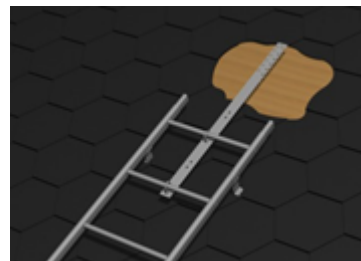


Roof ladder for bitumen roof

1. Instructions for use

- Roof ladders are designed and manufactured according to EN 12951, class 2. When installed according to these instructions, the roof ladder can be used as a safety line anchor point (= class 2).
- We recommend attaching the safety line around the side rails, but it can also be attached to the rungs.
- NOTE! The safety line may not be attached to the fixtures or the plastic feet.
- The safety line may only be used on the same roof plane as the ladder, in the direction of the eaves, and the line must be dimensioned in such a way that the user cannot fall over the eaves.
- An approved safety line (EN 353-2) with fall arrest system and length adjustment must be used. Retractable type fall arresters (EN 360) may be used instead of safety line.
- A roof ladder may only be used as safety line anchor point by one person at a time. The maximum weight of the person using the anchor point, including equipment, is 100 kg.

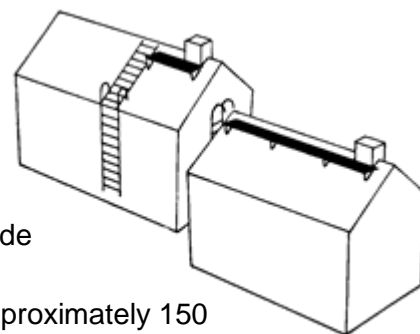


2. Planning

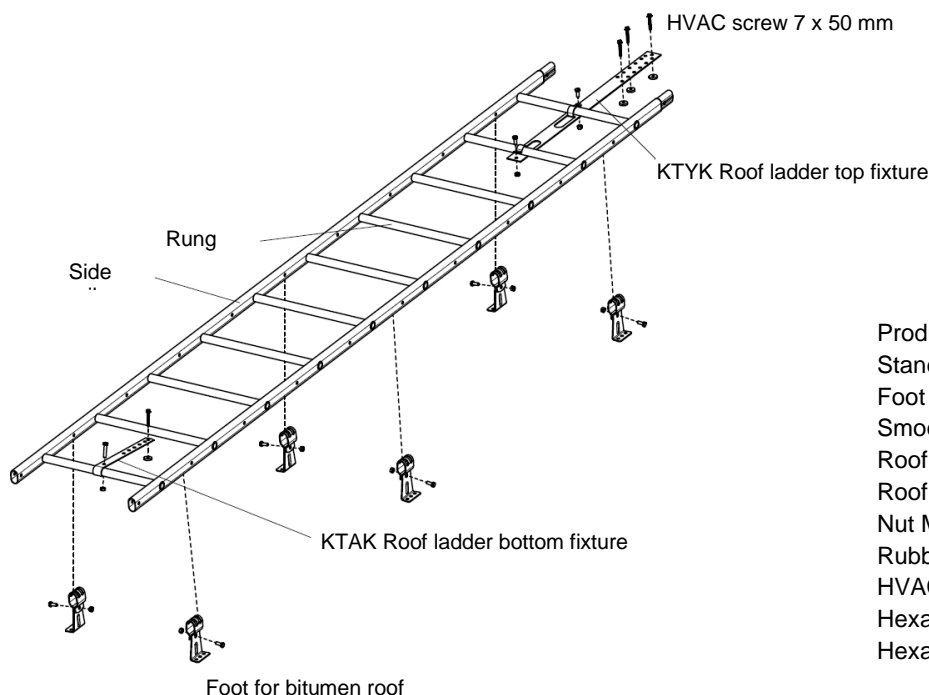
- Safe access must be provided for all items on the roof that need regular maintenance or inspections if the slope of the roof is steeper than 1:8 (7°).
- Using a separate snow guard at the roof ladder location is recommended. The roof ladder is not a snow guard.
- Plan the placement of the roof ladder and the wall ladder so that they are at the same place.
- Nesco's vertical safety rail can only be installed on class 2 roof ladders.

3. Dimensions and dimensioning of roof ladders

- The distance of the bottom rung of the roof ladder from the top rung of the wall ladder may not exceed 400 mm (Nat. Building Code F2).
- The rung distance is 300 mm and the internal distance of the side rails is 400 mm.
- The products are designed to sustain a point load of 1.5 kN (approximately 150 kg).



4. Parts of the roof ladder



Product
 Standard ladder
 Foot for bitumen roof
 Smooth support
 Roof ladder top fixture KTYK/P
 Roof ladder bottom fixture KTAK
 Nut M8
 Rubber gasket Ø 25 x 5 mm
 HVAC screw 7 x 50 mm
 Hexagonal screw M8 x 20 mm
 Hexagonal screw M8 x 40 mm

5. Installation order

1. Plan the placement. Ensure that the boarding under the roofing is made of closed boarding with close-grained tongue and groove boards, minimum thickness 23 mm, of good quality. Plywood can also be used as the underlay, minimum thickness 15 mm. Using tongue and groove plywood is recommended (e.g. Visa). The products must be attached to plywood by means of through-bolting. Through-bolting with two M8 x 40 mm bolts and minimum Ø 30 x 3 metal washers on the underside of the plywood.
2. Measure the required ladder length. If necessary, cut with a hacksaw or extend with another ladder. One end of the ladder is narrower than the other so that the sections overlap when placed in a row. Use M8 x 40 mm bolts to lock the connections. If the ladder length is over 6 m, the sections should only be connected to the roof after the top section has been attached on the roof. Ensure that the boarding under the roofing is made of closed boarding.
3. Attach the roof ladder top fixture to the two rungs at the top by passing the top fixture in its place and tightening the fixture handles around the rungs using an M8 x 20 mm hexagonal screw and an M8 nut. Attach the roof ladder bottom fixture (KTAK) to the bottom rung of the ladder using an M8 x 40 mm hexagonal screw.
4. Place the feet for bitumen roof in the holes on the side rails of the ladder. Place the feet at approximately 1.5 m intervals. Attach the feet using M8 x 20 mm screws and M8 nuts. Attach a plastic spacer stud or glue a piece of padding rubber to the bottom of the foot.

5. Lift the ladder to the correct place on the roof.

6. Attach the ladder using roof ladder fixtures:

* On the ridge:

Attaching to minimum 23 mm rough sawn tongue and groove boarding or 25 mm rough sawn boarding:

Bend the roof ladder top fixture KTYK over the ridge and attach it to the roof with three 7 x 50 mm HVAC screws. Use Ø 25 x 5 mm EPDM rubber gaskets for sealing.

Attaching to minimum 15 mm plywood:

Bend the roof ladder top fixture KTYK over the ridge and attach it through the plywood with two M8 mm through-bolts. Use Ø 30 x 3 mm washers. Use EPDM rubber gaskets for sealing.

* On the roof plane:

Attaching to minimum 23 mm rough sawn tongue and groove boarding or 25 mm rough sawn boarding:

Attach the roof ladder top fixture KTYK to the roof battens with four 7 x 50 mm HVAC screws. Attach at the top end of the fixture. Use Ø 25 x 5 mm EPDM rubber gaskets between the fixture and the roof always when penetrating the roofing with screws.

Attaching to minimum 15 mm plywood:

Attach the roof ladder top fixture KTYK through the plywood with two M8 mm through-bolts. Use Ø 30 x 3 mm washers. Use EPDM rubber gaskets for sealing.

7. Attach the roof ladder bottom fixture (KTAK) at the bottom of the ladder to the roof batten or plywood with one 7 x 50 mm HVAC screw. Use Ø 25 x 5 mm EPDM rubber gaskets for sealing the lead-through.

If a wall ladder is attached on the building at the same place, attach the top curves of the wall ladder to the roof ladder using the U flanges included in the wall ladder installation kit AS1. Tighten with M8 x 40 mm hexagonal screws and M8 nuts.

6. Maintenance

- In order to keep the installation as a class 2 system, the installation must be inspected once a year by an inspector authorised by the manufacturer.
- The roof ladder is not dimensioned to sustain the snow load of the entire roof and especially not moving masses of snow. Snow must, therefore, be prevented from moving and the stress must be directed at the snow guards. If no snow guards have been installed, snow must be cut regularly on both sides of the roof ladder to reduce loads.



Nesco Oy
Teollisuustie 8
FI-16300 ORIMATTILA
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EN 12951
Fixed roof ladders C2-TB
DoP: <http://nescos.fi>