



LOFT
LADDERS
2014

WOODEN FOLDING SECTION LOFT LADDERS



LWS Smart

Satisfy the requirements of EN 14975



LWK Komfort

Satisfy the requirements of EN 14975



LWZ

Satisfy the requirements of EN 14975

The **LWS Smart** is a 3 or 4 section folding wooden ladders with insulated beige hatch which can be veneered or painted to match the interior character.

LWK Komfort loft ladders have the same structure as the LWS ladders, but are also equipped with accessories that allow comfortable use of the ladders.

The **LWZ** is a 3-section folding wooden ladder with an insulated hatch. The wooden ladder box includes a steel frame, finishing linings slats and a quick installation system. This simplifies installation and reduces the time to fit the ladder in the ceiling.



beige hatch



peripheral seal



treads set flush with ladder strings



possibility of installing additional accessories



stile ends (only in 3-section ladders)



white hatch



peripheral seal



handrail



non-slip treads protruding from strings



possibility of installing additional accessories



stile ends



white hatch



peripheral seal



handrail



non-slip treads protruding from strings



possibility of installing additional accessories



finishing lining slats



system of quick installation in the ceiling



fully assembled and ready for quick installation in the ceiling

NEW



U=1,1
W/m²K



LWL Lux

Satisfy the requirements of EN 14975



U=0,76
W/m²K



LTK Thermo

Satisfy the requirements of EN 14975



U=0,51
W/m²K



LWT

Highest tightness – Class 4
according to EN12207

The **LWL Lux** folding 3-section loft ladder has been equipped with two handrails for greater safety and user comfort. It has a special supporting mechanism for folding and unfolding the ladder.

The **LTK Thermo** folding 3 section loft ladder is a highly insulated (**U=0.76 W/m²K**) ladder intended for buildings with significant temperature differences between the living areas and non-habitable spaces in the loft. The ladder features the highest rating of air tightness - Class 4.

The **LWT** loft ladder is a highly insulated (**U=0.51 W/m²K**) ladder intended for energy efficient buildings where great emphasis is placed on minimizing heat loss. The ladder features the highest rating of air tightness - Class 4.



stile ends



white hatch



peripheral seal



handrail



non-slip treads
protruding from strings



possibility of installing
additional accessories



unloading mechanism



stile ends



white hatch



peripheral seal



handrail



non-slip treads
protruding from strings



possibility of installing
additional accessories



stile ends



white hatch



three seals



handrail



non-slip treads
set flush with ladder strings



possibility of installing
additional accessories



easy installation

3 year
warranty



fully assembled
and ready for quick
installation in the ceiling

SLIDING SECTION LOFT LADDER



LWF

Satisfy the requirements of EN 14975

The **LWF folding** 3 section fire-resistant loft ladder with its high fire-resistant properties, **EI₂ = 30 min (according to EN 13501-2)** is perfect for installations which are subject to stipulations as specified in building regulations.



stile ends



fire-resistant hatch
inner hatch in white, external in Cherry



peripheral seal



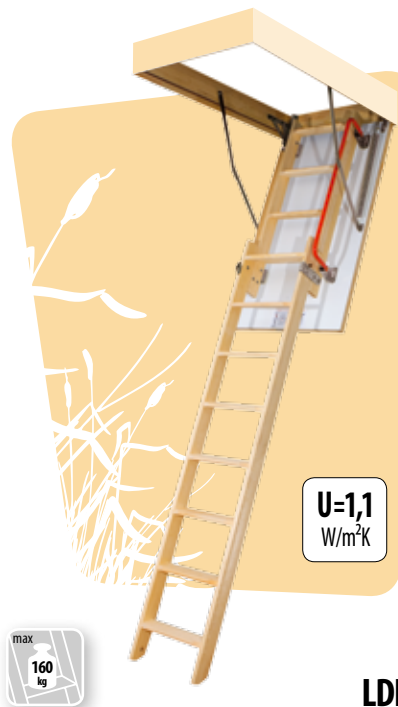
handrail



non-slip treads
protruding from strings



possibility of installing
additional accessories



LDK

Satisfy the requirements of EN 14975

The **LDK** loft ladder is a double-section loft ladder with a slidable lower section. This makes it possible to eliminate the swing space required on the landing for unfolding the ladder.



white hatch



peripheral seal



handrail



non-slip treads
protruding from strings



possibility of installing
additional accessories



LMS Smart

Satisfy the requirements of EN 14975

The **LMS** loft ladder is a 3-section metal ladder with the insulated hatch and ladder box made of pine.



stile ends



beige hatch



peripheral seal



handrail



non-slip treads



possibility of installing
additional accessories

3 year
warranty



fully assembled
and ready for quick
installation in the ceiling

FOLDING METAL SECTION LOFT LADDERS



LMK Komfort

Satisfy the requirements of EN 14975



LML Lux

Satisfy the requirements of EN 14975



LMF

Satisfy the requirements of EN 14975

The **LMK** unlike the LMS ladder has a white hatch and handrail for easier movement on the ladder.

The **LML** loft ladder with metal folding 3-section ladder is designed to ensure the highest comfort of use. The ladder installation process is simplified by easy adjustment of ladder's length to the ceiling height.

The **LMF** 3-section loft ladder complies with fire-resistant standards, whilst providing safe and comfortable access to the loft spaces.

The LMF ladder prevents smoke and fire from spreading to the upper or lower fire free storey for 120 minutes.

(EI₁₂₀ = 120 min, classification according to EN 13501-2).



stile ends



white hatch



peripheral seal



handrail



non-slip treads



possibility of installing additional accessories



telescopic stile ends



white hatch



finishing lining slats



peripheral seal



ladder unloading mechanism, built in handrail



non-slip treads



possibility of installing additional accessories



system of quick installation in the ceiling



telescopic stile ends



fire-resistant hatch



finishing lining slats



peripheral seal



ladder unloading mechanism, built in handrail



non-slip treads



possibility of installing additional accessories



system of quick installation in the ceiling

SCISSOR LOFT LADDERS








The **LST** scissors loft ladder is complete with white insulated hatch, wooden ladder box, metal finishing lining and quick-installation brackets. The scissors ladder construction takes less space allowing the ladder to be installed in smaller openings (the smallest ladder size is 51 x 80cm).

The **LSZ** unlike the LST ladder has a steel frame integrated within the ladder box, metal finishing slats and quick installation brackets that allow for even faster mounting in the ceiling.

The **LSF fire-resistant** loft ladder acts as a smoke block inside the building preventing the smoke from passing to a smoke free storey. The loft ladder fire-resistance is **EI₂= 60 minutes (classification according to EN 13501-2)**.

-  white hatch
-  finishing lining slats
-  peripheral seal
-  non-slip treads
-  possibility of installing additional accessories
-  possibility of installing additional accessories
-  system of quick installation in the ceiling
-  system of adopting the ladder length to the ceiling height

-  white hatch
-  finishing lining slats
-  peripheral seal
-  non-slip treads
-  possibility of adding or detaching segments
-  possibility of installing additional accessories
-  system of quick installation in the ceiling
-  system of adopting the ladder length to the ceiling height

-  fire-resistant hatch
-  finishing lining slats
-  non-slip treads
-  possibility of adding or detaching segments
-  system of quick installation in the ceiling
-  system of adopting the ladder length to the ceiling height

3 year
warranty

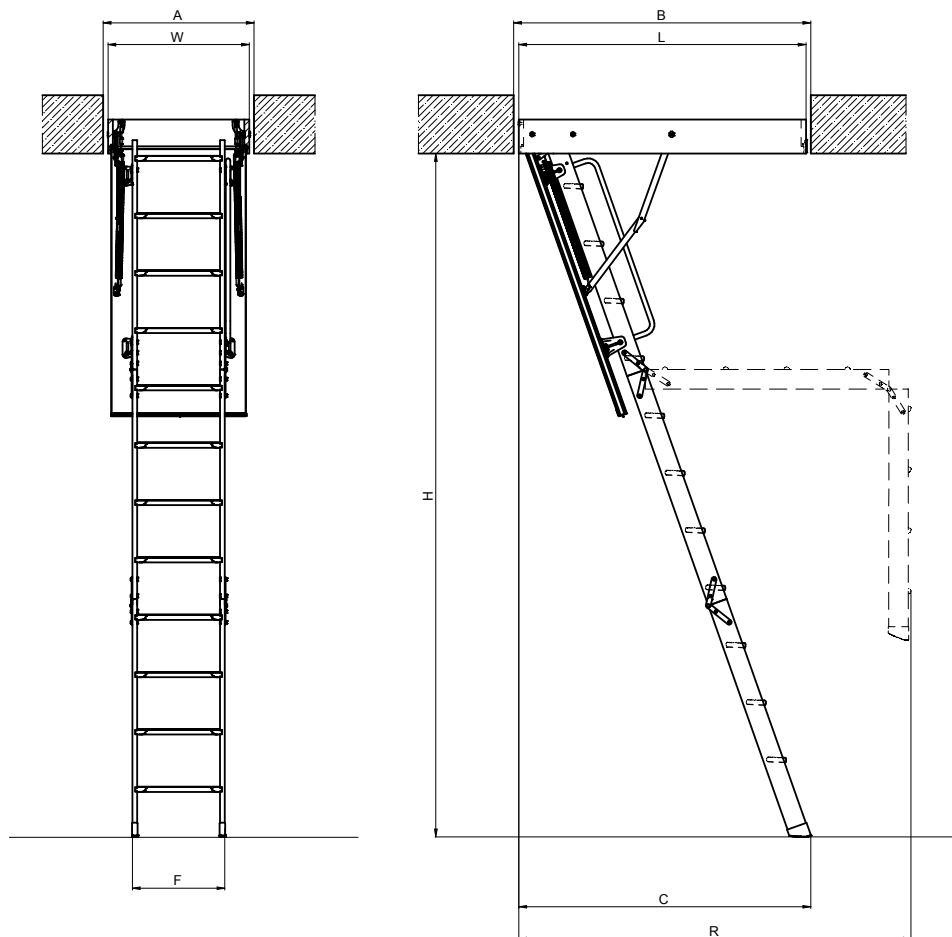


fully assembled
and ready for quick
installation in the ceiling

NON- STANDARD LWS and LWK LADDER SIZES

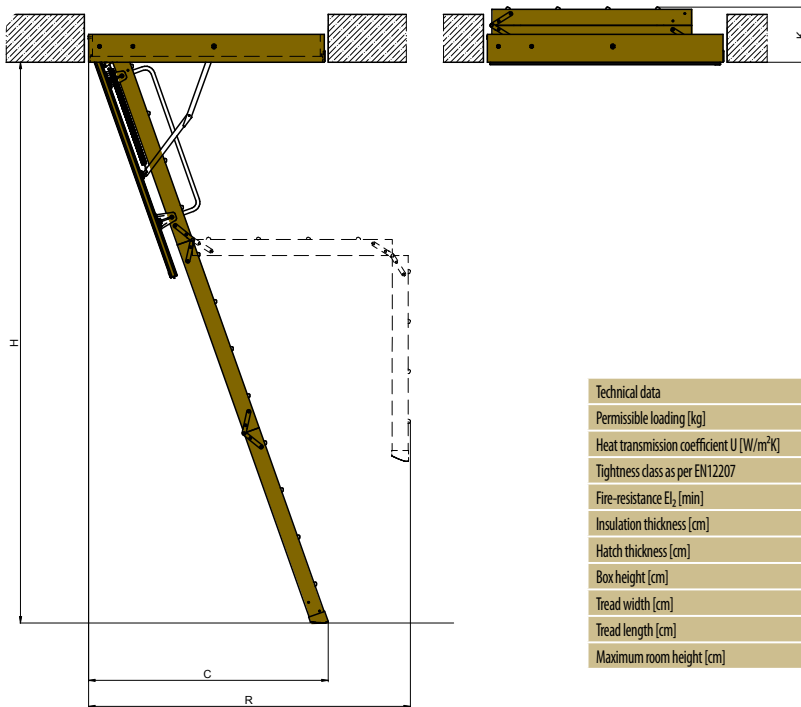
When ordering LWS and LWK in non-standard sizes, the real dimensions of the ceiling opening will have to be provided ("A" and "B") and a room height "H". The actual size of the loft ladders ("W" and "L") will be reduced by the assembly clearance, 2cm in width and 1.6cm in length; for example, for the ceiling opening 52x94cm the provided ladders will have dimensions 50x92.4cm. When ordering the ladder, the space occupied by the ladder while unfolding (swing space "R") and after ladder unfolding (distance "C") should also be taken into account.

The loft ladder box height is 14cm. In case of thicker ceilings, for aesthetic looks of the ceiling opening above the ladder box, the box extension LXN is advised to be installed (see accessories loft ladders).



Ceiling opening width (box width) [cm]	Ceiling opening length (box length) [cm]	Room height [cm]	Swing space [cm]	Distance after ladder unfolding [cm]	Number of segments	The width of the ladder section [cm]
A (W)	B (L)	H	R	C		F
52 – 82 (50 – 80)	94 – 140 (92.4 – 138.4)	254 – 280	139	109 – 119	4	34- for the ladder with box width ≤ 54cm 38- for the ladder with box width ≥ 55cm
	113 – 140 (111.4 – 138.4)	232 – 280	164	104 – 122	3	
	115 – 140 (113.4 – 138.4)	209 – 248	150	97 – 111	3	
	112 – 140 (110.4 – 138.4)	272 – 303	150	118 – 128	4	
	120 – 140 (118.4 – 138.4)	290 – 325	162	126 – 139	4	
	130 – 140 (128.4 – 138.4)	243 – 305	180	109 – 132	3	

WOODEN FOLDING SECTION LOFT LADDERS -DIAGRAM



Technical data	LWS/LWK/LWZ/LWL	LTK	LWF
Permissible loading [kg]	160		
Heat transmission coefficient U [W/m²K]	1.1	0.76	0.9
Tightness class as per EN12207	-	4	-
Fire-resistance EI ₂ [min]	-	-	30
Insulation thickness [cm]	3	6	3
Hatch thickness [cm]	3.6	6.6	4.2
Box height [cm]	14	22	14
Tread width [cm]	8		
Tread length [cm]	34		
Maximum room height [cm]	280/305	280	280/305

Ladder LWS/ LWK

Ceiling opening dimension [cm]	55x111	60x94	60x100	60x111	60x120	60x130	70x94	70x100	70x111	70x120	70x130	70x140	60x130	60x140	70x130	70x140
Box external dimension [cm]	55x111	58x92.4	58x98.4	58x111	58x118.4	58x128.4	68x92.4	68x98.4	68x111	68x118.4	68x128.4	68x138.4	58x128.4	58x138.4	68x128.4	68x138.4
Room height H [cm]	280												305			
Number of ladder sections [units]	3	4			3		4					3				
Swing space R [cm]	159	138		159	162		138		159	162				179		
Distance after ladder unfolding C [cm]	108	120		108	121		120		108	121				130		
Folded ladder height K [cm]	33/34	41/42			33/34		41/42					33/34				

Ladder LWZ

Ceiling opening dimension [cm]	60x120	70x120	70x130	70x140	60x130	70x130	70x140
Box external dimension [cm]	58.8x118.8	68.8x118.8	68.8x128.8	68.8x138.8	58.8x128.8	68.8x128.8	68.8x138.8
Room height H [cm]	280				305		
Swing space R [cm]	162				179		
Distance after ladder unfolding C [cm]	121				130		
Folded ladder height K [cm]	34						

Ladder LWL

Ceiling opening dimension [cm]	60x120	70x120	70x130	70x140	60x130	70x130	70x140
Box external dimension [cm]	58x118	68x118	68x128	68x138	58x128	68x128	68x138
Room height H [cm]	280				305		
Swing space R [cm]	164				179		
Distance after ladder unfolding C [cm]	122				130		
Folded ladder height K [cm]	34						

Ladder LTK

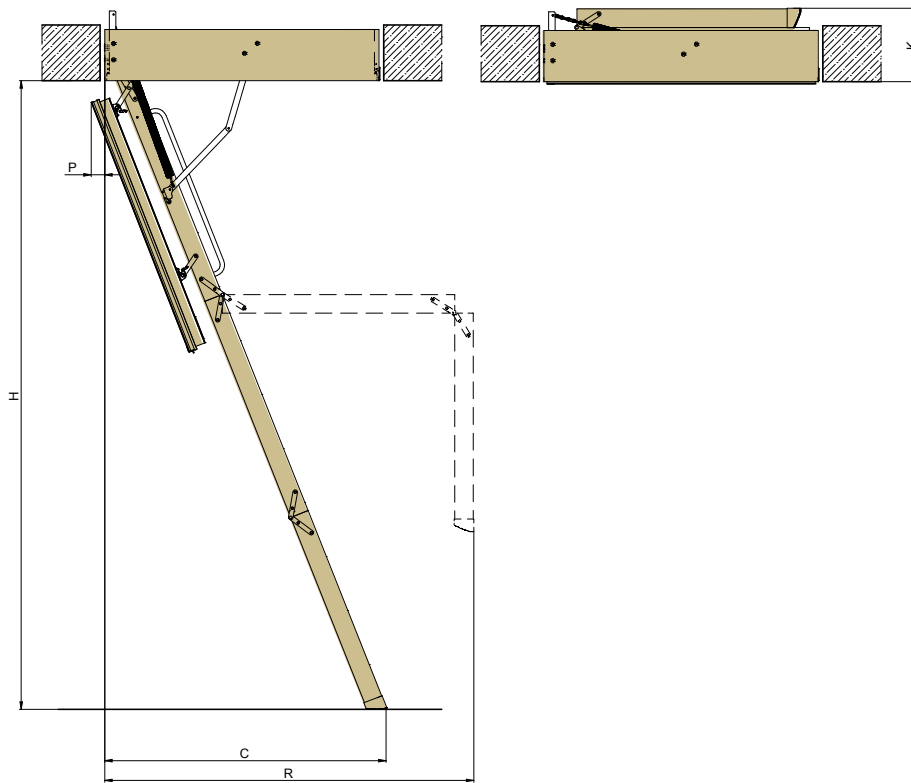
Ceiling opening dimension [cm]	60x120	70x120	70x130	70x140
Box external dimension [cm]	58x118.4	68x118.4	68x128.4	68x138.4
Room height H [cm]	280			
Swing space R [cm]	167			
Distance after ladder unfolding C [cm]	121			
Folded ladder height K [cm]	37			

Ladder LWF

Ceiling opening dimension [cm]	60x120	70x120	70x130	70x140	86x130	70x130	70x140	86x130
Box external dimension [cm]	58x118.4	68x118.4	68x128.4	68x138.4	84x128.4	68x128.4	68x138.4	84x128.4
Room height H [cm]	280					305		
Swing space R [cm]	172		177		194			
Distance after ladder unfolding C [cm]	140		152		163			
Folded ladder height K [cm]	35							

LWS, LWK non-standard sizes - page 7. LWZ, LWL, LTK, LWF loft ladders are available only in sizes shown above.

WODDEN FOLDING SECTION LOFT LADDER LWT-DIAGRAM



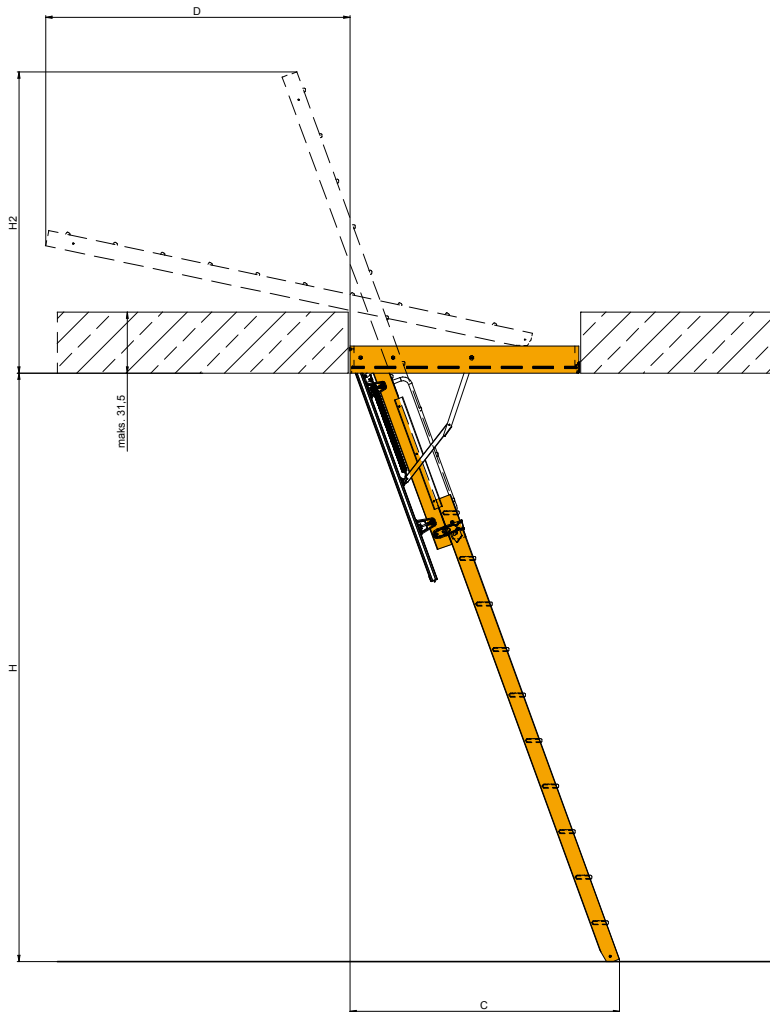
Technical data	LWT
Permissible loading [kg]	160
Heat transmission coefficient U [W/m²K]	0.51
Tightness class as per EN12207	4
Fire-resistance E _f [min]	-
Insulation thickness [cm]	7.4
Hatch thickness [cm]	8
Box height [cm]	22
Tread width [cm]	8
Tread length [cm]	34
Maximum room height [cm]	280/305

Ladder LWT

Ceiling opening dimension [cm]	60x120	70x120	70x130	70x140	60x130	70x130	70x140
Box external dimension [cm]	58x118.4	68x118.4	68x128.4	68x138.4	58x128.4	68x128.4	68x138.4
Room height H [cm]	280				305		
Swing space R [cm]	160				175		
Distance after ladder unfolding C [cm]	127				135		
Folded ladder height K [cm]	33						
Hatch retrace distance after opening [cm]	6.1						

LWT loft ladders are available only in sizes shown above.

SLIDING SECTION LOFT LADDER



Technical data	LDK
Permissible loading [kg]	160
Heat transmission coefficient U [W/m ² K]	1.1
Insulation thickness [cm]	3
Hatch thickness [cm]	3.6
Box height [cm]	14
Tread width [cm]	8
Tread length [cm]	34
Maximum room height [cm]	280/300/335

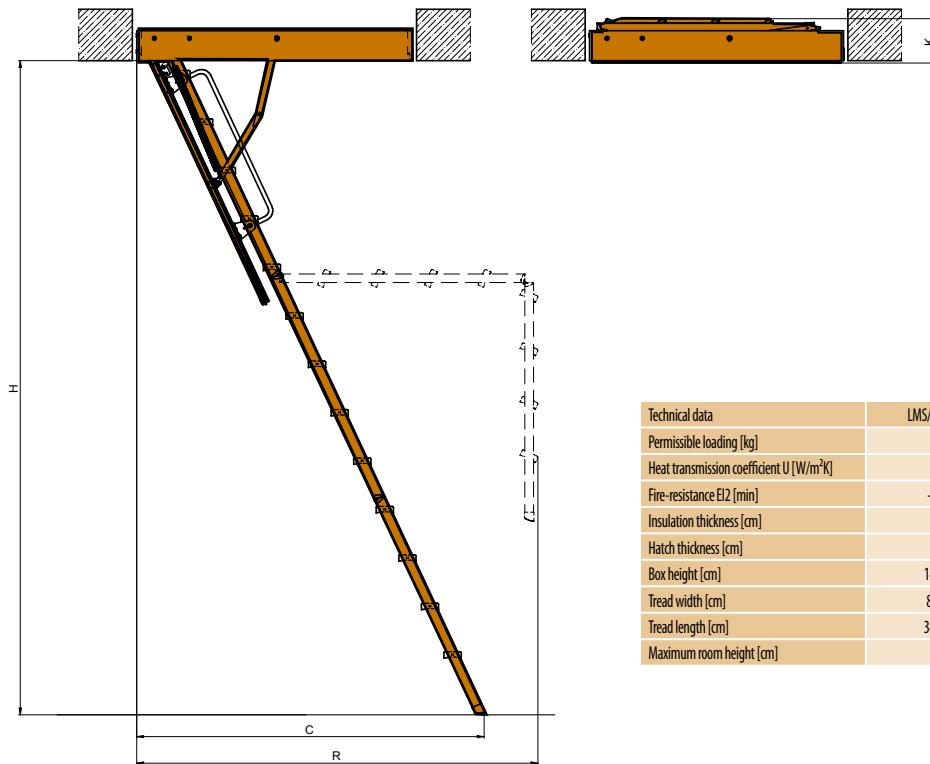
Ladder LDK*

Ceiling opening dimension [cm]	60x120	70x120	70x130	70x140	60x120	70x120	70x130	70x140	60x120	70x120	70x130	70x140
Box external dimension [cm]	58x118.4	68x118.4	68x128.4	68x138.4	58x118.4	68x118.4	68x128.4	68x138.4	58x118.4	68x118.4	68x128.4	68x138.4
Room height H [cm]	280				300				335			
Sliding section LDS	LDS – 9				LDS – 10				LDS – 11			
Distance of drop C [cm]	130				140				150			
Max height of the loft required with hatch H2 [cm]	130				155				184			
Max length of the loft required with hatch door closed D [cm]	129				155				185			
Max thickness of the ceiling [cm]					31.5							

*The LDK complete ladder consists of the top element and sliding section LDS, packed separately.

LDK loft ladders are available only in sizes shown above.

FOLDING METAL SECTION LOFT LADDER



Technical data	LMS/LMK	LML	LMF
Permissible loading [kg]	200		
Heat transmission coefficient U [W/m²K]	1.1		-
Fire-resistance EI2 [min]	-	-	120
Insulation thickness [cm]	3		8
Hatch thickness [cm]	3.6		8.2
Box height [cm]	14	31	16
Tread width [cm]	8	13	
Tread length [cm]	34	35	
Maximum room height [cm]	280/305		

Ladder LMS/LMK

Ceiling opening dimension [cm]	60x120	70x120	70x130	70x140	60x130	70x130	70x140
Box external dimension [cm]	58x118.4	68x118.4	68x128.4	68x138.4	58x128.4	68x128.4	68x138.4
Room height H [cm]	280				305		
Swing space R [cm]	157				175		
Distance after ladder unfolding C [cm]	118.5				127		
Folded ladder height K [cm]	25.5						

Ladder LML

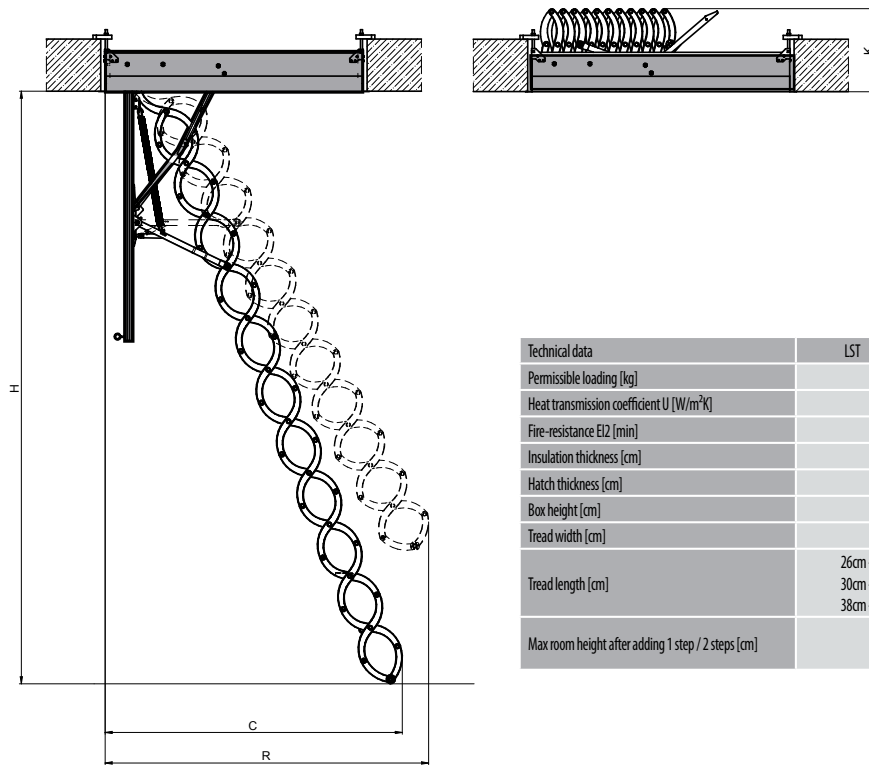
Ceiling opening dimension [cm]	60x120	70x120	70x130	70x140	60x130	70x130	70x140
Box external dimension [cm]	59.6x118.6	68.6x118.6	68.6x128.6	68.6x138.6	59.6x128.6	68.6x128.6	68.6x138.6
Room height H [cm]	280				305		
Swing space R [cm]	165				176		
Distance after ladder unfolding C [cm]	120				130		
Folded ladder height K [cm]	31						

Ladder LMF

Ceiling opening dimension [cm]	60x120	70x120	70x130	70x140	86x130	70x130	70x140	86x130
Box external dimension [cm]	59x118	68x118	68x128	68x138	84x128	68x128	68x138	84x128
Room height H [cm]	280					305		
Swing space R [cm]	165					176		
Distance after ladder unfolding C [cm]	120					130		
Folded ladder height K [cm]	34							

LMS, LMK, LML, LMF loft ladders are available only in sizes shown above.

SCISSORS LOFT LADDERS



Technical data	LST	LSZ	LSF
Permissible loading [kg]	200		
Heat transmission coefficient U [W/m²K]	1.1	-	-
Fire-resistance EI2 [min]	-	-	60
Insulation thickness [cm]	3		
Hatch thickness [cm]	3.6	-	5.4
Box height [cm]	18	-	14
Tread width [cm]	8		
Tread length [cm]	26cm -for ladder width 51cm 30cm -for ladder width 60cm 38cm -for ladder width 70cm	30cm -for ladder width 50cm 32cm -for ladder width 60cm 40cm -for ladder width 70cm	
Max room height after adding 1 step / 2 steps [cm]	300/330		320

Ladder LST/LSZ	LST / LSZ	LST	LST	LST / LSZ	LST / LSZ
Ceiling opening dimension [cm]	51x80	60x90	60x120	70x80	70x120
Box external dimension [cm]	51x79.4	59x89.4	59x119.4	69x79.4	69x119.4
Room height H for standard ladder length [cm]	250-280				
Swing space R [cm]	150				
Distance after ladder unfolding C [cm]	146-134				
Folded ladder height K [cm]	38.2				

Standard ladder length -1 tread		Standard ladder length +1 tread*		Standard ladder length +2 treads*		
230	240	290	300	310	320	330
140		160		170		
135-131		150-145		160	156	150
38.2						

tread	LSS-26	LSS-31	LSS-38
ladder width LST/LSZ [cm]	51	60	70

Ladder LSF							
Ceiling opening dimension [cm]	50x70	60x90	60x120	70x80	70x90	70x110	70x120
Box external dimension [cm]	49x68.5	59x88.5	59x118.5	69x78.5	69x88.5	69x108.5	69x118.5
Room height H for standard ladder length [cm]	280-300						
Swing space R [cm]	175-185						
Distance after ladder unfolding C [cm]	145-120						
Folded ladder height K [cm]	40						

standard ladder length - 2 tread	standard ladder length - 1 tread	standard ladder length + 1 tread*
240-250	260-270	310-320
165-160	165-170	200-210
100-135	140-165	130-140
40		

tread	LSS-30	LSS-32	LSS-40
ladder width LSF [cm]	50	60	70

*while ordering LSS tread- the ladder commercial size and type has to be provided
LST, LSZ, LSF loft ladders are available only in sizes shown above.

LOFT LADDERS OPTIONAL ACCESSORIES



Loft balustrade LXB-U

The loft balustrade protects the ceiling opening in the attic and makes it easier and safer to descend the ladder. The LXB-U is installed directly to the loft floor and can be applied to all types of loft ladders without cutting of slats.

	LXB-U
Dimensions [cm]	86x140
Balustrade height	110
Order processing time [working days]	8

Note: LXB-U available for all types of loft ladders.



Finishing lining slats LXL

The finishing lining is designed to finish the installation of the loft ladder and to cover any gaps in the ceiling which remain after the fitting process. The lining elements are made from solid pine wood in natural colour (LXL-P) and white (LXL-W) or in white PVC (LXL-PVC). For the PVC lining slat, the fixing with the ladder box does not require nails.

	LXL-P/-W	LXL-PVC
Dimensions [cm]	70x140*	60/70x120 and 86x140*
Slats thickness after installation [cm]	1	1
Slats width [cm]	3,5	3,3
Order processing time [working days]	8	

Note: LXL-P/-W are available for ladders LWS, LWK, LTK, LWT, LWF, LDK, LMS, LMK

Note: LXL-PVC are available in white** for LWS, LWK, LTK, LWT, LDK, LMS, LMK

*slats for smaller sizes have to be cut

**the slats colour may slightly differ from the colour of slats in angles and hatch



Stile ends LXS

Stile ends in brown finish the ladder and enhance its stability.

Order processing time [working days]	5
--------------------------------------	---

Note: available for LWS, LWK, LWZ, LWL, LWF, LTK, LWT, except for 4- section ladders.



Handrail LXH

The metal handrail makes ascending and descending the ladder easier, increasing user's comfort and safety. The LXH is screwed to the ladder top segment. The installation of the handrail on the left side makes the installation of unloading mechanism LXM impossible.

Type of ladders	LWS/LWK/LWZ/LTK/LWF	LWT	LDK	LMS/LMK
Handrail	LXH 50/17 lub LXH 75/17*	LXH 75/13	LXH 75/16	LXH 75/14
Order processing time [working days]	15			

*handrails LXH 50/17 are installed with ladders boxes lengths up to 100cm; for boxes lengths higher than 100cm, the LXH75/17 handrails are available.



Box extension LXN

Made of pine, the box extension matches perfectly with the box of the installed ladder and enhances the look of the ceiling opening. The standard box height is 10cm. Maximum non-standard LXN box extension height for LDK loft ladders is 16cm and 20cm for other ladder types.

Box extension size [cm]	51 x 80	55 x 111	60 x 90	60 x 94	60 x 100	60 x 111	60 x 120	60 x 130	60 x 140	70 x 80	70 x 94	70 x 100	70 x 111	70 x 120	70 x 130	70 x 140	86 x 130
Order processing time [working days]	20																

Note: available for ladders LWS, LWK, LWZ, LWL, LTK, LWT, LWF, LDK, LMS, LMK, LML, LMF, LST, LSZ

While ordering box extension - besides the size, the ladder type has to be provided



Upper hatch LXW

The upper hatch prevents attic dust from accumulating on the hatch and steps of the closed ladder. It improves the overall insulating parameters and air tightness of the ladder on which it is installed. The height of the upper hatch box is 20cm.

Upper hatch size [cm]	51 x 80	55 x 111	60 x 90	60 x 94	60 x 100	60 x 111	60 x 120	60 x 130	60 x 140	70 x 80	70 x 94	70 x 100	70 x 111	70 x 120	70 x 130	70 x 140	86 x 130
Order processing time [working days]	20																

Note: available for ladders LWS, LWK, LWZ, LWL, LTK, LWT, LWF, LST, LMS, LMK, LML, LMF, LSZ. For 4-section LWS, LWK and LST, LSZ ladders, it is necessary to install the LXN box extension prior to the LXW upper hatch.



Handle LXZ

The LXZ handle enables the closing of the LXW upper hatch from the loft side e.g. during maintenance works in the loft or roof.

Order processing time [working days]	8
--------------------------------------	---



Additional tread LXT

An additional tread makes climbing the ladder easier and increases comfort and safety of access to the loft space. It is recommended especially in situations where the upper hatch is installed on the loft ladder's box or ladders are installed in a thick ceiling. The LXT tread is installed between the last ladder's tread and the floor of the loft. Standard width of the LXT additional tread is 30cm.

Order processing time [working days]	3
--------------------------------------	---

Note: available for ladders LWS, LWK, LWL, LWF.



Installation brackets LXK

Installation brackets facilitate loft ladder installation in the ceiling. Adjusted to ceilings up to 43cm thick (for LTK and LWT ladders) and 35cm for all other ladder types.

Order processing time [working days]	3
--------------------------------------	---

Note: available for ladders LWS, LWK, LWL, LTK, LWF, LDK, LMS, LMK.



Ladder section unloading mechanism LXM

Assists folding and unfolding the ladder and makes the use of the ladder more comfortable. The hatch unloading mechanism LXM provides added assistance when using 3 section ladders in room heights between 260cm and 305cm.

Order processing time [working days]	10
--------------------------------------	----

Note : available only for 3-section ladders: LWS, LWK (for ladder with boxes- minimum 120cm long) and for LWZ, LTK, LWF.



Insulation kit LXD

The insulation kit provides tight insulation between the box of the mounted ladder and the opening in the ceiling, thereby allowing a "warm assembly" essential in energy-efficient and passive construction. The kit includes: air tight collar, insulation material (sheep wool blocks) and the air-permeable collar.

LXD dimensions [cm]	60/70x120 and 86 x 140*
Order processing time [working days]	-

Note: LXD kit is available for LWS, LWK, LWL, LTK, LWT, LDK, LMS, LMK.

*for loft ladder boxes sizes smaller than 86 x 140cm the standard size has to be adapted



The MSU Universal "Miller" staircase

The MSU Universal "Miller" staircase is made from solid spruce wood. The maximum ceiling height for use of the MSU must not exceed 290cm. The external staircase width is 65cm. As standard the staircase is provided without handrail. The MXH handrail can be obtained and be mounted on the left or right side of the stairs.

	MSU	MXH handrail
Order processing time [working days]	15	

The L-Shaped combination door DWK



The L-shaped door DWK is intended to be built into L-shaped walls. Superb thermo-insulating parameters ($U=1.1 \text{ W/m}^2\text{K}$) along with high air tightness keep heat-loss to a minimum. The L-shaped doors may be installed in right or left opening versions. As standard the door is provided with lining slats.

L-shaped doors commercial dimension [cm]	55x80	60x80	60x100	60x110	70x90	70x100	70x110
Order processing time [working days]	15						



www.fakro.com

Fakro reserves the right to change specifications and technical parameters of products without prior notice.