

# **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

# 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 and do not require any additional pre-installation work.

To make installation easier, 'click' fixings

# ADDITIONAL EQUIPMENT

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 INSULATED FIRE-RESISTANT ENERGY-EFFICIENT** EI<sub>1</sub>/EI<sub>2</sub> 60MIN **ENERGY-EFFICIENT PASSIVE HOUSE** EI<sub>2</sub> 60 MIN EI, 120 MIN **METAL METAL WOODEN** METAL WOODEN **WOODEN** WOODEN **METAL** 160 kg 200 kg 200 kg **U=0.79**HATCH W/m²K U=1.1 HATCH W/m²K U=1.1 HATCH W/m²K U=0.74 LOFT LADDER W/m²K U=0.68 LOFTLADDER W/m²K U=0.51 LOFT LADDER W/m<sup>2</sup>K U=0.64 LOFT LADDER W/m²K U=0.64 LOFT LADDER W/m²K U=1.8 HATCH W/m²K U=1.1 HATCH W/m²K U=0.51 LOFT LADDER W/m²K **SLIDING SCISSORS SECTION SECTION SECTION SECTION SECTION SCISSORS SECTION LWF 60** LWT LWK LMS LWT LMF LDK LML LMP LST LTK **LMF 60** LSF **LWF 60 SL** Passive House **KOMFORT** PLUS **EXTRA** ENERGY FUNCTIONALITY AND SMALL BOX DIMENSIONS ENHENCED COMFORT OF USE HIGHLY ENERGY EFFICIENT BEST Insulation AVAILABLE IN VERSION FOR HIGH ROOMS QUICK INSTALLATION AND SMALL BOX DIMENSIONS BEST FIRE RESISTANCE ON THE MARKET PASSIVE HOUSE INSULATION KIT COMFORT AND FUNCTIONALITY SLIDING LADDER FOR HIGH ROOMS Page **10** Page **26** Page 32 Page **34** Page 38 Page **16** Page **18** Page **20** Page **22,24** Page **42** Page **36** Page **46** Page **14** Page **40** Page **48**

# L-SHAPED COMBINATION DOORS

### TYPES AND CHOICE OF L-SHAPED DOOR

In addition to having a wide range of loft ladders FAKRO also manufactures combination loft doors for installation in walls. These are used to provide access to unused space behind a wall or under stairs. Three models are available, the first and most basic model, the **DWF** insulating door having a 3.6cm 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.

INSULATED	HIGHLY ENERGY EFFICIENT	FIRE-RESISTANT
DWK	DWT	DWF
U=1.1* W/m²K	U= <b>0.6**</b> W/m²K EN12207	U=0.64 W/m²K EN12207 EI, 45
page 50	page 52	page 54

<sup>\*</sup> internal tests of the middle part of the sash

<sup>\*\*</sup> manufacturer's internal tests for the sash

<sup>\*\*\*</sup> manufacturer's internal testino



# FOLDING LOFT LADDERS

Create safe and easy access to your loft space without the need for costly and oversized staircases. FAKRO loft ladders satisfy all technical and safety requirements whilst maximizing ease of use and comfort.

### **SPACE SAVINGS**

Thanks to their clever design, 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 INSTALLATION

To make installation fast and easy, FAKRO loft ladders feature a "click" fixing, enabling some ladders to be fitted by a single person. Additionally, FAKRO loft ladders can be adjusted to suit any ceiling height.

# 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.

# ADDITIONAL EQUIPMENT

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.** 









# 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 hatch, and a handrail as standard.





Light hatch weight and method of 'click fixing' makes installation very simple.



stile ends (only in 3-section version)



handrail



white hatch



non-slip treads set flush with ladder strings



peripheral



easy installation



possibility of installing additional accessories, pages 56-61

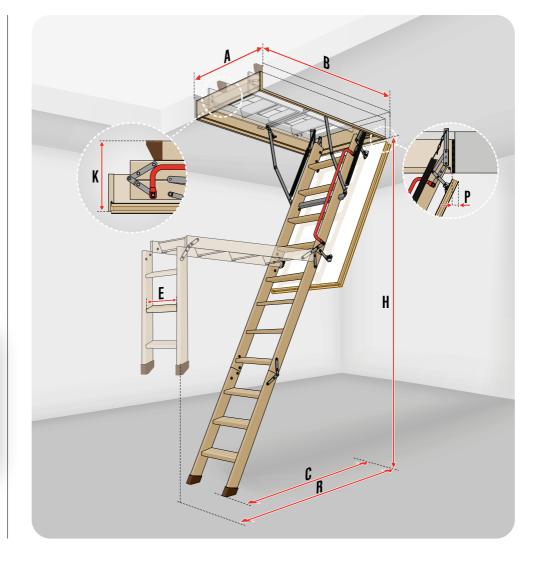
Technical specification:

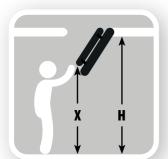
permissible load of 160 kg hatch heat transmission coefficient  $U = 1.1 \text{ W/m}^2 \text{K}$ insulation thickness 3 cm hatch thickness 3.6 cm





## LWK KOMFORT LADDER DIAGRAM







#### LWK Komfort LOFT LADDER DIMENSIONS

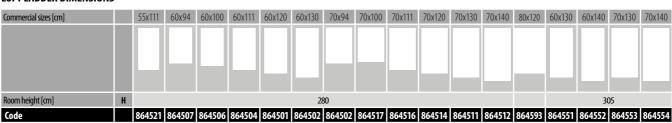
Ceiling opening dimensions [cm]	AxB	55x111	60x94	60x100	60x111	60x120	60x130	70x94	70x100	70x111	70x120	70x130	70x140	80x120	60x130	60x140	70x130	70x140		
Maximum room height [cm]	Н							280							305					
Minimum room height [cm]*	H <sub>min.</sub>	232	2	50		232			50			232			246					
Height to be reached to operate the ladder [cm]	X	215	2.	10		215			10			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	54 x 134	64 x 124	64x134		
Folded ladder height [cm]	K	27	3	5		27		3	5					27						
Swing space [cm]	R	153	1.	28	153	15	56	128 153			3 156				175					
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	1		3		4	1					3						
y		3		1		3			1	14				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



system of quick installation in

the ceiling

a

additional accessories

pages 56-61

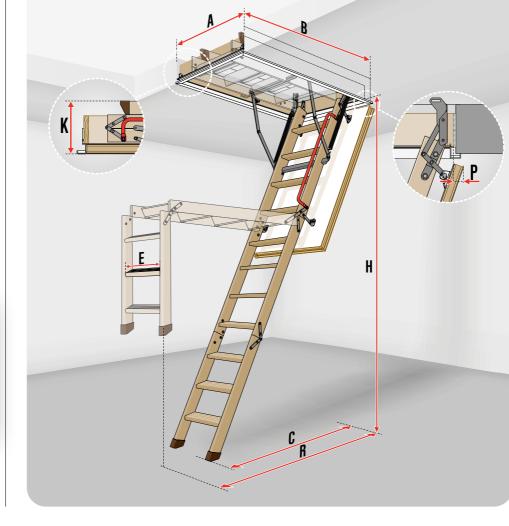
fully assembled, and ready for quick installation in the ceiling

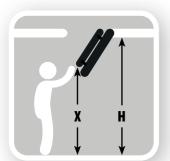




peripheral seal

# 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

LWZ I IUS LOI I LADDLIK DIN	ILIT	,10113						
Ceiling opening dimensions [cm]	<b>AxB</b> 60x120 70x120 70x <sup>2</sup>							
Maximum room height [cm]	H 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 72.9 x 122.9 72.9 x						
Internal box dimensions [cm]	54x114 64x114 64							
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					

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

#### LOFT LADDER DIMENSIONS

Commercial sizes [cm]		60 x 120	70 x 120	70 x 140
Room height [cm]	Н		280	
Code		865701	865711	865713



# WOODEN SECTION LOFT LADDERS

# **NEW!**





double system of "seals" guarantees perfect tightness



I he hinge controls hatch movement and whilst opening, automatically moves away from the ladder providing added stability and ease of use.

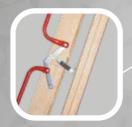








Unloading mechanism facilitates folding and unfolding the ladder.



Additional handrail ensures safety and comfort of use.



Light hatch weight and method of 'click fixing' makes installation very simple.



Energy-efficient, 5.6cm thick hatch equipped with lock perfectly prevents heat loss.

LWL Extra wooden loft ladders in new design with increased insulation parameters. LWL Extra for increased security and comfort of use has been equipped with an additional handrail mounted on the middle folding section and unloading mechanism that supports folding and unfolding the ladder.



stile ends



white hatch



two seals



two handrails



easy installation



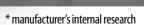
non-slip treads set flush with ladder strings



ladder unloading mechanism



possibility of installing additional accessories pages 56-61



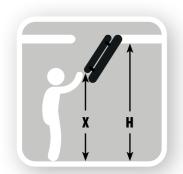
**Technical specification:** 

permissible load 160 kg loft ladder heat transmission coefficient U=0.74 W/m²K insulation thickness 5cm hatch thickness 5.6

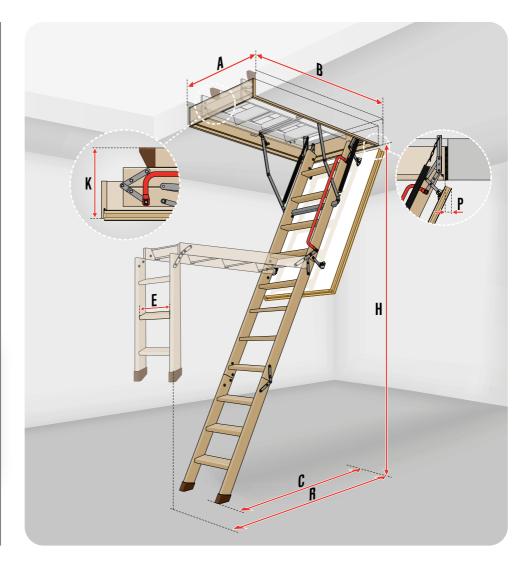




# LWL EXTRA LADDER DIAGRAM



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>		260 280									
Height to be reached to operate the ladder [cm]	X		215 1 225 1									
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	64 x 134	54x124	64x124	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												

### 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> 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
Room height [cm]	Н		28	80			305	
Code		867901	867911	867912	867913	867951	867953	867954



# WOODEN SECTION LOFT LADDERS





guarantees perfect tightness.



Short distance between the top tread and attic floor.



U=**0.68**LOFT LADDER

 $W/m^2K$ 







Highly energy-efficient, 6.6cm thick hatch prevents heat loss, making significant saving on energy bills.





stile ends (only in 3-section version)



white hatch



non-slip treads set flush with ladder strings



two seals



easy installation



handrail



possibility of installing additional accessories pages 56-61

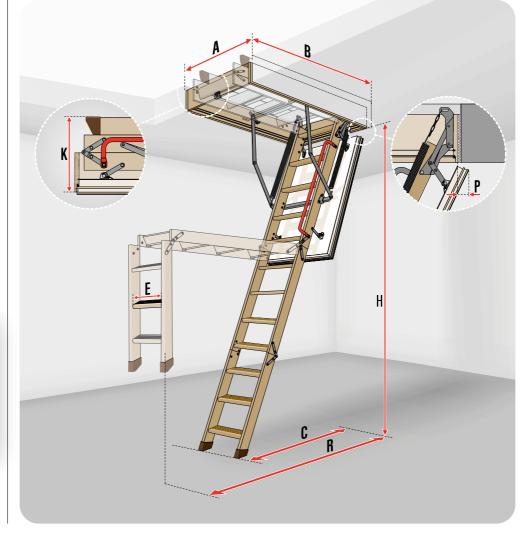
Technical specification:

maximum load of 160 kg loft ladder heat transmission coefficient U = 0.68 W/m<sup>2</sup>K insulation thickness 6 cm hatch thickness 6.6 cm





# LTK ENERGY 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

### 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				305			
Minimum room height [cm]*	H <sub>min.</sub>		253			2	35		243			
Height to be reached to operate the ladder [cm]	X		230			2	10 🚺		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	54x114	64 x 114	64 x 124	64x134	54 x 124	64 x 124	64 x 134	
Folded ladder height [cm]	K		42									
Swing space [cm]	R		136			10	64		178			
Distance after ladder unfolding [cm]	C		123			1.	29		139			
Hatch retraction after opening [cm]	P						3					
Box height [cm]						1	8					
Number of segments			4									
LADDER PARAMETERS												
Tread length [cm]	E	30					34					

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

#### LOFT LADDER

Tread width [cm] Distance between treads [cm]

Tread thickness [cm]

EGI I ENDDEN											
Commercial sizes [cm]		55x100	60x100	70x100	60x120	70x120	70x130	70x140	60x130	70x130	70x140
		ш	ш	ш							
											_
Room height [cm]	Н				280					305	
Code		864720	864706	864716	864701	864711	864712	864713	864751	864753	864754

25



# WOODEN SECTION LOFT LADDERS

LWT









Triple system of seals guarantees perfect tightness.



Light hatch weight and method of 'click fixing' make installation very simple



Short distance between the top tread and attic floor.

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.



Its special 8cm thick hatch is filled with polystyrene insulation to provide an excellent barrier and reduce heat loss.



stile ends (only in 3-section version)



white hatch



non-slip treads set flush with ladder strings



three seals



easy installation



handrail



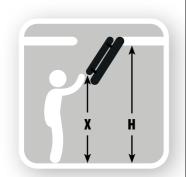
possibility of installing additional accessories pages 56-61 Technical specification:

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

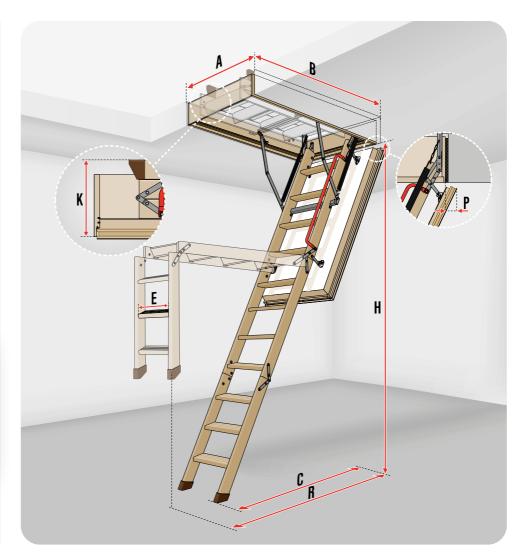




# LWT LOFT LADDER DIAGRAM



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

EWI LOT I LADDEN DIMEN.												
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			2	10 🚺		230			
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	64x124	64 x 134	54x 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]						2	22					
Number of segments			4					3				
I ADDED DADAMETEDS												

#### **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

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



# LOFT LADDERS WITH WOODEN FOLDING SECTION

# PASSIVE HOUSE





Short distance between the top tread and attic floor.



经规

Triple system of seals guarantees perfect tightness



Its special 8cm thick hatch is filled with polystyrene insulation to provide an excellent barrier and reduce heat loss.







The **LWT Passive House** loft ladder is a technically complex design specifically developed for the demands of such energy-efficient construction standards. It is installed with a kit which connects the ladder to the ceiling to guarantee a perfect seal and insulation without thermal bridges. It comes with Passive House certification.



stile ends











PASSIVE HOUSE Insulation kit



non-slip treads set flush with ladder strings



easy installation



possibility of installing additional accessories pages 56-61

 $\label{lem:continuous} \textbf{Technical specification:}$ 

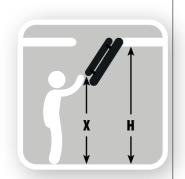
permissible load of 160 kg loft ladder heat transmission coefficient U = 0.51 W/m²K insulation thickness 7.4 cm hatch thickness 8 cm



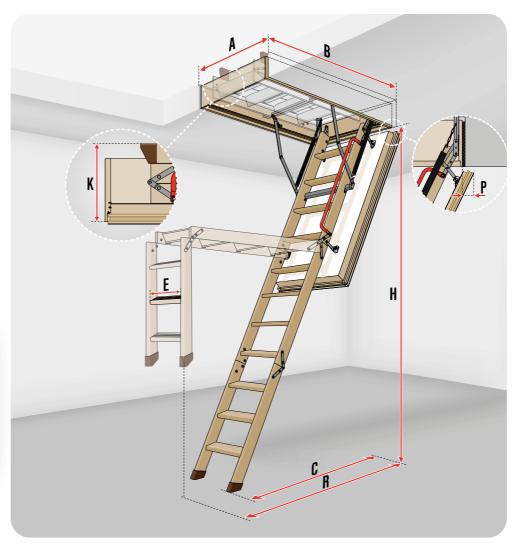




# LWT PASSIVE HOUSE LOFT LADDER DIAGRAM







#### 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
		ш	ш	
Room height [cm]	Н		280	
Code		8665AE	8665AF	8665AH



# LOFT LADDERS WITH WOODEN FOLDING SECTION

# LWF 60 FIRE-RESISTANT







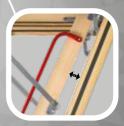
The **LWF60**, a new generation of fire resistant loft ladders with wooden ladder which perfectly combines a **high level of fire protection** with comfortable and safe access to the loft. Special hatch design and materials used provide a 60-minute protection against fire penetration from the space where the loft ladder was installed. Fire resistance class **El**<sub>1</sub> **60/El**<sub>2</sub> **60**, classification according to EN 13501.



Triple system of seals guarantees perfect airtightness



Short distance between the top tread and loft floor.



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.



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



handrail



fire resistant hatch on one side



non-slip treads set flush with ladder strings



three seals



possibility of installing additional accessories pages 56-61

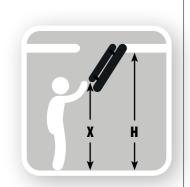
Technical specification:

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





# 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					280	280				305			
Minimum room height [cm]*	H <sub>min.</sub>		253					234			242			
Height to be reached to operate the ladder [cm]	X		23	35				210	0			2	30	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	49x114	54x94	64x94	54 x 114	64x114	64 x 124	64 x 134	80 x 124	49x124	64 x 124	64x134	80 x 124
Folded ladder height [cm]	K		4	6						38				
Swing space [cm]	R		138			164					10	78		
Distance after ladder unfolding [cm]	C		12	26		129					13	39		
Hatch retraction after opening [cm]	P							5						
Box height [cm]								22.5						
Number of segments			4	4						3				
LADDER PARAMETERS														
Tread length [cm]	E	3	0				34				30		34	
Tread width [cm]								8						

<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	55 x 120	60x100	70 x 100	60x120	70x120	70x130	70x140	86x130	55 x 130	70x130	70x140	86x130
			ш			ш	ш	ш			ш	ш		
Room height [cm]	Н					280						30	)5	
Code		869G20	869G22	869G06	869G16	869G01	869G11	869G12	869G13	869 <b>G</b> 96	869G57	869G53	869G54	869 <b>G</b> 97

25

Ladders are available only in sizes shown above.

Distance between treads [cm]



# LOFT LADDERS WITH WOODEN FOLDING SECTION

# NEW!

LWF 60







The **LWF60 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.



Triple system of seals guarantees perfect airtightness.



Short distance between the top tread and loft floor.



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.



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



key lock



three seals



non-slip treads set flush with ladder strings



a

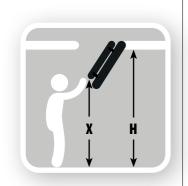
possibility of installing additional accessories pages 56-61 Technical specification:

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





# 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**

LIVI GO SE LOI I EADDEN D	/!!V!E!	1310113										
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	280						
Minimum room height [cm]*	H <sub>min.</sub>		253				234					
Height to be reached to operate the ladder [cm]	X		235	0			210	0				
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	64x114	64 x 124	64 x 134	80 x 124	64 x 124	64 x 134	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						3			
LADDER PARAMETERS												
Tread length [cm]	E	30				34					34	
Tread width [cm]							8					
Distance between treads [cm]							25					

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

Commercial sizes [cm]		55 x 100	60x100	70 x 100	60x120	70x120	70x130	70x140	86x130	70x130	70x140	86x130
			ш		ш							
Room height [cm]	Н				28	80						
Code		869H20	869H06	869H16	869H01	869H11	869H12	869H13	869H96	869H53	869H54	869H97

2



# **SLIDING SECTION LOFT LADDERS**









The LDK loft ladder is a 2-section, sliding loft ladder. It is similar in style to folding section ladders, the main difference being that the bottom section simply slides up into the loft, eliminating the need for swing space. The LDK with new LDS split section gives the chance to deliver LDK loft ladders in reduced packaging dimensions by a courier service. The LDK loft ladders are designed for room heights of 280 cm & 305 cm.



The sliding ladder mechanism has a longer lower section which gives it stability



white hatch



peripheral seal



non-slip treads with additional depth



a

possibility of installing additional accessories pages 56-61

Technical specification:

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





# LDK LOFT LADDER DIAGRAM **H2** H C

The LDK ladder with new LDS split section

#### For the room height up to [cm] 205 305 C Distance of drop [cm] 105 140 Max height of the loft required [cm] H2 55 150 D 55 150 X 130 230

#### LDK LADDER DIMENSIONS

Ceiling opening dimensions [cm]	AxB	60x120	70x120	70x130	70x140
Sliding section LDS			Ц	OS	
Maximum room height [cm]	Н		30	05	
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	05	
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.}$ 

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

# **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.

The loft ladder box is made of wood and has a peripheral seal placed within a milled recess.

Once the hatch is closed, this seal ensures full airtightness is provided and once installed the box's special design enables quick and easy fitting

### HARDWARE

### TREADS

### stile ends

made of PVC protect the floor surface from scratching and add to overall

## HATCH OPENING MECHANISM

### HATCH

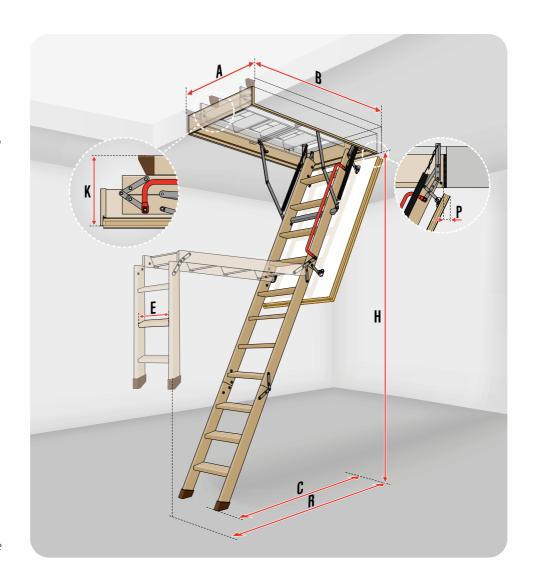
The loft ladder hatch is made of wood and can be either insulated or fire-resistant. The insulation protects against heat loss while fire-resistant material protects against heat build-up caused by spread of flame. The external hatch surface is smooth with no visible fixing points to detract from the visual style of any interior design.

### LADDER

FAKRO loft ladders are predominantly of three sections, though to create more space for the feet. The special ladder structure

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.

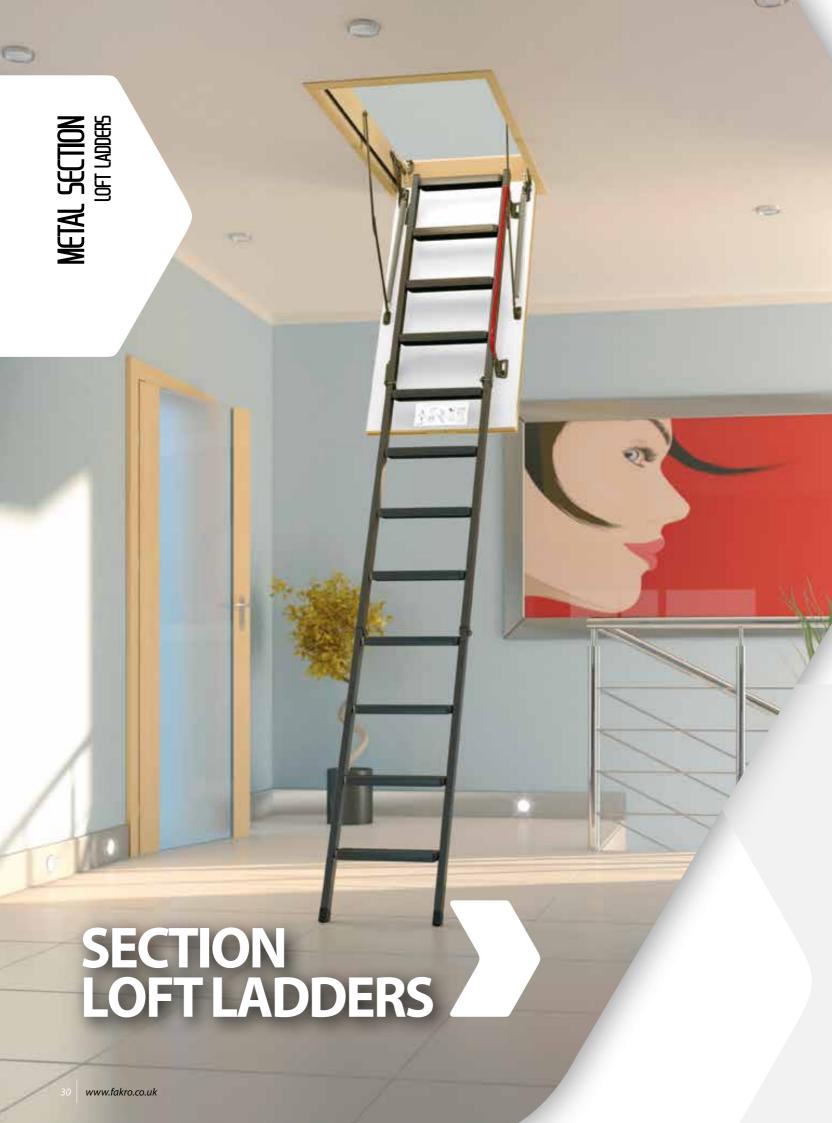
### ${\bf TREAD\ LENGTH:}$

#### 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



### **HATCH UNFOLDING MECHANISM** The ladder box can be of wood, metal or a combination of a wooden box / metal frame. The hatch opening mechanism enables it to be It has been designed to enable architrave to be fully or partly open positions to ensure folding and installed with ease if the ready-fitted option is not unfolding are done in safety. LML and LMF loft ladders chosen. Peripheral single or double seals provide also have a hidden mechanism in the handrail which a good standard of airtightness. in conjunction with that of the hatch opening enables them to be opened or closed with a single rod. The loft ladder hatch is made **HARDWARE** of wood or metal and can be The patented corner hinge design either insulated or fire-resistant. adds rigidity to the box and prevents The insulation protects against distortion. This ensures that the ladder heat loss while fire-resistant will continue to be operated material protects against heat trouble-free. build-up caused by spread of flame. The external hatch surface is smooth to blend effectively with the visual style of any interior design. **TREAD** Circular embossing of the tread surface prevents slipping while the width of treads (8 or 13cm) enables them to be used safely and with ease. **LADDER** The special design of the metal ladder and a double connection of the ladder hinges guarantee high ladder **STILE ENDS** strength. Ladder elements are powder-coated with hard wearing lacquer in grey RAL 7022 or silver RAL 9006. Some Made from plastic, these protect metal ladders have the final two treads left loose and with the floor from scratches and in telescopic stile ends this enables adjustments of the ladder addition add to the overall ladder length to be made without the need for cutting. stability.



# 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 beige.





stile ends



beige hatch



non-slip treads



peripheral seal



possibility of installing additional accessories pages 56-61

Technical specification:

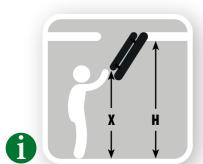
 $\label{eq:permissible} permissible\ loading\ of\ 200\ kg$   $\ hatch\ heat\ transmission\ coefficient\ U=1.1\ W/m^2K$ insulation thickness 3 cm hatch thickness 3.6 cm





# LMS LOFT LADDER DIAGRAM



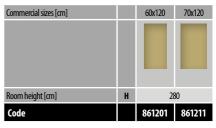


### LMS LOFT LADDER DIMENSIONS

LMS LUFT LADDER DIMENS	IONS	•			
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]	X	220			
Box external dimensions [cm]		58 x 118.4	68 x 118.4		
Internal box dimensions [cm]		54x114	64x114		
Folded ladder height [cm]	K	25.5			
Swing space [cm]	R	157			
Distance after ladder unfolding [cm]	C	118	8.5		
Box height [cm]	14				
LADDER PARAMETERS					
Tread length [cm]	<b>E</b> 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





# METAL FOLDING SECTION LOFT LADDERS







Unlike the LMS the **LMK** loft ladder has a white hatch and red handrail. The handrail is fixed to the ladder brackets, making its use much easier.





stile ends



handrail



white hatch



non-slip treads



peripherial seal



possibility of installing additional accessories pages 56-61

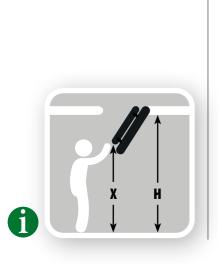
Technical specification:

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





# LMK LOFT LADDER DIAGRAM





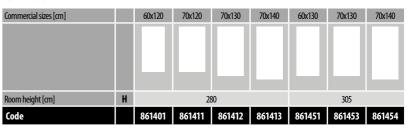
### LMK LOFT LADDER DIMENSIONS

Ceiling opening dimensions [cm]	AxB	60x120	70x120	70x130	60x130	70x130	70x140		
Maximum room height [cm]	Н		28	30		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]		58x118.4 68x118.4 68x128.4 68x138.4			68 x 128.4	68 x 128.4	68 x 138.4		
Internal box dimensions [cm]		54x114	64 x 114	64 x 124	64 x 134	54x124	64 x 124	64x134	
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							
LADDER PARAMETERS									
Tread length [cm]	E	34							

### **Distance between treads [cm]**\* 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]





# **METAL FOLDING SECTION LOFT LADDERS**



Steel frame integrated with a wooden box, metal architrave lining and quick fit brackets.





Mechanism hidden within the rail aids folding and unfolding of the ladder.



Additional tread shortens distance between top tread and loft floor.



U= 1. 1



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 enable quick adjustment of ladder length to suit ceiling height.



telescopic stile ends









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

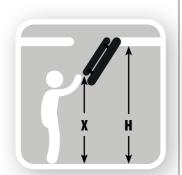
**Technical specification:** 

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

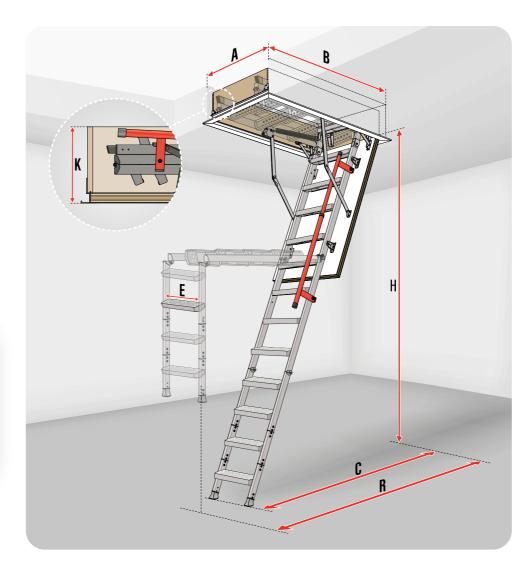




# LML LUX LOFT LADDER DIAGRAM







### 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			2	80			305				
Minimum room height [cm]*	H <sub>min.</sub>			2	33			256				
Height to be reached to operate the ladder [cm]	X			2	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			1	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> 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
			$\square$									
Room height [cm]	Н			28	30					305		
Code		862401	862411	862412	862413	862496	862498	862451	862453	862454	862497	862499
,	Н	862401	862411			862496	862498	862451	862453		862497	862



### METAL FOLDING SECTION LOFT LADDERS

LMP



White on both sides, 3.6 cm thick, insulated hatch equipped with a latch







Added safety, thanks to lock which prevents against unintentional folding.

The LMP new generation loft ladder, allows access to attic space, even in very high ceiling rooms (from 300 to 366cm). The unloading system used in ladder allows for convenient operation while maintaining the maximum comfort and safety of use.



ladder unloading mechanism built in handrail

non-slip treads



stile ends





possibility of installing additional accessories pages 56-61



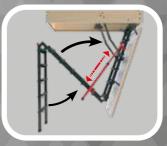
for high rooms



Short distance between the last tread and attic floor enhances the comfort of use.



Ladders intended for installation in high ceiling rooms.



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.

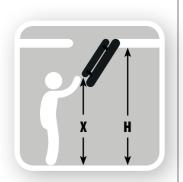
Technical specification:

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





# 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	84 x 142.2					
Internal box dimensions [cm]	MxN	54x138.2 64x138.2 80x138.2						
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> 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]		60x144	70x144	86x144
Room height [cm]	Н		366	
Code		869334	869335	869336



# METAL FOLDING SECTION LOFT LADDERS

### NEW!

# LMF 60 FIRE-RESISTANT



Triple system of seals guarantees perfect tightness.



Short distance between the last tread and attic floor.







only in loft ladders to room height 360cm

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 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 heat expands and prevents entering the fire to the fire free space.



stile ends



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



one - sidedly fire-resistant hatch



non-slip treads



seal





possibility of installing additional accessories pages 56-61



for high rooms

\*manufacturer's internal research

Technical specification:

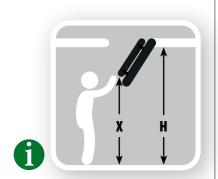
permissible loading of 200 kg loft ladder heat transmission coefficient U = 0.64 W /m²K\* Fire resistance class El<sub>1</sub>/El<sub>2</sub> = 60 minutes insulation thickness 7.8 cm hatch thickness 8.5 cm

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

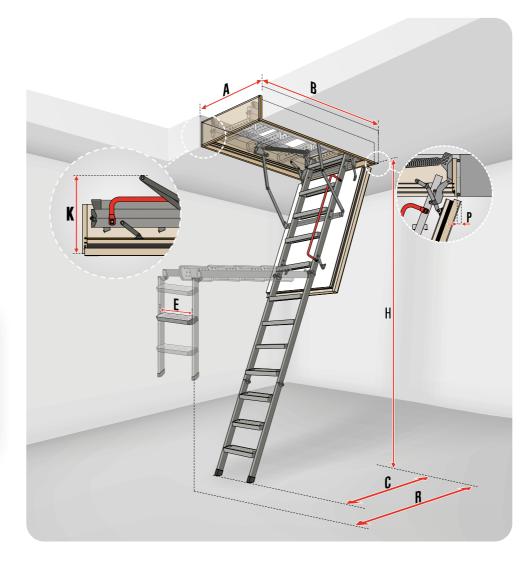




### LMF 60 LADDER DIAGRAM



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

LINI OO LOI I LADDEN DIINI												
Ceiling opening dimensions [cm]	AxB	60x120	70x120	70x130	70x140	86x130	70x130	70x140	86x130	60x144	70x144	86x144
Maximum room height [cm]	Н			280				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	0
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	64x124	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	15					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

LOFI LADDER												
Commercial sizes [cm]		60x120	70x120	70x130	70x140	86x130	70x130	70x140	86x130	60x144	70x144	86x144
		_		$\square$			$\square$					
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

# **FIRE-RESISTANT**















The design of **LMF** loft ladder complies with stringent fire requirements, whilst providing safe and comfortable access to the loft spaces. The LMF ladder prevents fire from spreading to the upper or lower fire free storey for 120 minutes.



Mechanism hidden within the rail aids folding and unfolding of the ladder.



telescopic stile ends



ladder unloading mechanism built in handrail



fire-resistant hatch on both sides



system of quick installation in the ceiling



architrave lining



non-slip treads, 13 cm in width



seal



possibility of installing additional accessories pages 56-61



Technical specification:

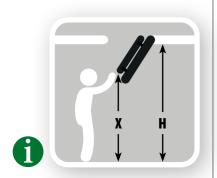
permissible loading of 200 kg hatch heat transmission coefficient  $U = 0.79 \text{ W/m}^2\text{K}$ fire-resistance El<sub>3</sub>=120 minutes insulation thickness 8 cm hatch thickness 8.2 cm

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





### LMF LOFT LADDER DIAGRAM



The LMF loft 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 LOFT LADDER DIMENSIONS

LMF LOFT LADDER DIMENS	ION	•							
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]		59x118	68 x 118	68 x 128	68x138	84x128	68x128	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 64x124 64x134						80 x 124
Folded ladder height [cm]	K				3	34			
Swing space [cm]	R			165				176	
Distance after ladder unfolding [cm]	C			120				130	
Box height [cm]					1	16			
LADDER PARAMETERS									
Tread length [cm]	E	35							
Tread width [cm]					1	13			
Distance between treads [cm]					2	25			

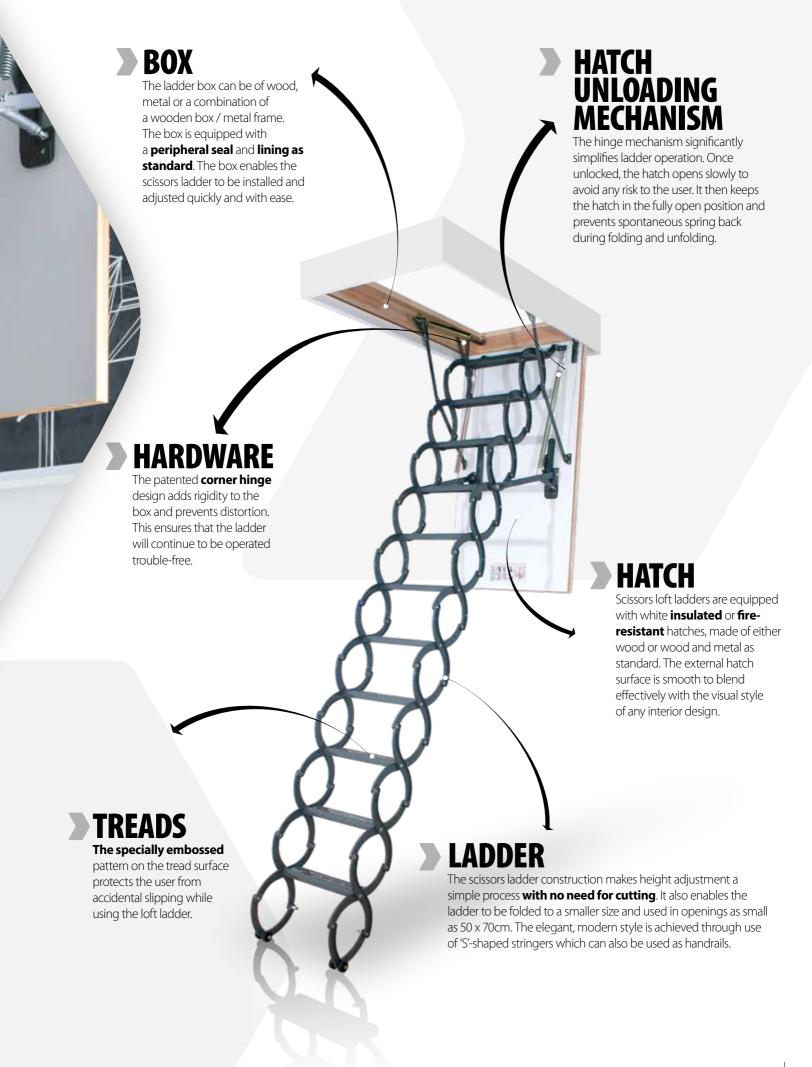
 $<sup>\</sup>hbox{* for rooms lower than the maximum standard height H please adjust the length of the ladder according to the assembly instructions}$ 

#### **LOFT LADDER**

Commercial sizes [cm]		60x120	70x120	70x130	70x140	86x130	70x130	70x140	86x130
		ш		ш	ш		ш		
Room height [cm]	н			280				305	
<b>,</b>	"	862501	862511		862513	862596	862553		862597
Room height [cm]	Н	862501	862511	280 <b>862512</b>	862513	862596	862553	305 <b>862554</b>	86259

Ladders are available only in sizes shown above.







**SCISSORS LOFT LADDERS** 

LST





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



possibility of adding or detaching tread



architrave lining



system of quick installation in the ceiling



peripheral seal



system of adapting the ladder length to the ceiling height



non-slip treads



possibility of installing additional accessories

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





### LST LOFT LADDER DIAGRAM



#### LST LOFT LADDER DIMENSIONS

			Stan	dard ladder le	ngth				
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							
I ADDED DADAMETEDS									

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

Ladder short (10-trea	ter by 1 tread d ladder)	Standard ladder (11- tread ladder)		Ladder long (12-trea	er by 1 tread d ladder)	Ladder longer by 2 treads (13- tread ladder)		
230	250	250	280	280	300	300	330	
	Sizes and d			ot induded in ights 250-28		ire identical		
14	40	15	50	16	50	17	70	
135	127	146	134	153	145	163	150	

#### LOFT LADDER

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

Ladders are available only in sizes shown above.

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

 $<sup>\</sup>hbox{*-} while {\it ordering LSS tread-the ladder commercial size and type has to be provided} \\$ 

### SCISSORS LOFT LADDERS

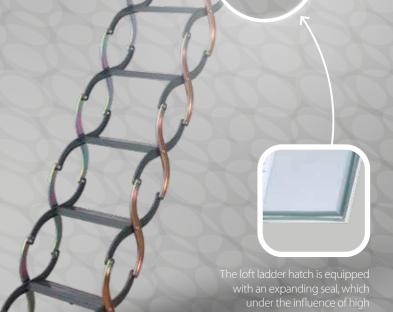








The **LSF** fire-resistant loft ladder has a 60-minute fire rating and acts as a barrier to prevent spread of flame. The overall floor - ceiling ladder height can be increased to a maximum of 320cm by adding one LSS tread.





fire-resistant hatch on one side



architrave lining



non-slip treads



system of adapting the ladder length to the ceiling height



possibility of installing additional accessories pages 56-61

system of quick installation in the



possibility of adding or detaching tread



fully assembled, and ready for quick

installation in the ceiling



temperature increases its volume and prevents fire from spreading to the fire free storey.

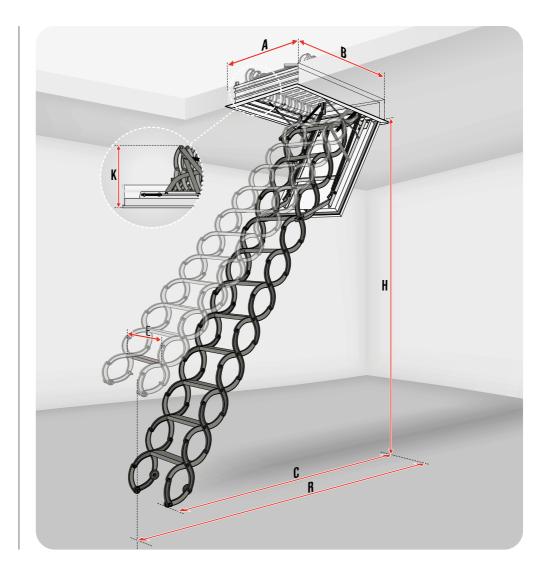
\*manufacturer's internal research

Technical specification: 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

				Stan	dard ladder le	ngth		
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

L	adder short (9-tread	ter by 1 tread I ladder)		d ladder d ladder)	Ladder longer by 1 tread (11- tread ladder)					
	240	270	270	300	300	320				
	Sizes and dimensions of loft ladder not included into the table are identical with those for heights 250-280cm									
	165	165	170	180	185	210				
		140	165	130	120					

#### LOFT LADDER

Compatible tread LSS

Tread width [cm]

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

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

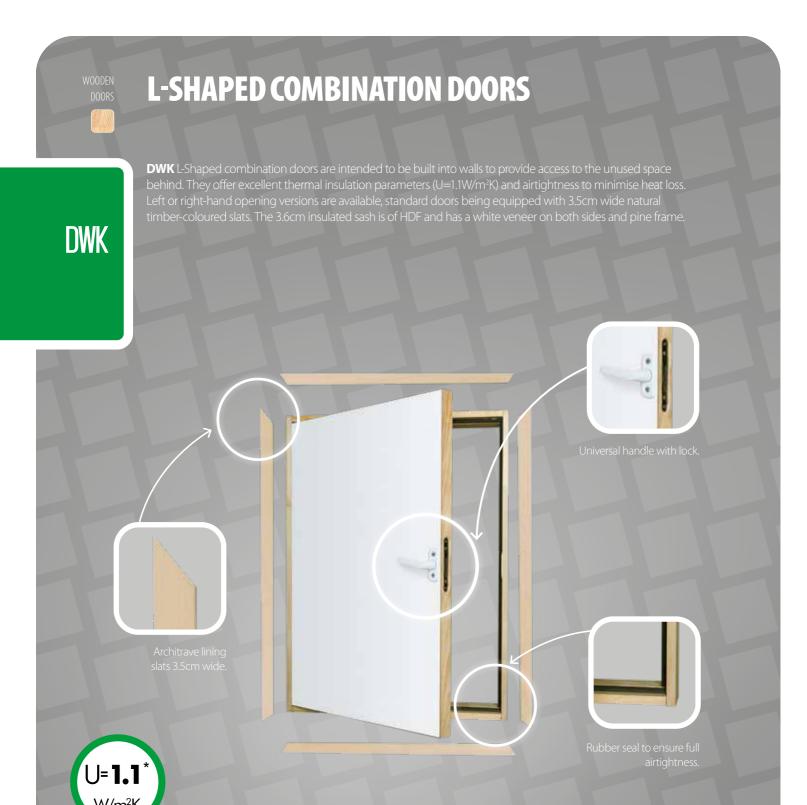
LSS-32

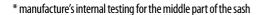
LSS-30

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

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











Technical specification:

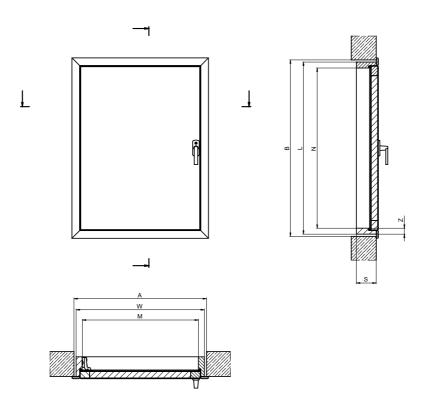
heat transmission coefficient U = 1.1 W/m<sup>2</sup>K insulation thickness 3 cm

fully assembled, and ready for quick installation





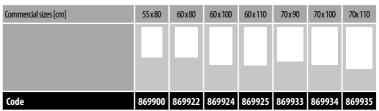
### **DWK DOOR DIAGRAM**



#### **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	58.4x98.4	58.4x 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



DWK doors are available only in sizes shown above.



# HIGHLY ENERGY-EFFICIENT WOODEN DOORS

DWT
HIGHLY ENERGY
EFFICIENT

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  $U = 0.6 \text{ W/m}^2\text{K}^*$ ) 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.









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

**Technical specification:** 

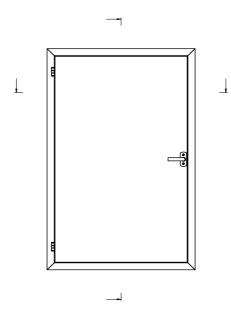
heat transmission coefficient U = 0.6 W/m<sup>2</sup>K\* insulation thickness 6 cm

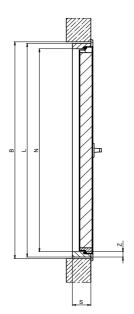
fully assembled, and ready for quick installation

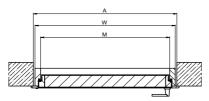




### **DWT DOOR DIAGRAM**



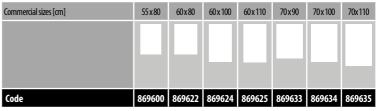




#### **DWT L-SHAPED DOORS DIMENSIONS**

Opening dimensions [cm]	AxB	55x80	60x80	60x100	60x110	70x90	70x100	70x110
Door dimensions [cm]	WxL	53.4x78.4	58.4x78.4	58.4 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

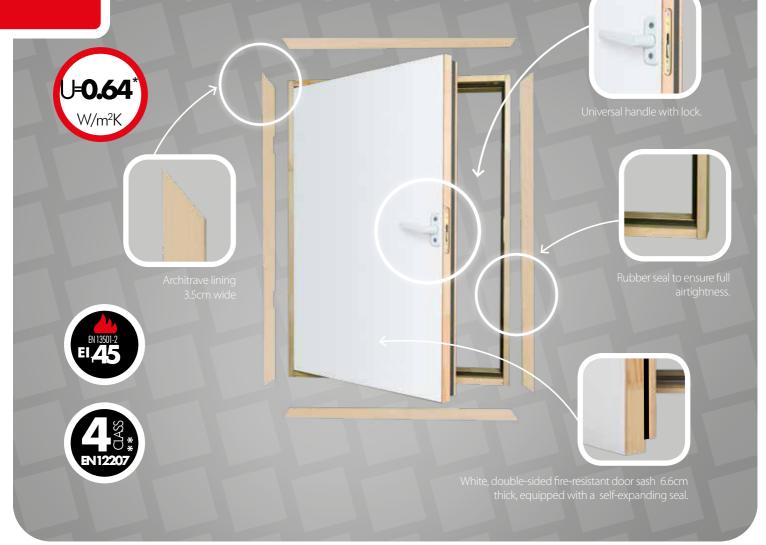


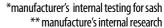
DWT doors are available only in sizes shown above.



# L-SHAPED COMBINATION DOORS

DWF FIRE-RESISTANT **DWF** L-Shaped combination fire-resistant doors have a 45-minute fire rating – (EN 13501-2) to protect against the spread of flame while providing access to unused space behind a wall. The white 6.6cm thick sash has thermo insulation to provide an excellent barrier against heat loss (U= 0.64W/m²K\*). The door can be installed in the right or left side. They are as standard equipped with wooden architrave lining in natural colour.











fire-resistant white sash on both sides

Technical specification:

fire-resistance EI<sub>1</sub>/EI<sub>2</sub>=45 minutes heat transmission coefficient U = 0.64 W/m<sup>2</sup>K\* insulation thickness 6 cm

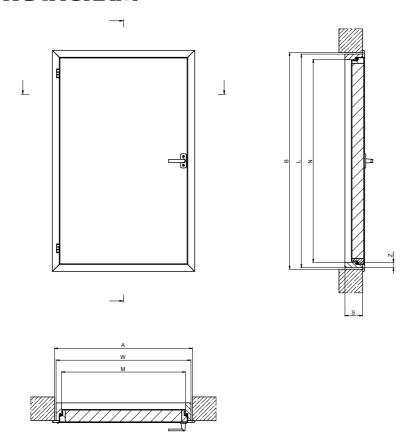


fully assembled, and ready for quick installation in the ceiling





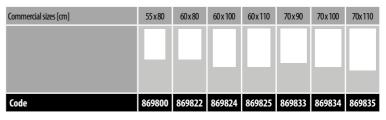
### **DWF DOOR DIAGRAM**



#### **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	58.4x98.4	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



DWF doors are available only in sizes shown above.



## 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.



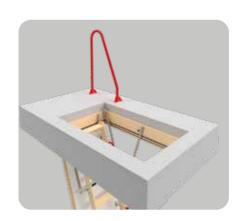
LVD DD-live d-	Available for loft ladders
LXB-P Balustrade	all FAKRO loft ladders
Standard dimensions [cm]	92x140
Non-standard dimesnions [cm]	for loft ladder sizes smaller than 92x140 cm, the standard size balustrade is applied
Balustrade height [cm]	110

# 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.

<sup>\*</sup>available in second half of 2021



# 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					Avail	able for loft lad	lders								
	LWK Komfort	LWL Extra	LTK Energy	LWT	LWT Passive House	LWF60	LDK	LMS	LMK	LMP	LMF60				
Installation to the ceiling max. thickness [cm]	3:	5	39		43			35		39	43				

Code	62085

### ARCHITRAVE LININGS LXL

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\*.

Architectus linings IVI D/W					Av	ailable for	r loft ladd	ers					
Architrave linings LXL-P/-W	LWK Komfort	LWL Extra	LTK Energy	LWT	LWT Passive House	LWF 60	LDK	LMS	LMK	LMS	LMK	LMP	LMF60
Standard dimensions [cm]		70x140, 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 instllation on the box [cm]						2	.5						





	LX	L-P	LXI	-W	
	70x140	86x144	70x140	86x144	
Code	62087	80AZ52	62088	80AZ54	

Architrave linings LXL-PVC					Available for	r loft ladde	ers				
Architrave linings LXL-PVC	LWKKomfort	LWL Extra	LTK Energy	LWT	LWT Passive House	LWF60	LDK	LMS	LMK	LMP	LMF60
Standard dimensions [cm]					60x120, 70x120,	86x140, 86	ix144				
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	.3					
Max. witdh of the gaps, the architrave slats cover after instllation on the box [cm]					2	.4					





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

<sup>\*</sup> the architrave lining colour may slightly differ from the colour of lining in angles and hatch

### INVISIBLE ARCHITRAVE L

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	Available for loft ladders											
IIIVISIDIE ATCIIITAVE LAL-I	LWK Komfort, LWL Extra, LTK Energy, LWT											
Standard dimensions [cm]		60x120cm, 70x120cm, 86x140cm										
Non-standard dimensions [cm]	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	70x120	86x140									
Code	80AZ68	80AZ69	80AZ70									





## **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).



D			Available for loft ladders															
Box extension LXN			LWK Komfort	LWZ Plus	LWLExtra	LTK Energy	LWT	LWT Passi House	ve LWF60	) LDK	LIV	IS LI	MK L	ML L	MF60	LMF	LST	LSZ
Height of the box extension frame	[cm]									10								
Max. height of non-standard box e	xtension [cr	n]				20				16		20						
LXN box extension commercial size [cm]	51 x 80	55x100	55 x 111	60x90	60x94	60 x 100	60 x 111	60 x 120	60 x 130	60 x 140	70 x 80	70 x 94	70 x 100	70x111	70 x 120	70 x 130	70 x 140	86x130
Code	862300	862320	862321	862322	862307	862306	862304	862301	862302	862303	862332	862317	862316	862314	862311	862312	862313	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.

### 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.



Additional tread LXT		Available for loft ladders												
	LWK Komfort (size 55x111)	LWL Extra (sizes 60x)	LWK Komfort (except size 55x111)	LWL Extra (except sizes 60x)	LWZ Plus	LMS	LMK							
	LXT	280	LXT300											
Loft ladder's tread length [cm]	3	0	34											

	LXT 280	LXT 300
Code	62058	62059



## 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.



Ummay hatah I VIII		Available for loft ladders																
Upper hatch LXW	LWK Komfo	ort LW	ZPlus I	LWL Extra	LTK Energy	LWT	LW	Passive Hous	se LWF	60	LMS	LMK	LML	LMF	60	LMF	LST	LSZ
Max. thickness of the ceiling where the upper hatch can be installed [cm]	31 or afte standard b extension in lation 41. Fo section ladd the use of t box extension a must.	ox stal- or 4 31 c lers h he	or after stand atch installat	ard upper	35 or after standard bo extension installation 4 With 4-section loft ladders extension box must be applied.	x 5. 39 or at on With 4-	39 or after standard box extension installation 49. With 4-section loft ladders extension box must be applied.			rtho 3	t1 or after sta ktension inst	48 or after standard bo extension installation 5	x standar exten	rd box stan	tension	41, the boxe installation		
Upper hatch box height [cm]									2	0								
Commercial sizes of LXW [cm]	51x80	55x100	55 x 111	60 x 90	60x94	60 x 100	60 x 111	60 x 120	60 x 130	60 x 140	70 x 80	70x94	70 x 100	70 x 111	70 x 120	70 x 130	70 x 140	86 x 130
Code	862200	862220	862221	862222	862207	862206	862204	862201	862202	862203	862232	862217	862216	862214	862211	862212	862213	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.

### 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.





### STILE ENDS LXS

**The LXS 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 from being scratched. They are available for all segment of loft ladders with wooden ladder sections (besides 4-section and LDK loft ladder).





### UNLOADING MECHANISM LXM

The unloading mechanism assists in folding and unfolding the ladder thus increasing the comfort and safety of using loft ladders. The LXM 3 mechanism is designed for 3-section wooden loft ladders, the LXM 4 mechanism for 4-section wooden loft ladders. The LXM-M mechanism is intended for metal section loft ladders. The installation of the LXM mechanism is possible on the right or left side of the ladder and is mounted on the opposite side to the LXH handrail. Compatibility table below.



		Available for loft ladders	
Unloading mechanism LXM		Plus, LWZ Plus, , LWT PH, LWF60	LMS, LMK, LMF60 up to the height 280
	3-segment	4-segment	
	LXM 3	LXM 4	LXM-M
Code	869373	869374	869297
Minimum ladder width [cm]		60	
The minimum height	260	260	The minimum height resulting from the ladder dimension table

## 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.

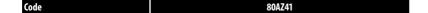


Handrail LXH	Available for loft ladders									
	LWK Komfort, LWZ Plus, LTK Energy, LWT, L	WT Passive House, LWF 60, LMS, LMK, LMF60	LDK							
Handrail is installed to the upper ladder section	LXH*50/13	LXH*75/13	LXH75/16							
Code	80AZ24	80AZ18	62065							

<sup>\*</sup> Handrails LXH 50/13 are installed to ladder with boxes up to 100cm in length; handrails LXH 75/13 to ladders with boxes over 100cm in length In the LMF 60 loft ladders, the additional LXH handrail is compatible only with the loft ladders version heights up to 280 and 305cm

### **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.





# 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	Available for loft ladders													
	LWK Komfort	LWL Extra	LTK Energy	LWT	LDK	LMS	LMK							
Standard dimensions [cm]	60/70x120 oraz 86 x 140													
Non-standard dimensions		For ladders smaller then 86x140 cm the standard size of the kit has to be adapted												
Commercial sizes LXD	60x120	70x1.	20	86x140	86x144									
Code	80AZ13	80AZ	14	80AZ15	80AZ61									

### **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
<b>LXB-P</b> balustrade	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
LXH-A handrail	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>LXK</b> installation brackets	✓	S	✓	✓	✓	✓	✓	✓	✓	✓	S	✓	✓	S	S	S
LXL architrave lining (wooden)	✓	_	✓	✓	✓	✓	✓	✓	✓	✓	_	✓	✓	_	_	_
<b>LXL-PVC</b> architrave lining (plastic)	✓	_	✓	✓	✓	✓	✓	_	✓	✓	_	✓	✓	_	_	_
<b>LXL-I</b> architrave	✓	_	✓	✓	✓	_	_	_	_	_	_	_	_	_	_	_
<b>LXH</b> handrail	+S	+5	S	+5	+S	+S	+S	+5	+S	+ <b>√</b> /S	_	_	**+S	_	_	_
<b>LXN</b> box extension	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	_
<b>LXT</b> additional tread	✓	✓	✓	_	_	_	_	_	_	✓	_	_	_	_	_	_
<b>LXW</b> upper hatch	*✓	✓	✓	*✓	*✓	✓	*✓	*•	_	✓	✓	✓	✓	✓	*•	_
<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	✓	_	✓	✓	✓	_	_	_	✓	✓	_	✓	_	_	_	_

[✓] - compatible

[—] - not compatible

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