

grad[®]

GRAD[®] FOR CLADDING

Installation Guide for
Mini Rails and Start Rails



BEFORE YOU START

Transportation & Storage

- When transported, the Grad® rails should be secured in their original packaging and should be stored indoors before installation.
- Grad® rails can be stored outdoors for short periods of time just before being used
- Only material that has been grooved to Grad's specifications can be used with Grad® rails
- No heavy object should be stored on top of the rails to avoid possible damage and/or distortion of the rails.

Applications

- The rails can be used for horizontal, vertical, diagonal cladding
- Only use Grad® cladding as specified by the manufacturer

What to check

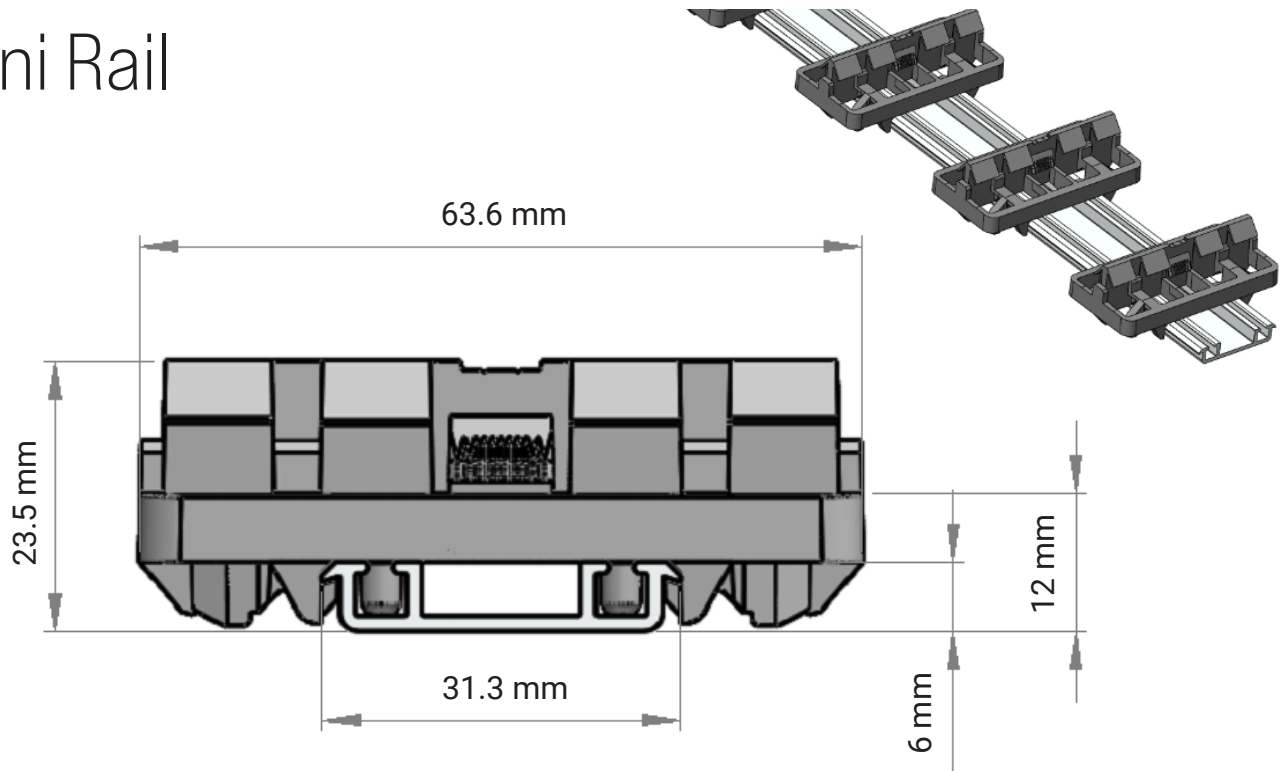
- The wall should be entirely straight
- Each rail must be fixed onto a flat and hard surface (stud or wall) using the right fasteners adapted to the surface onto which the rails are secured.

Safety Guidelines

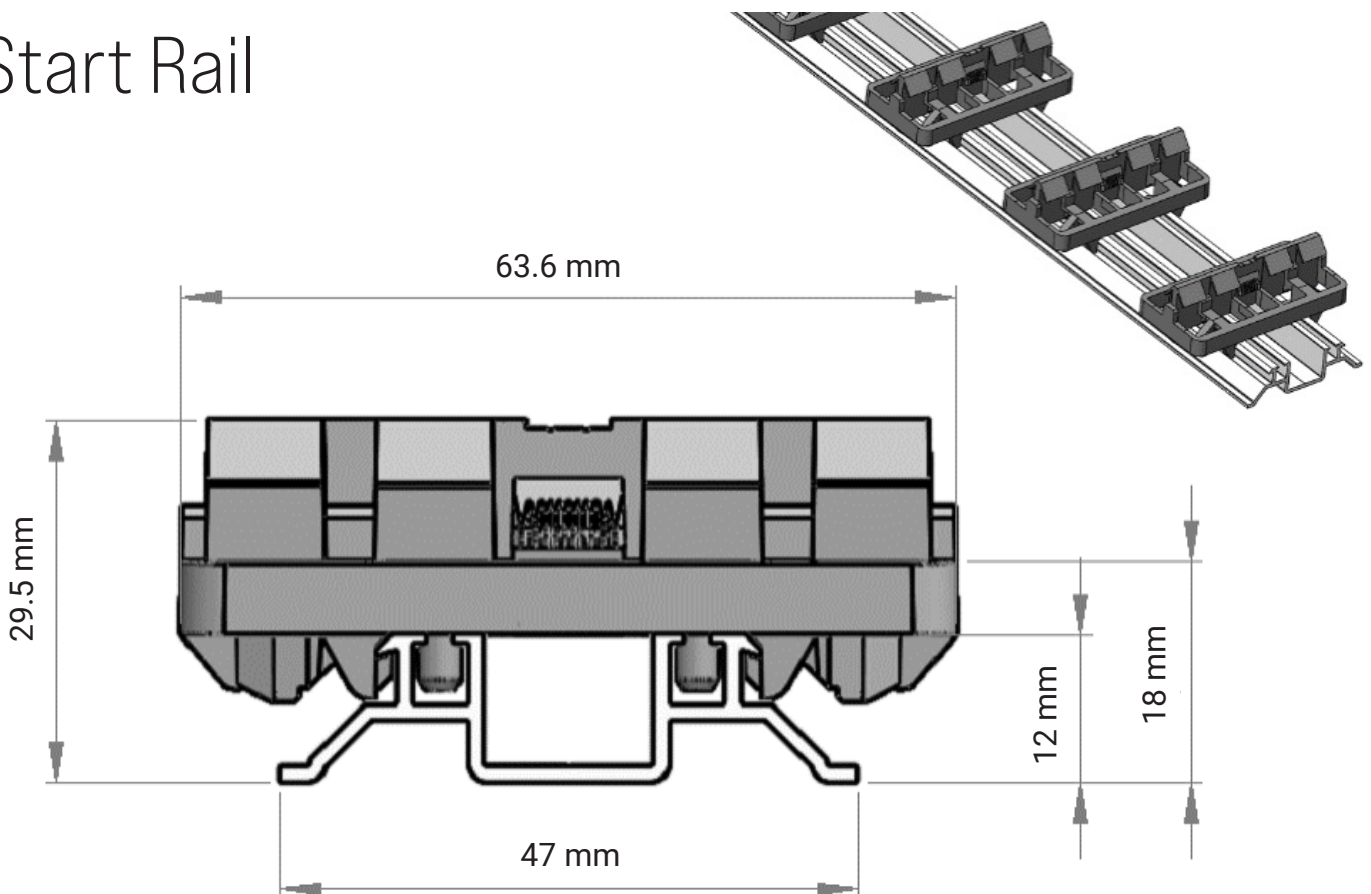
- Wear protective clothing and safety equipment such as safety glasses, gloves, long sleeves, and a mask, particularly when cutting aluminum
- The installer is responsible for identifying and following all building codes and construction safety practices
- Grad® accepts no liability or responsibility for the improper installation of this product
- Grad® for cladding may not be suitable for every application, and it is the sole responsibility of the installer to be sure that Grad® cladding is fit for the intended use. Because all installations are unique, it is also the installer's responsibility to determine specific requirements for each cladding application.
- Grad® recommends that all applications be reviewed by a licensed architect, engineer or local building official before installation.

RAIL CHARACTERISTICS

Mini Rail



Start Rail



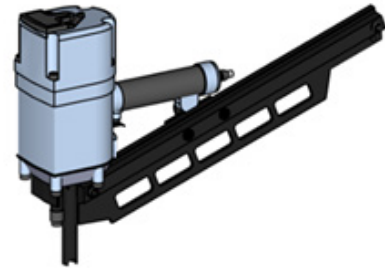
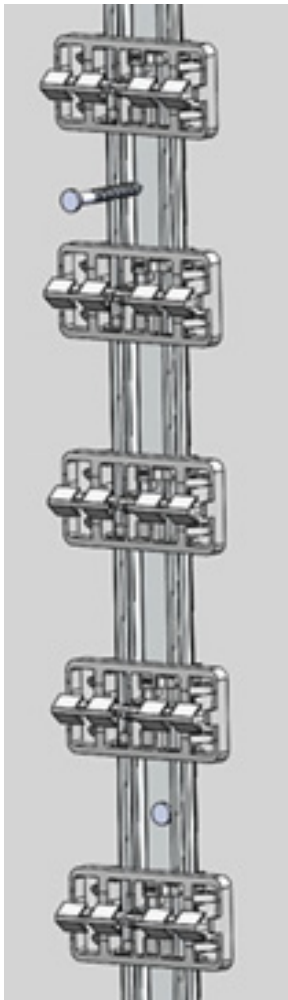
FIXING GRAD[®] RAILS

with a pneumatic nail gun



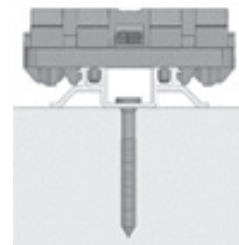
Mini Rail:

In between 2 clips, approximately
every 25 cm



Start Rail:

In between 2 clips, approximately
every 50 cm



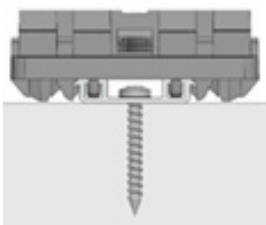
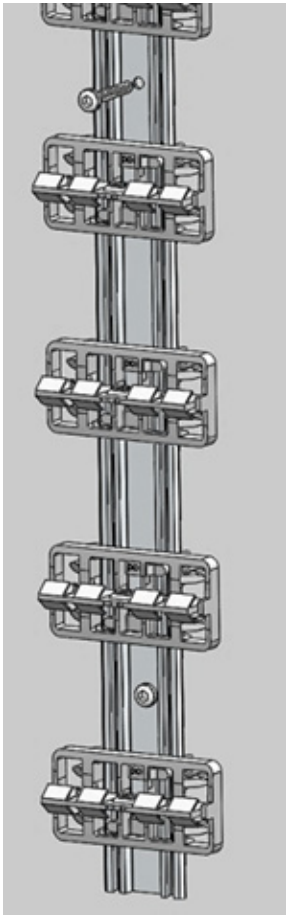
FIXING GRAD® RAILS

with screws



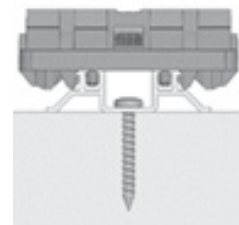
Mini Rail:

In between 2 clips, approximately
every 25 cm



Start Rail:

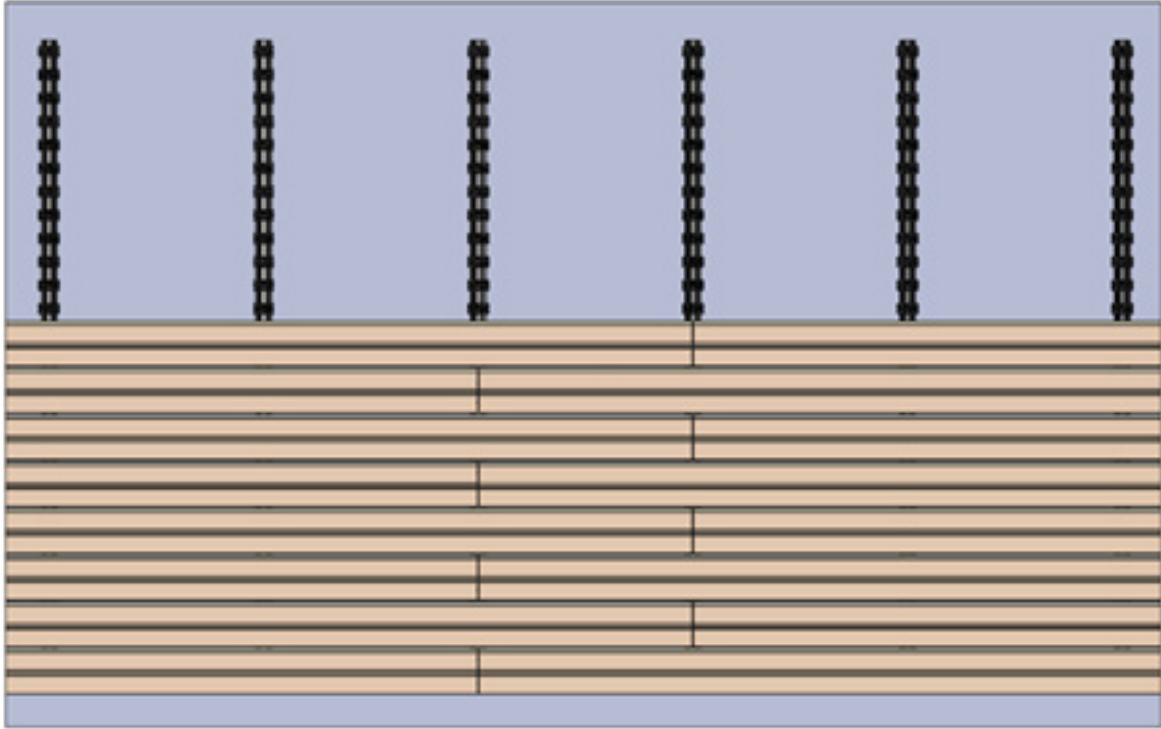
In between 2 clips, approximately
every 50 cm



DIFFERENT CONFIGURATIONS

for horizontal and vertical cladding

For horizontal cladding, rails must be placed vertically.



For vertical cladding, rails must be placed horizontally.

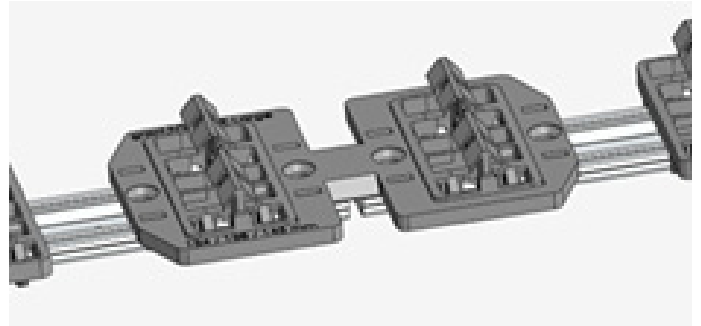
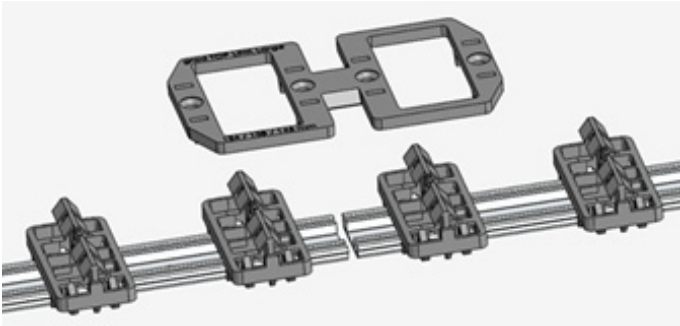


INSTALLING THE RAILS

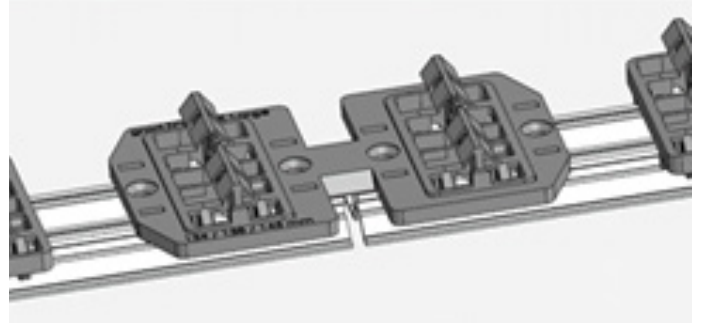
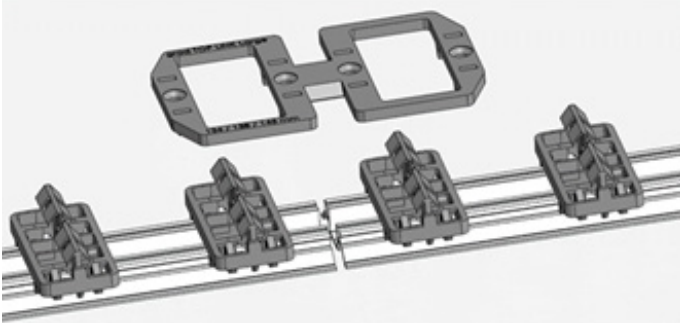
Connecting rails with the Top Link

Top links quickly align and connect rails in a snap (no need for screws) and ensure a regular gap is maintained between two rails to allow for aluminium expansion.

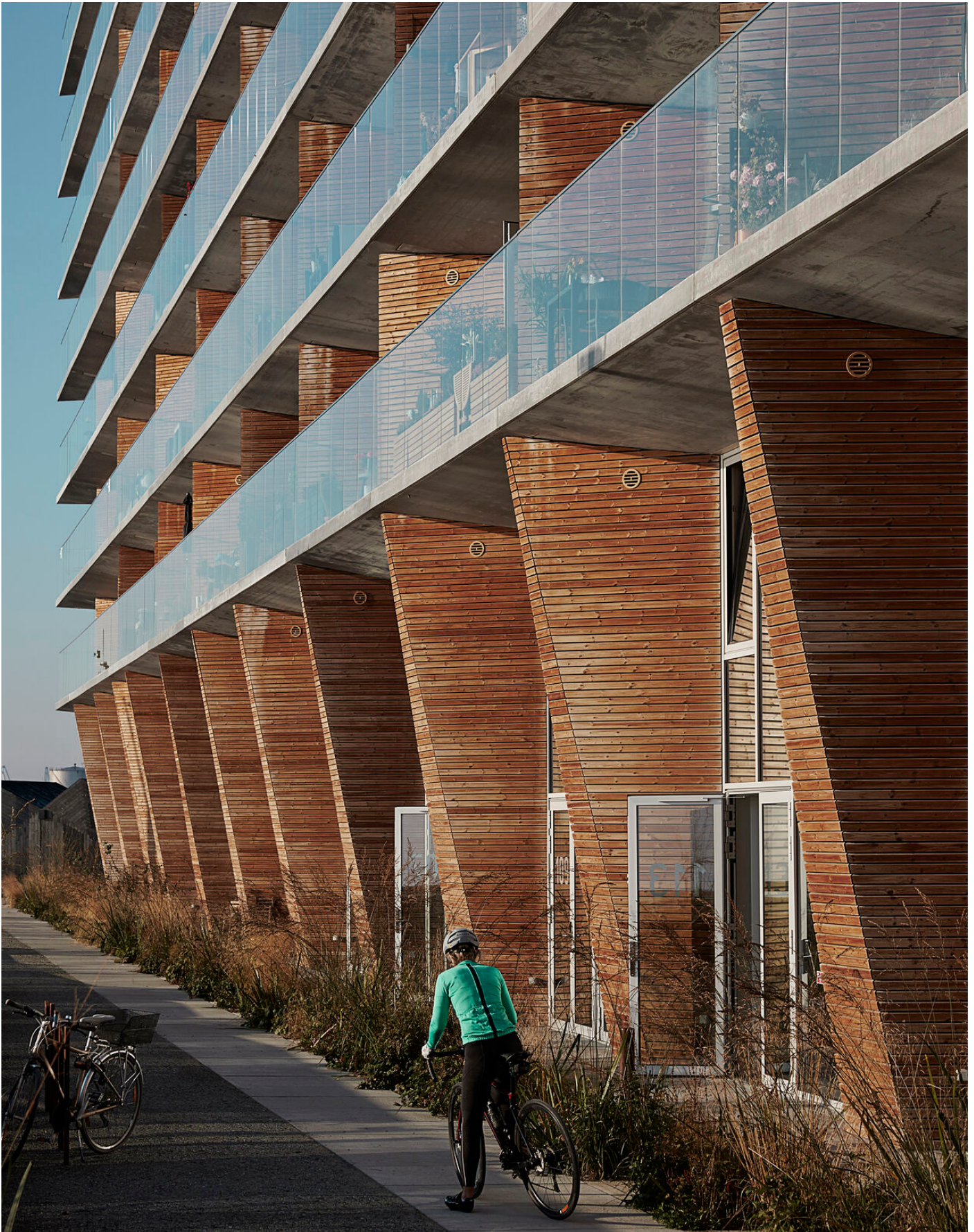
Mini Rail:



Start Rail:



HORIZONTAL CLADDING



Thermopine / Denmark / Partner: Dolle Nordic / Architect: Bjarke Ingels Group

HORIZONTAL CLADDING

Before attaching any cladding

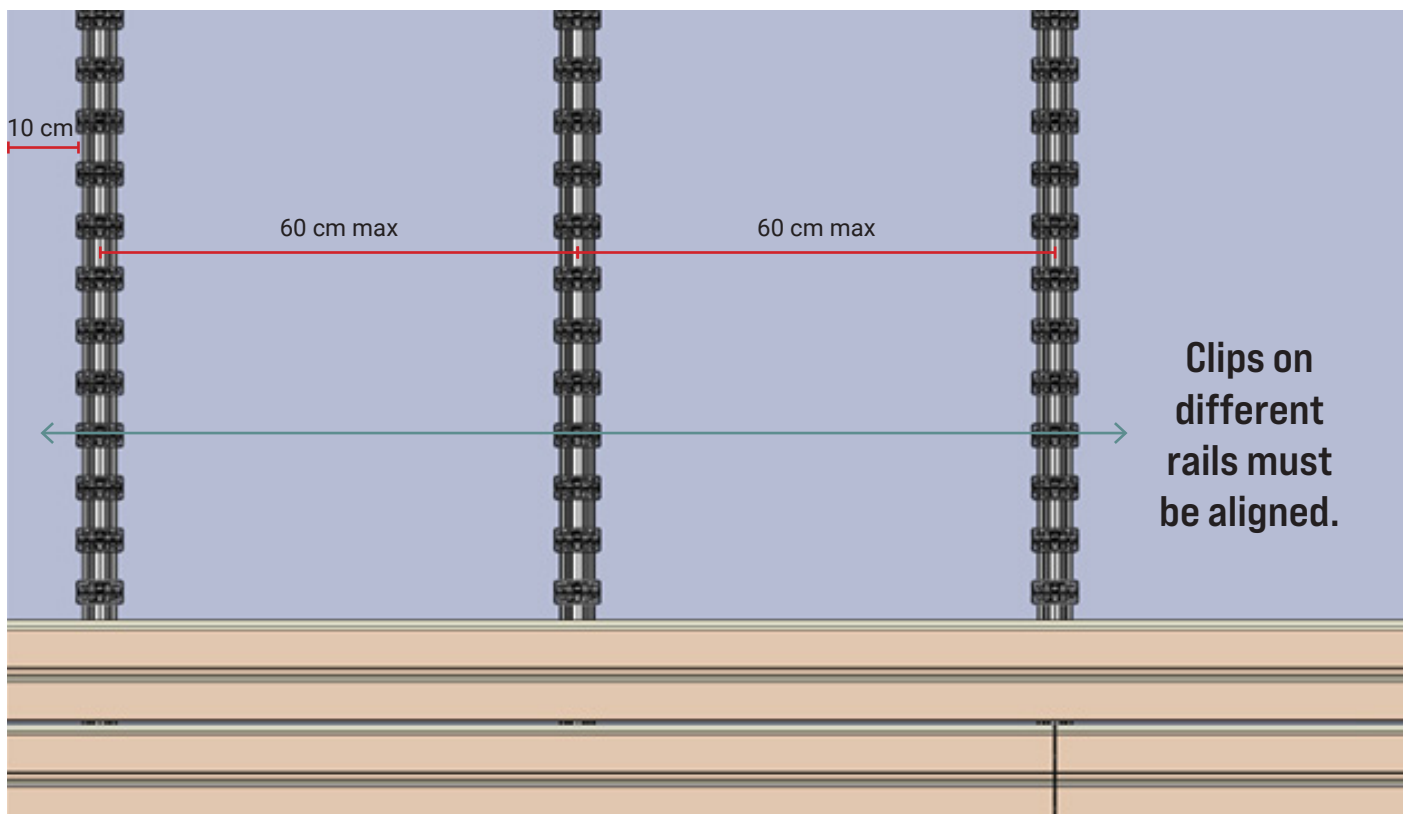
The rails can be placed either directly on a wall, studs, concrete, or any hard and flat surface, with the appropriate fasteners.

Apply the first rail at a maximum of **10 cm** from the edge of any wall to be covered.

Rails should be placed at a minimum of **10 cm** from the ground. Please refer to the guidelines of the cladding manufacturer to know at what minimum height the cladding should start from the ground.

Rails must be parallel to one another and clips must be aligned (as illustrated). A laser level or chalk line can be used for optimal and fast results.

Rail spans can be adjusted **up to 60 cm maximum**. Please refer to the guidelines of the cladding manufacturer to know which span to adopt with their material.

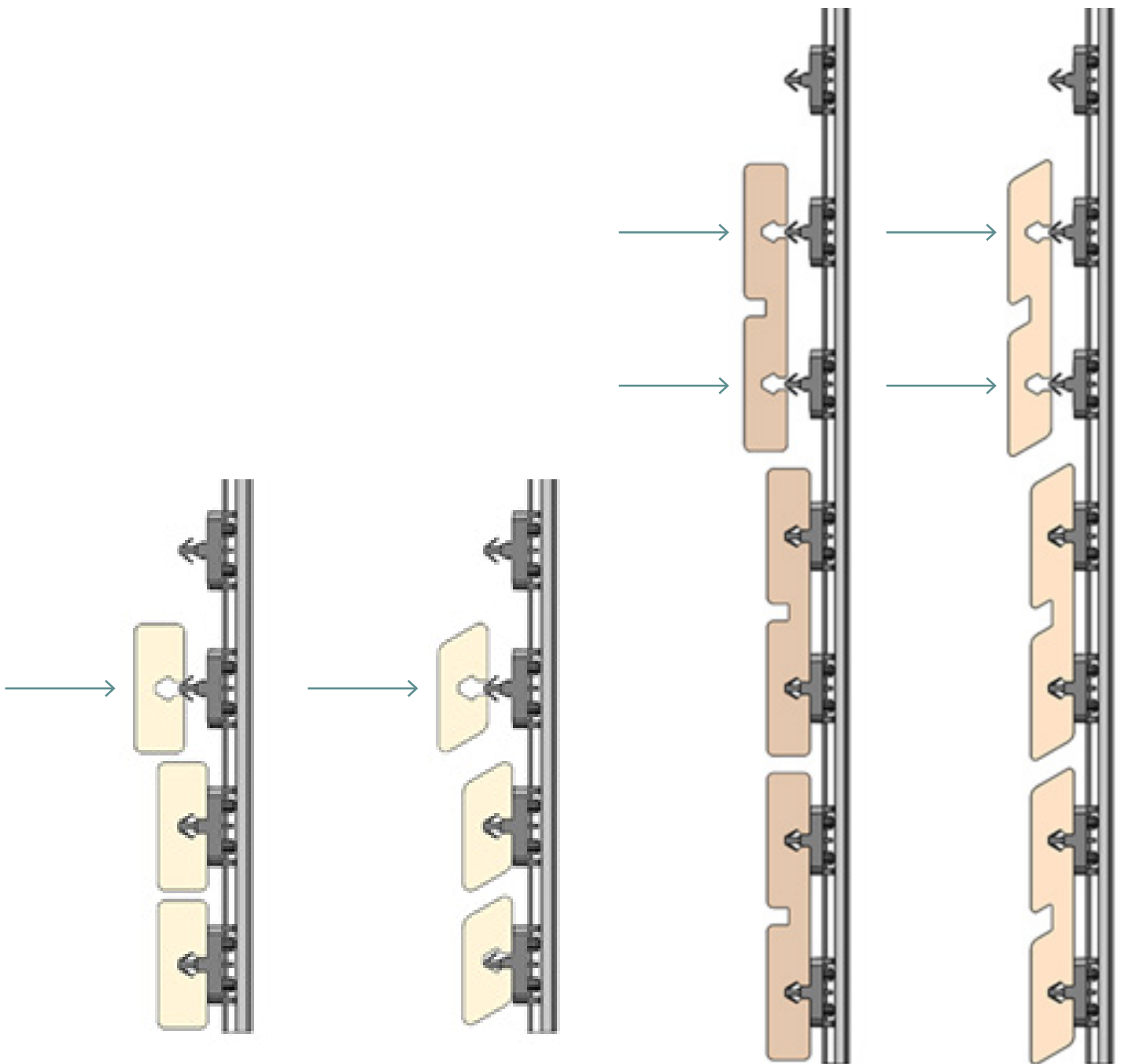


HORIZONTAL CLADDING

Attaching cladding material to the Grad[®] rails

Please refer to the cladding manufacturer's installation guidelines.

All boards will simply be snapped onto the Grad[®] clips as illustrated below.

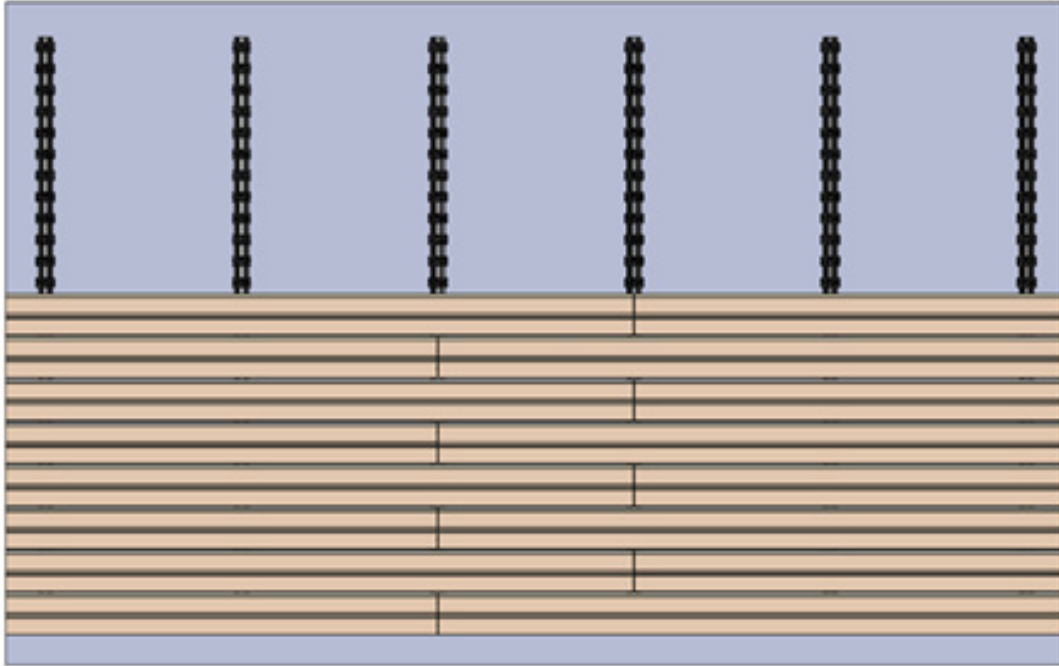


HORIZONTAL CLADDING

Board joints

Recommended butt joints:

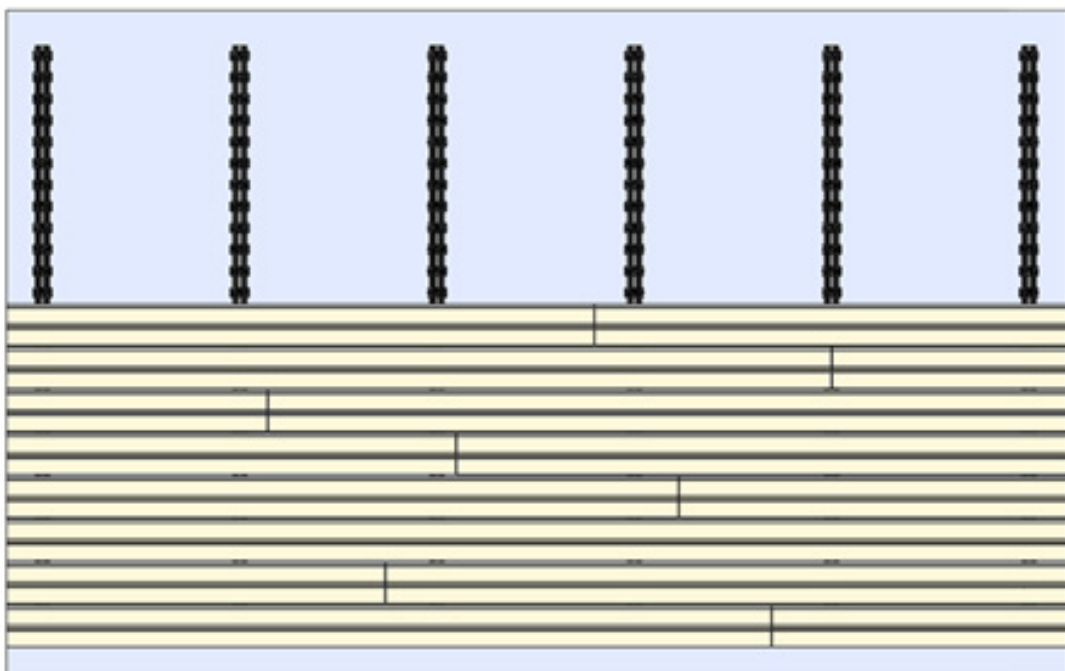
Board ends meet on top of the rails.



Mixed butt joints:

Board ends can be outside of the rails, but must be linked with clips as illustrated on page 10.

Boards must be connected to at least 2 rails.

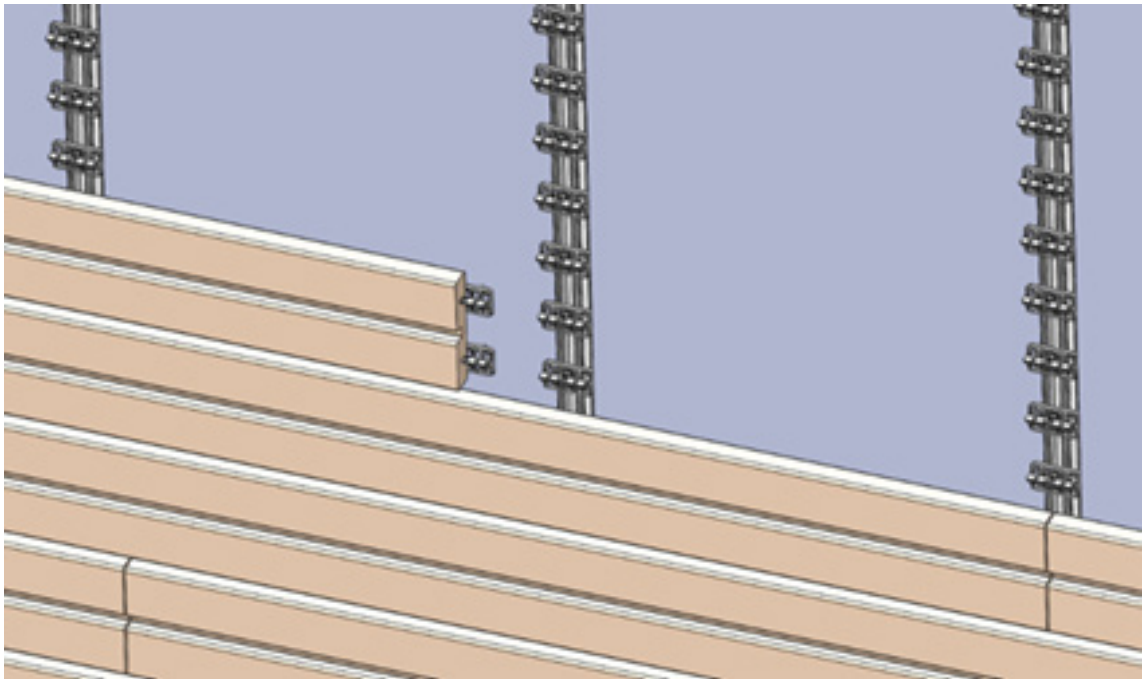


HORIZONTAL CLADDING

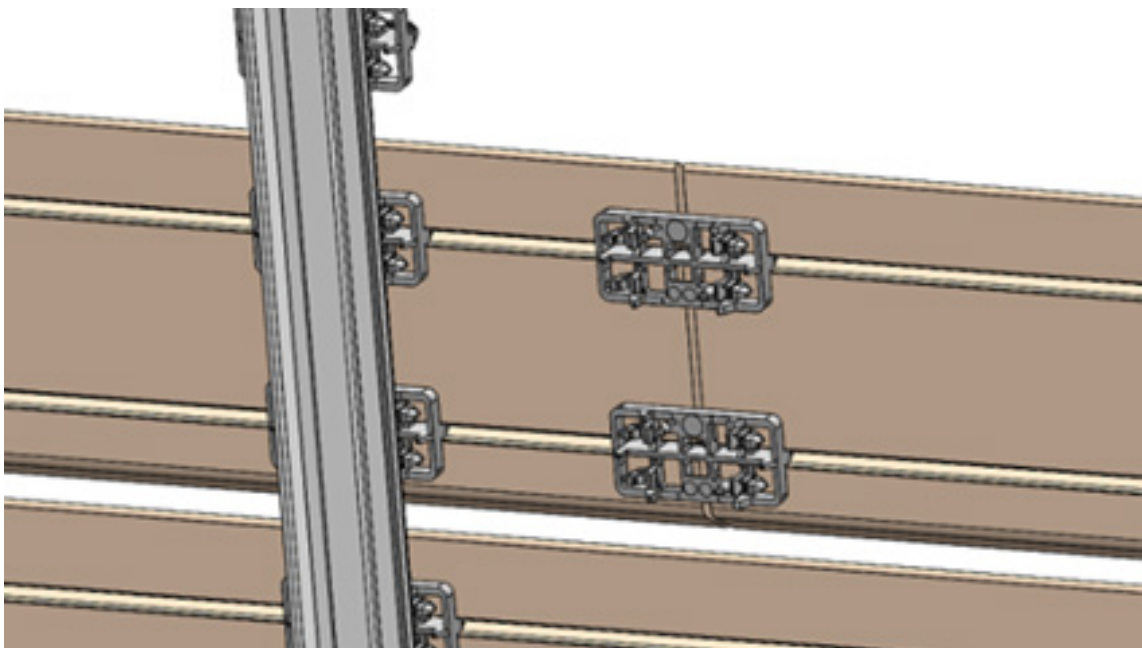
Board joints

Add single clips to the back of the boards when the board ends are not on the rails.

Front view:



Back view:



VERTICAL CLADDING



Bamboo / The Netherlands / Architect: Spee Architecten / Contractor: Awood

VERTICAL CLADDING

Before attaching any cladding

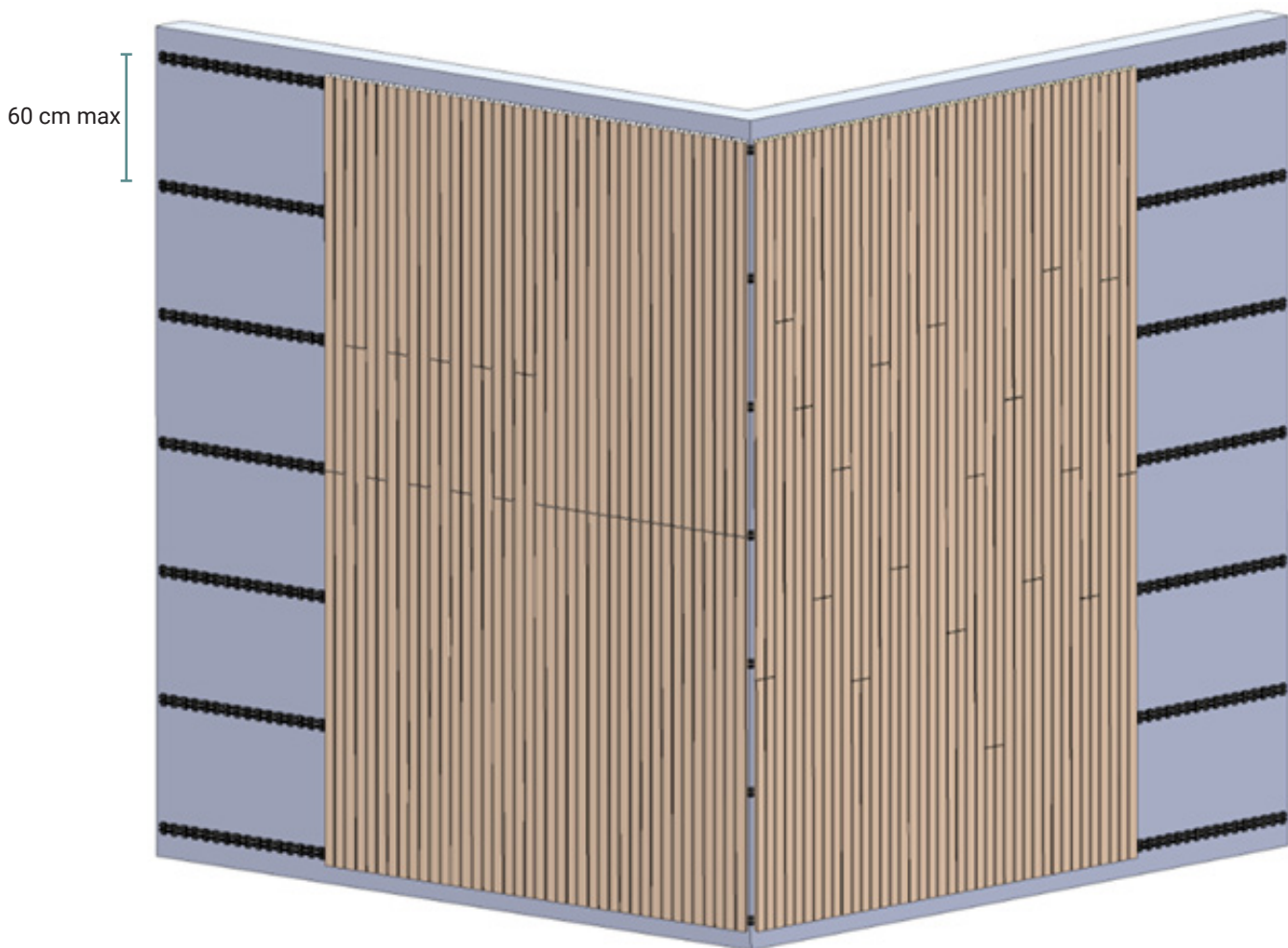
The rails can be placed either directly on a wall, studs, concrete, or any hard and flat surface, with the appropriate fasteners.

Apply the first rail at a minimum of **10 cm** minimum from the ground. Please also refer to the guidelines of the cladding manufacturer to know at what minimum height from the ground the cladding should start.

Rail spans can be adjusted **up to 60 cm maximum**. Please refer to the guidelines of the cladding manufacturer to know which span to adopt for using their material

Rails must be parallel to one another and clips must be aligned (as illustrated). A laser level or chalk line can be used for optimal and fast results.

Clips on different rails must be aligned.



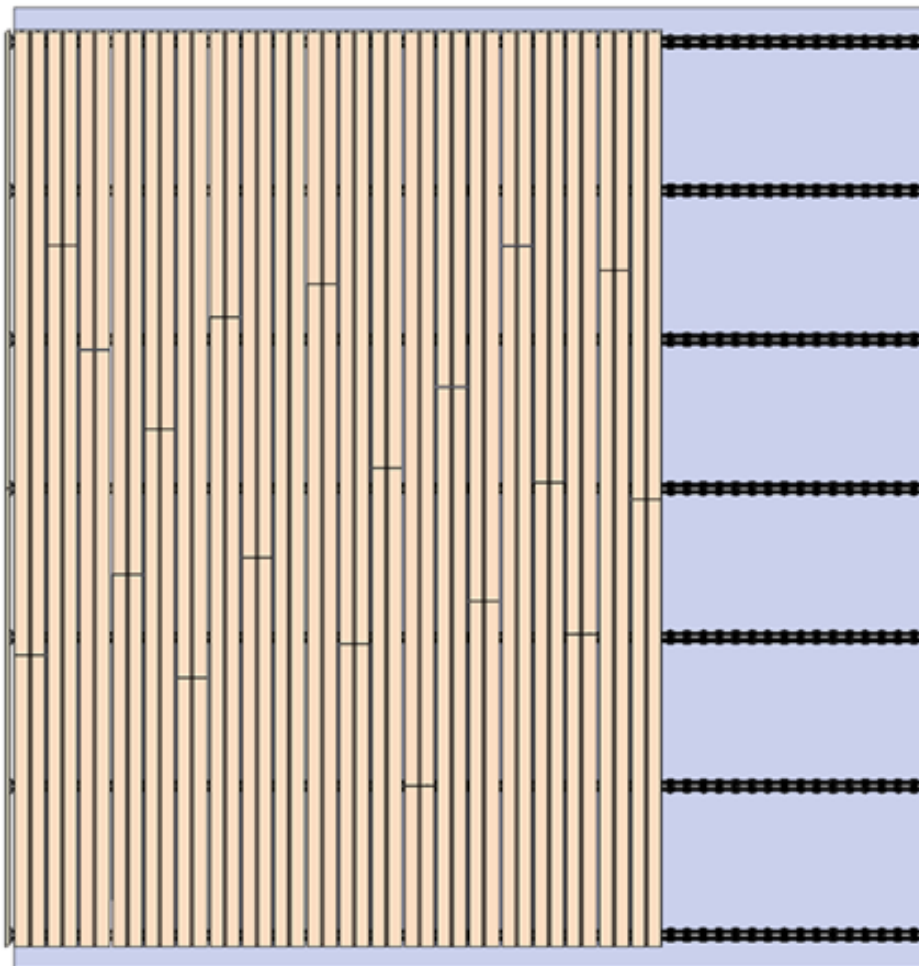
VERTICAL CLADDING

Board joints

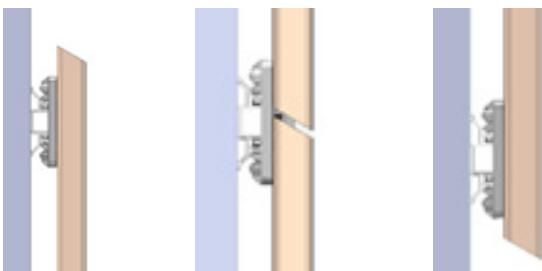
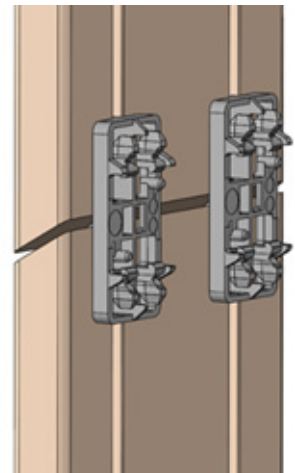
Add single clips to the back of the boards when the board ends are not on the rails.

Boards must be connected to at least two rails.

Front view:



Back view:



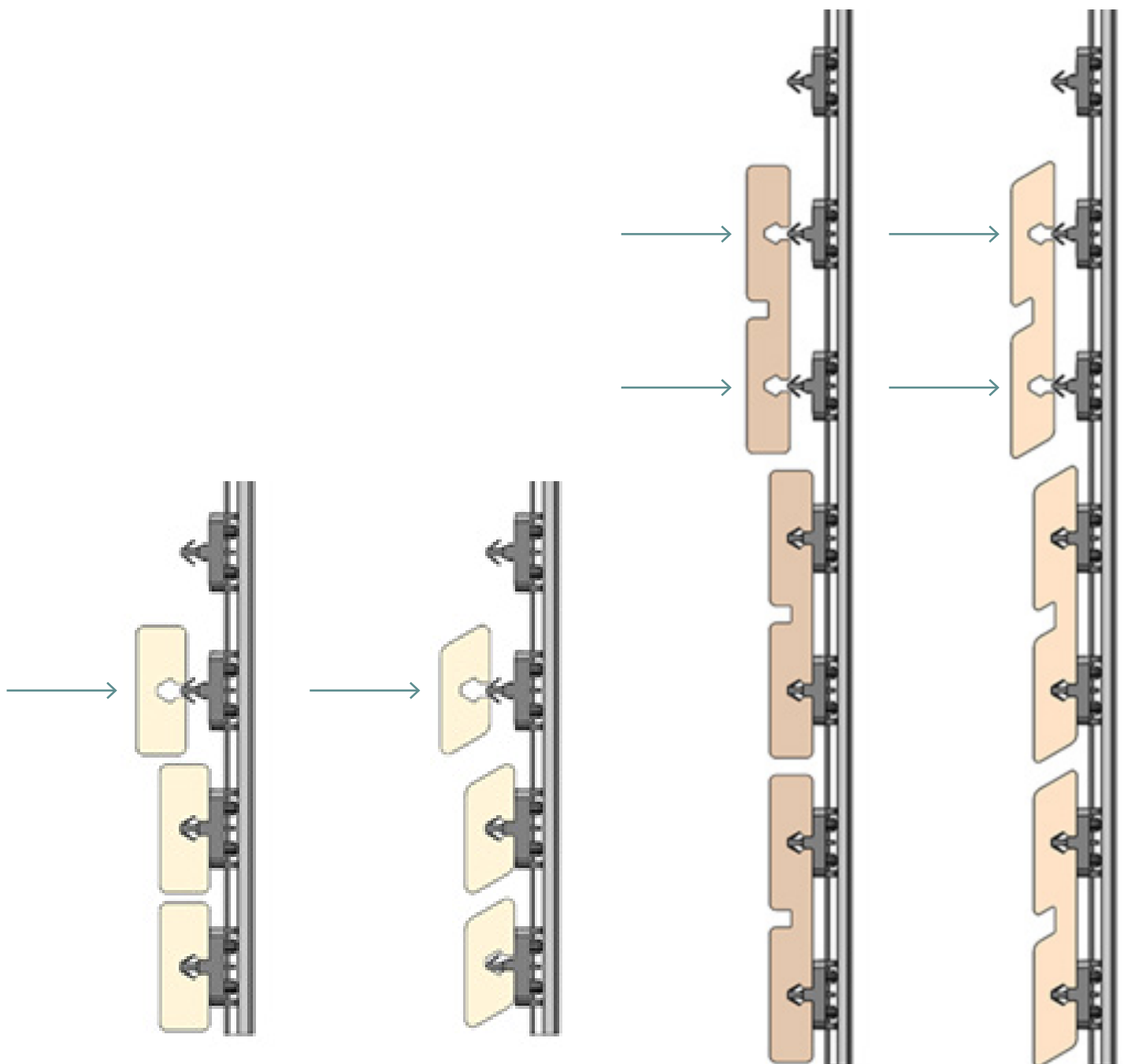
When installed vertically, it is recommended to cut the boards at a 30-degree angle to drain water.

VERTICAL CLADDING

Attaching cladding material to the Grad[®] rails

Please refer to the cladding manufacturer's installation guidelines.

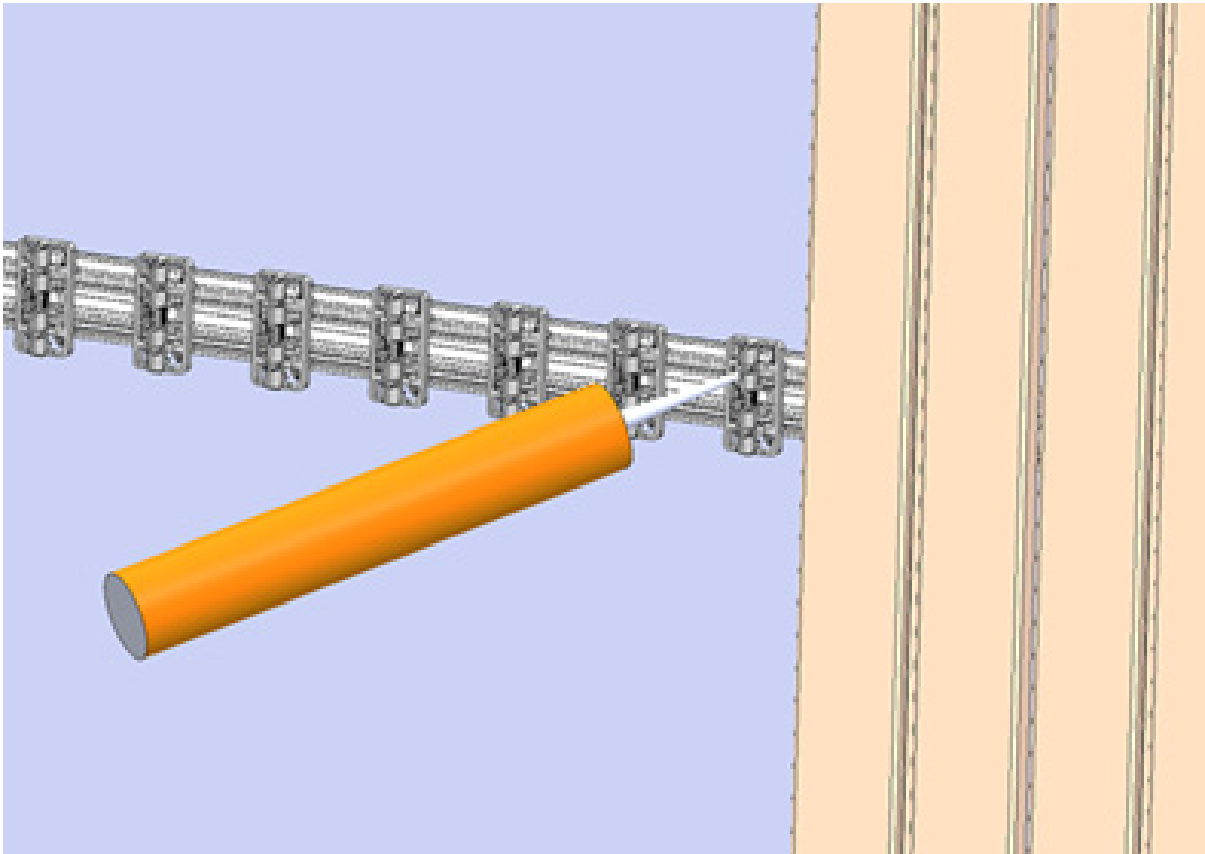
All boards will simply be snapped onto the Grad[®] clips as illustrated below.



VERTICAL CLADDING

Tip to prevent sliding

You can add polyurethane glue onto two clips per board before attaching them onto the Grad® rails to prevent them from sliding down over time.

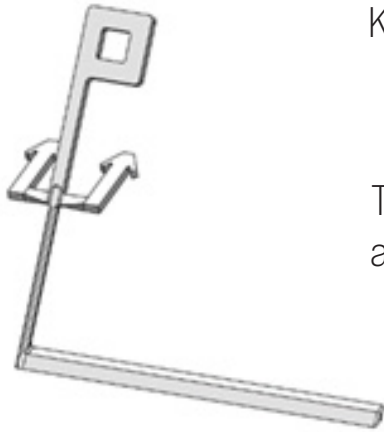


REMOVING BOARDS

with special keys

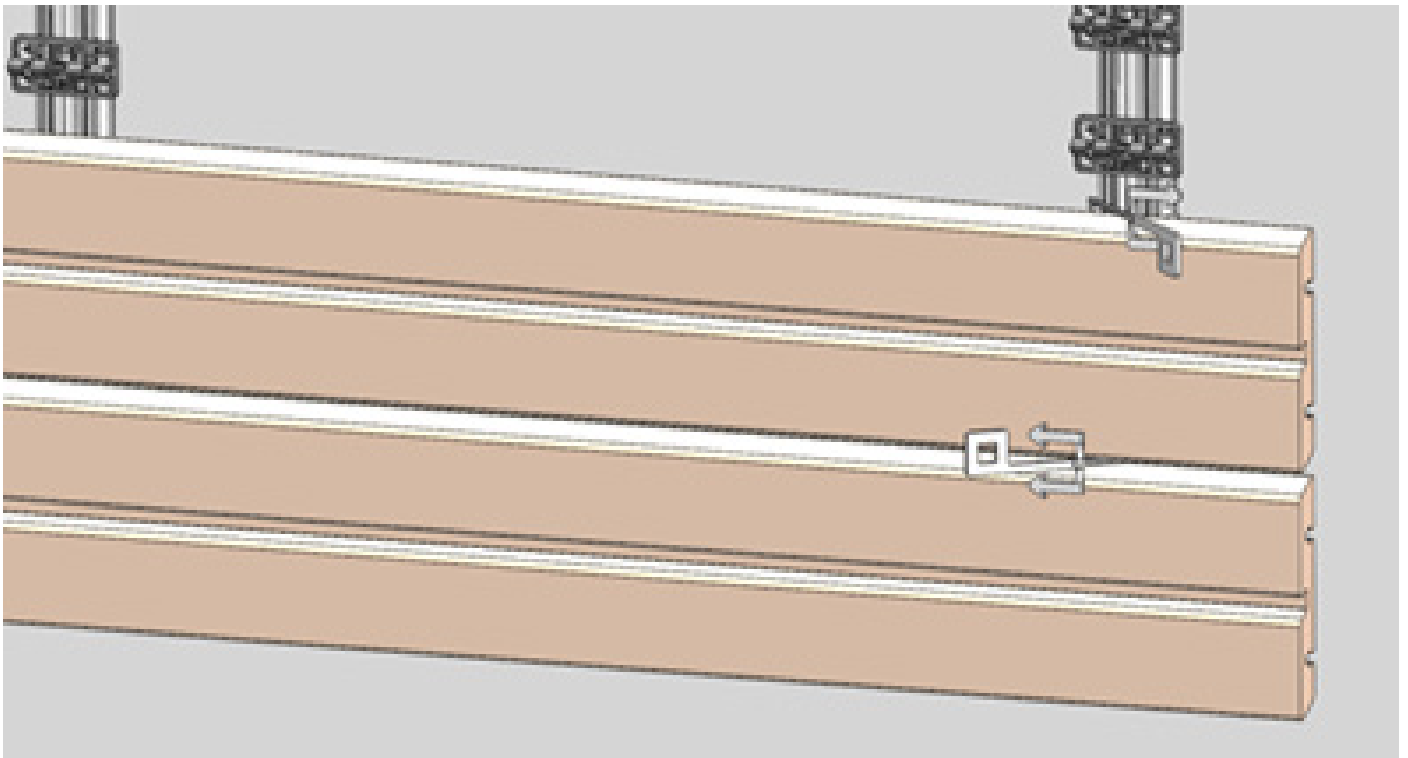
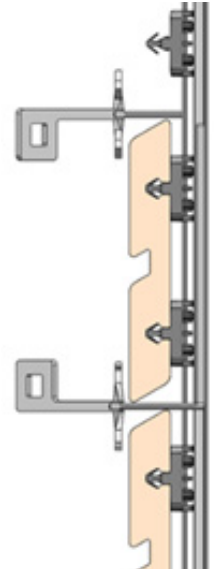
For gap cladding only

Option only available with the Start Rail



Keys must be positioned simultaneously on each side of the same board, at the level of the clips, onto the rails.

The space between each board must be at least **4 mm** wide in order to insert the keys properly.





For more information, please visit:

GRADCONCEPT.COM