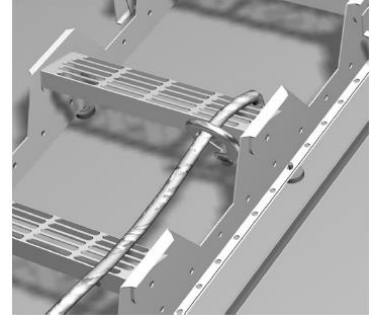


Roof treads for bitumen roof

1. Planning the location

- Roof treads are designed and manufactured according to EN 12951, class 2. When installed according to these instructions, roof treads can be used as a safety line anchor point (= class 2).
- The safety line must be attached around a tread. The line may not be attached to the fasteners.
- The safety line may only be used on the same roof plane as the treads, 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 tread 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.

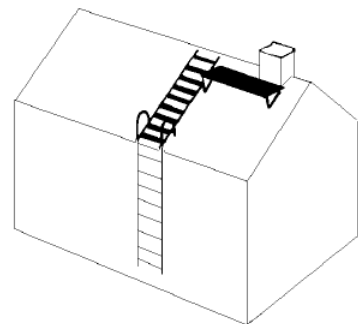


2. Planning

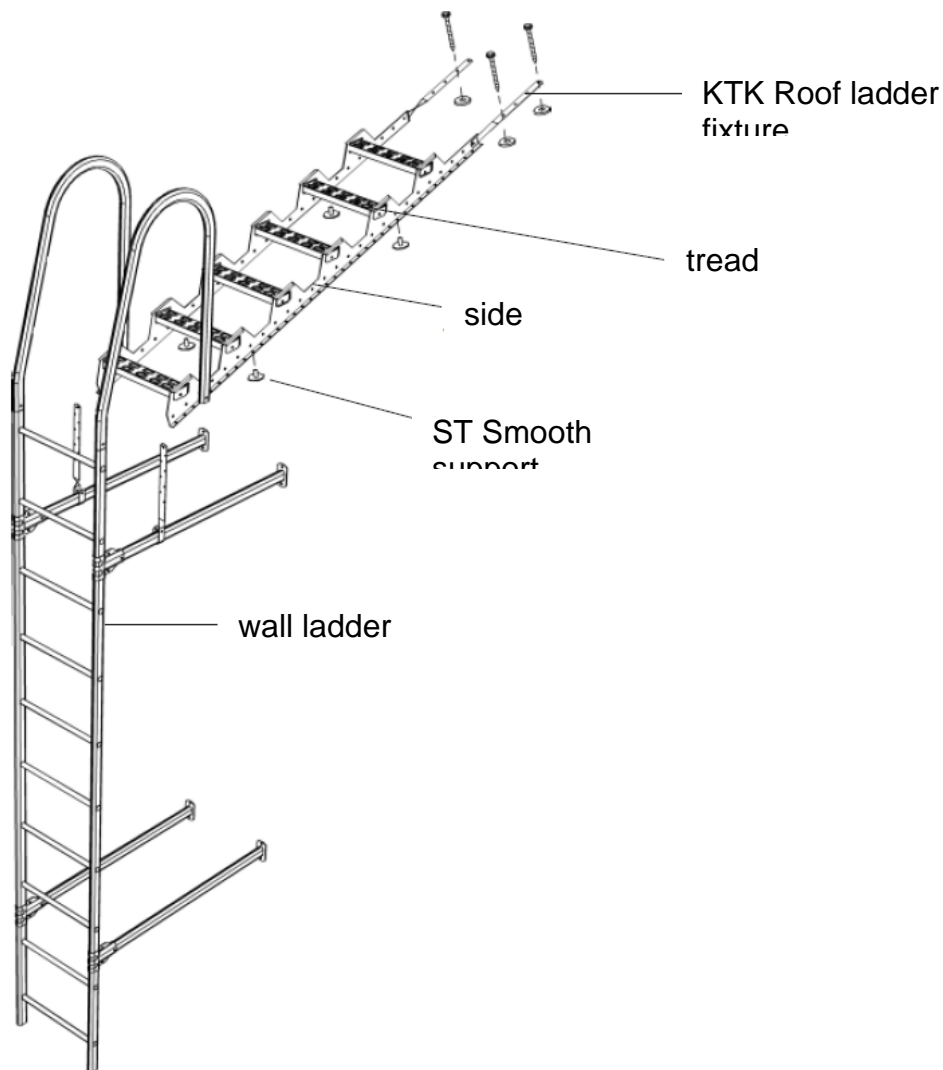
- Safe access must be provided for all items on the roof that need maintenance. Roof treads are used for access between the eaves and the ridge on low pitch roofs (slope 1:3 or gentler).
- Access to the roof can be arranged from the side or the end of the building. We recommend arranging access to the roof through wall ladders from the end of the building and continuing the access route without interruption as a roof walkway. A prerequisite for this is that the wall ladder and the roof walkway can be placed at the same location. Wall ladders installed on the side of the building are always sensitive to snow loads if the building is not fitted with snow guards.
- Nesco's vertical safety rail can only be installed on class 2 roof ladders.
- The roof structures must fulfil the instructions of the manufacturer.

3. Dimensions and dimensioning of roof treads

- The tread element length is 2.84 m. Consecutive elements overlap 0.14 m, i.e. the effective length is 2.7 m.
- The free width between the side rails is 380 mm.
- The tread distance is 300 mm and the slope is 1:3 (18.3°).
- The products are designed to sustain a point load of 1.5 kN (approximately 150 kg).

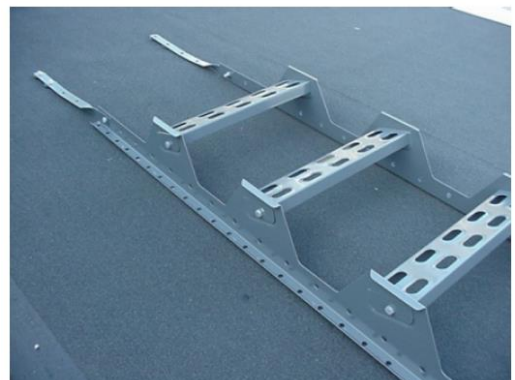


4. Parts of the roof treads



5. Installation order

1. 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 product must be attached to plywood by means of through-bolting. Through-bolting with one M8 x 40 mm bolt and minimum Ø 30 x 3 metal washers on the underside of the plywood.



2. Measure the distance from the eaves to the ridge and deduct 0.3 m to determine the required tread length. Note! The treads do not always run from the ridge to the eaves. They can also run to roof walkway or roof hatch, for example.
3. Assemble the roof treads by pushing the treads into the pockets on the sides of the side rails. Use M8 x 20 mm (16 mm) screws and M8 mm nuts to lock the connections. Pre-attach the roof ladder fixtures KTK treads on the top tread element using M8 x 20 mm (16 mm) screws and M8 mm nuts. Attach the completed tread elements on each other on the roof.
4. Lift the assembled elements to a suitable place on the roof and attach them on one another using two M8 x 20 screws. The section with the roof ladder fixtures is installed on the top. Use three 7 x 50 mm HVAC screws on each roof ladder fixtures to fix the treads to the roof. Use Ø 25 x 5 EPDM rubber gaskets (in through-bolting according to section 1, one (1) M8 x 40 mm bolt/roof ladder fixture is enough).
5. Place the smooth supports on the roof at approximately 0.8–0.9 m intervals. Push the smooth supports into the holes at the bottom of the treads' side from below.
6. If the treads tend to move sideways, attach the treads to the roof at a suitable point using 7 x 50 mm HVAC screws in the holes on the treads' side every 6 m, for example. Use Ø 25 x 5 mm EPDM rubber gaskets for sealing.
7. The bottom of the treads can be attached to the top curves of the wall ladder.



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 treads are 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 treads to reduce loads.

CE

Nesco Oy
Teollisuustie 8
FI-16300 ORIMATTILA
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EN 12951
Fixed roof ladders
C2-TA

DoP: <http://nescos.fi>