# Premium flat 167 Group manual

# deceuninck







05/03/2015 Deceuninck Premium flat 167 2/83

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# Premium flat 167: 1 General system/product information

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# Premium flat 167: 1 General system/product information

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# 1.1 Product range

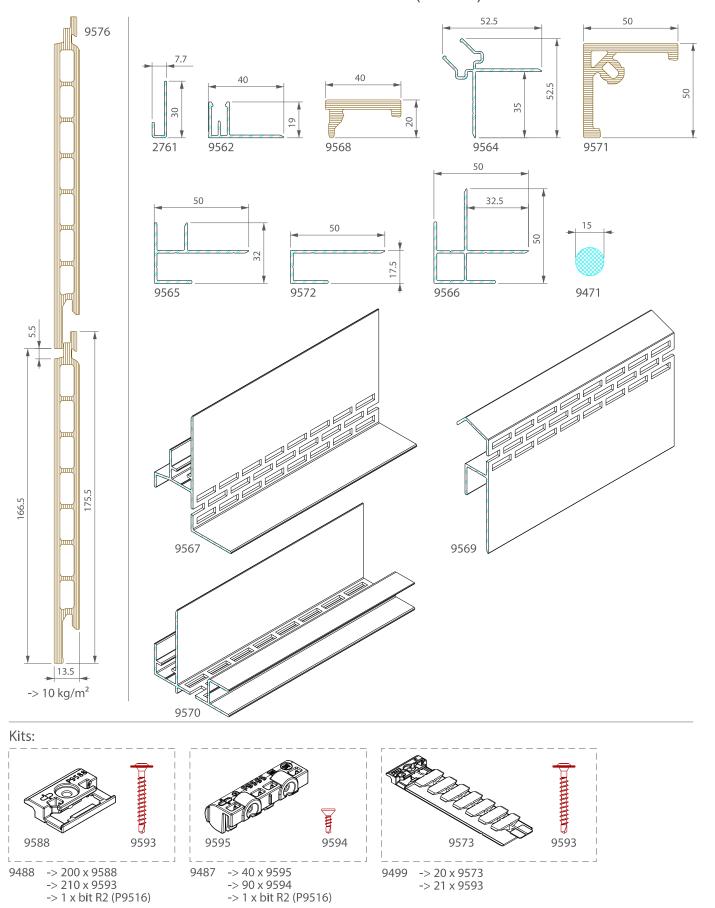
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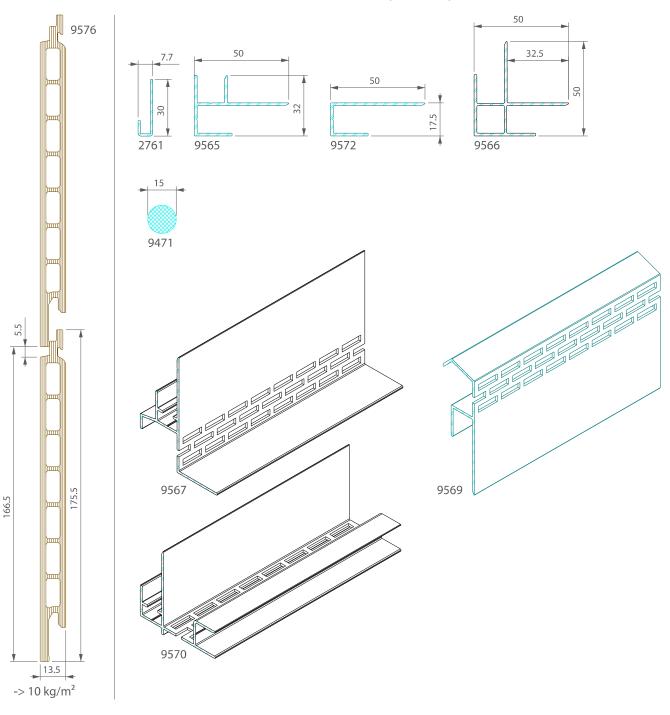


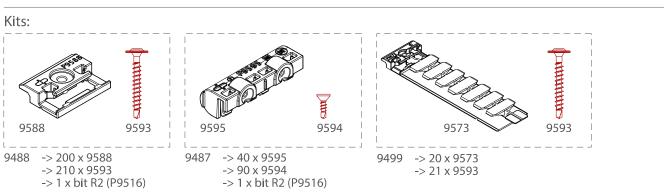
# 1.1.1 Profile overview Premium flat 167 Twinson (P 9576)



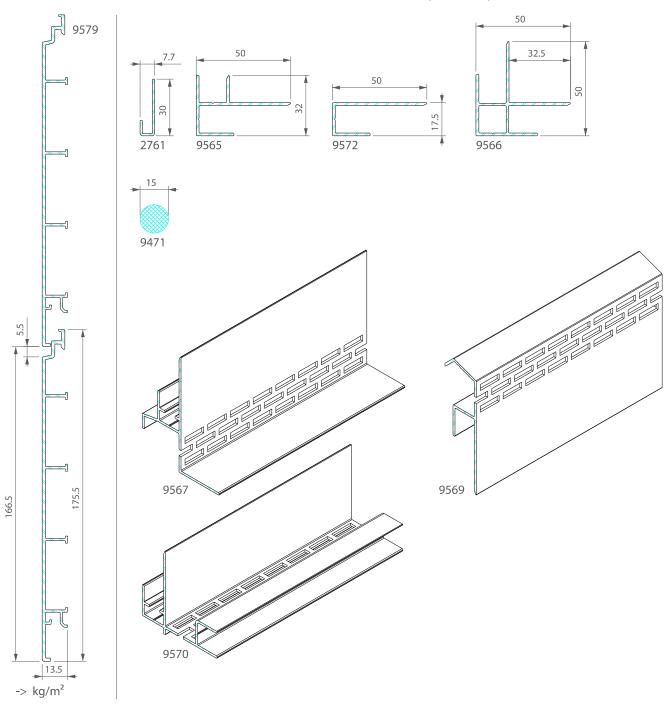
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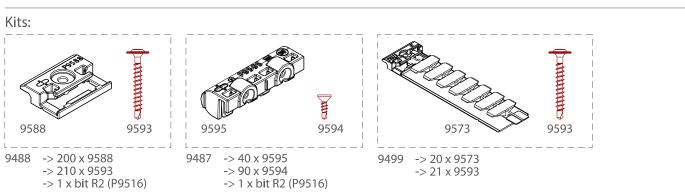
# 1.1.2 Profile overview Premium flat 167 Colour (P 9576)





# 1.1.3 Profile overview Premium flat 167 Aluminium (P 9579)





# **Premium flat 167:**1 General system/product information

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1.2 Storage and transport

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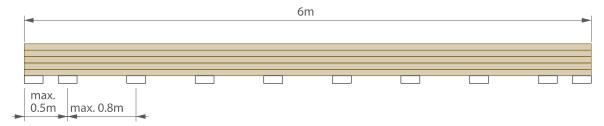


# 1.2 Storage & transport

- Store profiles or stillages containing profiles inside:
   In a dry and ventilated environment, away from direct exposure to sunlight.
- · Stock and transport the profiles horizontally.
- Handle long profiles by 2 persons (> 2 m).
  Unload the profiles with care.



- · Ensure that the profiles are secured during transportation, Twinson profiles can easily slide over each other and this can leave shiny tracks and burrs on to the profiles.
- Distance between supports maximum 0.8 m.
  Profiles or stillages partially stored outside will result in differences in colour on the profiles. The parts of the profiles that are exposed to the elements (rain, UV) will incur some weathering and change in colour. Afterwards, when they are completely exposed outside, the normal weathering process will continue.



# Premium flat 167: 1 General system/product information

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# 1.3.1 Maintenance

#### **Premium flat 167 Twinson**

Premium Twinson offers you the ultimate wall cladding solution and protection. It is durable, offering a low maintenance solution, there is no need to treat or protect premium Twinson products with paint or varnish.

All wall coverings are subject to attack from external elements including weather (wood, PVC, bricks, etc.). Environment, orientation, design and materials used in the building will often determine the performance and maintenance regime of your facade.

If your building is located close to forests, or near polluted urban areas or known pollution, opting for darker colours, can help as they are generally less sensitive to environmental pollution in the long-term.

In new build situations, building design is of vital importance. A number of measures could be taken in order to protect your façade particularly against build-up of dirt or grime caused from exposure to high water concentration.

#### Design tips:

- In case of flat roofs: it is recommended to provide fascia boards and copings with a drip edge that sticks out at least 4 cm from the façade. Moreover, slopped capping stones which create a water run-off from the roof are preferable.
- External window sills should protrude at least 3 cm from the façade. Local dirt accumulation will reduce as a result. Note Circular windows should have an additional edge profile and drip edge in order to avoid concentration below the circle.
- · In order to protect the façade against splashed dirt and mechanical stress, it is recommended to start installing 30 cm above ground level. The distance between the ground level and the premium Twinson façade could be covered by a blue stone/brick.
- · Finally, a proper rainwater system (eg: guttering, down pipes) is required.

Similar to other façades, the premium Twinson façade will be cleaned naturally during heavy rain fall. An accumulation of dirt could occur on places (e.g. just below the soffits, window boards), where less or even no water gathers. This dirt can deface the façade, which is a result of air pollution (dust, dust particles etc.) if left to accumulate. These very small particles can merge with persistent rainfall and cause water spots/circles with dark edges on the surface. The dust particles will dilute and dissipate easily in places that are saturated on a regular basis in combination with UV-light. It is recommended to remove local dirt accumulation or marks as soon as they are visible, using a mild cleaner (soft brush) or a sponge with a large quantity of water, combined, if necessary, with diluted bleach/soap solution for more stubborn marks. The dirt accumulation will reduce in the course of time in most cases (but not in all) as the wall covering becomes weathered and less sensible to dirt.

#### **Premjum flat 167 Colour**

Cleaning of Premium flat 167 Colour profiles is extremely simple: the profiles are simply washed with a soft damp sponge, which may be impregnated with a non-abrasive household cleaner, water-based (non-based among other things as ammonia and chlorine-containing products such as bleach).

Not permitted is the use of abrasive, corrosive liquids and chemical solvents such as benzene, acetone, turpentine, kerosene, white spirit and similar.

#### **Premium flat 167 Aluminium**

Cleaning of Premium flat 167 Aluminium profiles is extremely simple: the profiles are simply washed with a soft damp sponge, which may be impregnated with a non-abrasive household cleaner, water-based (non-based among other things as ammonia and chlorine-containing products such as bleach).

Not permitted is the use of abrasive, corrosive liquids and chemical solvents such as benzene, acetone, turpentine, kerosene, white spirit and similar.



# 1.3.2 Cleaning

As with other cladding systems, the weather (rainwater/UV-light) will clean, give premium Twinson cladding a natural appearance.

Where dirt and grime build-up and therefore cleaning manually is required, use a soft brush or sponge with large quantities of water (this can be done with or without a mild soap solution).

## Disclaimer:

- The usage of abrasive, or corrosive chemicals and solvents such as paraffin, acetone, turpentine, petroleum, white spirit, etc ... are strictly prohibited.
  The use of a high pressure cleaner is not allowed.
  The use of PVC Cleanup P956, PVC Protect P960, Decoclean P961 and PVC Cement Wipe-off P965 are NOT ALLOWED.

# Premium flat 167: 2 Fabrication process

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# 2 Fabrication

# 2.1 Machining:

#### General:

# Premium flat 167 Twinson & Premium flat 167 Colour:

- · Almost the same range of tools as for wood.
- · For a perfect result, it is advisable to cut both ends of the plank removing approx 10 mm.

## **Premium flat 167 Aluminium:**

• The alu. plank is exact 3 m with coated ends so no cutting is needed.

## Specific tools/machining:

- Glass paper, sandpaper, wire brush or steel wool (for Premium flat 167 Twinson only).
   Drills: HSS metal drills
- - During drilling: for best result do not apply heavy pressure.
    Periodically lift the bit to clear the shavings.
- Cutting: use a carbide teeth saw blade.Thin blade.

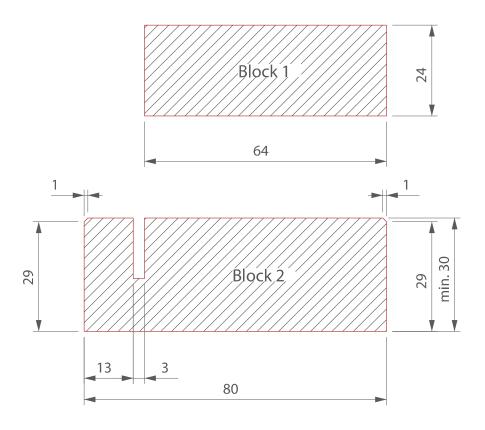
  - Number of teeth: minimum 80.
  - Burrs can be removed with glass paper or steel wool.

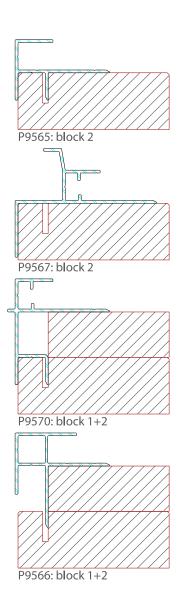
# 2.2 Safety precautions:

When using electrical devices for machining the Twinson profiles, we recommend wearing a dust mask and safety goggles.

There are no specific measures necessary to process Twinson as there are no dangerous particles being released during processing.

# 2.3 Proposed sawing blocks: NOT SUPPLIED BY DECEUNINCK





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# Premium flat 167: 3 Installation

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# Base rules

## Substructure:

- Min. dimensions treated wood 30 mm deep by 40 mm wide.
- Always min. 3 battens per plank on a distance of max. 500 mm hart to hart.
- Always place extra or wider batten next to the finishing profiles for close fixation with the clips.

## **Expansion:**

- In any case a free expansion of 3mm/m must be foreseen between:
  - Planks
  - Planks and finishing
  - Any fixed object
- Use the P9488 to fix the plank to the substucture
- Use 2x P9595 to fix the plank in the middle to have an even distribution of the expansion on both sides. (or in case of vertical installation, one on the bottom)
- Always use an aluminium profile over the full length to keep the profile in place when clips cannot be used (top of installation, cut-off above window, ...)

## Ventilation:

- A good ventilation of 100 cm<sup>2</sup> opening per meter cladding on bottom and on top of installation and windows is required. This opening is integrated in our start, end and window finishing profiles. (P9567, P9569 & P9570)

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Cladding premium Roofline & Cladding

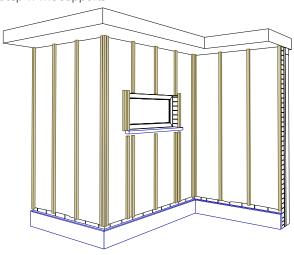


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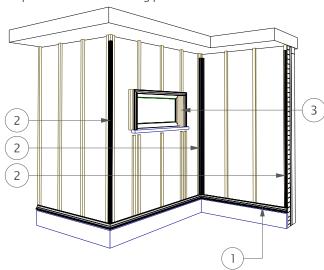
# 3.1 Horizontal installation

# 3.1.1 System assembly:

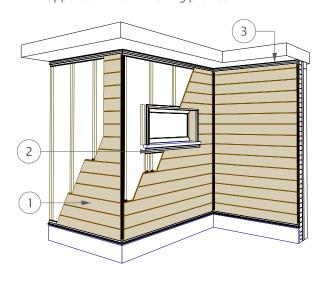
Step 1: The supports

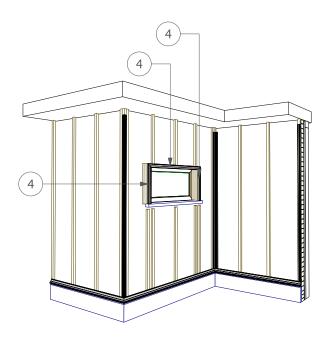


Step 2: Aluminium finishing profiles

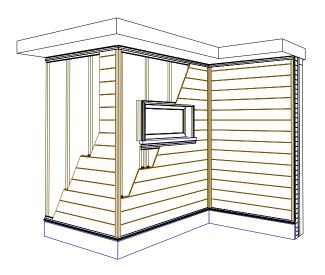


Step 3: Main profiles (Twinson planks P9576) + upper aluminium finishing profiles





Step 4: Twinson finishing profiles

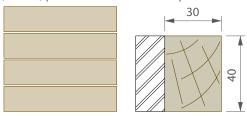


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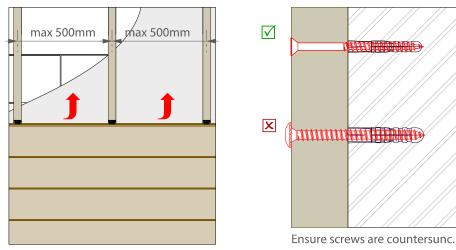
# 3.1.2 Understructure:

# A. General rules:

- · Twinson has to be installed on a solid and levelled structure.
- · The dimensions of the battens required minimum 30mm (depth) by 40mm (width).
  This is to ensure that the recommended P9593 fixings are adequate to support the lead of the premium flat 167 Twinson (P 9576) profiles and to allow adequate ventilation.



- · Distance between the battens have to be kept to a maximum of 50cm.
- · If the width of the cladding is 50cm or less, use a minimum of 3 battens.
- · Impregnated wood is advised.
- · Where necessary we advise using a moisture barrier to protect the wall against moisture. The moisture barrier has to be applied between the battens and the supporting wall.



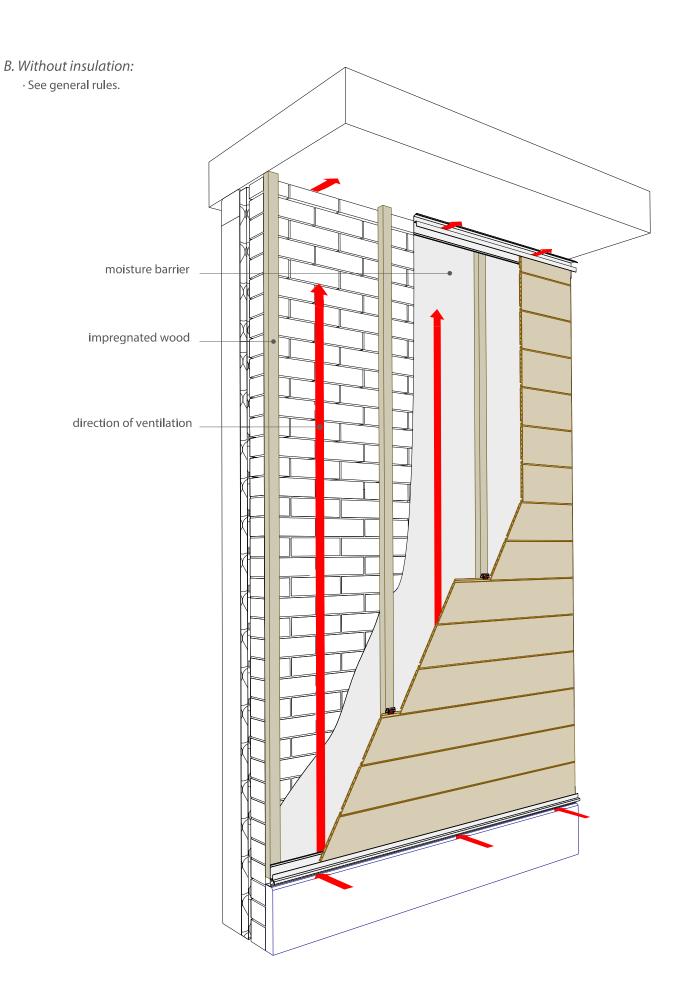


· NOTES:

Keep in mind that if you are using finishing profiles you have to place additional battens. (more information in the chapter: finishing profiles)

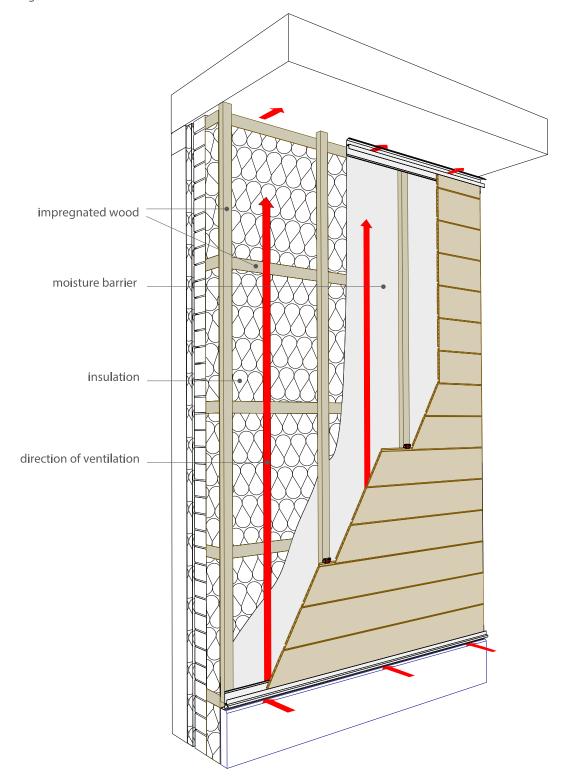


Ensure the understructure is of good quality and craftsmanship and is in accordance with local codes of practice or legislation.



# C. With insulation:

- · Follow same basic rules as without insulation.
- $\cdot$  The illustration underneath is an example of one of the many types of insulation solutions. There are many different insulation materials on the market with their specificities and fixing methods.
- $\cdot$  The same applies for the fixing of your battens into the wall/structure.
- · We advise contacting the respective companies to help you with specifying your insulation and fixing system.
- $\cdot$  General guidelines however have to be followed.



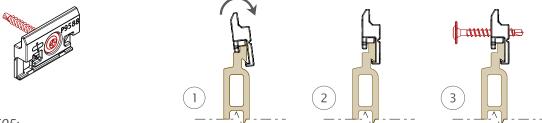
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# 3.1.3 Expansion rules:

Twinson contains wood fibres and is therefore subject to moisture content, leading to potential expansion. This is allowed for in our system providing our installation guidelines are followed. The standard is 10mm elongation space unless specified otherwise.

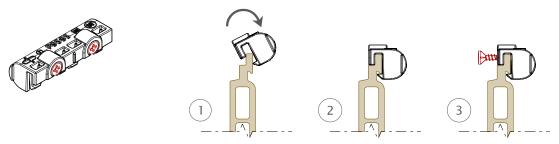
# A. P9588:

The clip P9588 holds the plank P9576 in place while allowing it to elongate freely whilst also absorbing the width elongation. The clip P9588 is easily clipped to the plank P9576 and positioned on every batten. After positioning, the clip is screwed to the batten with the P9593. (Both available in the kit 9488)



## B. P9595:

To ensure that the elongation of the plank is symmetrical on both sides we developed the P9595 which spaces the planks evenly while allowing width elongation.

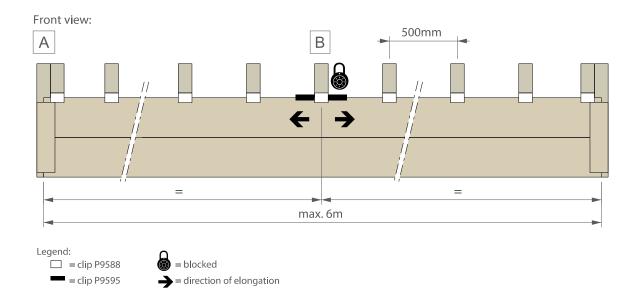


## C. General expansion rules:

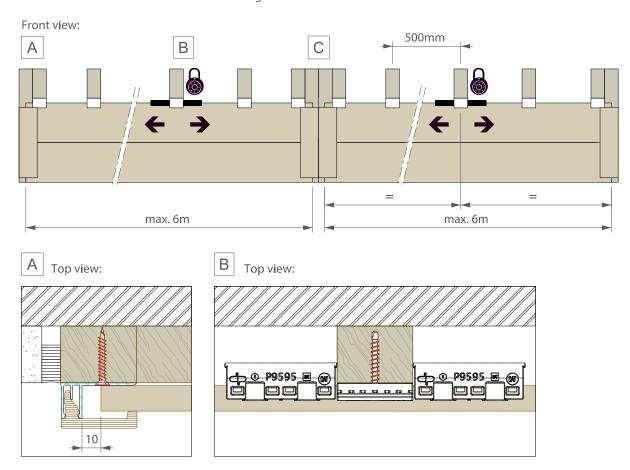
To ensure the elongation in length is managed by the system you can follow one of the 2 following rules depending on the installation.

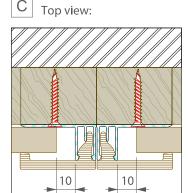
# · Length facade cladding: ≤6m

- $\cdot$  For installations upto 6 metres you can use max. one full length.
- · On both sides you have to allow 10mm for the length elongation of the profile. This elongation is not visible, it is hidden underneath the Twinson finishing profiles. (for more information see chapter finishing profiles)
- To ensure that the elongation of the profiles is identical on both sides, fix the plank in the middle or nearest beam with 2 clips P9595, one on each side of the batten.



 $\cdot$  If you have a wall of more than 6m and you want to work with full lengths, you can use 2 x P9568 & P9562 back to back and start a new module of max. 1 length of 6m.

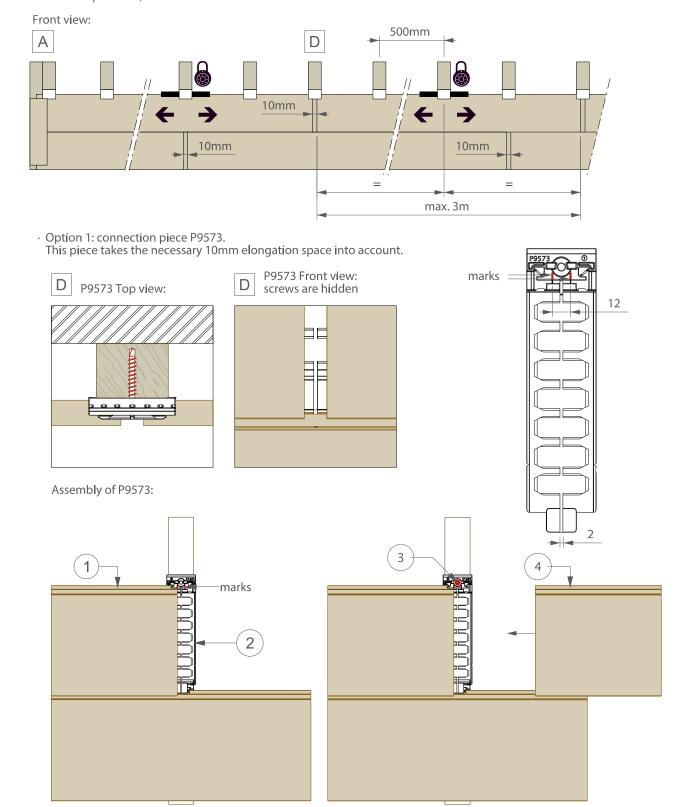




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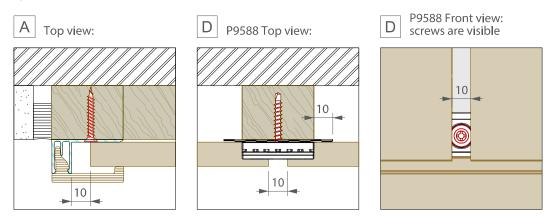
# · Length facade cladding: > 6m

- For installations more than 6m or a multiple of planks installed on the same height after each other you will need to leave a gap of 10mm between the planks. This allows the planks to elongate freely. The length of one plank should never exceed 3m. Otherwise the gap of 10mm will not be enough.
- To insure that the elongation of the profiles is identical on both sides, fix the plank in the middle or nearest beam with 2 clips P9595, one on each side of the batten.



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· Option 2: clip P9588.
Using this option for the joint, it is necessary to protect the battens to insure the life span. This can easily be done with a flexible lipless seal (or other depending on the width of the batten).
Try to have an overlap of 10mm on both sides. See D

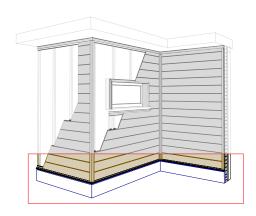


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# 3.1.4 Finishing:

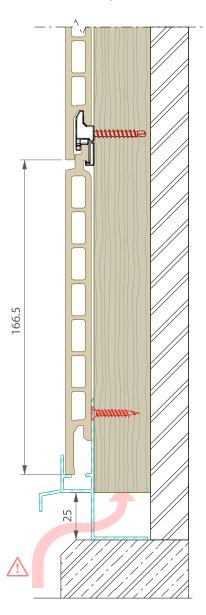
# A. Start of installation:

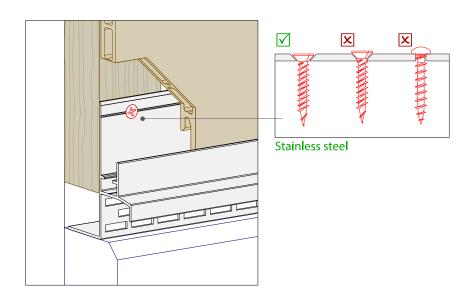
- · We strongly recommend to start with the P9567.
- $\cdot$  We advise starting at a height of minimum 30 cm from the ground to avoid stains from splashing raindrops and dirt.
- · Installation of the Premium flat 167 Colour and the Premium flat 167 Aluminium see chapter Examples 4.4 Aluminium finishing.



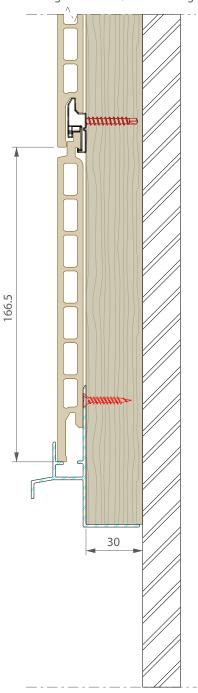
# 1 Start of sill:

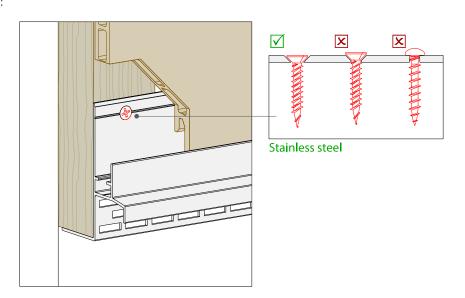
- · For example: stone cills, bricks
- Install the starter profile P9567 directly onto the stone cill.
  The ventilation is allowed for within the design of the start profile.
- The vertifiation is allowed for within the design of the start profile.
  The profile has to be fixed every 50cm.
  Make sure that the screws are countersunk otherwise the cladding profiles will not fit into the starter profile P9567.
  Slide the plank P9576 into the P9567.





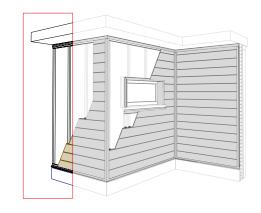
# 2 Starting at different/variable heights:





# B Sides:

- The finishing trims on the ends consists of the aluminium profile P9562 in combination with the Twinson finishing profile P9568.
- As an alternative to the Twinson finishing, you may also use the P9572 for a complete aluminium finishing (see chapter Examples).
- · Installation of the Premium flat 167 Colour and the Premium flat 167 Aluminium see chapter Examples 4.4 Aluminium finishing.

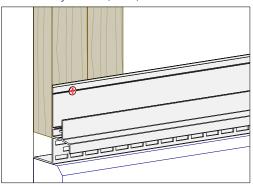


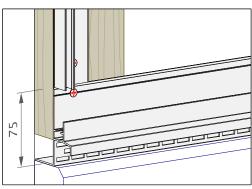
# SEQUENCE OF ASSEMBLY

### Step 1

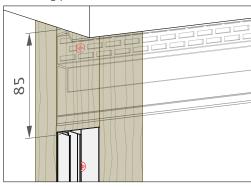
- Ensure that you place an additional batten adjacent where you will fix the finishing profile.

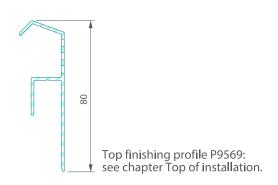
  This is necessary to ensure that you can fix a clip P9588 close to the finishing profile. Failure to do this compromises the fixed distance between the planks.
- Next take your starter profile P9567 and place the aluminium P9562 above the starter profile. The profile must be fixed every 50 cm. (3.1/9)





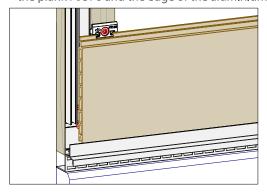
· For a quick installation, allow an extra 5mm expansion gap between the top finishing profile and the aluminium finishing profile at the sides.

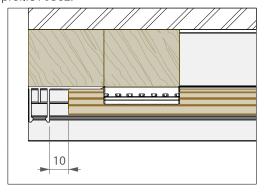




Step 2

· Install planks (P9576) and follow the requirements regarding expansion. Allowing 10 mm between the edge of the plank P9576 and the edge of the aluminium profile P9562.



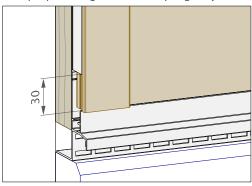


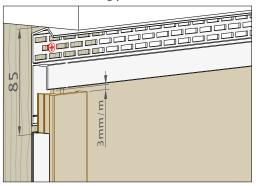


· If there are windows on the elevation, you first need to finish off before installing the planks. (see chapter window finishing)

# Step 3

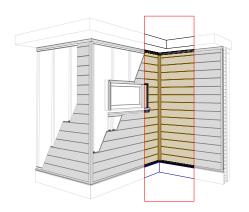
· Cut the Twinson profile P9568 to the right length (bear in mind that you need to allow 3mm/m expansion space for proper elongation) and clip it gently into the aluminium P9562 using your hands.





# C Inner corner:

- $\cdot$  The finishing on the sides consists of a pair of the aluminium profiles P9562 in combination with the Twinson finishing profile P9568.
- · As an alternative to the Twinson finishing you may also use the P9566 for a complete aluminium finishing (see chapter
- · Installation of the Premium flat 167 Colour and the Premium flat 167 Aluminium see chapter Examples 4.4 Aluminium finishing.



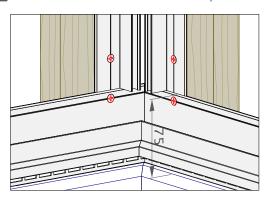
# SEQUENCE OF ASSEMBLY

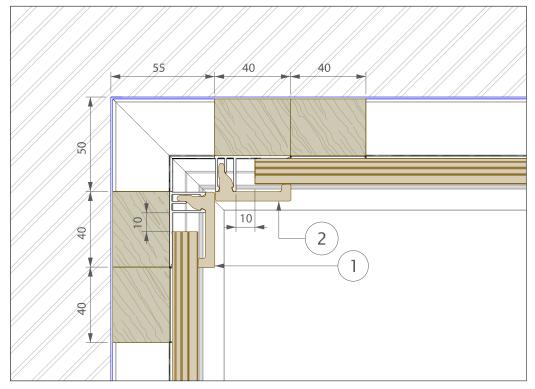
#### Step 1

· Ensure that you place an additional batten adjacent to the finishing profile. This is necessary to ensure that you can fix a clip P9588 close to the finishing profile. Failure to do this compromises the fixed distance between the planks.



· Next put your starter profile P9567 then place the aluminium P9562 above the starter profile. Ensure you position them so that both P9568 Twinson clips can fit in (see drawing top view). The profile must be fixed every 50 cm.

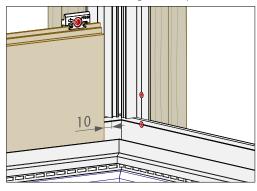


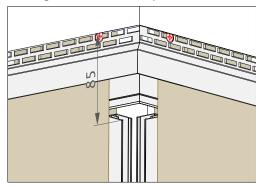




## Step 2

 $\cdot$  Install planks (P9576) and follow the guidelines in chapter expansion rules (3.1/5 - 3.1/8). Ensure that you keep 10 mm between the edge of the plank P9576 and the edge of the aluminium profile P9562.



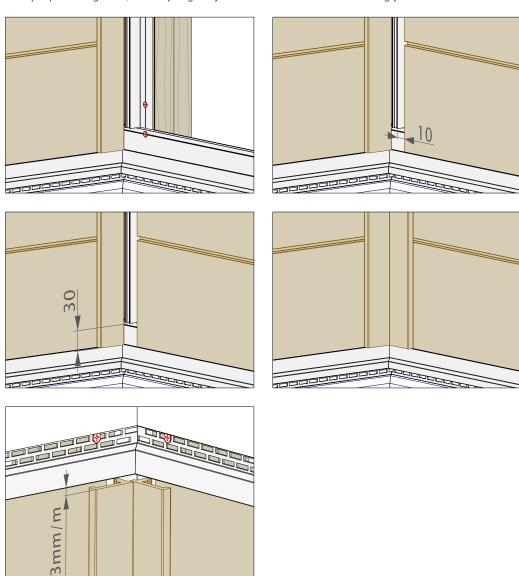


 $\triangle$ 

· If there are windows on the elevation, you first need to finish off before installing the planks.

Step 3

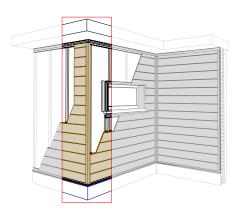
 $\cdot$  Cut the Twinson profile P9568 to the right length (bear in mind that you need to allow 3mm/m expansion space for proper elongation) and clip it gently into the aluminium P9562 using your hands.



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# D Outer corner:

- · The finishing on the sides consists of the aluminium profile P9564 in combination with the Twinson finishing profile P9571.
- · As an alternative to the Twinson finishing you may also use the P9566 for a complete aluminium finishing (see chapter Examples).
- · Installation of the Premium flat 167 Colour and the Premium flat 167 Aluminium see chapter Examples 4.4 Aluminium finishing.



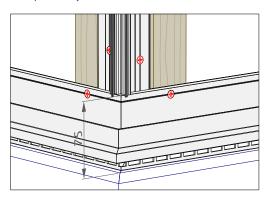
## SEQUENCE OF ASSEMBLY

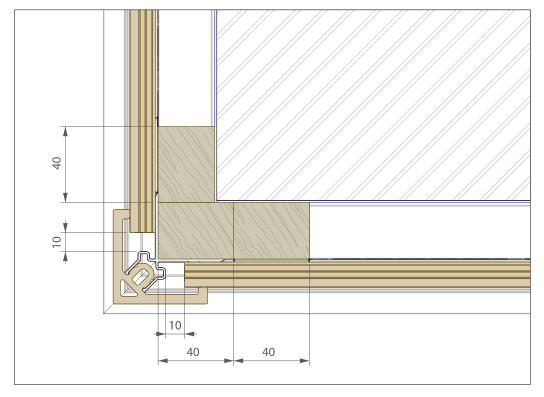
#### Step 1

· Ensure that you place an additional batten adjacent to the finishing profile. This is necessary to insure that you can fix a clip P9588 close to the finishing profile. Failure to do this compromises the fixed distance between the planks.



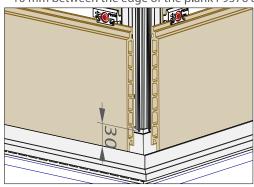
· Next put your starter profile P9567 then place the aluminium P9564 above the starter profile. Ensure you position them so that both P9568 Twinson clips can fit in (see drawing top view). The profile must be fixed every 50 cm sequentially on both sides.

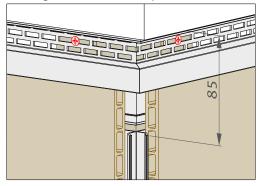




# Step 2

 $\cdot$  Install planks (P9576) and follow the guidelines in chapter expansion rules (3.1/5 - 3.1/8). Ensure that you keep 10 mm between the edge of the plank P9576 and the edge of the aluminium profile P9564.



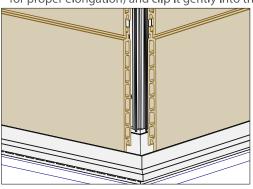


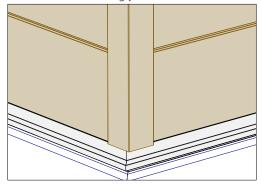
 $\triangle$ 

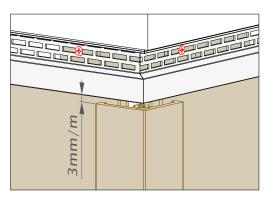
 $\cdot$  If there are windows on the elevation, you first need to finish off before installing the planks. (see chapter window finishing)

# Step 3

 $\cdot$  Cut the Twinson profile P9571 to the right length (bear in mind that you need to allow 3 mm/m expansion space for proper elongation) and clip it gently into the aluminium P9564 using your hands.

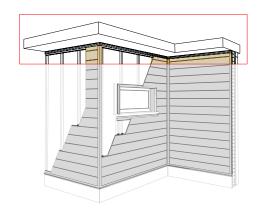






# *E* Top of installation:

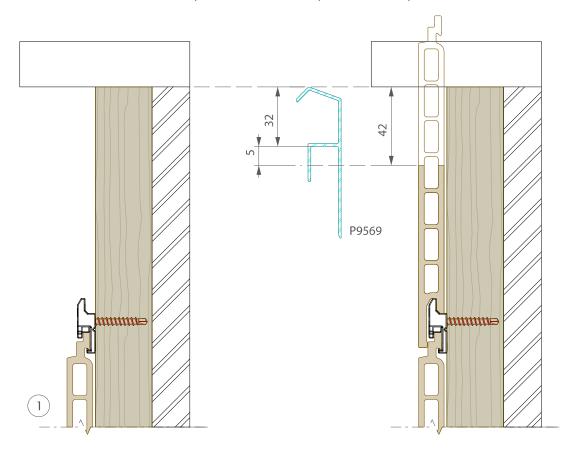
- · As with the starter profile, the P9569 allows ventilation for your installation. Ensure there is nothing obstructing the perforated zone preventing the air to circulate freely.
- · Installation of the Premium flat 167 Aluminium see chapter Examples 4.5



# SEQUENCE OF ASSEMBLY

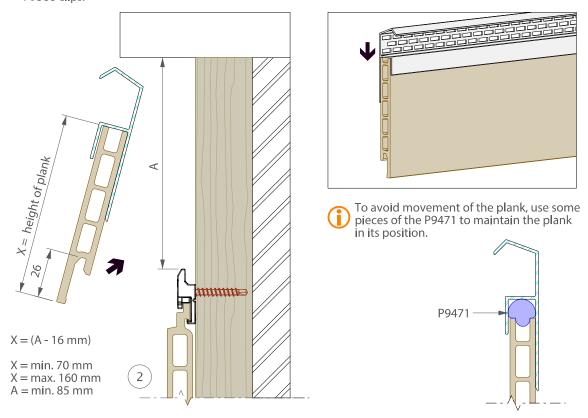
# Step 1

Cut the profile P9576 along its length so that you have minimum 40 mm left between the plank P9576 and the edge of the top of the cladding (for example roof edge).
An additional 10 mm is required to manouvre the plank over the clip P9588.



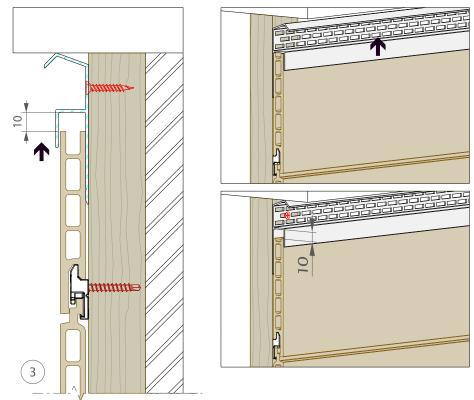


Step 2
 Place the aluminium finishing profile P9569 over the plank P9576 and slide them both over the last P9588 clips.



Step 3

Push the aluminium finishing profile P9569 back upwards and fix at every 50 cm with a screw through the perforated holes.



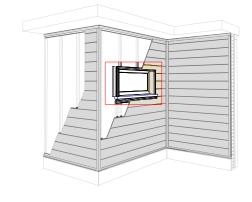
To avoid any visability of the battens, paint the top of the battens or use an EPDM strip.

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# F Window:

· When installing planks make sure you always first start with the finishing around the window.

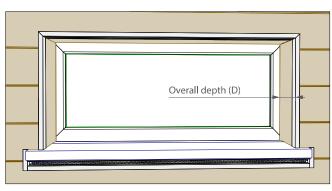
- There are 2 posibilities:
   1 Overall depth ≤ 160 mm
   2 Overall depth > 160 mm

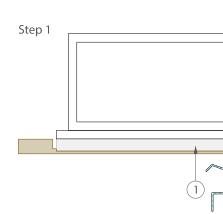


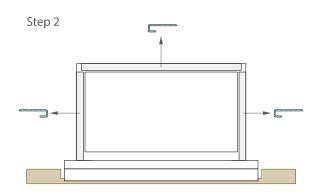
1 Overall depth ≤ 160mm: one plank is sufficient

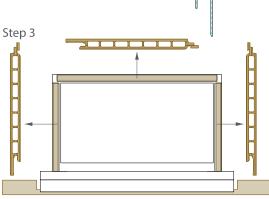


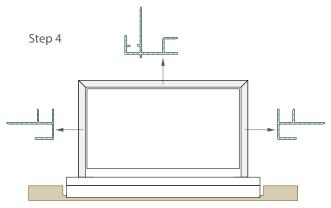
# STEP BY STEP PLAN

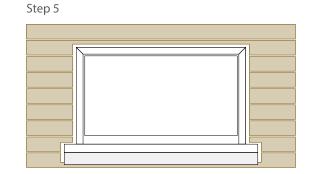








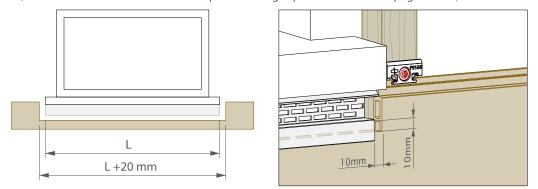




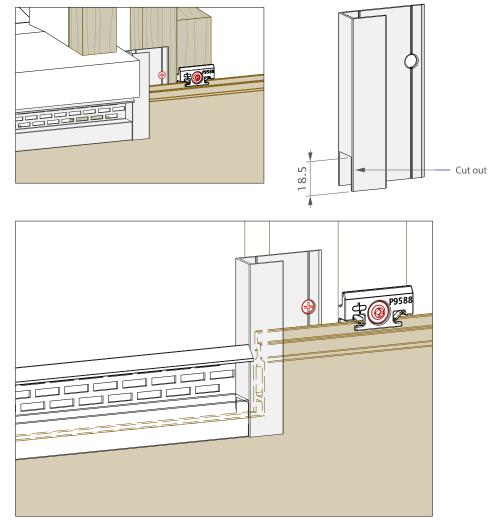
#### SEQUENCE OF ASSEMBLY

### Step 1

- Start by installing the aluminium finishing profile P9569 under the window-sill.
  Ensure you allow 10 mm lengthways between the P9569 and the cut out of the plank P9576 to ensure the necessary elongation space. (for installation of the P9569 see chapter finishing top of installation on page 3.1/17)

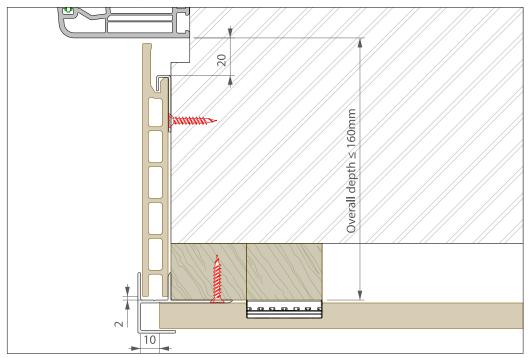


· OPTIONAL: The aluminium profile P9572 can be used to finish the cut out of the plank but you will need to install an extra batten.



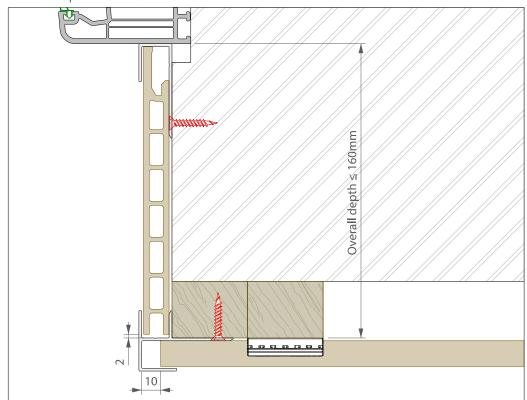
 $\cdot$  NOTE: If the wall is longer than 6m, install the planks with a weep hole. (see chapter 3.1.3 expansion rules on page 3.1/5 - 3.1/8)

Step 2: Different possibilities of finishing:  $\cdot$  A: with P2761

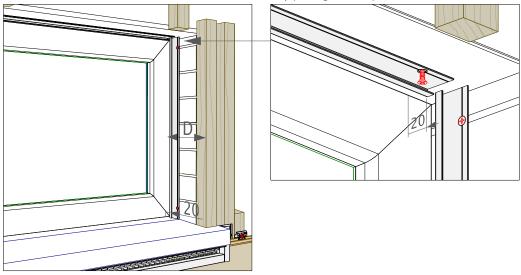


Pieces of the P9471 can be used to maintain some positioning of the profile.

### · B: with P9572 = Optional



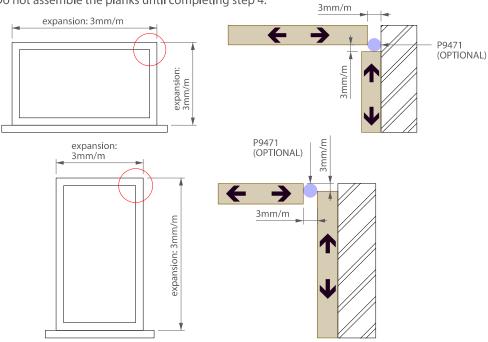
- Cut the starter profiles P2761 to the right length and fix them around the window. For correct positioning of the P2761 leave 20 mm between the window and the edge of the P2761. Countersink the screws into the P2761 to ensure easy passage of the plank.



### Step 3

Cut out the planks taking into account the need for expansion.
 Optional: For a proper finishing we propose using a round sealing profile (P9471) with a diameter of 15 mm. Do not use silicone to close the gap! Doing this can leave stains on your Twinson profiles.
 Do not assemble the planks until completing step 4.

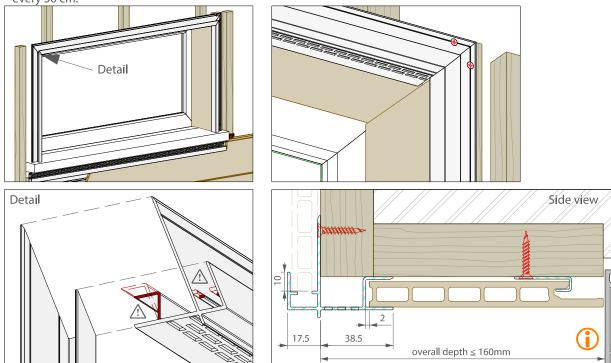
expansion: 3mm/m



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### Step 4

- Above the window use aluminium finishing profile P9570 with integrated ventilation and drip detail.
  On the sides of the window use aluminium finishing profile P9565. Remember to put an additional batten next to the P9565 to be able to fix the plank P9576 with the clip P9588.
- · Cut the aluminium profiles to the right length with mitre return. Finally slide the planks mentioned in step 3 into the aluminium finishing profiles and assemble sequentially. The aluminium finishing profiles need to be fixed every 50 cm.



NOTE:

It is necessary to make an extra cut off of the P9570 top aluminium profile on both sides, otherwise the Twinson planks installed on the sides cannot be put into place.

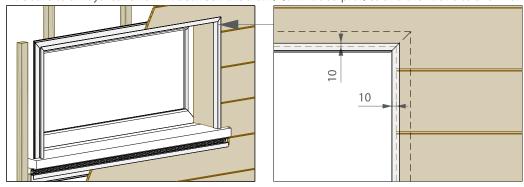


Pieces of the P9471 can be used to maintain some positioning of the profile.

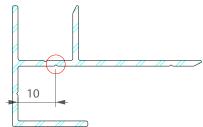
### Step 5

Now you can continue installing the planks around the window.

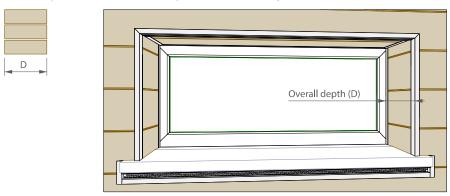
Be sure to always leave 10 mm between the aluminium P9565 profiles and the P9576 to allow for expansion.

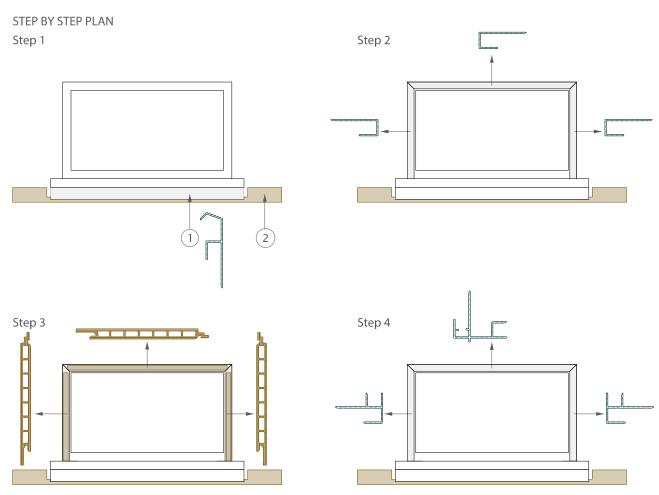


· Nice to know: in the aluminium P9565 profile there is a detail on 10 mm of the edge of the profile to help you with the positioning of the planks on the correct distance needed for expansion.

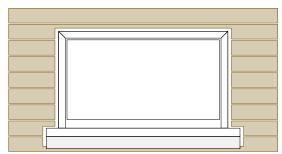


# 2 Overall depth > 160mm: different planks are necessary





Step 5

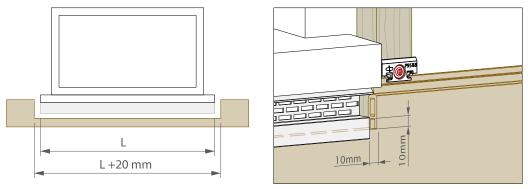


#### SEQUENCE OF ASSEMBLY

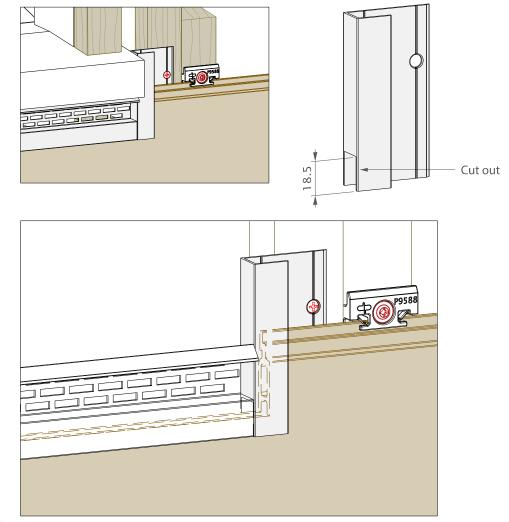
### Step 1

- Begin by installing the aluminium finishing profile P9569 under the window-sill.
  Ensure you leave 10 mm lengthways between the P9569 and the cut out of the plank P9576 to ensure the necessary expansion space.

(for installation of the P9569 see chapter finishing top of installation on page 3.1/17)

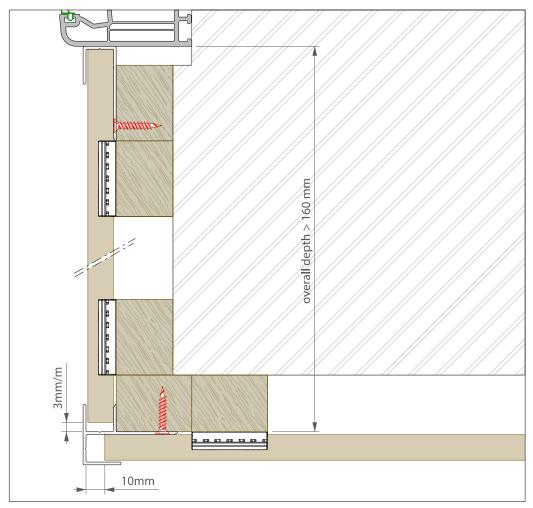


· OPTIONAL: The aluminium profile P9572 can be used to finish the cut out of the plank but you need to install an extra batten.

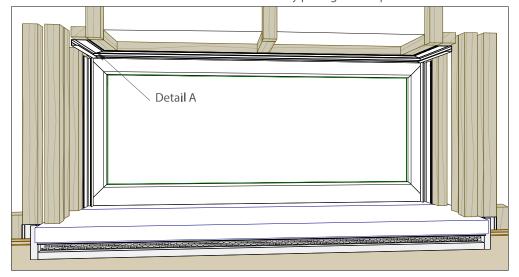


 $\cdot$  NOTE: If the wall is longer than 6m, install the planks with a weep hole. (see chapter 3.1.3 expansion rules on page 3.1/5 - 3.1/8)

Step 2: finishing with P9572

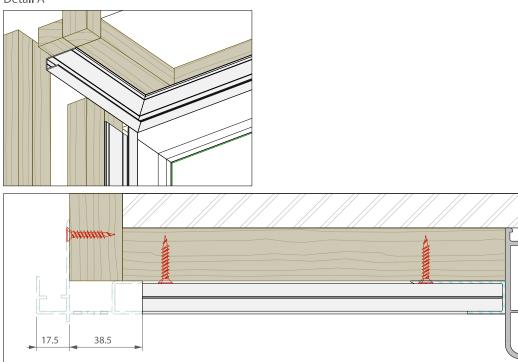


- Cut the starter profiles P9572 to the right length and install them around the window.
   Countersink the screws into the P9572 to ensure easy passage of the plank.



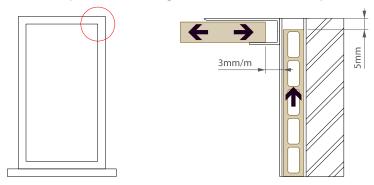
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### Detail A

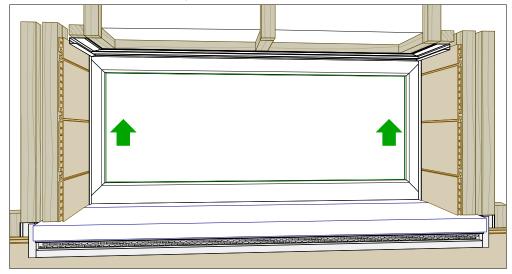


Step 3

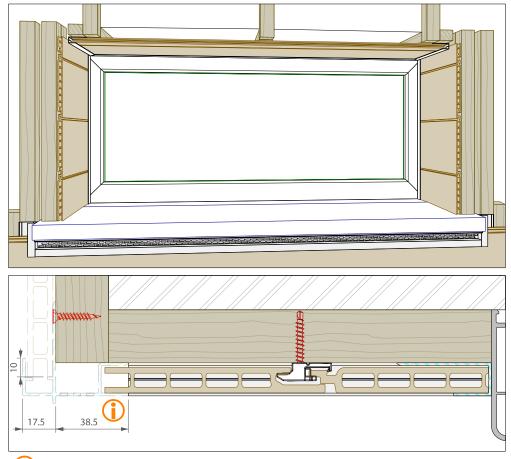
· Install the planks whilst taking into account the needed expansion.



 $\cdot$  Slide the planks into the aluminium finishing profiles to finish of the top of window. Use the clips P9588 to keep the exact distance between the planks.



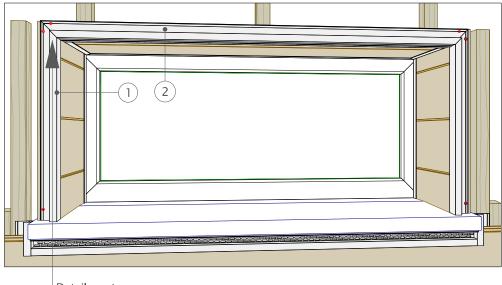
05/03/2015 Deceuninck Premium flat 167 44/85



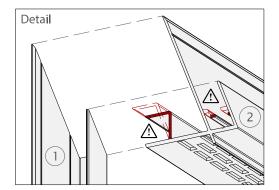
Pieces of the P9471 can be used to maintain some positioning of the profile.

### Step 4

- At the top of the window use the aluminium finishing profile P9570 with integrated ventilation and drip detail.
  On the sides of the window use the aluminium finishing profile P9565.
  Cut the aluminium profiles to the right length with mitre return and assemble sequentially. The aluminium finishing profiles need to be fixed every 50 cm.



Detail, next page

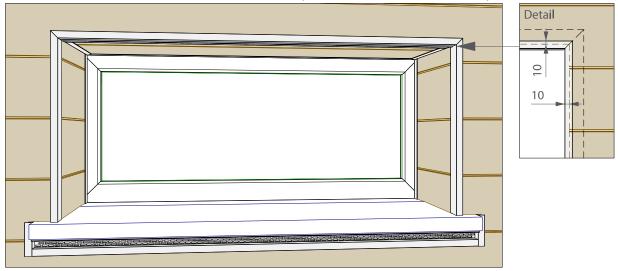


### NOTE:

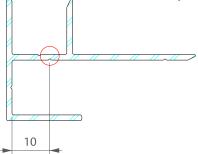
It is necessary to make an extra cut out in the P9570 top aluminium profile on both sides, otherwise the Twinson planks installed on the sides cannot be slotted into place.

Step 5

· Continue installing the planks around the window. · Be sure to leave 10 mm between the aluminium P9565 profiles and the P9576 to ensure expansion.



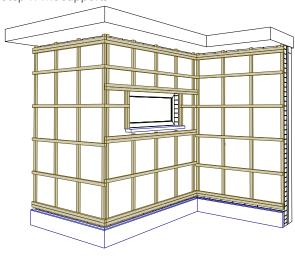
· Nice to know: in the aluminium P9565 profile there is a detail on 10 mm of the edge of the profile to help you with the positioning of the planks on the correct distance needed for expansion.



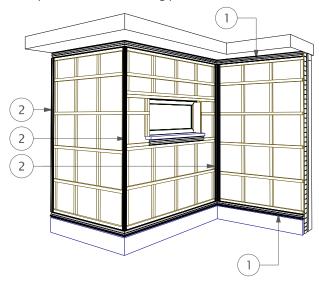
# 3.2 Vertical installation

# 3.2.1 System assembly:

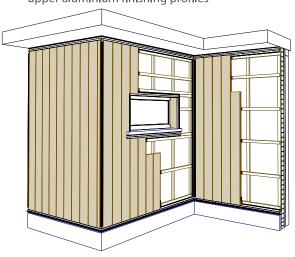
Step 1: The supports

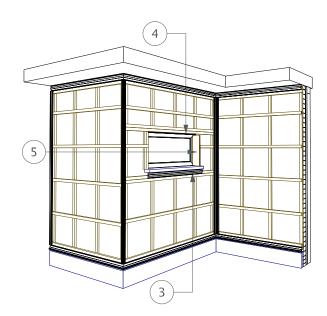


Step 2: Aluminium finishing profiles

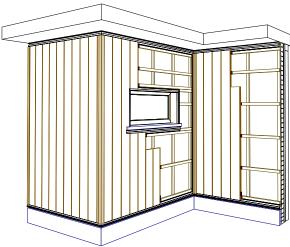


Step 3: Main profiles (Twinson planks P9576) + upper aluminium finishing profiles





Step 4: Twinson finishing profiles



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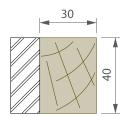
### 3.2.2 Understructure:

### A General rules:

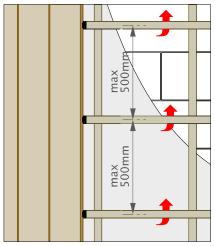
- · Twinson has to be installed on a solid and levelled structure.
- The dimensions of the battens required are minimum 30 mm (depth) by 40 mm (width).

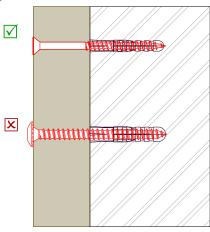
  This is to ensure that the recommended P9593 fixings are adequate to support the load of the premium flat 167 Twinson (P 9576) profiles and to allow adequate ventilation.





- · To be sure ventilation is adequate you need to use double battens. Please allow ventilation between the last batten and the highest point of the installation.
- · Distance between the battens have to be kept to a maximum of 50 cm.
- · If the heigth of the cladding is 50 cm or less, use a minimum of 3 battens.
- · Impregnated wood is advised.
- · Where necessary we advise using a moisture barrier to protect the wall against moisture. The moisture barrier has to be applied between the battens and the supporting wall.





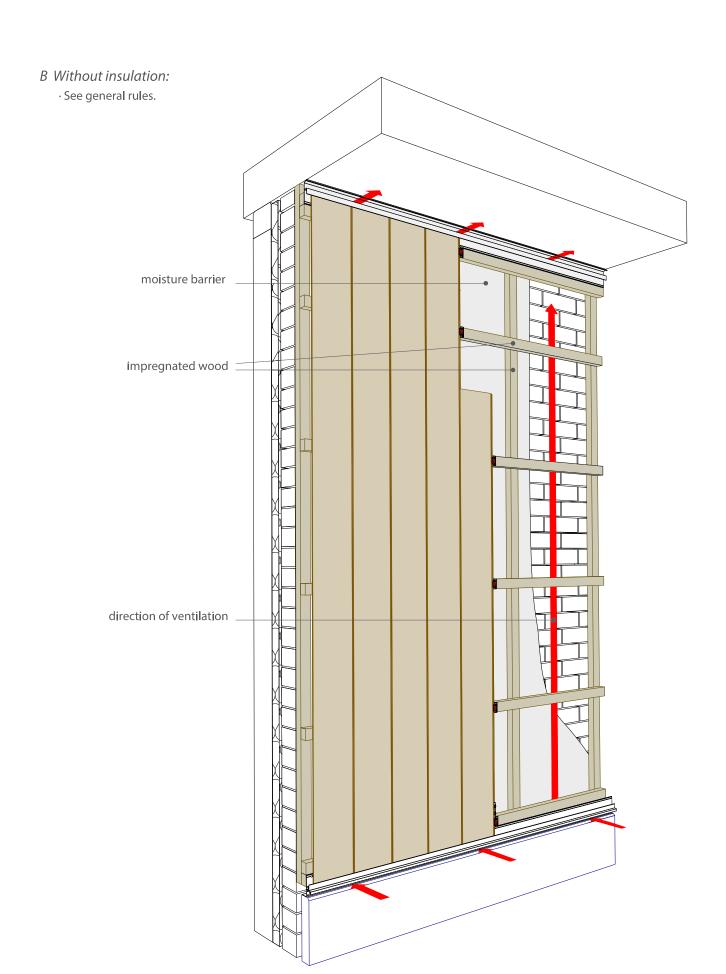
· Ensure screws are countersunc.



Keep in mind that if you are using finishing profiles you may have to place additional battens. (more information in the chapter: finishing profiles)

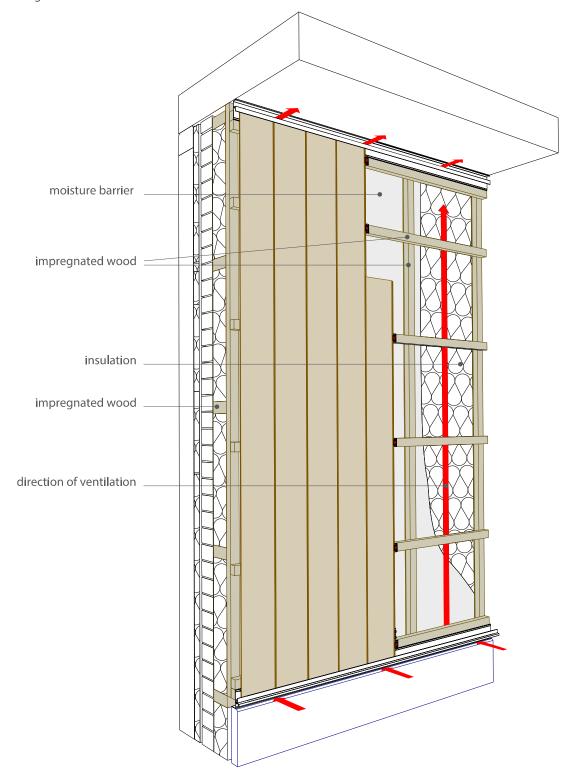


Ensure the understructure is of good quality and craftsmanship and is in accordance with local codes of practice or legislation.



### C With insulation:

- $\cdot$  Follow same basic rules as without insulation.
- $\cdot$  The illustration underneath is an example of one of the many types of insulation solutions. There are many different insulation materials on the market with their specificities and fixing methods.
- $\cdot$  The same applies for the fixing of your battens into the wall/structure.
- · We advise contacting the respective companies to help you with specifing your insulation and fixing system.
- $\cdot$  General guidelines however have to be followed.



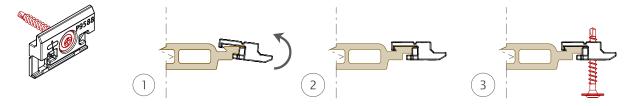
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### 3.2.3 Expansion rules for vertical cladding:

Twinson contains wood fibres and is therefore subject to moisture content leading to potential expansion and contraction. This is allowed for in our system providing our installation guidelines are followed.

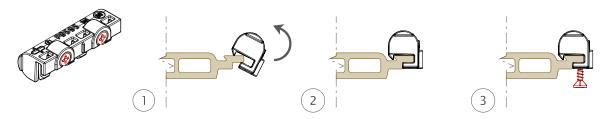
### A P9588:

The clip P9588 holds the plank P9576 in place while allowing it to elongate freely whilst also absorbing the width elongation. The clip P9588 is easily clipped to the plank P9576 and positioned on the batten. After positioning, the clip is screwed to the batten with the P9593. (Both available in the kit 9488) The plank has to be fixed with te clip every 50 cm.



#### B P9595:

To ensure that the direction of the elongation can be controlled, we developed the P9595 who blocks the planks evenly while allowing width elongation.

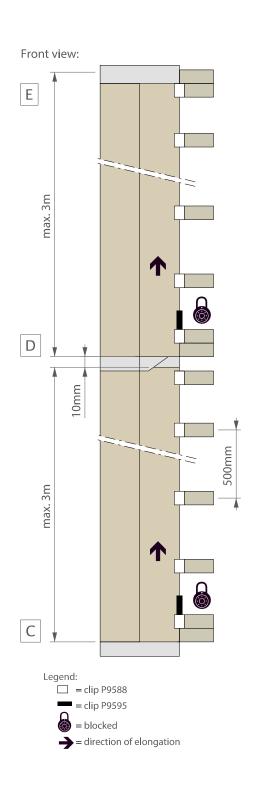


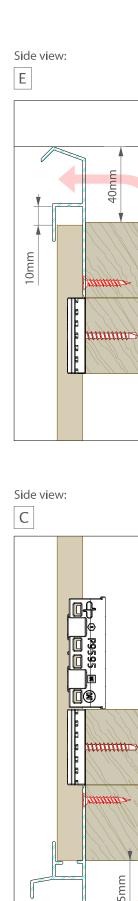
### C General expansion rules:

To ensure the required expansion is allowed for, see below:

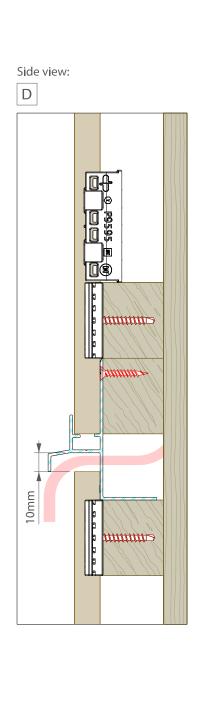
### · Length: modules of 3 m:

- · Because of the elongation and weight is in the same direction, the maximal length of 1 module is max. 3 m. To go larger you can start a new module on top using the starter profile P9567 to make the junction.
- · For proper elongation you need to leave a gap of 10 mm on top of the profile.
- · For finishing the top of the cladding we recommend using the P9569 to ensure proper ventilation of the profiles.





±35mm

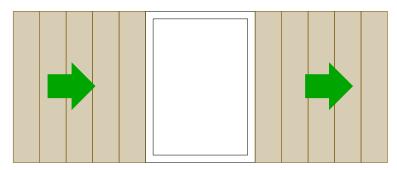


# 3.2.4 Finishing:

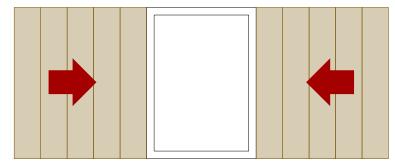
# A General: visual aspect

· To avoid colour differences avoid changing mounting direction of the planks in the same surface.









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### **B** Start of installation:

- $\cdot$  We strongly recommend to start with the aluminium starter profile P9567.
- · We advise starting at a height of minimum 30 cm from the ground to avoid stains from splashing raindrops and dirt.
- · This profile is handy for a gradient.
- · Installation of the Premium flat 167 Colour and the Premium flat 167 Aluminium see chapter Examples 4.4 Aluminium finishing.

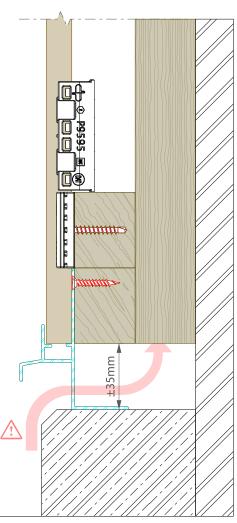
#### 1 Start at sill:

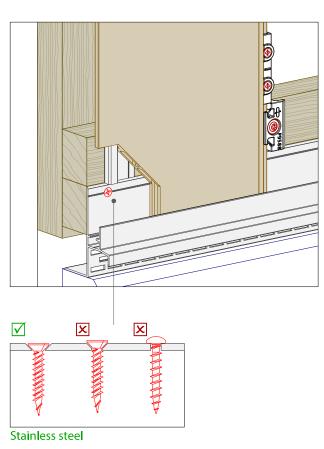
- · For example: stone cill, bricks
- Install the starter profile P9567 directly on the granite.
  The ventilation is allowed for within the design of the start profile.
- · The profile has to be fixed every 50 cm.
- Make sure that the screws are countersunk otherwise the cladding profiles will not fit into the starter profile P9567.
  An extra batten is needed at the bottom to fix the clip P9588 to ensure a proper fixing of the plank.

  - · To start on the sides you need to use the P2761.
  - · Note:



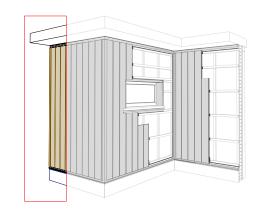
The end profile at the top as well as the aluminium profiles on the sides have to be fixed before inserting the plank P9576.





### C Sides:

- $\cdot\,$  The finishing trims on the ends consists of the aluminium profile P9562 in combination with the Twinson finishing profile P9568.
- · As an alternative to the Twinson finishing you may also use the P9572 for a complete aluminium finishing (see chapter
- · Installation of the Premium flat 167 Colour and the Premium flat 167 Aluminium see chapter Examples 4.4 Aluminium finishing.

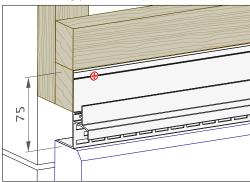


### C1 Starting from a side:

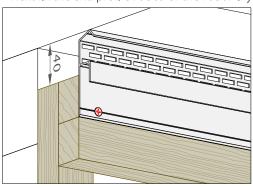
### SEQUENCE OF ASSEMBLY

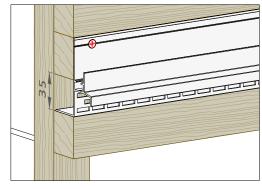
#### Step 1

 $\cdot$  Start placing your starter profile P9567 (see chapter start of installation on page 3.2/8).

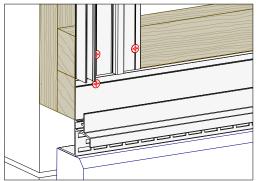


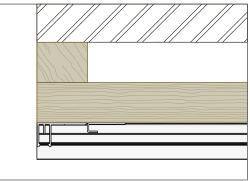
 $\cdot$  Next fix the end profile P9569 or the P9567 if you are to completing a number of modules.





- Cut the P9562 to the right length and fix every 50 cm. Use starter profile P2761 next to the P9562 to insure proper positioning of the plank.



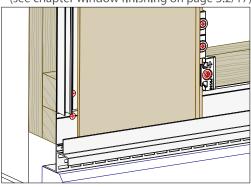


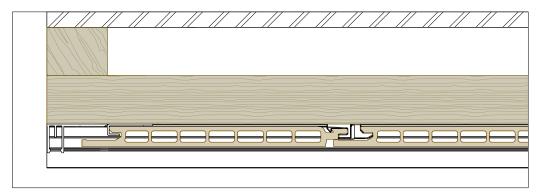
### Step 2

· Install your planks (P9576) and follow the guidelines in chapter expansion rules on page 3.2/5.



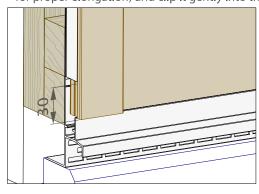
 $\land$  If there are windows on the elevation, you first need to finish off before installing the planks. (see chapter window finishing on page 3.2/17)

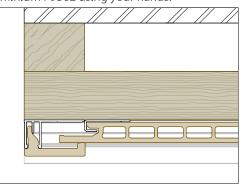


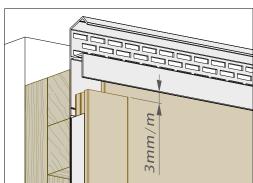


Step 3

 $\cdot$  Cut the Twinson profile P9568 to the right length (bear in mind that you need to allow 3mm/m expansion space for proper elongation) and clip it gently into the aluminium P9562 using your hands.



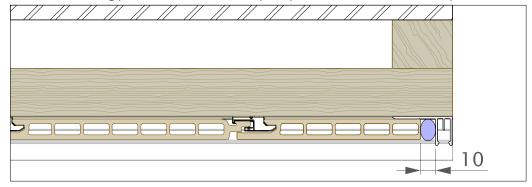




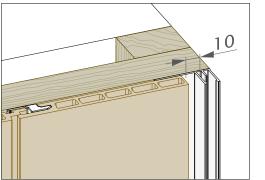
### C2 Ending on a side:

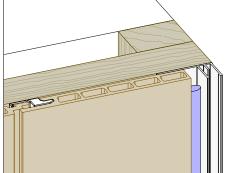
<u>^!\</u>

In most situations you will have to end with a cut off plank. Allow a space of 10 mm between the plank and the aluminium finishing profile P9562 in order to clip the plank P9576 over the P9588 clip.



· Once the plank is placed over the P9588 clip you will have a gap of 10 mm between the edge of the aluminium finishing profile P9562 and the plank P9576. We advise using packing blocks of 10 mm or a sealing strip (P9471) in order to maintain an even gap between the planks.





 $\triangle$ 

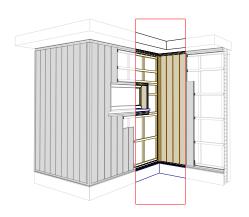
· In order to allow expansion of the last plank, do not screw!

· As an alternative to the Twinson finishing you may also use the P9572 in combination with the P9471 for a complete aluminium finishing.

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### D Inner corner:

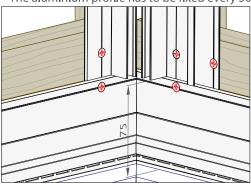
- $\cdot$  The finishing on the sides consists of a pair of the aluminium profiles P9562 in combination with the Twinson finishing profile P9568.
- · As an alternative to the Twinson finishing you may also use the P9566 in combination with the P9471 for a complete aluminium finishing.
- · Installation of the Premium flat 167 Colour and the Premium flat 167 Aluminium see chapter Examples 4.4 Aluminium finishing.

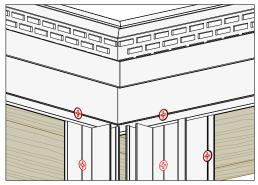


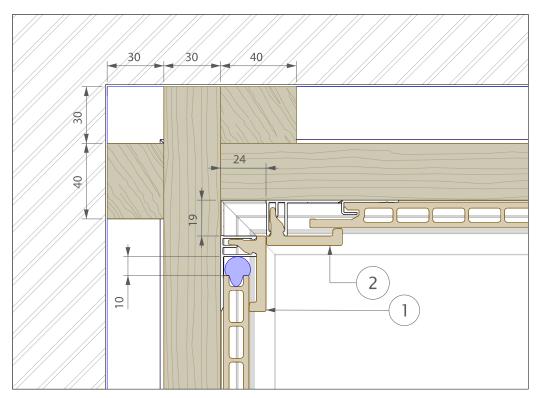
### SEQUENCE OF ASSEMBLY

#### Step 1

· First install your starter profile P9567 and the end profile P9569 (see chapter start of installation on page 3.2/8 + finishing top on page 3.2/16), then place the aluminium P9562 above the starter profile. Ensure you position them so that both P9568 clips can fit in (see drawing top view).
The aluminium profile has to be fixed every 50 cm.

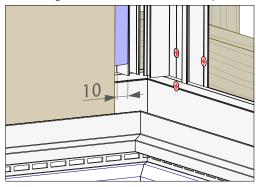






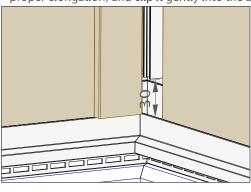
### Step 2

 $\cdot$  Installing towards the corner. (see chapter sides on page 3.2/9)

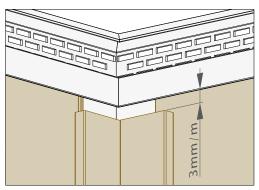


Step 3

· Cut the Twinson profile P9568 to the right length (bear in mind that you need to allow 3mm/m expansion space for proper elongation) and clip it gently into the aluminium P9562 in a sequential way using your hands.

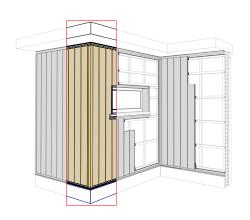






### *E* Outer corner:

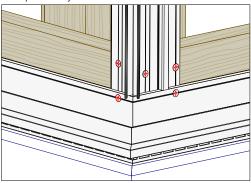
- · The finishing on the sides consists of a pair of the aluminium profile P9564 in combination with the Twinson finishing profile P9571.
- · As an alternative to the Twinson finishing you may also use the P9566 in combination with the P9471 for a complete aluminium finishing (see chapter Examples).
- · Installation of the Premium flat 167 Colour and the Premium flat 167 Aluminium see chapter Examples 4.4 Aluminium finishing.

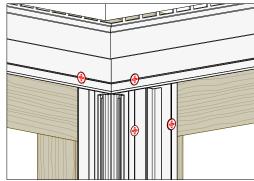


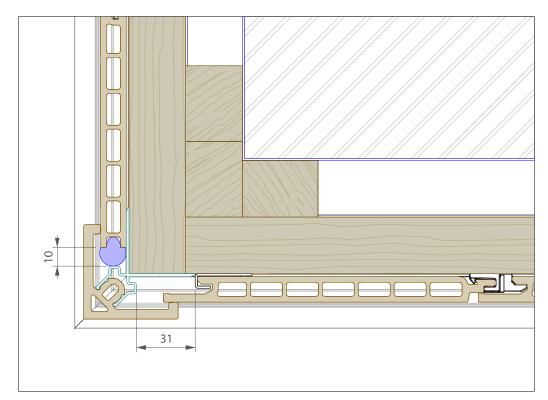
### SEQUENCE OF ASSEMBLY

#### Step 1

· First put your starter and end profile (see chapter start on page 3.2/8 + top of installation on page 3.2/16) then place the aluminium P9564 above the starter profile (P9567). The profile P9564 needs to be fixed every 50 mm sequentially on both sides.



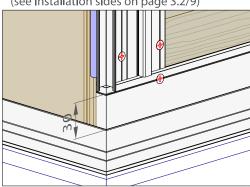


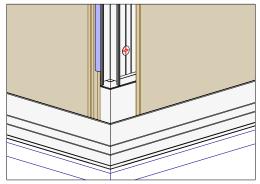




### Step 2

- Install planks (P9576) and follow the guidelines in chapter expansion rules on page 3.2/5. Ensure that you keep 10 mm between the edge of the plank P9576 and the edge of the aluminium profile P9564.
  It is also necessary to use packing blocks or a sealing strip (P9471) to keep the profiles in place. (see installation sides on page 3.2/9)

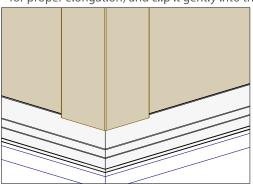


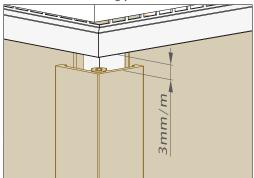


 $\cdot$  If there are windows on the elevation, you first need to finish off before installing the planks. (see chapter window finishing on page 3.2/17)

#### Step 3

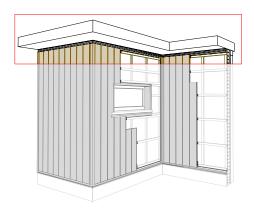
 $\cdot$  Cut the Twinson profile P9571 to the right length (bear in mind that you need to allow 3mm/m expansion space for proper elongation) and clip it gently into the aluminium P9564 using your hands.





### F Top of installation:

- As with the starter profile, the P9569 allows ventilation for your installation.
   Ensure there is nothing obstructing the perforated zone preventing the air to circulate freely.
- · Installation of the Premium flat 167 Colour and the Premium flat 167 Aluminium see chapter Examples 4.4 Aluminium finishing.

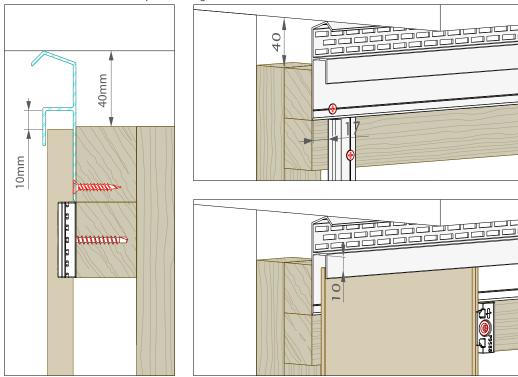


### **SEQUENCE OF ASSEMBLY**

#### Step 1

<u>^!\</u>

· Due to the fact you are using horizontal battens you will need to leave 40 mm between the edge of the highest batten and the roof or drip moulding. This will ensure the ventilation is not blocked.



### Step 2

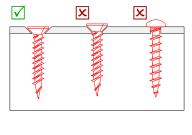
Cut the profile to the right length. For corners we advise mitre cutting the profile.

Position the profile at the top of your installation. This can be the edge of a flat roof or dripmoulding.

Make sure in all cases that the P9569 is fully covered.

Fix the P9569 every 50 cm and do not forget to countersink the screws otherwise the planks will not fit in.





### G Window:

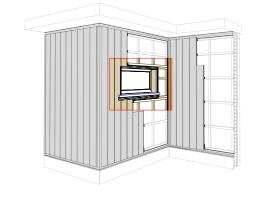
· When installing planks make sure you always start with the finishing around the window.

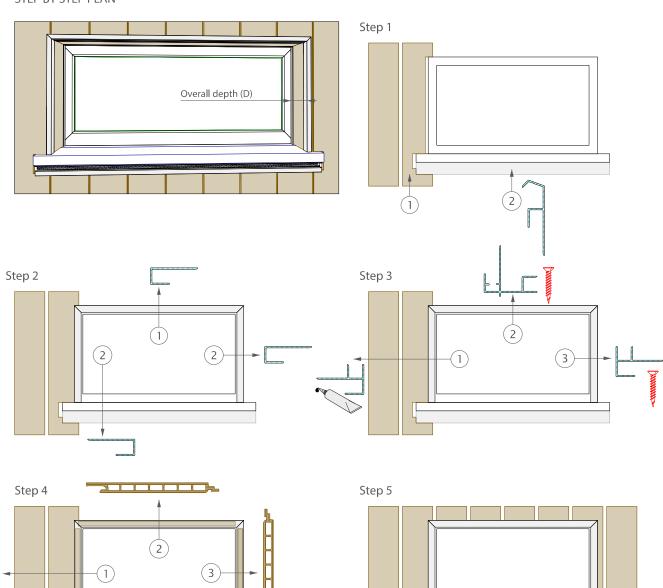
- There are 2 posibilities:
   1 Overall depth ≤ 160 mm
   2 Overall depth > 160 mm





### STEP BY STEP PLAN

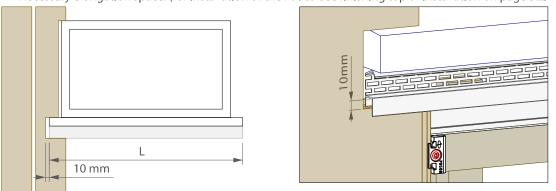




### SEQUENCE OF ASSEMBLY

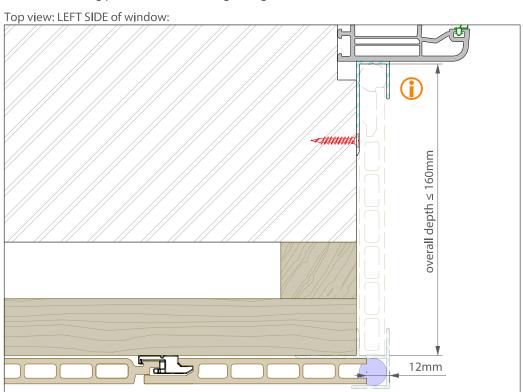
### Step 1

- Start by installing the aluminium finishing profile P9569 under the window-sill.
  Ensure you allow 10 mm lengthways between the P9569 and the cut out of the plank P9576 to ensure the necessary elongation space. (for installation of the P9569 see finishing top of installation on page 3.2/16)



Step 2: finishing with P9572

· Trim the finishing profiles P9572 to the right length and install them around the window.

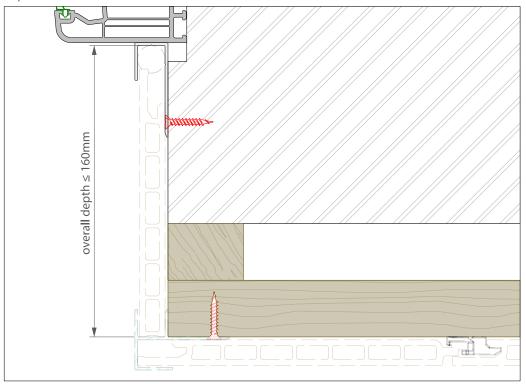






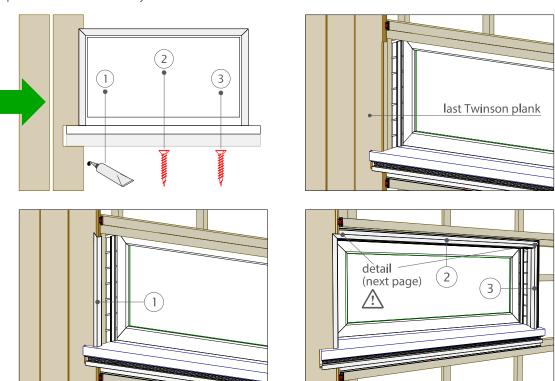
Pieces of the P9471 can be used to maintain positioning of the profile.

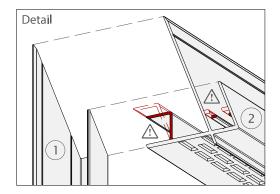
### Top view: RIGHT SIDE of window:



### Step 3

- At the sides of the window use the aluminium finishing profile P9565.
  Put an additional batten for the P9565 to maintain proper fixing of the profile.
  Above the window use the aluminium finishing profile P9570 with integrated ventilation and drip detail.
  Cut the aluminium profiles to size with mitre return.
  Glue the left P9565 to the batten after installing the last plank, then screw the top and right aluminium finishing profiles and fix them every 50 cm.

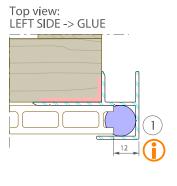


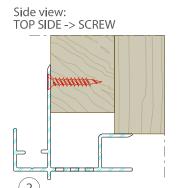


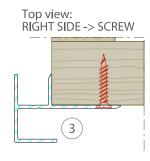
### NOTE:

It is necessary to make an extra cut out in the P9570 top aluminium profile at each end, otherwise the planks cannot be put into place.

Pieces of the P9471 can be used to maintain positioning of the profile.

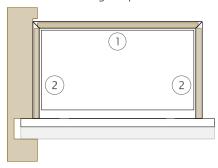




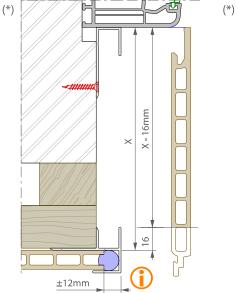


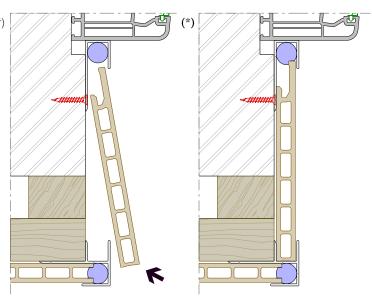
Step 4

· Now continue installing the planks around the window.



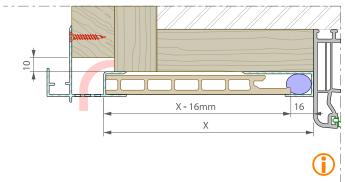
Top view: LEFT/RIGHT SIDE of window:





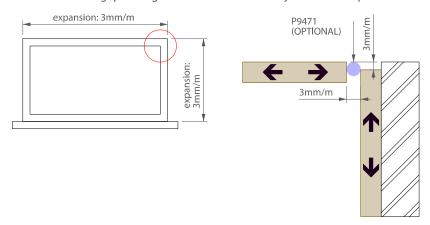
(\*) Repeat for left and right side of the window, except for gluing/screwing of the finishing profile

Side view: ABOVE of window:

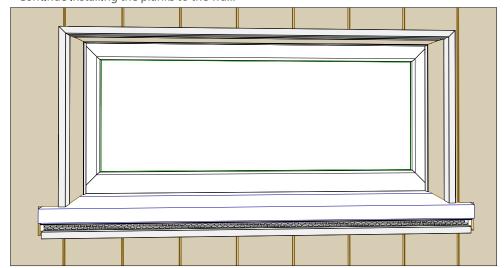


Pieces of the P9471 can be used to maintain some positioning of the profile.

- Cut out the planks taking into account the need for expansion.
  Optional: For a proper finish we propose using a round sealing profile (P9471) with a diameter of 15 mm. Do not use silicone to close the gap! Doing this can leave stains on your Twinson profiles.

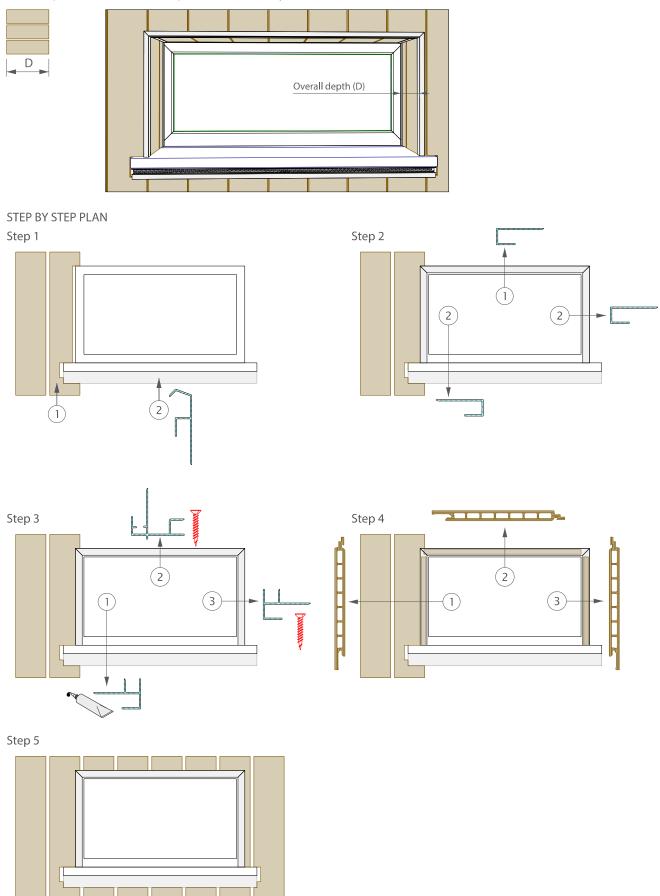


Step 5 Continue installing the planks to the wall.



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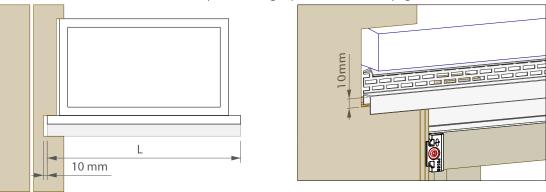
### 2 Overall depth > 160mm: different planks are necessary



### SEQUENCE OF ASSEMBLY

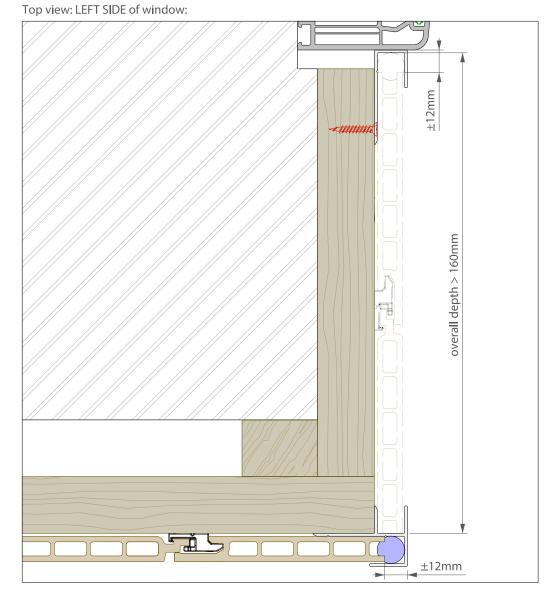
### Step 1

- Begin by installing the aluminium finishing profile P9569 under the window-sill.
   Ensure you leave 10mm lengthways between the P9569 and the cut out of the plank P9576 to ensure the necessary expansion. (for installation of the P9569 see chapter finishing top of installation on page 3.2/16).



Step 2: finishing with P9572

• Cut the finishing profiles P9572 to the right length and install them around the window.

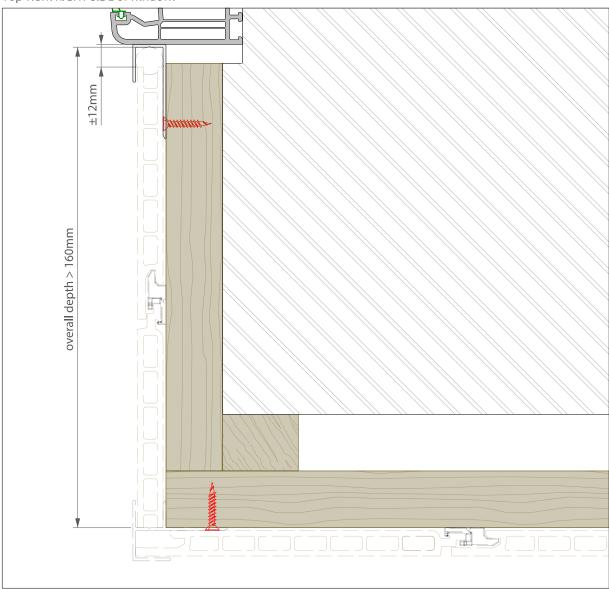


### Side view: ABOVE the window:



Pieces of the P9471 can be used to maintain some positioning of the profile.

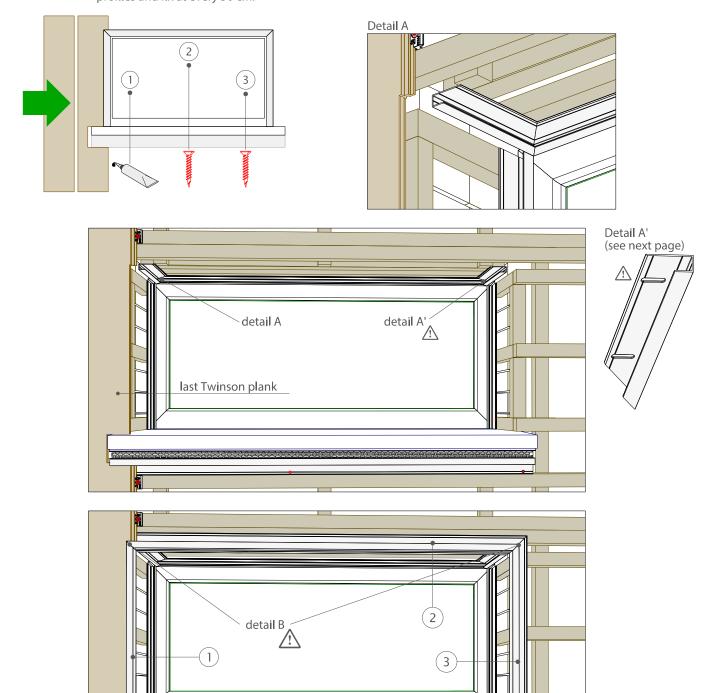
Top view: RIGHT SIDE of window:

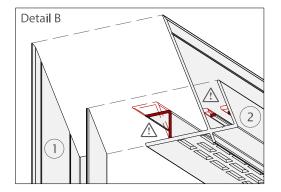


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### Step 3

- For the sides of the window use aluminium finishing profile P9565.
  Put an additional batten next to the P9565 to maintain a proper fixing of the plank P9576 with the clip P9588.
  Above the window use aluminium finishing profile P9570 with integrated ventilation and drip detail.
  Cut the aluminium profiles to length with mitre return.
  Glue the left P9565 to the batten after installing the last plank, then screw the top and right aluminium finishing profiles and fix at every 50 cm.

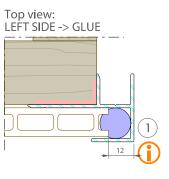


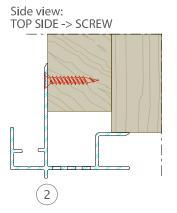


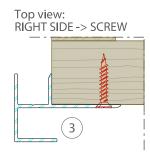
### NOTE:

It is necessary to make an extra cut out in the P9570 top aluminium profile on both sides, otherwise the Twinson planks installed on the sides cannot be slotted into place.

Pieces of the P9471 can be used to maintain positioning of the profile.

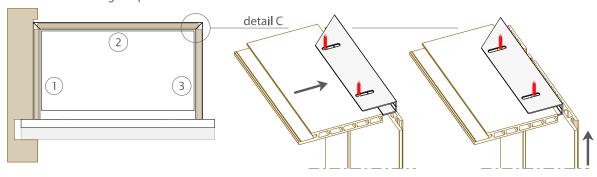


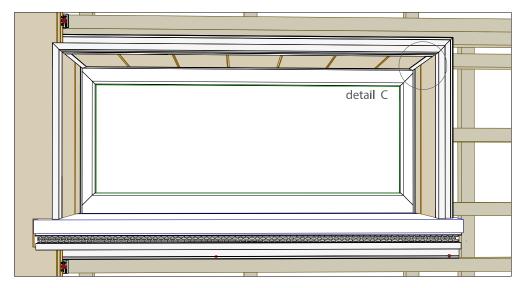




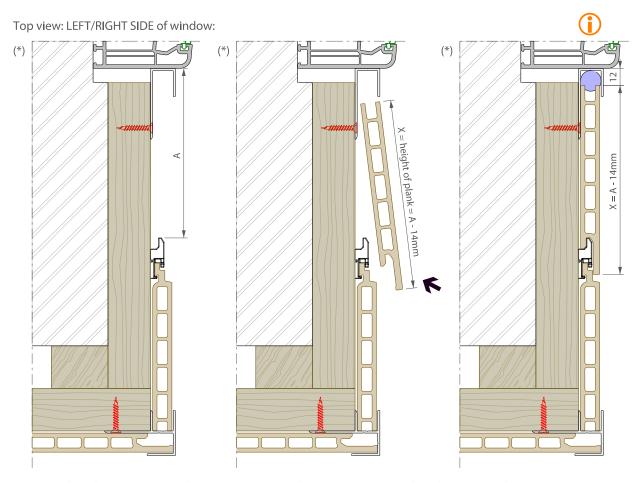
Step 4

· Continue installing the planks around the window.



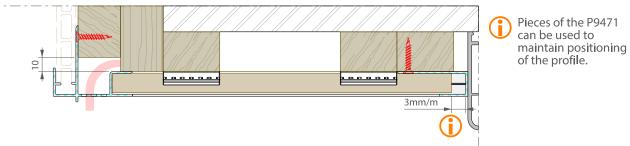


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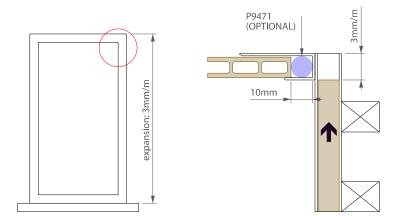


(\*) Repeat for left and right side of the window, except for gluing/screwing of the finishing profile





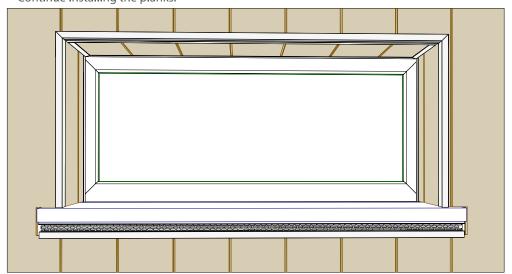
Cut out the planks taking into account the need for expansion.
Optional: For a proper finish we propose using a round sealing profile (P9471) with a diameter of 15 mm. Do not use silicone to close the gap! Doing this can leave stains on your Twinson profiles.



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Step 5

Continue installing the planks.



# Premium flat 167: 4 Examples

# deceuninck

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4.5 Premium flat 167 Aluminium: Top of installation	84

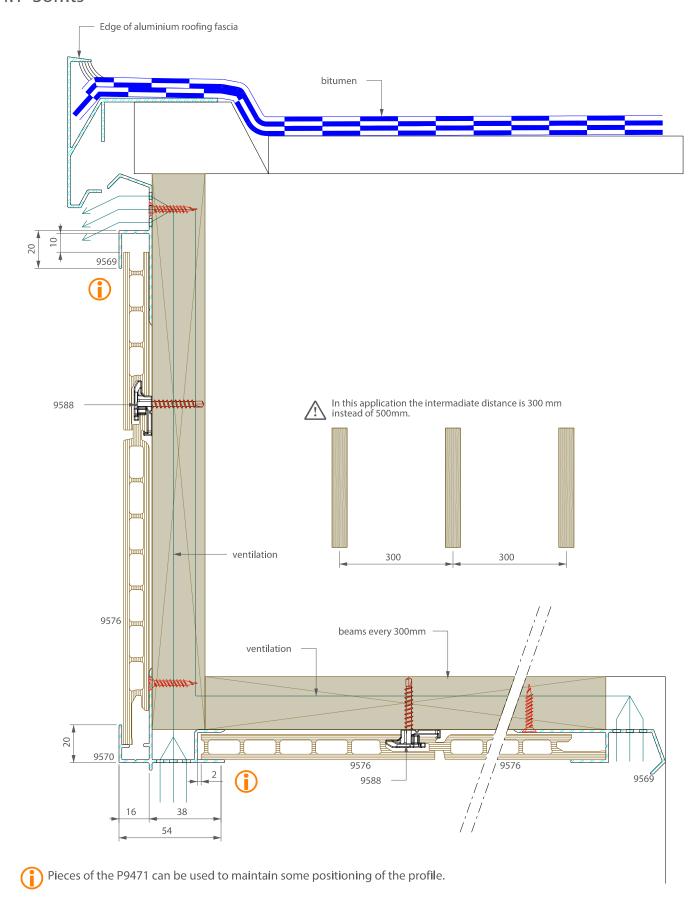
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Cladding premium Roofline & Cladding



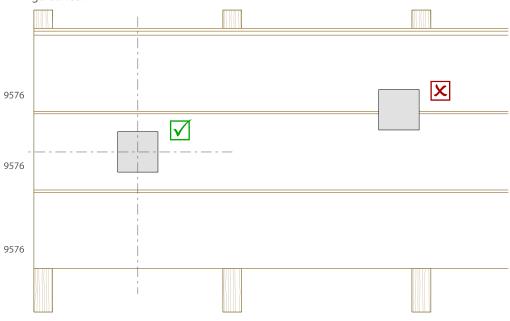
# 4.1 Soffits



# 4.2 Spotlights

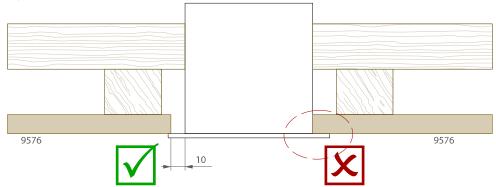
#### 4.2.1 Light weight decking spotlights:

- Light weight Decking lights must to be installed between the batten supports and centrally in the middle of one plank.
   Installing lights that overlap different planks could lead to extra tension due to expansion which in turn may lead to deformation of the planks and/or damage to the lights.
- · Positioning the decking lights in the middle of the planks between the battens is the best method of avoiding blocking the expansion.
- · The temperature of the casing of the decking light should not exceed 60°C, please refer to the manufacturer for guidance.



#### 4.2.2 Heavy weight decking spotlights:

- · Heavy decking lights should be fixed directly to a sufficient, reinforced under structure. In this case the spot needs to be considered as a fixed object so an expansion space of 10mm around the light is needed.
- · Additional battens will be needed next to the light to fix the plank with the clip P9588 as close as possible.
- $\cdot$  The temperature of the casing of the decking light should not exceed 60°C. Please refer to the manufacturer for guidance.

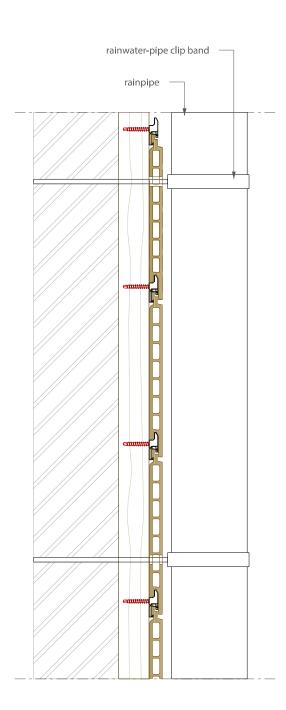


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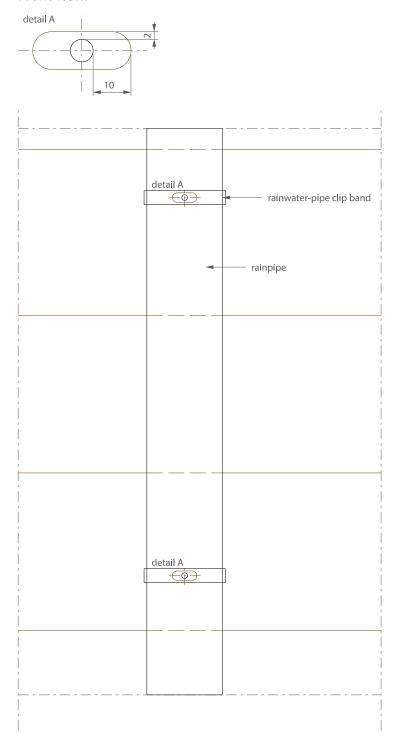
# 4.3 Rainwater drainage:

# 4.3.1 Horizontal installation:

Side view:





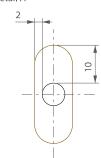


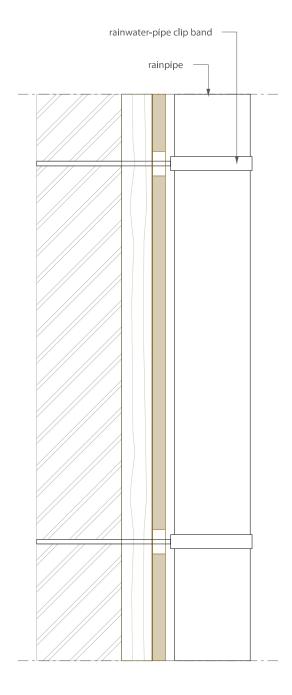
# 4.3.2 Vertical installation:

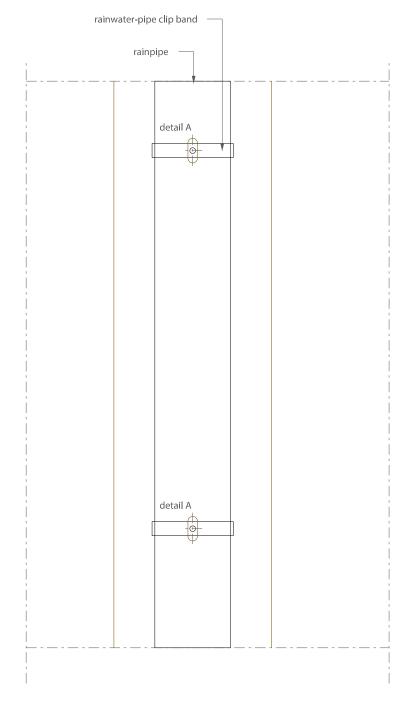
Side view:

#### Front view:

detail A







# 4.4 Aluminium finishing:

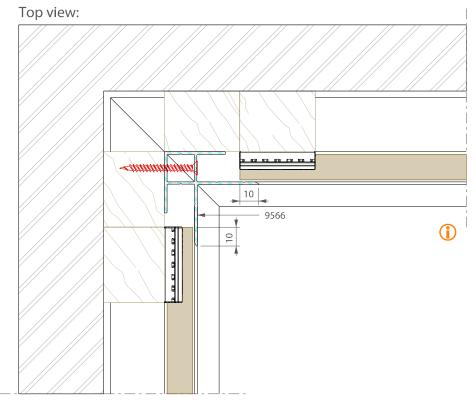
#### 4.4.1 Horizontal installation:

A Sides with P9572 (alternative for P9562):

Front view: Side view: **(i)** P9569 P9569 P9569 P9572 P9572 P9572 \_A'\_ P9567 P9567 P9567 Top view: ' Section A - A' 10 Pre-drill all aluminium finishing profiles.

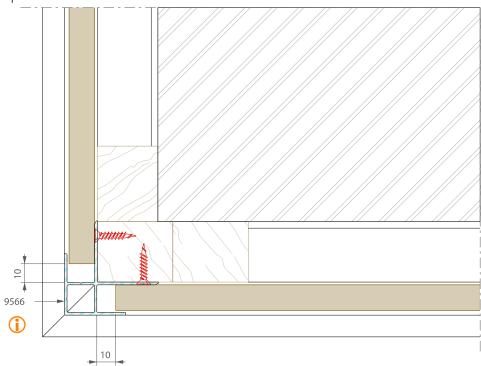
#### 4.4.1 Horizontal installation:

*B Internal corner P9566 (alternative for P9562):* 



# C External corner P9566 (alternative for P9564):

Top view:



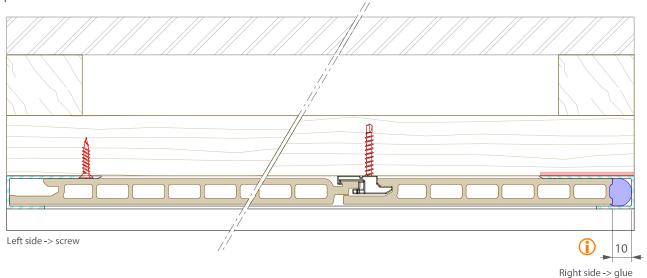
Pre-drill all aluminium finishing profiles.

# 4.4 Aluminium finishing:

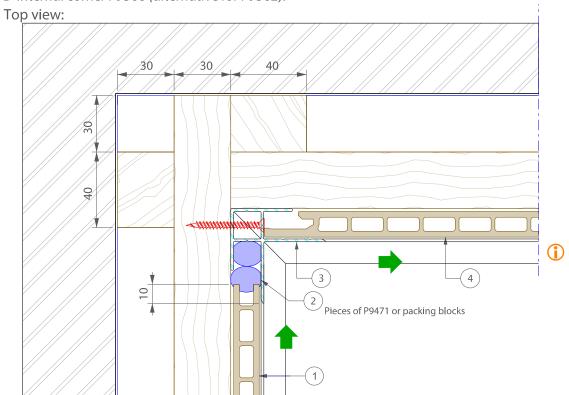
#### 4.4.2 Vertical installation:

A Sides with P9572 (alternative for P9562):

Top view:



*B Internal corner P9566 (alternative for P9562):* 



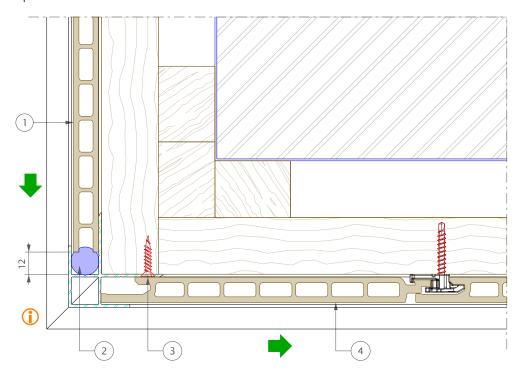
Direction of installation.

Pre-drill all aluminium finishing profiles.

# 4.4.2 Vertical installation:

C External corner P9566 (alternative for P9564):

Top view:

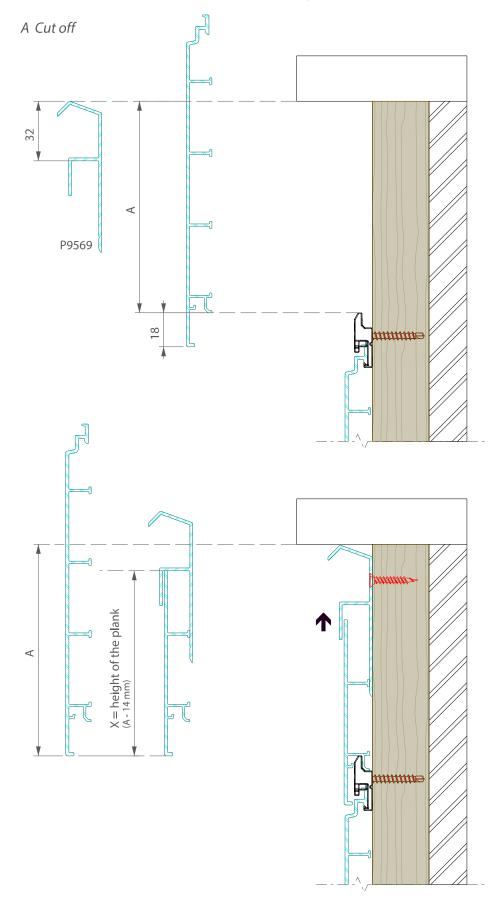


Direction of installation.

Pre-drill all aluminium finishing profiles.

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# 4.5 Premium flat 167 Aluminium: Top of installation



# B Full plank

