FRINORM[®]

Frame extension elements for aluminium windows Sound insulation

CHIPBOARD FOR SOUND INSULATION 1

Cover panel and surface	Chipboar	Chipboard P5, E1, untreated, 10 mm (PEFC-certified)											
Thermal insulation	Glass woo	Glass wool, 20 kg/m³, 15–74 mm											
Sound insulation	1 piece of	1 piece of heavy bitumen foil, 5 mm											
Bonding	Water-resis	Nater-resistant D3 (EN 204-D3)											
Edge band	• •	Spruce, circumferential (PEFC-certified) Special edge bands can be inset according to your requirements											
Edge milling	All possib	All possible CNC edge profile work is performed on all sides according to your profile specifications											
Thicknesses	For thicknes	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 format	s from 5	500 × 95	mm to	3588 × 1	1294 mi	m can b	e produ	ced				
Element thicknesses from 40	mm to 99 m	nm can k	be produ	ced. For	further	U-value	calculati	ons, plea	ase cont	act our d	consultar	nts.	
Element thickness	mm	40	50	54	58	64	68	70	74	80	84	94	99
Cover panel thickness	mm	10	10	10	10	10	10	10	10	10	10	10	10
Thermal insulation thickness	mm	15	25	29	33	39	43	45	49	55	59	69	74
Sound insulation thickness	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 thi	ckness: 5	4 mm; tes	st surface	: 2.3 m² (download	test repo	orts)				
Weight	kg/m ²	25,1	25,3	25,4	25,4	25,6	25,6	25,7	25,7	25,8	26,0	26,2	26,3

Cover panel and surface	Chipboard P5, E1, untreated, 16 mm (PEFC-certified)
Thermal insulation	Glass wool, 20 kg/m ³ , 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) 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
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 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	99	
Cover panel thickness	mm	16	16	16	16	16	16	16	16	16	16	
Thermal insulation thickness	mm	17	21	27	31	33	37	43	47	57	62	
Sound insulation thickness	mm	5	5	5	5	5	5	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 m ² (download test reports)											
Weight	kg/m ²	33,2	33,3	33,4	33,5	33,5	33,6	33,7	33,8	34,0	34,1	

CHIPBOARD FOR SOUND INSULATION 2

Cover panel and surface	Chipboard P5, E1, untreated, 10 mm (PEFC-certified)
Thermal insulation	Glass wool, 20 kg/m ³ , 10–69 mm
Sound insulation	2 pieces of heavy bitumen foil, 5 mm
Bonding	Water-resistant D3 (EN 204-D3)
Edge band	Spruce, circumferential (PEFC-certified) 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
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
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
Cover panel thickness	mm	10	10	10	10	10	10	10	10	10	10	10	10
Thermal insulation thickness	mm	10	20	24	28	34	38	40	44	50	54	64	69
Sound insulation thickness	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/m ² K	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, element thickness: 54 mm; test surface: 2.3 m ² (download test reports)												
Weight	kg/m ²	35,0	35,2	35,3	35,4	35,4	35,5	35,6	35,7	35,8	35,9	36,0	36,2

Chipboard P5, E1, untreated, 16 mm (PEFC-certified)
Glass wool, 20 kg/m ³ , 12–57 mm
2 pieces of heavy bitumen foil, 5 mm
Water-resistant D3 (EN 204-D3)
Spruce, circumferential (PEFC-certified) Special edge bands can be inset according to your requirements
All possible CNC edge profile work is performed on all sides according to your profile specifications
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
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	mm	54	58	64	68	70	74	80	84	94	99		
Cover panel thickness	mm	16	16	16	16	16	16	16	16	16	16		
Thermal insulation thickness	mm	12	16	22	26	28	32	38	42	52	57		
Sound insulation thickness	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	1,313	1,142	0,955	0,861	0,821	0,750	0,665	0,618	0,525	0,488		
Airborne sound insulation	43 dB, ele	43 dB, element thickness: 64 mm; test surface: 1.9 m ² (download test reports)											
Weight	kg/m²	43,9	44,0	44,1	44,2	44,2	44,3	44,4	44,5	44,7	44,8		

PLYWOOD FOR SOUND INSULATION 1

Cover panel and surface	Plywood board AW100, untreated, 12 mm
Thermal insulation	Glass wool, 20 kg/m ³ , 15–70 mm
Sound insulation	1 piece of heavy bitumen foil, 5 mm
Bonding	Water-resistant D3 (EN 204-D3)
Edge band	Spruce, circumferential (PEFC-certified) 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
Thicknesses	Thicknesses from 44 mm to 99 mm can be produced For thicknesses as from 100 mm, see extension elements for wooden lifting sliding doors For thicknesses below 44 mm, see infill for wooden windows
Formats	All formats from 500 × 95 mm to 3088 × 1294 mm can be produced
Element thicknesses from 44	mm to 99 mm can be produced. For further U-value calculations, please contact our consultants.

Element thickness	mm	44	50	54	58	64	68	70	74	80	84	94	99
Cover panel thickness	mm	12	12	12	12	12	12	12	12	12	12	12	12
Thermal insulation thickness	mm	15	21	25	29	35	39	41	45	51	55	65	70
Sound insulation thickness	mm	5	5	5	5	5	5	5	5	5	5	5	5
U-value	W/m²K	1,261	1,037	0,927	0,838	0,733	0,676	0,651	0,606	0,549	0,517	0,450	0,423
Airborne sound insulation	38 dB, element thickness: 54 mm; test surface: 2.3 m ² (download test reports)												
Weight	kg/m²	22,3	22,4	22,5	22,6	22,7	22,8	22,8	22,9	23,0	23,0	23,3	23,4

PLYWOOD FOR SOUND INSULATION 2

Cover panel and surface	Plywood board AW100, untreated, 12 mm
Thermal insulation	Glass wool, 20 kg/m ³ , 10–65 mm
Sound insulation	2 pieces of heavy bitumen foil, 5 mm
Bonding	Water-resistant D3 (EN 204-D3)
Edge band	Spruce, circumferential (PEFC-certified) 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
Thicknesses	Thicknesses from 44 mm to 99 mm can be produced For thicknesses as from 100 mm, see extension elements for wooden lifting sliding doors For thicknesses below 44 mm, see infill for wooden windows
Formats	All formats from 500 × 95 mm to 3088 × 1294 mm can be produced

Element thicknesses from 44 mm to 99 mm can be produced. For further U-value calculations, please contact our consultants.													
Element thickness	mm	44	50	54	58	64	68	70	74	80	84	94	99
Cover panel thickness	mm	12	12	12	12	12	12	12	12	12	12	12	12
Thermal insulation thickness	mm	10	16	20	24	30	34	36	40	46	50	60	65
Sound insulation thickness	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	1,514	1,202	1,057	0,943	0,812	0,743	0,713	0,659	0,592	0,555	0,479	0,448
Airborne sound insulation	40 dB, element thickness: 54 mm; test surface: 2.3 m ² (download test reports)												
Weight	kg/m²	32,2	32,3	32,4	32,5	32,6	32,7	32,7	32,8	32,9	33,0	33,2	33,3