

VERIFICATION CERTIFICATE

VTT-VA-00002-17

1 (7)

VTT Expert Services Oy has, in accordance with Chapter 3 of the Finnish Act on the Type Approval of Certain Construction Products (954/2012, amended with Act 1262/2014) and the provisions of the decree given by the Finnish Ministry of the Environment on the approval of certain construction products (555/2013, amended with decree 66/2015), granted the following verification certificate.

Lapuan Piristeel Oy, Teollisuustie 5, FI-62100 Lapua

Pisko wall ladder

The verified performance levels for meeting the basic requirements are provided in Appendix 2.

The product description is provided in Appendix 3, and the conditions for product use are provided in Appendix 4.

The conformity has been assessed in accordance with the evaluation criteria published by the Finnish Ministry of the Environment and provided in the document "Kattoturvatuotteet - Kattopollarit, talotikkaat, lumiesteet ja katon vaakaturvakiskot" (Roof safety products – roof bollards, wall ladders, snow guards, and horizontal roof safety rails).

The system used for the evaluation and verification of the permanence of the performance level is 2+.

The construction product and the related package and documents must be equipped with the verification certificate mark concerning this certificate.


The verified product properties must be presented in connection with the mark in accordance with Appendix 5.



This verification certificate has been granted on February 23, 2017 and it is valid until February 22, 2022, at the latest. The conditions for validity are provided in Appendix 1.

The validity of the certificate can be checked via the www.vtt-todistus.fi service.

Espoo 23.11.2017



Tiina Ala-Outinen
Business Manager



Annamajja Naula-Iltanen
Lead assessor

This document has been signed electronically.

- APPENDICES
1. Conditions for Validity
 2. Verified Basic Requirements for the Product
 3. Product Description Provided by the Manufacturer
 4. Conditions for Product Use
 5. Marking of the Verified Product

Appendix 1: Conditions for Validity

The verification certificate is granted for a fixed period, for no more than five years at a time. If necessary, the approved body may require a periodic review to ensure that the properties of the product correspond with the properties reported by the manufacturer. Products that have been inspected on a consignment-specific basis may only be commissioned after the approved body has issued the verification certificate concerning the consignment in question. (954/2012, section 14)

The verification certificate must be withdrawn if the construction product does not meet the essential technical requirements stipulated in the Finnish Land Use and Building Act or the provisions adopted under it. If the product is included in the scope of application of the CE marking system, the verification certificate expires. (954/2012, section 14)

In addition, the utilization of the verification certificate also requires internal production-related quality control and testing maintained by the manufacturer. The entity responsible for quality control verification verifies the internal quality control by carrying out the related initial inspection, monitoring the quality control continuously, and evaluating and approving the quality control. (954/2012, section 12)

The approved body and entity responsible for quality control verification must inform the manufacturer in writing of any reductions in product quality or safety detected during quality control and demand the manufacturer to modify the construction product within a fixed period to correspond with the verification certificate. (555/1213, section 8)

The approved body that issues verification certificates must withdraw the verification certificate if the importer, manufacturer, or authorized representative does not remedy the deficiencies detected during quality control verification. (954/2012, section 12)

The verification certificate must be withdrawn without delay if the Finnish Safety and Chemicals Agency (Tukes) has prohibited the use of the construction product or ordered the importer, manufacturer, or authorized representative to take measures to remove the product from the market. (954/2012, section 12)

The verification certificate is a public document. A record, which is available via the www.vtt-todistus.fi service maintained by VTT Expert Services Oy, is kept of the certificates.

Before the verification certificate can be issued, the manufacturer must report the entity responsible for quality control verification to the approved body.

The holder of the verification certificate is responsible for product quality and continuous quality control. When granting this verification certificate, VTT Expert Services Oy does not assume any liability for personal injuries or other damages that are caused by the direct or indirect use of the product related to this verification certificate.

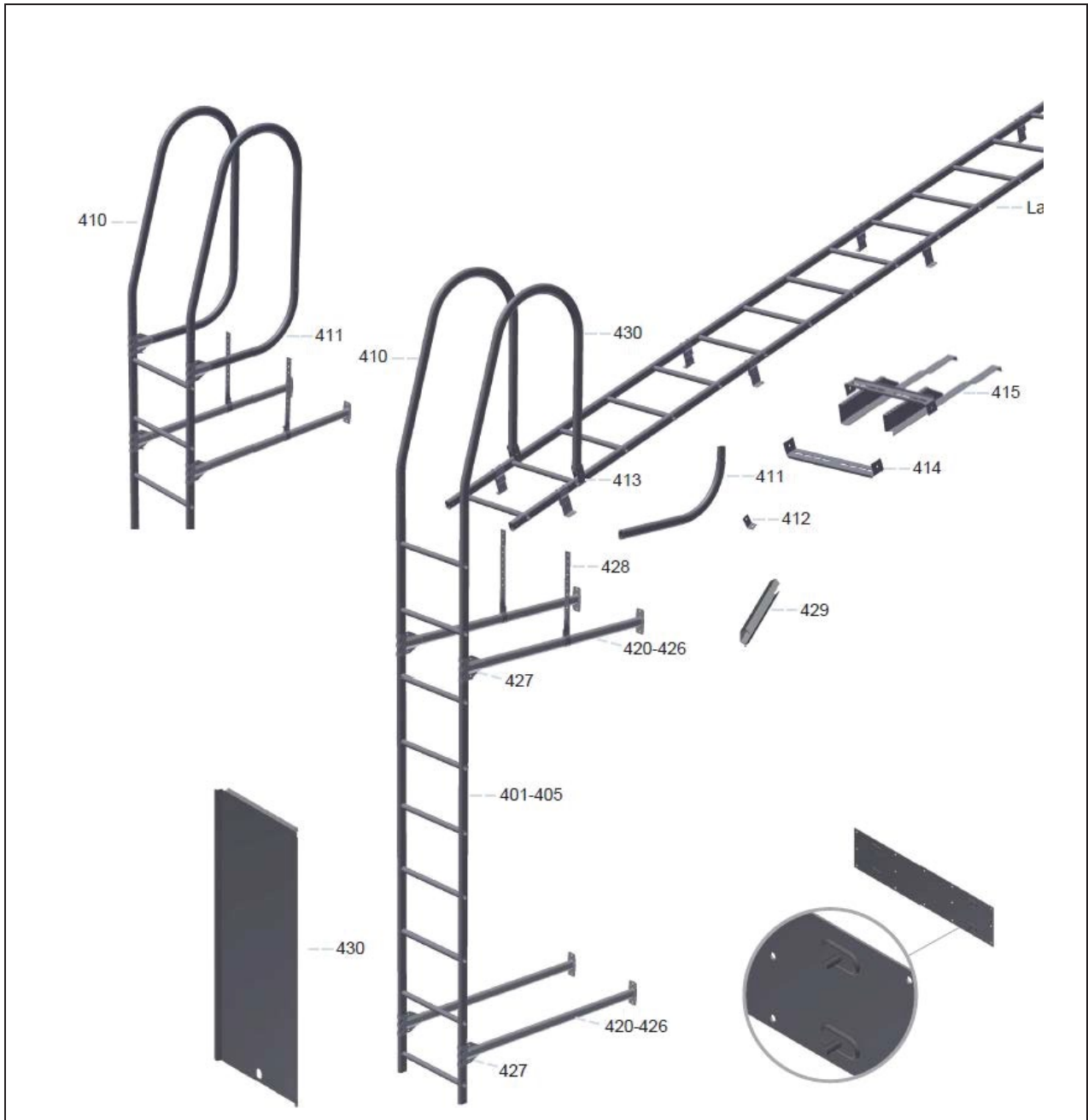
The use of the names "VTT Expert Services Oy" or "VTT" (VTT Technical Research Centre of Finland) in any other form in advertisements, as well as the partial distribution of this verification certificate, is only permitted with the written authorization of VTT Expert Services Oy.

Appendix 2: Verified Basic Requirements for the Product

The verified performance levels for meeting the basic product requirements are as described in the table below. As the provided requirements are minimum requirements, it is permissible to use materials with a higher performance level.

1. Dimensions	<ul style="list-style-type: none"> a) Minimum rung width 400 mm b) Rung interval 300 mm c) Rung diameter $25 \leq \varnothing \leq 40$ mm d) Distance between the rungs and the wall ≥ 200 mm
2. Coating thickness	To be reported
3. Load-bearing capacity and torque resistance	<ul style="list-style-type: none"> a) Static load-bearing capacity of the rungs <ul style="list-style-type: none"> • With a 1.5-kN load, the maximum deflection is 5 mm. Withstands a load of 2.6 kN. b)) Static load-bearing capacity of the side rail <ul style="list-style-type: none"> • With a 1.5-kN load, the maximum deflection is 10 mm and 1/100 of the length of the bracket interval. Withstands a load of 2.6 kN. c) Static load-bearing capacity of the ladder's fastening and the wall ladder legs <ul style="list-style-type: none"> • Withstand a load of 2.6 kN. d) Torque-resistance capacity of the rungs' fastening <ul style="list-style-type: none"> • Withstands a torque of 50 Nm. e) Dynamic load-bearing capacity of the ladder <ul style="list-style-type: none"> • Withstands the load of a 100-kg mass falling from the height of 2,500 mm. f) Dynamic load-bearing capacity of the vertical safety rail <ul style="list-style-type: none"> • Withstands the load of a 100-kg mass falling from the height of 2,500 mm.
4. Corrosion	Corrosion resistance class C3 medium

Appendix 3: Product Description Provided by the Manufacturer and Component Materials



401 - 405	Ladder with rungs	DX51D+Z275 1,25 mm
410	Bow	DX51D+Z275 1,25 mm
411	Bow fastener for wall ladder	DX51D+Z275 1,25 mm
412	Bow fastener for roof (L-model)	S320GD+Z275 2,5 mm
413	Bow fastener for ladder (U-model)	S320GD+Z275 2,5 mm
414	Bow fastener for walkway	S320GD+Z275 2,5 mm
415	Bow fastener for tile roof - auxiliary batten fastener	S320GD+Z275 2,5 mm

416	Fixing plate for sandwich wall element (for wall ladder fastener)	S320GD+Z275 2,5 mm
420 - 426	Wall ladder fastener	DX51D+Z275 1,25 mm
427	Wall ladder fastener clip	DX51D+Z275 1,5 mm
428	Eaves support	DX51D+Z275 1,5 mm
430	Anti-climb plate	DX51D+Z275 1,0 mm
	Screws – Self-tapping flange screws (7x50 mm) for sandwich panels and wood-cladded walls – Aerated concrete wall plugs + self-tapping flange screws (M8x30 mm) for cinder block walls	
Wall ladder installation kit	(incl. bow 2 pcs, 1 m wall ladder fastener 4 pcs, wall ladder fastener clip 4 pcs, eaves support 2 pcs, bow fastener for roof (L-model) and for ladder (U-model) 2 pcs and screws)	
Supplemental installation kit	(incl. 1 m wall ladder fastener 2 pcs, wall ladder clip 2 pcs and screws)	
Bow fastener installation kit for wall ladder	(incl. Bow fastener for wall ladder 2 pcs, wall ladder fastener clip 2 pcs and screws)	
<p>The wall ladder consists of oval and round painted and hot-galvanized steel pipes that are installed with fasteners made of painted hot-galvanized steel plate.</p> <p>The wall ladder legs are to be fixed to the structure of the building, if possible. Otherwise:</p> <ul style="list-style-type: none"> – To wood with self-tapping flange screws – To a concrete, stone, or cinder block wall with metallic or nylon plugs suitable for the material in question – To sandwich panels with a separate mounting plate <p>The eaves supports are to be fixed if the length of the wall ladder legs exceeds 40 cm.</p>		

Figure 3-1. Pisko wall ladder

Appendix 4: Conditions for Product Use

Design

The instructions drawn up by the manufacturer and the RT 85-11132 instructions are to be followed in the site-specific design of the wall ladder.

Manufacture

The manufacturer's internal production and quality control instructions are to be followed in the different manufacturing stages.

Delivery and On-Site Storage

The instructions drawn up by the manufacturer are to be followed during the transportation and storage of the products.

Painted surfaces are to be protected against scratches for the duration of the installation.

Use

The installation and maintenance of the products are to be carried out in accordance with the RT 85-11132 instructions and the instructions provided by the manufacturer.


The wall ladder is to be used for climbing onto the roof of a building or other platform.

Appendix 5: Marking of the Verified Product

The approved body must equip the verification certificate with a mark that can be used for distinguishing the verification certificate from other voluntary certificates granted by the approved body. The manufacturer must equip the construction product and the related package and documents (555/2013, section 7) with the mark.

The wall ladder is to be marked with a verification mark similar to the one in the image. The numerical identifier that will be included in the mark is presented at the top of this verification certificate. The verification certificate mark will be delivered to the client in a separate file.

Installation and maintenance instructions, as well as the verification certificate including the product-related performance levels, are to be delivered in connection with the product.

	<p>Lapuan Piristeel Oy Teollisuustie 5 FI-62100 Lapua</p>
<p>Product</p>	<p>Pisko wall ladder</p>
<p>Intended Purpose</p>	<p>Roof safety product – A ladder for climbing on the roof of a building or other platform.</p>
<p>Performance levels</p>	
<p>1. Dimensions</p>	<p>a) Rung width b) Rung interval c) Rung diameter d) Distance between the rungs and the wall</p>
<p>2. Coating thickness</p>	<p>To be reported</p>
<p>3. Load-bearing capacity and torque resistance</p>	<p>a) Static load-bearing capacity of the rungs b) Static load-bearing capacity of the side rail c) Static load-bearing capacity of the ladder's fastening and the wall ladder legs d) Torque-resistance capacity of the rungs' fastening e) Dynamic load-bearing capacity of the ladder f) Dynamic load-bearing capacity of the vertical safety rail</p>
<p>4. Corrosion</p>	<p>Corrosion resistance class C3 medium</p>

This is a translation of the original document.