Plannja

Assemby instructions

2024 | Roofing Sheet & Wall Cladding

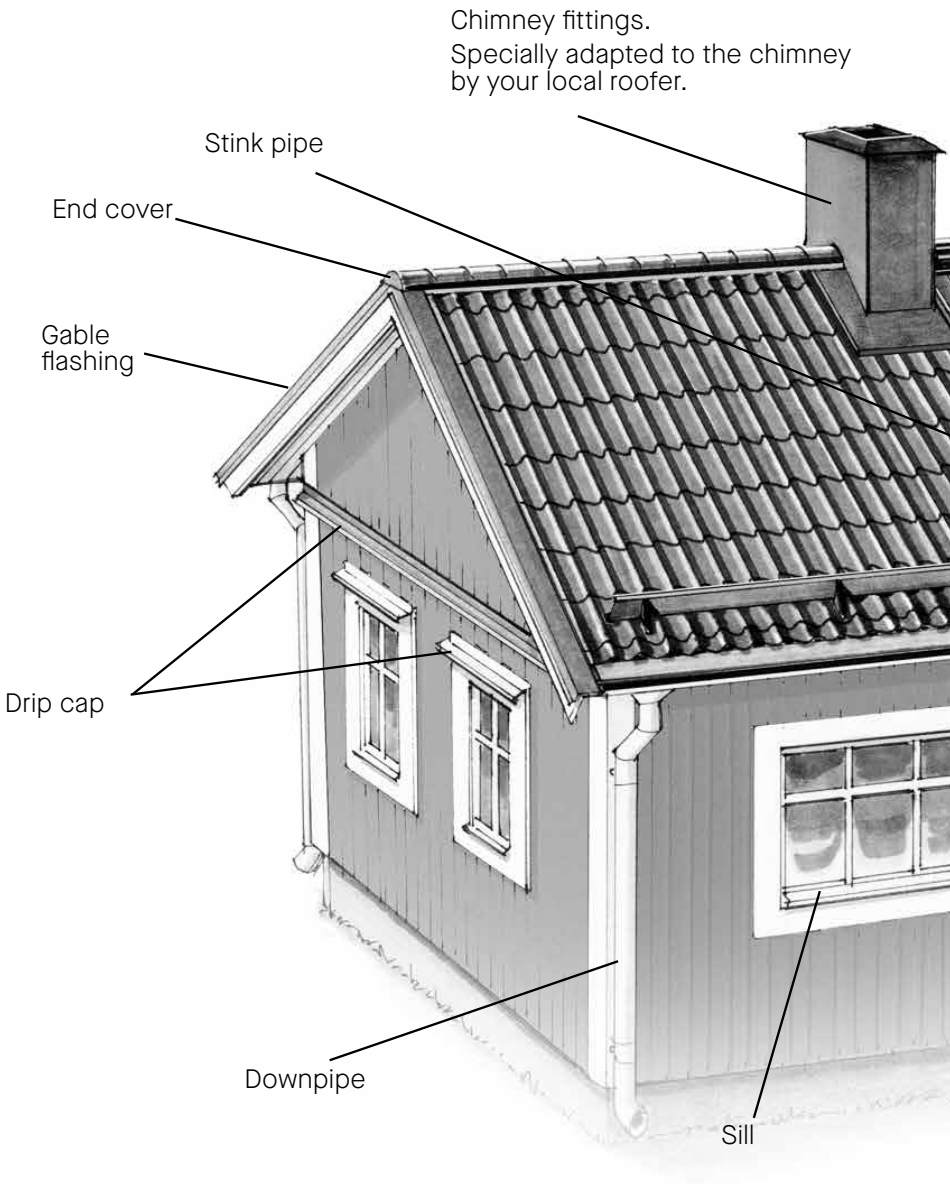
Plannja Profiles: 20-105, 20-75, Sinus 18, Sinus 51, 45, 45R, 19, 35 plus flashings and fittings

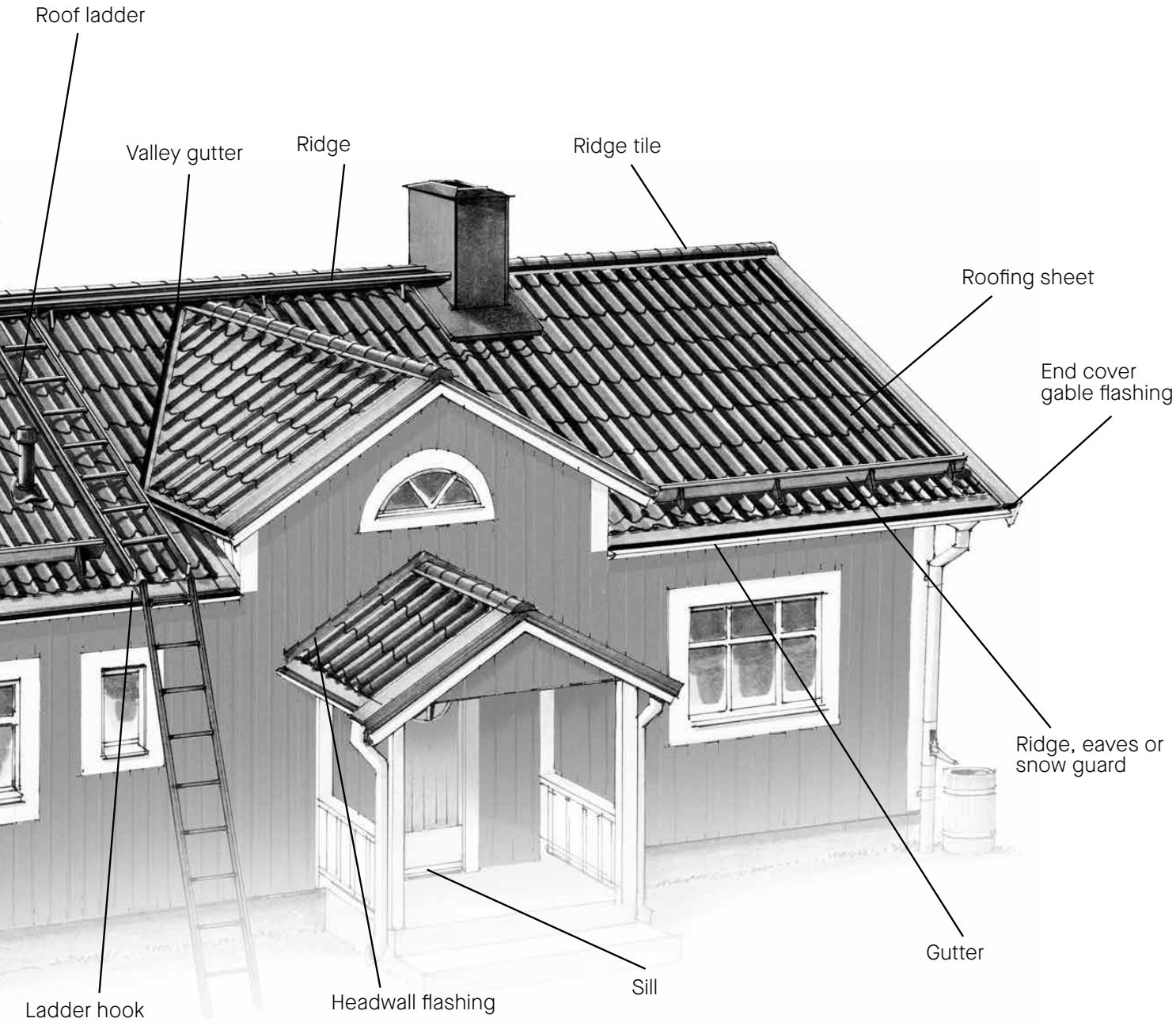
Table of contents

Some words of advice

Plannja's assemby instructions were created to help both the private individual and the professional.
In order to make it easier for everyone to immediately find the instructions and the help they need, we have divided the assemby instructions into distinct sections. The first chapter – General preparations, roofing – is extremely important for those who have never laid a roof before.
Don't forget to stay calm and think through every step before you get to grips with the actual assemby. Good preparation and a methodical approach are the key to a perfect result. The assemby instructions must be followed for our warranty to be valid.
Plannja is Europe's leading manufacturer of thin sheet building materials. Our wide range of products means that we can provide product systems and total thin sheet solutions for almost any building project.

Roof components




Roof ladder
Valley gutter
Ridge
Ridge tile
Roofing sheet
End cover
gable flashing
Ridge, eaves or
snow guard
Gutter
Sill
Headwall flashing
Ladder hook

General preparations

Roofing

Plannja

SHEET METAL ROOF

When taking delivery of roofing sheet
As far as possible, store Plannja construction panelling indoors. Cover the materials with tarpaulin when storing outdoors. If there is a risk of condensation store packages inclined. Make sure good ventilation is achieved. This applies to both steel and aluminium.

Avoid damage to the panelling!
Carry Plannja Roofing Tiles longer than 5 metres on edge or on a wooden frame. If they are carried flat the sheets will bend by their own weight and stretch. During subsequent assemby problems may be encountered with the fit between different sheets.

Sheet durability and walkability
The walkability of thin sheet profile panels is difficult to define. In general a certain degree of care must be taken when walking and working on thin sheet roofs. Walkable sheeting refers to profiled panels that will allow careful access without being damaged or suffering ugly indentations.

Walkability and strength are dependent on thickness
Thicker sheeting allows greater spacing between battens and provides improved walkability. For safety's sake always try to walk above or beside a batten. In the case of Plannja Roofing Tiles and Plannja Pannplåt, always step in the profile valley when walking on the roof.

ALUMINIUM ROOF

Aluminium roofs are more sensitive
Aluminium is softer than steel. Therefore exercise extreme caution when walking on an aluminium roof. Note that Plannja 20-75 in aluminium is not walkable at all if batten spacing is the maximum 500 mm c/c.

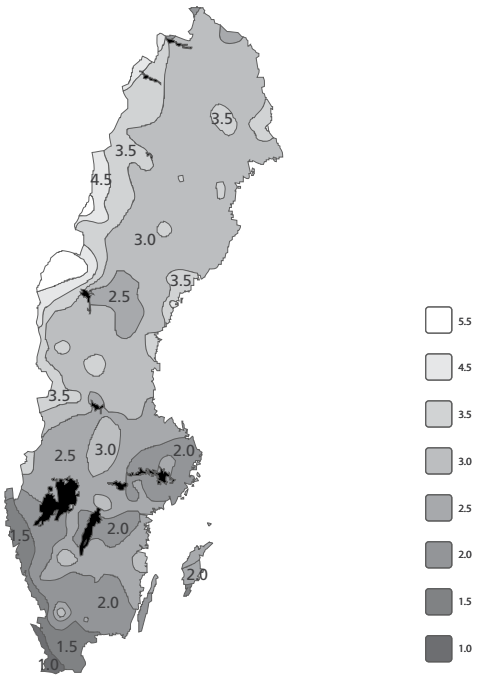
IMPORTANT – ALUMINIUM ROOFS
A few things to remember when selecting an aluminium roof.

a) Aluminium moves more than steel with temperature changes. If the pitch of the roof is more than 6 metres expansion and contraction can be handled by pre-drilling the top sheet at each end overlap with an ø 8 mm bit before fastening the sheet. Avoid pitches longer than 12 metres!

b) When using wooden battens, affix a strip of felt paper (see options selections) above the joists to avoid hearing a clicking noise during temperature changes. Not necessary when using Plannja Kombi battens or Renovation battens.

c) In order to prevent contraction/expansion movements, it is necessary for all flashings to be fastened without sharing screws in overlaps, i.e. screws may not pass through both flashings.

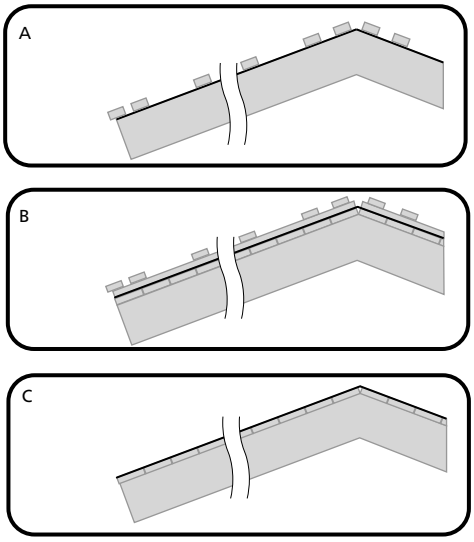
SNOW LOAD MAP



The snow load map shows snow volumes where you live. It also determines how the underlayment should look. If you live on the boundary between two different zones, choose the one with the most snow to guarantee durability. A more detailed map is available on Boverket's website. This applies to Sweden. Check the snow load for the area where your property is located.

1 UNDERLAYMENT FOR SHEET

The most common underlayments



A. ON TRUSSES
When building a new roof, it's usual to choose a light underlayment such as Plannja Anticon Coverall or tongue-and-groove planks/plywood, at least 17 mm thick with a felt paper underlay with a minimum quality of YAP2200 or Plannja Anticon Coverall. Read more under *Installing battens* for each type of product.

B. ON TONGUE-AND-GROOVE PLANKS/ PLYWOOD
Remove the old roofing. If the existing battens and counter battens are used, the battens must be moved so that the spacing corresponds to the dimensions in the assemby instructions for the roofing profile concerned. Replace defective battens.

C. ON SHINGLES, FELT PAPER, FLAT TILES
Allow the old roof to remain as underlayment. Seal any holes in the simplest manner. Roofing sheet can be laid directly on the old roof on the condition that the roof is watertight, even and that tongue-and-groove planking is in good enough condition for fasteners to hold the sheet down onto the underlayment, which must be at least 17 mm thick. However, we recommend the use of Plannja Kombi Battens, Plannja Renovation Battens or battens and counter battens.

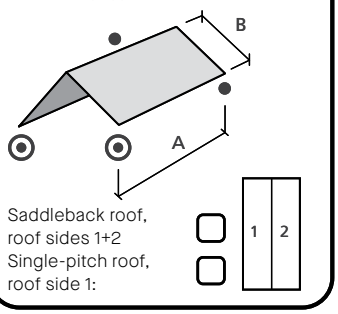
2 HOW TO MEASURE THE ROOF

Types of roofs

Enter the dimensions indicated for your roof type. These are needed as support data for an offer or order for your roof. If your type of roof is missing and you need help, please contact Plannja for support.

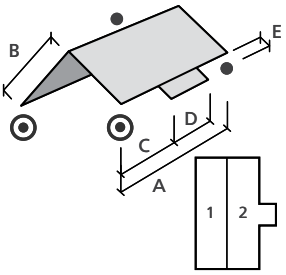
We recommend a visit to Calculate My Roof at http://beraknamittak.plannja.se
You can get help there with a price estimate for a complete roof including rainwater system and all the accessories to suit the dimensions of your roof.

This is my type of roof:



Saddleback roof, roof sides 1+2
Single-pitch roof, roof side 1:

This is my type of roof: ☐



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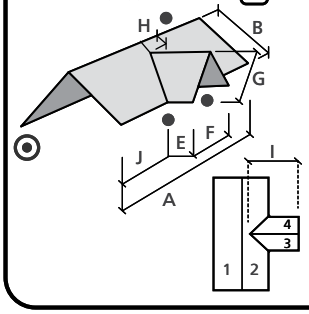

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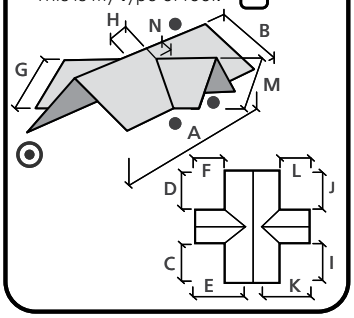

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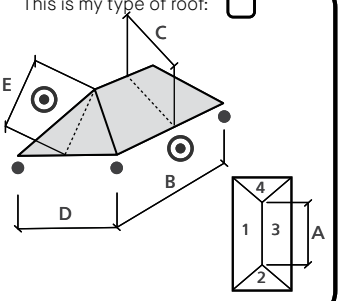

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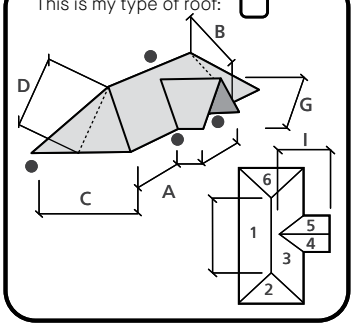

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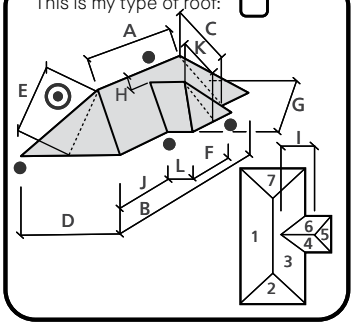

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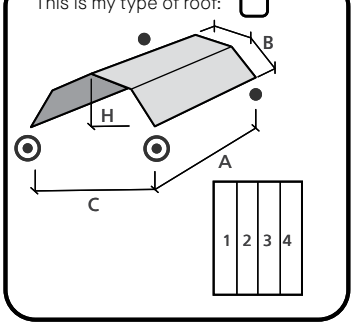

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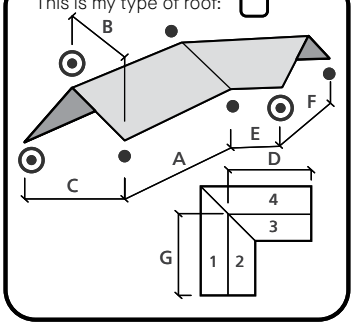

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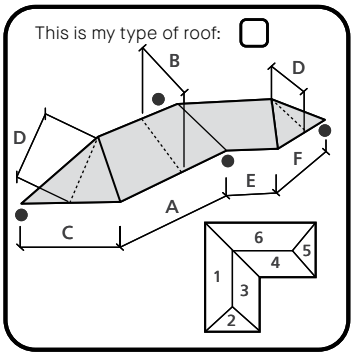

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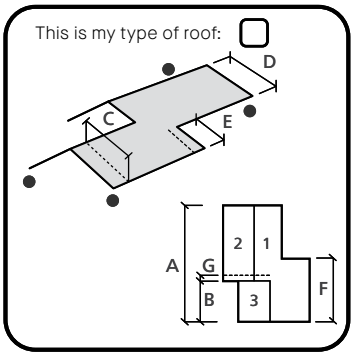

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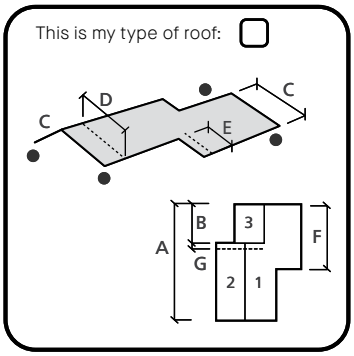
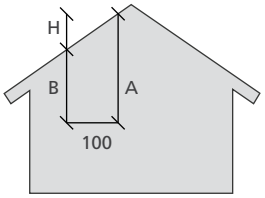


= Always downpipe
= Downpipe if eaves > 10 metres, otherwise every 10 metres.
NOTE! All dimensions in mm.

3 PITCH

Pitch angle should be checked to ensure selection of the right roofing product. Pitch angle may also affect the choice of underlayment, roof assemby and the assemby of flashings and fittings.



Calculating pitch.
Use the table on the right to calculate pitch, or use a smartphone app for the calculation.

Dimension A minus dimension B gives H, which is the height difference for calculating pitch. See table.

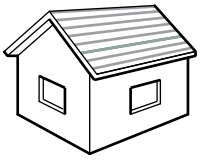
Rise in cm (≈)	Pitch	Rise in cm (≈)	Pitch
25	14	75	37
30	17	80	39
36	20	84	40
40	22	90	42
45	24	100	45
49	26	104	46
53	28	111	48
58	30	119	48
62	32	133	53
67	34	143	55
73	36	173	60

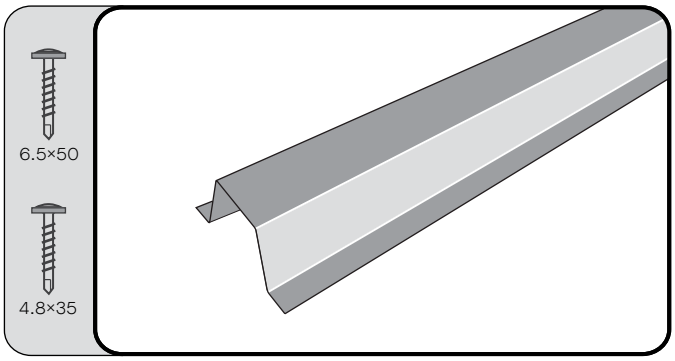
POSSIBLE ROOFING PRODUCT SELECTIONS DEPENDING ON PITCH

	Pitch in degrees				
	3.6-5.7*	5.7-8	8-10	10-14	> = 14
Product		Seal in side and end overlap			
Plannja 20-105		X	X	X	X
Plannja 20-75		X		X	
Plannja Sinus 18				X	X
Plannja 45 / 45R	X	X	X	X	X
Plannja Sinus 51				X	X
Plannja Traditional profile				X	X
Plannja Royal					X
Plannja Regent					X
Plannja Regal					X
Plannja Trend			X	X	
Plannja Modern				X	X

* With attachment strip

4a KOMBI BATTEN



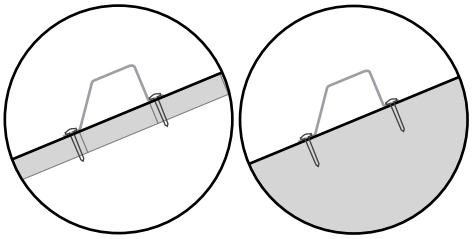


Choosing battens
Plannja roofing sheet can be installed on different types of batten. Choose either Plannja Kombi Batten, Plannja Renovation Battens or wooden battens.

Plannja Kombi Batten is intended for new constructions and renovations. It is designed to handle truss spacing of 1200 mm. The standard length is 2700 mm and the profile height is 40 mm. We recommend the use of wooden battens at eaves. Attachment to truss c/c 1200 mm Use two 6.5×50 screws for attachment; two screws in each truss.

Overlapping joints
Join Kombi Battens using 100–300 mm overlaps. Locate the joints above the trusses.

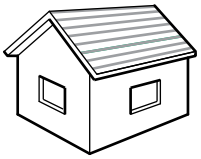
Fastening to wooden panels
Minimum thickness 17 mm. Screws 4.8×35, spacing max 300 mm in zigzag pattern. Tighten screws carefully so that they do not spin freely.



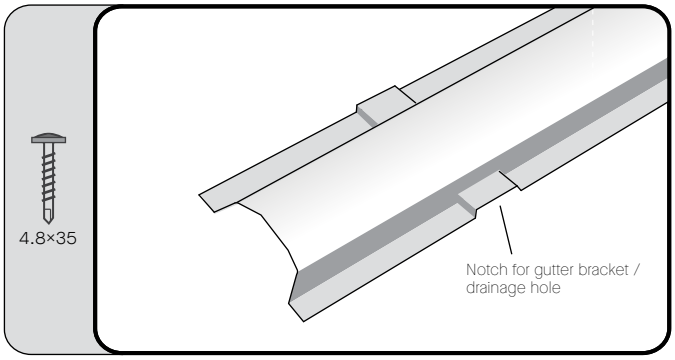
Attachment, wooden panel

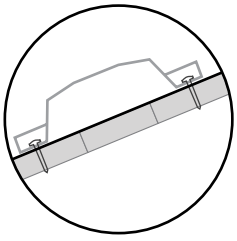
Attachment to truss c/c 1200

4b RENOVATION BATTENS



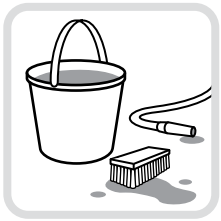
Plannja Renovation Battens are primarily intended for renovation and have cut-outs for gutter brackets/drainage holes which means they can be used as eaves strips and that they eliminate the need for counter battens. They are not designed to support between trusses but require a structural support. The standard length is 3000 mm and the profile height is 20 mm. Attachment to wooden panels with a minimum thickness of 17 mm. Screws 4.8×35 mm, spacing max 300 mm in zigzag pattern. Tighten screws carefully so that they do not spin freely.





Attachment, wooden panel

MAINTENANCE



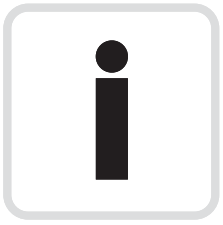
Plannja roofing tiles and wall cladding normally require very little maintenance. Deposits that are not washed away by rain should be removed with a soft brush and water. Cut edges and paint damage that occur during assemby should be immediately touched up with Plannja touch-up paint. After assemby, be careful to remove all drill swarf so that the profiles do not become miscoloured.

Assemby instructions

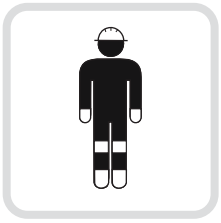
Roofing Profiles

20-105, 20-75, Sinus 18, Sinus 51, 45, 45R

Plannja

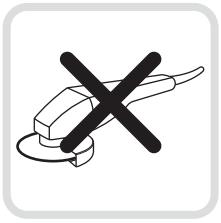


PREPARATION
Before you begin the assemby of your Plannja Roof it is important to read through the “General Preparations, roof laying” section. The section provides information and advice on how to measure your roof, what underlying materials are suitable, and much more besides.

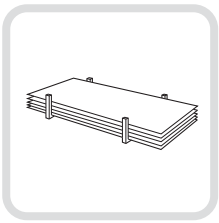


WORK SAFETY
Always follow applicable work safety legislation.

LABOUR
Assembly can be done by one person. For safe assembly, we always recommend that at least two people perform the work.



TOOLS
No special tools are required for sheet assemby. Nevertheless, a screwdriver can make the work considerably easier. Cut sheets using sheet metal shears, a nibbling machine or a circular saw. Never use a grinding disc. Sheet metal coatings can be damaged by swarf from the disc.



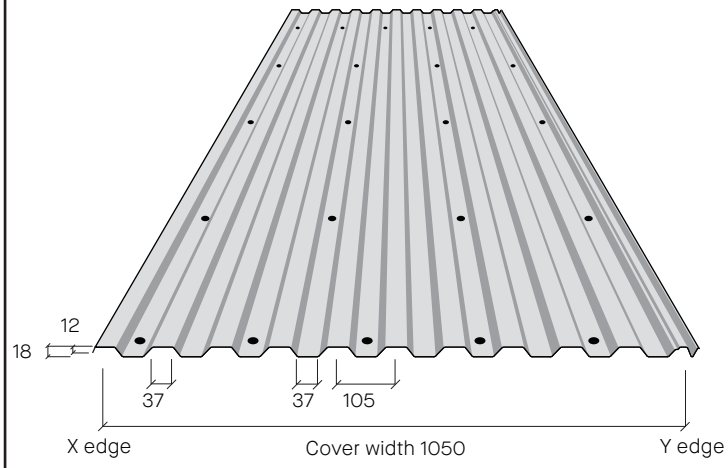
TRANSPORT, STORAGE AND HANDLING
As far as possible, store roof sheeting indoors. Cover the materials with tarpaulin when storing outdoors. If there is a risk of condensation, store packages at an incline. Make sure good ventilation is achieved.

Remember that long sheets may not be lifted by their ends; the best method is to carry them by holding the long sides.

WALKABILITY
The walkability of thin sheet profile panels is difficult to define. In general a certain degree of care must be taken when walking and working on thin sheet roofs. Walkable sheeting refers to profiled panels that will allow careful access without being damaged or suffering ugly indentations. For safety’s sake always try to walk above or beside a batten.

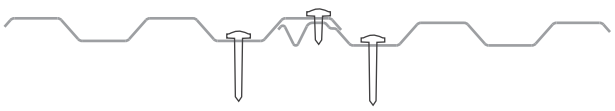
Plannja 20-105	
Material	Steel
Sheet thickness, Steel	0.50, 0.60 mm
Weight, steel	3.7, 4.6, 5.5 kg/m^2
Cover width	1050 mm.
Length	700-10000 mm
Minimum recommended pitch	5.7° (1:10)
Seal at side and end overlap	5.7-14°

PROFILE GEOMETRY AND ATTACHMENT



Use one fastener in every batten for every third profile valley.
Use one fastener in every other profile valley at sheet ends.
Always use one fastener to each batten at the side overlap.

SIDE OVERLAP IF THERE IS AN UNDERLAYMENT



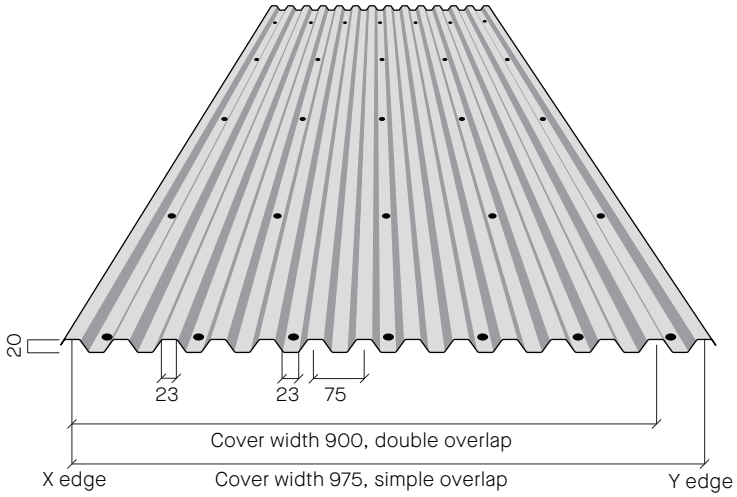
When using fleece, a screw or rivet can be mounted on the profile top to get a tighter connection.

SIDE OVERLAP IF UNDERLAYMENT IS LACKING

If batten spacing is equal to or less than 500 mm, a screw must be put in every batten at the overlap. If batten spacing is greater than 500 mm, use a side overlap screw or rivet, max c distance 500 mm. If the roof pitch is less than 14° run a 4 mm bead of sealant along the lower profile's top flange. A 3×10 mm self-adhesive seal strip may also be used. Rivet or screw c/c 300 mm in the side overlap.

Plannja 20-75	
Material	Aluminium
Sheet thickness, Alu	0.50 mm
Weight, Alu	1.8 kg/m^2
Cover width	900 mm.
Length	700-10000 mm
Minimum recommended pitch	5.7° (1:10)
Seal at side and end overlap	5.7-14°

PROFILE GEOMETRY AND ATTACHMENT



Use one fastener in every batten for every third profile valley.
Use one fastener in every other profile valley at sheet ends.
Always use one fastener to each batten and side overlap.

SIDE OVERLAP IF THERE IS AN UNDERLAYMENT

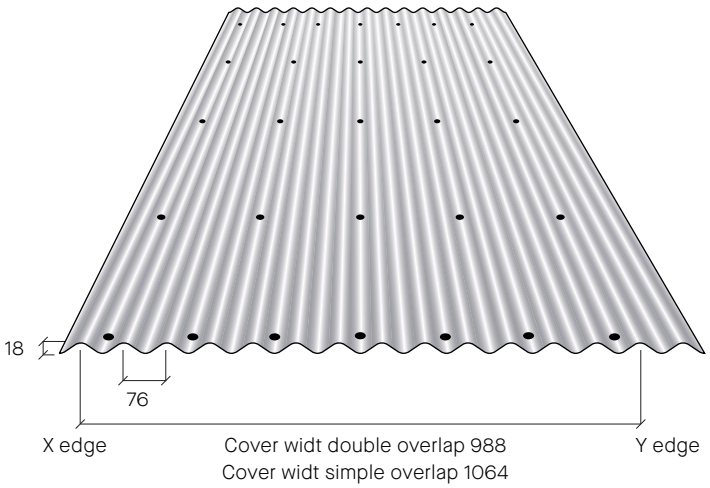
Screw Plannja 20–75 into each batten at the overlap.

SIDE OVERLAP IF UNDERLAYMENT IS LACKING

If batten spacing is equal to or less than 500 mm, a screw must be put in every batten at the overlap. If batten spacing is greater than 500 mm, use a side overlap screw or rivet, max c distance 500 mm. If the roof pitch is less than 14° run a 4 mm bead of sealant along the lower profile's top flange. A 3×10 mm self-adhesive seal strip may also be used. Rivet or screw c/c 300 mm in the side overlap.

Plannja Sinus 18	
Material	Steel / Aluminium
Sheet thickness, Steel	0.50, 0.60 mm
Sheet thickness, Alu	0.50, 0.70, 1.00 mm
Weight, steel	4.6, 5.5 kg/m^2
Weight, Alu	1.6, 2.3, 3.1 kg/m^2
Cover width	988 mm.
Length	1500-8000 mm
Minimum recommended pitch	10° (1:9)
Seal at side and end overlap	10-14°

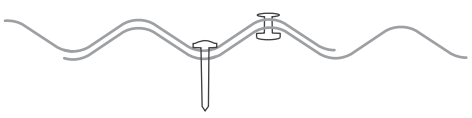
PROFILE GEOMETRY AND ATTACHMENT



Use one fastener in every batten for every third profile valley.
Use one fastener in every other profile valley at sheet ends.
Always use one fastener to each batten and side overlap.

SIDE OVERLAP

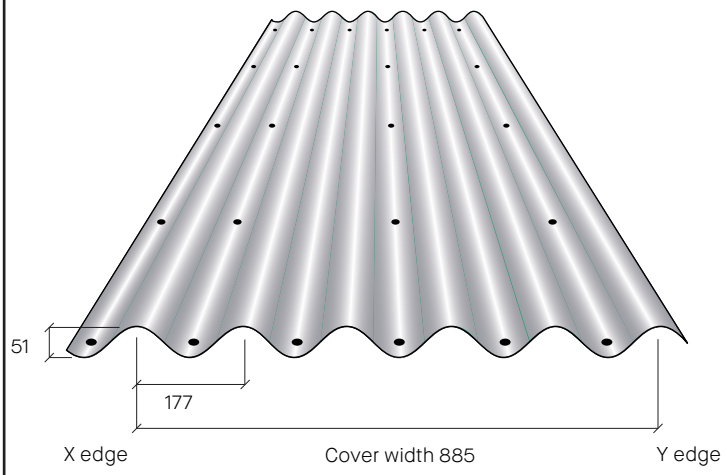
Fasten Plannja Sinus 18 in every other profile valley
and rivet in the profile apex between every batten.



Double overlap and riveting between every lawn is recommended for roof pitch 10-14° and sealed on the lower profile's top flange.
Sealing can be done with a self-adhesive sealing tape 3×10 mm

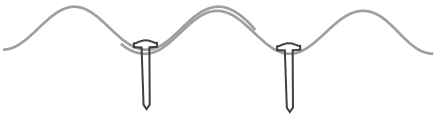
Plannja Sinus 51	
Material	Aluminium
Sheet thickness, Steel	0.60 mm
Sheet thickness, Alu	1.00 mm
Weight, steel	6.8 kg/m^2
Weight, Alu	3.7 kg/m^2
Cover width	885 mm
Length	1500-8000 mm
Minimum recommended pitch	10° (1:9)
Seal at side and end overlap	10-14°

PROFILE GEOMETRY AND ATTACHMENT



Use one fastener in every batten for every third profile valley.
Use one fastener in every profile valley at sheet ends.
Always use one fastener to each batten and side overlap.

SIDE OVERLAP IF THERE IS AN UNDERLAYMENT



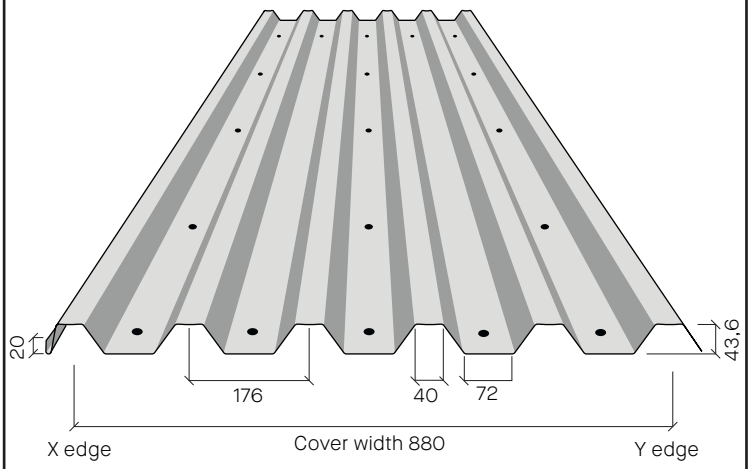
Screw Plannja Sinus 51 into each batten at the side overlap.

SIDE OVERLAP IF UNDERLAYMENT IS LACKING

If batten spacing is equal to or less than 500 mm, a screw must be put in every batten at the overlap. If batten spacing is greater than 500 mm, use a side overlap screw or rivet, max c distance 500 mm. If the roof pitch is less than 14° run a 4 mm bead of sealant along the lower profile's top flange. A 3×10 mm self-adhesive seal strip may also be used. Rivet or screw c/c 300 mm in the side overlap. See double overlap Sinus 18

Plannja 45 / 45R	
Material	Steel
Sheet thickness, Steel	0.50, 0.60, 0.65, 0.72, 0.85 mm
Weight, Steel	5.5, 6.5, 7.1, 7.9, 9.3 kg/m²
Cover width	880mm
Length	700-12000 mm
Minimum recommended pitch	5.7° (1:10)
Seal at side and end overlap	5.7-14°

PROFILE GEOMETRY AND ATTACHMENT



Use one fastener in every batten in every other profile valley.
Use one fastener in every profile valley at sheet ends.
Always use one fastener to each batten at the side overlap.

SIDE OVERLAP IF THERE IS AN UNDERLAYMENT

Screw Plannja 45 / 45R into each batten at the side overlap.

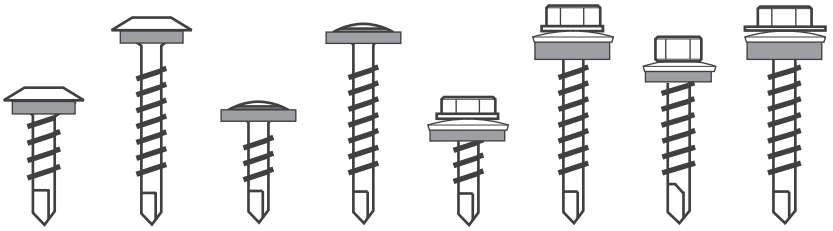
SIDE OVERLAP IF UNDERLAYMENT IS LACKING

If batten spacing is equal to or less than 500 mm, a screw must be put in every batten at the overlap. If batten spacing is greater than 500 mm, use a side overlap screw or rivet, max c distance 500 mm. If the roof pitch is less than 14° run a 4 mm bead of sealant along the lower profile's top flange. A 3×10 mm self-adhesive seal strip may also be used. Rivet or screw c/c 300 mm in the side overlap.

INSTALLATION SCREWS

For best results with steel profiles, use self-drilling, stainless steel or painted galvanized roofing screws with washers. Always fasten aluminium profiles using aluminium screws or self-drilling, stainless steel screws. Use a power screwdriver and screw socket.

Part number 312032 5.5×25 Sinus profiles in steel and aluminium on steel battens, painted stainless steel screws
Part number 312033 4.8×35 Sinus profiles in steel and aluminium on wooden battens, painted stainless steel screws
Part number 312001 4.8×19 in steel on steel battens, galvanized and painted screws
Part number 312002 4.8×35 in steel on wooden battens, galvanized and painted screws
Part number 312005 4.8×35 in steel on steel battens, galvanized and painted screws
Part number 312004 4.8×35 in steel on wooden battens, galvanized and painted screws
Part number 312046 5.5×27 in aluminium on steel battens, galvanized and painted screws
Part number 312420 5.5×35 in aluminium on wooden battens, aluminium screws



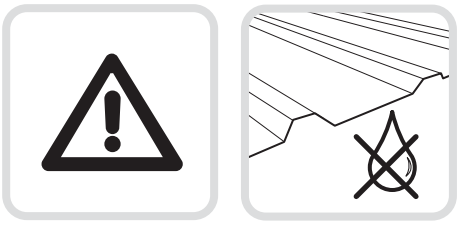
Part number	312032	312033	312001	312002	312005	312004	312046	312420
Dimensions	5.5×25	4.8×35	4.8×19	4.8×35	4.8×20	4.8×35	5.5×27	5.5×35

It's a good idea to use low-head screws for a more discreet impression.

RECYCLING

Take care to remove sheet clippings and screws from the roof, gutters and the ground on completion of assembly. The materials are 100 per cent recyclable and can be disposed of at recycling stations.

ANTI-CONDENSATION COATED SHEET



Plannja anti-condensation felt or anti-condensation coating

The underside of the sheet is coated with anti-condensation felt or anti-condensation coating that can temporarily absorb condensation.

The moisture is ventilated away between the occasions when condensation occurs. In moderate levels of humidity, ventilation in the eaves and ventilators at gable apexes can be sufficient, but as a rule we recommend the choice of the special, ventilated ridges. Construction condensation can cause problems of a temporary nature. Plannja's anti-condensation felt or anti-condensation coating is recommended when there is a risk of moisture condensing on the underside of the sheet in e.g. uninsulated spaces and shelters.

When using sheet with anti-condensation felt on pitches of less than 10°, around 150 mm clear varnish should always be applied on the felt side along the full length of the eaves. Also, if the sheet is installed on wooden battens, sandwich a non-absorbent material between the batten and the sheet, e.g. Plannja Regelpapp 100.

INSTALLING BATTENS

WOODEN PANEL min 17 mm

Snow loads	1.0-1.5	2.0-2.5	3.0-4.0
Counter batten, wood	25×50	25×50	25×50
Batten, wood	25×50	25×50	34×70
Batten, steel*	Can handle snow load 4.0		

* Plannja Renovation or Kombi Batten

Always use an approved drainage underlay e.g. Plannja Anticon Coverall.
Counter batten c/c spacing 600 mm.
Batten spacing c/c 500 mm. Fasten battens at intersection with counter battens using 2 pcs 100×3.4 galvanized nails.

TRUSS DISTANCE, c/c 1200 mm.

Snow loads	1.0-1.5	2.0-2.5	3.0-4.0
Wooden batten 45×70	800	500	
Wooden batten 45×90	1000	700	500
Plannja Kombi Batten	1200	700	500

Light underlayment e.g. Plannja Anticon Coverall. The values in the table refer to maximum spacing between battens. However, the roofing profiles selected may demand a shorter spacing depending on the load and/or walkability requirements. Battens to be fastened using 2 × galvanized 100×3.4 nails at each truss. Fasten Plannja kombi battens using 6.5×50 screws.

WALKABLE SPAN
Maximum (m)

'Walkable span' means the sheet can cope with careful walking across its full surface without damage given that it is fastened to the purlins. Deformations can occur when walking between two supports on spans that exceed walkable spans. However, careful walking above supports is often possible. We recommend load spreading-crawling boards for works on spans that exceed the walkable.

Steel profile	Thickness	2-FACK △△△	FLERFACK △△△△
Plannja 20-105	-	-	-
	0.50	-	0.50
	0.60	1.20	1.80
Plannja Sinus 18	0.50	–	–
	0.60	0.60	0.80
Plannja 45 / 45R	0.50	0.60 1.00*	0.80 1.20*
	0.60	1.20 1.50*	1.50 2.10*
	0.65	1.80 2.10*	1.80 2.40*
	0.72	2.10 2.40*	2.40 3.00
	0.85	2.70 3.00*	3.90 4.20*
Plannja Sinus 51	0.60	–	–
Plannja Traditional	0.60	0.60**	0.60**

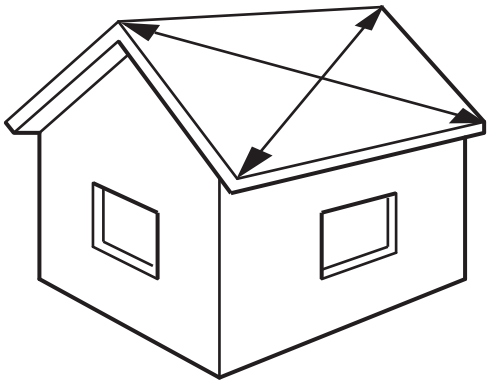
* Value applies to Plannja 45R
** Value applies to walking in profile valley. Suitable to walk above joist.

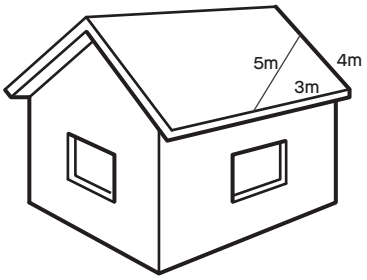
Aluminium profile	Thickness	2-FACK △△△	FLERFACK △△△△
Plannja 20-75	0,50	-	0,50*
Plannja 20-105	0,50	-	-
Plannja 20-105	0,70	-	-
Plannja Sinus 18	0.50	–	–
	0.70	–	0.60*
	1.00	–	0.80*
Plannja Sinus 51	1.00	–	–
Plannja Traditional	0.70	–	0.60

* Value applies to walking on two profile apexes at the same time.

1 ROOF MEASUREMENT
Diagonal measurement

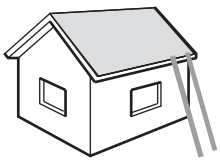
Begin by checking that the roof is straight. Measure diagonally from corner to corner. If the distances are unequal, the roof is skewed. Deviations of 20–30 mm can be adjusted with gable flashings. Alternatively, check the angle using a 3-4-5 triangle as illustrated.

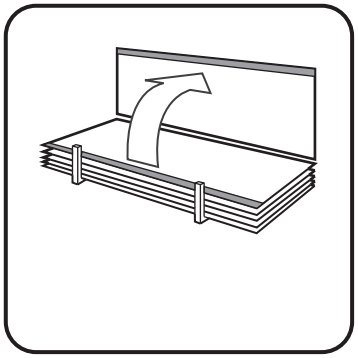




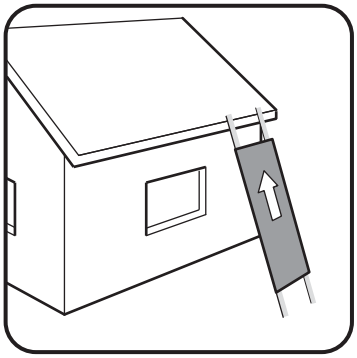
2 LIFTING SHEETS TO THE ROOF

Remember that long sheets may not be lifted by their ends. The best method is to carry them by holding the long sides. The sheets can be slid up to the roof along a pair of beams, a ladder or similar.



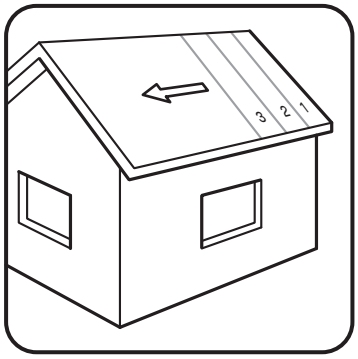


Carry sheets upright by holding the long sides.

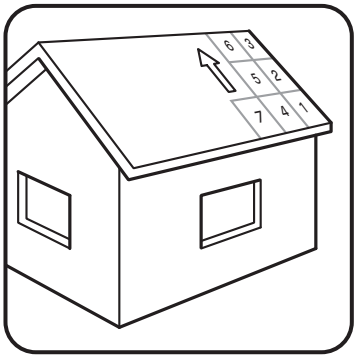


Use planks, a ladder or similar as a support on which to slide the sheets up onto the roof.

3 DIRECTION OF INSTALLATION



Lay the sheets in the order shown in the schematic.
Assemby may also be done from left to right.

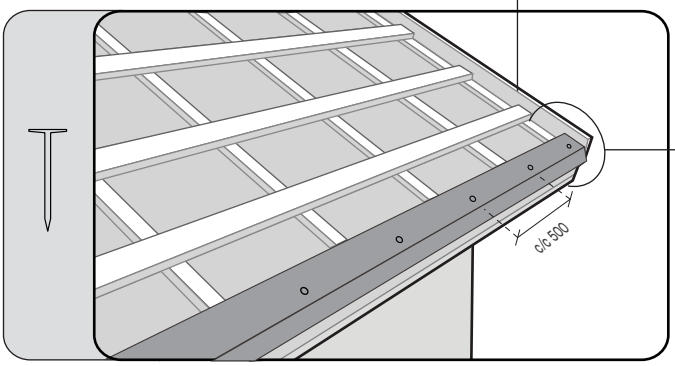


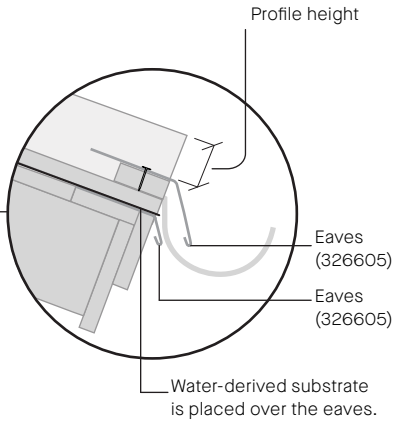
Assemby order where joints are necessary. See step six for lengthwise joints.

4 EAVE FLASHING

Install the bargeboard with the top edge level with the sheet profile tops.

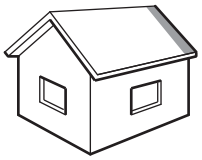
Attach the eve flashing using galvanized nails (or screws) in the substrate at intervals of 500 mm. Bear in mind you may have to install gutter brackets before the eave flashing. Overlapping joints of min 100 mm.

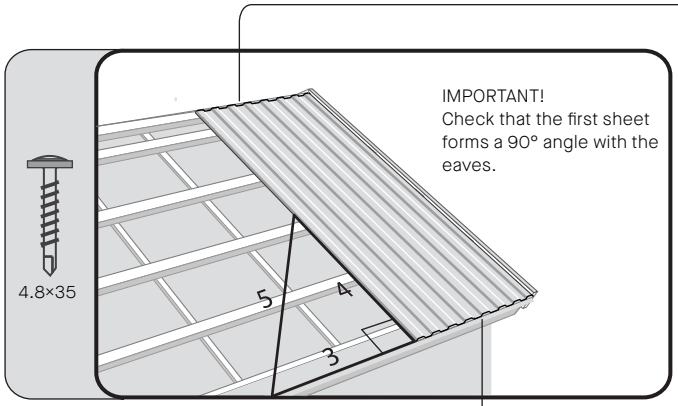




5 INSTALLING THE FIRST ROOF PROFILE

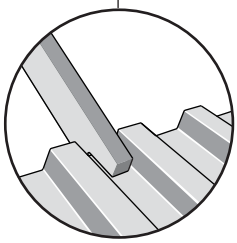
Lay the sheet from the bottom from the edge of the roof. Attach the sheet at right angles to the eaves.



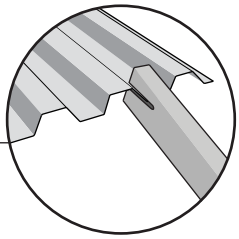


IMPORTANT!
Check that the first sheet forms a 90° angle with the eaves.

Check the angle using the 3-4-5 method, as illustrated.



Profile valleys are bent up

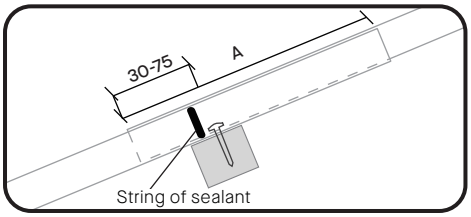


Profile valleys are bent down for low pitch roofs

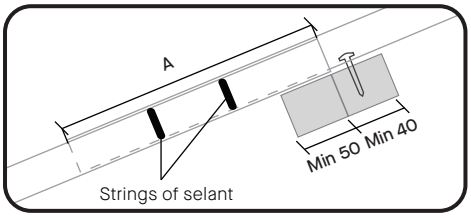
6 (A) END OVERLAP

The end overlap must be on top of a batten; length according to the table below. If the length of the slope exceeds 12 m for a steel profile or 6 m for an aluminium profile according to the table below, shape the end overlap such that the upper and lower sheet rows can slide in relation to each other when expanding/contracting (see fig.). NOTE! The batten must be at least 90 mm or be doubled.

Locked end overlap



Movable end overlap

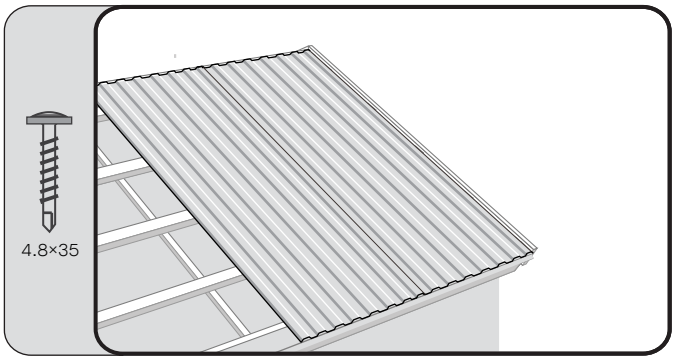


Pitch	End overlap
5.7–6.3 degrees	450 mm
6.3-7.1 degrees	400 mm
7.1-8.1 degrees	350 mm
8.1-9.5 degrees	300 mm
9.5-11.3 degrees	250 mm
more than 11.3 degrees	200 mm

7 SUBSEQUENT PROFILES

When installing on battens, fasten the sheet in the profile valleys using 4.8×35 screws as shown in the fastening diagram below.

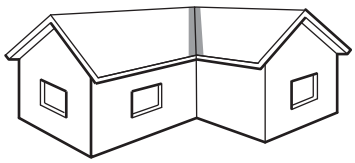
Referred to the TECHNICAL INFORMATION pages for the profile concerned.

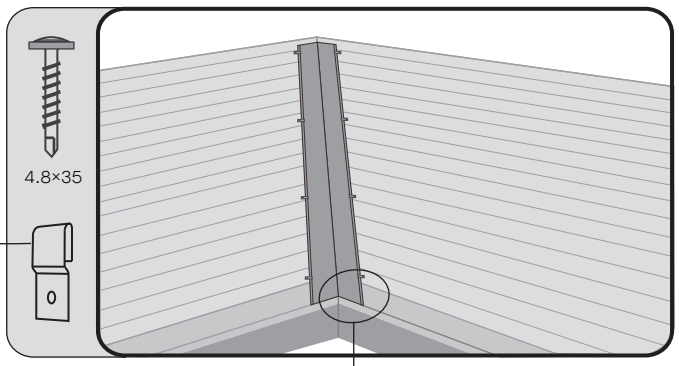


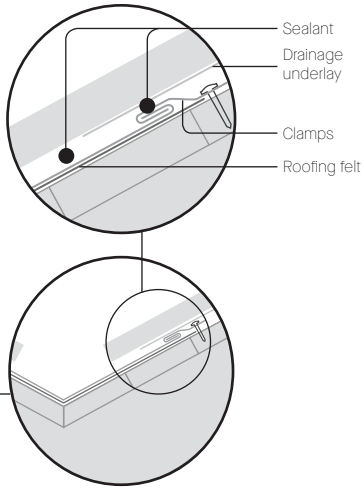
8a VALLEY GUTTER
Standard

Fasten the valley gutter to the roof profile using brackets or step brackets. The sheet must protrude at least 150 mm beyond the edge of the valley. Fasten all sheets next to the valley gutter using screws on the outside of the gutter. Overlap gutter joints by at least 200 mm.

Run a bead of sealant e.g. Plannja SPS, between the sheet and the valley gutter, and a bead between the drainage underlay and the gutter seam.



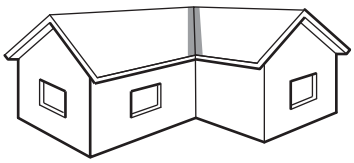


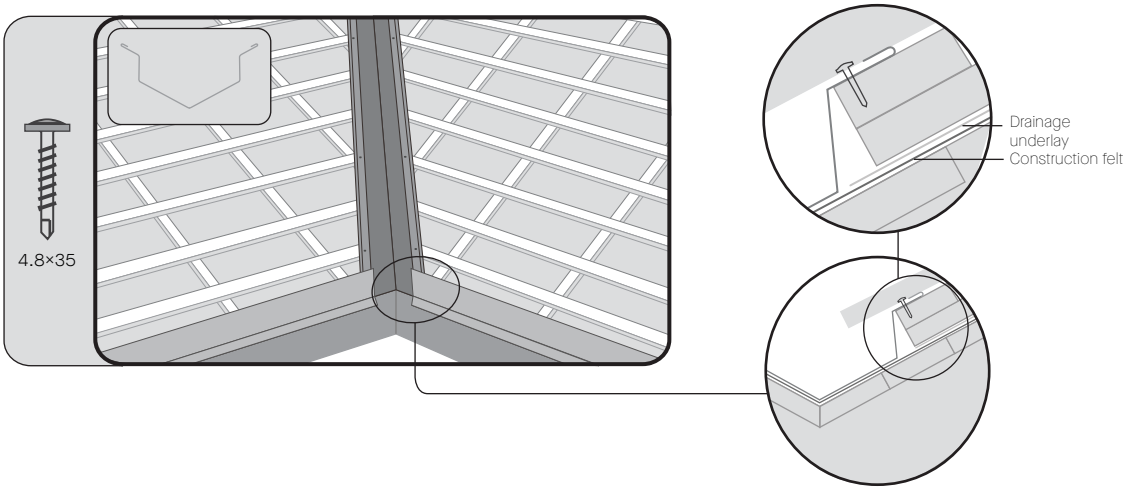


Clamps are easily made by shaping a piece of sheet.

8b VALLEY GUTTER
Alternative 2

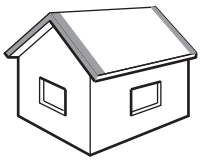
The sheet must protrude at least 150 mm beyond the edge of the valley. Fasten all sheets next to the valley gutter using screws on the outside of the gutter. Overlap gutter joints by at least 200 mm.

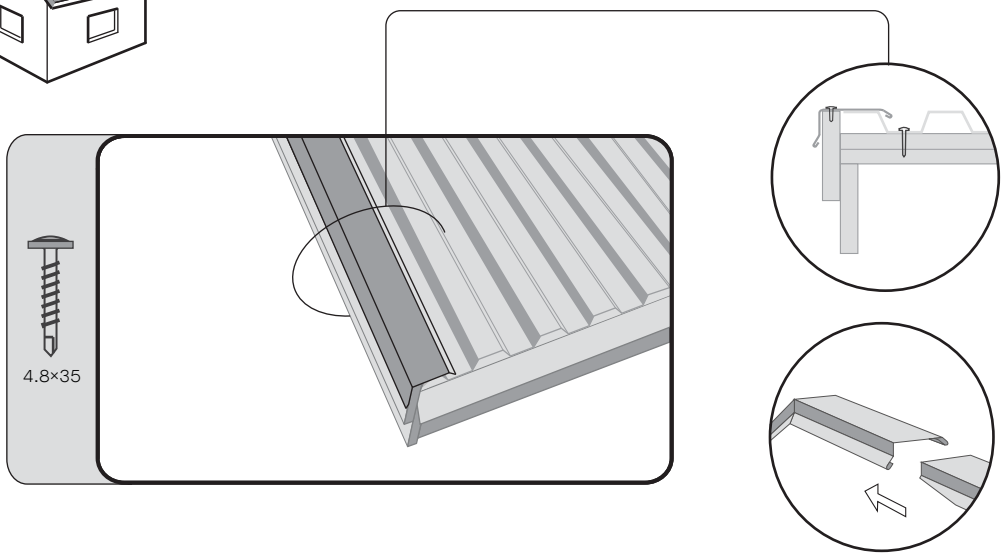




9 GABLE FLASHING

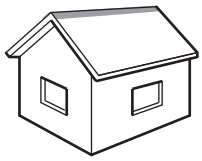
Screw the gable flashing to the bargeboard using screws 4.8×35 c/c 300 mm. When joining, cut the lower part as illustrated below and overlap joints 100 mm.

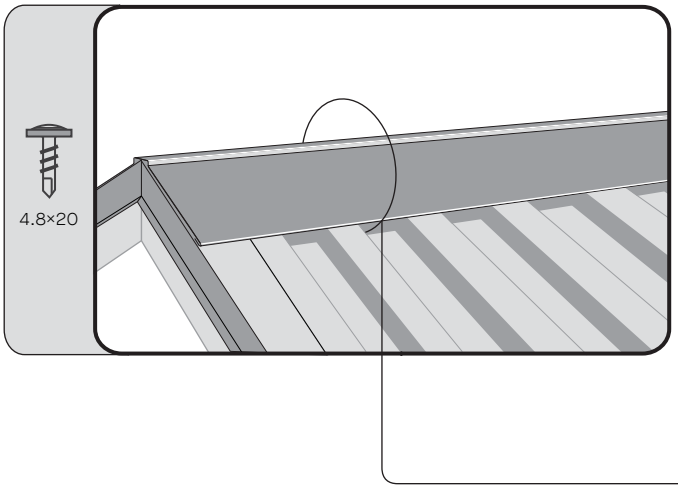


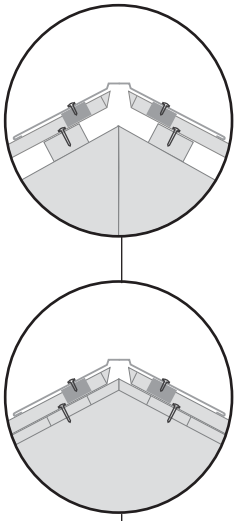


10a RIDGE FLASHINGS
Ridge flashing

Position the seal strip and screw the ridge flashing into every other profile apex. Small size always to profile apex. Join using 200 mm overlaps. Fold the profile bottom up at the top.

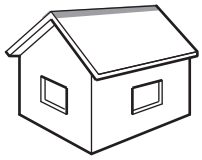


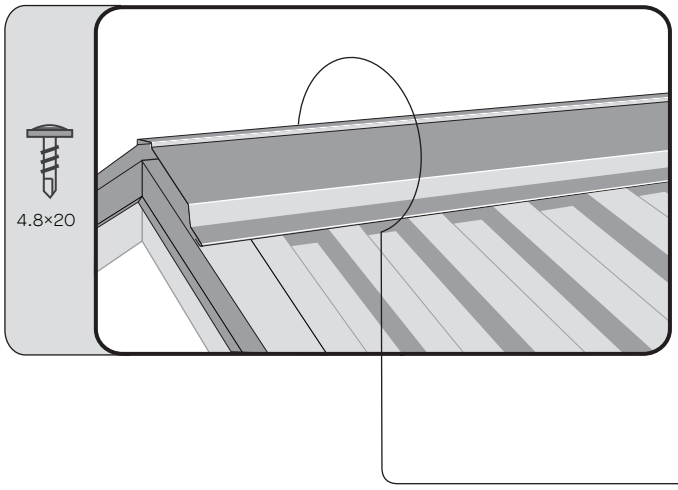


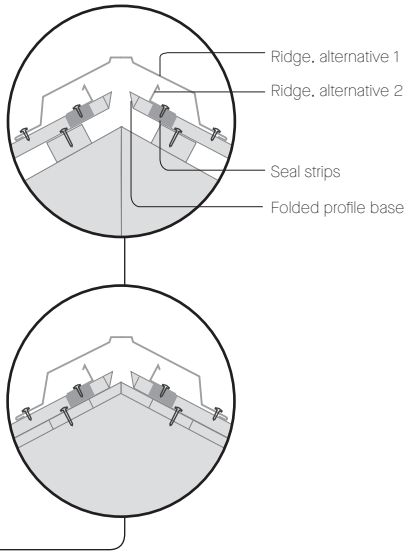


10b RIDGE FLASHINGS
Ventilated ridge plate

Position the seal strip and screw the ridge flashing into every other profile apex. Small size always to profile apex. Join using 200 mm overlaps. Fold the profile bottom up at the top.







Assemby instructions

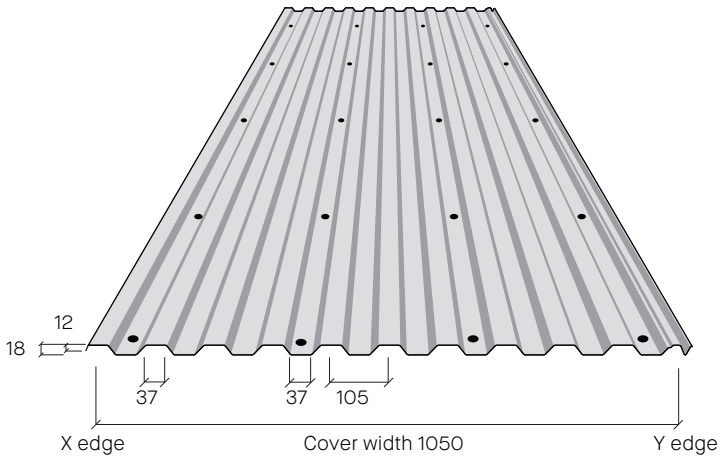
Wall Cladding

20-105, 20-75, Sinus 18, Sinus 51, 19, 35

Plannja

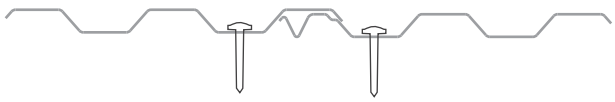
Plannja 20-105	
Material	Steel
Sheet thickness, Steel	0.50, 0.60 mm
Weight, steel	3.7, 4.6, 5.5 kg/m^2
Cover width	1050 mm
Length	700-10000 mm

PROFILE GEOMETRY AND ATTACHMENT



Use one fastener in every batten for every third profile valley.

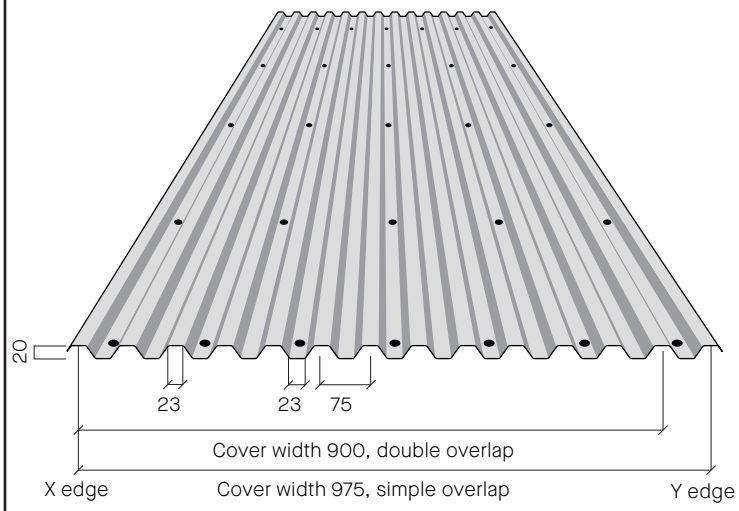
SIDE OVERLAP



Screw Plannja 20-105 into each batten at the overlap.

Plannja 20-75	
Material	Aluminium
Sheet thickness, Alu	0.50 mm
Weight, Alu	1.8 kg/m^2
Cover width	900 mm
Length	700-10000 mm

PROFILE GEOMETRY AND ATTACHMENT



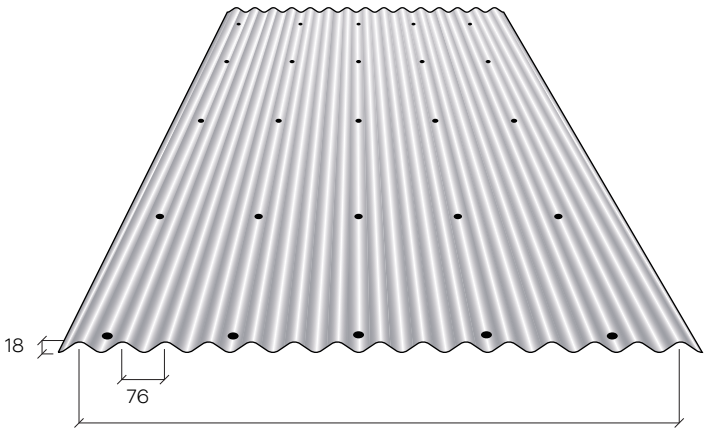
Use one fastener in every batten for every third profile valley.

SIDE OVERLAP

Screw Plannja 20–75 into each batten at the overlap.

Plannja Sinus 18	
Material	Steel / Aluminium
Sheet thickness, steel	0.50, 0.60 mm
Sheet thickness, Alu	0.50, 0.70, 1.00 mm
Weight, steel	4.6, 5.5 kg/m^2
Weight, Alu	1.6, 2.3, 3.1 kg/m^2
Cover width	1060 mm (double overlap 988 mm)
Length	1500-8000 mm

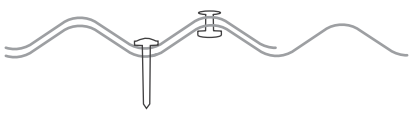
PROFILE GEOMETRY AND ATTACHMENT



Use one fastener in every batten for every third profile valley.

SIDE OVERLAP

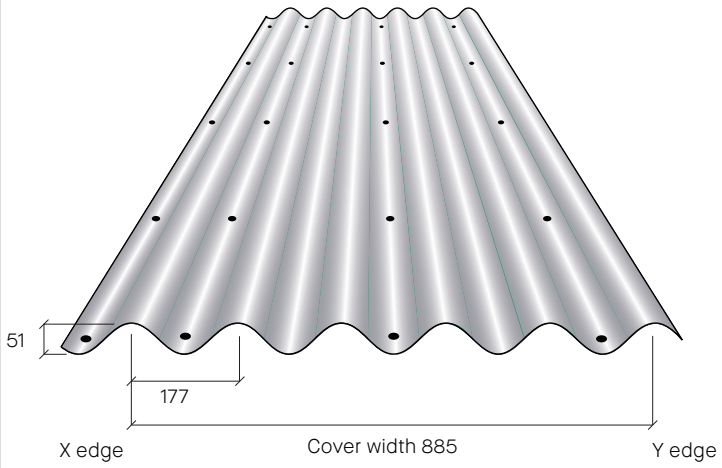
Plannja Sinus 18 is screwed into each batten at the side overlap.



In severe wind-exposed positions, the profile can be added with double overlap and a 4 mm sealing string alt. self-adhesive sealing tape 3×10 mm on lower profile top flange and riveted in profile top between each batten.

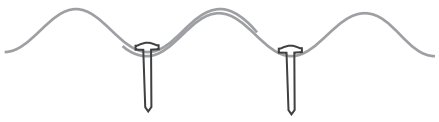
Plannja Sinus 51	
Material	Aluminium
Sheet thickness, Steel	0.60 mm
Sheet thickness, Alu	1.00 mm
Weight, steel	6.8 kg/m^2
Weight, Alu	3.7 kg/m^2
Cover width	885 mm
Length	1500-8000 mm

PROFILE GEOMETRY AND ATTACHMENT



Use one fastener in every batten in every other profile valley.

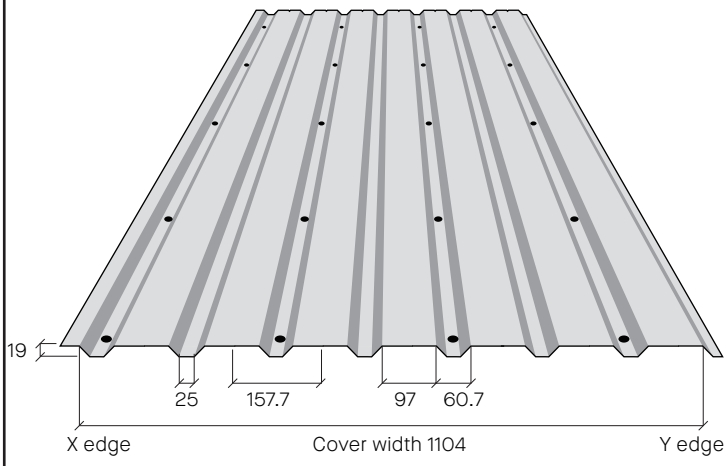
SIDE OVERLAP



Screw Plannja Sinus 51 into each batten at the side overlap.
In case of double overlap see Sinus 18.

Plannja 19	
Material	Steel / Aluminium
Sheet thickness, Steel	0.50 mm
Sheet thickness, Alu	0.70 mm
Weight, steel	5.4 kg/m^2
Weight, Alu	2.0 kg/m^2
Cover width	1104 mm
Length	700-8500 mm

PROFILE GEOMETRY AND ATTACHMENT



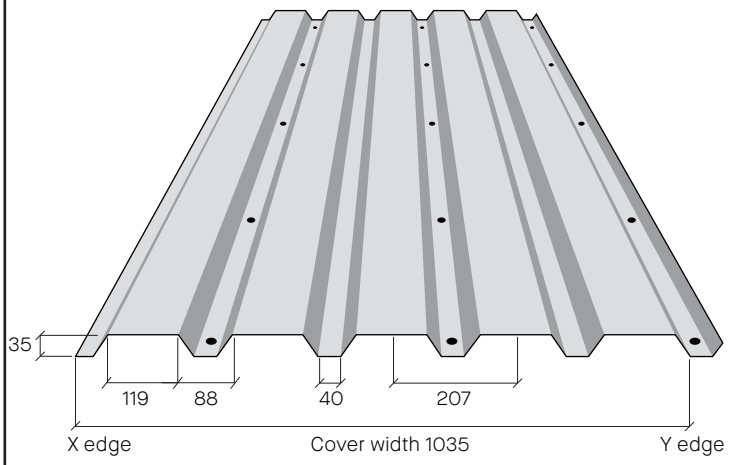
Use one fastener in every batten in every other profile valley.

SIDE OVERLAP

Screw Plannja 19 into each batten at the side overlap.

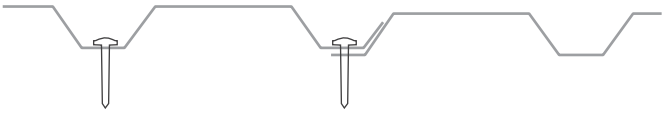
Plannja 35	
Material	Steel / Aluminium
Sheet thickness, steel	0.50, 0.60 mm
Sheet thickness, Alu	0.70 mm
Weight, steel	4.2, 5.1 kg/m^2
Weight, Alu	2.2 kg/m^2
Cover width	1035 mm
Length	500-8000 mm

PROFILE GEOMETRY AND ATTACHMENT



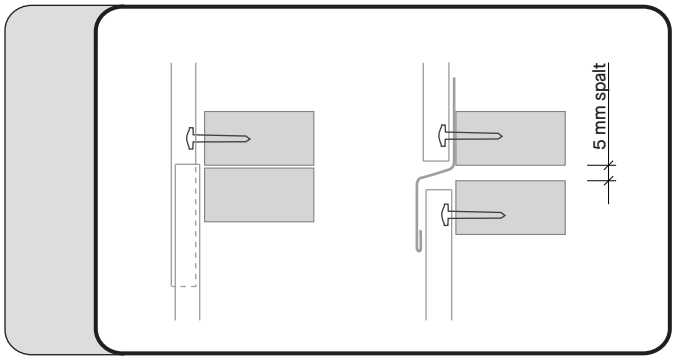
Use one fastener in every batten in every other profile valley.

SIDE OVERLAP



Screw Plannja 35 into each batten at the side overlap.

STUD SPACING AND JOINTS



Frame structure and method will vary depending on the type of wall Plannja sheeting will be attached to.

Stud spacing
On insulated walls, stud spacing is adapted to the format of the insulation. On uninsulated walls, stud spacing is limited to 1.5 m. Stud spacing can be extended to 2.1 m for Plannja 35 in steel.

Joints at side overlaps:
Steel sheet is joined c 600 with galvanized, painted 4.8×20 screws, or rivets.
Aluminium profiles are joined c 600 using stainless steel, painted 4.8×20 screws, painted aluminium 5.5×20 screws or rivets. If batten spacing is greater than 600 mm, no special side overlap joint is necessary.

Joints at end overlaps:
End overlaps must be 100 mm and supported by a horizontal stud behind. If total sheet length exceeds 6 metres for aluminium sheet or 12 metres for steel sheet, shape the end overlaps so that the sheet ends can slide in relation to each other when expanding/contracting.
The examples illustrated on the left show solutions for moveable end overlaps on wooden studs.

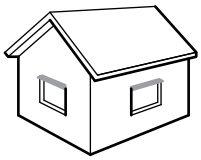
Assemby instructions

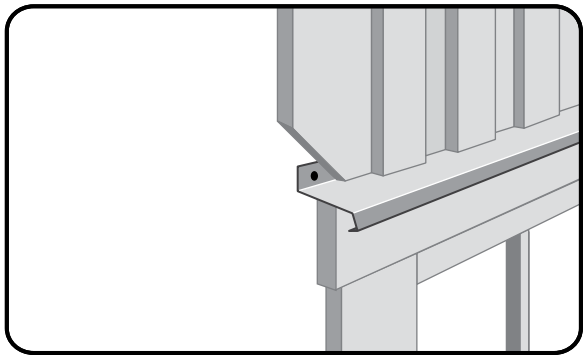
Flashings and fittings

Plannja

INSTALLING WINDOW FLASHINGS
Drip cap

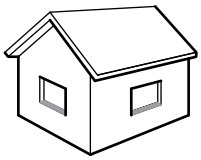
Installed above the window case. Prevents water forcing its way into the structure. Screw or nail down the drip cap every 10 cm.

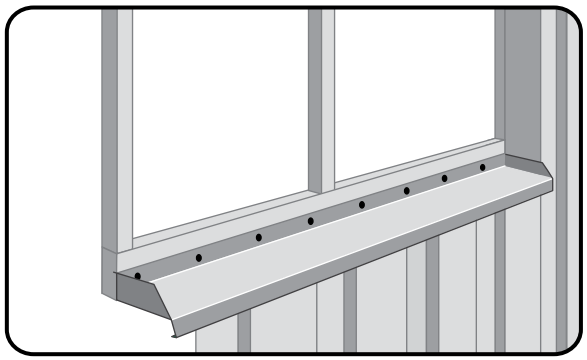


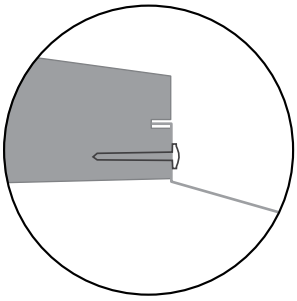


INSTALLING WINDOW FLASHINGS
Sill

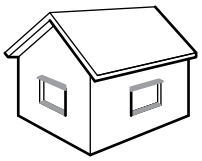
Install it in the window frame's routed groove. Prevents water and snow forcing their way behind the façade cladding.



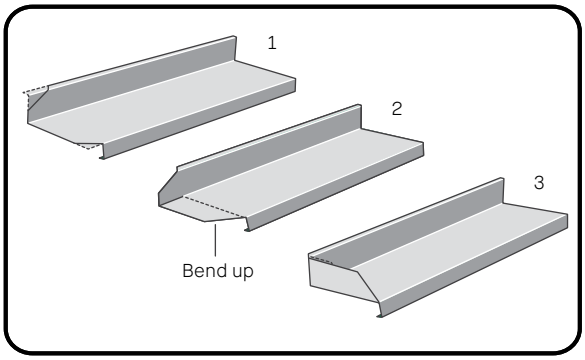




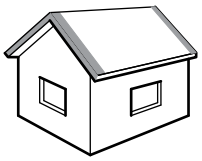
INSTALLING WINDOW FLASHINGS
Assemby tips



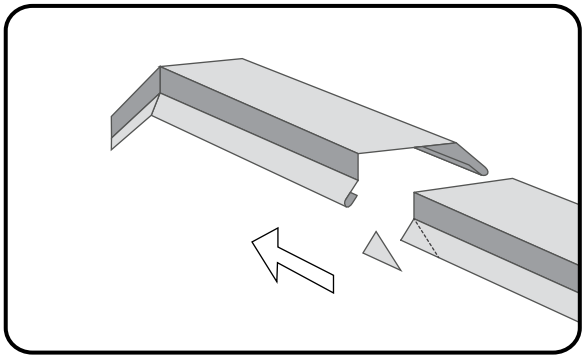
Cut to correct length, 30 mm longer than the groove in the window frame. Clip out an angled notch at the front and back edges. Bend up an approx. 10 mm tab at both ends and fold in the back edge as illustrated. Press the back edge into the frame groove. Screw or nail the sill every 10 cm.



INSTALLING GABLE FLASHINGS



When joining gable flashings, cut away the corners of the underlying flashing so that the lower can be slid under the upper. The joint will then form a better seal and be less visible.



Plannja

One Plannja telephone number is all you need: +46 10-516 10 00

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