

Lindab **Profiled Sheeting**

Lindab Coverline™ LPPN20D Installation instructions



Preparations

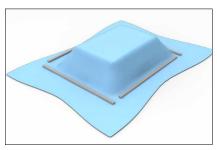
Before getting started

Make sure that the surface is level. If the surface is rectangular, the diagonals and opposite sides should have the same dimensions. Minor deviations can be adjusted with fittings. The edges must be even at the beginning. Consider how to resolve various openings and other obstructions before starting the assembly.

- Wear work gloves to avoid cuts.
- Attach the sheets immediately.
 Otherwise, they may blow away.
- Be careful not to slip in rain and during winter.
- Do not stand under the installation site. Loose sheeting and tools can fall down.
- Stacks of steel sheeting are heavy and constitute heavy concentrated loads. Position them near supporting beams.
- Distribute the load on as many profile crests as possible, preferably with battens.

Storage

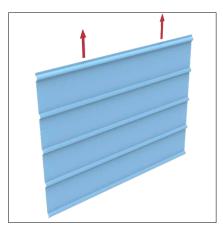
The sheets must be stored flat, in a dry space with good ventilation, preferably indoors. If stored outdoors, cover them with a waterproof cover. If water leaks in, it may create white spots on the coating. Make sure that the sheet is sufficiently supported and that it slopes slightly lengthwise, as an added safety measure in case water leaks in.



Keep dry

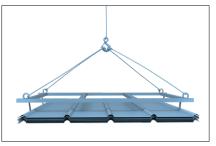
Carrying sheeting

Sheets must be carried by two people – one on each side. Lift the sheet and allow it to bend slightly lengthwise towards the centre. Always lift it straight up. If the sheets are dragged, their surface can get scratched.



Lifting

When loading, unloading and moving the sheets, a hoist with a load distributor and a 100 mm wide terylene sling must be used.



Lifting sheeting

Preparations

Fasteners

The roof profile LPPN20D must be attached to the profile valley. Remember to choose the right fastener depending on how you choose to fasten the roof profile. Maximum cc between fixings is 500 mm at the edges, otherwise maximum cc 1000 mm. Side overlaps must be made with a maximum cc of 500 mm. An end overlap should be made with 200 mm and with an overlap screw in each profile valley. See the table of fasteners to select the right screw for the substrate in question.

Cutting to length

Cut the sheeting with a nibbler, on a solid surface on the ground. Never use an angle grinder. An angle grinder heats the sheeting, which destroys the galvanization, and hot grinding chips can cause burn marks in the coating.



Never use an angle grinder.

Finishing of cut surfaces

Cut surfaces must be painted with Lindab touch-up paint to ensure the cladding or roof has as long a lifespan as possible. Use Lindab touch-up sticks.

Cleaning after installation

Metal shavings or filings on the sheet metal cladding or in the gutters must be removed as soon as the installation is completed. They can corrode and cause discolouration.

Maintenance

The hard and smooth surface of Lindab roof profile LPPN20D, makes it difficult for moss and algae to grow on wall cladding or roof coverings. If you want to keep the sheeting in top condition, wash the roof regularly with water and mild detergent. For more information, see Lindab's maintenance instructions for products made of painted steel sheet.

Tools



Product overview

Fastening

See the table below for different types of fasteners.

Fasteners

Designation		Dimensions	Drilling capacity	Corrosion class	Stainless steel	Area of application	
A13			4.8 × 35	4 × 0.5	C1-C2		All-round screw for securing steel sheeting to wood (self-tapping)
A31		Marutex [®]	4.8 × 35	4 × 0.5	C4	•	Outdoor all-round screw for securing steel sheeting to wood (self-tapping)
B21	MAL: 8 mm		4.8 × 20	1.2–2 × 2.0	C1-C2		All-round screw, steel sheeting to light section steel etc.
B62	KL: 8 mm	Marutex [®]	4.8 × 25	1.2–2 × 2.0	C4	•	Outdoor all-round screw for steel sheeting in lightweight construction/profile
D14	mm>		4.8 × 19	4 × 0.5	C1-C2		All-round screw for fastening overlapping thinner steel sheeting
D51		Marutex [®]	4.8 × 19	3 × 0.7	C4	•	External all-round screw for fastening overlapping thinner steel sheeting

Minimum fastening

De ef esse file	м	Purchasing advice			
Roof profile	End support, end overlap	Mid support	Side overlap	End support, end overlap	Side overlap
LPPN20D	2 screws in each profile valley	1 screw in each profile valley	Max 500 mm	3 pcs./m²	2 pcs./m ²

Product overview

Roof profile

Profile	Dimensions	Overlap	
LPPN20D with groove	92 275 Covering width 1100	_~_	

Fittings

Component	Description	Dimensions	
FOTP	Eaves board L=2000 mm	150	
FOTPA	Eaves board L=2000 mm	150 V	
RD	Valley gutter L=2000 mm	230 230	
NP120/NP170	Ridge capping L=2000 mm	120110	

Product overview

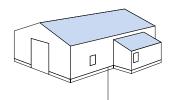
Fittings

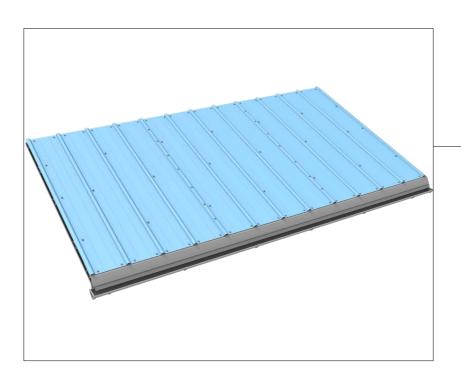
Component	Description	Dimensions	
VABR	Weatherboard fittings L=2000 mm	1 2/	
VISK55/VISK110	Barge board flashing fittings L=2000 mm	25	
VISK120	Barge board flashing fittings L=2000 mm	140 ¥	

Seal

Component	Description	Image
TPPN20	For the top	
TBA 10 x 3	Along panel, e.g. at side overlap. A self-adhesive sealing tape is used for all profiles.	
WFLEX 280 x 5000	Sealing strip	
WFLEX 560 x 5000	Sealing strip	-

Installation





Substrate

Lindab KLS battens have been used in the following installation instructions. The order of installation is the same for joists or a wooden substrate. If a wooden substrate is used, it should not be pressure-impregnated.

Roof pitch

If the roof slope is less than 14° , the overlap must be longer and sealing strip must be used. Read more about this at that point.

The minimum permitted roof pitch is 5.7°. For roof pitches between 5.7–14°, Lindab's installation instructions only cover the installation of the roof profile.

For other assembly work on roofs with a slope between 5.7–14°, we recommend hiring a qualified professional for work such as gutter valley sheets, penetrations, connections to walls and similar.

Installation

Always start with the first sheet at the end and the lower right corner of the roof. The sheeting should be mounted from the bottom to the top. Check that the first sheet is also at right angles to the roof line at the eaves. In the following installation instructions, the substrate is a paper substrate with eaves board at the eaves.

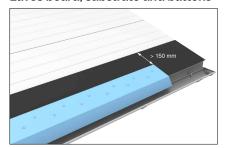
This detail can be carried out in other ways, but the roofing method is the same. Contact Lindab's local representative if you have any questions about this. Never walk on the sheets before they are fully installed – use a roof ladder.

Fastening

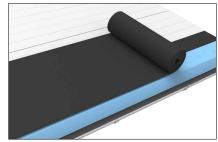
When a new sheet is installed, it must be attached all the way up on the overlap side and then on the opposite side.

Each sheet must be completely fastened before starting the next sheet, but the fastening of the overlap can be carried out last.

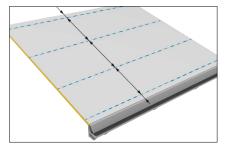
Eaves board, substrate and battens



Place a strip of substrate paper on the roof. Install eaves board. Install the screws in a zig-zag pattern.

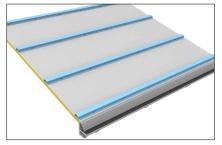


Place the substrate covering on top of the eaves board.

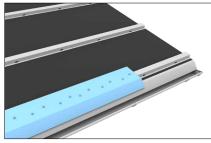


Measure and mark the batten distance. Max $\rm cc~500~mm$.

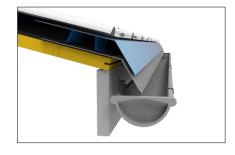
Eaves board, substrate and battens

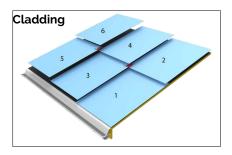


Fasten KLS battens on the roof. KLS does not need horizontal battens as it has a drainage hole for the water. For wooden battens, 25×25 is recommended for horizontal battens and 25×50 for vertical battens.

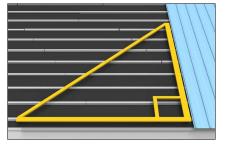


Use Lindab KLS battens for eaves construction.



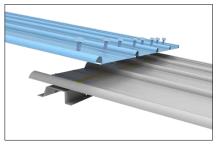


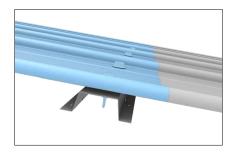
Order of installation.



Place the first sheet at a right angle to the eaves. Continue with the next sheet and overlap as shown in the sketches below.

End overlap for roof pitch <12 m





Roof pitch degrees °	End overlap length mm
5.7-6.3	450
6.3-7.1	400
7.1-8.1	350
8.1-9.5	300
9.5-11.3	250
>11.3	200

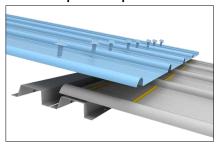
Use screw with drill tip in each profile valley.

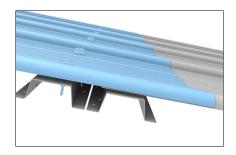
Use one bead of sealing compound or one strip of sealing tape in the roof valley.

NB! End overlap length according to table.

When the roof pitch exceeds 12 m, the overlaps should be designed with a floating end overlap. This allows the upper and lower sheets to move independently of each other to accommodate for temperature fluctuations.

End overlap for roof pitch >12 m



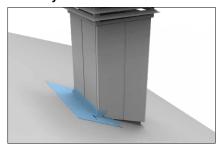


Use screw with drill tip in each profile valley.

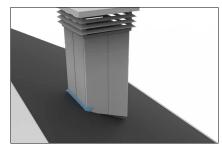
Use **two** beads of sealing compound or **two** strips of sealing tape in the profile valley.

When the roof pitch exceeds 12 m, the overlaps should be designed with a floating end overlap. This allows the upper and lower sheets to move independently of each other to accommodate for temperature fluctuations. **NB!** Do not use any side cover screws in the overlapping "floating" part.

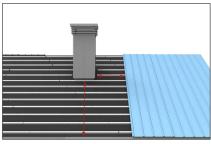
Chimney



Use WFLEX around the chimney.



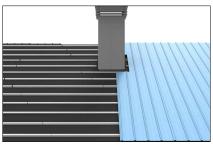
Place roofing felt over WFLEX



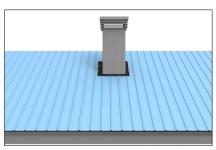
Apply the sheeting. Measure the cut-out at the roof opening, e.g. the chimney. The hole size should be 150 mm larger at the upper edge.



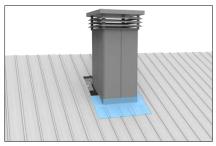
Use a nibbler to cut out the sheeting. **NB!** Do not use an angle grinder.



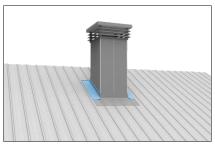
Lay out the cut out sheeting.



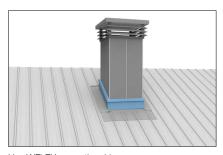
Continue to lay out the roofing sheets.



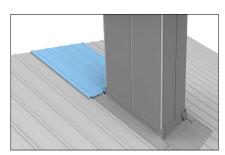
Use WFLEX around the chimney and on top of the roofing sheets in this order.



Use WFLEX around the chimney and on top of the roofing sheets in this order.



Use WFLEX up on the chimney.



Place a sheet on top, from the ridge to the chimney.

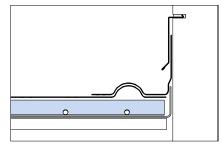
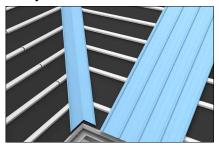


Illustration of chimney.

Valley



Measure two distances to determine the correct angle.



Use a nibbler to cut out the sheeting.



Do not use an angle grinder.

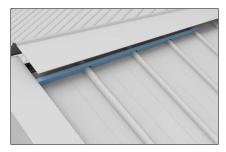


Measure the spacing to determine the right angle.

Fittings



Use Lindab barge board fittings to cover the roof gables. Fastening cc 400 mm.



Use Lindab ridge capping with sealing profile below.



Use Lindab ridge capping with sealing profile below. Fastening to each profile peak and barge board fitting.



Most of us spend the majority of our time indoors. Indoor climate is crucial to how we feel, how productive we are and if we stay healthy.

We at Lindab have therefore made it our most important objective to contribute to an indoor climate that improves people's lives. We do this by developing energy-efficient ventilation solutions and durable building products. We also aim to contribute to a better climate for our planet by working in a way that is sustainable for both people and the environment.

Lindab | For a better climate

