



TECHNICAL BROCHURE

 **TÄHTIPORRAS**
ONE STEP AHEAD



Welcome to the world of stairs!

Tähtiporras is one of Finland's largest stair manufacturers. Our extensive, versatile expertise and long experience in the field guarantee that our stairs are not only eye-catching, but also durable. We also have a verification certificate issued by Inspecta, which we can use to verify the suitability and quality of our products, e.g. for municipal building inspection.

The purpose of this brochure is to help architects, designers and builders understand the technical details of stairs and things to consider in construction, and to clarify the different options from our wide selection. For example, how much space do the different stair designs require?

What must be taken into account regarding support structures? What does a reinforced front edge of the step mean?

We hope that this brochure will help you in your choosing stairs or with stair design!
If something remains unclear, you can always ask us. www.tahtiporras.fi!



Colour models

PINE



black



lacquer



3466



1826



3037



3467



5074



1836



1835



1811



3443



7470/08

Pine is a soft type of wood. Steps get dents and scratches more easily than other types of wood. For stringers, posts, railing surfaces, etc., pine is a functional and sufficiently hard material. In stained parts we use glued healthy-branched pine board. In paint-covered parts we use finger-jointed, glued knotless pine board.

The colour tones reproduced by a computer or mobile device may differ from the stained model; the final colour should always be confirmed from a sample piece. Colour variations in the final product are also possible due to the porosity of the wood. The colour swatches of the printed colour chart are as close to the real colours as technically possible.



We have a verification certificate issued by Inspecta to prove the validity of our products

Colour models

BIRCH

Birch is a very commonly used step material, and its wear resistance is moderate/good.

Birch, oak and ash steps are available both as finger-jointed and long-slatted.



long slat



finger-jointed



black

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1836



1835



1826



5074



1811



3443



3466



3037



3467



lacquer



7470/08



8/8 white lacquer

Colour models

ASH

Ash and oak are also available as finger-jointed and long-slatted.
Hard wood types, good wear resistance. Lively surface structure.



3467



7470/08



lacquer



5074



3037



1836



1835



8/8 white lacquer



1811



3443



black



1826

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OAK



5074



lacquer



1811



3443



7470/08



3466



3037



3467



8/8 white lacquer



1836



1835



black



1826

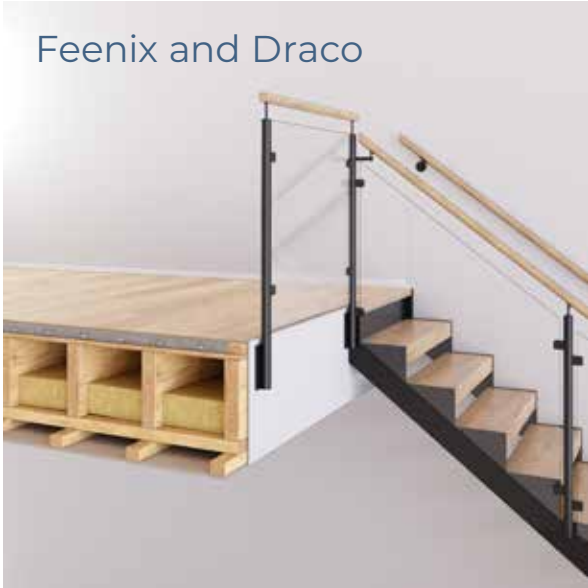
Cuts of the railing models

Aura



In the Aura model, the 250 mm high lower rail connects to the side of the intermediate base. The floor railing height is 1000 mm, and so the handrail of the stair rail meets the side of the floor rail. If the drop height is below 3 m, the height of the floor rail can be 900 mm. In this case in the Aura model, the handrail of the stair rail continues unbroken into the floor rail.

Feenix and Draco



In the Feenix and Draco models, metal posts are attached to the side of the intermediate base. Standard attachment heights downwards from the floor surface 112/268 mm.

Capella



In the Capella model, the floor railing pillars are notched and attached to the side of the intermediate base.

Alava- and Alava premium



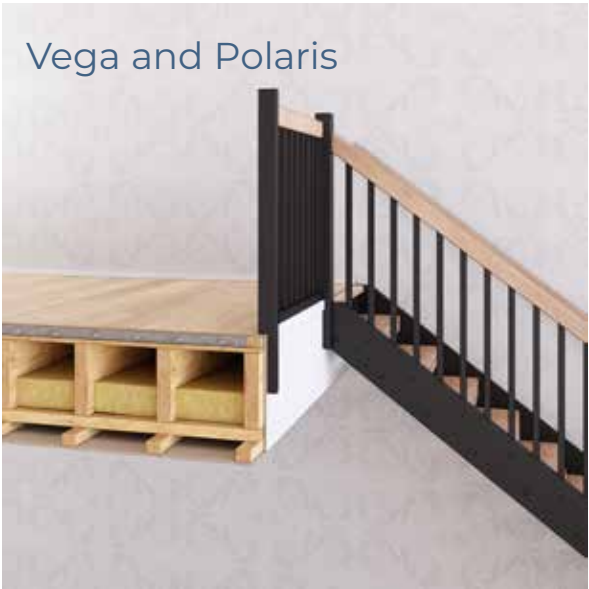
In the Alava and Alava premium models, the floor railing pillars are notched and attached to the side of the intermediate base. In Alava, the glass is attached with brackets between wooden posts; in the premium model the glass is embedded.

Lyyra



In the Lyyra model, the railing element is attached to the side of the intermediate base. Standard attachment points 50/100/200 mm downwards from the floor surface.

Vega and Polaris



In the Vega and Polaris models, the floor rail posts are notched and attached to the side of the intermediate base.

Stella



In the Stella model, the railing glass is attached to the side of the intermediate base. Standard attachment points 100/250 mm downwards from the floor surface.

Stella premium



In the Stella Premium model, the railing glass is attached to the side of the intermediate base. Standard attachment points 100-300 mm from the upstairs floor surface. The standard height of the plate is 320 mm.

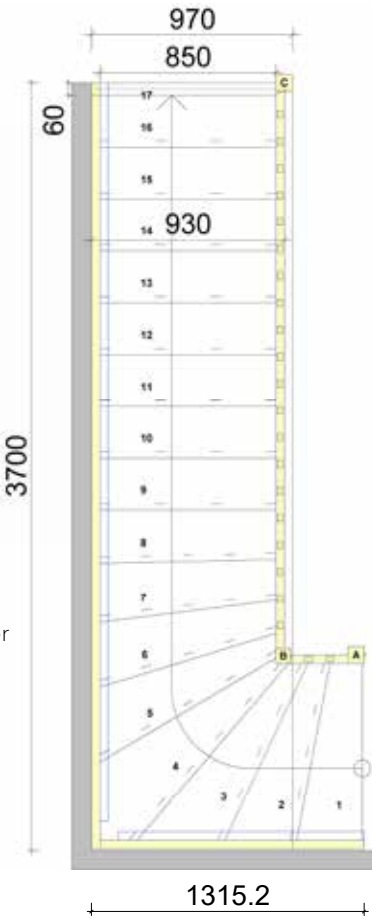
Stella premium, with U-profile rail



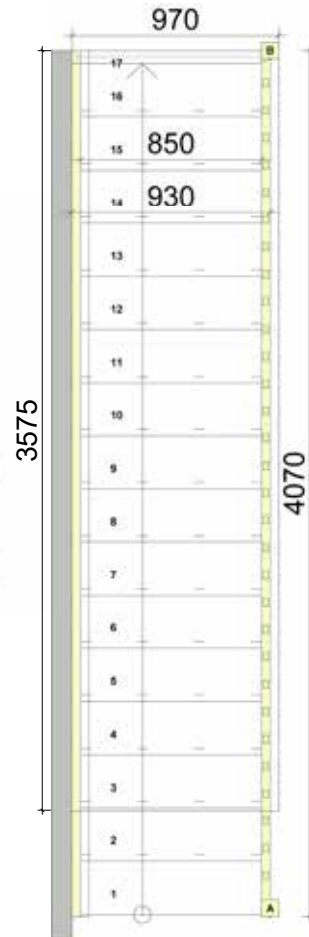
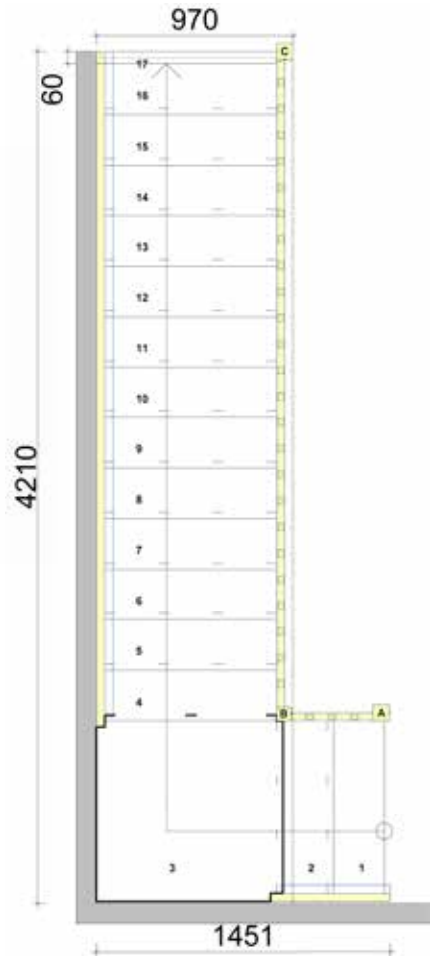
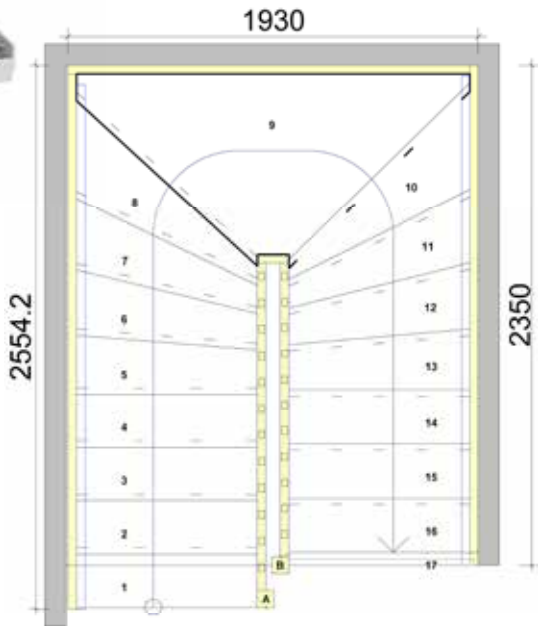
An alternative attachment for the Stella premium model is with a U-profile rail that attaches to the floor surface. Note! It must be ensured that the floor structure allows the attachment. At the edge of the opening, an approx. 90 mm wide plywood should be taken into account, on top of which the U-profile rail can be installed. If the upstairs floor is made with plaster or concrete casting (thickness approx. 50 mm), the rail must be installed 70 mm from the edge of the opening. Note the floor heating pipes! A thin floor casting breaks under the rail.

Stair models

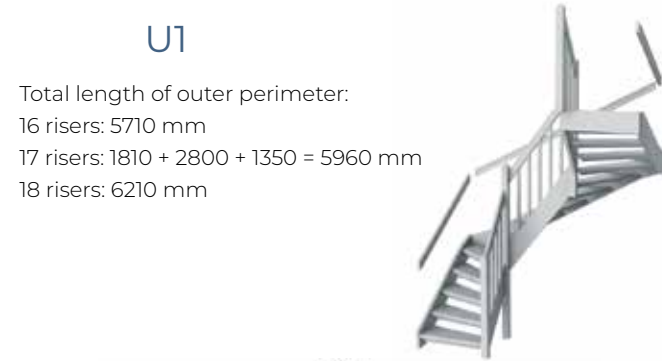
The dimension images of the stairs are with 17 steps, so the max. floor height can be 3230 mm. Tread 250 mm and riser max. 190 mm. The dimensioning conforms to RT card 103345. The Topten card (www.toptenrava.fi) on the dimensioning of indoor stairs allows a stairwell narrower by the thickness of the stringer; the dimensioning should be checked with building inspection when applying for the building permit.



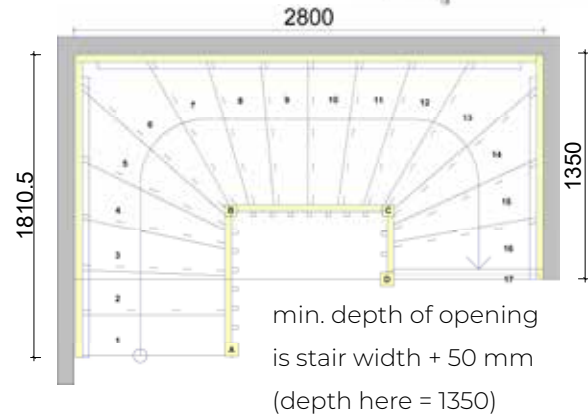
Total length of outer perimeter
16 risers: 4765 mm
17 risers: 1315 + 3700 = 5015 mm
18 risers: 5265 mm



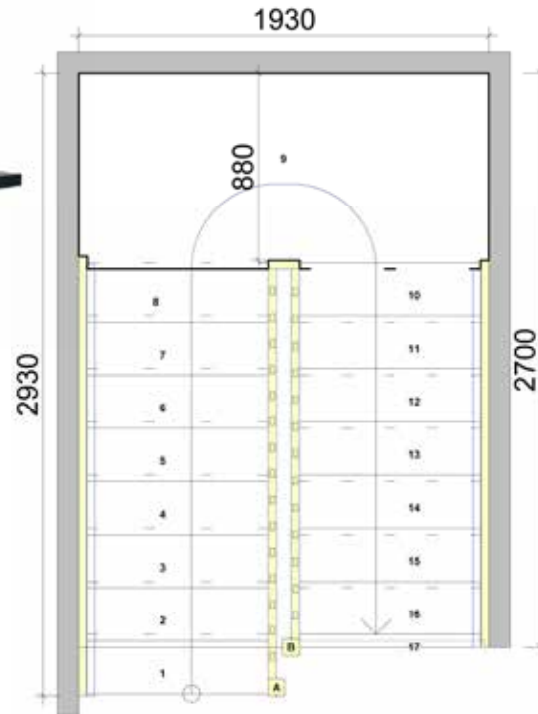
R1



Total length of outer perimeter:
16 risers: 5710 mm
17 risers: 1810 + 2800 + 1350 = 5960 mm
18 risers: 6210 mm



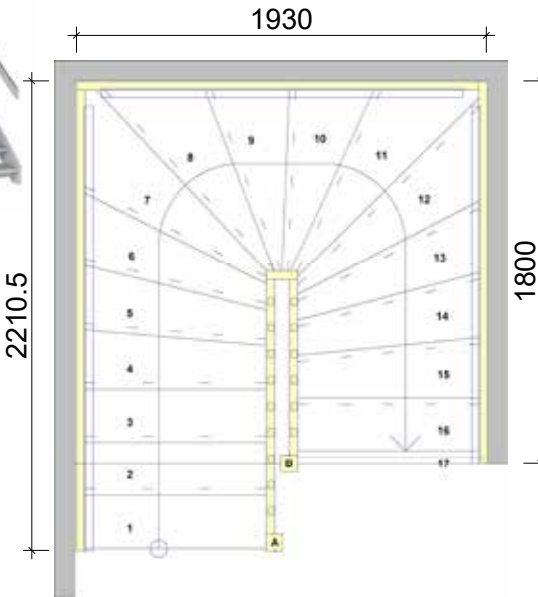
U1



R2



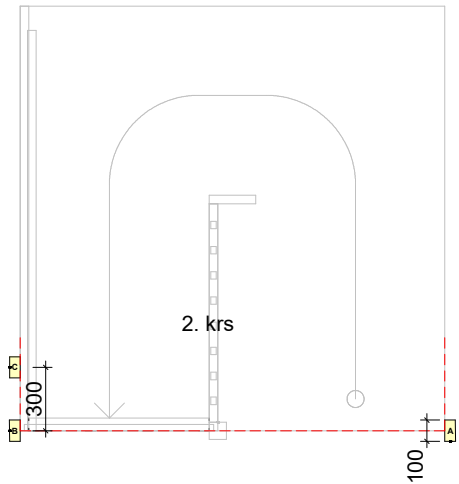
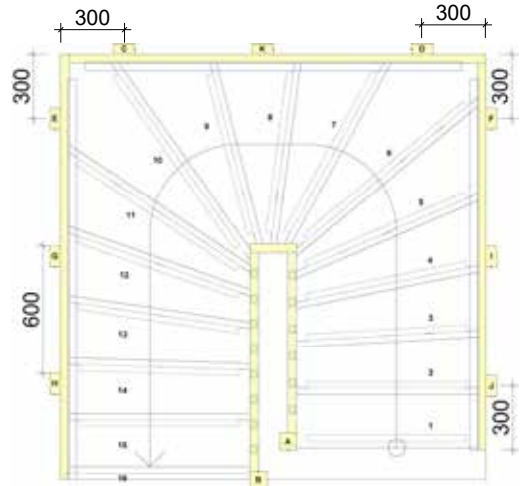
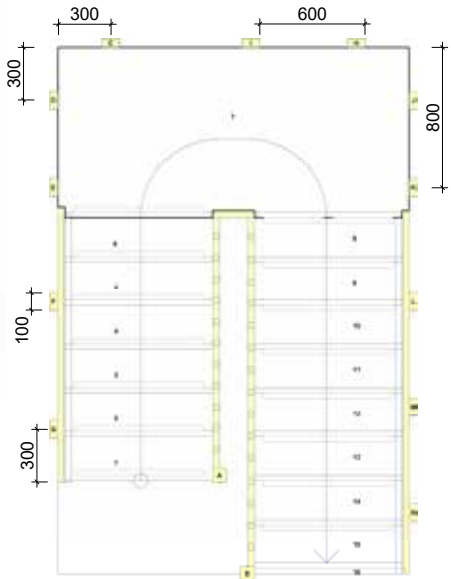
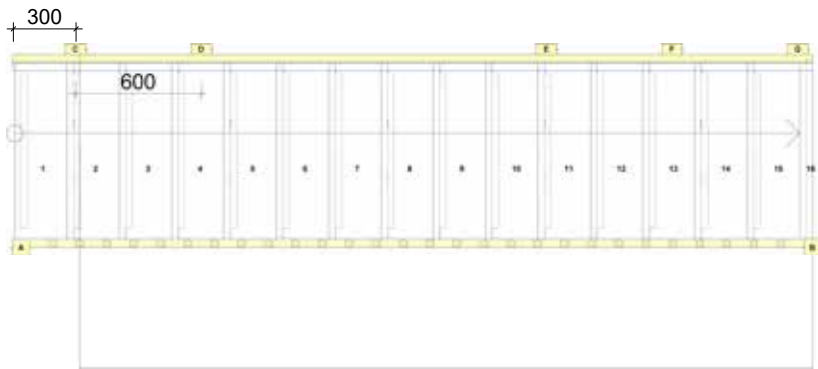
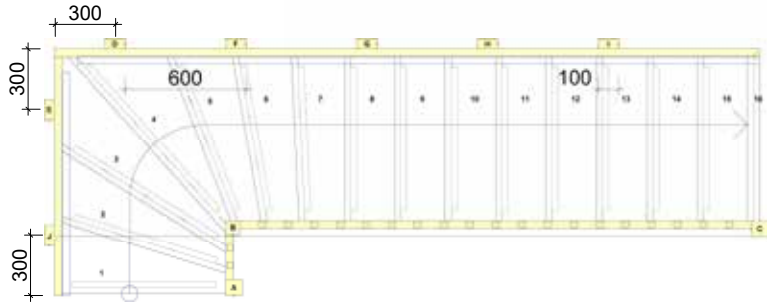
Total length of outer perimeter:
16 risers: 5690 mm
17 risers: 2210 + 1930 + 1800 = 5940 mm
18 risers: 6190 mm



U2

Stair support frames

If there are LED lights in the stairs, you must take into account the socket routed under the stairs. Generally a good location is under the 3rd or 4th step.



Post and railing models



Handrails



KJ1
40 mm x 90 mm.



KJ2
40 mm x 90 mm.



KJ3
Round, diameter 40 mm.



KJ4
60 mm x 40 mm.
(Not recommended for installation on walls.)



KJ5
40 mm x 90 mm.



KJ6
40 mm x 40 mm.



KJ7
25 mm x 45 mm.
Only on top of the Lyyra stair railing and floor railing.



KJ8
30 mm x 30 mm.
Only on top of the Stella stair railing railing and floor railing.



KJ9
30 mm x 70 mm.
Bracket-free attachment.



Stainless steel
Diameter 42 mm

Choice of material for stringers

All our stair models are available as closed or open. In all stair models, the Safety strip under the steps can be placed either indented or in the foreground of the step, creating the impression of a strong step, or the steps can be made solid, “box-like”.



- 1 High-pressure laminate or compact laminate is 18 mm thick, durable and workable material that looks like metal. High-pressure laminate and metal stringers can be shaped into a “Z” shape. Can be painted numerous different colours.
- 2 Metal stringers are now also available from us! The appearance is delicate, the metal stringers' thickness is 8 mm.
- 3 Wooden stringers are mostly pine with a paint covering. Other materials are also possible. Strong wooden stringers 40 mm thick, cannot be shaped into a “Z” shape. Saddle model stairs possible.



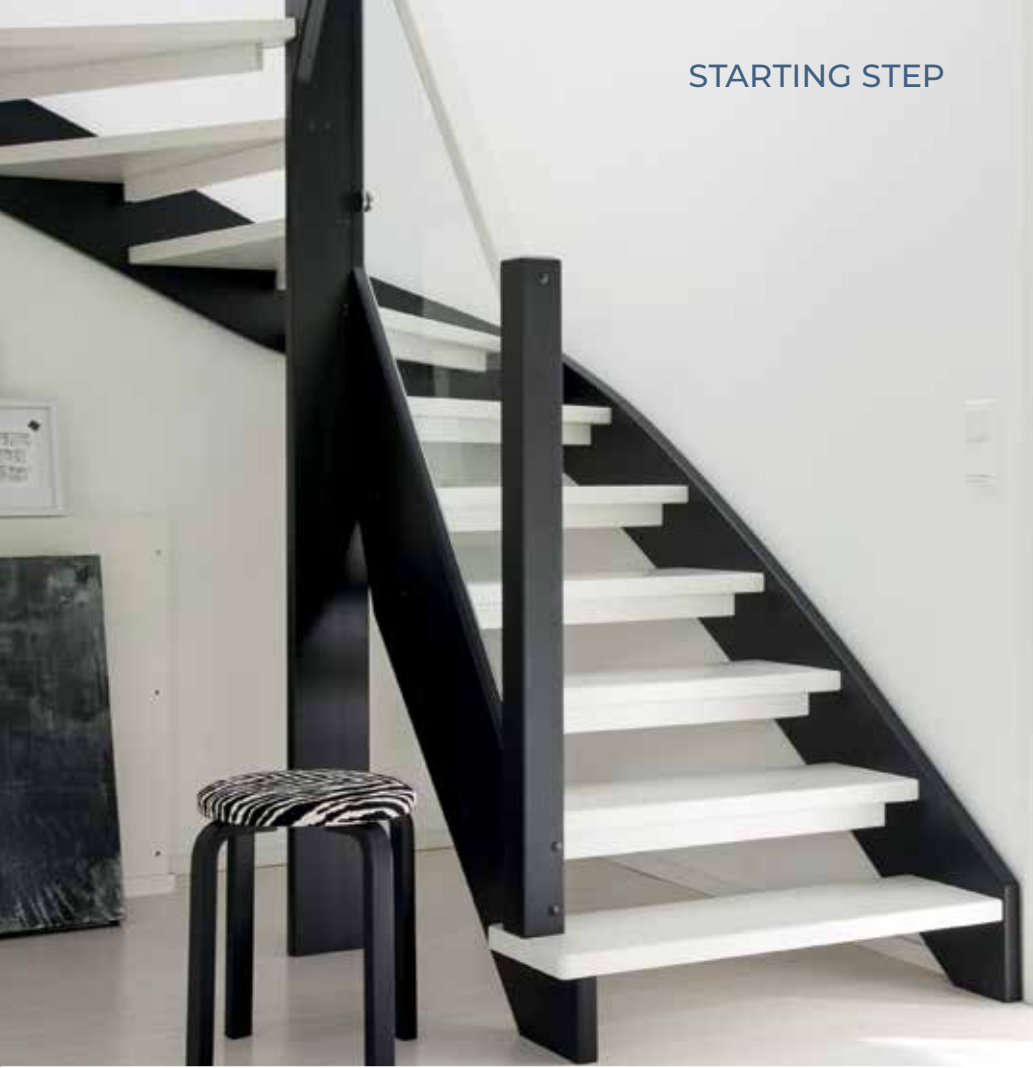
Accessories



FOLDING CHILD GATE,
CLOSED STEPS, LED LIGHT
STRIPS BELOW THE STEPS,
NON-SLIP STRIPS



FIXED CHILD GATE



STARTING STEP



NON-SLIP GROOVES



NON-SLIP STRIPS

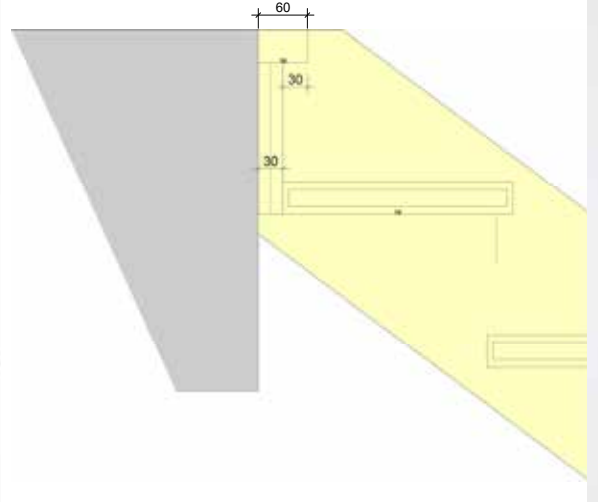


CLOSET UNDER THE
STAIRS, CLOSED STEPS



REINFORCED FRONT
EDGE OF THE STEP

Especially when dimensioning a straight-step staircase, it is good to note that the standard structure of the staircase includes a 60 mm deep step flush with the floor of the upper floor, which affects the dimensioning of the stairwell.



TÄHTIPORRAS

Contact us

tahtiporras.fi

 [@tahtiporras](https://www.instagram.com/tahtiporras)