



**MORALT**  
the core of the door

# FERRO

## FireSafe



5-ply  
faces



Exterior grade  
MDF faces



Flat steel  
stabilizer



Laminated  
core



Robust  
construction



Fire  
protection

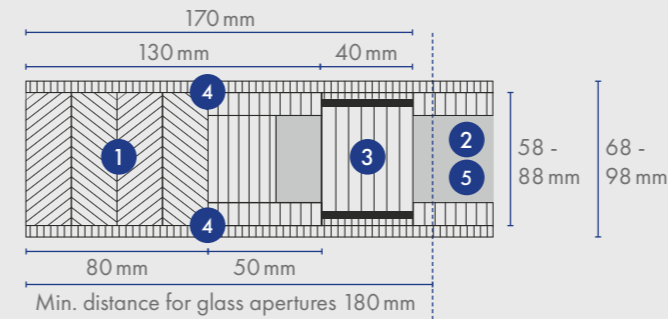


**FERRO FireSafe  
KlimaSoft**

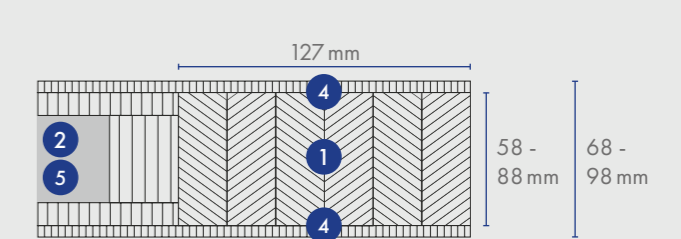


**FERRO FireSafe  
Akustik**

**Cross-section lock-side**



**Cross-section hinge-side**



- 1 Framing /stiles & rails
- 2 Sandwich System with ecological wood fibre insulation
- 3 Flat steel stabilizer
- 4 Facing
- 5 Sandwich system with sound insulation insert and PU hard foam

## Technical details

### FRAME

1 Timber framing	Timber framing finger-jointed and laminated.		
	Thickness of door blank 68 / 78 / 88 / 98 mm		
		Frame width in mm	can be trimmed by
	Top	127	75*
Frieze, trim, glass aperture	Side	lock-side 80/hinge-side 127	25* / 75*
	Bottom	127	75*
Minimum distance for glass apertures is 180 mm on all four sides. When trimmed by a maximum at the bottom (75 mm), a single rebate (max. 18 mm) or fitting of drop down seal is possible.			

### INNER LAYER

2 Construction	<ul style="list-style-type: none"> <li>Sandwich construction of laminated core with ecological wood fibre insulation</li> <li>FireSafe Akustik with sound insulation insert</li> <li>Surface stability through vertically aligned annual rings</li> </ul>
Bonding	Free of formaldehydew
3 Flat steel stabilizer	Lock-side flat steel stabilizer – thermally separated and sound insulated – to absorb tractive and shearing forces. Stabilizers are glued and friction-locked with the framework.

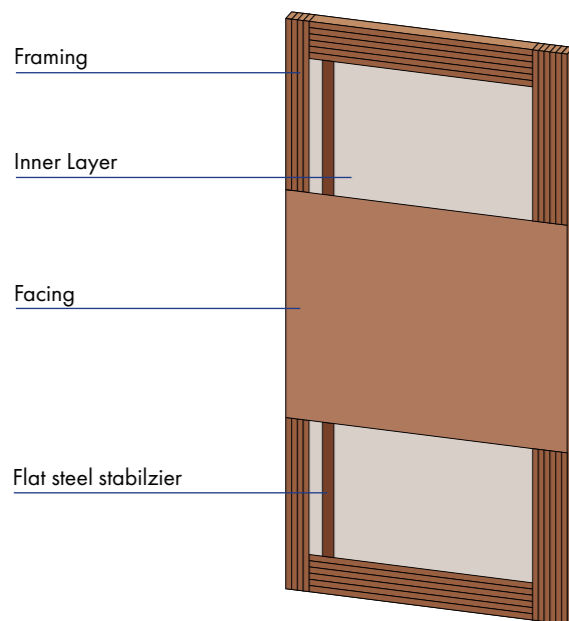
### 4 FACING

Bonding	Veneer plywood AW bonding according to DIN 68705-2, 5 layers (noble veneer), 3 layer (cross veneer) = individually veneerable, MDF/HDF exterior = paintable or veneerable, full-surface bonding with the overall construction, min. stress group D4 according to DIN EN 204/205 and DIN EN 14257 (WATT 91)
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### EXTERNAL DOOR BLANK

Model / finish	Trimmed edges and sanded surfaces
Processing information	Please note the national usability certificates. For more information contact <a href="mailto:brandschutz@moralt-ag.de">brandschutz@moralt-ag.de</a>

\* with a max. rebate of 30 mm



## Product Range

<b>Thickness in mm</b>	<b>68 / 78 / 88 / 98</b>
Thickness in mm cross-veneered RV	66 / 76 / 86 / 96

Length in mm	default	can be cut to
	2,110	1,890
	2,240	2,020
	2,370	2,150
	2,470	2,250

Maximum length of 2,980 mm available on request.

Width in mm	default	can be cut to
	950	850
	1,050	950
	1,150	1,050
	1,230	1,130
	1,250**	1,150

### Face types

Veneer plywood: Mahogany SV, Okumé/Gabun SV, Meranti FL, Oak\*, knotty Oak\*, knotty Oak 3.5mm\*, rustic knotty Oak cross-veneered, Pine FL/ SV, Spruce FL/SV, Larch\*, knotty Larch\*, white Fir, paint-grade SV.  
Or: MDF/HDF-exterior\*\*, HPL/CPL laminate

### Framing / stiles & rails

Oak, Larch, Conifer wood, Redwood

\*cross-grain also available \*\*Only MDF-Exterior possible up to a width of 1,250 mm SV=sliced veneer FL=Fineline RV=rotary cut veneer  
Further dimensions, sizes and facings on request.

## Certification

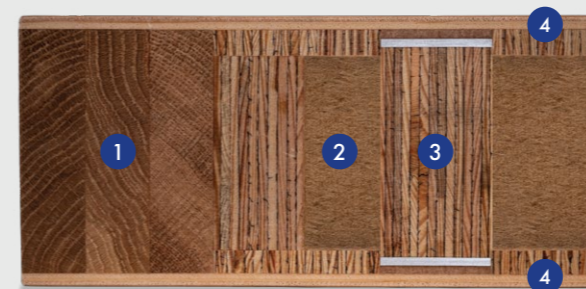
	FireSafe KlimaSoft	FireSafe Akustik
<b>Height</b> in mm	up to 2,470	up to 2,470
<b>Width</b> in mm	up to 1,230 (1,250 MDF-ext.)	up to 1,230 (1,250 MDF-ext.)
<b>Thickness</b> in mm	68 - 98	68 - 98
<b>Different climate testing</b> DIN EN 1121:2000-09	test climate c, d, e	
<b>Tolerance classes</b> (by using three hinges) DIN EN 12219:2000-6	3	
<b>Thermal transfer coefficient</b> U-value (W/m²K) DIN EN ISO 10077-2:2012-06	1.0 - 0.8	1.2 - 0.9
<b>Acoustic performance</b> DIN EN ISO 717-1 R <sub>w,p</sub> (dB)	32	42 - 47*
<b>Fire rating</b> DIN EN 13501-2	EI30 S <sub>a</sub> / S200**	
<b>Burglar resistance</b> DIN EN 1627:2011-09	RC2 / RC3***	
<b>Weight</b> 2,240 x 1,050 mm kg/piece	70 - 98	88 - 121

\*element thickness 88 mm \*\*depending on the national usability certification \*\*\* tested & valid to H 2,470 mm

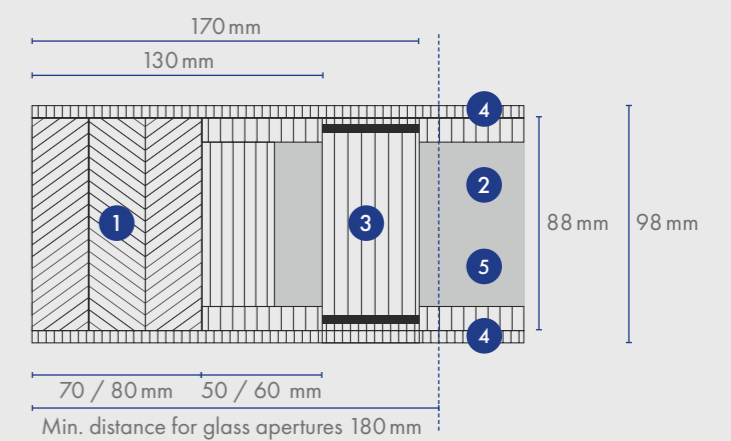
**CNC-processing service**  
All types may be delivered CNC processed.



## FERRO FireSafe Passiv



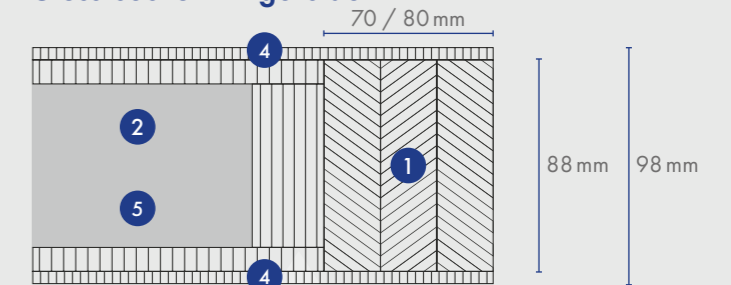
### Cross-section lock-side



## FERRO FireSafe Passiv Akustik



### Cross-section hinge-side



- 1 Framing / stiles & rails
- 2 Sandwich System with ecological wood fibre insulation
- 3 Flat steel stabilizer
- 4 Facing
- 5 Sandwich system with sound insulation insert and PU hard foam

## Technical details

### FRAME

1 Timber framing	Timber framing finger-jointed and laminated.	
Frieze, trim, glass aperture	Thickness of door blank 98 mm	
	Frame width in mm	can be trimmed by
	Top	70 / 80 10*
	Side	70 / 80 10*
Bottom	70 / 80 10*	
Minimum distance for glass apertures is 180 mm on all four sides. When trimmed by a maximum at the bottom (10 mm) a single rebate (max. 18 mm) or fitting of drop down seal is possible.		

### INNER LAYER

2 Construction	<ul style="list-style-type: none"> <li>Sandwich construction of laminated core with ecological wood fibre insulation</li> <li>FireSafe Passiv Akustik with sound insulation insert</li> <li>Surface stability through vertically aligned annual rings</li> </ul>
Bonding	Free of formaldehyde
3 Flat steel stabilizer	Lock-side flat steel stabilizer – thermally separated and sound insulated – to absorb tractive and shearing forces. Stabilizers are glued and friction-locked with the framework.

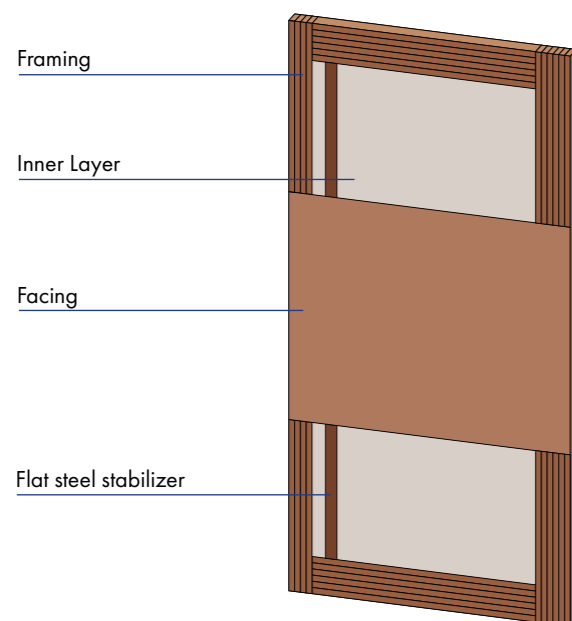
### 4 FACING

Bonding	Veneer plywood AW bonding according to DIN 68705-2, 5 layers (noble veneer), 3 layer (cross-veneer) = individually veneerable, MDF/HDF exterior = paintable or veneerable, full-surface bonding with the overall construction, min. stress group D4 according to DIN EN 204/205 and DIN EN 14257 (WATT 91)
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### EXTERNAL DOOR BLANK

Model / finish	Trimmed edges and sanded surfaces
Processing information	Please note the national usability certificates. For more information contact <a href="mailto:brandschutz@moralt-ag.de">brandschutz@moralt-ag.de</a>

\* with a max. rebate of 30 mm



## Product Range

<b>Thickness in mm</b>	<b>98</b>
Thickness in mm cross-veneered RV	96

Length in mm	default	can be cut to
	2,110	2,090
	2,240	2,220
	2,370	2,350
	2,470	2,450

Maximum length of 2,980 mm available on request.

Width in mm	default	can be cut to
	950	930
	1,050	1,030
	1,150	1,130
	1,230	1,210
	1,250**	1,230

### Face types

Veneer plywood: Mahogany SV, Okumé/Gabun SV, Meranti FL, Oak\*, knotty Oak\*, knotty Oak 3.5mm\*, rustic knotty Oak cross-veneered, Pine FL/ SV, Spruce FL/SV, Larch\*, knotty Larch\*, white Fir, paint-grade SV.

Or: MDF/HDF-exterior\*\*, HPL/CPL laminate

### Framing / stiles & rails

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\*cross-grain also available    \*\*Only MDF-Exterior possible up to a width of 1,250 mm    SV=sliced veneer    FL=Fineline    RV=rotary cut veneer  
Further dimensions, sizes and facings on request.

## Certification

	FireSafe Passiv	FireSafe Passiv Akustik
<b>Height</b> in mm	up to 2,470	up to 2,470
<b>Width</b> in mm	up to 1,230 (1,250 MDF-ext.)	bis 1,230 (1,250 MDF-ext.)
<b>Thickness</b> in mm	98 (96*)	98 (96*)
<b>Different climate testing</b> DIN EN 1121:2000-09	test climate c, d, e	
<b>Tolerance classes</b> (by using 3 hinges) DIN EN 12219:2000-6	3	
<b>Thermal transfer coefficient</b> U-value (W/m <sup>2</sup> K) DIN EN ISO 10077-2:2012-06	0.69	0.78
<b>Acoustic performance</b> DIN EN ISO 717-1 R <sub>w</sub> (dB)	31	44 - 47
<b>Fire rating</b> DIN EN 13501-2	EI30**	
<b>Burglar resistance</b> DIN EN 1627:2011-09	RC2/RC3***	RC2/RC3***
<b>Weight</b> 2.240 x 1.050 mm kg/piece	70 - 89	88 - 121

\*cross-veneered    \*\*depending on the national usability certification    \*\*\*tested & valid to H 2,470 mm

CNC-processing service  
All types may be delivered CNC processed.



## Any questions?

Info hotline: +49 8026 92538-11

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