

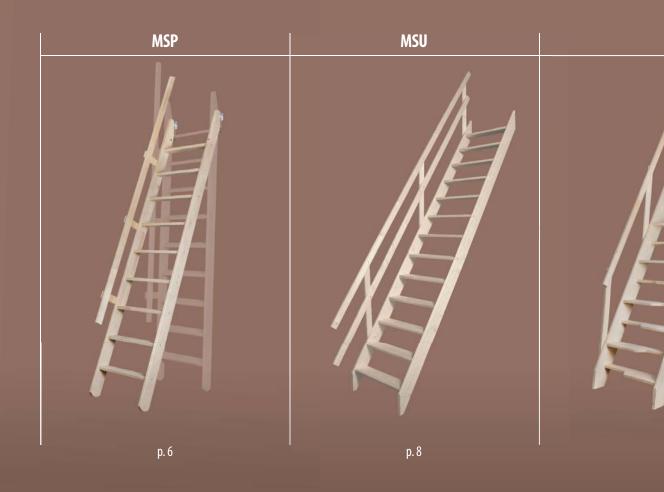






TYPES OF STAIRCASES AND THEIR SELECTION

FAKRO offers a wide range of miller staircase models which will satisfy even the most diverse needs of our customers. The MSP leaning staircase is ideal for mezzanines and rooms with very limited space, where it is necessary to fold away the ladder when the staircase is not in use.



The **MSA** alternating tread staircase thanks to its design occupies very little space inside the room while maintaining optimal comfort of use. Both **MSP** and **MSA** staircases can be successfully utilised even in small ceiling openings normally adapted to loft ladders.

In case of more spacious rooms requiring a miller staircase, it is possible to select one of the models of solid straight staircases: **MSU** or its larger counterpart **MSS**.

Additionally, in rooms where the inconvenient positioning of the walls excludes the use of straight staircases, it is possible to use MSW-L left-handed or MSW-R right-handed winder treads in conjunction with the MSS staircase.



MSP

MSP Pivot Miller Staircase

The MSP Pivot leaning staircase thanks to its special design and the use of lightweight spruce wood can be folded away freeing up the space around the staircase when it is not in use. For added safety and comfort as standard the staircase is equipped with a handrail which can be mounted on the left- or right-hand side.



Patent-pending mechanism for folding away when not used.



Equipped with handrail to be fixed on the left or on the right.



Robust tenon connections of treads in stringers strengthened with screws supplied with the staircase.



ready to be painted



easy height adjustment



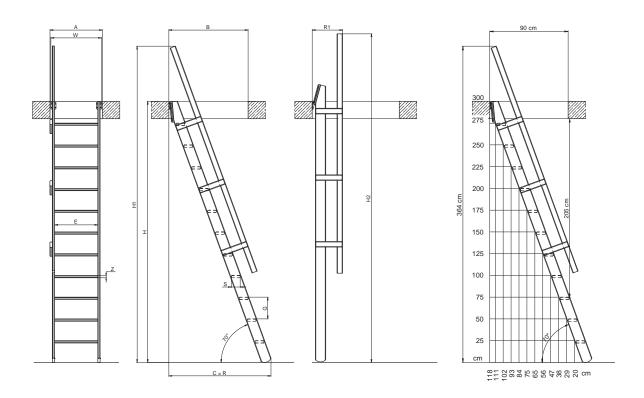
supplied with installation kit

permissible load 160 kg ladder inclination 70°









DIMENSIONS OF MSP STAIRCASE

Size		55 cm
Max. floor height [cm]	Н	300
Installed staircase height with handrail [cm]	H1	364
Folded staircase height with handrail [cm]	H2	378
Min. ceiling opening dimensions [cm]	AxB	60x90
Distance occupied by staircase on the floor [cm]	C	118
Distance occupied by staircase on the floor with handrail [cm]	R	118
Staircase width [cm]	W	59
Number of treads [pcs]		11
Distance between treads [cm]	G	25
Tread thickness [cm]	Z	2,7
Tread width [cm]	E	50
Tread depth [cm]	S	10
Ladder inclination [°]		70

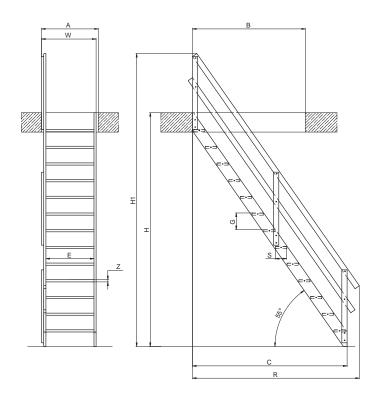
MSU

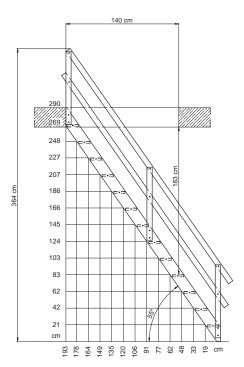
MSU Universal Miller Staircase

The **MSU Universal** is the most popular straight miller staircase made of solid spruce wood. The straight treads with fixed width, lightweight latticework construction and the appropriately selected inclination of the ladder guarantee outstanding functionality and optimal comfort while moving between floors. The staircase can be successfully utilised as a long term solution in private homes, summer houses or apartments as well as on a temporary bases wherever ensuring safe communication is required. The staircase can be additionally fitted with a handrail mounted on the right or on the left.



Diagram of **MSU Universal** Staircase





DIMENSIONS OF MSU STAIRCASE

Size		65cm
Max. floor height [cm]	Н	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 [pcs]		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

MSA

MSA Altero Miller Staircase

The **MSA Altero** staircase with alternating tread design provides optimal level of comfort despite its significant steepness. The alternating tread staircase is ideal for rooms with limited floor space or where small openings in the ceiling restrict the free space above the stairs. As standard, the staircase comes without a handrail but it is possible to purchase the MXH-A handrail and mount it on either side of the run of the stairs.



Robust tenon connections of treads in stringers strengthened with screws supplied with the staircase



MXH-A safety handrail mounted on the right or left side of the staircase - as an accessory.



Alternating tread design — "goose-step"



ready to be painted



can be fitted with accessories



easy height adjustment



supplied with installation kit

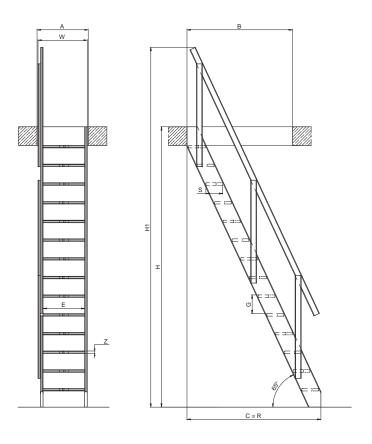
permissible load 160 kg ladder inclination 65°

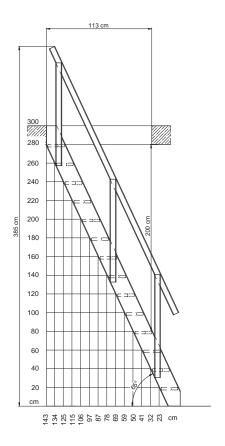






Diagram of **MSA Altero** Staircase





DIMENSIONS OF MSA STAIRCASE

Size		60 cm
Max. floor height [cm]	Н	300
Installed staircase height with handrail [cm]	H1	385
Min. ceiling opening dimensions [cm]	AxB	64x113
Distance occupied by staircase on the floor [cm]	C	144
Distance occupied by staircase on the floor with handrail [cm]	R	144
Staircase width [cm]	W	63
Number of treads [pcs]		14
Distance between treads [cm]	G	20
Tread thickness [cm]	Z	2,7
Tread width [cm]	E	55
Tread depth [cm]	S	18/11
Ladder inclination [°]		65

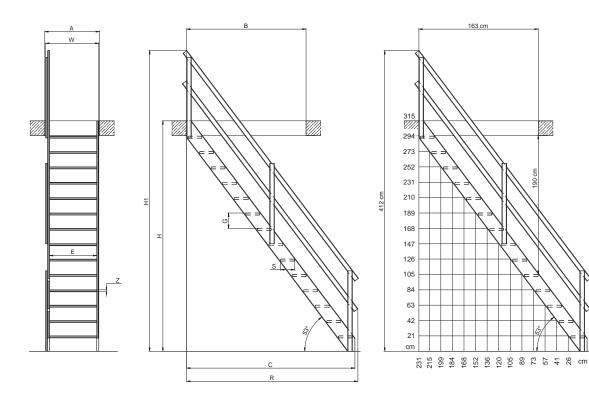
MSS

MSS Superior Miller Staircase

The MSS Superior Miller Staircase is largest of all our models of miller staircases, characterised by a robust and durable design. In order to increase the comfort and safety of use the Superior staircase utilises wider and longer treads and more gentle inclination angle of the ladder. The staircase is made of light spruce, prepared for any colouring. The supplied instructions make adjusting the staircase to the ceiling height a very easy task for the customer. As standard, the staircase comes without a handrail but it is possible to purchase the MXH-S handrail and mount it on either side of the stairs.



Diagram of MSS Superior



DIMENSION OF MSS STAIRCASE

Size		70 cm
Max. floor height [cm]	Н	315
Installed staircase height with handrail [cm]	H1	412
Min. ceiling opening dimensions [cm]	AxB	75x163
Distance occupied by staircase on the floor [cm]	C	230
Distance occupied by staircase on the floor with handrail [cm]	R	234
Staircase width [cm]	W	73
Number of treads [pcs]		14
Distance between treads [cm]	G	21
Tread thickness [cm]	Z	2,7
Tread width [cm]	E	65
Tread depth [cm]	S	19
Ladder inclination [°]		53

MSW-L **MSW-R**

MSW Winder Staircase

The MSW Winder (left or right) to be used in conjunction with MSS Superior makes it possible to adapt the structure of the staircase to the room in which the use of straight stairs is not possible. Installation of the MSW winder with the MSS staircase increases its usable range up to the floor height of 3.57m. The MXH-5 handrail can be additionally purchased and mounted on either side of the stairs.



Robust tenon connections of treads in stringers strengthened with screws supplied with the staircase



MXH-S safety handrail mounted on the right or on the left - as an accessory.



MSW-L left-handed winder treads



MSW-R right-handed winder treads

permissible load 160 kg ladder inclination 53°



supplied with installation kit DIY installation







ready to be painted

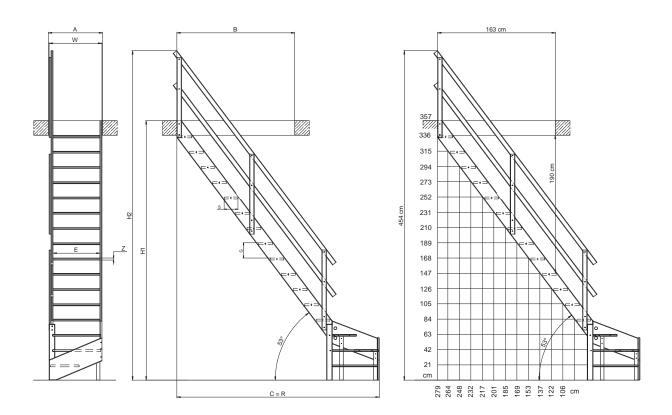


can be fitted with accessories

easy height adjustment



Diagram of MSS Superior with MSW-L winder.



DIMENSIONS OF MSW WINDER IN CONJUNCTION WITH MSS STAIRCASE

Size		70 cm
Max. floor height [cm]	Н	357
Installed staircase height with handrail [cm]	H1	454
Min. ceiling opening dimensions [cm]	AxB	75x163
Distance occupied by staircase on the floor [cm]	C	279
Distance occupied by staircase on the floor with handrail [cm]	R	279
Staircase width [cm]	W	73
Number of treads [pcs]		16
Distance between treads [cm]	G	21
Tread thickness [cm]	Z	2,7
Tread width [cm]	E	65
Tread depth [cm]	S	19
Ladder inclination [°]		53



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