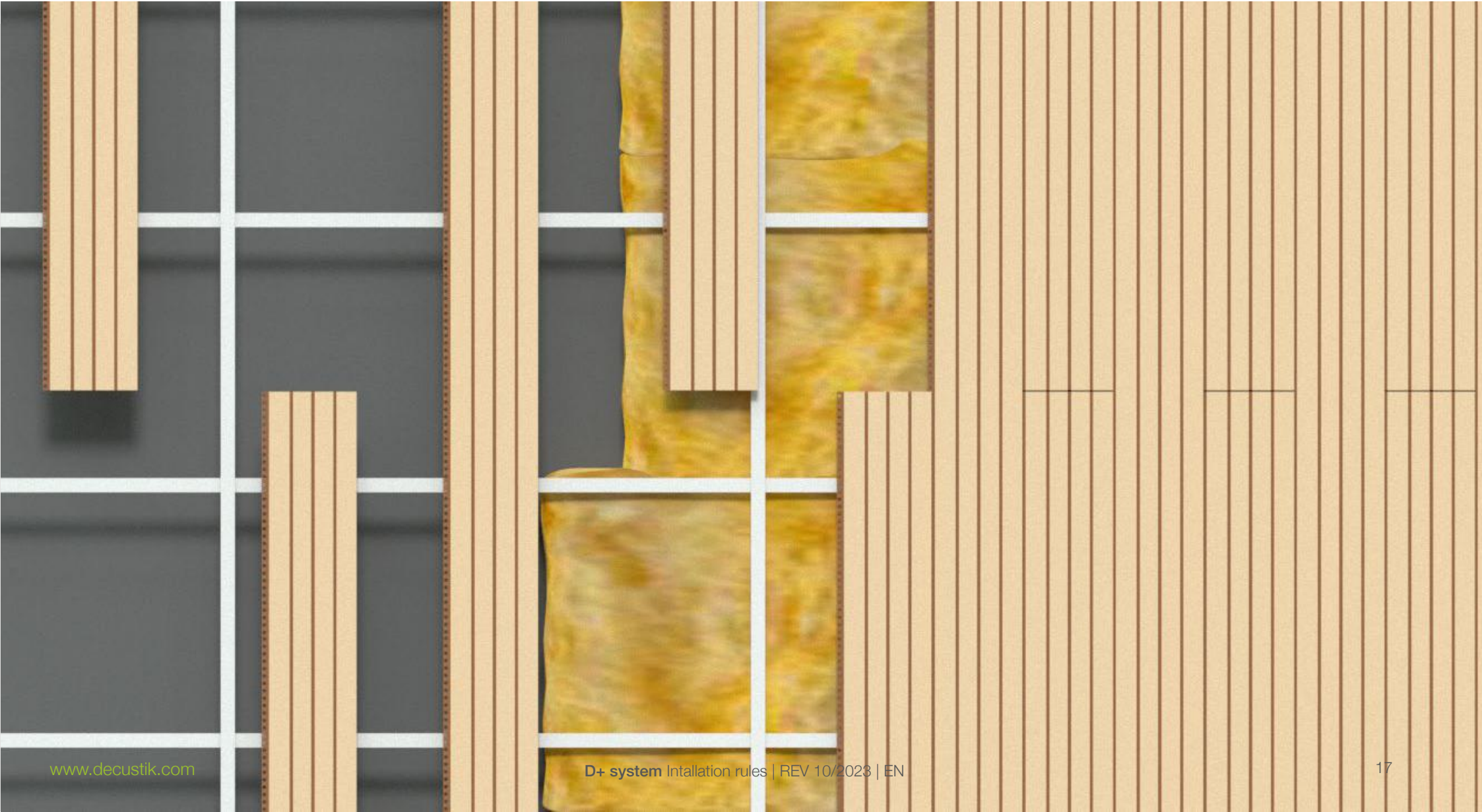


Incorrect

The use of inadequate screws or with the height of the head too large may cause the slats to break and fall.



D+ system installation instructions for ceiling



D+ system installation instructions for ceiling

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).

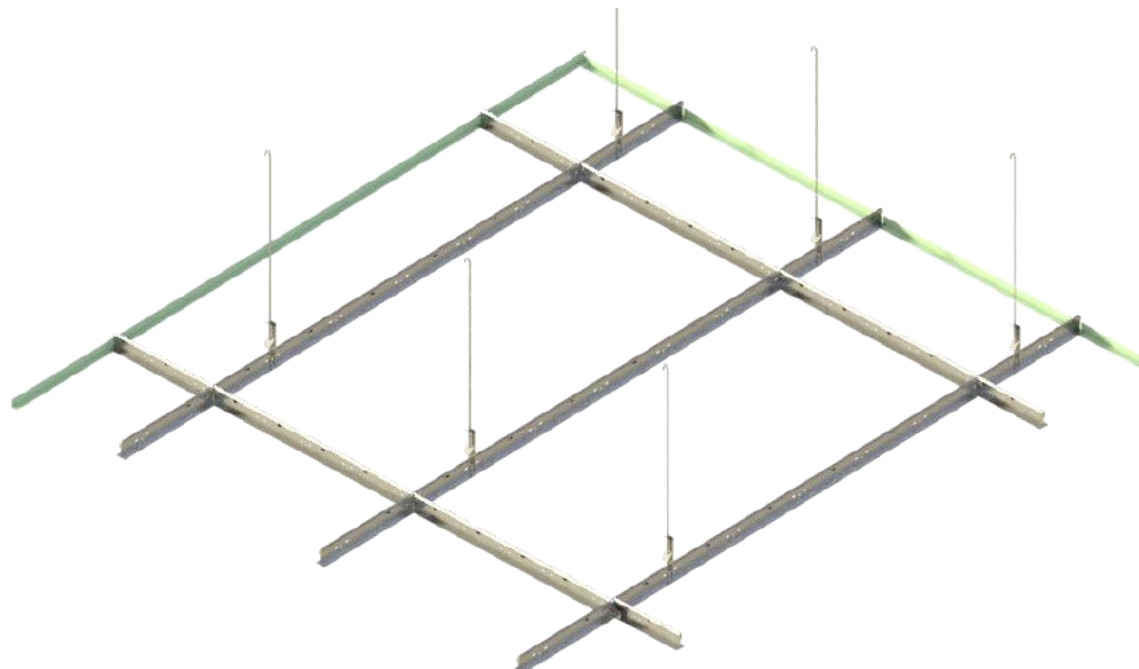
To achieve the acoustic absorption coefficients equivalent to those obtained in our laboratory tests, leave a space of 200 mm above the slats and place a layer of mineral wool ISOVER ARENA BASIC 45 mm or equivalent over the slats.

Ceiling installation

Install a T24 Profile structure securely hung and correctly aligned and leveled, leaving enough space to install the mineral wool and the running of other services. This structure is made up of main runners hung every 600 mm and 600 mm cross tee profiles placed every 1200 mm, forming a 1200x600 mm frame.

Install the slats across the main runners, starting from one end, maintaining alignment in the slats and joints.

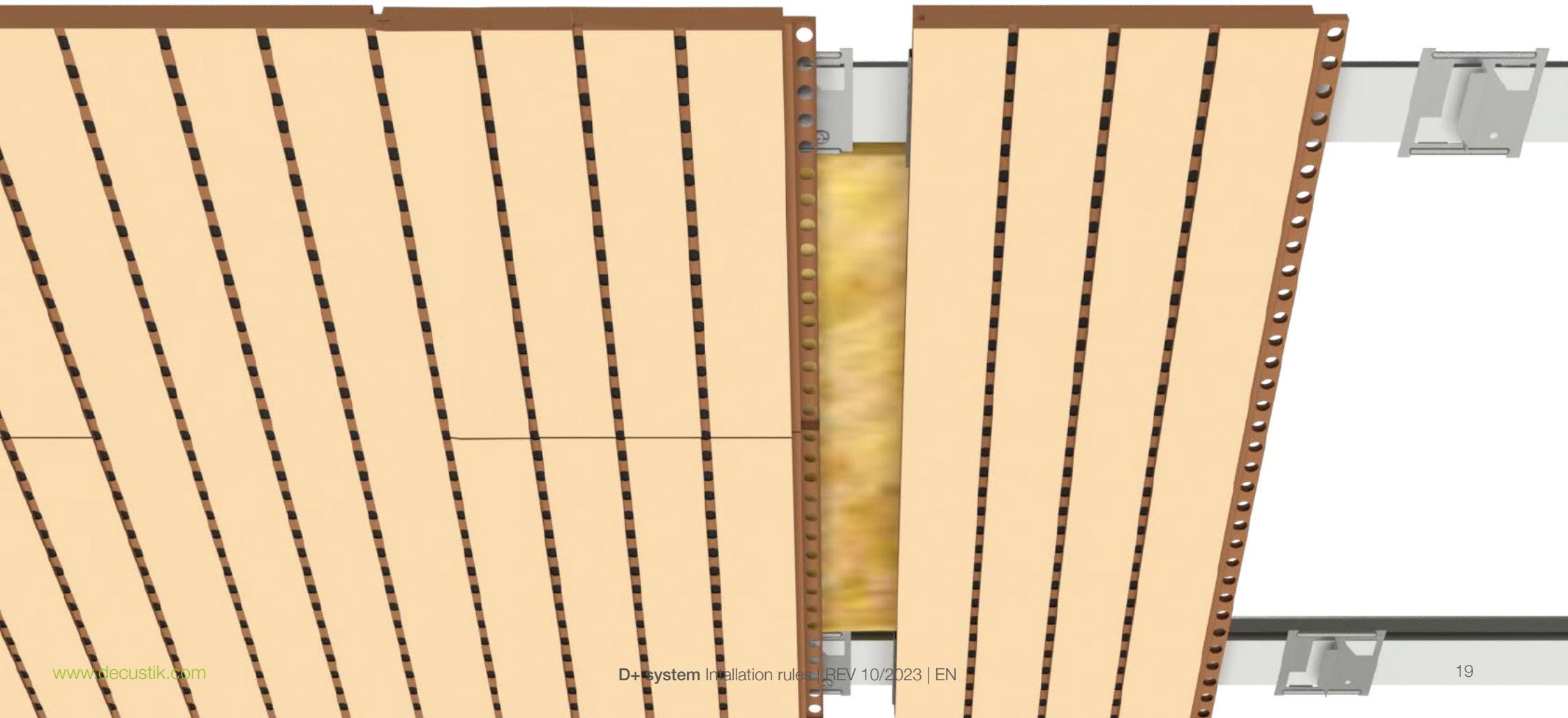
Fix the last slat using a mechanical system, usually mounting glue.



D+ ceiling installation system details

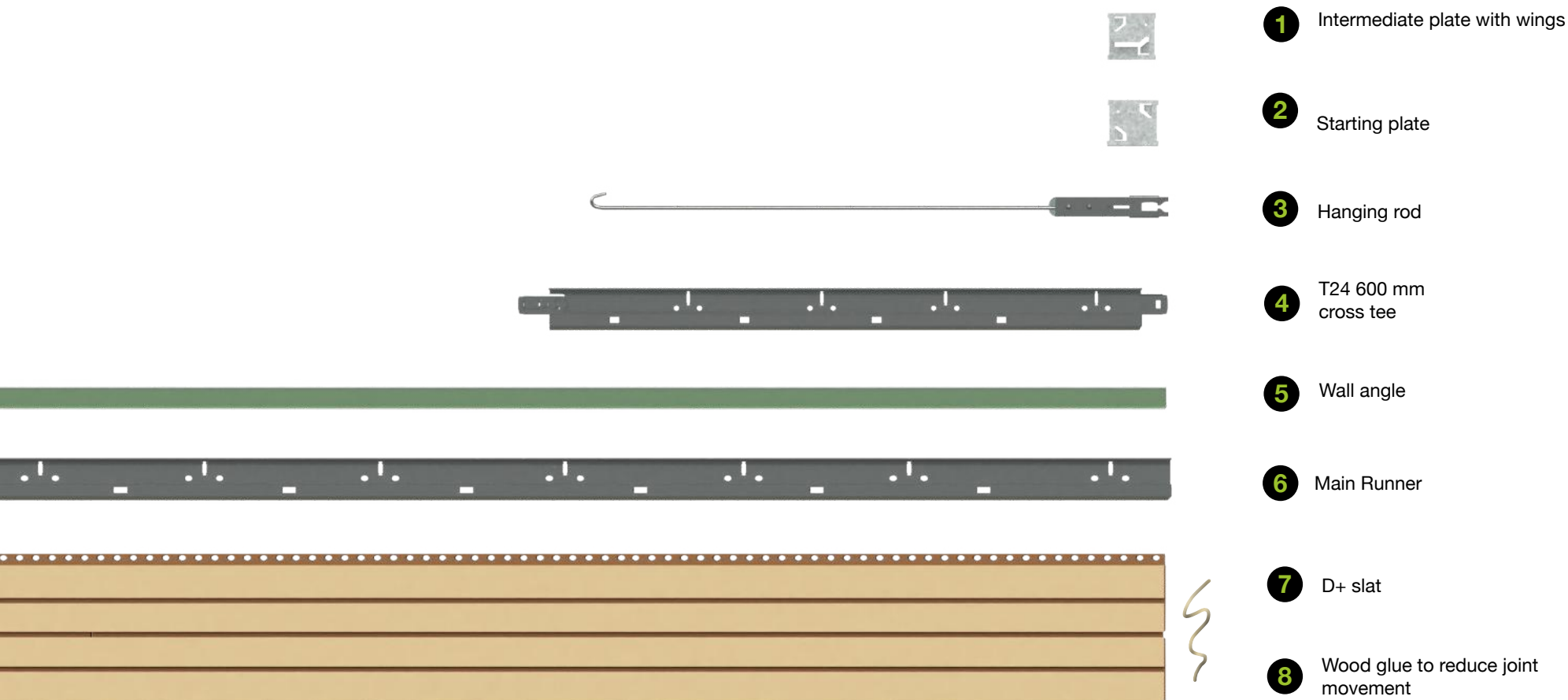
System with T24 profiles and plates with wings

D+ slats are easily installed hanging from a standard T24 ceiling grid by means of wing plates.



D+ ceiling installation system details

List of necessary materials



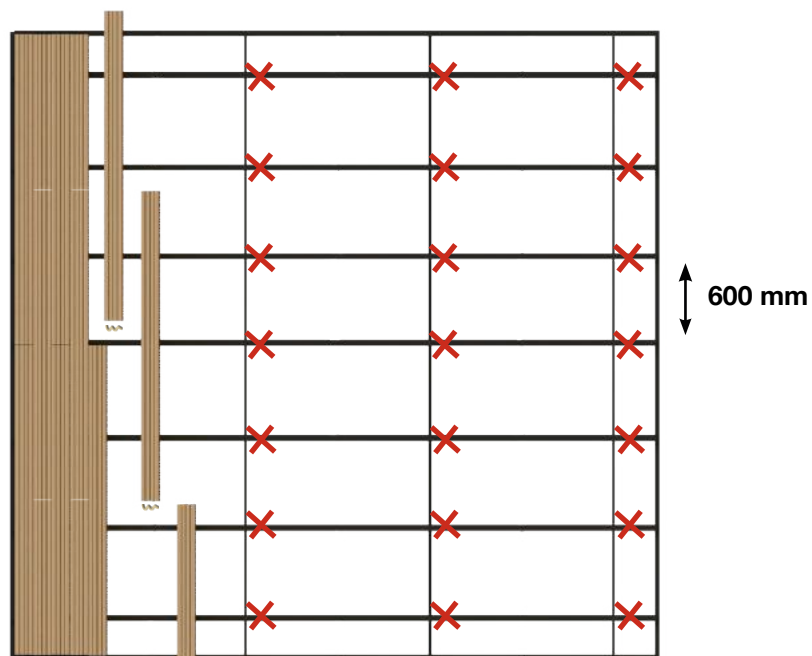
D+ ceiling installation system details

T24 structure assembly

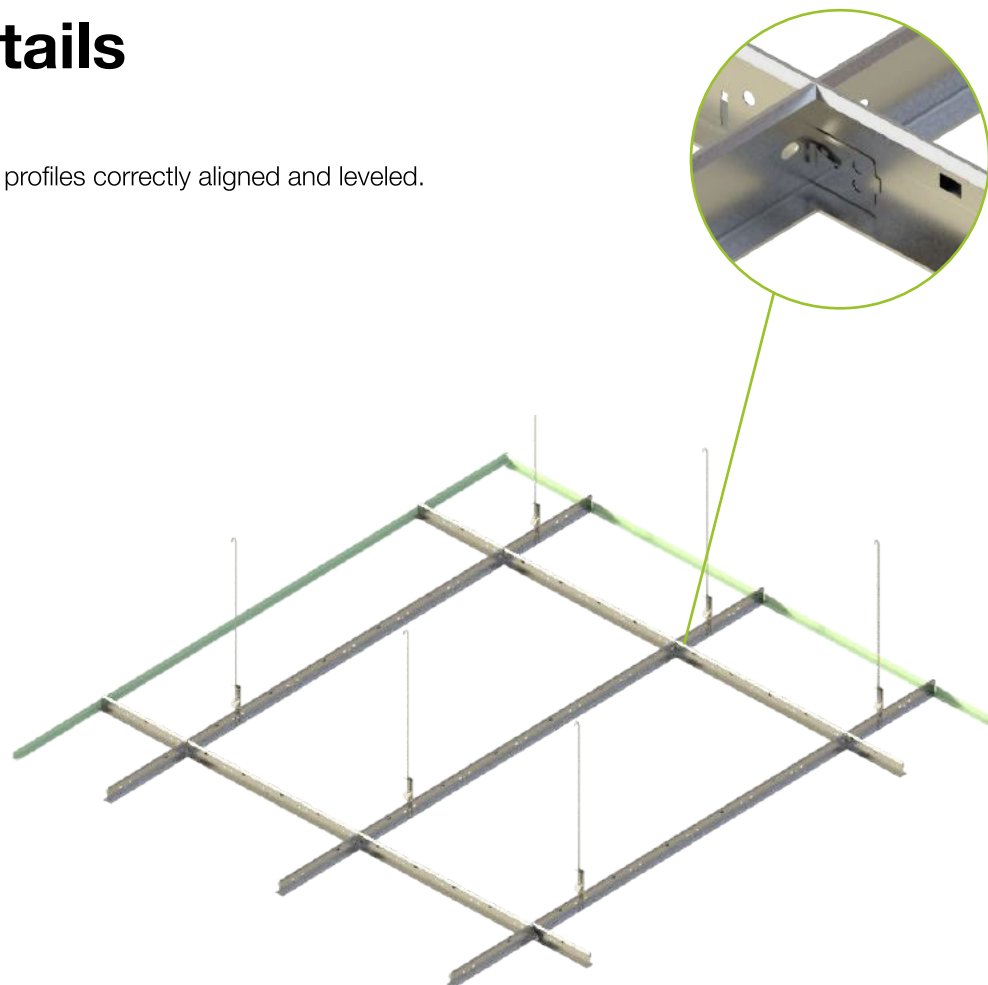
Install a T24 profile structure made of main runners, 600 mm cross tee and wall angle profiles correctly aligned and leveled.
Place the slats by means of the wing plates.

✗ Hanging rod

~ White glue for wood on the ends



Ceiling layout and main runners



Grid of standard T24 profiles

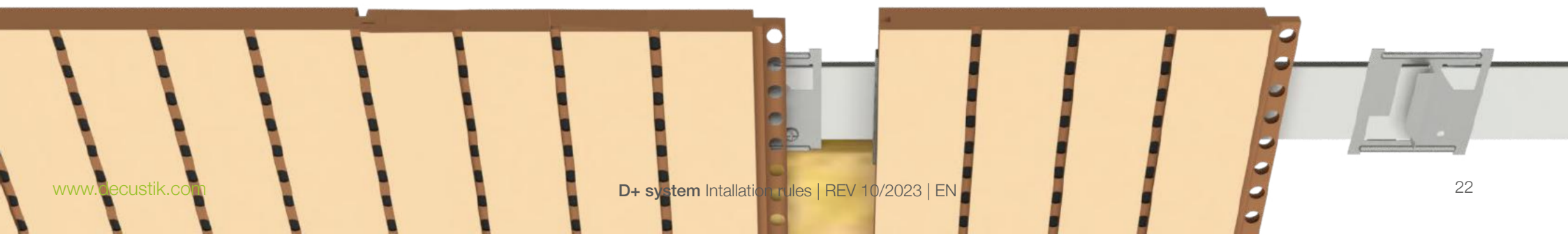
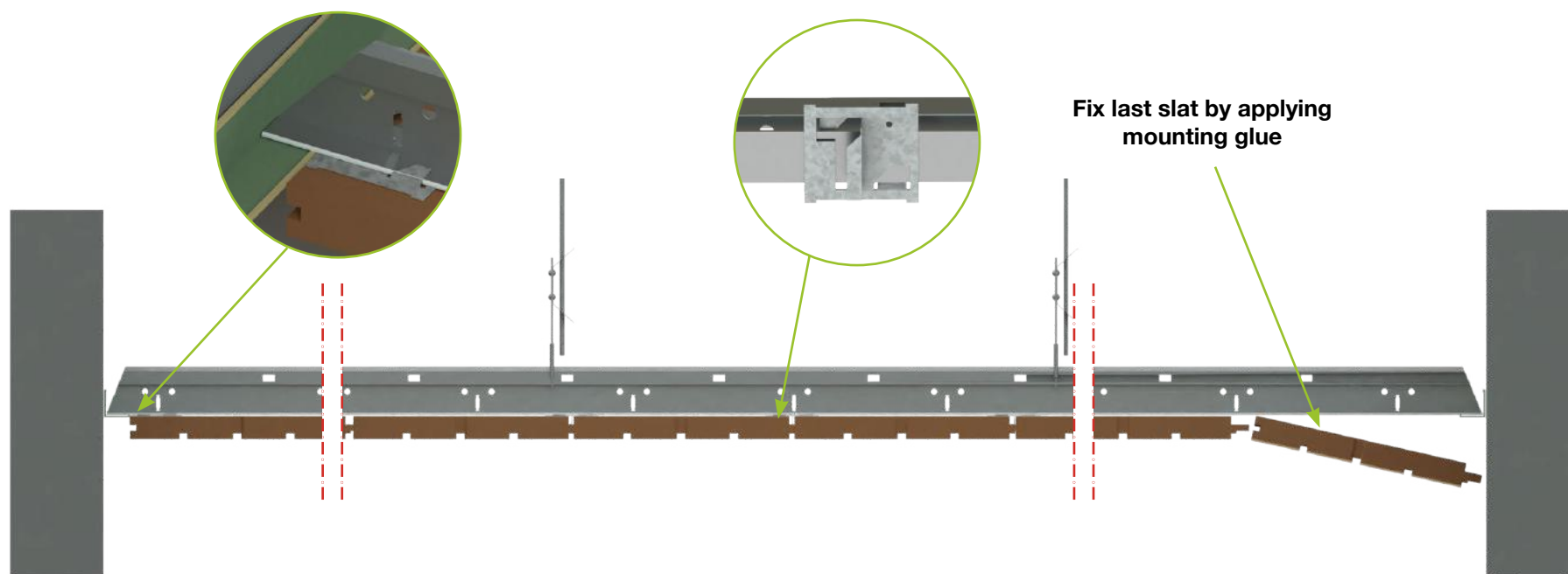
D+ ceiling installation system details

Installing slats

Install the slats below the structure using the wing plates.

Take care to place the slats well aligned.

Fix the last slat with mounting glue or another mechanical fixing.



D+ panel dimensions

Standard dimensions

D+ slat dimensions

2430x128x16 mm - standard dimensions

2840x128x16 mm - depending on material availability

2430x128x16 mm



2840x128x16 mm

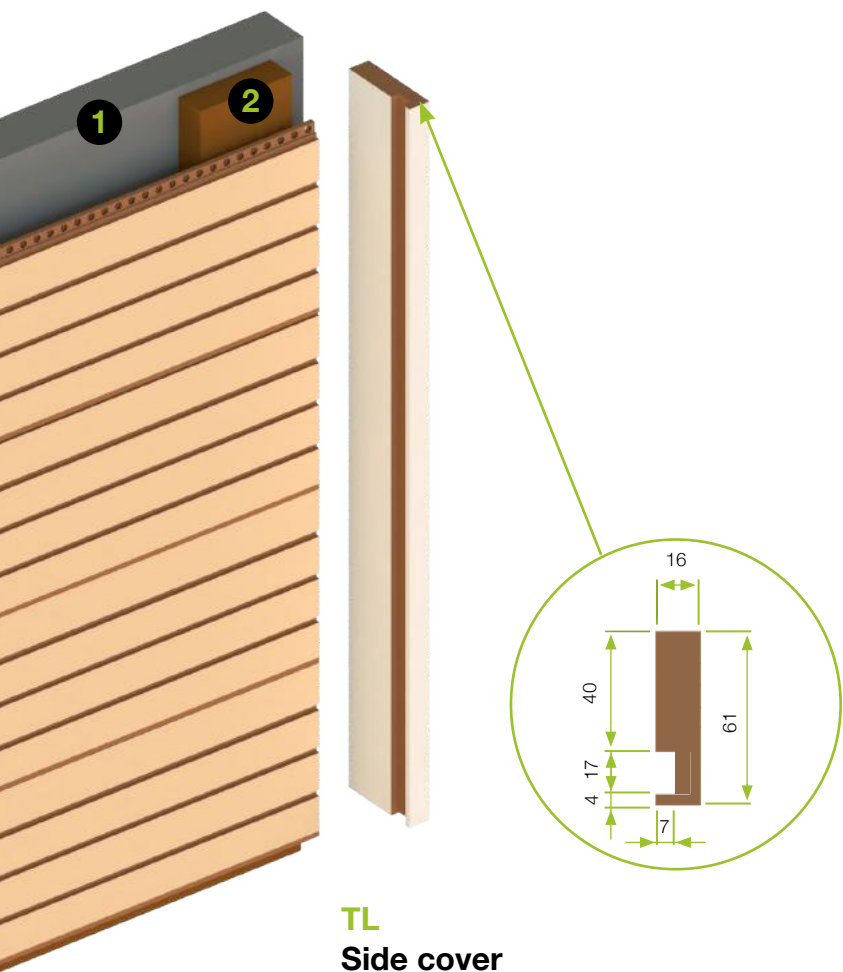


Other dimensions and shapes please consult

Endings and skirting boards

To achieve an impeccable result in your installation

With the same materials and finishes we manufacture skirting boards and trim solutions to achieve the best result for your project.



Important note: prevent direct contact of the slats with the floor and moisture. Leave a minimum ground clearance of 5 mm.



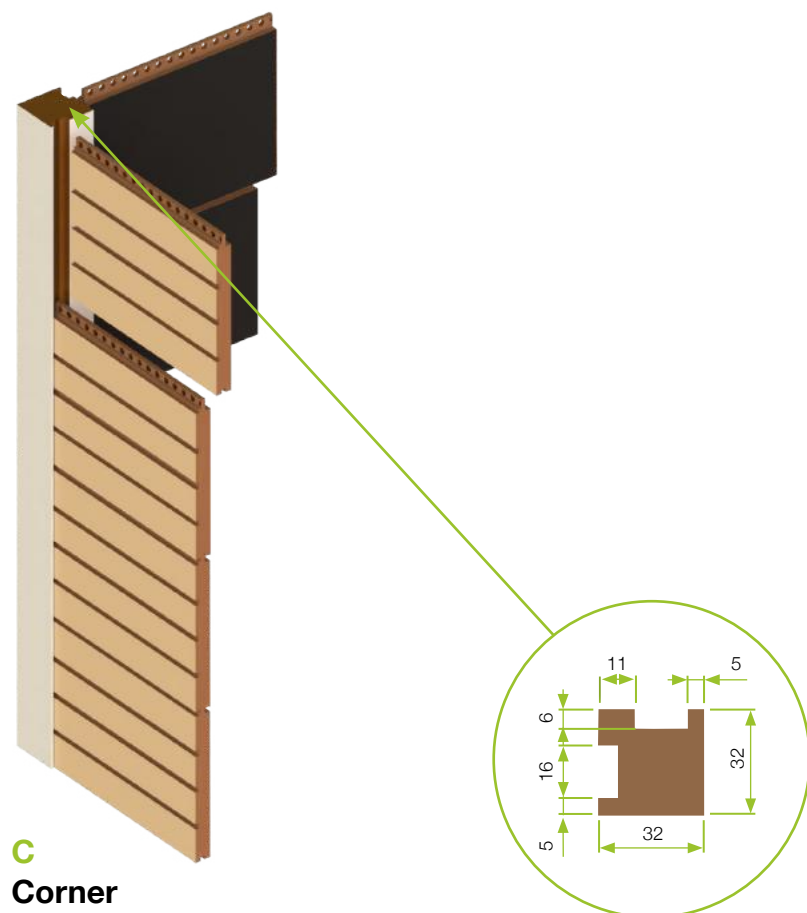
- 1** Structural wall
- 2** Wood batten
- 3** Flat back start plate
- 4** Flat back plate

Endings and skirting boards

To achieve an impeccable result in your installation

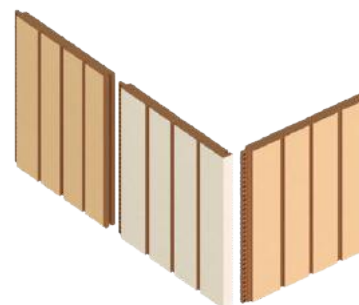
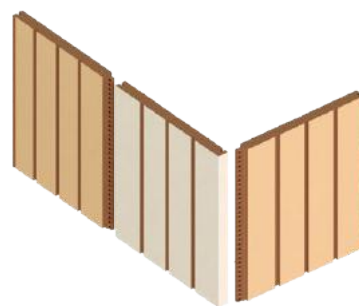
With the same materials and finishes we manufacture baseboard and trim solutions to achieve the best result for your project.

Corner



C
Corner

D+ slats edged Male and Female



LFC
Only Groove slat with rear slot



LMC
Only Tongue slat with rear slot

Access hatch for D+

Where it is necessary to access behind D+ paneling, you must install access hatches.

The hatches can be finished with the same materials and finishings as the rest of the panels.



Single dimension: 500x500 mm



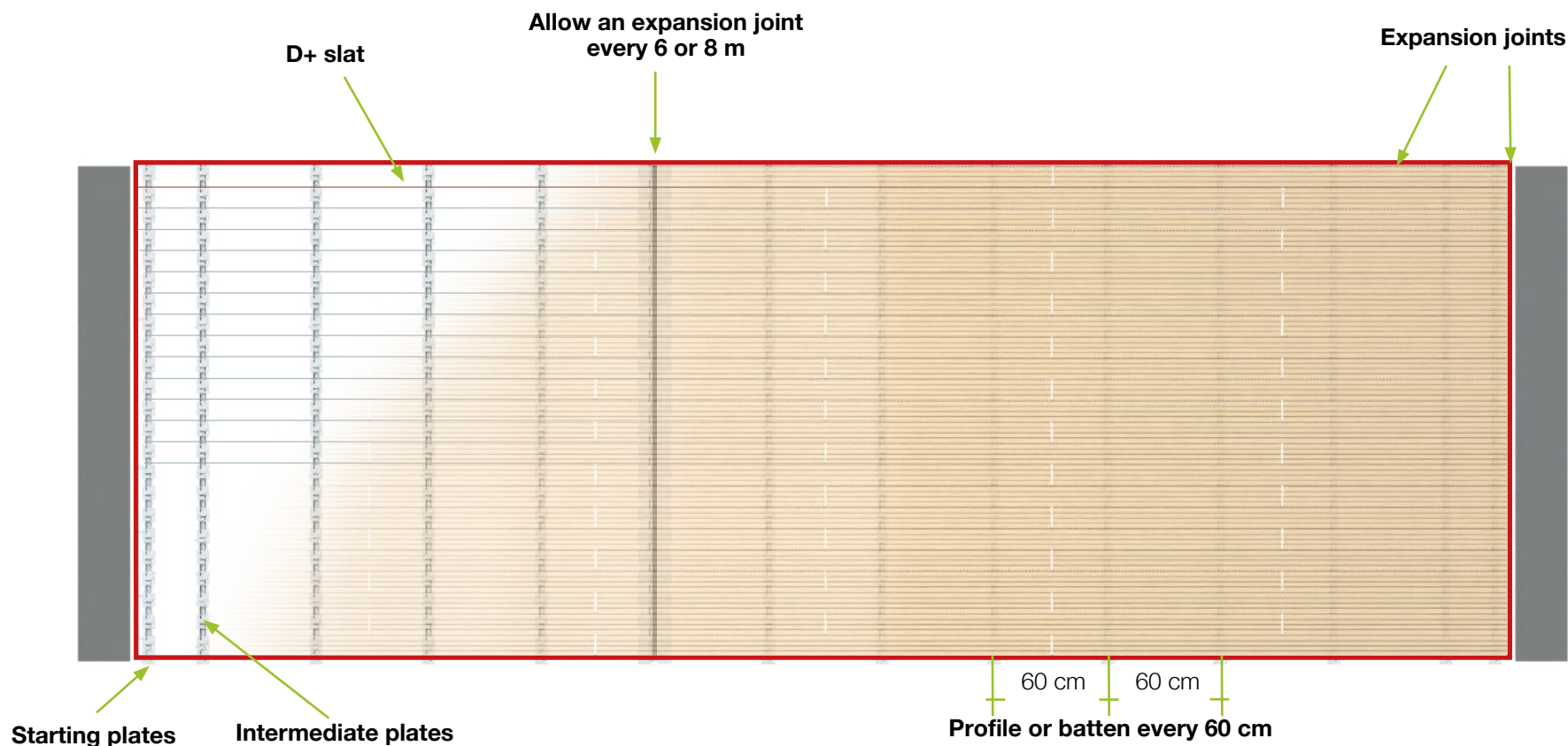
Expansion joints for walls and ceilings

To be installed on the perimeter and every 6 or 8 meters

The acoustic and decorative panels are made of wood fiber pannels that, like natural wood, expand and contract according to weather conditions. In the summer months the panels expand considerably due to the high humidity of the air and the temperature. It is important to maintain a distance (called an "expansion joint") between the perimeter of the cladding and all the walls and fixed elements in the room.

Expansion joints must be allowed around the perimeter of the installed surface and, on large walls and ceilings, every 6 or 8 linear meters. As a general rule, a 1.5 mm joint must be provided for each linear meter around the perimeter of the wall and also in the middle of the wall or ceiling every 6 or 8 linear meters.

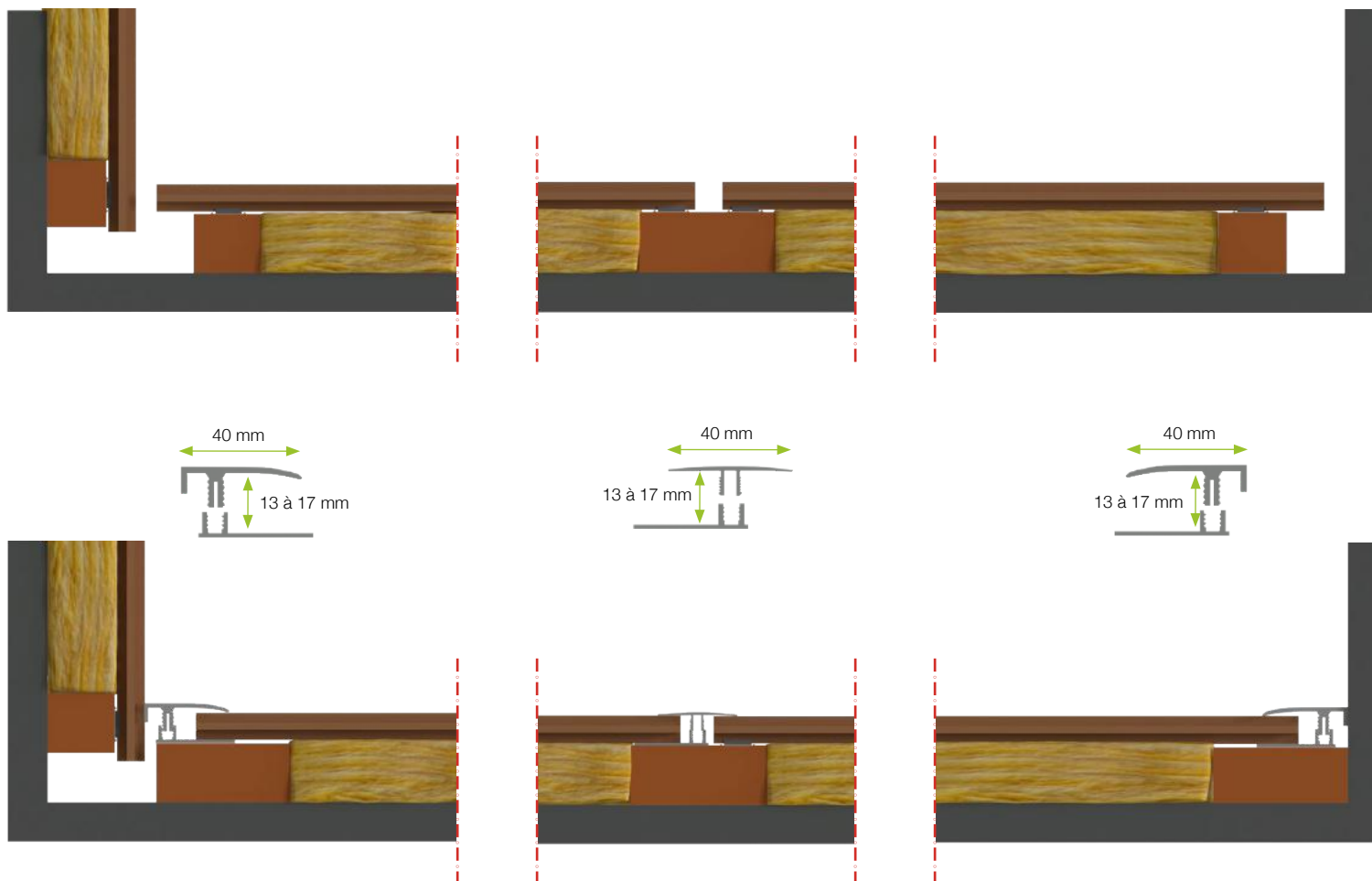
Expansion joints can be covered with special covers or profiles.



Expansion joints

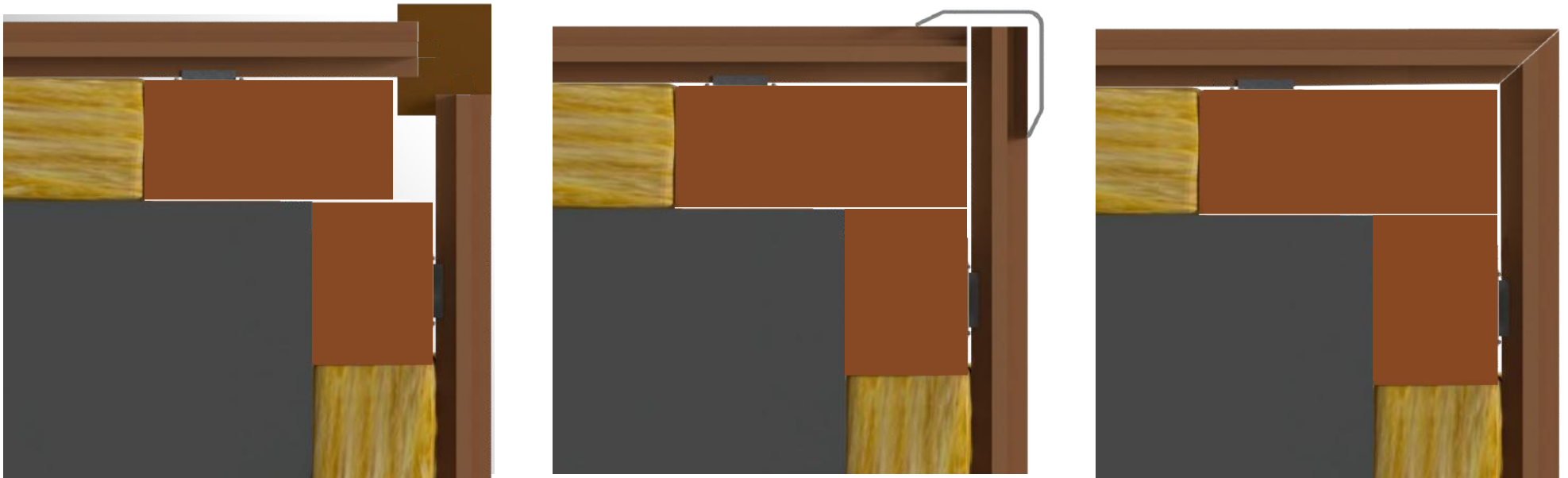
Expansion joint cover plates

Expansion joints can be covered with special plates or profiles.



Corner pieces

Examples of available corner pieces



Important

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

The images in this manual are only illustrative of the different installation concepts and recommendations; therefore the dimensions, 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.

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**INSTALLATION INSTRUCTIONS DECUSTIK D+
REV 10 2023 / EN**



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