

## **FOLDING LOFT LADDERS**

enable safe and easy access to loft spaces without the need for costly and space-consuming staircases. FAKRO ladders satisfy all technical and safety requirements whilst maximising ease of use and comfort.





## **SPACE SAVINGS**

FAKRO loft ladders require little 'swing space'. The ladder is mounted on the hatch so that, when folded, its sections are neatly concealed inside the loft space.

## EASE OF OPERATION

The innovative spring-assisted opening mechanism (on some models ladder sections are also sprung) greatly eases ladder use. An opening rod is also supplied with every ladder.

## EASE OF INSTALLATION

enable some FAKRO loft ladders to be fitted by a single person. All can be installed with ease, however and can be adjusted to suit ceiling height.

Ladders come fully assembled

Ladders come fully assembled and do not require any additional pre-installation work.

## ADDITIONAL EOUIPMENT

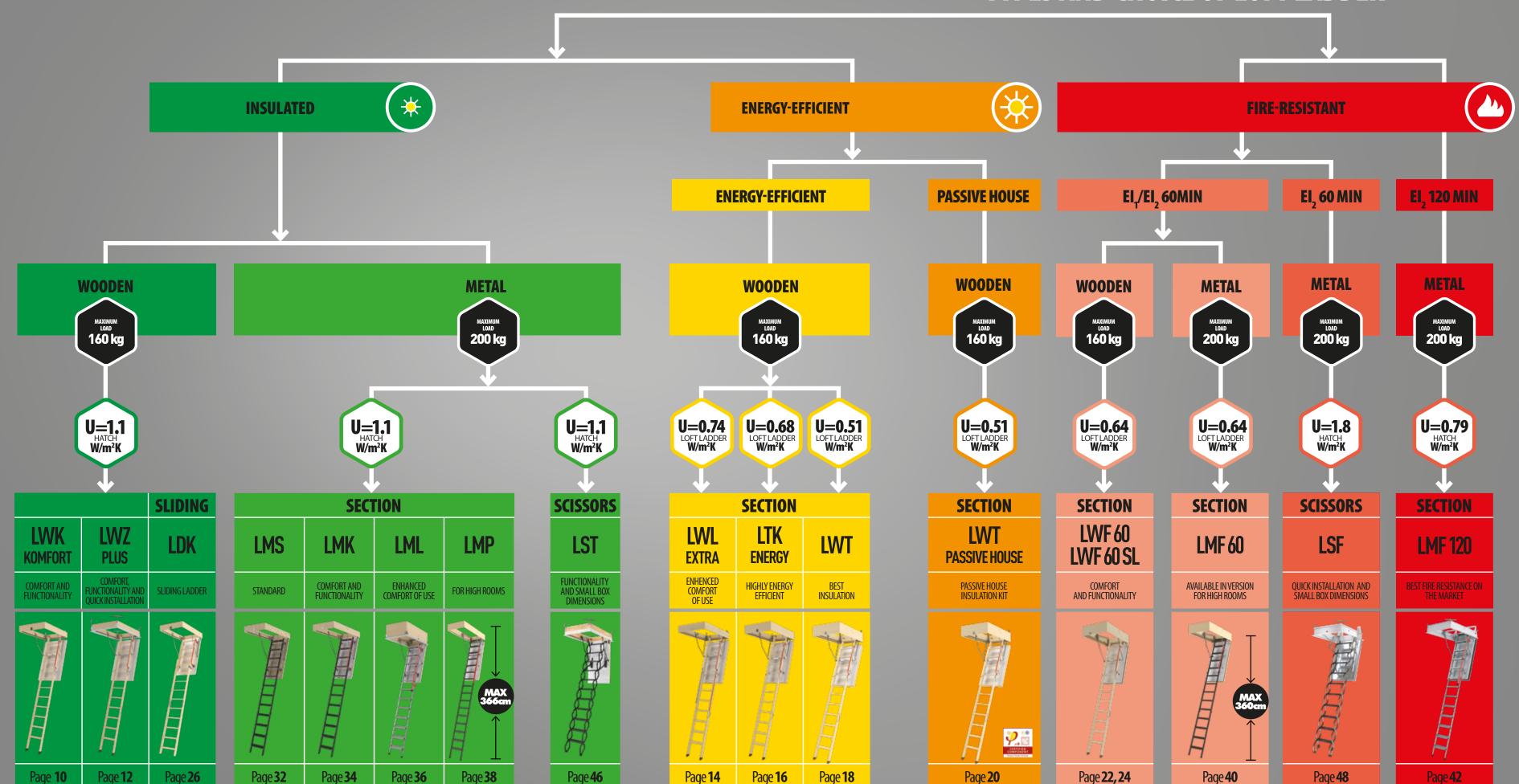
In order to maximise comfort and accelerate installation of the loft ladder, additional accessories are available.

### WARRANTY

FAKRO loft ladders come with a **3-year warranty.** 



## **TYPES AND CHOICE OF LOFT LADDER**





## **L-SHAPED COMBINATION DOORS**

# DWK





to unused space behind a wall or under stairs. Three models are available, the first and most basic model, the **DWK** insulating door having a 3.6 cm thick sash. For added thermal efficiency and airtightness the **DWT** provides a U-value of 0.6 and offers Class 4: EN 12207 performance. Where fire resistance is required, the **DWF** offers double-sided protection (fire classification El<sub>1</sub>45 EN 13501-2), as well as exceptional airtightness and thermal insulation.

## **DWT**



















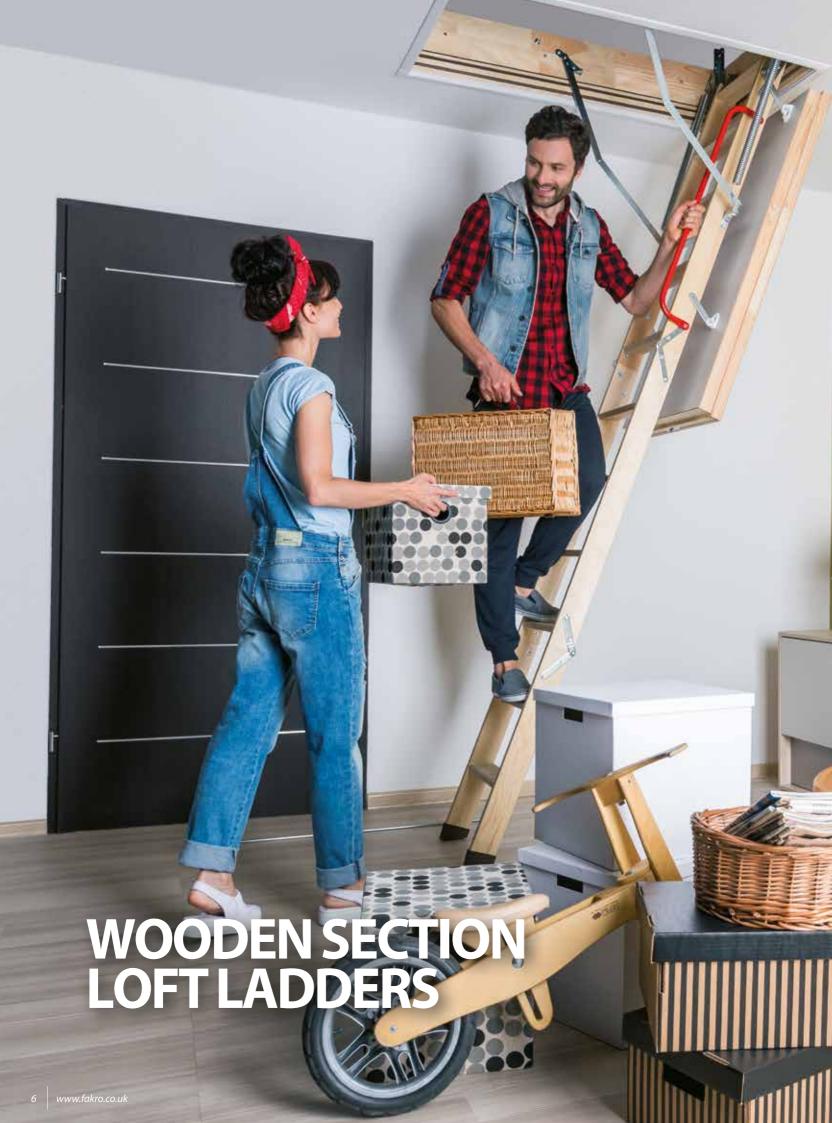








fully assembled, and ready for quick installation in the ceiling

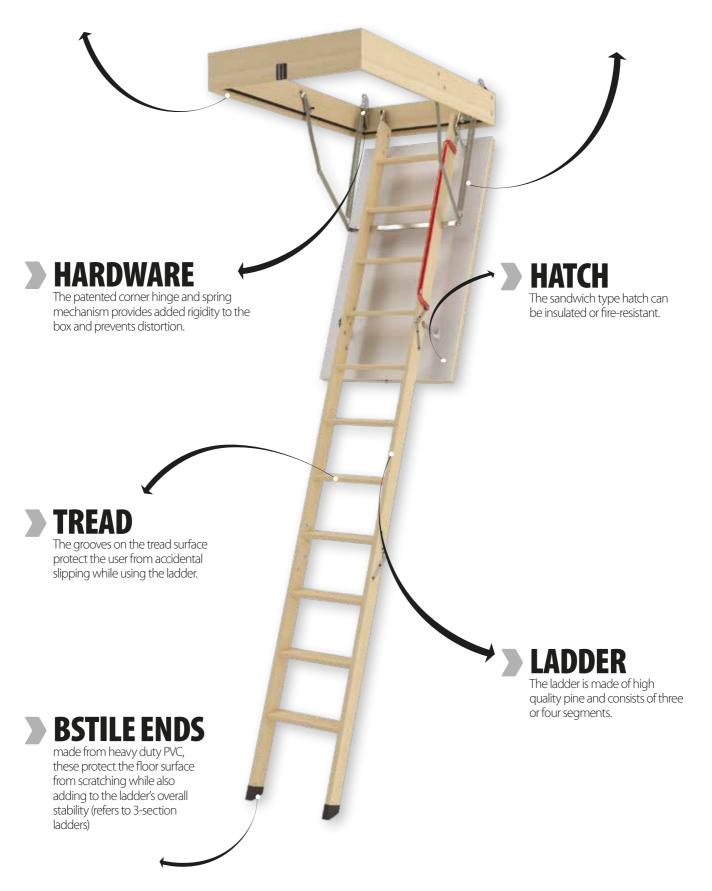


### **BOX**

The loft ladder has a pine or metal frame integrated within its box. It comes complete with linings which, in combination with a quick installation system gets the job done fast! The peripheral seal is used to ensure the ladder aperture remains airtight.

### HATCH MECHANISM

The used mechanism significantly simplifies ladder operation. The hatch after unlocking opens slowly without causing any hazard to the user. In addition, the mechanism maintains the hatch in fully open position, prevents it from spontaneous closing during unfolding and folding the ladder.





## WOODEN FOLDING SECTION LOFT LADDERS









The **LWK Komfort** ladder's innovative design ensures ease of use, a high insulation value and quick installation. It is equipped with an aesthetically pleasing, smooth white finish to the batch, and a bandrail as standard





stile ends (only in 3-section version)



white hatch



peripheral seal



handrail



non-slip treads set flush with ladder strings



possibility of installing additional accessories, pages 56-61

Technical specification:

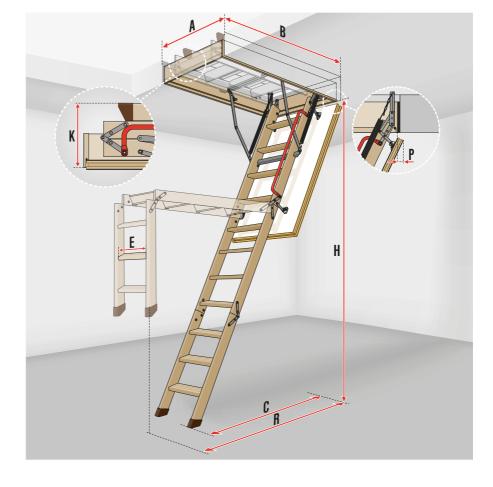
permissible load of 160 kg hatch heat transmission coefficient U = 1.1 W/m²K insulation thickness 3 cm hatch thickness 3.6 cm

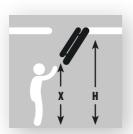
> fully assembled, and ready for quick installation in the ceiling





## LWK KOMFORT LADDER DIAGRAM







3-segment ladder can be equipped with the LXM ladder unloading mechanism (page 58), so that the ladder can be fully operated with a rod

#### LWK Komfort LOFT LADDER DIMENSIONS

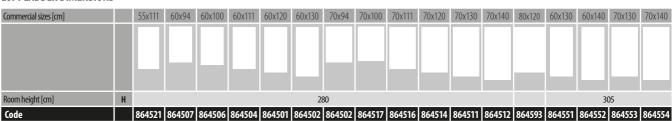
Ceiling opening dimensions [cm]	AxB	55x111	60x94	60x100	60x111	60x120	60x130	70x94	70x100	70x111	70x120	70x130	70x140	80x120	60x130	60x140	70x130	70x140
Maximum room height [cm]	Н							280								305		
Minimum room height [cm]*	H <sub>min.</sub>	232	2.	50		232			50			232			246			
Height to be reached to operate the ladder [cm]	X	215	24	40		215			240			215			225 🚺			
Box external dimensions [cm]		53 x 109.4	58x92.4	58 x 98.4	58 x 109.4	58 x 118.4	58 x 128.4	68 x 92.4	68 x 98.4	68 x 109.4	68 x 118.4	68 x 128.4	68 x 138.4	78 x 118,4	58 x 128.4	58 x 138.4	68 x 128.4	68 x 138.4
Internal box dimensions [cm]		49 x 105	54x88	54x94	54 x 105	54x114	54 x 124	64x88	64x94	64 x 105	64x114	64 x 124	64x134	74 x 114	54x124	54x134	64 x 124	64 x 134
Folded ladder height [cm]	K	27	3	5		27		3	5		27							
Swing space [cm]	R	153	1.	28	153	1:	56	1.	28	153		15	56			17	75	
Distance after ladder unfolding [cm]	C	113	1	14	113	1.	20	1	14	113		12	20			13	35	
Hatch retraction after opening [cm]	P									4								
Box height [cm]										14								
Number of segments		3	4	4		3		4	4					3				

#### **LADDER PARAMETERS**

Tread length [cm]	E	30	34
Tread width [cm]			8
Distance between treads [cm]			25
Tread thickness [cm]			2

<sup>\*</sup> for rooms lower than the maximum standard height H please adjust the length of the ladder according to the assembly instructions

#### LOFT LADDER DIMENSIONS



For LWK Komfort non-standard sizes page 24



## **WOODEN SECTION LOFT LADDERS**













The **LWZ Plus** loft ladder combines the advantages of the latest design and quick fitting.



stile ends



white hatch



architrave



peripheral seal



handrail



non-slip treads



system of quick installation in the ceiling



possibility of installing additional accessories pages 56-61



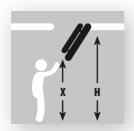
permissible load of 160 kg hatch heat transmission coefficient  $U = 1.1 \text{ W/m}^2\text{K}$ insulation thickness 3 cm hatch thickness 3.6 cm





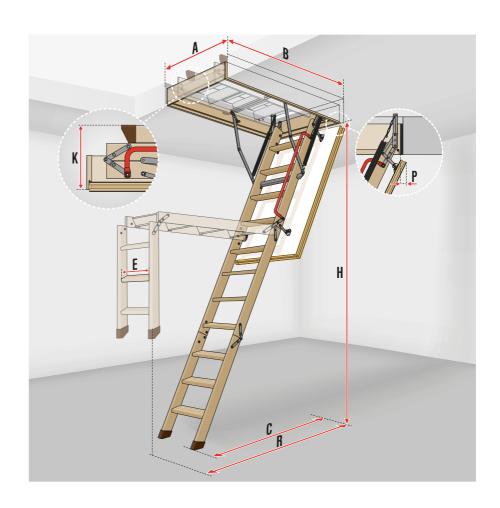


## LWZ PLUS LADDER DIAGRAM





3-segment ladder can be equipped with the LXM ladder unloading mechanism (page 60), so that the ladder can be fully operated with a rod



### LWZ Plus LOFT LADDER DIMENSIONS

Ceiling opening dimensions [cm]	AxB	60x120	70x120	70x140				
Maximum room height [cm]	Н		280					
Minimum room height [cm]*	H <sub>min.</sub>		232					
Height to be reached to operate the ladder [cm]	X		215	Ð				
Box external dimensions [cm]		58.8 x 118.8	68.8 x 118.8	68.8 x 138.8				
Box external dimensions with architrave lininings		62.9 x 122.9	72.9x122.9	72.9x142.9				
Internal box dimensions [cm]		54 x 114	64x114	64 x 134				
Folded ladder height [cm]	K		27					
Swing space [cm]	R		156					
Distance after ladder unfolding [cm]	C		120					
Hatch retraction after opening [cm]	P		4					
Box height [cm]			14					
LADDER PARAMETERS								
Tread length [cm]	E		34					
Tread width [cm]			8					
Distance between treads [cm]			25					
Tread thickness [cm]			2					

<sup>\*</sup> for rooms lower than the maximum standard height H please adjust the length of the ladder according to the assembly instructions

#### LOFT LADDER DIMENSIONS

Room height [cm]	Н		280 <b>865711</b>	
Commercial sizes [cm]		60 x 120	70 x 120	70 x 140

## **WOODEN SECTION LOFT LADDERS**









stile ends



white hatch



two seals



two handrails



non-slip treads set flush with ladder strings



ladder unloading mechanism



possibility of installing additional accessories pages 56-61



Technical specification:

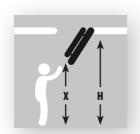
permissible load 160 kg loft ladder heat transmission coefficient U=0.74 W/m<sup>2</sup>K insulation thickness 5cm hatch thickness 5.6







## **LWL EXTRA LADDER DIAGRAM**





The LWL Extra ladders are as standard equipped with ladder unloading mechanism, so they can be fully operated with the opening rod.



### **LWL EXTRA LOFT LADDER DIMENSIONS**

Ceiling opening dimensions [cm]	AxB	60x120	70x120	70x130	70x140	60x130	70x130	70x140		
Maximum room height [cm]	Н		2	80			305			
Minimum room height [cm]*	H <sub>min.</sub>		2	60			280			
Height to be reached to operate the ladder [cm]	X	215 🚺 225 🚺								
Box external dimensions [cm]		58 x 118.4	68 x 118.4	68 x 128.4	68 x 138.4	58 x 128.4	68 x 128.4	68 x 138.4		
Internal box dimensions [cm]		54x114	64x114	64x124	64x134	54x124	64 x 124	64 x 134		
Folded ladder height [cm]	K				30					
Hatch retraction after opening [cm]	R		1.	56			175			
Distance after ladder unfolding [cm]	C		1.	20			135			
Box height [cm]					14					
Hatch retraction after opening [cm]					6					
LADDER PARAMETERS										
T 11 d.f. 1		20		24		20 24				

Tread length [cm]	E	30	34	30	34
Tread width [cm]			8		
Distance between treads [cm]			25		
Tread thickness [cm]			2		

<sup>\*</sup> for rooms lower than the maximum standard height H please adjust the length of the ladder according to the assembly instructions

Commercial sizes [cm]		60x120	70x120	70x130	70x140	60x130	70x130	70x140
			ш					
Room height [cm]	Н		28	80			305	
Code		867901	867911	867912	867913	867951	867953	867954



## **WOODEN SECTION LOFT LADDERS**





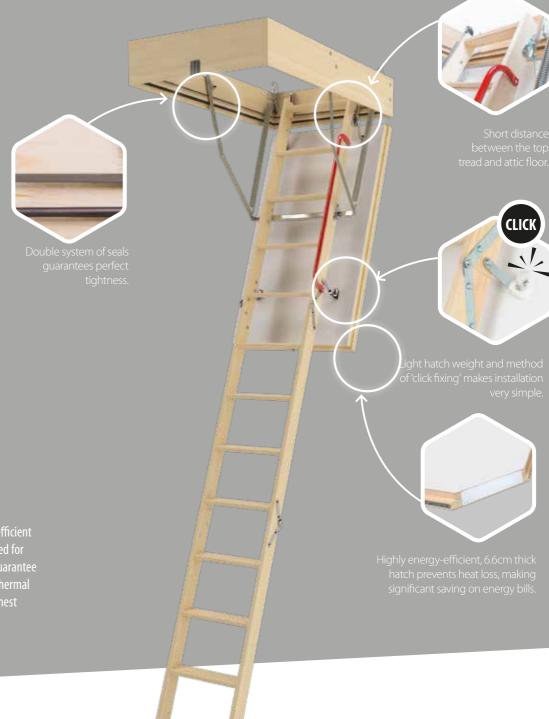








The **LTK Energy** is highly energy efficient new generation loft ladder intended for energy-efficient buildings. They guarantee a high level of comfort, excellent thermal insulation parameters and the highest Class 4 tightness.





stile ends (only in 3-section version)



white hatch



two seals



handrail



non-slip treads set flush with ladder strings



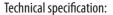
easy installation



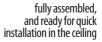
possibility of installing additional accessories pages 56-61



lacquer ladder



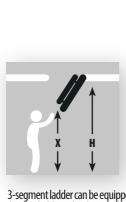
maximum load of 160 kg loft ladder heat transmission coefficient U = 0.68 W/m²K insulation thickness 6 cm hatch thickness 6.6 cm

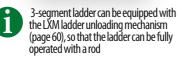


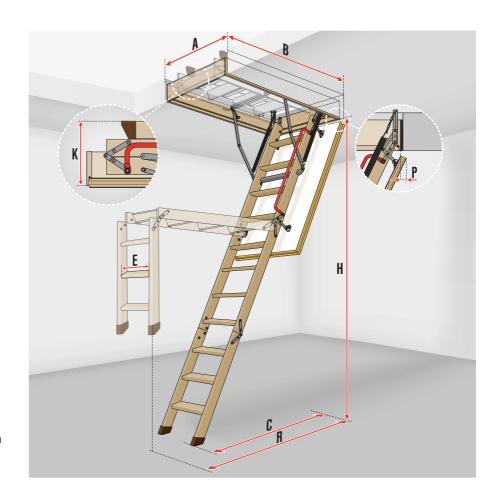




## LTK ENERGY LADDER DIAGRAM







### LTK ENERGY LOFT LADDER DIMENSIONS

Ceiling opening dimensions [cm]	AxB	55x100	60x100	70x100	60x120	70x120	70x130	70x140	60x130	70x130	70x140	
Maximum room height [cm]	Н				280	280				305		
Minimum room height [cm]*	H <sub>min.</sub>		253			235				243		
Height to be reached to operate the ladder [cm]	X		230			210 🚺				230 🚺		
Box external dimensions [cm]		53x98.4	58x98.4	68x98.4	58 x 118.4	68 x 118.4	68 x 128.4	68 x 138.4	58 x 128.4	68 x 128.4	68 x 138.4	
Internal box dimensions [cm]		49x94	54x94	64x94	54 x 114	64x114	64 x 124	64 x 134	54 x 124	64 x 124	64 x 134	
Folded ladder height [cm]	K		42									
Swing space [cm]	R		136		164				178			
Distance after ladder unfolding [cm]	C		123		129				139			
Hatch retraction after opening [cm]	P						3					
Box height [cm]						1	8					
Number of segments			4		3							
LADDER PARAMETERS												
Tread length [cm]	E	30			34							

 $<sup>{\</sup>color{blue}*} \ for rooms \ lower than \ the \ maximum \ standard \ height \ H \ please \ adjust \ the \ length \ of \ the \ ladder \ according \ to \ the \ assembly \ instructions$ 

### LOFT LADDER

Tread width [cm]

Distance between treads [cm]

Commercial sizes [cm]		55x100	60x100	70x100	60x120	70x120	70x130	70x140	60x130	70x130	70x140
D h .: . h .: [ ]					200					205	
Room height [cm]	Н				280					305	
Code		864720	864706	864716	864701	864711	864712	864713	864751	864753	864754

25



## **WOODEN SECTION LOFT LADDERS**













The highly efficient **LWT** loft ladder is recommended for use in energy-efficient buildings. Its excellent level of insulation significantly reduces heat loss and energy bills.





Short distance between the top tread and attic floor.



its special 8cm thick natch is filled wit polystyrene insulation to provide an exceller barrier and reduce heat los



stile ends (only in 3-section version)



white hatch



three seals



handrail



non-slip treads set flush with ladder strings



easy installation



possibility of installing additional accessories pages 56-61



lacquer ladder

Technical specification:

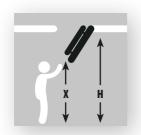
permissible load of 160 kg loft ladder heat transmission coefficient U = 0.51 W/m²K insulation thickness 7.4 cm hatch thickness 8 cm

> fully assembled, and ready for quick installation in the ceiling





## LWT LOFT LADDER DIAGRAM





3-segment ladder can be equipped with the LXM ladder unloading mechanism (page 60), so that the ladder can be fully operated with a rod



### **LWT LOFT LADDER DIMENSIONS**

Ceiling opening dimensions [cm]	AxB	55x100	60x100	70x100	60x120	70x120	70x130	70x140	60x130	70x130	70x140		
Maximum room height [cm]	Н				280				305				
Minimum room height [cm]*	H <sub>min.</sub>		253			2	34		242				
Height to be reached to operate the ladder [cm]	X		230 210 🚺 2							230	30		
Box external dimensions [cm]		53 x 98.4	58 x 98.4	68 x 98.4	58 x 118.4	68 x 118.4	68 x 128.4	68 x 138.4	58 x 128.4	68 x 128.4	68 x 138.4		
Internal box dimensions [cm]		49x94	54x94	64x94	54x114	64 x 114	64 x 124	64 x 134	54 x 124	64 x 124	64 x 134		
Folded ladder height [cm]	K		43.5			3	16	36					
Swing space [cm]	R		136			1	64		178				
Distance after ladder unfolding [cm]	C		123			1.	30	137					
Hatch retraction after opening [cm]	P					4	.5						
Box height [cm]					22								
Number of segments			4				3						

### LADDER PARAMETERS

Tread length [cm]	E	30	34
Tread width [cm]			8
Distance between treads [cm]			25
Tread thickness [cm]			2

 $<sup>\</sup>hbox{* for rooms lower than the maximum standard height H please adjust the length of the ladder according to the assembly instructions}$ 

Commercial sizes [cm]		55x100	60x100	70x100	60x120	70x120	70x130	70x140	60x130	70x130	70x140
							ш			ш	
Room height [cm]	Н				280					305	
Code		863120	863106	863116	863101	863111	863112	863113	863151	863153	863154



LOFT LADDERS WITH WOODEN FOLDING SECTION





U**<b>:0,51** NEW The **LWT Passive House** loft ladder is a technically





stile ends (only in 3-section version)

of such energy-efficient construction standards.

ceiling to guarantee a perfect seal and insulation without



white hatch



three seals



handrail



non-slip treads set flush with ladder strings



PASSIVE HOUSE Insulation kit



easy installation



possibility of installing additional accessories pages 56-61



lacquer ladder



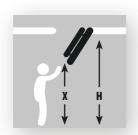
permissible load of 160 kg loft ladder heat transmission coefficient U = 0.51 W/m<sup>2</sup>K insulation thickness 7.4 cm hatch thickness 8 cm







## LWT PASSIVE HOUSE LOFT LADDER DIAGRAM





3-segment ladder can be equipped with the LXM ladder unloading mechanism (page 60), so that the ladder can be fully operated with a rod



### LWT PASSIVE HOUSE LOFT LADDER DIMENSIONS

Ceiling opening dimensions [cm]	AxB	62x122	72x122	72x142			
Maximum room height [cm]	Н	280					
Minimum room height [cm]*	H <sub>min.</sub>		234				
Height to be reached to open the ladder [cm]	X		210				
Box external dimensions [cm]		58 x 118.4	68 x 118.4	68 x 138.4			
Internal box dimensions [cm]		54 x 114	64x114	64 x 134			
Folded ladder height [cm]	K	36					
Swing space [cm]	R	164					
Distance after ladder unfolding [cm]	C		127				
Hatch retraction after opening [cm]	P		4.5				
Box height [cm]			22				
LADDER PARAMETERS							
Tread length [cm]	E	34					
Tread width [cm]		8					
Distance between treads [cm]		25					
Tread thickness [cm]		2					

<sup>\*</sup> for rooms lower than the maximum standard height H please adjust the length of the ladder according to the assembly instructions

### **LOFT LADDER**

Commercial sizes [cm]		62x122	72x122	72x142
Room height [cm]	н		280	
noonineight [cm]	-			
Code		8665AE	8665AF	8665AH

Ladders are available only in sizes shown above.



## LOFT LADDERS WITH WOODEN FOLDING SECTION











The LWF 60, a new generation of fire resistant loft ladders space where the loft ladder was installed. Fire resistance







\* manufacturer's internal research



stile ends (only in 3-section version)



fire resistant hatch on one side



three seals



handrail



non-slip treads set flush with ladder strings



possibility of installing additional accessories pages 56-61



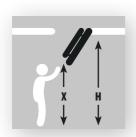
maximum load of 160 kg loft ladder heat transmission coefficient  $U = 0.64 \text{ W/m}^2 \text{ K}^2$ Fire resistance class El<sub>1</sub>/El<sub>2</sub>=60minutes insulation thickness 7.9 cm hatch thickness 8.5 cm

> fully assembled, and ready for quick installation in the ceiling



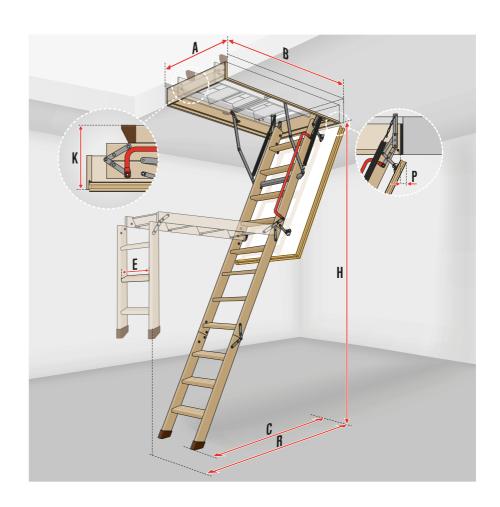


## LWF 60 LOFT LADDER DIAGRAM





3-segment ladder can be equipped with the LXM ladder unloading mechanism (page 60), so that the ladder can be fully operated with a rod



### **LWF 60 LOFT LADDER DIMENSIONS**

Ceiling opening dimensions [cm]	AxB	55 x 100	55 x 120	60 x 100	70 x 100	60x120	70x120	70x130	70x140	86x130	55 x 130	70x130	70x140	86x130	
Maximum room height [cm]	Н											305			
Minimum room height [cm]*	H <sub>min.</sub>		2.5	53				234				24	12		
Height to be reached to operate the ladder [cm]	X		235				210				230			Ð	
Box external dimensions [cm]		53 x 98	53x118	58x98	68 x 98	58 x 118	68 x 118	68 x 128	68x138	84x128	53x128	68x128	68 x 138	84 x 128	
Internal box dimensions [cm]		49x94	49x94 49x114 54x94 64x94				64x114	64 x 124	64 x 134	80 x 124	49x124	64 x 124	64 x 134	80 x 124	
Folded ladder height [cm]	K		4	6		38									
Swing space [cm]	R		13	38		164						1.	78		
Distance after ladder unfolding [cm]	C		12	26				129			139				
Hatch retraction after opening [cm]	P							5							
Box height [cm]								22.5							
Number of segments			4				3								
LADDER PARAMETERS															

Tread length [cm]	E	30	34	30	34
Tread width [cm]			8		
Distance between treads [cm]			25		
Tread thickness [cm]			2		

 $<sup>\</sup>hbox{* for rooms lower than the maximum standard height H please adjust the length of the ladder according to the assembly instructions}$ 

Commercial sizes [cm]		55 x 100	55 x 120	60x100	70 x 100	60x120	70x120	70x130	70x140	86x130	55 x 130	70x130	70x140	86x130
						ш					ш			
			ш			ш		ш	ш		ш	ш	Ш	
D b.:.b.[]						200						24	nc	
Room height [cm]	Н					280						3(	J5	
Code		869G20	869G22	869G06	869G16	869G01	869G11	869G12	869G13	869G96	869G57	869G53	869G54	869G97



## LOFT LADDERS WITH WOODEN FOLDING SECTION



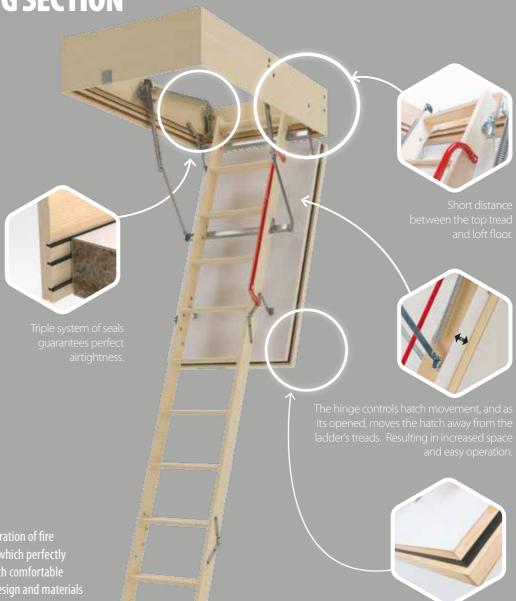








The **LWF 60 SL** (secutity lock), a new generation of fire resistant loft ladders with wooden ladder which perfectly combines a high level of fire protection with comfortable and safe access to the loft. Special hatch design and materials used provide a 60-minute protection against fire penetration from the space where the loft ladder was installed. Fire resistance class El<sub>1</sub> 60/El<sub>2</sub> 60, classification according to EN 13501-2.



Insulated and finished in white on both sides, the hatch is also equipped with an expandable seal. When this seal is exposed to high temperatures, it expands and prevents fire from breaching the hatch.

\* manufacturer's internal research



stile ends (only in 3-section version



fire resistant hatch on one side



three seals



handrail



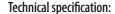
non-slip treads set flush with ladder strings



possibility of installing additional accessories pages 56-61



key lock



maximum load of 160 kg loft ladder heat transmission coefficient U = 0.64 W/m²K° Fire resistance class El\_/El\_=60minutes insulation thickness 7.9 cm hatch thickness 8.5 cm

> fully assembled, and ready for quick installation in the ceiling

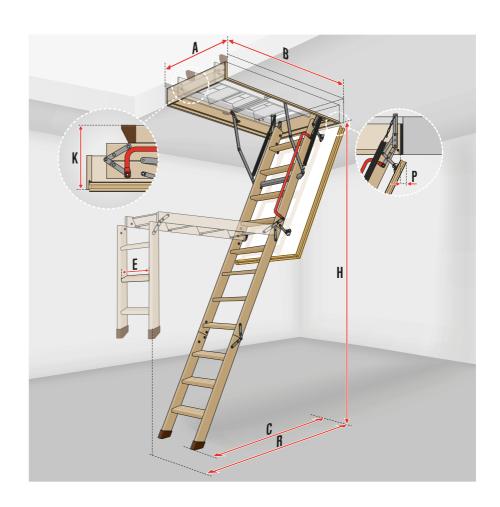




## LWF 60 SL **LOFT LADDER DIAGRAM**



3-segment ladder can be equipped with the LXM ladder unloading mechanism (page 60), so that the ladder can be fully operated with a rod



### **LWF 60 SL LOFT LADDER DIMENSIONS**

Ceiling opening dimensions [cm]	AxB	55 x 100	60 x 100	70 x 100	60x120	70x120	70x130	70x140	86x130	70x130	70x140	86x130
Maximum room height [cm]	Н				2	80						
Minimum room height [cm]*	H <sub>min.</sub>		253				234					
Height to be reached to operate the ladder [cm]	X		235	1			210	1				
Box external dimensions [cm]		53 x 98	58 x 98	68 x 98	58 x 118	68 x 118	68 x 128	68x138	84x128	68x128	68 x 138	84 x 128
Internal box dimensions [cm]		49 x 94	54x94	64x94	54x114	64 x 114	64x124	64 x 134	80 x 124	64 x 124	64x134	80 x 124
Folded ladder height [cm]	K		46					3	8			
Swing space [cm]	R		138				164					
Distance after ladder unfolding [cm]	C		126				129					
Hatch retraction after opening [cm]	P						5					
Box height [cm]			22.5									
Number of segments			4									
LADDER PARAMETERS												

### **LADDER PARAMETERS**

Tread length [cm]	E	30	34	34
Tread width [cm]			8	
Distance between treads [cm]			25	
Tread thickness [cm]			2	

<sup>\*</sup> for rooms lower than the maximum standard height H please adjust the length of the ladder according to the assembly instructions

Commercial sizes [cm]		55 x 100	60 x 100	70 x 100	60x120	70x120	70x130	70x140	86x130	70x130	70x140	86x130
					ш	ш						
Room height [cm]	Н				2	80						
Code		869H20	869H06	869H16	869H01	869H11	869H12	869H13	869H96	869H53	869H54	869H97



## **SLIDING SECTION LOFT LADDERS**

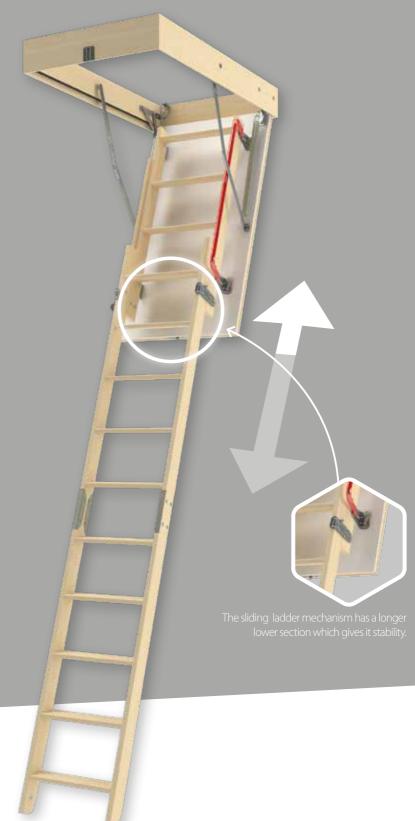


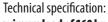






The **LDK** loft ladder is a 2-section, sliding loft ladder. deliver LDK loft ladders in reduced packaging dimensions





maximum load of 160 kg hatch heat transmission coefficient  $U = 1.1 \text{ W/m}^2\text{K}$ insulation thickness 3 cm hatch thickness 3.6 cm



white hatch



peripheral seal



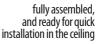
handrail



non-slip treads with additional depth



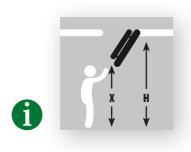
possibility of installing additional accessories pages 56-61

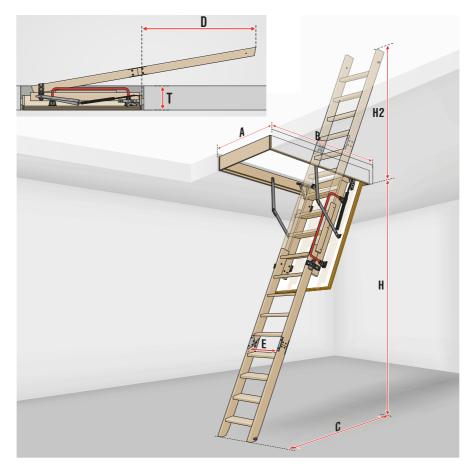






## **LDK LOFT LADDER DIAGRAM**





The LDK ladder with new LDS split section

For the room height up to [cm]		205	305
Distance of drop [cm]	C	105	140
Max height of the loft required [cm]	H2	55	150
Max length of the loft required with hatch door closed [cm]	D	55	150
Height to be reached to operate	v	120	220

<sup>\*</sup> for rooms lower than the maximum standard height H please adjust the length of the ladder according to the assembly instructions

### LDK LADDER DIMENSIONS

Ceiling opening dimensions [cm]	AxB	60x120	70x120	70x130	70x140				
Sliding section LDS			Ц	OS					
Maximum room height [cm]	Н	305							
Minimum room height [cm]*	H <sub>min.</sub>		20	05					
Box external dimensions [cm]	WxL	58 x 118,4	68 x 118,4	68 x 128,4	68 x 138,4				
Internal dimensions of the box [cm]	MxN	54x114	64x114	64x124	64 x 134				
Max thickness of the ceiling [cm]			3	5					
Box height [cm]			1	4					
Tread length [cm]	E		3	4					
Tread width [cm]	S		8	3					
Distance between treads [cm]	G		2	5					
Tread thickness [cm]	Z		;	2					

### **LOFT LADDER**

Commercial sizes [cm]		60x120	70x120	70x130	70x140
Room height [cm]	Н		30	)5	
Code LDK*		861001	861011	861012	861013
Code LDS*		66134	66134	66134	66134

 $<sup>\</sup>hbox{$^*$ The LDK complete ladder consists of the top element and LDS sliding split section, packed separately.}$ 

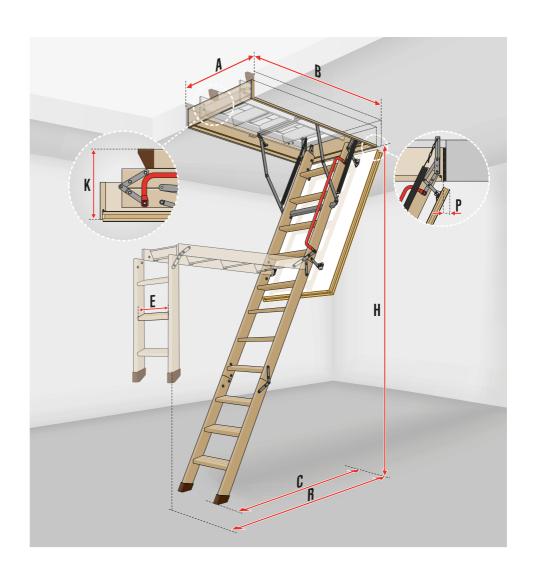
## **NON-STANDARD LOFT LADDER SIZES**

Where installation of a standard FAKRO loft ladder is not possible, bespoke timber folding sections of the LWK KOMFORT can be made.



When ordering the **LWK** Komfort loft ladder in nonstandard sizes the actual dimensions of the ceiling opening ('A' and 'B') and the room height 'H' have to be provided. The actual size of the loft ladder box is reduced (for installation reasons) by 2 cm in width and 1.6 cm in length, e.g. for the opening dimensions 54 x 94cm, those of the ladder would be 52 x 92.4cm. When ordering please take into account the swing space needed when unfolding (swing space 'R'), the distance once the ladder is unfolded (distance 'C') and hatch retraction after it is opened (distnce 'P').

**LWK Komfort** loft ladders are equipped with a hatch which is finished in white on both sides (three section ladders only), and, with the exception of ladders for a 54cm hatch width, a handrail. The height of the loft ladder box is 14cm though to provide a neat finish with deeper ceilings an LXN box extension can be installed (see page 58).



### **LOFT LADDER COMMERCIAL SIZES**

Ceiling opening width [cm]	Ceiling opening length [cm]	Room height [cm]	Swing space (measured from the rear edge of the box) [cm]	Distance after ladder unfolding (measured from the rear edge of the box) [cm]	Hatch retraction after opening [cm]	Number of segments after opening
А	В	Н	R	C	Р	
	94-140	200 – 280	115-155	89-120	4	3 or 4 segments*
54 – 86	120 – 129	280 – 305	140	110-119	4	4 segments
34-00	130 – 140	280 – 305	155-175	120-135	4	3 segments
	140	305 – 335	175-184	135-146	4	3 segments

 $<sup>\</sup>ensuremath{^*}$  - Number of ladder's segments depends on the opening length configuration and room height.

### TREAD LENGTH:

### 3-segment ladder

Ceiling opening width A [cm]	54≤ A <58	58≤A
Tread length E [cm]	30	34

### 4-segment ladder

Ceiling opening width A [cm]	54≤ A<56	56≤A<60	60≤A		
Tread length E [cm]	28	30	34		



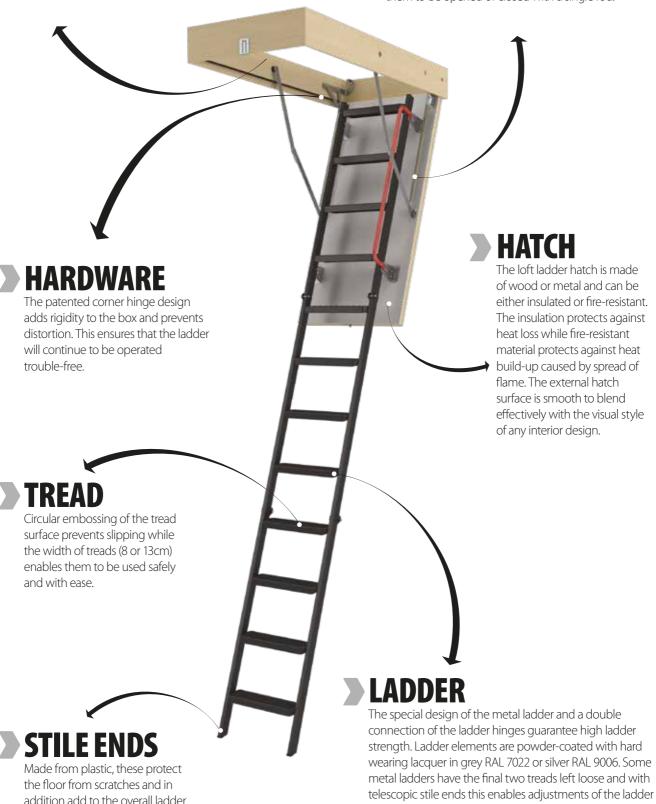
### **BOX**

stability.

The ladder box can be of wood, metal or a combination of a wooden box / metal frame. It has been designed to enable architrave to be installed with ease if the ready-fitted option is not chosen. Peripheral single or double seals provide a good standard of airtightness.

## HATCH UNFOLDING MECHANISM

The hatch opening mechanism enables it to be fully or partly open positions to ensure folding and unfolding are done in safety. LML and LMF loft ladders also have a hidden mechanism in the handrail which in conjunction with that of the hatch opening enables them to be opened or closed with a single rod.



length to be made without the need for cutting.



## **METAL FOLDING SECTION LOFT LADDERS**

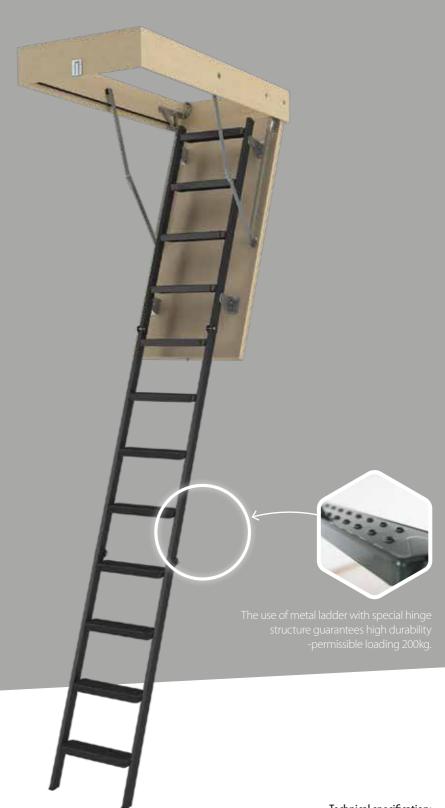








The **LMS** is a 3-section loft ladder in which the hatch and box are made of pine. The metal ladder is powder-coated in RAL 7022 while the insulated hatch is finished in heige







peripheral seal



Technical specification:

permissible loading of 200 kg hatch heat transmission coefficient U = 1.1 W/m²K insulation thickness 3 cm hatch thickness 3.6 cm



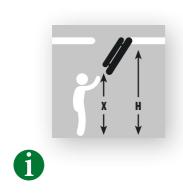




## LMS LOFT LADDER **DIAGRAM**



B



### LMS LOFT LADDER DIMENSIONS

Ceiling opening dimensions [cm]	AxB	60x120	70x120
Maximum room height [cm]	Н	28	30
Minimum room height [cm]*	H <sub>min.</sub>	22	20
Height to be reached to operate the ladder [cm]	Х	22	20
Box external dimensions [cm]		58 x 118.4	68 x 118.4
Internal box dimensions [cm]		54x114	64x114
Folded ladder height [cm]	K	25	i.5
Swing space [cm]	R	15	57
Distance after ladder unfolding [cm]	C	118	8.5
Box height [cm]		1	4
LADDER PARAMETERS			
T II (I f 1		2	

### Tread length [cm] Tread width [cm] Distance between treads [cm]

### LOFT LADDER

Commercial sizes [cm]		60x120	70x120
		ш	
Room height [cm]	Н	28	30
Code		861201	861211

<sup>\*</sup> for rooms lower than the maximum standard height H please adjust the length of the ladder according to the assembly instructions



## **METAL FOLDING SECTION LOFT LADDERS**

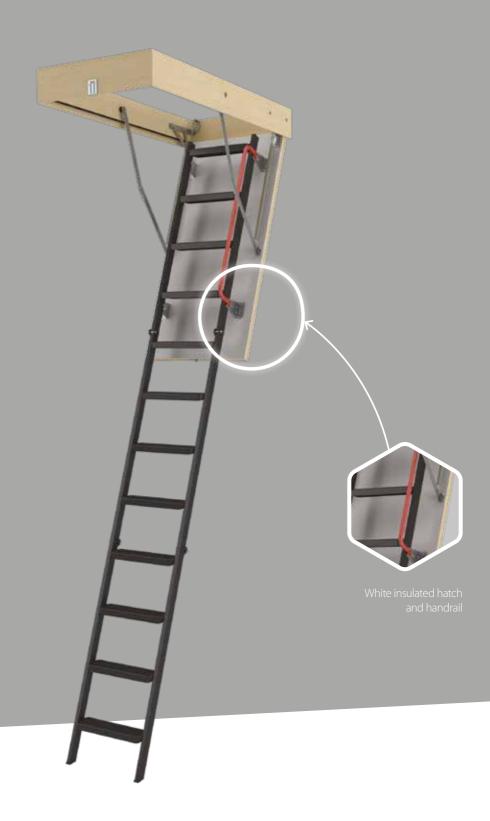








Unlike the LMS the **LMK** loft ladder













Technical specification:

permissible loading of 200 kg hatch heat transmission coefficient U = 1.1 W /m²K insulation thickness 3 cm hatch thickness 3.6 cm







## LMK LOFT LADDER DIAGRAM





### LMK LOFT LADDER DIMENSIONS

Ceiling opening dimensions [cm]	AxB	60x120	70x120	70x130	70x140	60x130	70x130	70x140		
Maximum room height [cm]	Н		28	80			305			
Minimum room height [cm]*	H <sub>min.</sub>		22	20			245			
Height to be reached to operate the ladder [cm]	X		22	20			245			
Box external dimensions [cm]		58 x 118.4	68 x 118.4	68 x 128.4	68 x 138.4	68 x 128.4	68 x 128.4	68 x 138.4		
Internal box dimensions [cm]		54 x 114	64 x 114	64 x 124	64x134	54x124	64 x 124	64 x 134		
Folded ladder height [cm]	K				25.5					
Swing space [cm]	R		15	57			175			
Distance after ladder unfolding [cm]	C		11	8.5		127				
Box height [cm]		14								
I ADDER PARAMETERS										

### LADDER PARAMETERS

Tread length [cm]	E	34
Tread width [cm]		8
Distance between treads [cm]		25

<sup>\*</sup> for rooms lower than the maximum standard height H please adjust the length of the ladder according to the assembly instructions

### LOFT LADDER

Commercial sizes [cm]		60x120	70x120	70x130	70x140	60x130	70x130	70x140
		ш	ш			ш	ш	
Room height [cm]	Н		28	80			305	
Code		861401	861411	861412	861413	861451	861453	861454



## **METAL FOLDING SECTION LOFT LADDERS**







The **LML** folding section metal loft ladder has been designed to provide the highest standard of ease and convenience while offering simple assembly and height adjustment.





telescopic stile ends



white hatch



finishing lining slats



peripheral seal



ladder unloading mechanism built in handrail



system of quick installation in the ceiling



non-slip treads, 13cm in width



possibility of installing additional accessories pages 56-61 Technical specification:

permissible loading of 200 kg hatch heat transmission coefficient U = 1.1 W/m²K insulation thickness 3 cm hatch thickness 3.6 cm

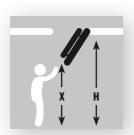
> fully assembled, and ready for quick installation in the ceiling





## LML LUX LOFT LADDER DIAGRAM







The LML ladders as standard are equipped with ladder unloading mechanism, so they can be fully operated with the opening rod (hatch opening and closing, ladder unfolding).

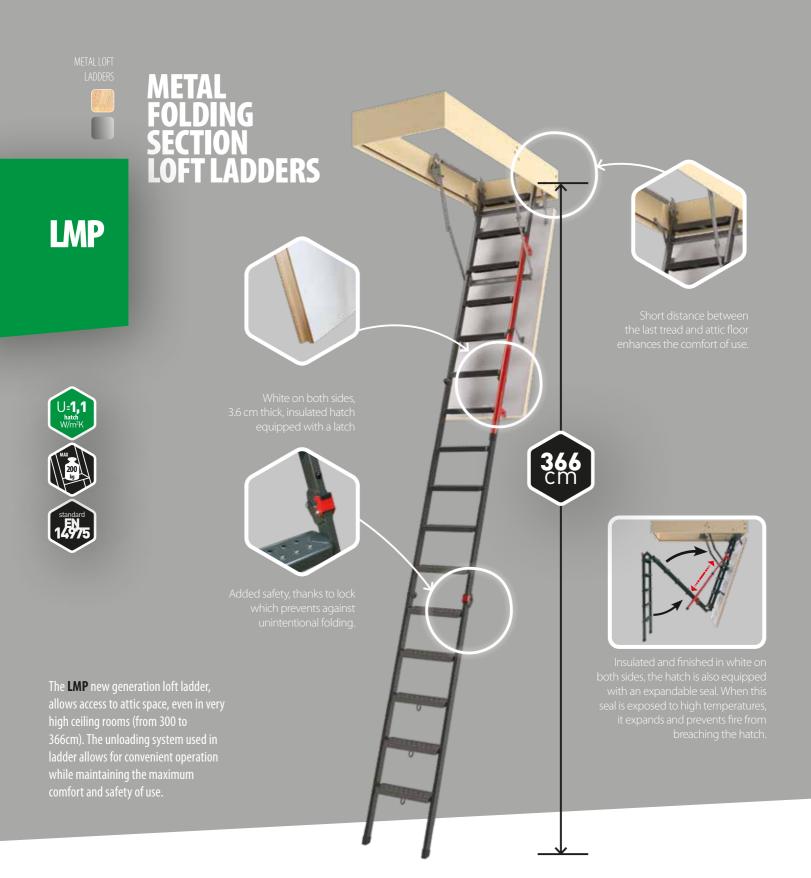
### LML LUX LOFT LADDER DIMENSIONS

Ceiling opening dimensions [cm]	AxB	60x120	70x120	70x130	70x140	86x130	92x130	60x130	70x130	70x140	86x130	92x130
Maximum room height [cm]	Н			28	80					305		
Minimum room height [cm]*	H <sub>min.</sub>			2	33					256		
Height to be reached to operate the ladder [cm]	X			20	05					230		
Box external dimensions [cm]		59.6 x 118.6	68.6 x 118.6	68.6 x 128.6	68.6 x 138.6	84.6x128.6	90.6x128.6	59.6 x 128.6	68.6 x 128.6	68.6 x 138.6	84.6x128.6	90.6x128.6
Box external dimensions with architrave linings [cm]		63.6x122.6	72.6x122.6	72.6x132.6	72.6x142.6	88.6x132.6	94.6x132.6	63.6x132.6	72.6x132.6	72.6x142.6	88.6x132.6	94.6x132.6
Internal box dimensions [cm]		54.7x113.7	63.7x113.7	63.7x123.7	63.7x133.7	79.7x123.7	85.7x123.7	54.7x123.7	63.7x123.7	63.7x133.7	79.7x123.7	85.7x123.7
Folded ladder height [cm]	K						31.5					
Swing space [cm]	R			10	67			178				
Distance after ladder unfolding [cm]	C			1.	20					130		
Box height [cm]							31.5					
LADDER PARAMETERS												
Tread length [cm]	E	35										
Tread width [cm]		13										
Distance between treads [cm]							25					

 $<sup>\</sup>hbox{*" for rooms lower than the maximum standard height H please adjust the length of the ladder according to the assembly instructions}$ 

#### **LOFT LADDER**

Commercial sizes [cm]		60x120	70x120	70x130	70x140	86x130	92x130	60x130	70x130	70x140	86x130	92x130
			$\square$									
D b-:-b+[]				20	20					205		
Room height [cm]	Н			2	30					305		
Code		862401	862411	862412	862413	862496	862498	862451	862453	862454	862497	862499





stile ends



white hatch



peripheral seal



ladder unloading mechanism built in handrail



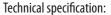
non-slip treads



possibility of installing additional accessories pages 56-61



for high rooms



permissible loading of 200 kg hatch heat transmission coefficient U = 1.1 W/m²K insulation thickness 3 cm hatch thickness 3.6 cm

> fully assembled, and ready for quick installation in the ceiling



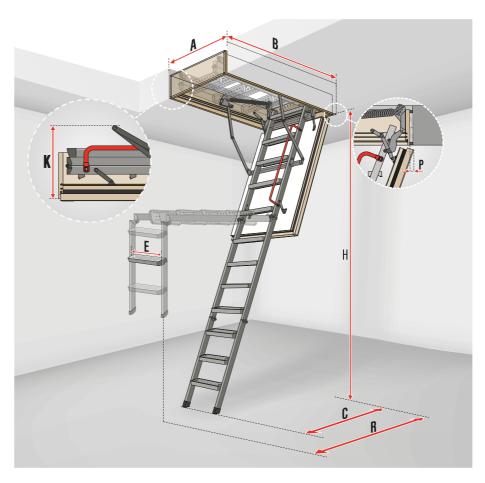


## LMP LOFT LADDER DIAGRAM





The LMP ladders as standard are equipped with ladder unloading mechanism, so they can be fully operated with the opening rod (hatch opening and closing, ladder unfolding).



#### LMP LOFT LADDER DIMENSIONS

Ceiling opening dimensions [cm]	AxB	60x144	86x144						
Maximum room height [cm]	Н		366						
Minimum room height [cm]*	H <sub>min.</sub>		300						
Height to be reached to operate the ladder [cm]	X		270						
Box external dimensions [cm]	WxL	58x142.2	68 x 142.2	84 x 142.2					
Internal box dimensions [cm]	MxN	54x138.2	64 x 138.2	80 x 138.2					
Folded ladder height [cm]	K		32						
Swing space [cm]	R	196							
Distance after ladder unfolding [cm]	C	145							
Box height [cm]		18							

#### LADDER PARAMETERS

Tread length [cm]	E	34
Tread width [cm]	S	8
Distance between treads [cm]	G	24

 $<sup>\</sup>hbox{* for rooms lower than the maximum standard height H please adjust the length of the ladder according to the assembly instructions}$ 

### LOFT LADDER

LOFI LADDEN				
Commercial sizes [cm]		60x144	70x144	86x144
Room height [cm]	Н		366	
Code		869334	869335	869336



## METAL FOLDING SECTION LOFT LADDERS

LMF 60













The LMF 60 to room height 360cm as standard are equipped with ladder unloading mechanism, so they can be fully operated with the opening rod (hatch opening and closing, ladder unfolding).

The **LMF 60** a new generation of fire resistant loft ladders with metal ladder which perfectly combines a high level of fire protection with comfortable and safe access to the loft. The materials used provide 60-minute protection against fire penetration from the space where the loft ladder was installed.





The hinge controls hatch movement, and as its opened, moves the hatch away from the ladder's treads. Resulting in increased space and easy operation.



The white on both sides and insulated the hatch is equipped with expandable seal which under the influence of hear expands and prevents entering the fire to the fire free space

\*manufacturer's internal research



stile ends



one - sidedly fire-resistant hatch



seal



handrail (in loft ladders in version 280 and 305cm)



ladder unloading mechanism built in handrail (in version 360cm in height).



non-slip treads



possibility of installing additional accessories pages 56-61



for high rooms

Technical specification:

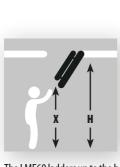
permissible loading of 200 kg loft ladder heat transmission coefficient U = 0.64 W /m²K\* Fire resistance class El<sub>1</sub>/El<sub>2</sub> = 60 minutes insulation thickness 7.8 cm hatch thickness 8.5 cm

> fully assembled, and ready for quick installation in the ceiling





### LMF 60 LOFT LADDER DIAGRAM





The LMF60 ladders up to the height of 360 cm are as standard equipped with ladder unloading mechanism, so they can be fully operated with the opening rod (hatch opening and closing, ladder unfolding).



#### LMF 60 LOFT LADDER DIMENSIONS

LIMIT OO LOT I LADDLIK DIIMI		,,,,												
Ceiling opening dimensions [cm]	AxB	60x120	70x120	70x130	70x140	86x130	70x130	70x140	86x130	60x144	70x144	86x144		
Maximum room height [cm]	Н					305			360					
Minimum room height [cm]*	H <sub>min.</sub>		233						234			295		
Height to be reached to operate the ladder [cm]	X		210						230			265		
Box external dimensions [cm]		58 x 118	68 x 118	68 x 128	68x138	84x128	68x128	68 x 138	84 x 128	58x142.2	68 x 142.2	84 x 142.2		
Box Internal dimensions [cm]		54x114	64x114	64x124	64 x 134	80 x 124	64 x 124	64 x 134	80 x 124	54x138.2	64x138.2	80 x138.2		
Folded ladder height [cm]	K						39							
Swing space [cm]	R		156					167		194				
Distance after ladder unfolding [cm]	C			125			135			156				
Hatch retraction after opening	P						5							
Box height [cm]							22.5							
Number of sections							3							
LADDER PARAMETERS														
Tread length [cm]	E						34							
Tread width [cm]	S						8							
Distance between treads [cm]	G				2	25					24			

<sup>\*</sup> For rooms lower than the standard maximum height "H", it is required to match the ladder length in accordance with the fitting instructions.

#### LOFT LADDER

Commercial sizes [cm]		60x120	70x120	70x130	70x140	86x130	70x130	70x140	86x130	60x144	70x144	86x144
		ш	ш									
											_	
Room height [cm]	Н			280				305			360	
Code		869J01	869J11	869J12	869J13	869J96	869J53	869J54	869J97	869JAD	869JAE	869JAF

Ladders are available only in sizes shown above.



### **FIRE-RESISTANT LOFT LADDERS**

### LMF 120



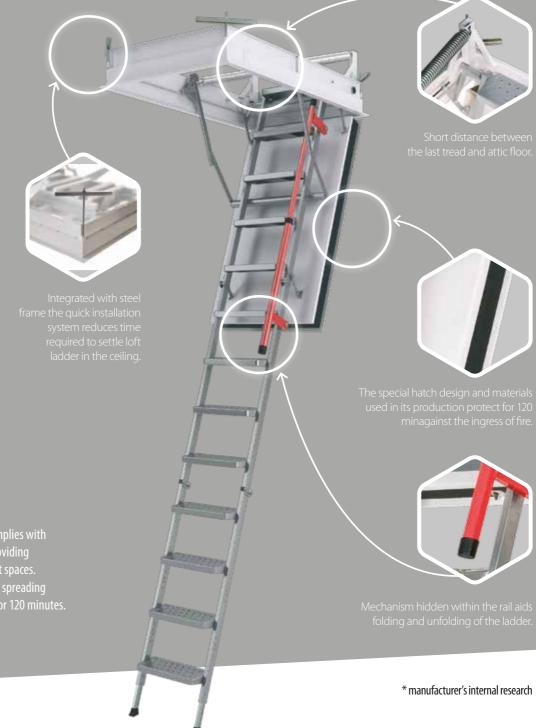






The design of **LMF 120** loft ladder complies with stringent fire requirements, whilst providing safe and comfortable access to the loft spaces.

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





telescopic stile ends



fire-resistant hatch



architrave lining



seal



ladder unloading mechanism built in handrail



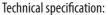
system of quick installation in the ceiling



non-slip treads, 13 cm in width



possibility of installing additional accessories pages 56-61



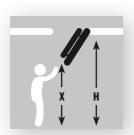
permissible loading of 200 kg hatch heat transmission coefficient U = 0.79 W/m²K fire-resistance El\_=120 minutes insulation thickness 8 cm hatch thickness 8.2 cm

> fully assembled, and ready for quick installation in the ceiling





### LMF 120 LOFT LADDER DIAGRAM





The LMF 120loft ladders are as standard equipped with ladder unloading mechanism, so theycan be fully operated with the opening rod (hatch opening and closing, ladder unfolding).



#### **LMF 120 LOFT LADDER DIMENSIONS**

Ceiling opening dimensions [cm]	AxB	60x120	70x120	70x130	70x140	86x130	70x130	70x140	86x130	
Maximum room height [cm]	Н			280			305			
Minimum room height [cm]*	H <sub>min.</sub>			233			256			
Height to be reached to operate the ladder [cm]	X			220		235				
Box external dimensions [cm]		59 x 118	59x118 68x118 68x128 68x138 84x128					68 x 138	84 x 128	
Box external dimensions with architrave lininings		64.7x123.7	73.7x123.7	73.7x133.7	73.7x143.7	89.7x133.7	73.7x133.7	73.7x143.7	89.7x133.7	
Internal box dimensions [cm]		55 x 114	55x114 64x114 64x124 64x134 80x124					64 x 134	80 x 124	
Folded ladder height [cm]	K				3	4				
Swing space [cm]	R			165				176		
Distance after ladder unfolding [cm]	C			120				130		
Box height [cm]										
LADDER PARAMETERS										
Tread length [cm]	E				3	5				
Torred and deleterant						2				

Tread length [cm]	E	35
Tread width [cm]		13
Distance between treads [cm]		25

 $<sup>\</sup>hbox{* for rooms lower than the maximum standard height H please adjust the length of the ladder according to the assembly instructions}$ 

#### **LOFT LADDER**

Commercial sizes [cm]		60x120	70x120	70x130	70x140	86x130	70x130	70x140	86x130
		ш	ш	ш			ш		
Room height [cm]	Н			280				305	
Code		862501	862511	862512	862513	862596	862553	862554	862597

Ladders are available only in sizes shown above.



#### **BOX**

The ladder box can be of wood, metal or a combination of a wooden box / metal frame. The box is equipped with a peripheral seal and lining as standard. The box enables the scissors ladder to be installed and adjusted quickly and with ease.

# MECHANISM THE HINGE MECHANISM SIGNIFICANTLY

The hinge mechanism significantly simplifies ladder operation. Once unlocked, the hatch opens slowly to avoid any risk to the user. It then keeps the hatch in the fully open position and prevents spontaneous spring back during folding and unfolding.



the ladder to be folded to a smaller size and used in openings as small as  $50 \times 70$ cm. The elegant, modern style is achieved through use of 'S'-shaped stringers which can also be used as handrails.



### **SCISSORS LOFT LADDERS**

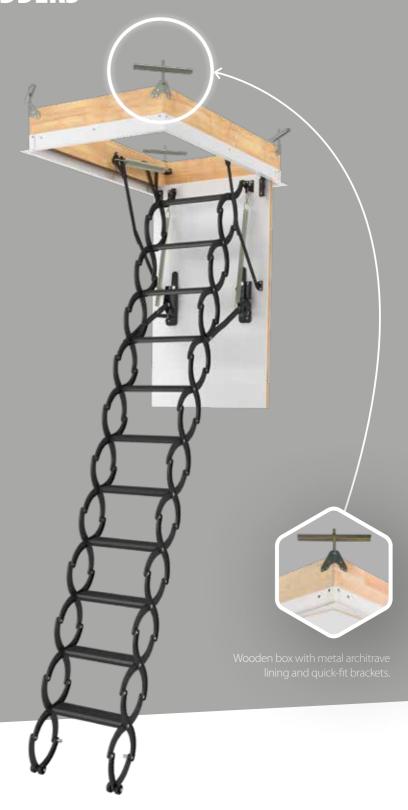








The **LST** scissors loft ladder is equipped with a 3.6cm thick, white insulated hatch as standard. The box is made of wood and has quick-fit brackets while the hatch opening mechanism guarantees safe folding and unfolding. In addition, its construction has eliminated the need for a lock. The ladder itself is powder-coated in RAL 7022 Grey. The overall floor — ceiling ladder height can be increased to a maximum of 330cm by adding two LSS treads.





white hatch



architrave lining



peripheral seal



non-slip treads



possibility of adding or detaching tread



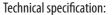
system of quick installation in the ceiling



system of adapting the ladder length to the ceiling height



possibility of installing additional accessories



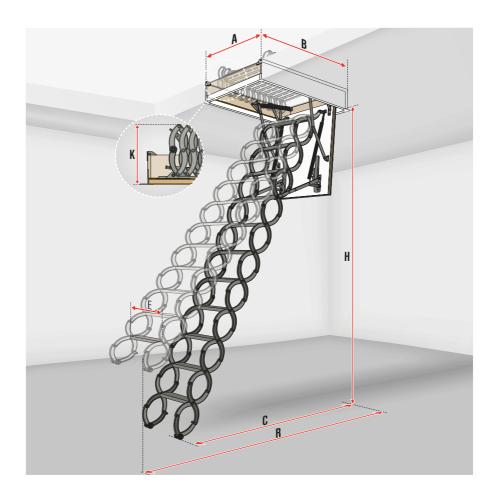
permissible loading of 200 kg hatch heat transmission coefficient U = 1.1 W/m²K insulation thickness 3 cm hatch thickness 3.6 cm

> fully assembled, and ready for quick installation in the ceiling





### **LST LOFT LADDER DIAGRAM**



#### LST LOFT LADDER DIMENSIONS

		Standard ladder length						
Ceiling opening dimensions [cm]	AxB	50x80	60x90	60x120	70x80	70x120		
Room height [cm]	Н	250 – 280						
Box external dimensions [cm]		49x79.4	59x89.4	59x119.4	69x79.4	69x119.4		
Box external dimensions with architrave lininings		54x84.4	64x94.4	64x124.4	74x84.4	74x124.4		
Internal box dimensions [cm]		44x74	54x84	54x114	64x74	64x114		
Folded ladder height [cm]	K			38.2				
Swing space [cm]	R			150				
Distance after ladder unfolding [cm]	C	146-134						
Box height [cm]		18						
LABBER BARAMETERS								

(10-trea	d ladder)	tread l	adder)	(12-tread ladder)		treads (13-t	read ladder)			
230	250	250	280	280 300		300	330			
Sizes and dimensions of loft ladder not included into the table are identical with those for heights 250-280cm										
14	40	150 160 170								
135	127	146	134	153	145	163	150			

Ladder shorter by 1 tread Standard ladder (11- Ladder longer by 1 tread Ladder longer by 2

#### **LADDER PARAMETERS**

Tread length [cm]	E	24	30	38				
Tread width [cm]			8					
Distance between treads [cm]		24-26						
Standard number of treads [units]			11					
Compatible tread LSS		LSS-24	LSS-31	LSS-38*				

#### LOFT LADDER

Commercial sizes [cm]		50x80	60x90	60x120	70x80	70x120
				П	П	
		ш		ш	ш	
				ш		
Room height [cm]	Н			250-280		
Code		860402	860432	860423	860426	860436

Ladders are available only in siazes shown above.

Code	860207	860205	860206
tread**	LSS-24	LSS-31	LSS-38*
ladder width [cm]	50	60-70	70

<sup>\*</sup> LSS-38 is compatible only with loft ladders ordered before 04.01.2022
\*\* while ordering LSS tread - the ladder commercial size and type has to be provided

### **SCISSORS LOFT LADDERS**

**LSF** 



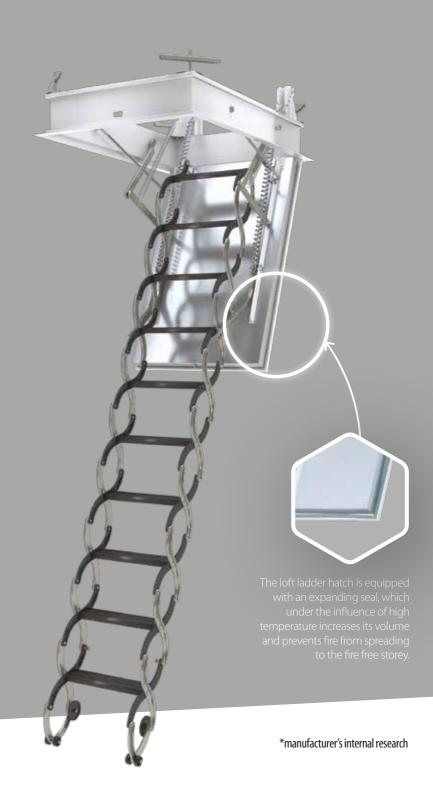






The **LSF** fire-resistant loft ladder has a 60-minute fire rating and acts as a barrier to prevent spread of flame.

The overall floor — ceiling ladder height can be increased to a maximum of 320cm by adding one LSS tread.





fire-resistant hatch on one side



architrave lining



non-slip treads



possibility of adding or detaching tread



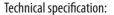
system of quick installation in the ceiling



system of adapting the ladder length to the ceiling height



possibility of installing additional accessories pages 56-61



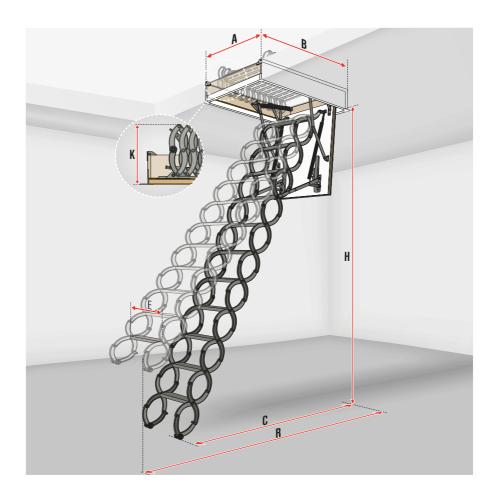
permissible loading of 200 kg fire-resistance El<sub>2</sub>=60 minutes insulation thickness 3 cm hatch thickness 5.6cm







### LSF LOFT LADDER DIAGRAM



#### LSF LOFT LADDER DIMENSIONS

			Standard ladder length							
Ceiling opening dimensions [cm]	AxB	50x70	60x90	60x120	70x80	70x90	70x110	70x120		
Room height [cm]	Н		270-300							
Box external dimensions [cm]		48x68.5	58x88.5	58x118.5	68x78.5	68x88.5	68x108.5	68x118.5		
Box external dimensions with architrave lininings		54.8x75	64.8x95	64.8x125	74.8x85	74.8x95	74.8x115	74.8x125		
Internal box dimensions [cm]		44.8x64.8	54.8x84.8	54.8x114.8	64.8x74.8	64.8x84.8	64.8x104.8	64.8x114.8		
Folded ladder height [cm]	K				46					
Swing space [cm]	R				170-180					
Distance after ladder unfolding [cm]	C				165-130					
Box height [cm]					14					
LADDER PARAMETERS										

25-30

LSS-40

Laddershort (9-tread	Ladder shorter by 1 tread (9-tread ladder)		d ladder d ladder)	Ladderlonger by 1 trea (11-tread ladder)				
240	270	270	300	300 320				
Sizes and dimensions of loft ladder not included into the table are ider with those for heights 250-280cm								
165	165	170	180	185	210			
100	140	165	130	120	140			

#### LOFT LADDER

Compatible tread LSS

Tread width [cm]

Distance between treads [cm]
Standard number of treads [units]

LOFI LADDER							
Commercial sizes [cm]	50x70	60x90	60x120	70x80	70x90	70x110	70x120
Room height [cm]				270-300			
Code	860101	860123	860126	860132	860133	860135	860136

LSS-30

Ladders are available only in sizes shown above.

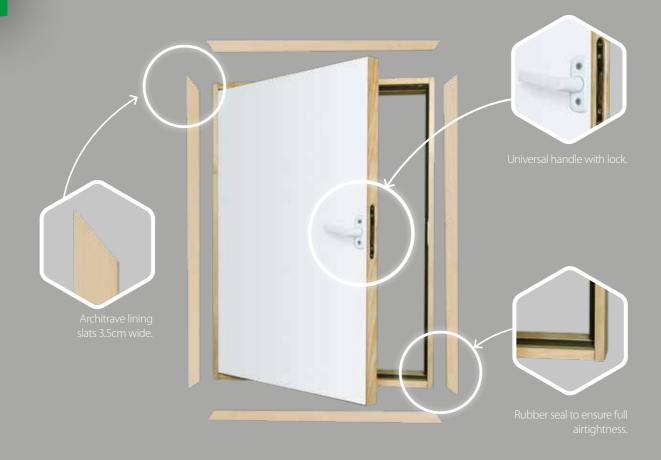
Code	860201	860202	860203
tread*	LSS-30	LSS-32	LSS-40
ladder width[cm]	50	60	70

 $<sup>\</sup>ensuremath{^{*}}$  when ordering LSS tread– the ladder commercial size and type has to be provided

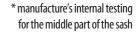
### **L-SHAPED COMBINATION DOORS**



**DWK** 



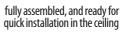






Technical specification:

heat transmission coefficient U = 1.1 W/m<sup>2</sup>K insulation thickness 3 cm







### **DWK DOOR DIAGRAM**



TECHNICAL SPECIFICATION:						
	DWK	DWT	DWF			
heat transmission coefficient U [W/m²K]	1.1*	0.6	0.64			
tightness class according to EN 12207	-	4	4			
fire resistant	-	-	El <sub>1</sub> /El <sub>2</sub> 45			
insulation thickness [cm]	3	6	6			
sash thickness [cm]	3.6	6.6	6.6			

#### **DWK L-SHAPED DOORS DIMENSIONS**

Opening dimensions [cm]	AxB	55x80	60x80	60x100	60x110	70x90	70x100	70x110
Door dimensions [cm]	WxL	53.4x78.4	58.4x78.4	58.4 x 98.4	58.4 x 108.4	68.4 x 88.4	68.4x98.4	68.4 x 108.4
Frame internal dimensions [cm]	MxN	48x73	53 x 73	53 x 93	53 x 103	63 x 83	63 x 93	63 x 103
Frame width [cm]	S				8.5			
Frame thickness [cm]	Z				2.7			

#### L-SHAPED DOORS

Commercial sizes [cm]	55x80	60 x 80	60 x 100	60x110	70 x 90	70 x 100	70x 110
	П						
	ш	ш	ш	ш	ш	ш	
Code	869900	869922	869924	869925	869933	869934	869935

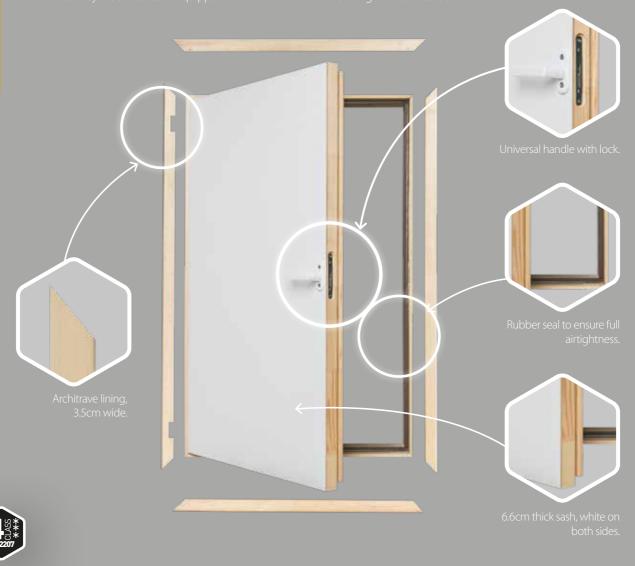
DWK doors are available only in sizes shown above.



## HIGHLY ENERGY-EFFICIENT WOODEN DOORS



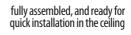
The **DWT** highly energy efficient L-shaped doors are designed primarily for installation in L-shaped walls, provide access to the room behind and at the same time constitute an excellent barrier against heat loss (heat transfer coefficient  $U = 0.6 \text{ W} / \text{m}^2 \text{K}^*$ ) and guarantee high tightness. The door can be installed in the right or left side. They are as standard equipped with wooden architrave lining in natural colour.





Technical specification:

heat transmission coefficient U = 0.6 W/m<sup>2</sup>K\* insulation thickness 6 cm







### **DWT DOOR DIAGRAM**



TECHNICAL SPECIFICATION:						
	DWK	DWT	DWF			
heat transmission coefficient U [W/m²K]	1.1*	0.6	0.64			
tightness class according to EN 12207	-	4	4			
fire resistant	-	-	El <sub>1</sub> /El <sub>2</sub> 45			
insulation thickness [cm]	3	6	6			
sash thickness [cm]	3.6	6.6	6.6			

#### **DWT L-SHAPED DOORS DIMENSIONS**

Opening dimensions [cm]	AxB	55x80	60x80	60x100	60x110	70x90	70x100	70x110
Door dimensions [cm]	WxL	53.4x78.4	58.4x78.4	58.4x98.4	58.4 x 108.4	68.4 x 88.4	68.4x98.4	68.4 x 108.4
Frame internal dimensions [cm]	MxN	48 x 73	53 x 73	53 x 93	53 x 103	63 x 83	63 x 93	63 x 103
Frame width [cm]	S				9			
Frame thickness [cm]	Z				2.7			

#### L-SHAPED DOORS

Commercial sizes [cm]	55 x 80	60x80	60 x 100	60x110	70 x 90	70 x 100	70x110
	П		П	П			
	ш	ш	ш		ш		
Code	869600	869622	869624	869625	869633	869634	869635

DWT doors are available only in sizes shown above.



## L-SHAPED COMBINATION DOORS

**DWF** L-Shaped combination fire-resistant doors have a 45-minute fire rating – (EN 13501-2) to protect against















\*manufacturer's internal testing for sash \*\* manufacture's internal research

**Technical specification:** 

fire-resistance EI $_1$ /EI $_2$ =45 minutes heat transmission coefficient U = 0.64 W/m $^2$ K\* insulation thickness 6 cm

fully assembled, and ready for quick installation in the ceiling





### **DWF DOOR DIAGRAM**



TECHNICAL SPECIFICATION:						
	DWK	DWT	DWF			
heat transmission coefficient U [W/m²K]	1.1*	0.6	0.64			
tightness class according to EN 12207	-	4	4			
fire resistant	-	-	El <sub>1</sub> /El <sub>2</sub> 45			
insulation thickness [cm]	3	6	6			
sash thickness[cm]	3.6	6.6	6.6			

#### **DWF L-SHAPED DOORS DIMENSIONS**

Opening dimensions [cm]	AxB	55x80	60x80	60x100	60x110	70x90	70x100	70x110
Door dimensions [cm]	WxL	53.4x78.4	58.4x78.4	58.4 x 98.4	58.4 x 108.4	68.4 x 88.4	68.4x98.4	68.4 x 108.4
Frame internal dimensions [cm]	MxN	48 x 73	53 x 73	53 x 93	53 x 103	63 x 83	63 x 93	63 x 103
Frame width [cm]	S				9			
Frame thickness [cm]	Z				2.7			

#### L-SHAPED DOORS

Commercial sizes [cm]	55 x 80	60x80	60 x 100	60x110	70x90	70 x 100	70x 110
	п		П		П		
	ш	ш	ш	ш	ш		
Code	869800	869822	869824	869825	869833	869834	869835

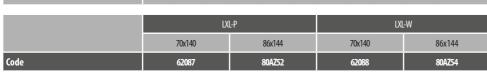
DWF doors are available only in sizes shown above.

### **ARCHITRAVE LININGS LXL-P, LXL-W**The architrave is designed to finish the installation of the loft ladder and to cover gaps in the ceiling which remain after the

The architrave is designed to finish the installation of the loft ladder and to cover gaps in the ceiling which remain after the fitting process. The architrave elements are of solid pine wood (LXL-P) or in white (LXL-W) or PVC (LXL-PVC). This quick and simple fitting process ensures a fast, aesthetically pleasing finish of the installed Loft Ladder. In the case of PVC architrave, connection with the box does not require any nails. The LXL-PVC architrave is available in white\*.

Aushituarra linings I VI D/W	Available for loft ladders
Architrave linings LXL-P/-W	IWS LWK LWL LTK LWT LWTPH LWF60 LDK LMS LMK LMP LMF60
Standard dimensions [cm]	70 x140,86x144
Non-standard dimensions [cm]	For other loft ladders sizes , cut the slats from the standard architrave lining size.
Slats thickness after installation on box [cm]	1
Slats width [cm]	3.5
Max. witdh of the gaps, the architrave slats cover after instillation on the box [cm]	2.5







### **ARCHITRAVE LININGS LXL-PVC, LXL-PVC SL**

Available for loft ladders												
LWS Smart	LWK Komfort	LWL Extra	LTK Energy	LWT	LWTPH	LWF60	LDK	LMS	LMK	LMP	LMF60	
	60x120,70x120,86x140,86x144											
	For other loft ladders sizes, cut the slats from the standard architrave lining size.											
					1							
					3.	3						
	2.4											
		IWS IWK Smart Komfort	Smart   Komfort   Extra	Smart Komfort Extra Energy	LWS LWK LWL LTK LWT Smart Komfort Extra Energy LWT 60x120	Smart Komfort Extra Energy LWT LWTPH  60x120,70x120,  For other loft ladders sizes, cut the slats:  3.	Smart Komfort Extra Energy LWT LWTPH LWF60  60x120,70x120,86x140,8  For other loft ladders sizes, cut the slats from the st  1  3.3	IWS LWK Extra Energy LWT LWTPH LWF60 LDK  60x120,70x120,86x140,86x144  For other loft ladders sizes, cut the slats from the standard arc  1  3.3	Smart LWK LWK Extra Energy LWT LWTPH LWF60 LDK LMS  60x120,70x120,86x140,86x144  For other loft ladders sizes, cut the slats from the standard architrave lin  1  3.3	Smart LWK LWK Extra Energy LWT LWTPH LWF60 LDK LMS LMK  60x120,70x120,86x140,86x144  For other loft ladders sizes, cut the slats from the standard architrave lining size.	IWS LWK Extra Energy LWT LWTPH LWF60 LDK LMS LMK LMP  60x120,70x120,86x140,86x144  For other loft ladders sizes, cut the slats from the standard architrave lining size.	

		LXL-	PVC	
	60x120	70x120	86x140	86x144
Code	62082	62083	62084	80AZ 56

 $<sup>\</sup>hbox{\it *the architrave lining colour may slightly differ from the colour of lining in angles and hatch}\\$ 





#### **INVISIBLE ARCHITRAVE LXL-I**

The LXL-Invisible linings allow for discreet installation and concealment loft ladders in the ceiling. Thanks to the use of linings, the ladder box remains invisible. There is no need to install architrave linings masking the gaps, and the loft ladder hatch is hidden in the ceiling. The use of a discrete assembly system allows for an aesthetic and minimalistic interior finish. Installation of LXL-Invisible linings with loft ladders should be done before finishing the ceiling with plasterboards.

Invisible architrave LXL-I	Availa	able for loft ladders								
INVISIBLE AFCHILFAVE LAL-I	LWS Smart, LWK Komfort, LWL Extra, LTK Energy, LWT									
Standard dimensions [cm]	60x120cr	60x120cm, 70x120cm, 86x140cm								
Non-standard dimensions [cm]	For other loft ladders sizes, cut	For other loft ladders sizes, cut the slats from the standard architrave lining size.								
The thickness of the plasterboards to which the lining is adapted		12.5								
		LXL-I								
	60x120	60x120 70x120 86x140								
Code	80AZ68	80AZ69	80AZ70							





 $<sup>\</sup>hbox{$^*$ the architrave lining colour may slightly differ from the colour of lining in angles and hatch}$ 

#### **BALUSTRADE LXB-P**

The loft balustrade is made of pine wood, protects the ceiling opening in the attic and makes it easier and safer to descend the ladder. The structure of the balustrade and system of fixing to the loft floor with special metal holders increase its stiffness, thus improving the comfort of use. The balustrade is compatible with all sizes of loft ladders.

BALUSTRADE LXB-U	Available for loft ladders
DALUSI KADE LAD-U	all FAKRO loft ladders
Standard dimensions [cm]	86x140
Non-standard dimensions [cm]	for loft ladder sizes smaller than 86x140 cm, the standard size balustrade is applied

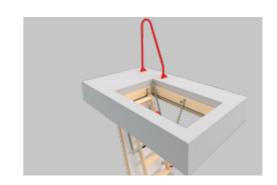


#### **HANDRAIL LXH-A**

The LXH-A handrail improves the comfort and safety of access to the loft. Mounted to the floor near the ceiling opening, makes every trip up and down the attic easier.

For installation on the right and on the left side of the opening.

Code	869287



#### **HANDLE LXZ**

The LXZ handle enables the LXW upper hatch to be closed from the loft side e.g. during maintenance work in the loft or on the roof.



#### **INSTALLATION BRACKETS LXK**

Installation brackets facilitate loft ladder installation in the ceiling. Installed in the corners of the box, they add to its overall rigidity ensuring equal lengths of diagonals. Bolts are screwed into brackets guaranteeing quick and accurate levelling of the loft ladder in the ceiling.



Installation brackets LXK		Available for loft ladders										
	LWS Smart	LWK Komfort	LWLExtra	LTK Energy	LWT	LWTPH	LWF60	LDK	LMS	LMK	LMP	LMF60
Installation to the ceiling max. thickness [cm]		max. 35		max. 39		max. 43			max. 35		max. 39	max. 43

Code	62085

### **ASSEMBLY KIT LXK-D**

The LXK-D assembly kit simplifies and improves the installation of LML loft ladders to the ceiling, on which the DRL hatch has already been installed. Installation in ceilings with a thickness of min. 38cm, maximum 50cm.

Code 80AZ41

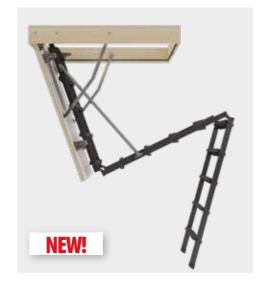


#### **UNLOADING MECHANISM LXM**

The unloading mechanism assists in folding and unfolding the ladder thus increasing the comfort and safety of using loft ladders. The LXM3 mechanism is designed for 3-section wooden loft ladders, and the LXM4 mechanism for 4-section loft ladders, installed in rooms with a minimum height of 260 cm. The LXM installation possible on the right or left side of the ladder, on the opposite side to the LXH handrail.



	Available for	r loft ladders
Unloading mechanism LXM	3-section	4-section
	LWS Smart, LWK Komfort, LWZ Plus, LTK Energy, LWT, LWT Passive House, LWF60	LWK Komfort, LTK Energy, LWT, LWF60
Minimum room height 260cm	LXM 3	LXM 4
Code	869373	869374



#### **INSULATION KIT LXD**

The LXD Insulation Kit provides the standard of tight insulation between the ladder box and ceiling opening needed in energy-efficient construction. It includes: airight collar, insulation material (sheep wool blocks) and an air permeable collar.



Installation kit LXD				Ava	ilable for loft lad	ders			
	LWS Smart	LWK Komfort	LWL Extra	LTK Energy	LWT	LDK	LMS	LMK	LMP
Standard dimensions [cm]				60	/70x120 and 86 x 140/1	44			
Non-standard dimensions			Forla	dders smaller then 86x	140 cm the standard siz	e of the kit has to be ad	apted		

Commercial sizes LXD	60x120	70x120	86x140	86x144
Code	80AZ13	80AZ14	80AZ15	80AZ61

#### **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. In addition, in case of thick ceilings, for 4-segment and scissors LST and LSZ loft ladders, the box extension serves as an extension element of a box height allowing for installation of the LXW upper hatch (see LXW, page 57).



Box extension LXN							Av	ailable fo	loft ladde	ers						
BOX extension LAN	LWS Smart	LWK Komfort	LWZPlus	LWL Extra	LTKEnergy	LWT	LWTPH	LWF60	LDK	LMS	LMK	LML	LMP	LMF60	LMF	LST
Height of the box extension frame [cm]		10														
Max. height of non-standard box extension [cm]				2	20				16				20			

Box extension LXN RF for L	.MF (120)	Box extension LXN R (fo	Box extension LXN (for LMP, LMF60)												
Commercial sizes of LXW [cm]	60 x 120	Commercial sizes [cm]	70x80	60x120	60x130	70x120	70x130	70x140	86x130	92x130	Commercial sizes of LXW [cm]	60x144	70x144	86x144	
Code	869286	Code	869L00	869L32	869L01	869L02	869L11	869L12	869L13	869L96	862399	Code	862334	862335	862336

Box extension	LXN (for o	ther loft l	adders)																
Commercial sizes of LXW [cm]	50 x 80	55x100	55x111	60 x 90	60x94	60 x 100	60x111	60 x 120	60 x 130	60 x 140	70 x 80	70x94	70 x 100	70x111	70 x 120	70 x 130	70 x 140	80 x 120	86 x 130
Code	862300	862320	862321	862322	862307	862306	862304	862301	862302	862303	862332	862317	862316	862314	862311	862312	862313	862393	862396

When ordering standard and non-standard box extensions, please specify the model and commercial size of loft ladders. The provided box extension size will be compatibile with the loft ladder box.

### **UPPER HATCH LXW**

The LXW Upper Hatch prevents attic dust from accumulating on the hatch and steps of the closed ladder. It improves the overall insulating parameters and airtightness of the ladder on which it is installed. The upper hatch consists of a frame equipped with a peripheral gasket, 3.6cm thick hatch door, hardware, installation brackets, gas piston and rotational closing handle. In order to close the upper hatch from the loft side, it is possible to install an additional LXZ handle.



llanes betch I VW						Availal	ole for loft l	adders						
Upper hatch LXW	LWS Smart LWK Komfort	LWZ Plus	LWL Extra	LTK Energy	LWT	LWTPH	LWF 60	LMS	LMK	LML	LMP	LMF60	LMF	LST
Max. thickness of the ceiling where the upper hatch can be installed [cm]	31 or after standard box extension installation 41, For 4 section ladders the use of the box extension is a must.	31 or after st hatch inst	andard upper allation 41.	35 or after standard box extension installation 45. With 4-section loft ladders extension box must be applied.	39 or after standard box extension installation 49. With 4-section loft ladders extension box must be applied.	39 or after standard box extension installation 49.	31 or after standard box extension installation 41.	31 or after st hatch insta	andard upper allation 41.	48 or after standard box extension installation 58.	35 or after standard box extension installation 45.	39 or after standard box extension installation 49.	33 or after standard box extension installation 43.	41, the box extension installation is a must
Upper hatch box height [cm]							20							

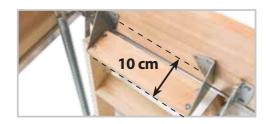
Upper hatch LXW RF for Li	MF (120)	Upper hatch LXW R (for	Upper hatch LXW R (for LML)												Upper hatch LXW (for LMP, LMF60)					
Commercial sizes of LXW [cm]	60 x 120	Commercial sizes of LXW [cm]	51x80	70x80	60x120	60x130	70x120	70x130	70x140	86x130	92x130	Commercial sizes of LXW [cm]	60x144	70x144	86x144					
Code	869285	Code	869K00	869K32	869K01	869K02	869K11	869K12	869K13	869K96	862299	Code	862234	862235	862236					

Upper hatch LX	Upper hatch LXW (for other loft ladders)																		
Commercial sizes of LXW [cm]	50 x 80	55x100	55x111	60x90	60x94	60 x 100	60x111	60 x 120	60 x 130	60 x 140	70 x 80	x9470	70 x 100	70x111	70 x 120	70 x 130	70 x 140	80 x 120	86 x 130
Code	862200	862220	862221	862222	862207	862206	862204	862201	862202	862203	862232	862217	862216	862214	862211	862212	862213	862293	862296

When ordering standard and non-standard upper hatches, please specify the model and commercial size of loft ladders. The provided upper hatch size will be compatibile with the loft ladder box.

### **ADDITIONAL TREAD LXT**

An additional tread makes climbing the ladder easier and increases comfort and safety when accessing the loft space. Made of wood, it is installed between the final tread and loft floor and is particularly recommended for use in situations where the upper hatch is installed on the ladder box or where ladders are installed in a thick ceiling.



				Available for loft ladders				
Additional tread LXT	LWS/LWK Komfort (size 55x111cm)	LWS/LWK Komfort         LWL Extra         LWS/LWK Komfort         LWL Extra         LWZ Plus           (size 55x111cm)         (size 60xcm)         LWZ Plus						
	LXT	280						
Loft ladder's tread length [cm]	3	0			34			
Code	620	)58			62059			

### STILE ENDS LXS-W, LXS-M

The LXS-W, LXS-M Stile Ends are finishing elements mounted on the base of the ladder, adding a smart touch to its appearance. They add to the ladder's stability and are made from specially selected material to protect the floor against scratches by applying TPE cap. The LXS-W & LXS-M stile ends are compatible with all 3-section wooden and metal loft ladders.

Stile ends	LXS-W	LXS-M
Code	66135	66136

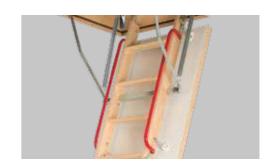






#### **HANDRAIL LXH**

The LXH Metal Handrail makes climbing the ladder easier and increases user's safety and comfort. It is mounted onto upper ladder section.



Handrail LXH		Available for loft ladders	
Handraii LXH	LWS Smart, LWK Komfort, LWZ Plus, LTK Ene	LDK	
Handrail screwed to the ladder's upper section	LXH50/13	LXH75/13	LXH75/16
Code	80AZ24	80AZ18	62065

<sup>\*</sup>LXH 50/13 handrails are installed with ladders' boxes lengths up to 100cm, while for boxes lengths higher than 100cm, the LXH75/13 handrails are available. 1 – For LMF 60 loft ladders the handrail is compatible only with versions with heighs up to 280 and 305cm.

### **AVAILABLE ADDITIONAL ACCESSORIES**

	LWK Komfort	LWZ Plus	LWL Extra	LTK Energy	LWT	LWT PH	LWF 60	LWF SL 60	LDK	LMS LMK/	LML	LMP	LMF 60	LMF	LST	LSF
LXB-P balustrade	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
LXH-A handrail	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>LXK</b> installation brackets	✓	S	✓	✓	✓	✓	✓	✓	✓	✓	S	✓	✓	S	S	S
<b>LXL</b> architrave lining (wooden)	✓	_	✓	✓	✓	✓	✓	✓	✓	✓	_	✓	✓	_	_	_
<b>LXL-PVC</b> architrave lining (plastic)	✓	_	✓	✓	✓	✓	✓	_	✓	✓	_	✓	✓	_	_	_
LXL-I architrave	✓	_	✓	✓	✓	_	_	_	_	_	_	_	_	_	_	_
<b>LXH</b> handrail	S+	S+	S+	S+	S+	S+	S+	S+	S+	<b>√</b> S+	_	_	S+	_	_	_
<b>LXN</b> box extension	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	_
<b>LXT</b> additional tread	✓	✓	✓	_	_	_	_	_	_	✓	_	_	_	_	_	_
<b>LXW</b> upper hatch	<b>√</b> *	✓	✓	<b>√</b> *	<b>√</b> *	✓	<b>√</b> *	<b>√</b> *	_	✓	✓	✓	✓	✓	<b>√</b> *	_
<b>LXS</b> stile ends (only for 3 sections ladders)	S	S	S	S	S	S	S	S	_	_	_	_	_	_	_	_
<b>LXM</b> unloading mechanism	✓	✓	S	✓	✓	✓	✓	✓	_	✓	_	_	✓	_	_	_
<b>LXK-D</b> assembly kit	_	_	_	_	_	_	_	_	_	_	✓	_	_	_	_	_
<b>LXD</b> insulation kit	✓	_	✓	✓	✓	_	_	_	✓	✓	_	✓	_	_	_	_

<sup>\*</sup> for 4 section loft ladders and scissors the LXN box extension is mounted piror to the upper hatch LXW installation

 ${f [\checkmark]}$  – compatible

[—] - not compatible

<sup>\*\*</sup> In the LMF60 loft ladders, the additional LXH handrail is compatible only with the loft ladders version heights up to 280 and 305cm

<sup>[</sup>S] - factory fitted accessory as standard

<sup>[</sup>S+] – factory fitted accessory as standard with the option of installing a second one









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