

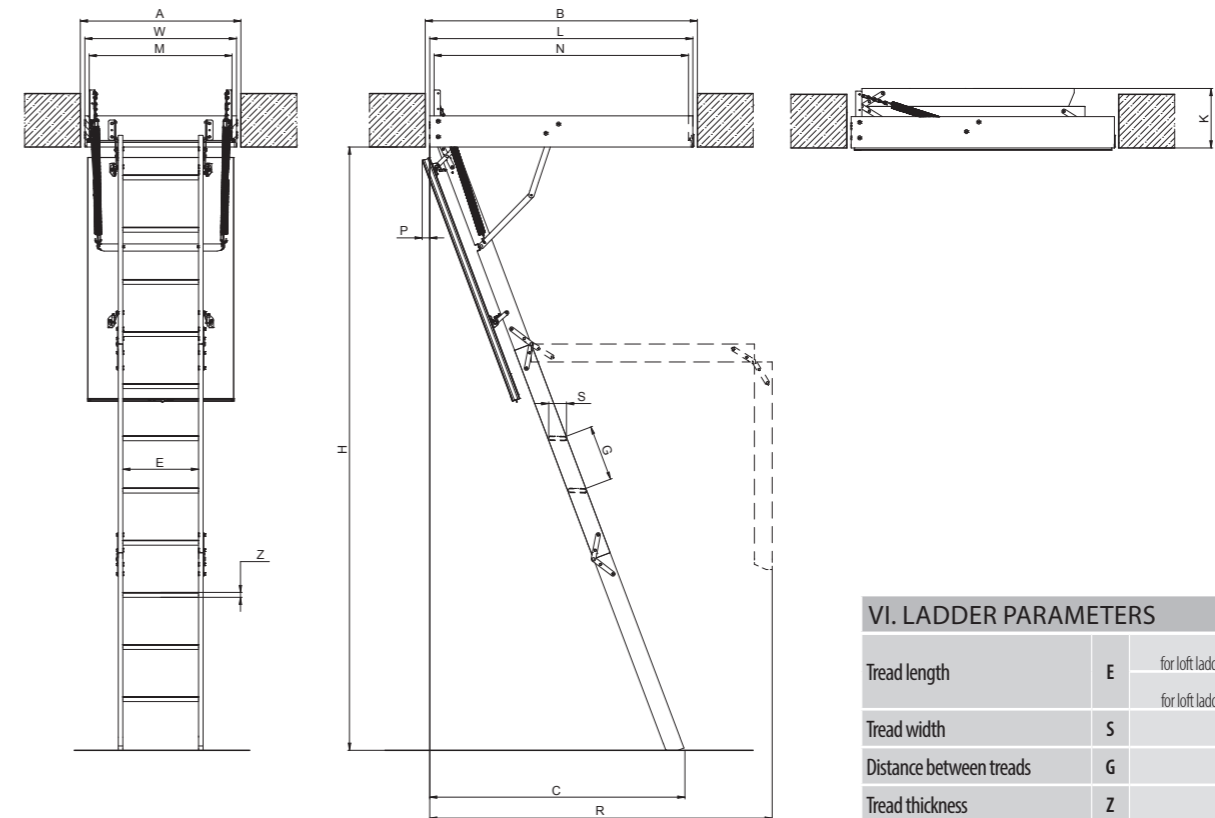


TECHNICAL SPECIFICATION

LWS Smart, LWK Komfort FOLDING WOODEN SECTION LOFT LADDER

LOFT LADDER TYPE	LWS Smart	LWK Komfort
	 Compliant with EN14975	 Compliant with EN14975
I. APPLICATION		
Room height [cm]	280, 305	
Installation	- fully assembled product - easy to install (use of special fasteners – the so called „clicks“)	
II. FEATURES		
Box	pinewood	
Hatch	ladder hinge controls the movement of the hatch so that during opening the ladder automatically shifts away from the hatch for improved comfort of the user	
Hatch colour	beige	white
Lock	+	
Unloading mechanism	-	
Ladder	pinewood	
Seal	peripheral	
Treads	anti-slip, equal with stringers of the ladder	
Handrail	-	x 1
Finishing trims	-	
Stile ends	-	+ (only in 3-section version)
III. TECHNICAL PARAMETERS		
Heat transfer coefficient U	1.1 W/m ² K	
Thermal insulation thickness	3 cm	
Hatch thickness	3.6 cm	
Maximum loading	160 kg	
IV. OPTIONS		
Accessories	<ul style="list-style-type: none"> - balustrade - handrail - installation brackets - wooden trims - plastic trims - stile ends (only for 3-section loft ladder) - box extension - upper hatch - insulation kit 	<ul style="list-style-type: none"> - balustrade - handrail - installation brackets - wooden trims - plastic trims - box extension - upper hatch - insulation kit

V. LOFT LADDER DIAGRAM



VI. LADDER PARAMETERS

Tread length	E	30 cm for loft ladders with a width of 55cm 34 cm for loft ladders with a width >55cm
Tread width	S	8 cm
Distance between treads	G	25 cm
Tread thickness	Z	2 cm



VII. TECHNICAL PARAMETERS FOR LOFT LADDERS IN PARTICULAR SIZES

Ceiling opening dimensions [cm]	AxB	55x111	60x94	60x100	60x111	60x120	60x130	70x94	70x100	70x111	70x120	70x130	70x140	60x130	60x140	70x130	70x140
Room height [cm]	H	280												305			
Box external dimensions [cm]	WxL	53x109.4	58x92.4	58x98.4	58x109.4	58x118.4	58x128.4	68x92.4	68x98.4	68x109.4	68x118.4	68x128.4	68x138.4	58x128.4	58x138.4	68x128.4	68x138.4
Box internal dimensions [cm]	MxN	49x105	54x88	54x94	54x105	54x114	54x124	64x88	64x94	64x105	64x114	64x124	64x134	54x124	54x134	64x124	64x134
Height of folded ladder [cm]	K	27	35			27		35					27				
Swing space [cm]	R	153	128			153		156			128		153			156	
Distance after ladder unfolding [cm]	C	113	114			113		120			114		113			120	
Hatch board retraction after opening [cm]	P													4			
Box height [cm]														14			
Number of sections		3	4			3		4						3			

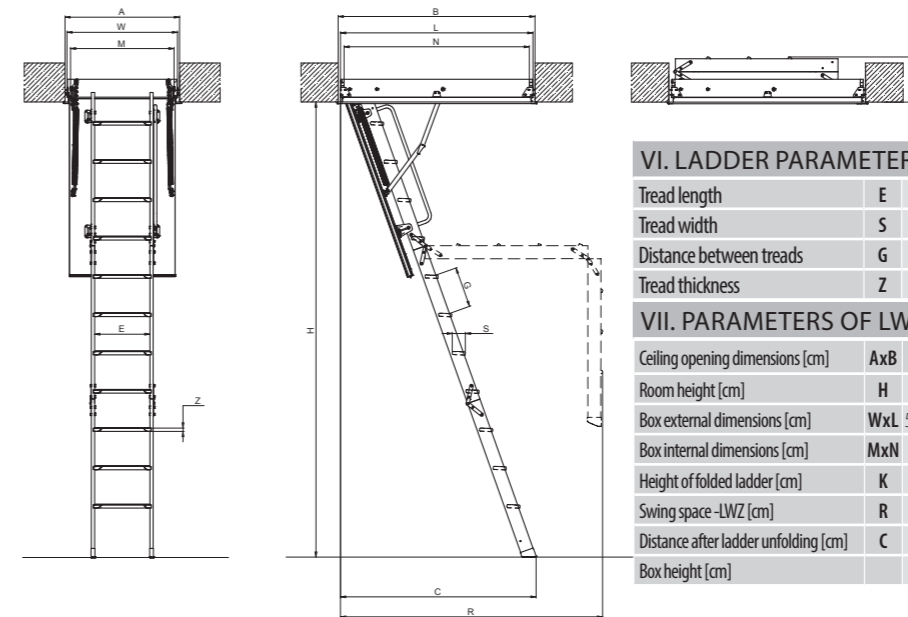
TECHNICAL SPECIFICATION

LWZ, LWL Lux

FOLDING WOODEN 3-SECTION LOFT LADDER

LOFT LADDER TYPE	LWZ	LWL Lux
	 Compliant with EN14975	 Compliant with EN14975
I. APPLICATION		
Room height [cm]	280, 305	
Installation	- fully assembled product - quick mounting system in the ceiling (installation brackets)	- fully assembled product
II. FEATURES		
Box	metal framework combined with pinewood box	pinewood
Hatch colour	white	
Lock	+	-
Unloading mechanism	-	+
Ladder	pinewood	
Seal	peripheral	
Treads	anti-slip, protruding beyond stringers of the ladder	
Handrail	x1	x2
Finishing trims	metal integrated with a steel framework	
Stile ends	+	
III. TECHNICAL PARAMETERS		
Heat transfer coefficient U	1.1 W/m ² K	
Thermal insulation thickness	3 cm	
Hatch thickness	3.6 cm	
Maximum loading	160 kg	
IV. OPTIONS		
Accessories	- handrail - balustrade - box extension - upper hatch - unloading mechanism	- balustrade - installation brackets - wooden trims - plastic trims - box extension - upper hatch - insulation kit

V. DIAGRAM OF LWZ LOFT LADDER



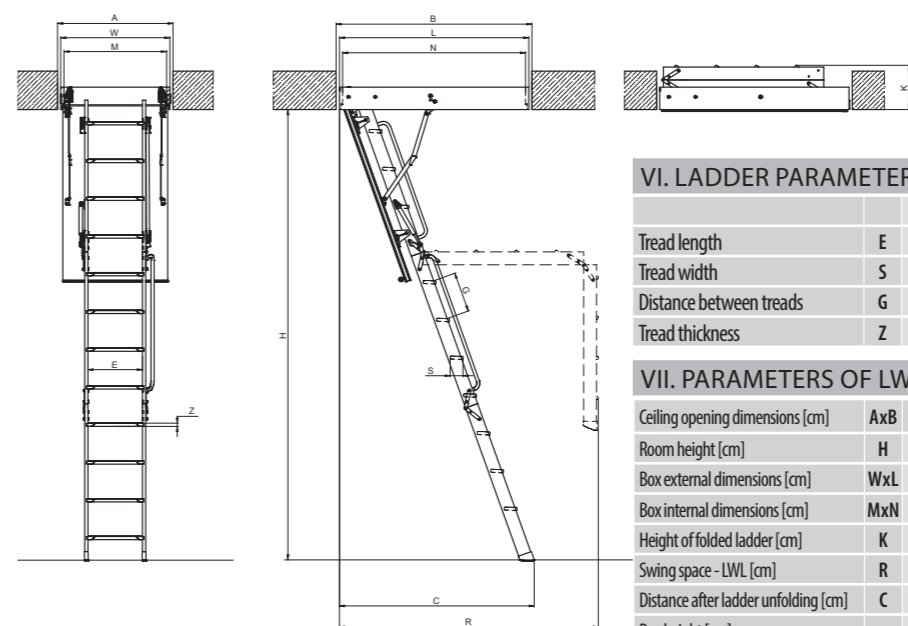
VI. LADDER PARAMETERS

Tread length	E	34 cm
Tread width	S	8 cm
Distance between treads	G	25 cm
Tread thickness	Z	2 cm

VII. PARAMETERS OF LWZ LOFT LADDER

Ceiling opening dimensions [cm]	AxB	60x120	70x120	70x130	70x140	60x130	70x130	70x140
Room height [cm]	H	280			305			
Box external dimensions [cm]	WxL	58.8x118.8	68.8x118.8	68.8x128.8	68.8x138.8	58.8x128.8	68.8x128.8	68.8x138.8
Box internal dimensions [cm]	MxN	54x114	64x114	64x124	64x134	54x124	64x124	64x134
Height of folded ladder [cm]	K	34						
Swing space - LWZ [cm]	R	162			179			
Distance after ladder unfolding [cm]	C	121			130			
Box height [cm]		14						

V. DIAGRAM OF LWL LUX LOFT LADDER



VI. LADDER PARAMETERS

		60 x ...	70 x ...
Tread length	E	30 cm	34 cm
Tread width	S	8 cm	
Distance between treads	G	25 cm	
Tread thickness	Z	2 cm	



VII. PARAMETERS OF LWL Lux LOFT LADDER

Ceiling opening dimensions [cm]	AxB	60x120	70x120	70x130	70x140	60x130	70x130	70x140
Room height [cm]	H	280			305			
Box external dimensions [cm]	WxL	58x118	68x118	68x128	68x138	58x128	68x128	68x138
Box internal dimensions [cm]	MxN	54x114	64x114	64x124	64x134	54x124	64x124	64x134
Height of folded ladder [cm]	K	34						
Swing space - LWL [cm]	R	164			179			
Distance after ladder unfolding [cm]	C	122			130			
Box height [cm]		14						

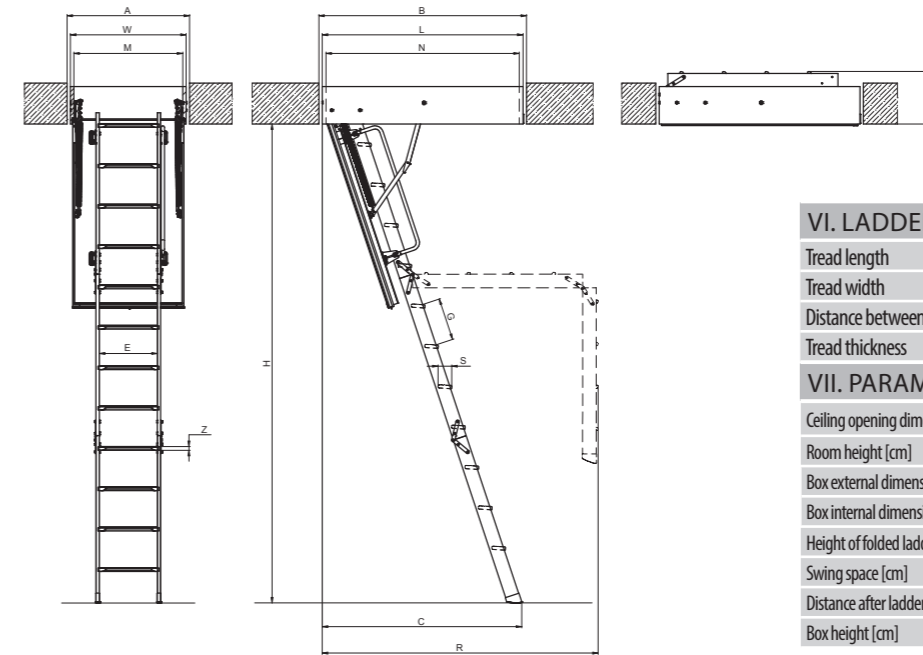
TECHNICAL SPECIFICATION

LTK Thermo, LWT

FOLDING WOODEN SECTION INSULATED LOFT LADDER

LOFT LADDER TYPE	LTK Thermo	LWT
	 Compliant with EN14975	 Compliant with EN14975
I. APPLICATION		
Room height [cm]	280	280, 305
Installation	- fully assembled product	- fully assembled product - easy to install (use of special fasteners – the so called „clicks“)
II. FEATURES		
Box	pinewood	
Hatch	ladder hinge controls movement of the hatch so that during opening the ladder automatically shifts away from the hatch for improved comfort of the user	
Hatch colour	white	
Lock	+	
Unloading mechanism	-	
Ladder	pinewood	
Seal	peripheral	x 3
Treads	anti-slip, protruding beyond stringers of the ladder	anti-slip, equal with stringers of the ladder
Handrail	x1	
Finishing trims	-	
Stile ends	+	
III. TECHNICAL PARAMETERS		
Heat transfer coefficient U	0.76 W/m ² K	0.51 W/m ² K
Thermal insulation thickness	6 cm	7.4 cm
Hatch thickness	6.6 cm	8 cm
Maximum loading	160 kg	160 kg
Class	class 4 (the highest) as per EN 12207	
IV. OPTIONS		
Accessories	- handrail - balustrade - installation brackets - wooden trims - plastic trims - box extension - upper hatch - insulation kit - unloading mechanism	- handrail - balustrade - installation brackets - wooden trims - plastic trims - box extension - upper hatch - insulation kit

V. DIAGRAM OF LTK LOFT LADDER



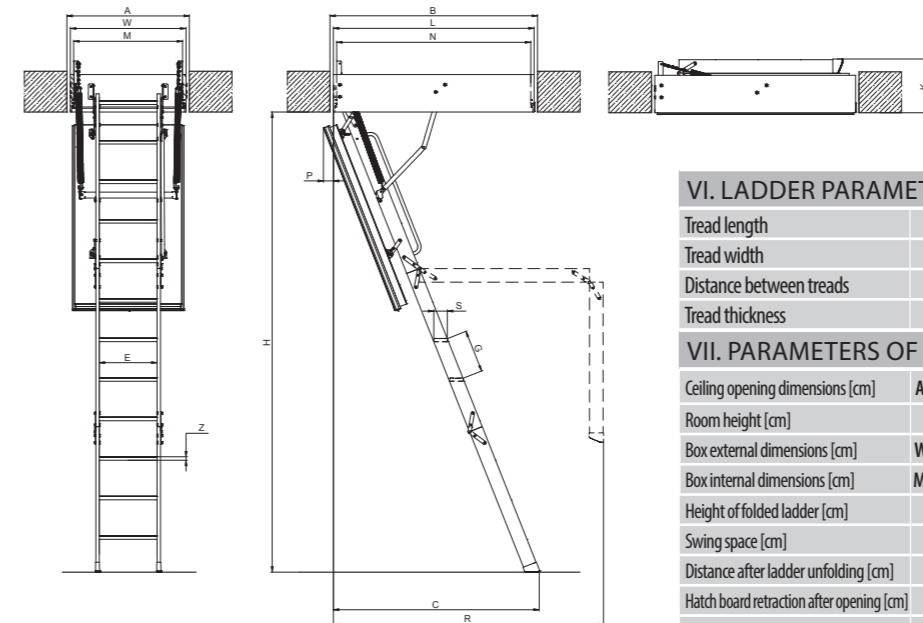
VI. LADDER PARAMETERS

Tread length	E	34 cm
Tread width	S	8 cm
Distance between treads	G	25 cm
Tread thickness	Z	2 cm

VII. PARAMETERS OF LTK Thermo LOFT LADDER

Ceiling opening dimensions [cm]	AxB	60x120	70x120	70x130	70x140
Room height [cm]	H	280			
Box external dimensions [cm]	WxL	58x118.4	68x118.4	68x128.4	68x138.4
Box internal dimensions [cm]	MxN	54x114	64x114	64x124	64x134
Height of folded ladder [cm]	K	37			
Swing space [cm]	R	167			
Distance after ladder unfolding [cm]	C	121			
Box height [cm]		22			

V. DIAGRAM OF LWT LOFT LADDER



VI. LADDER PARAMETERS

Tread length	E	34 cm
Tread width	S	8 cm
Distance between treads	G	25 cm
Tread thickness	Z	2 cm

VII. PARAMETERS OF LWT LOFT LADDER


Ceiling opening dimensions [cm]	AxB	60x120	70x120	70x130	70x140	60x130	70x130	70x140
Room height [cm]	H	280				305		
Box external dimensions [cm]	WxL	58x118.4	68x118.4	68x128.4	68x138.4	58x128.4	68x128.4	68x138.4
Box internal dimensions [cm]	MxN	54x114	64x114	64x124	64x134	54x124	64x124	64x134
Height of folded ladder [cm]	K	33						
Swing space [cm]	R	160			175			
Distance after ladder unfolding [cm]	C	127			135			
Hatch board retraction after opening [cm]	P	65						
Box height [cm]		22						

TECHNICAL SPECIFICATION

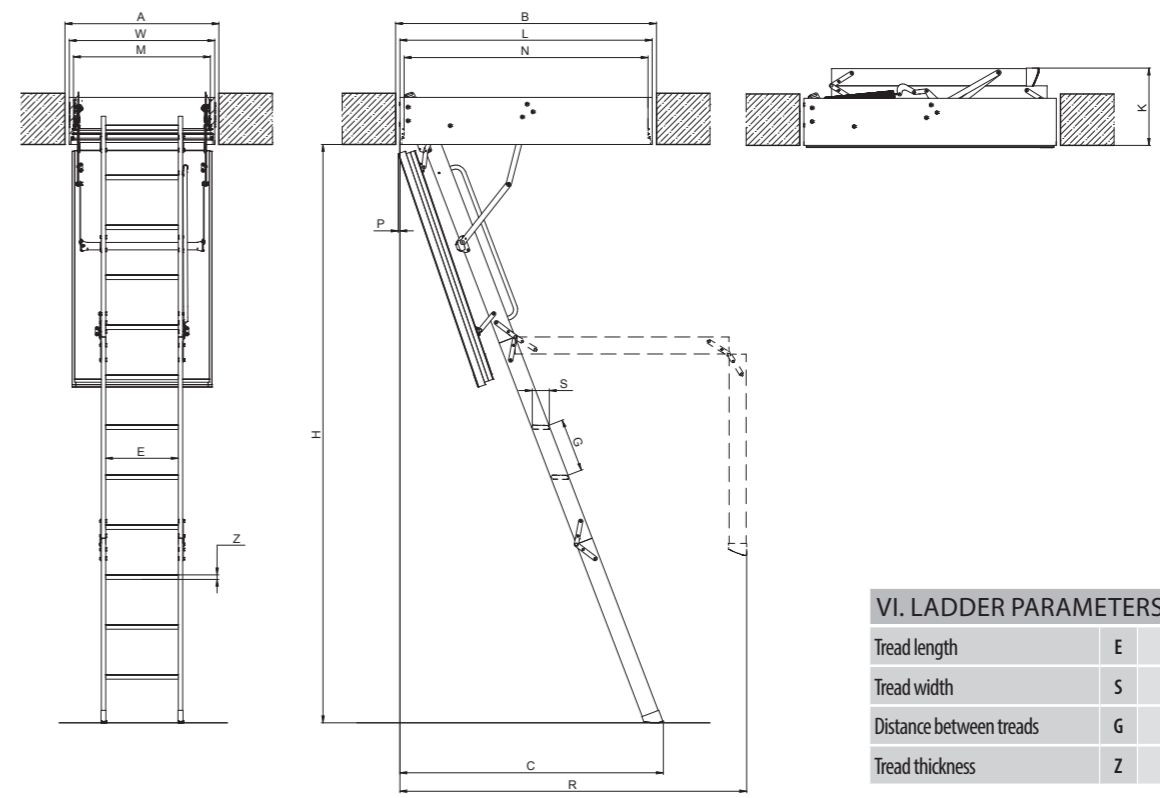
LWF 45

FOLDING WOODEN SECTION FIRE-RESISTANT LOFT LADDER



LOFT LADDER TYPE	LWF 45	
		
	Compliant with EN14975 classification as per EN 13501-2	
I. APPLICATION		
Room height [cm]	280, 305	
Installation	- fully assembled product - easy to install	
II. FEATURES		
Box	pinewood	
Hatch	fire-resistant	
Hatch colour	white	
Lock	-	
Unloading mechanism	-	
Ladder	pinewood	
Seal	seal x3, seal increasing its volume under the influence of high temperature	
Treads	anti-slip, equal with stringers of the ladder	
Handrail	+	
Finishing trims	-	
Stile ends	+	
III. TECHNICAL PARAMETERS		
Heat transfer coefficient U*	0.6 W/m ² K	
Thermal insulation thickness	7.4 cm	
Hatch thickness	8 cm	
Maximum loading	160 kg	
Fire-resistance	E ₁ =45min	
IV. OPTIONS		
Accessories	<ul style="list-style-type: none"> - handrail - balustrade - installation brackets - wooden trims - plastic trims - box extension - upper hatch 	

V. LOFT LADDER DIAGRAM



VI. LADDER PARAMETERS		
Tread length	E	34 cm
Tread width	S	8 cm
Distance between treads	G	25 cm
Tread thickness	Z	2 cm

VII. TECHNICAL PARAMETERS FOR LOFT LADDERS IN PARTICULAR SIZES


Ceiling opening dimensions [cm]	AxB	60x120	70x120	70x130	70x140	86x130	70x130	70x140	86x130
Room height [cm]	H	280				305			
Box external dimensions [cm]	WxL	58x118	68x118	68x128	68x138	84x128	68x128	68x138	84x128
Box internal dimensions [cm]	MxN	54x114	64x114	64x124	64x134	80x124	64x124	64x134	80x124
Height of folded ladder [cm]	K	37							
Swing space [cm]	R	164				178			
Distance after ladder unfolding [cm]	C	129				139			
Box height [cm]		22							

* manufacturer's internal calculations

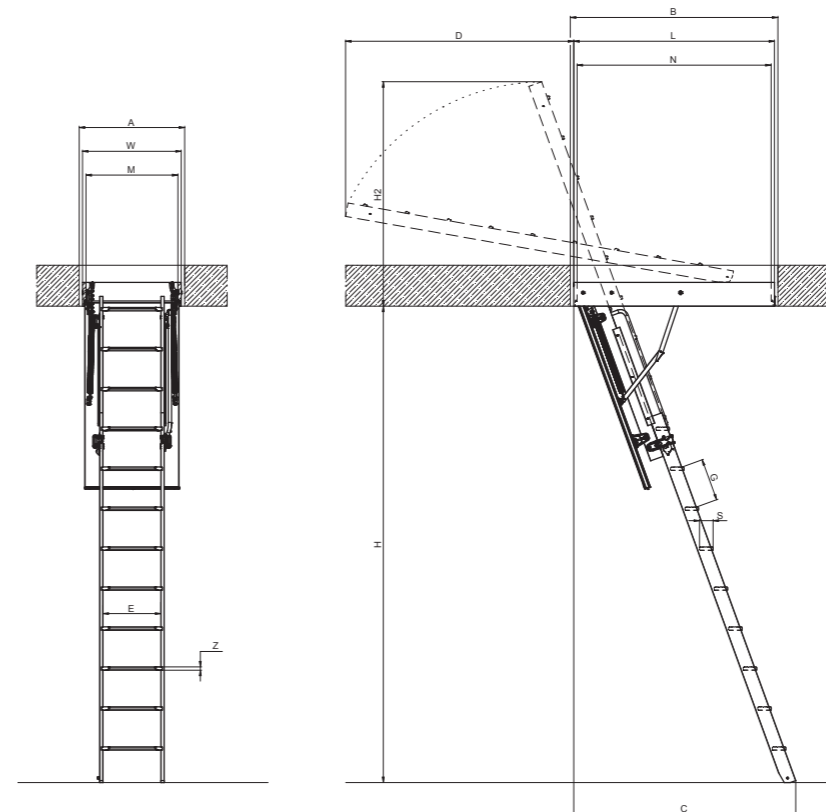
TECHNICAL SPECIFICATION

LDK

SLIDING WOODEN DOUBLE-SECTION LOFT LADDER

LOFT LADDER TYPE	LDK
	
	Compliant with EN14975
I. APPLICATION	
Room height [cm]	280, 300, 335
Installation	- fully assembled product - easy to install
II. FEATURES	
Box	pinewood
Hatch colour	white
Lock	+
Unloading mechanism	-
Ladder	pinewood
Folding	A specially developed mechanism allows sliding of the sections in relation to each other. The longer section can be pulled down to form a stable ladder. When folding the ladder, the longer section is retracted and stored in the attic.
Seal	peripheral
Treads	anti-slip, protruding beyond stringers of the ladder
Handrail	+
Finishing trims	-
Stile ends	-
III. TECHNICAL PARAMETERS	
Heat transfer coefficient U	1.1 W/m²K
Thermal insulation thickness	3 cm
Hatch thickness	3.6 cm
Maximum loading	160 kg
IV. OPTIONS	
Accessories	- balustrade - handrail - installation brackets - wooden trims - plastic trims - box extension - insulation kit

V. LOFT LADDER DIAGRAM



VI. LADDER PARAMETERS


Tread length	E	34 cm
Tread width	S	8 cm
Distance between treads	G	25 cm
Tread thickness	Z	2 cm

VII. TECHNICAL PARAMETERS FOR LOFT LADDERS IN PARTICULAR SIZES

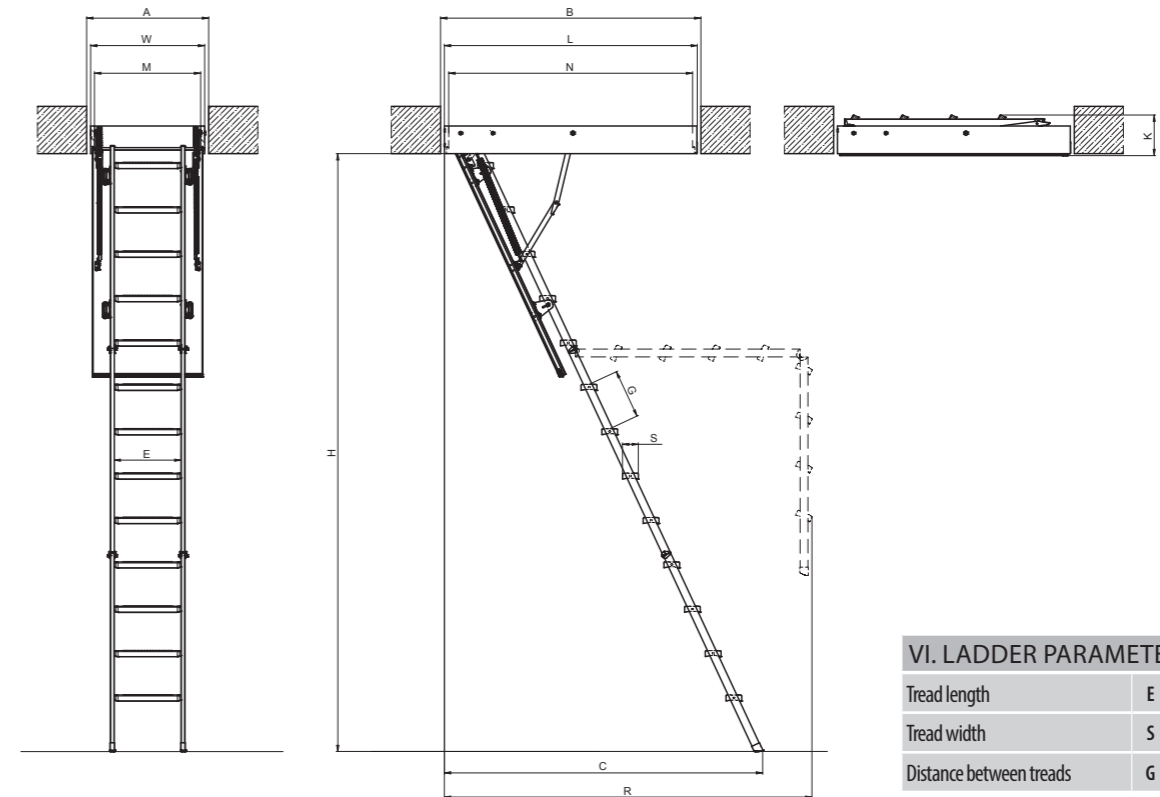
Ceiling opening dimensions [cm]	AxB	60x120	70x120	70x130	70x140	60x120	70x120	70x130	70x140	60x120	70x120	70x130	70x140
Sliding section LDS		LDS-9				LDS-10				LDS-11			
Room height [cm]	H	280				300				335			
Box external dimensions [cm]	WxL	58x118.4	68x118.4	68x128.4	68x138.4	58x118.4	68x118.4	68x128.4	68x138.4	58x118.4	68x118.4	68x128.4	68x138.4
Box internal dimensions [cm]	MxN	54x114	64x114	64x124	64x134	54x114	64x114	64x124	64x134	54x114	64x114	64x124	64x134
Distance after ladder unfolding [cm]	C	130				140				150			
Maximum height in the ceiling with the ladder folded [cm]	H2	130				155				184			
Maximum length in the ceiling with the hatch closed [cm]	D	129				155				185			
Box height [cm]						14							
Ceiling maximum thickness [cm]						31.5							

TECHNICAL SPECIFICATION

LMS Smart, LMK Komfort FOLDING METAL SECTION LOFT LADDER

LOFT LADDER TYPE	LMS Smart	LMK Komfort
	 Compliant with EN14975	 Compliant with EN14975
I. APPLICATION		
Room height [cm]	280, 305	
Installation	- fully assembled product - easy to install	
II. FEATURES		
Box	pinewood	
Hatch colour	beige	white
Lock	+	
Unloading mechanism	-	
Ladder	metal	
Seal	peripheral	
Treads	metal, anti-slip, protruding beyond stringers of the ladder	
Handrail	-	x 1
Finishing trims	-	
Stile ends	+	
III. TECHNICAL PARAMETERS		
Heat transfer coefficient U	1.1 W/m ² K	
Thermal insulation thickness	3 cm	
Hatch thickness	3.6 cm	
Maximum loading	200 kg	
IV. OPTIONS		
Accessories	<ul style="list-style-type: none"> - balustrade - handrail - installation brackets - wooden trims - plastic trims - box extension - upper hatch - insulation kit - additional wooden tread 	<ul style="list-style-type: none"> - balustrade - handrail - installation brackets - wooden trims - plastic trims - box extension - upper hatch - insulation kit - additional wooden tread

V. LOFT LADDER DIAGRAM



VI. LADDER PARAMETERS

Tread length	E	34 cm
Tread width	S	8 cm
Distance between treads	G	25 cm


VII. TECHNICAL PARAMETERS FOR LOFT LADDERS IN PARTICULAR SIZES

Ceiling opening dimensions [cm]	AxB	60x120	70x120	70x130	70x140	60x130	70x130	70x140
Room height [cm]	H	280				305		
Box external dimensions [cm]	WxL	58x118.4	68x118.4	68x128.4	68x138.4	58x128.4	68x128.4	68x138.4
Box internal dimensions [cm]	MxN	54x114	64x114	64x124	64x134	54x124	64x124	64x134
Height of folded ladder [cm]	K	25.5						
Swing space [cm]	R	157				175		
Distance after ladder unfolding [cm]	C	118.5				127		
Box height [cm]		14						

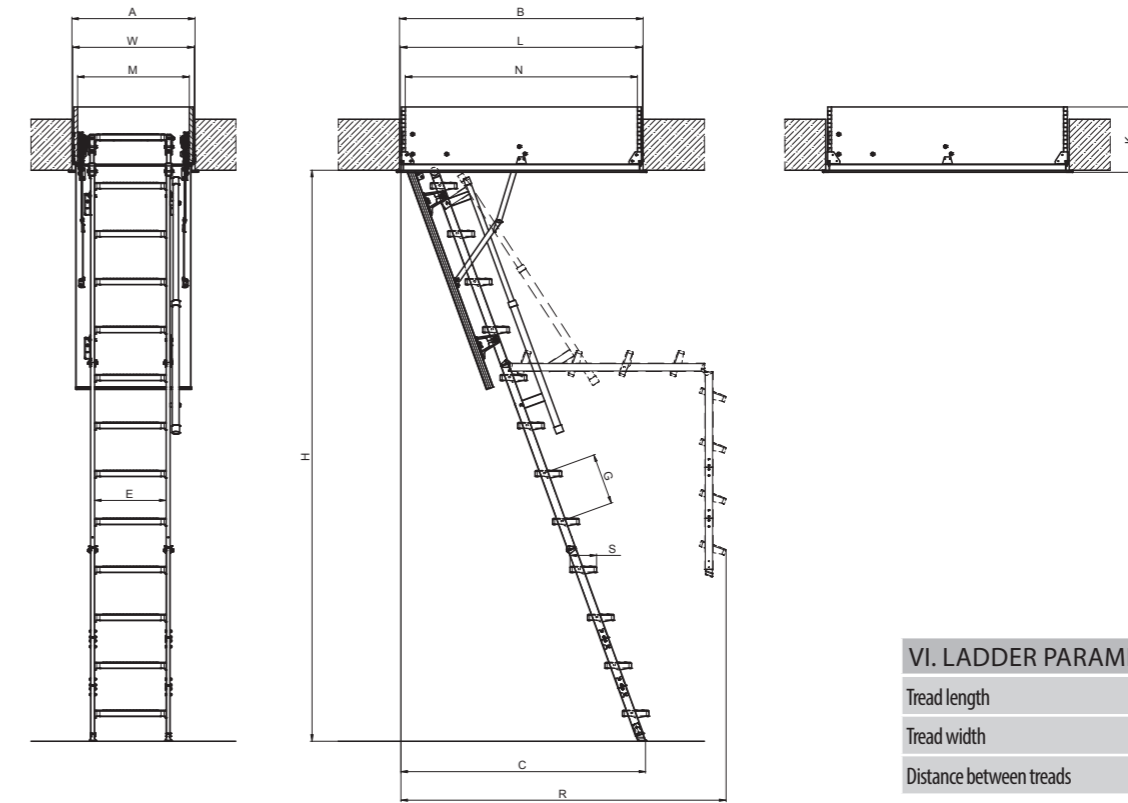
TECHNICAL SPECIFICATION

LML Lux

FOLDING METAL SECTION LOFT LADDER

LOFT LADDER TYPE	LML Lux	
		
	Compliant with EN14975	
I. APPLICATION		
Room height [cm]	280, 305	
Installation	- fully assembled product - quick mounting system in the ceiling (installation brackets)	
II. FEATURES		
Box	metal framework combined with pinewood box	
Hatch colour	white	
Lock	-	
Unloading mechanism	+	
Ladder	metal	
Seal	peripheral	
Treads	metal, anti-slip, protruding beyond stringers of the ladder	
Handrail	telescopic with mechanism supporting folding and unfolding the ladder	
Finishing trims	metal integrated with a steel framework	
Stile ends	retractable	
III. TECHNICAL PARAMETERS		
Heat transfer coefficient U	1.1 W/m ² K	
Thermal insulation thickness	3 cm	
Hatch thickness	3.6 cm	
Maximum loading	200 kg	
IV. OPTIONS		
Accessories	- balustrade - box extension - upper hatch	

V. LOFT LADDER DIAGRAM



VI. LADDER PARAMETERS		
Tread length	E	35 cm
Tread width	S	13 cm
Distance between treads	G	25 cm


VII. TECHNICAL PARAMETERS FOR LOFT LADDERS IN PARTICULAR SIZES

Ceiling opening dimensions [cm]	AxB	60x120	70x120	70x130	70x140	60x130	70x130	70x140
Room height [cm]	H	280				305		
Box external dimensions [cm]	WxL	59.6x118.6	68.6x118.6	68.6x128.6	68.6x138.6	59.6x128.6	68.6x128.6	68.6x138.6
Box internal dimensions [cm]	MxN	55x114	64x114	64x124	64x134	55x124	64x124	64x134
Height of folded ladder [cm]	K	31.5						
Swing space [cm]	R	165				176		
Distance after ladder unfolding [cm]	C	120				130		
Box height [cm]		31.5						

TECHNICAL SPECIFICATION

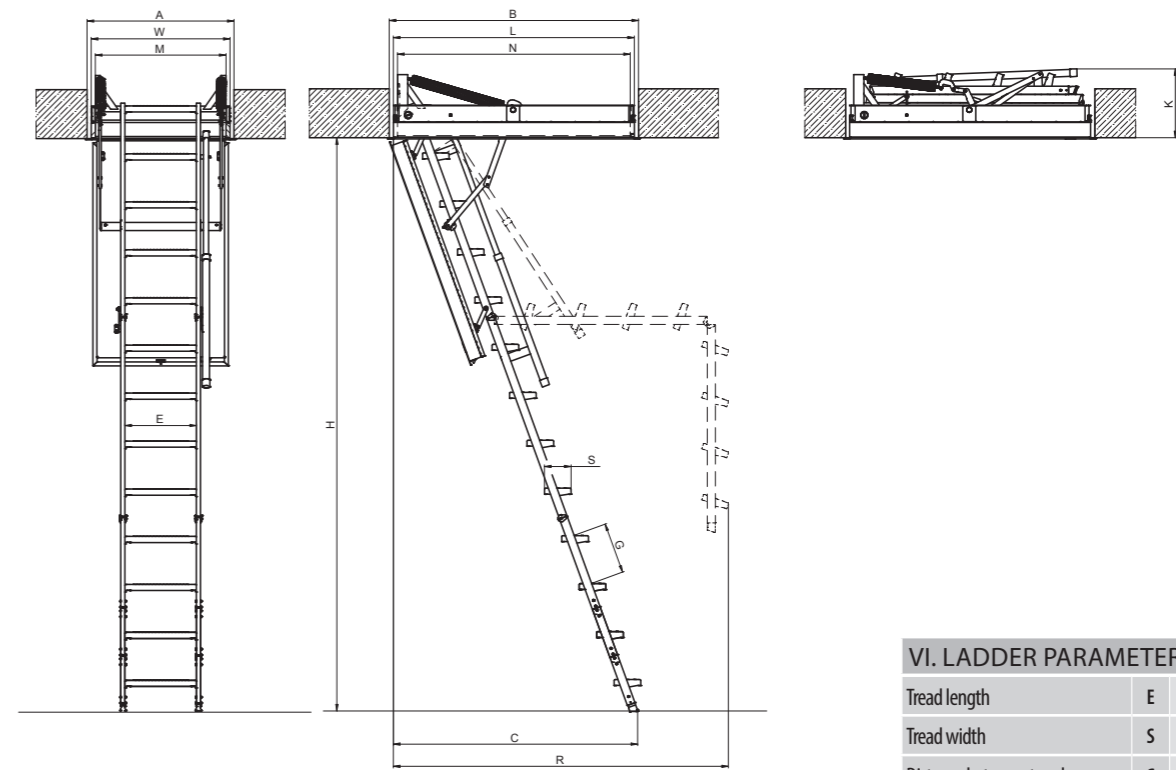
LMF FOLDING METAL SECTION FIRE-RESISTANT LOFT LADDER



LOFT LADDER TYPE	LMF
	 <p>Compliant with EN14975 classification as per EN 13501-2</p>
I. APPLICATION	
Room height [cm]	280, 305
Installation	- fully assembled product - quick mounting system in the ceiling (installation brackets)
II. FEATURES	
Box	metal framework combined with metal box
Hatch	fire-resistant
Hatch colour	white
Lock	+
Unloading mechanism	+
Ladder	metal
Seal	2x peripheral and seal increasing its volume under the influence of high temperature
Treads	metal, anti-slip, protruding beyond stringers of the ladder
Handrail	telescopic with mechanism supporting folding and unfolding the ladder
Finishing trims	metal integrated with a steel framework
Stile ends	retractable
III. TECHNICAL PARAMETERS	
Heat transfer coefficient U*	0.79 W/m²K
Thermal insulation thickness	8 cm
Hatch thickness	8.2 cm
Maximum loading	200 kg
Fire-resistance	EI ₂ =120min
IV. OPTIONS	
Accessories	- balustrade - box extension - upper hatch

* manufacturer's internal calculations

V. LOFT LADDER DIAGRAM



VI. LADDER PARAMETERS


Tread length	E	35 cm
Tread width	S	13 cm
Distance between treads	G	25 cm

VII. TECHNICAL PARAMETERS FOR LOFT LADDERS IN PARTICULAR SIZES

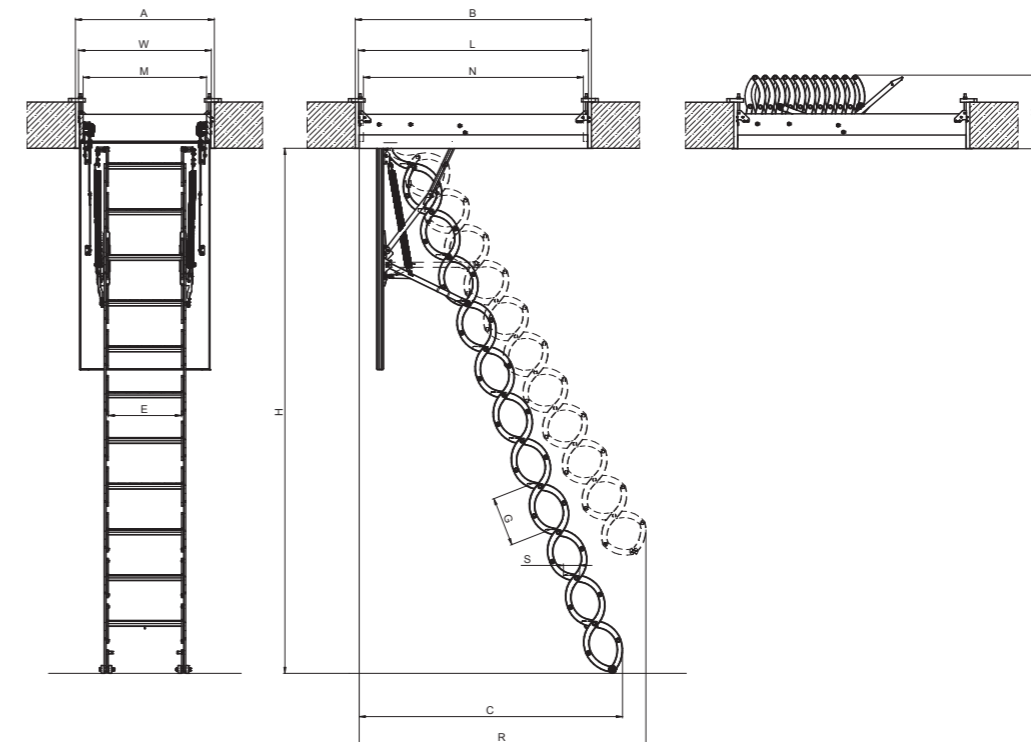
Ceiling opening dimensions [cm]	AxB	60x120	70x120	70x130	70x140	86x130	70x130	70x140	86x130	
Room height [cm]	H	280				305				
Box external dimensions [cm]	WxL	59x118	68x118	68x128	68x138	84x128	68x128	68x138	84x128	
Box internal dimensions [cm]	MxN	55x114	64x114	64x124	64x134	80x124	64x124	64x134	80x124	
Height of folded ladder [cm]	K	34								
Swing space [cm]	R	165				176				
Distance after ladder unfolding [cm]	C	120				130				
Box height [cm]		16								

TECHNICAL SPECIFICATION

LST SCISSOR LOFT LADDER

LOFT LADDER TYPE	LST	
		
	Compliant with EN14975	
I. APPLICATION		
Room height [cm]	280	
Installation	- fully assembled product - quick mounting system in the ceiling (installation brackets)	
II. FEATURES		
Box	pinewood	
Hatch colour	white	
Lock	-	
Unloading mechanism	+	
Ladder	metal, length of the ladder adjusted to the room height	
Seal	peripheral	
Treads	anti-slip, possibility to remove or add tread	
Handrail	-	
Finishing trims	metal	
Stile ends	-	
III. TECHNICAL PARAMETERS		
Heat transfer coefficient U	1.1 W/m ² K	
Thermal insulation thickness	3 cm	
Hatch thickness	3.6 cm	
Maximum loading	200 kg	
IV. OPTIONS		
Accessories	- balustrade - box extension - upper hatch	

V. LOFT LADDER DIAGRAM



VI. LADDER PARAMETERS

		LOFT LADDER LST		
		51x...	60x...	70x...
Tread length	E	26 cm	30 cm	38 cm
Tread width	S	8 cm		
Distance between treads	G	24-26 cm		
Standard number of treads [unit]		11		

VII. TECHNICAL PARAMETERS FOR LOFT LADDERS IN PARTICULAR SIZES


		Ladder standard length				
Ceiling opening dimensions [cm]	AxB	51x80	60x90	60x120	70x80	70x120
Room height [cm]	H	250-280				
Box external dimensions [cm]	WxL	51x79.4	59x89.4	59x119.4	69x79.4	69x119.4
Box internal dimensions [cm]	MxN	46x74	54x84	54x114	64x74	64x114
Height of folded ladder [cm]	K	38.2				
Swing space [cm]	R	150				
Distance after ladder unfolding [cm]	C	146-134				
Box height [cm]		18				

		Ladder shorter by 1 tread (10 treads)		Standard ladder (11 treads)		Ladder longer by 1 tread* (12 treads)		Ladder longer by 2 treads* (13 treads)	
		230	250	250	280	280	300	300	330
SIZES OF LOFT LADDERS AND DIMENSIONS NOT INCLUDED IN THE TABLE ARE THE SAME AS FOR LOFT LADDERS WITH A HEIGHT OF 250 - 280CM									
		140	150	160	170				
		135	127	146	134	153	145	164	150
		18							

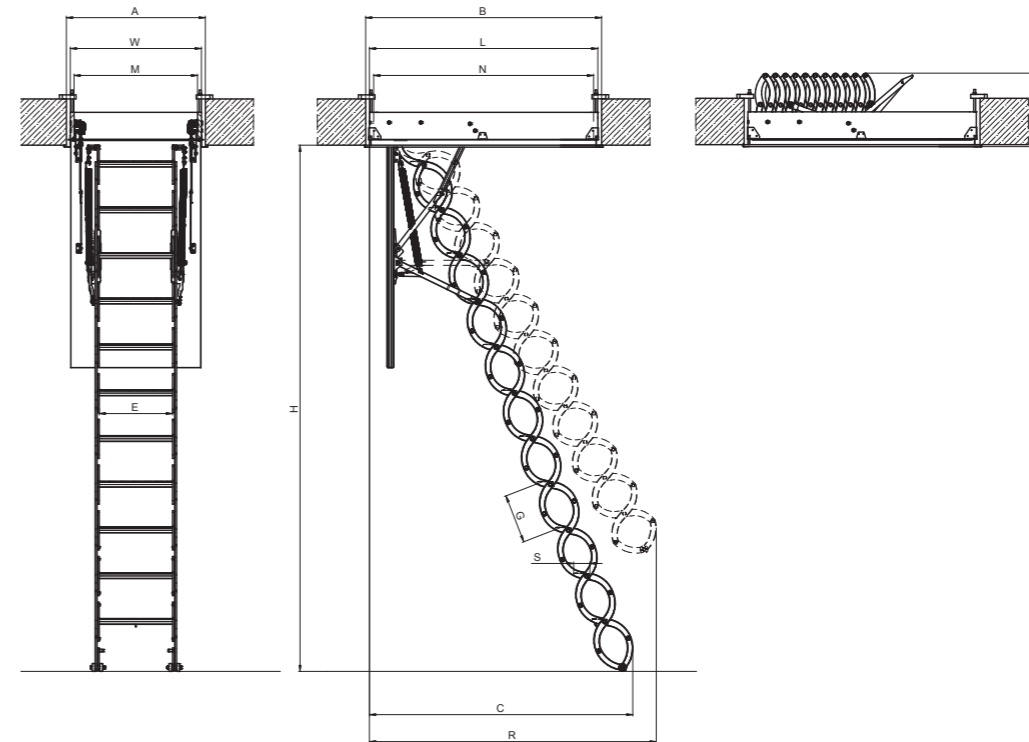
* Treads LSS-26, LSS-31, LSS-38.
When ordering treads it is necessary to provide the dimensions of the loft ladder aperture

TECHNICAL SPECIFICATION

LSZ SCISSOR LOFT LADDER

LOFT LADDER TYPE	LSZ
	 <p style="text-align: right;">Compliant with EN14975</p>
I. APPLICATION	
Room height [cm]	280
Installation	- fully assembled product - quick mounting system in the ceiling (installation brackets)
II. FEATURES	
Box	metal framework combined with pinewood box
Hatch colour	white
Lock	-
Unloading mechanism	+
Ladder	metal, length of the ladder adjusted to the room height
Seal	peripheral
Treads	anti-slip, possibility to remove or add tread
Handrail	-
Finishing trims	metal integrated with a steel framework
Stile ends	-
III. TECHNICAL PARAMETERS	
Heat transfer coefficient U	1.1 W/m ² K
Thermal insulation thickness	3 cm
Hatch thickness	3.6 cm
Maximum loading	200 kg
IV. OPTIONS	
Accessories	- balustrade - box extension - upper hatch

V. LOFT LADDER DIAGRAM



VI. LADDER PARAMETERS

LOFT LADDER LSZ		
	51x...	70x...
Tread length	E 26 cm	38 cm
Tread width	S 8 cm	
Distance between treads	G 24-26 cm	
Standard number of treads [unit]	11	

VII. TECHNICAL PARAMETERS FOR LOFT LADDERS IN PARTICULAR SIZES


	AxB	Ladder standard length			Ladder shorter by 1 tread* (10 treads)				Standard ladder (11 treads)		Ladder longer by 1 tread* (12 treads)		Ladder longer by 2 treads* (13 treads)	
		51x80	70x80	70x120	230	250	250	280	280	300	300	330		
Ceiling opening dimensions [cm]	AxB	51x80	70x80	70x120										
Room height [cm]	H	250-280												
Box external dimensions [cm]	WxL	51x79.4	69x79.4	69x119.4										
Box internal dimensions [cm]	MxN	46x74	64x74	64x114										
Height of folded ladder [cm]	K	38,2												
Swing space [cm]	R	150												
Distance after ladder unfolding [cm]	C	146-134												
Box height [cm]		14												

* Treads LSS-26, LSS-38.
When ordering treads it is necessary to provide the dimensions of the loft ladder aperture

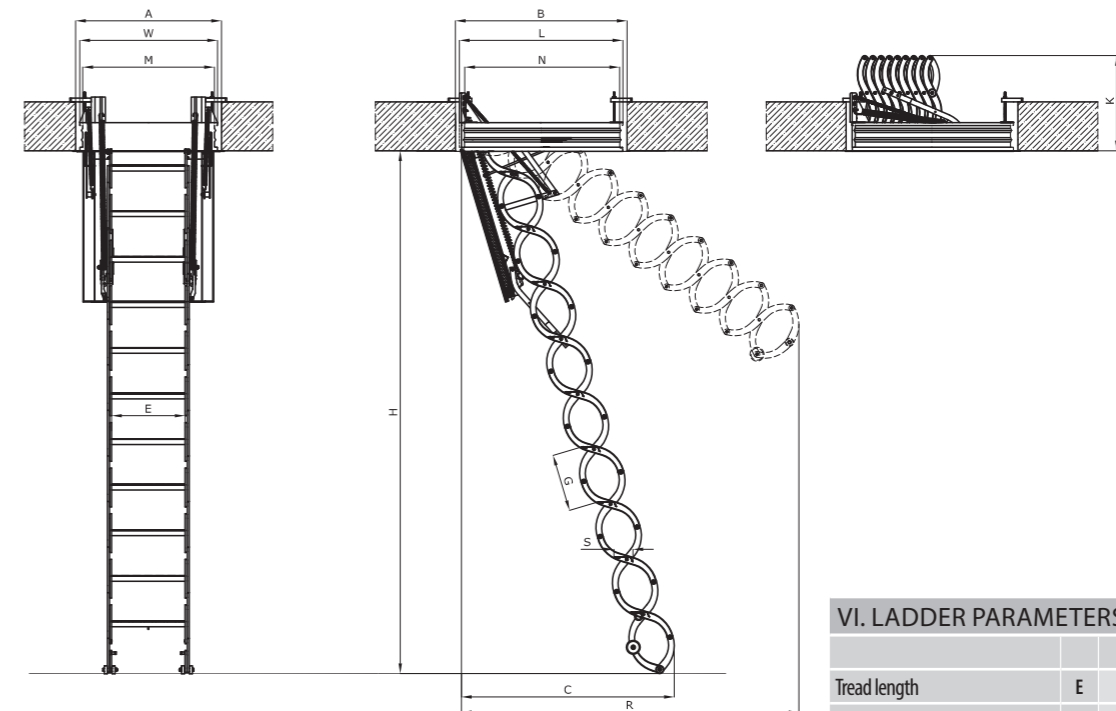
TECHNICAL SPECIFICATION

LSF FIRE-RESISTANT SCISSOR LOFT LADDER



LOFT LADDER TYPE	LSF
	 <p>Compliant with EN14975 classification as per EN 13501-2</p>
I. APPLICATION	
Room height [cm]	300
Installation	- fully assembled product - quick mounting system in the ceiling (installation brackets)
II. FEATURES	
Box	metal
Hatch	fire-resistant
Hatch colour	white
Lock	+
Unloading mechanism	-
Ladder	metal, length of the ladder adjusted to the room height
Seal	expanding seal
Treads	anti-slip, possibility to remove or add tread
Handrail	-
Finishing trims	metal integrated with a steel framework
Stile ends	-
III. TECHNICAL PARAMETERS	
Heat transfer coefficient U*	1.8 W/m ² K
Thermal insulation thickness	3 cm
Hatch thickness	5.4 cm
Maximum loading	200 kg
Fire-resistance	EI ₂ =60min
IV. OPTIONS	
Accessories	- balustrade

V. LOFT LADDER DIAGRAM



VI. LADDER PARAMETERS

		50x...	60x...	70x...
Tread length	E	30 cm	32 cm	40 cm
Tread width	S	8 cm		
Distance between treads	G	25-30 cm		
Standard number of treads [unit]	Z	10		

VII. TECHNICAL PARAMETERS FOR LOFT LADDERS IN PARTICULAR SIZES


Ceiling opening dimensions [cm]	AxB	50x70	60x90	60x120	70x80	70x90	70x110	70x120								
									Ladder shorter by 2 treads (8 treads)	Ladder shorter by 1 tread (9 treads)	Standard ladder (10 treads)		Ladder longer by 1 tread* (11 treads)			
Room height [cm]	H	275-300							240	245	245	275	275	300	300	320
Box external dimensions [cm]	WxL	49x68.5	59x88.5	59x118.5	69x78.5	69x88.5	69x108.5	69x118.5	Sizes of loft ladders and dimensions not included in the table are the same as for loft ladders with a height of 275 - 300cm							
Box internal dimensions [cm]	MxN	44.8x64.8	54.8x84.8	54.8x114.8	64.8x74.8	64.8x84.8	64.8x104.8	64.8x114.8	150	145	190	158	205	178	216	193
Height of folded ladder [cm]	K	46							111	101	160	106	175	126	189	149
Swing space [cm]	R	170-180														
Distance after ladder unfolding [cm]	C	165-130														
Box height [cm]		14														

* Treads LSS-30, LSS-32, LSS-40.
When ordering treads it is necessary to provide the dimensions of the loft ladder aperture

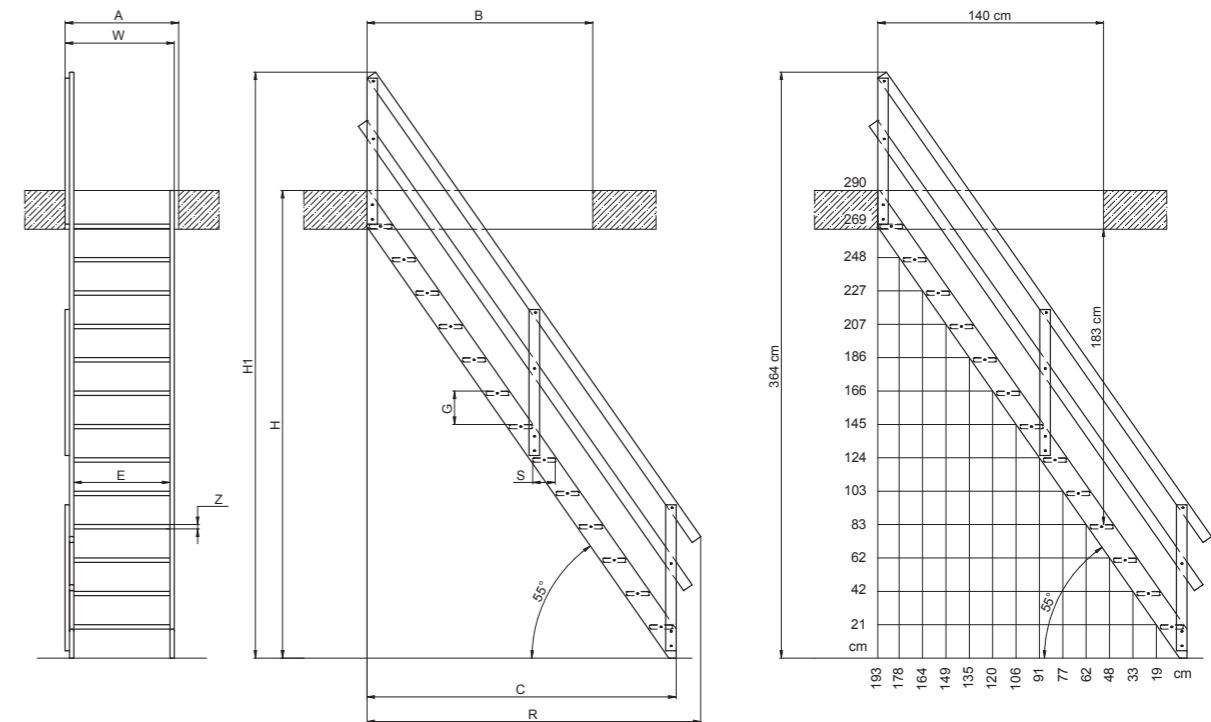
* manufacturer's internal calculations

TECHNICAL SPECIFICATION

MSU Universal WOODEN MILLER STAIRCASE

LOFT LADDER TYPE	MSU Universal
	
I. APPLICATION	
Floor height [cm]	290
Installation	- product intended for DIY installation - easily adjusted to the room height
II. FEATURES	
Ladder	spruce wood
Treads	durable connection between treads and ladder
III. TECHNICAL PARAMETERS	
Staircase inclination angle	55°
Minimum dimensions of ceiling opening [cm]	70x140
Maximum loading	160 kg
IV. OPTIONS	
Accessories	- the MXH handrail can be installed on the right or left-hand side

V. LOFT LADDER DIAGRAM



V. TECHNICAL PARAMETERS FOR LOFT LADDERS IN PARTICULAR SIZES

Size		65cm
Max. floor height [cm]	H	290
Installed staircase height with handrail [cm]	H1	364
Min. ceiling opening dimensions [cm]	AxB	70 x 140
Distance occupied by staircase on the floor [cm]	C	192
Distance occupied by staircase on the floor with handrail [cm]	R	207
Staircase width [cm]	W	65
Number of treads [szt.]		13
Distance between treads [cm]	G	21
Tread thickness [cm]	Z	2.7
Tread width [cm]	E	60
Tread depth [cm]	S	14
Ladder inclination [°]		55