

Frame extension elements for wooden and wood-metal windows Sound insulation

SOUND INSULATION 1 UNTREATED

Covernonal and													
Cover panel and surface	Chipboai	rd P5, E	1, untre	ated, 10) mm (Pl	EFC-cert	ified)						
Thermal insulation	Glass wo	ol, 20 kç	g/m³, 15	–79 mm	ı								
Sound insulation	1 piece o	f heavy	bitume	n foil, 5	mm								
Bonding	Water-resi	istant D3	B (EN 204	4-D3)									
Edge band	Spruce, of Other types					ds can be	inset acc	ording to y	your requi	rements			
Edge milling	All possik Special CN		• .						_			•	
Thicknesses	Thicknes For thickne For thickne	esses as fr	om 100 n	nm, see e	extension	elements	for woode	en lifting sl	iding doo	rs			
Formats	All forma	ts from (500 × 95	mm to	3588 ×	1294 mr	n can be	produc	ed				
Flomont thinknesses from 40	mm to 00	to 99 mm can be produced. For further U-value calculations, please contact our consultants.											
													00
Element thickness	mm	40	50	54	58	64	68	70	74	80	84	94	99
Thickness cover panel	mm	10	10	10	10	10	10	10	10	10	10	10	10
Thickness thermal insulation	mm	15	25	29	33	39	43	45	49	55	59	69	79
Thickness sound insulation	mm	5	5	5	5	5	5	5	5	5	5	5	5
U-value	W/m²K	_	_	_	_	_	0,645	_	_	0,528	0,498	0,436	0,410
Airborne sound insulation	38 dB, ele	_	_				_	_		05.0	05.0	00.4	00.0
Weight	kg/m²	25,1	25,3	25,4	25,4	25,5	25,6	25,7	25,7	25,8	25,9	26,1	26,3
Cover panel and surface	Chipboar	d P5, E	1, untrea	ated, 16	mm (PE	EFC-cert	ified)						
Thermal insulation	Glass wo	ol, 20 kç	g/m³, 17-	–62 mm									
Sound insulation	1 piece o	f heavy	bitume	n foil, 5	mm								
Bonding	Water-resi	iotopt DG		1 DO									
Edge band		Vater-resistant D3 (EN 204-D3) Spruce, circumferential (PEFC-certified)											
3	Spruce, of Other types	circumfe	rential (F	PEFC-ce		ds can be	inset acco	ording to y	/our requi	rements			
Edge milling		circumfe of wood	rential (F available; edge pr	PEFC-ce special e	edge band ork is pe	rformed	on all s	ides acc	ording t	o your p			
-	Other types All possib	circumfe s of wood ble CNC IC process ses from sses as fro	rential (Favailable; edge probing like company 100 m	PEFC-ce special e rofile wo ut-outs, r	ork is per ound and ound can lead to the control of	rformed segment be produ	on all so arches, vouced for woode	ides acc entilation s	cording t	o your purface gro			
Edge milling	Other types All possible Special CN Thickness For thickness	circumfe s of wood ble CNC IC process ses from sses as from sses below	rential (F available; edge pr sing like c n 54 mm om 100 m w 54 mm	PEFC-ce special e rofile wo ut-outs, r to 99 n nm, see e , see infill	ork is per ound and ound and	rformed segment be producted elements en window	on all s arches, vouced for woode	ides acc entilation s	cording t slots or su iding door	o your purface gro			
Edge milling Thicknesses	All possible Special CN Thickness For thickness For thickness All formation	circumfe s of wood ble CNC IC process ses from sses as fri sses belov ts from 8	rential (F available; edge pr sing like c 1 54 mm om 100 m w 54 mm 500 × 95	PEFC-ce special e rofile wo ut-outs, r to 99 nn, see e , see infill i mm to	ork is peround and and can I extension of for woods 3588 x 1	rformed segment be producted elements en window	on all s arches, vouced for woode ws n can be	ides accentilation sentilation sentilation sentilation sentilation sentilation sentilations.	cording t slots or su iding door	o your purface gro	oves are	also poss	
Edge milling Thicknesses Formats	All possible Special CN Thickness For thickness For thickness All formation	circumfe s of wood ble CNC IC process ses from sses as fri sses belov ts from 8	rential (F available; edge pr sing like c 1 54 mm om 100 m w 54 mm 500 × 95	PEFC-ce special e rofile wout-outs, r to 99 nnm, see e , see infill imm to uced. Fo	ork is peround and and can I extension of for woods 3588 x 1	rformed segment be producted elements en window	on all s arches, vouced for woode ws n can be	ides accentilation sentilation sentilation sentilation sentilation sentilation sentilations.	cording t slots or su iding door	o your purface gro	oves are	also poss	
Edge milling Thicknesses Formats Element thicknesses from 54	All possible Special CN Thickness For thickness For thickness For thickness All formation of the control of th	circumfe s of wood ole CNC of process ses from sees as from sees below ts from 8	rential (F available; edge pr sing like c n 54 mm om 100 m w 54 mm 500 x 95	PEFC-ce special e rofile wout-outs, r to 99 nm, see e , see infill imm to	ork is peround and nm can I xtension of for wood 3588 x	rformed segment be produ elements en windov 1294 mr	on all s arches, vouced for woode ws n can be	ides accentilation son lifting slipe productions, plea	cording to slots or suiting door	o your purface gro	oves are a	also poss	ible
Edge milling Thicknesses Formats Element thicknesses from 54 Element thickness	Other types All possible Special CN Thickness For thickness For thickness For thickness All formate mm to 99 r mm	circumfe s of wood cole CNC IC process ses from sses as from sses below ts from 8	rential (F available; edge pr sing like c 1 54 mm om 100 m w 54 mm 500 × 95 be produ	PEFC-ce special e rofile wout-outs, rofile wout-outs, rofile wout-outs, rofile special e rofile wout-outs, rofile wout-o	ork is percount and	rformed segment be producted elements en window 1294 mr U-value 68	on all s arches, vouced for woode ws n can be calculation	ides accentilation sentilation	cording to slots or suiting door seed use contains 80	o your purface gro	oves are a	also poss its.	eible 99
Edge milling Thicknesses Formats Element thicknesses from 54 Element thickness Thickness cover panel	All possible Special CN Thickness For thickness For thickness All formation of the second of the se	circumfe s of wood one CNC of process sees from sees as from sees below ts from 54	rential (F available; edge pr sing like c n 54 mm om 100 m w 54 mm 500 x 95 be produ	PEFC-ce special e rofile wout-outs, r to 99 nnm, see e , see infill imm to 6 1 2	ork is perior of the period of the perior of the period of	rformed segment be prod elements en windov 11294 mr U-value 68 16	on all s arches, vi uced for woode vs m can be calculated 70	ides accentilation son lifting slipe productions, plea	cording to slots or suitiding door seed see contains and seed seed seed seed seed seed seed se	o your purface gro	onsultan 4 6 7	also poss tts. 94	99 16
Edge milling Thicknesses Formats Element thicknesses from 54 Element thickness Thickness cover panel Thickness thermal insulation	All possible Special CN Thickness For thickness For thickness All formation mm to 99 mm mm mm	circumfe s of wood ble CNC lace process sees from the sees as from the sees below the from the sees from the sees below the from the sees from the sees below the from the sees from the	rential (F available; edge pr sing like c n 54 mm om 100 m w 54 mm 500 x 95 be produ 58 16	PEFC-ce special e rofile wout-outs, r to 99 mm, see e, see infill mm to 6 mm to 2	ork is percount and	rformed segment be produced elements en window 1294 mr U-value 68 16 31	on all s arches, where the same can be calculated as 33	ides accentilation son lifting slipe produce ons, plea 74 16 37	eording to slots or suited assections and seed assections are seed as	o your purface grows	onsultan 4 6 7	also poss tts. 94 16 57	99 16 62
Edge milling Thicknesses Formats Element thicknesses from 54 Element thickness Thickness cover panel Thickness thermal insulation Thickness sound insulation	All possible Special CN Thickness For thickness For thickness All formate mm to 99 r mm mm mm mm	circumfe of software of softwa	rential (F. available; edge prising like con 54 mm om 100 m w 54 mm 500 x 95 be produted to 58 16 21 5 0,995	rofile wout-outs, rofile wout-	ork is percount and	rformed segment be producted as the prod	on all s arches, vi uced for woode vs n can be calculate 70 16 33 5 0,740	ides accentilation son lifting slipe productions, please 74 16 37 5 0,682	ecording to slots or substituting door seed see contains and seed seed seed seed seed seed seed se	o your purface grows	onsultan 4 6 7	also poss tts. 94 16 57	99 16 62 5

Cover panel and surface	Biofaser Hydropan BF-STX hardboard, untreated, 8 mm (certified FSC, PEFC, CE)
Thermal insulation	Glass wool, 20 kg/m³, 19–78 mm
Sound insulation	1 piece of heavy bitumen foil, 5 mm
Bonding	Water-resistant D3 (EN 204-D3)
Edge band	Spruce, circumferential or on the longitudinal edges (PEFC-certified) Other types of wood available; special edge bands can be inset according to your requirements
Edge milling	All possible CNC edge profile work is performed on all sides according to your profile specifications Special CNC processing such as cut-outs, round and segment arches, ventilation slots or surface grooves are also possible
Thicknesses	Thicknesses from 40 mm to 99 mm can be produced For thicknesses of 100 mm and more, see extension elements for wooden lifting sliding doors For thicknesses below 40 mm, see infill for wooden windows
Formats	All formats from 500 × 95 mm to 3588 × 1294 mm can be produced

Element thicknesses from 40	mm to 99 i	mm can b	oe produc	ced. For f	urther U-	value calo	culations,	please co	ontact ou	r consulta	ants.	
Element thickness	mm	40	50	54	58	64	68	74	80	84	94	99
Cover panel thickness	mm	8	8	8	8	8	8	8	8	8	8	8
Thermal insulation thickness	mm	19	29	33	37	43	47	53	59	63	73	78
Sound insulation thickness	mm	5	5	5	5	5	5	5	5	5	5	5
U-value	W/m²K	1,195	0,891	0,808	0,740	0,657	0,611	0,553	0,505	0,477	0,420	0,396
Airborne sound insulation	43 dB , el	ement th	ickness:	64 mm; t	est surfa	ce: 1.82 i	m² (dowr	nload test	reports)			
Weight	kg/m²	24,8	25,0	25,1	25,1	25,3	25,3	25,5	25,6	25,7	25,9	26,0

SOUND INSULATION 2 UNTREATED

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Cover panel and surface	Chipboa	rd P5, E ⁻	1, untre	ated, 10	mm (Pl	EFC-cert	ified)						
Thermal insulation	Glass wo	ol, 20 kç	g/m³, 10	–69 mm									
Sound insulation	2 pieces	of heav	y bitum	en foil,	5 mm								
Bonding	Water-res	istant D3	8 (EN 204	4-D3)									
Edge band	Spruce, of Other types				,	ds can be	inset acc	ording to	your requ	irements			
Edge milling	All possil Special CN												
Thicknesses	For thickne	hicknesses from 40 mm to 99 mm can be produced or thicknesses as from 100 mm, see extension elements for wooden lifting sliding doors or thicknesses below 40 mm, see infill for wooden windows											
Formats	All forma	formats from 500 × 95 mm to 3588 × 1294 mm can be produced											
EL LUCI												,	
Element thicknesses from 40													
Element thickness	mm	40	50	54	58	64	68	70	74	80	84	94	99
Thickness cover panel	mm	10	10	10	10	10	10	10	10	10	10	10	10
Thickness thermal insulation	mm	10	20	24	28	34	38	40	44	50	54	64	69
Thickness sound insulation	mm	2×5	2×5	2×5	2×5	2×5	2×5	2×5	2×5	2×5	2×5	2×5	2×5
U-value	W/m²K	1,617	1,106	0,982	0,883	0,767	0,705	0,678	0,629	0,568	0,533	0,463	0,434
Airborne sound insulation	40 dB, ele		_		_						-	-	
Weight	kg/m²	35,0	35,2	35,3	35,3	35,4	35,5	35,6	35,6	35,8	35,8	36,0	36,2
Cover panel and surface	Chipboa	rd P5, E [.]	1, untre	ated, 16	mm (Pl	EFC-cert	ified)						
Thermal insulation	Glass wo	ol, 20 kç	g/m³, 12	–57 mm									
Sound insulation	2 pieces	of heav	y bitum	en foil,	5 mm								
Bonding	Water-res	istant D3	3 (EN 204	1-D3)									
Edge band	Spruce, o				,	ds can be	inset acc	ording to	your requ	irements			
Edge milling	All possil Special CN								_	-			
Thicknesses	Thicknes For thicknes	esses as fr	om 100 n	nm, see e	xtension	elements [·]	for woode	en lifting sl	liding doo	rs			
Formats	All forma	ts from	500 × 95	mm to	3588 ×	1294 mr	n can b	e produc	ced				
Element thicknesses from 54	mm to 00	mm can l	he produ	iced Ea	r further	-\/aluc	calculati	one plac	sea conto	act our o	oneultar	nte	
Element thickness	mm	54	be produ 58	6		68	70	74	80		4	94	99
Thickness cover panel	mm	16	16	1	_	16	16	16	16		6	16	16
Thickness thermal insulation	mm	12	16	2		26	28	32	38		2	52	57
Thickness sound insulation		2×5	2×5			2×5	2×5	2×5	2×5			2×5	2×5
	mm W/m²K						0,821	0,750	0,66			2×5), 525	0,488
U-value	W/m ² K	1,313	1,14	2 0,9	ວວ 0	ODI	11071	U. (5U	0.00	5 0,6	010	13/3	UAKK
Airharna course insculation	42 dD	2 100 0 10 t t t t t t t	lunna - C				_					,020	0,100
Airborne sound insulation Weight	43 dB, ele	ement thic	kness: 64		t surface:		_					44,7	44,8

Cover panel and surface	Biofaser Hydropan BF-STX hardboard, untreated, 8 mm (certified FSC, PEFC, CE)
Thermal insulation	Glass wool, 20 kg/m³, 14–73 mm
Bonding	Water-resistant D3 (EN 204-D3)
Edge band	Spruce, circumferential or on the longitudinal edges (PEFC-certified) Other types of wood available; special edge bands can be inset according to your requirements
Edge milling	All possible CNC edge profile work is performed on all sides according to your profile specification Special CNC processing such as cut-outs, round and segment arches, ventilation slots or surface grooves are also possible
Thicknesses	Thicknesses from 40 mm to 99 mm can be produced For thicknesses of 100 mm and more, see extension elements for wooden lifting sliding doors For thicknesses below 40 mm, see infill for wooden windows
Formats	All formats from 500 × 95 mm to 3588 × 1294 mm can be produced

Element thicknesses from 40	mm to 99 r	mm can b	e produc	ed. For fu	urther U-v	alue calc	ulations,	please co	ontact ou	r consulta	ints.	
Element thickness	mm	40	50	54	58	64	68	74	80	84	94	99
Cover panel thickness	mm	8	8	8	8	8	8	8	8	8	8	8
Thermal insulation thickness	mm	14	24	28	32	38	42	48	54	58	68	73
Sound insulation thickness	mm	2 x 5	2 x 5	2 x 5	2 x 5	2 x 5	2 x 5	2 x 5	2 x 5	2 x 5	2 x 5	2 x 5
U-value	W/m ² K	1,420	1,010	0,906	0,821	0,719	0,665	0,597	0,541	0,510	0,445	0,418
Airborne sound insulation	46 dB, ele	ement thic	kness: 64	mm; test s	surface: 1.	82 m² (do	wnload tes	t reports)				
Weight	kg/m²	34,7	34,9	35,0	35,0	35,2	35,2	35,4	35,5	35,6	35,8	35,9

SOUND INSULATION 1 PRIMER FOIL

Cover panel and surface	Chipboard P5, E1, with white primer foil, 10 mm (PEFC-certified)
Thermal insulation	Glass wool, 20 kg/m³, 15–74 mm
Sound insulation	1 piece of heavy bitumen foil, 5 mm
Bonding	Water-resistant D3 (EN 204-D3)
Edge band	Spruce, circumferential (PEFC-certified) Other types of wood available; special edge bands can be inset according to your requirements
Edge milling	All possible CNC edge profile work is performed on all sides according to your profile specifications Special CNC processing like cut-outs, round and segment arches, ventilation slots or surface grooves are also possible
Thicknesses	Thicknesses from 40 mm to 99 mm can be produced For thicknesses as from 100 mm, see extension elements for wooden lifting sliding doors For thicknesses below 40 mm, see infill for wooden windows
Formats	All formats from 500 × 95 mm to 3588 × 1294 mm can be produced

Alle Elementstärken von 40 m	nm bis 99 n	nm herst	ellbar. Fü	ir weiter	e U-Wert	-Berech	nungen \	wenden	Sie sich	bitte an ı	unsere B	erater.	
Element thickness	mm	40	50	54	58	64	68	70	74	80	84	94	99
Thickness cover panel	mm	10	10	10	10	10	10	10	10	10	10	10	10
Thickness thermal insulation	mm	15	25	29	33	39	43	45	49	55	59	69	74
Thickness sound insulation	mm	5	5	5	5	5	5	5	5	5	5	5	5
U-value	W/m²K	1,331	0,964	0,868	0,790	0,696	0,645	0,622	0,580	0,528	0,498	0,436	0,410
Airborne sound insulation	38 dB, ele	ement thic	ckness: 54	4 mm; tes	t surface:	2.3 m² (c	lownload	test repor	ts)				
Weight	kg/m²	25,1	25,3	25,4	25,4	25,5	25,6	25,7	25,7	25,8	25,9	26,1	26,3

Cover panel and surface	Chipboard P5, E1, with white primer foil, 16 mm (PEFC-certified)
Thermal insulation	Glass wool, 20 kg/m³, 17–62 mm
Sound insulation	1 piece of heavy bitumen foil, 5 mm
Bonding	Water-resistant D3 (EN 204-D3)
Edge band	Spruce, circumferential (PEFC-certified) Other types of wood available; special edge bands can be inset according to your requirements
Edge milling	All possible CNC edge profile work is performed on all sides according to your profile specifications Special CNC processing like cut-outs, round and segment arches, ventilation slots or surface grooves are also possible
Thicknesses	Thicknesses from 54 mm to 99 mm can be produced For thicknesses as from 113 mm, see extension elements for wooden lifting sliding doors For thicknesses below 54 mm, see infill for wooden windows
Formats	All formats from 500 × 95 mm to 3588 × 1294 mm can be produced

Element thicknesses from 54 mm to 99 mm can be produced. For further U-value calculations, please contact our consultants. **Element thickness** 54 58 64 68 70 74 80 84 94 99 $\mathbf{m}\mathbf{m}$ Thickness cover panel mm 16 16 16 16 16 16 16 16 16 16 17 21 47 Thickness thermal insulation mm 27 31 33 37 43 57 62 Thickness sound insulation 5 5 5 5 5 5 mm 5 5 5 5 U-value W/m²K 1,118 0,992 0,847 0,773 0,740 0,682 0,611 0,571 0,491 0,459 Airborne sound insulation **40 dB,** element thickness: 64 mm; test surface: 1.9 m² (download test reports) Weight kg/m² 33,2 33,3 33,4 33,5 33,5 33,6 33,7 33,8 34,0 34,1

Cover panel and surface	Medium-density fibreboard (MDF) P3, E1, with white primer foil, 10 mm
Thermal insulation	Glass wool, 20 kg/m³, 15–74 mm
Sound insulation	1 piece of heavy bitumen foil, 5 mm
Bonding	Water-resistant D3 (EN 204-D3)
Edge band	Spruce, circumferential (PEFC-certified) Other types of wood available; special edge bands can be inset according to your requirements
Edge milling	All possible CNC edge profile work is performed on all sides according to your profile specifications Special CNC processing like cut-outs, round and segment arches, ventilation slots or surface grooves are also possible
Thicknesses	Thicknesses from 40 mm to 99 mm can be produced For thicknesses as from 100 mm, see extension elements for wooden lifting sliding doors For thicknesses below 40 mm, see infill for wooden windows
Formats	All formats from 500 \times 95 mm to 3588 \times 1294 mm can be produced
Element thicknesses from	1 40 mm to 99 mm can be produced. For further U-value calculations, please contact our consultants.

Element thicknesses from 40	mm to 99 i	mm can	be produ	uced. Fo	r further	U-value	calculation	ons, plea	se conta	act our c	onsultan	ts.	
Element thickness	mm	40	50	54	58	64	68	70	74	80	84	94	99
Thickness cover panel	mm	10	10	10	10	10	10	10	10	10	10	10	10
Thickness thermal insulation	mm	15	25	29	33	39	43	45	49	55	59	69	74
Thickness sound insulation	mm	5	5	5	5	5	5	5	5	5	5	5	5
U-value	W/m ² K	1,237	0,914	0,827	0,756	0,669	0,622	0,600	0,562	0,512	0,484	0,425	0,401
Airborne sound insulation	38 dB, ele	ement thic	ckness: 54	1 mm; tes	t surface:	2.3 m² (d	lownload ·	est repor	ts)				
Weight	kg/m²	25,7	25,9	26,0	26,1	26,2	26,3	26,3	26,4	26,5	26,6	26,8	26,9

SOUND INSULATION 2 PRIMER FOIL

Cover panel and	Chipboa	rd P5, E [.]	1, with \	vhite pı	rimer fo	il, 10 mr	n (PEFC	-certified)				
surface													
Thermal insulation	Glass wo												
Sound insulation	2 pieces			,	5 mm								
Bonding	Water-res		•										
Edge band	Spruce, of Other types				,	ds can be	inset acc	ording to	your requ	irements			
Edge milling	All possil Special CN		• .						_	•		•	
Thicknesses	Thicknes For thickne	sses as fr	om 100 n	nm, see e	extension	elements	for wood	en lifting s	liding doc	ors			
Formats	All forma	ts from	500 × 95	mm to	3588 ×	1294 m	m can b	e produ	ced				
Element thicknesses from 40	mm to 99 r	mm can l	be produ	ıced. Fo	r further	U-value	calculati	ons, plea	ase conta	act our c	consultar	nts.	
Element thickness	mm	40	50	54	58	64	68	70	74	80	84	94	99
Thickness cover panel	mm	10	10	10	10	10	10	10	10	10	10	10	10
Thickness thermal insulation	mm	10	20	24	28	34	38	40	44	50	54	64	69
Thickness sound insulation	mm	2×5	2×5	2×5	2×5	2×5	2×5	2×5	2×5	2×5	2×5	2×5	2×5
U-value	W/m²K						0,705		0,629	0,568	0,533	0.463	0,43
Airborne sound insulation	40 dB, ele		_			_	_			0,000	,,,,,,	0, 100	0, 10
Weight	kg/m²	35,0	35,2	35,3	35,3	35,4	35,5	35,6	35,6	35,8	35,8	36,0	36,2
curfaca	Cilippoal					16 m	M (DEEC	oortified					
Thermal insulation	Glass wo	ol, 20 kç	g/m³, 12	–57 mm	1	il, 16 mr	n (PEFC	-certified		•	•	•	
Thermal insulation Sound insulation	2 pieces	ol, 20 kç	g/m³, 12 y bitum	–57 mm en foil,	1	il, 16 mr	n (PEFC	-certified					
Thermal insulation	2 pieces Water-res Spruce, o	ool, 20 kg of heavy istant D3 circumfe	g/m³, 12 y bitum ß (EN 204 rential (l	-57 mm en foil, 4-D3)	5 mm			Ξ		irements			
Thermal insulation Sound insulation Bonding	2 pieces Water-res	ool, 20 kg of heavy istant D3 circumfe s of wood	g/m³, 12 y bitum 3 (EN 204 rential (l available edge pl	-57 mm en foil, 1-D3) PEFC-ce special e	5 mm ertified) edge band ork is pe	ds can be	inset acc	ording to	your requ	to your			
Thermal insulation Sound insulation Bonding Edge band	2 pieces Water-res Spruce, o Other types	ool, 20 kg of heavy istant D3 circumfe s of wood ole CNC IC process sees from	g/m³, 12 y bitume ß (EN 204 rential (I available edge pt sing like o	-57 mm en foil, 4-D3) PEFC-cc special (rofile wa ut-outs, i to 99 r	55 mm ertified) ertified) ertified and and and and and and and and and an	ds can be erformed segment be prod	inset according in a line	ording to sides acc	your requ cording slots or s	to your urface gro			
Thermal insulation Sound insulation Bonding Edge band Edge milling	2 pieces Water-res Spruce, o Other types All possil Special CN Thicknes For thicknes	ool, 20 kg of heavy istant D3 circumfe s of wood Dle CNC C process sees from ssses as fr	g/m³, 12 y bitume 8 (EN 204 rential (I available edge pi sing like c n 54 mm om 100 n	-57 mm en foil, 4-D3) PEFC-ce special of rofile wo ut-outs, i to 99 r	5 mm ertified) edge band ork is peround and nm can extension for wood	ds can be erformed I segment be prod elements en windo	inset acc d on all s t arches, v uced for woode	ording to sides acceptation acceptation in the sides acceptance ac	your requ cording slots or s	to your urface gro			
Thermal insulation Sound insulation Bonding Edge band Edge milling Thicknesses	2 pieces Water-res Spruce, o Other types All possil Special CN Thicknes For thicknes For thicknes All forma	ool, 20 kg of heavy istant D3 circumfe s of wood lC process ses from sses as fr sses belo ts from \$	g/m³, 12 y bitume 8 (EN 204 rential (I available edge prising like of 154 mm om 100 n w 54 mm 500 × 95	-57 mm en foil, 1-D3) PEFC-ce special of rofile wo ut-outs, in to 99 r nm, see e , see infill	5 mm ertified) edge band ork is peround and extension for wood 3588 ×	erformec I segment be prod elements en windo	inset acc d on all s t arches, v uced for woode ws m can b	ording to sides according to ventilation en lifting see production	your requ cording slots or s liding doc ced	to your urface gro	ooves are	also pos	
Thermal insulation Sound insulation Bonding Edge band Edge milling Thicknesses Formats	2 pieces Water-res Spruce, o Other types All possil Special CN Thicknes For thicknes For thicknes All forma	ool, 20 kg of heavy istant D3 circumfe s of wood lC process ses from sses as fr sses belo ts from \$	g/m³, 12 y bitume 8 (EN 204 rential (I available edge prising like of 154 mm om 100 n w 54 mm 500 × 95	-57 mm en foil, 4-D3) PEFC-cc special (rofile wo ut-outs, i to 99 r nm, see e , see infill mm to uced. Fc	5 mm ertified) edge band ork is peround and extension for wood 3588 ×	erformec I segment be prod elements en windo	inset acc d on all s t arches, v uced for woode ws m can b	ording to sides according to ventilation en lifting see production	your requ cording slots or s liding doc ced	to your urface gro ors	ooves are	also pos	
Thermal insulation Sound insulation Bonding Edge band Edge milling Thicknesses Formats Element thicknesses from 54	2 pieces Water-res Spruce, o Other types All possil Special CN Thicknes For thicknes For thicknes All forma	ool, 20 kg of heavy istant D3 circumfe s of wood ole CNC IC process sees from seeses sees belo ts from seeses	g/m³, 12 y bitume B (EN 204 rential (I available edge pl sing like c 1 54 mm om 100 n w 54 mm 5500 × 95	-57 mm en foil, 4-D3) PEFC-ce special of rofile wo ut-outs, if to 99 r nm, see e , see infill 6 mm to	pertified) ertified) ertif	ds can be erformed I segment be prod elements en windo 1294 mi U-value	inset according in inset according in all starches, which was a can be calculated.	ording to sides accentilation en lifting see productions, please	your required cording slots or soliding documents.	to your urface gro ors act our c	consultar	also pos	sible
Thermal insulation Sound insulation Bonding Edge band Edge milling Thicknesses Formats Element thicknesses from 54 Element thickness	2 pieces Water-res Spruce, of Other types All possil Special CN Thicknes For thicknes For thicknes All forma mm to 99 r mm	ool, 20 kg of heavy istant D3 circumfe s of wood ble CNC IC process ses from ssess as fr ssess belo ts from 5 mm can 1	g/m³, 12 y bitumo 8 (EN 204 rential (lavailable edge prising like of n 54 mm om 100 n w 54 mm 500 x 95 be produ	-57 mm en foil, 4-D3) PEFC-ce special (rofile we ut-outs, (to 99 r nm, see e , see infill 6 mm to	pertified) edge band ork is peround and extension for wood 3588 × or further	ds can be erformec I segment be prod elements en windo 1294 mi U-value 68	d on all starches, wuced for wooddws m can b	eording to sides acceptation en lifting see productions, plea 74	your required cording slots or soliding documents.	to your urface gro ors act our c	consultar	also pos	sible 99
Thermal insulation Sound insulation Bonding Edge band Edge milling Thicknesses Formats Element thicknesses from 54 Element thickness Thickness cover panel	2 pieces Water-res Spruce, o Other types All possil Special CN Thicknes For thicknes For thicknes All forma mm to 99 mm mm	ool, 20 kg of heavy istant D3 circumfe s of wood ole CNC IC process ses from sses as fr ssess belo tts from 5 mm can 1 54 16	g/m³, 12 y bitume B (EN 204 rential (I available edge pl sing like c 154 mm om 100 n w 54 mm 500 × 95 be produ 58 16	-57 mm en foil, 4-D3) PEFC-cc special of rofile wo ut-outs, if to 99 r nm, see e , see infill 6 mm to uced. Fc	pertified) edge band ork is peround and nm can extension for wood 3588 × or further 44 66	ds can be erformed segment be prodelements en windo 1294 mil U-value 68 16	inset acc d on all s a arches, v uced for woode ws m can b calculati 70	eording to sides acceptable accep	your required cording slots or soliding documents.	to your urface gro ors act our c 8 1	consultar 6 2	also pos nts. 94 16	99 16
Thermal insulation Sound insulation Bonding Edge band Edge milling Thicknesses Formats Element thicknesses from 54 Element thickness Thickness cover panel Thickness thermal insulation	2 pieces Water-res Spruce, o Other types All possil Special CN Thicknes For thicknes For thicknes All forma mm to 99 mm mm mm	ool, 20 kg of heavy istant D3 circumfe s of wood ole CNC IC process ses from ssess as fr ssess belo ts from \$ 54 16 12	g/m³, 12 y bitume 8 (EN 204 rential (I available edge pl sing like com 54 mm om 100 m w 54 mm 500 × 95 be produ 58 16	-57 mm en foil, 4-D3) PEFC-ce special of rofile wo ut-outs, in to 99 r nm, see e , see infill 6 mm to ided. For	pertified) edge band ork is peround and nm can extension for wood 3588 x r further 4 6 22 × 5	ds can be erformec I segment be prod elements en windo 1294 mi U-value 68 16 26	inset according to all starches, which was a calculating to the calcul	en lifting s e productions, plea	your required solutions of the solution of the	to your urface grows act our comments 455 235	consultar 4 6 2 ×5	also pos nts. 94 16 52	99 16 57
Thermal insulation Sound insulation Bonding Edge band Edge milling Thicknesses Formats Element thicknesses from 54 Element thickness Thickness cover panel Thickness thermal insulation Thickness sound insulation	2 pieces Water-res Spruce, of Other types All possil Special CN Thicknes For thicknes For thicknes All forma mm to 99 r mm mm mm mm	ool, 20 kg of heavy istant D3 circumfe s of wood ole CNC IC process sees from seeses as fr seeses belo ts from 9 16 12 2×5 1,313	g/m³, 12 y bitume B (EN 204 rential (I available edge pl sing like of 1 54 mm om 100 n w 54 mm 500 x 95 be produ 58 16 16 2×5 1,14	-57 mm en foil, 4-D3) PEFC-cc special of rofile wout-outs, if to 99 mm, see e., see infill of mm to liced. For a constant of the constant of t	pertified) ertified) ertif	ds can be erformed segment be prodelements en windo 1294 mil U-value 68 16 26 2×5 4,861	inset according in inset according in inset according in a content in	cording to sides acceptable accep	your required cording slots or soliding documents assections assection assections assection asse	to your urface grows act our comments 455 235	consultar 4 6 2 ×5	also pos nts. 94 16 52 2×5	99 16 57 2×5

Cover panel and surface	Medium-	-density	fibrebo	ard (MI	OF) P3, E	≣1, with	white p	orimer fo	oil, 10 m	m			
Thermal insulation	Glass wo	ass wool, 20 kg/m³, 10–69 mm											
Sound insulation	2 pieces	pieces of heavy bitumen foil, 5 mm											
Bonding	Water-res	iter-resistant D3 (EN 204-D3)											
Edge band		ruce, circumferential (PEFC-certified) er types of wood available; special edge bands can be inset according to your requirements											
Edge milling	All possil Special CN		• .		•				•	-	•	•	
Thicknesses	Thicknes For thicknes For thicknes	esses as fr	rom 100 r	nm, see	extension	elements	for wood	en lifting s	sliding dod	ors			
Formats	All forma	ts from	500 × 95	5 mm to	3588 ×	1294 m	m can b	e produ	ced				
Element thicknesses from 40) mm to 99 i	mm can	be prodi	uced. Fo	or further	U-value	calculati	ions, ple	ase cont	act our c	consultar	nts.	
Element thickness	mm	40	50	54	58	64	68	70	74	80	84	94	99
Thickness cover panel	mm	10	10	10	10	10	10	10	10	10	10	10	10

28

2×5

0,840

36,0

45 dB, element thickness: 54 mm; test surface: 2.3 m² (download test reports)

34

2×5

36,1

38

2×5

36,2

40

2×5

0,735 0,678 0,652 0,607 0,550 0,517

36,2 36,3

44

2×5

50

2×5

36,4

54

2×5

36,5

64

2×5

0,451 0,423

36,7 36,8

69

2×5

Thickness thermal insulation

Thickness sound insulation

Airborne sound insulation

U-value

Weight

10

2×5

1,480

35,6

mm

mm

W/m²K

kg/m²

20

2×5

35,8

1,040 0,930

24

2×5

35,9

SOUND INSULATION 1 VENEERED

SOUND INSULATION	1 VENE	ERED												
Cover panel and surface	Chipboa All types of Veneer qua	f real woo	d veneers	available	: spruce,	pine, larcl	n, fir, oak,				l)			
Thermal insulation	Glass wo	ool, 20 k	g/m³, 13	3–72 mn	ı									
Sound insulation	1 piece d	of heavy	bitume	n foil, 5	mm									
Bonding	Water-res	sistant D	3 (EN 20	4-D3)										
Edge band	Spruce, of Other types			•	,	ds can be	inset acc	cording to	your requ	uirements				
Edge milling	All possil Special CN		• .						_	•	•	•		
Thicknesses	For thickne	icknesses from 40 mm to 99 mm can be produced thicknesses as from 100 mm, see extension elements for wooden lifting sliding doors thicknesses below 40 mm, see infill for wooden windows												
Formats	All forma	formats from 500 × 95 mm to 3588 × 1294 mm can be produced												
Alla Flamantstärkan van 40 m	nm hic QQ n	is 99 mm herstellbar. Für weitere U-Wert-Berechnungen wenden Sie sich bitte an unsere Berater.												
Element thickness	mm	40	50	54	58	64	68	70	74	80	84	94	99	
Thickness cover panel	mm	10	10	10	10	10	10	10	10	10	10	10	10	
Veneer thickness	mm	1	1	1	1	1	1	1	1	1	1	1	1	
Thickness thermal insulation	mm	13	23	27	31	37	41	43	47	53	57	67	72	
Thickness sound insulation	mm	5	5	5	5	5	5	5	5	5	5	5	5	
U-value	W/m²K	-	-	-	0,818	-	-	0,639		-	0,509			
Airborne sound insulation	38 dB, ele	_	_	_		_				0,010	0,000	0,111	0, 11	
Weight	kg/m ²	26,0	26,2	26,2	26,3	26,4	26,5	26,6	26,7	26,8	26,9	27,0	27,1	
Cover panel and surface	Chipboa All types of Veneer qua	f real woo	d veneers	available	: spruce,	pine, larcl	n, fir, oak,				l)			
Thermal insulation	Glass wo	ol, 20 k	g/m³, 11	–60 mn	า									
Sound insulation	1 piece o	of heavy	bitume	n foil, 5	mm									
Bonding	Water-res	sistant D	3 (EN 20	4-D3)										
Edge band	Spruce, of Other types			•	,	ds can be	inset acc	cording to	your requ	uirements				
Edge milling	All possil Special CN								_	-	•	•		
Thicknesses	Thicknes For thicknes For thicknes	esses as f	rom 100 i	mm, see	extension	elements	for wood	len lifting s	sliding do	ors				
Formats	All forma	ts from	500 × 9	5 mm to	3588 ×	1294 m	m can b	e produ	iced					
Element thicknesses from 50	mm to 99	mm can	be prod	uced Fo	or further	U-value	calculat	ions nle	ase cont	tact our d	consulta	nts.		
Element thickness	mm	50	54	58	64				74	80	84	94	99	
Thickness cover panel	mm	16	16	16	16				16	16	16	16	16	
		10	10	10	10	- 1							10	

Element thicknesses from 50	Element thicknesses from 50 mm to 99 mm can be produced. For further U-value calculations, please contact our consultants.												
Element thickness	mm	50	54	58	64	68	70	74	80	84	94	99	
Thickness cover panel	mm	16	16	16	16	16	16	16	16	16	16	16	
Veneer thickness	mm	1	1	1	1	1	1	1	1	1	1	1	
Thickness thermal insulation	mm	11	15	19	25	29	31	35	41	45	55	60	
Thickness sound insulation	mm	5	5	5	5	5	5	5	5	5	5	5	
U-value	W/m²K	1,357	1,174	1,036	0,879	0,799	0,764	0,703	0,627	0,585	0,501	0,467	
Airborne sound insulation	40 dB, ele	dB, element thickness: 64 mm; test surface: 1.9 m² (download test reports)											
Weight	kg/m²	34,0	34,1	34,2	34,3	34,4	34,4	34,5	34,6	34,7	34,9	35,0	

Cover panel and surface	Biofaser Hydropan BF-STX hardboard, 8 mm, untreated (unsanded), 1,4 mm (certified FSC, PEFC, CE) All types of real wood veneers available: spruce, pine, larch, fir, oak, etc. (FSC- or PEFC-certified) Veneer quality A/B (inside A/outside B) or A/A (inside A/outside A)
Thermal insulation	Glass wool, 20 kg/m³, 17–76 mm
Bonding	Water-resistant D3 (EN 204-D3)
Edge band	Spruce, circumferential or on the longitudinal edges (PEFC-certified) Other types of wood available; special edge bands can be inset according to your requirements
Edge milling	All possible CNC edge profile work is performed on all sides according to your profile specifications Special CNC processing such as cut-outs, round and segment arches, ventilation slots or surface grooves are also possible
Thicknesses	Thicknesses from 40 mm to 99 mm can be produced For thicknesses of 100 mm and more, see extension elements for wooden lifting sliding doors For thicknesses below 40 mm, see infill for wooden windows
Formats	All formats from 500 × 95 mm to 3588 × 1294 mm can be produced

Element thicknesses from 40	mm to 99 i	mm can b	oe produc	ced. For fo	urther U-V	value calc	ulations,	please co	ntact ou	r consulta	ants.	
Element thickness	mm	40	50	54	58	64	68	74	80	84	94	99
Cover panel thickness	mm	8	8	8	8	8	8	8	8	8	8	8
Veneer thickness	mm	1	1	1	1	1	1	1	1	1	1	1
Thermal insulation thickness	mm	17	27	31	35	41	45	51	57	61	71	76
Sound insulation thickness	mm	5	5	5	5	5	5	5	5	5	5	5
U-value	W/m ² K	1,259	0,926	0,837	0,764	0,676	0,627	0,566	0,516	0,487	0,428	0,403
Airborne sound insulation	43 dB, el	B, element thickness: 64 mm; test surface: 1.82 m² (download test reports)										
Weight	kg/m²	25,7	25,9	26,0	26,0	26,2	26,2	26,4	26,5	26,6	26,8	26,8

SOUND INSULATION 2 VENEERED

Cover panel and surface	Chipboard P5, E1, 10 mm, with real wood veneer, 1 mm (PEFC-certified) All types of real wood veneers available: spruce, pine, larch, fir, oak, etc. (FSC- or PEFC-certified) Veneer quality A/B (inside A/outside B) or A/A (inside A/outside A)
Thermal insulation	Glass wool, 20 kg/m³, 8–67 mm
Sound insulation	2 pieces of heavy bitumen foil, 5 mm
Bonding	Water-resistant D3 (EN 204-D3)
Edge band	Spruce, circumferential (PEFC-certified) Other types of wood available; special edge bands can be inset according to your requirements
Edge milling	All possible CNC edge profile work is performed on all sides according to your profile specifications Special CNC processing like cut-outs, round and segment arches, ventilation slots or surface grooves are also possible
Thicknesses	Thicknesses from 40 mm to 99 mm can be produced For thicknesses as from 99 mm, see extension elements for wooden lifting sliding doors For thicknesses below 40 mm, see infill for wooden windows
Formats	All formats from 500 × 95 mm to 3588 × 1294 mm can be produced
Element thicknesses from 4	0 mm to 99 mm can be produced. For further U-value calculations, please contact our consultants.

Element thicknesses from 40	Element thicknesses from 40 mm to 99 mm can be produced. For further U-value calculations, please contact our consultants.												
Element thickness	mm	40	50	54	58	64	68	70	74	80	84	94	99
Thickness cover panel	mm	10	10	10	10	10	10	10	10	10	10	10	10
Veneer thickness	mm	1	1	1	1	1	1	1	1	1	1	1	1
Thickness thermal insulation	mm	8	18	22	26	32	36	38	42	48	52	62	67
Thickness sound insulation	mm	2×5	2×5	2×5	2×5	2×5	2×5	2×5	2×5	2×5	2×5	2×5	2×5
U-value	W/m²K	1,737	1,161	1,025	0,917	0,793	0,727	0,698	0,646	0,582	0,546	0,472	0,441
Airborne sound insulation	40 dB, el	dB, element thickness: 54 mm; test surface: 2.3 m² (download test reports)											
Weight	kg/m²	35,9	36,1	36,2	36,3	36,4	36,5	36,5	36,6	36,7	36,8	36,9	37,0

Cover panel and surface	Chipboard P5, E1, 16 mm, with real wood veneer, 1 mm (PEFC-certified) All types of real wood veneers available: spruce, pine, larch, fir, oak, etc. (FSC- or PEFC-certified) Veneer quality A/B (inside A/outside B) or A/A (inside A/outside A)
Thermal insulation	Glass wool, 20 kg/m³, 10–55 mm
Sound insulation	2 pieces of heavy bitumen foil, 5 mm
Bonding	Water-resistant D3 (EN 204-D3)
Edge band	Spruce, circumferential (PEFC-certified) Other types of wood available; special edge bands can be inset according to your requirements
Edge milling	All possible CNC edge profile work is performed on all sides according to your profile specifications Special CNC processing like cut-outs, round and segment arches, ventilation slots or surface grooves are also possible
Thicknesses	Thicknesses from 54 mm to 99 mm can be produced For thicknesses as from 100 mm, see extension elements for wooden lifting sliding doors For thicknesses below 54 mm, see infill for wooden windows
Formats	All formats from 500 × 95 mm to 3588 × 1294 mm can be produced

Element thicknesses from 54	mm to 99 r	mm can b	e produce	d. For furt	her U-valu	e calculati	ons, pleas	e contact	our consu	Iltants.		
Element thickness	mm	54	58	64	68	70	74	80	84	94	99	
Thickness cover panel	mm	16	16	16	16	16	16	16	16	16	16	
Veneer thickness	mm	1	1	1	1	1	1	1	1	1	1	
Thickness thermal insulation	mm	10	14	20	24	26	30	36	40	50	55	
Thickness sound insulation	mm	2×5	2×5	2×5	2×5	2×5	2×5	2×5	2×5	2×5	2×5	
U-value	W/m²K	1,392	1,201	0,996	0,894	0,851	0,775	0,684	0,635	0,537	0,498	
Airborne sound insulation	43 dB, ele	dB, element thickness: 64 mm; test surface: 1.9 m² (download test reports)										
Weight	kg/m²	44,0	44,1	44,2	44,3	44,3	44,4	44,5	44,6	44,8	45,7	

Cover panel and surface	Biofaser Hydropan BF-STX hardboard, untreated, 8 mm, with real wood veneer (unsanded), 1,4 mm (certified FSC, PEFC, CE) All types of real wood veneers available: spruce, pine, larch, fir, oak, etc. (FSC- or PEFC-certified) Veneer quality A/B (inside A/outside B) or A/A (inside A/outside A)
Thermal insulation	Glass wool, 20 kg/m³, 12–71 mm
Bonding	Water-resistant D3 (EN 204-D3)
Edge band	Spruce, circumferential or on the longitudinal edges (PEFC-certified) Other types of wood available; special edge bands can be inset according to your requirements
Edge milling	All possible CNC edge profile work is performed on all sides according to your profile specifications Special CNC processing such as cut-outs, round and segment arches, ventilation slots or surface grooves are also possible
Thicknesses	Thicknesses from 40 mm to 99 mm can be produced For thicknesses of 100 mm and more, see extension elements for wooden lifting sliding doors For thicknesses below 40 mm, see infill for wooden windows
Formats	All formats from 500 × 95 mm to 3588 × 1294 mm can be produced

Element thicknesses from 40	Element thicknesses from 40 mm to 99 mm can be produced. For further U-value calculations, please contact our consultants.												
Element thickness	mm	40	50	54	58	64	68	74	80	84	94	99	
Cover panel thickness	mm	8	8	8	8	8	8	8	8	8	8	8	
Veneer thickness	mm	1	1	1	1	1	1	1	1	1	1	1	
Thermal insulation thickness	mm	12	22	26	30	36	40	46	52	56	66	71	
Sound insulation thickness	mm	2 x 5	2 x 5	2 x 5	2 x 5	2 x 5	2 x 5	2 x 5	2 x 5	2 x 5	2 x 5	2 x 5	
U-value	W/m ² K	1,512	1,056	0,942	0,851	0,742	0,684	0,612	0,554	0,521	0,454	0,425	
Airborne sound insulation	46 dB, ele	B, element thickness: 64 mm; test surface: 1.82 m² (download test reports)											
Weight	kg/m²	35,6	35,8	35,9	35,9	36,1	36,1	36,3	36,4	36,5	36,7	36,7	