TECHNICAL SPECIFICATION

LOFT LADDER LMF 60

I. APPLICATION

The **LMF60** is a new generation of fire-resistant metal loft ladders combining a high level of fire protection with comfortable and safe access to attic spaces. Special design of the hatch and materials used for its production allowed to achieve fire resistance class of $EI_1$60 (classification as per EN13501-2).

II. STRUCTURE

No.	Element	Description
1	Hatch	Fire-resistant sandwich type with a thickness of 8.5 cm. Thermal insulation thickness: 7.9 cm. Finished on both sides with white HDF board. Expanding seal. No lock, unlading mechanism presses the hatch against the box, opening by pulling the plastic catch.
2	Box	Made of pinewood. Height: 22.5 cm. Equipped with 3 seals.
3	Ladder	Metal. Ladder width: 38cm. Distance between treads: in version up to: 280 cm and 305 cm: 25 cm, in version up to 360 cm: 24 cm.
4	Treads	Metal, equipped with anti-slip profile. Tread width: 8 cm. Tread length: 34 cm.
5	Standard equipment	Stile ends. Handrail: loft ladder up to 280 cm and 305 cm - metal handrail, loft ladder up to 360 cm - telescopic handrail with unloading mechanism Control rod: loft ladder up to 280 cm and 305 cm - rod to open the hatch, loft ladder up to 360 cm - telescopic rod to open the hatch and folding up and unfolding the ladder.

III. SIZES

Size	Room height	Sections
60 x 120 cm	280 cm	3
70 x 120 cm		
70 x 130 cm		
70 x 140 cm		
86 x 130 cm		
70 x 130 cm	305 cm	
70 x 140 cm		
86 x 130 cm		
60 x 144 cm	360 cm	
70 x 144 cm		
86 x 144 cm		

IV. TECHNICAL PARAMETERS

Description	Value	Standard
Maximum loading	200 kg	EN 14975+A1:2010
Loft ladder heat transfer coefficient	U = 0.64* W/m²K	PN-EN 10077-2
Fire resistance	EI_1 60	EN 13501-2

** -manufacturer's internal calculations*

Loft ladder up to 280 cm and 305 cm

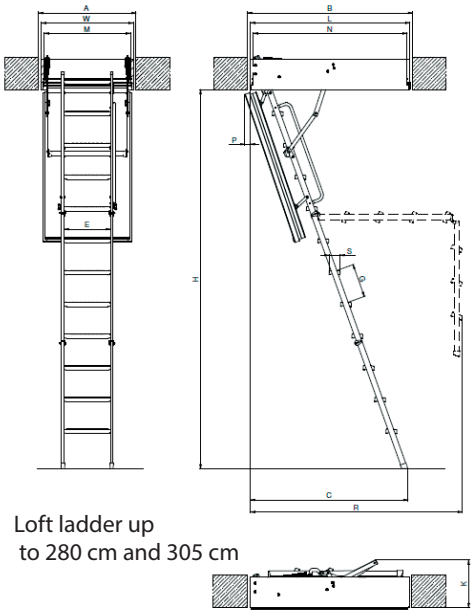
Loft ladder up to 360 cm

Accessories compatibility table:

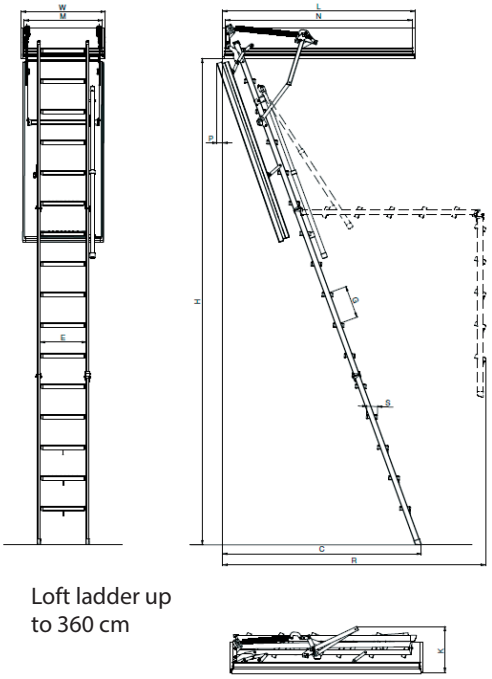
VI. ASSEMBLY INFORMATION

The loft ladder should be installed in the load-bearing structure with a fire resistance at least equal to a fire resistance of the loft ladder. The gap between the box and the ceiling must be filled with fire resistant materials in accordance with the fitting instructions and fire classification report.
The loft ladder must be installed in accordance with the included fitting instructions. The loft ladder must be adjusted to the room height by cutting the lower section. The loft ladder hatch after opening moves back by 5 cm in relation to the rear edge of the box.

VII.DETAILED DIMENSIONS



Loft ladder up
to 280 cm and 305 cm



Loft ladder up
to 360 cm

LMF 60 DIMENSIONS

Ceiling opening dimensions [cm]	AxB	60x120	70x120	70x130	70x140	86x130	70x130	70x140	86x130	60x144	70x144	86x144
Room height [cm]	H	280					305			360		
Minimum room height* [cm]	$H_{min.}$	233					234			295		
Height to be reached to operate the ladder [cm]	X	210					230			265		
Outside box dimensions [cm]	WxL	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
Inside box dimensions [cm]	MxN	54 x 114	64 x 114	64 x 124	64 x 134	80 x 124	64 x 124	64 x 134	80 x 124	54 x138.2	64 x138.2	80 x138.2
Folded loft ladder height [cm]	K	39										
Swing space [cm]	R	156					167			194		
Distance after ladder unfolding [cm]	C	125					135			156		
Hatch board movement after opening [cm]	P	5										
Box height [cm]		22.5										
LADDER PARAMETERS												
Tread length	E	34										
Tread width [cm]	S	8										
Distance between treads [cm]	G	25								24		

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

The LMF60 loft ladder up to 360 cm in height is equipped as standard with a ladder unloading mechanism, therefore it can be fully operated by means of a control rod (opening and closing the hatch, ladder unfolding).