

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

## **SOUND INSULATION 1 UNTREATED**

Cover panel and surface	Chipboa	rd P5, E	E1, untr	eated,	10 mm	(PEFC-	certified								
Thermal insulation	Glass wo	ol, 20 k	g/m³, 1	5–87 m	ım										
Sound insulation	1 piece d	of heavy	/ bitum	en foil,	5 mm										
Bonding	Water-res	istant D	3 (EN 2	04-D3)											
Edge band	Spruce, of Other type					,	n be inset	t accordii	ng to you	ır requirei	ments				
Edge milling	Special CN	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 or surface finishing like ventilation slots or surface groover also possible													
Thicknesses	For thickne	Thicknesses from 40 mm to 112 mm can be produced For thicknesses as from 113 mm, see extension elements for wooden lifting sliding doors For thicknesses below 40 mm, see infill for wooden windows													
Formats	All forma	ts from	500 × 9	95 mm	to 3588	× 1294	mm ca	an be pi	oduced	t					
Element thicknesses from 40	mm to 112	2 mm ca	n be pr	oduced.	. For fur	ther U-v	alue cal	culation	s, pleas	e conta	ct our c	onsultar	nts.		
Element thickness	mm	40	50	54	58	64	68	70	74	80	84	94	104	112	
Thickness cover panel	mm	10	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	87	
Thickness sound insulation	mm	5	5	5	5	5	5	5	5	5	5	5	5	5	
U-value	W/m <sup>2</sup> K	1.332	0.965	0.869	0.791	0.696	0.645	0.622	0.581	0.528	0.498	0.436	0.388	0.356	
Airborne sound insulation	38 dB, el	ement thi	ckness:	54 mm; t	est surfa	ce: 2.3 m	n² (downl	load test	reports)						
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	26.5	

Cover panel and surface	Chipboard P5, E1, untreated, 16 mm (PEFC-certified)
Thermal insulation	Glass wool, 20 kg/m³, 17–75 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 or surface finishing like ventilation slots or surface grooves are also possible
Thicknesses	Thicknesses from 54 mm to 112 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 112 mm can be produced. For further U-value calculations, please contact our consultants.													
Element thickness	mm	54	58	64	68	70	74	80	84	94	104	112	
Thickness cover panel	mm	16	16	16	16	16	16	16	16	16	16	16	
Thickness thermal insulation	mm	17	21	27	31	33	37	43	47	57	67	75	
Thickness sound insulation	mm	5	5	5	5	5	5	5	5	5	5	5	
U-value	W/m <sup>2</sup> K	1.119	0.992	0.848	0.773	0.740	0.683	0.611	0.571	0.491	0.431	0.392	
Airborne sound insulation	40 dB, ele	ement thick	kness: 64 i	mm; test s	urface: 1.9	9 m² (dowr	nload test r	reports)					
Weight	kg/m²	33.2	33.3	33.4	33.5	33.5	33.6	33.7	33.8	34.0	34.2	34.3	

# **SOUND INSULATION 2 UNTREATED**

0			-										-								
Cover panel and surface	Chipboa	rd P5, E	1, untr	eated,	10 mm	(PEFC-	certified														
Thermal insulation	Glass wo	ol, 20 k	g/m³, 1	0–82 m	m																
Sound insulation	2 pieces	of heav	y bitun	nen foil	, 5 mm																
Bonding	Water-res	istant D	3 (EN 20	04-D3)																	
Edge band	Spruce, of Other types			•		•	n be inset	t accordir	ng to you	ır requirei	ments										
Edge milling	All possible Special CN are also po	IC proces																			
Thicknesses	Thicknes For thickne	esses as f	rom 113	mm, see	e extensi	on eleme	ents for w		ting slidir	ng doors											
Formats	All forma	ts from	500 × 9	95 mm 1	to 3588	× 1294	l mm ca	an be pr	oduced	t											
Element thicknesses from 40	mm to 112	mm ca	n be pro	oduced.	For fur	ther U-v	alue cal	culation	s, pleas	e conta	ct our c	onsultaı	nts.								
Element thickness	mm	40	50	54	58	64	68	70	74	80	84	94	104	112							
Thickness cover panel	mm	10	10	10	10	10	10	10	10	10	10	10	10	10							
Thickness thermal insulation	mm	nm 10 20 24 28 34 38 40 44 50 54 64 74 82																			
Thickness sound insulation	mm	nm 2×5 2×5 2×5 2×5 2×5 2×5 2×5 2×5 2×5 2×5																			
U-value	W/m²K																				
Airborne sound insulation	<b>40 dB,</b> ele	ement this	ckness: {	54 mm; t	est surfa	ce: 2.3 r	m² (downl	load test	reports)	•											
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	36.4							
Cover panel and surface	Chipboa	rd P5, E	1, untr	eated,	16 mm	(PEFC-	certified	)													
Thermal insulation	Glass wo	ol, 20 k	g/m³, 1	2–70 m	m																
Sound insulation	2 pieces	of heav	y bitun	nen foil	, 5 mm																
Bonding	Water-res	istant D	3 (EN 20	04-D3)																	
Edge band	Spruce, of Other types			•			n be inset	t accordir	ng to you	ır requirei	ments										
Edge milling	All possible Special CN are also po	IC proces	•	•		•				_											
Thicknesses	Thicknes For thicknes For thicknes	esses as f	rom 113	mm, see	e extensi	on eleme	ents for w		ting slidir	ng doors											
_	For thicknesses below 54 mm, see infill for wooden windows  All formats from 500 x 95 mm to 3588 x 1294 mm can be produced																				
Formats All formats from 500 × 95 mm to 3588 × 1294 mm can be produced																					
			n be pro	oduced.	For fur	ther U-\	alue cal	mm to 112 mm can be produced. For further U-value calculations, please contact our consultants.													
			n be pro <b>58</b>			ther U-\ <b>68</b>	value cal	culation:	s, pleas	e conta		onsultai <b>94</b>	nts. <b>104</b>	112							
Element thicknesses from 54	mm to 112	2 mm ca		64	4						. 9			112 16							
Element thicknesses from 54 <b>Element thickness</b>	mm to 112	2 mm ca	58	6-	4 6	68	70	74	80	84	. 9	94	104								
Element thicknesses from 54 Element thickness Thickness cover panel	mm to 112 mm mm	2 mm car 54 16	58 16	64 10 22	<b>4 6</b> 2	68 16	70 16	74 16	80 16	<b>84 16</b> 42	. 9	94 16 52	104 16	16							
Element thicknesses from 54 Element thickness Thickness cover panel Thickness thermal insulation	mm to 112 mm mm mm	2 mm ca 54 16 12	<b>58 16</b> 16	64 10 22 5 2×	4 6 2 2 5 2	68 16 26 ×5	<b>70 16</b> 28	<b>74 16</b> 32	<b>80 16</b> 38	84 16 42 2×	. <b>§</b> 1	94 16 52 ×5	<b>104 16</b> 62	<b>16</b> 70							
Element thicknesses from 54 Element thickness Thickness cover panel Thickness thermal insulation Thickness sound insulation	mm to 112 mm mm mm mm	2 mm car 54 16 12 2×5 1.314	58 16 16 2×5 1.14	64 10 22 5 2× 3 0.9	4 6 2 55 2 55 0.	68 16 26 ×5 861	70 16 28 2×5 0.821	74 16 32 2×5 0.751	80 16 38 2×5 0.665	84 16 42 2×	. <b>§</b> 1	04 16 52 ×5	104 16 62 2×5	<b>16</b> 70 2×5							

#### **SOUND INSULATION 1 PRIMER FOIL**

Thickness sound insulation

Airborne sound insulation

U-value

Weight

mm

kg/m²

Cover panel and surface	Chipboard P5, E1, with white primer foil, 10 mm (PEFC-certified)  Glass wool, 20 kg/m³, 15–87 mm														
Thermal insulation	Glass wo	ol, 20 k	g/m³, 1	5–87 m	m										
Sound insulation	1 piece o	of heavy	/ bitum	en foil,	5 mm										
Bonding	Water-res	Vater-resistant D3 (EN 204-D3)													
Edge band		oruce, circumferential (PEFC-certified) ner types of wood available; special edge bands can be inset according to your requirements													
Edge milling	Special CN	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 or surface finishing like ventilation slots or surface grooves also possible													
Thicknesses	For thickne	Thicknesses from 40 mm to 112 mm can be produced  For thicknesses as from 113 mm, see extension elements for wooden lifting sliding doors  For thicknesses below 40 mm, see infill for wooden windows													
Formats	All forma	ts from	500 × 9	95 mm 1	to 3588	× 1294	mm ca	ın be pı	roduced	i					
Element thicknesses from 40	mm to 112	? mm ca	n be pro	oduced.	For fur	ther U-v	alue cal	culation	s, pleas	e conta	ct our c	onsultar	nts.		
Element thickness	mm	40	50	54	58	64	68	70	74	80	84	94	104	112	
Thickness cover panel	mm	10	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	87	

5

5

5

 $\textbf{38 dB,} \text{ element thickness: } 54 \text{ mm; test surface: } 2.3 \text{ m}^2 \text{ (download test reports)}$ 

5

5

W/m²K 1.332 0.965 0.869 0.791 0.696 0.645 0.622 0.581 0.528 0.498 0.436 0.388 0.356

5

5

25.1 25.3 25.4 25.4 25.5 25.6 25.7 25.7 25.8 25.9 26.1 26.3 26.5

5

5

5

5

5

Cover panel and surface	Chipboard P5, E1, with white primer foil, 16 mm (PEFC-certified)
Thermal insulation	Glass wool, 20 kg/m³, 17–75 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 or surface finishing like ventilation slots or surface grooves are also possible
Thicknesses	Thicknesses from 54 mm to 112 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 112 mm can be produced. For further U-value calculations, please contact our consultants.													
Element thickness	mm	54	58	64	68	70	74	80	84	94	104	112	
Thickness cover panel	mm	16	16	16	16	16	16	16	16	16	16	16	
Thickness thermal insulation	mm	17	21	27	31	33	37	43	47	57	67	75	
Thickness sound insulation	mm	5	5	5	5	5	5	5	5	5	5	5	
U-value	W/m <sup>2</sup> K	1.119	0.992	0.848	0.773	0.740	0.683	0.611	0.571	0.491	0.431	0.392	
Airborne sound insulation	40 dB, ele	ement thick	kness: 64	mm; test s	urface: 1.9	9 m² (dowr	nload test i	reports)					
Weight	kg/m²	33.2	33.3	33.4	33.5	33.5	33.6	33.7	33.8	34.0	34.2	34.3	

Cover panel and surface	Medium-	density	y fibreb	oard (N	MDF) PS	3, E1, w	ith whi	te prim	er foil,	10 mm					
Thermal insulation	Glass wo	ol, 20 k	(g/m³, 1	5–87 m	m										
Sound insulation	1 piece o	of heavy	y bitum	en foil,	5 mm										
Bonding	Water-res	istant D	3 (EN 20	04-D3)											
Edge band		ruce, circumferential (PEFC-certified) er types of wood available; special edge bands can be inset according to your requirements													
Edge milling	Special CN	Il possible CNC edge profile work is performed on all sides according to your profile specifications pecial CNC processing like cut-outs, round and segment arches or surface finishing like ventilation slots or surface grooves e also possible													
Thicknesses	For thickne	Thicknesses from 40 mm to 112 mm can be produced or thicknesses as from 113 mm, see extension elements for wooden lifting sliding doors or thicknesses below 40 mm, see infill for wooden windows													
Formats	All forma	ts from	500 × 9	95 mm 1	to 3588	× 1294	mm ca	an be pr	oduced	k					
Element thicknesses from 40	mm to 112	mm ca	ın be pro	oduced.	For fur	ther U-v	alue cal	culation	s. pleas	e conta	ct our c	onsultar	nts.		
Element thickness	mm	40	50	<b>54</b>	58	64	68	70	74	80	84	94	104	112	
Thickness cover panel	mm	10	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	87	

5

mm

Thickness sound insulation

Airborne sound insulation

U-value

Weight

5

5

5

**38 dB,** element thickness: 54 mm; test surface:  $2.3 \text{ m}^2$  (download test reports)

25.7 25.9 26.0 26.0 26.1 26.2

5

5

W/m<sup>2</sup>K 1.236 0.914 0.827 0.756 0.669 0.622 0.600 0.562 0.513 0.484 0.425 0.379 0.349

5

5

5

26.3 26.3 26.4 26.5

5

5

26.7 26.9 27.1

5

5

# **SOUND INSULATION 2 PRIMER FOIL**

SOUND INSULATION															
Cover panel and surface	Chipboa	rd P5, E	≣1, with	n white	primer	foil, 10	mm (Pl	EFC-cer	tified)						
Thermal insulation	Glass wo	ol, 20 k	(g/m³, 1	10–82 m	m										
Sound insulation	2 pieces	of heav	vy bitui	men foil	, 5 mm	ı									
Bonding	Water-res	istant D	3 (EN 2	.04-D3)											
Edge band	Spruce, of Other type			•		•	n be inset	t accordir	ng to you	ır require	ments				
Edge milling	All possil Special CN grooves an	IC proce	ssing like							_					
Thicknesses	Thicknes For thicknes	esses as	from 113	3 mm, see	e extensi	on eleme	nts for w		ting slidir	ng doors					
Formats	All forma	All formats from 500 × 95 mm to 3588 × 1294 mm can be produced													
Element thicknesses from 40	mm to 112	nm to 112 mm can be produced. For further U-value calculations, please contact our consultants.													
Element thickness	mm														
Thickness cover panel	mm														
Thickness thermal insulation	mm	10	20	24	28	34	38	40	44	50	54	64	74	82	
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	2×5	
U-value	W/m²K	1.618	1.107	0.982	0.883	0.767	0.705	0.678	0.629	0.568	0.533	0.463	0.409	0.37	
Airborne sound insulation	40 dB, ele	ement thi	ickness:	54 mm; t	est surfa	.ce: 2.3 n	n² (downl	oad test	reports)						
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	36.4	
Cover panel and surface	Chipboa	rd P5, E	≣1, witł	ı white	primer	foil, 16	mm (Pl	EFC-cer	tified)						
Thermal insulation	Glass wo	ol, 20 k	kg/m³, 1	12–70 m	m										
Sound insulation	2 pieces	of heav	vy bitui	men foil	, 5 mm	ı									
Bonding	Water-res	istant D	3 (EN 2	(04-D3)											
Edge band	Spruce, of Other type						n be inset	t accordir	ng to you	ır require	ments				
Edge milling	All possil Special CN grooves an	IC proce	ssing like												
Thicknesses	Thicknes For thicknes For thicknes	esses as	from 113	3 mm, see	e extensi	on eleme	ents for w		ting slidir	ng doors					
Formats	All forma	ts from	500 ×	95 mm t	to 3588	× 1294	mm ca	ın be pr	oduce	b					
Element thicknesses from 54	mm to 112	mm ca	ın he pr	nduced	For fur	ther Ll-v	alue cal	culation	s nless	e conta	ct our c	ngultar	nts		
Element thickness	mm	<b>54</b>	58			68	<b>70</b>	<b>74</b>	80	84			104	112	
		<b>J</b>		0	-	-0	. •			37					

Element thicknesses from 54 mm to 112 mm can be produced. For further U-value calculations, please contact our consultants.													
Element thickness	mm	54	58	64	68	70	74	80	84	94	104	112	
Thickness cover panel	mm	16	16	16	16	16	16	16	16	16	16	16	
Thickness thermal insulation	mm	12	16	22	26	28	32	38	42	52	62	70	
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	
U-value	W/m <sup>2</sup> K	1.314	1.143	0.955	0.861	0.821	0.751	0.665	0.618	0.525	0.457	0.414	
Airborne sound insulation	43 dB, ele	ement thick	kness: 64	mm; test s	urface: 1.9	9 m² (dowr	nload test r	reports)					
Weight	kg/m²	43.1	43.2	43.3	43.4	43.4	43.5	43.6	43.7	43.9	44.1	44.2	

Cover panel and surface	Medium-	density	/ fibreb	oard (N	IDF) P3	3, E1, w	ith whi	te prim	er foil,	10 mm					
Thermal insulation	Glass wo	ol, 20 k	g/m³, 1	0–82 m	m										
Sound insulation	2 pieces	of heav	y bitun	nen foil	, 5 mm										
Bonding	Water-res	istant D	3 (EN 20	04-D3)											
Edge band		Spruce, circumferential (PEFC-certified) Other types of wood available; special edge bands can be inset according to your requirements													
Edge milling	Special CN	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 or surface finishing like ventilation slots or surface  grooves are also possible													
Thicknesses	For thickne	Thicknesses from 40 mm to 112 mm can be produced  For thicknesses as from 113 mm, see extension elements for wooden lifting sliding doors  For thicknesses below 40 mm, see infill for wooden windows													
Formats	All forma	ts from	500 × 9	95 mm t	o 3588	× 1294	mm ca	an be pı	oduced	t					
Element thicknesses from 40	mm to 112	mm ca	n be pro	oduced.	For furt	ther U-v	alue cal	culation	s, pleas	e conta	ct our c	onsultar	nts.		
Element thickness	mm	40	50	54	58	64	68	70	74	80	84	94	104	112	
Thickness cover panel	mm	10	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	74	82	

 $\textbf{40 dB,} \text{ element thickness: 54 mm; test surface: } 2.3 \, \text{m}^{\text{2}} \text{ (download test reports)}$ 

W/m<sup>2</sup>K 1.479 1.041 0.929 0.840 0.735 0.678 0.652 0.607 0.550 0.517 0.451 0.399 0.366

kg/m² 35.6 35.8 35.9 35.9 36.0 36.1 36.2 36.2 36.4 36.4 36.6 36.8 37.0

Thickness sound insulation

Airborne sound insulation

U-value

Weight

mm

#### **SOUND INSULATION 1 VENEERED**

Thickness sound insulation

Airborne sound insulation

U-value

Weight

mm

kg/m²

5

5

5

5

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

5

5

W/m<sup>2</sup>K 1.414 1.007 0.903 0.818 0.718 0.664 0.639 0.596 0.541 0.509 0.444 0.394 0.362

5

26.4 26.6 26.7 26.7 26.8 26.9 26.9 27.0 27.1 27.2 27.4 27.6 27.7

5

5

5

5

5

5

SOUND INSULATION	VENE														
Cover panel and surface	Chipboa All types of Veneer qua	real woo	od venee	rs availab	ole: sprud	e, pine, l	arch, fir,	oak, etc.			ertified)				
Thermal insulation	Glass wo	ol, 20 k	kg/m³, 1	3–85 m	m										
Sound insulation	1 piece c	of heavy	, bitum	en foil,	5 mm										
Bonding	Water-res	istant D	3 (EN 2	04-D3)											
Edge band		Epruce, circumferential (PEFC-certified)  ther types of wood available; special edge bands can be inset according to your requirements													
Edge milling	Special CN	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 or surface finishing like ventilation slots or surface grooves are also possible													
Thicknesses	For thickne	Thicknesses from 40 mm to 112 mm can be produced For thicknesses as from 113 mm, see extension elements for wooden lifting sliding doors For thicknesses below 40 mm, see infill for wooden windows													
Formats	All forma	ts from	500 × 9	95 mm 1	to 3588	× 1294	mm ca	an be pr	oduced	t					
Flore and this knows as from 40	2000 to 110				Cox found	باليمط	امد مداد	a. dation	ممامم	a conto	ot 0 0	ana, iltar	a+a		
Element thicknesses from 40														440	
Element thickness	mm	40	50	54	58	64	68	70	74	80	84	94	104	112	
Thickness cover panel	mm	10	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	1	
Thickness thermal insulation	mm	13	23	27	31	37	41	43	47	53	57	67	77	85	

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, 11–73 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 or surface finishing like ventilation slots or surface grooves are also possible
Thicknesses	Thicknesses from 50 mm to 112 mm can be produced  For thicknesses as from 113 mm, see extension elements for wooden lifting sliding doors  For thicknesses below 50 mm, see infill for wooden windows
Formats	All formats from 500 × 95 mm to 3588 × 1294 mm can be produced

Element thicknesses from 50	mm to 112	2 mm car	n be prod	duced. F	or furthe	r U-valu	e calcula	itions, pl	ease cor	ntact our	consulta	ants.	
Element thickness	mm	50	54	58	64	68	70	74	80	84	94	104	112
Thickness cover panel	mm	16	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	1
Thickness thermal insulation	mm	11	15	19	25	29	31	35	41	45	55	65	73
Thickness sound insulation	mm	5	5	5	5	5	5	5	5	5	5	5	5
U-value	W/m <sup>2</sup> K	1.359	1.175	1.036	0.880	0.799	0.765	0.703	0.628	0.585	0.502	0.439	0.399
Airborne sound insulation	40 dB, el	ement thic	kness: 64	1 mm; tes	t surface:	1.9 m² (c	download	test repo	rts)				
Weight	kg/m²	34.4	34.5	34.6	34.7	34.8	34.8	34.9	35.0	35.1	35.2	35.4	35.6

## **SOUND INSULATION 2 VENEERED**

	All types o						voutside							
and surface	Veneer qua													
Thermal insulation	Glass wo	ool, 20 k	g/m³, 8	-80 mn	n									
Sound insulation	2 pieces	of heav	y bitun	nen foil	, 5 mm									
Bonding	Water-res	sistant D	3 (EN 20	04-D3)										
Edge band	Spruce, of Other type			•		•	n be inset	accordir	ng to you	r require	ments			
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 or surface finishing like ventilation slots or surface grooves are also possible													
Thicknesses	Thicknesses from 40 mm to 112 mm can be produced  For thicknesses as from 113 mm, see extension elements for wooden lifting sliding doors  For thicknesses below 40 mm, see infill for wooden windows													
Formats	All forma	ts from	500 × 9	5 mm 1	to 3588	× 1294	mm ca	ın be pr	oduced	ł				
Element thicknesses from 40	mm to 112	2 mm ca	n be pro	duced.	For furl	ther U-v	alue cal	culation	s, pleas	e conta	ct our c	onsultar	nts.	
Element thickness	mm	40	50	54	58	64	68	70	74	80	84	94	104	11
Thickness cover panel	mm	10	10	10	10	10	10	10	10	10	10	10	10	1
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	72	8
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	2>
U-value	W/m²K			-			0.727		-	-				
Airborne sound insulation		_	_	_	_	_	_	_	_	0.302	0.540	0.472	0.410	0.0
		omont this			act curta				roportel					
Weight  Cover panel	kg/m <sup>2</sup> Chipboa		36.5	36.5	36.6 h real v	36.7	36.8 eneer, 1	36.8 mm (P	36.9 EFC-ce		37.1 ertified)	37.3	37.5	37
Weight  Cover panel  and surface	kg/m²  Chipboa All types or Veneer qua	36.3  rd P5, E f real woodality A/B (i	36.5 E1, 16 m and veneer	36.5 m, with s availab butside E	36.6  h real vole: spruce 3) or A/A	36.7	36.8 eneer, 1	36.8 <b>mm</b> (Poak, etc.	36.9 EFC-ce	rtified)	_	37.3	37.5	37
Weight  Cover panel and surface  Thermal insulation	Chipboa All types or Veneer qua	36.3  rd P5, Ef real woodality A/B (in pol, 20 kg)	36.5 1, 16 m od veneer nside A/o g/m³, 1	36.5  mm, with a savailable butside E	36.6  h real volle: spruce 3) or A/A	36.7 <b>vood v</b> oe, pine, (inside A	36.8 eneer, 1	36.8 <b>mm</b> (Poak, etc.	36.9 EFC-ce	rtified)	_	37.3	37.5	37
Weight  Cover panel and surface  Thermal insulation  Sound insulation	kg/m² Chipboa All types o Veneer qua Glass wo 2 pieces	36.3  rd P5, E f real woo ality A/B (i	36.5  1, 16 m od veneer inside A/o g/m³, 10	36.5  mm, with a savailab putside E D-68 mmnen foil	36.6  h real volle: spruce 3) or A/A	36.7 <b>vood v</b> oe, pine, (inside A	36.8 eneer, 1	36.8 <b>mm</b> (Poak, etc.	36.9 EFC-ce	rtified)	_	37.3	37.5	37
Cover panel and surface Thermal insulation Sound insulation Bonding	Chipboa All types or Veneer qua Glass wo 2 pieces Water-res	36.3  rd P5, E f real woo ality A/B (i bool, 20 k of heav sistant D3	36.5 1, 16 m d veneer nside A/o g/m³, 10 y bitum 3 (EN 20	36.5 mm, with with savailable butside E0–68 mmen foil ()4-D3)	36.6  h real v  ple: spruce  m  m, 5 mm	36.7	36.8 eneer, 1	36.8 <b>mm</b> (Poak, etc.	36.9 EFC-ce	rtified)	_	37.3	37.5	37
Weight  Cover panel and surface  Thermal insulation  Sound insulation	kg/m² Chipboa All types o Veneer qua Glass wo 2 pieces	36.3  rd P5, E f real woo ality A/B (i pool, 20 k of heav sistant Di circumfe	36.5  1, 16 m d veneer nside A/o g/m³, 10 yy bitum 3 (EN 20 erential	36.5  m, with savailaboutside E0–68 men foil 04-D3) (PEFC-	36.6  h real v  ple: spruce  nm  n, 5 mm	36.7 vood vood vood vood proof vood vood vood vood vood vood vood v	36.8  eneer, 1  larch, fir,	36.8 mm (Poak, etc. A)	36.9 EFC-ce (FSC- or	rtified) PEFC-c	ertified)	37.3	37.5	37
Cover panel and surface Thermal insulation Sound insulation Bonding	Chipboa All types of Veneer qua Glass wo 2 pieces Water-res Spruce, o	36.3  rd P5, E f real wood ality A/B (i cool, 20 k of heav sistant Da circumfe s of wood ble CNC	36.5  1, 16 m d veneer nside A/c g/m³, 1 ry bitum 3 (EN 20 erential d available c edge p ssing like	36.5  m, with savailaboutside ED-68 men foil 04-D3) (PEFC-es; special profile N	h real vole: sprudal or A/A mm certified all edge b	36.7  vood v.e., pine, (inside A	36.8  eneer, 1  larch, fir,  voutside	mm (Poak, etc. A)	36.9  EFC-ce (FSC- or	rtified) PEFC-c	ertified) ments your pi	rofile sp	pecifica	tion
Cover panel and surface Thermal insulation Sound insulation Bonding Edge band	Chipboa All types o Veneer que Glass wo 2 pieces Water-res Spruce, o Other type All possii Special CN	36.3  rd P5, E f real woo ality A/B (i cool, 20 k of heav sistant D: circumfe s of woo ble CNC NC proces e also po sses fror esses as f	36.5  1, 16 m d veneernside A/c g/m³, 1 yy bitum 3 (EN 20 erential d available c edge p ssing like ssible m 54 m rrom 113	36.5  am, with a savailaboutside E D-68 men foil 04-D3) (PEFC-e; special profile value out-outside men to 11 mm, see	36.6  h real v  le: spruce 3) or A/A  m  certified al edge b  work is 5, round a	36.7  vood vood voog perform and segment segme	36.8  eneer, 1 larch, fir, voutside  n be inset  med on  nent arch  produce  ents for w	mm (Poak, etc. A)  accordinal side es or sur	36.9  EFC-ce (FSC- or	rtified) PEFC-c r require ding to hing like	ertified) ments your pi	rofile sp	pecifica	tion
Cover panel and surface Thermal insulation Sound insulation Bonding Edge band Edge milling	Chipboa All types or Veneer qua Glass wo 2 pieces Water-res Spruce, Other type All possii Special Ch grooves ar Thicknes For thicknes	rd P5, E f real woo ality A/B (i ool, 20 k of heav sistant Da circumfe s of wood ble CNC NC proces e also po	36.5  1, 16 m d veneer nside A/c g/m³, 1 my bitum 3 (EN 20 erential d available c edge p ssing like ssible m 54 mi mm 113 ow 54 mm	36.5  m, with savailaboutside Europe 68 m nen foil 04-D3)  (PEFC-e; special cut-outside for to 11 mm, see in, see in savailaboutside Europe 68 m, see in savailable 68 m, see	h real vole: sprud 3) or A/A m certified al edge b work is s, round a 2 mm c e extensi fill for wo	36.7  vood v.e., pine, (inside A ands car performand segment on element opposed with the content of the content of the content opposed on element opposed opposed on element opposed on	36.8  eneer, 1  larch, fir,  voutside  n be inset  ned on  nent arch  produce ents for w  ndows	mm (Poak, etc. A)  accordinal sides es or sur	36.9  EFC-ce (FSC- or face finishing sliding s	rtified) PEFC-c r require ding to hing like	ertified) ments your pi	rofile sp	pecifica	tion
Cover panel and surface Thermal insulation Sound insulation Bonding Edge band Edge milling Thicknesses	Chipboa All types or Veneer que Glass wo 2 pieces Water-res Spruce, o Other type All possii Special Ch grooves ar Thicknes For thicknes All forma	addity A/B (if real wood, 20 kg of heaves of wood ble CNC processe also possess from essess as fesses below the form of the control of the co	36.5  1, 16 m d veneer nside A/c g/m³, 1 ry bitum 3 (EN 20 erential d available c edge p ssing like ssible m 54 mm from 113 ow 54 mm 500 x 9	36.5  Im, with a savailab putside E 0–68 men foil 04-D3)  (PEFC-e; special profile wout-outs men to 11 mm, see in, see in 5 mm to 5 mm	h real vole: sprud sprude; sprude; spr	36.7  vood v. v.e, pine, (inside A  ands car perform and segn can be on element ooden wi × 1294	36.8  eneer, 1 larch, fir, voutside  n be inset med on nent arch produce ents for w ndows  med ows	mm (Poak, etc. A)  accordinal side es or sure ed cooden lift in be pr	36.9  EFC-ce (FSC- or face finishing sliding s	rtified) PEFC-c r require ding to hing like	ertified) ments your pi	<b>rofile sp</b> n slots o	<b>Decifica</b> r surface	tion
Cover panel and surface Thermal insulation Sound insulation Bonding Edge band Edge milling Thicknesses Formats Element thicknesses from 54	Chipboa All types or Veneer que Glass wo 2 pieces Water-res Spruce, o Other type All possii Special Ch grooves ar Thicknes For thicknes All forma	addity A/B (if real wood, 20 kg of heaves of wood ble CNC processe also possess from essess as fesses below the form of the control of the co	36.5  1, 16 m d veneer nside A/c g/m³, 1 ry bitum 3 (EN 20 erential d available c edge p ssing like ssible m 54 mm from 113 ow 54 mm 500 x 9	36.5  Im, with a savailab putside E 0–68 men foil 04-D3)  (PEFC-e; special profile wout-outs men to 11 mm, see in, see in 5 mm to 5 mm	h real vole: sprudal or A/A mm  certified al edge b  work is a cartesia or A/A cartesia or A/A mm  certified al edge b  work is a cartesia or A/A cartesia or	36.7  vood v. v.e, pine, (inside A  ands car perform and segn can be on element ooden wi × 1294	36.8  eneer, 1 larch, fir, voutside  n be inset med on nent arch produce ents for w ndows  med ows	mm (Poak, etc. A)  accordinal side es or sure ed cooden lift in be pr	36.9  EFC-ce (FSC- or face finishing sliding s	rtified) PEFC-c r require ding to hing like	ertified) ments your proventilation	r <b>ofile sp</b> n slots o	<b>Decifica</b> r surface	tion
Cover panel and surface Thermal insulation Sound insulation Bonding Edge band Edge milling Thicknesses Formats Element thicknesses from 54	kg/m²  Chipboa All types or Veneer que Glass wo 2 pieces Water-res Spruce, Other type All possii Special CN grooves ar Thicknes For thicknes For thicknes All forma	and and a second a	36.5  1, 16 m d veneer nside A/o g/m³, 1 yy bitun 3 (EN 20 erential d available c edge p ssing like ssible m 54 m r rom 113 ow 54 m 500 x 9	36.5  m, with savailaboutside ED-68 men foil (PEFC-e); special profile value outside ED-68 men foil outside ED-68	h real vole: sprud a) or A/A m certified al edge b work is c, round a e extension fill for work to 3588 For furt	36.7  vood vood voog perform and segment segment wooden with the U-vote to the total segment s	36.8  eneer, 1 larch, fir, voutside  n be inset med on nent arch produce ents for w ndows  I mm ca	mm (Poak, etc. A)  accordinal side es or sured cooden lift in be proculation	36.9  EFC-ce (FSC- or	rtified) r PEFC-c r require ding to hing like	ments your proventilation	r <b>ofile sp</b> n slots o	pecifica r surface	tion 11
Cover panel and surface Thermal insulation Sound insulation Bonding Edge band Edge milling Thicknesses Formats Element thicknesses from 54 Element thickness Thickness cover panel	kg/m²  Chipboa All types or Veneer que Glass wo 2 pieces Water-res Spruce, o Other type All possii Special Ch grooves ar Thicknes For thickne For thickne All forma mm to 112 mm	rd P5, E f real wood ality A/B (i cool, 20 k of heav sistant Di circumfe s of wood ble CNC NC proces re also po resses as f resses below the from 2 mm ca 54	36.5  1, 16 m d veneer nside A/c g/m³, 1 ry bitum 3 (EN 20 erential d available c edge p esing like ssible m 54 m from 113 ow 54 m 500 x 9 n be pro	36.5  Im, with a savailab putside E D-68 men foil 04-D3)  (PEFC-e; special profile worth outside E D-68 men foil 04-D3)  (PEFC-e; special profile worth outside E D-68 men foil 04-D3)	h real vole: spruce 3) or A/A m  certified all edge be work is a, round a ce extension of the control of the co	36.7  vood v. v.e, pine, (inside A  l) ands car perform and segn can be on element ooden wi x 1294 ther U-v.	36.8  eneer, 1 larch, fir, voutside  n be inset ned on nent arch produce ents for w ndows  mm ca walue cal	mm (Poak, etc. A)  accordinal side: es or sur ed noden lift un be pr culation 74	36.9  EFC-ce (FSC- or	rtified) PEFC-c r require ding to hing like ng doors e contact 84	ments  your pi ventilation  ct our co	rofile sp n slots o	pecifica r surface nts.	111 10
Cover panel and surface Thermal insulation Sound insulation Bonding Edge band Edge milling Thicknesses Formats	kg/m²  Chipboa All types or Veneer qua Glass wo 2 pieces Water-res Spruce, Other type All possil Special CN grooves ar Thicknes For thicknes For thicknes All forma mm to 112 mm mm	rd P5, E f real woo ality A/B (i col, 20 k of heav sistant Di circumfe s of woo ble CNC NC proces e also po esses fror esses as f esses belo ats from 2 mm ca 54 16	36.5  1, 16 m d veneer nside A/c g/m³, 1 my bitum 3 (EN 20 erential d available c edge passing like ssible m 54 mm from 113 bw 54 mm 500 x 9 m be profits 16	36.5  Im, with savailaboutside Eugene foil (PEFC-e); special profile worth to 11 mm, see in s	h real vole: sprud a) or A/A m l, 5 mm certified al edge b work is s, round a 2 mm c e extensi fill for wo to 3588 For furt 4	36.7  vood v. v.e, pine, (inside A  ands car perforr and segn can be   on element ooden wi x 1294  ther U-v. 68 16	36.8  eneer, 1 larch, fir, voutside  n be inset  ned on nent arch  produce ents for w ndows  mm ca  value cali  70  16	mm (Poak, etc. A)  accordinal sides es or sure ed rooden liften be proculation 74 16	36.9  EFC-ce (FSC- or	rtified) PEFC-c r requirer ding to hing like g doors decontage 84 16	ments  your proventilation  ct our columns  i	rofile sp n slots o	pecifica r surface nts. 104 16	tion
Cover panel and surface Thermal insulation Sound insulation Bonding Edge band Edge milling Thicknesses Formats Element thicknesses from 54 Element thickness Thickness cover panel Veneer thickness	kg/m²  Chipboa All types or Veneer que Glass wo 2 pieces Water-res Spruce, Other type All possii Special Ch grooves ar Thicknes For thicknes For thicknes All forma mm to 112 mm mm	rd P5, E f real woo ality A/B (i ool, 20 k of heav sistant D: circumfe s of woo ble CNC NC proces e also po esses fror esses as f esses belo ats from 2 mm ca 54 16 1	36.5  1, 16 m d veneer inside A/o g/m³, 1 ry bitum 3 (EN 20 erential d available c edge p esing like essible  m 54 mi rom 113 ow 54 mr 500 x 9 n be pro 58 16 1	36.5  Im, with a variable putside E controller of the court outs outs of the court o	h real vole: spruces or A/A m  certified al edge b work is a, round a second fill for work to 3588  For furth 4	36.7  vood v.e., pine, (inside A  l) ands car  performand segn  can be on element oden with the U-v  68  16  1	36.8  eneer, 1 larch, fir, voutside  n be inset med on nent arch produce ents for w ndows  mm ca value cal 70 16 1	mm (Poak, etc. A)  accordinal side es or sured coden lift to be production 74 16 1	36.9  EFC-ce (FSC- or	rtified) PEFC-c r required ding to hing like ag doors 4 16 1 40	ments your proventilation ct our columns is 1 is 1	onsultar	nts.  104  16	<b>111</b> 10 1 68
Cover panel and surface Thermal insulation Sound insulation Bonding Edge band Edge milling Thicknesses Formats Element thicknesses from 54 Element thickness Thickness cover panel Veneer thickness Thickness thermal insulation	kg/m²  Chipboa All types or Veneer qual Glass wo 2 pieces Water-res Spruce, of Other type All possii Special Chigrooves ar Thicknes For thicknes For thicknes All forma mm to 112 mm mm mm	and P5, E freal wood ality A/B (if the ality A/B) (	36.5  1, 16 m d veneer nside A/c g/m³, 1 ry bitum 3 (EN 20 erential d available c edge p ssing like ssible m 54 mm from 113 ow 54 mm 500 x 9 n be pro 58 16 1 14	36.5  Im, with savailaboutside ED-68 men foil 04-D3)  (PEFC-e; special cut-outside ED-68 men foil 04-D3)  (PEFC-e; special cut-outside ED-68 men foil 14 mm, see in 15 mm to 11 mm, see in 15 mm to 12 mm to 14 mm to 14 mm, see in 15 mm to 14 mm, see in 15 mm to 14 mm, see in 16 mm to 17 mm to 18 mm to	h real vole: spruce 3) or A/A m certified all edge be work is a, round a sextension of the control of the contr	36.7  vood v.e., pine, (inside A line) ands car performand segn can be pon element oden with x 1294 ther U-v. 68 16 1 24 x 5	36.8  eneer, 1 larch, fir, voutside  n be inset med on nent arch produce ents for w ndows  mm ca value cal 70 16 1 26	mm (Poak, etc. A)  accordinal side es or sure ed cooden lift to be proculation 74 16 1 30	36.9  EFC-ce (FSC- or	rtified) PEFC-c r requirer ding to hing like g doors l e contact 84 16 1 40 2×	ments your pi ventilation  ct our coll s 1 5 2	onsultar  onsultar  onsultar  onsultar  onsultar  onsultar  onsultar  onsultar	nts. 104 16 1 60	11 10