Technical details

FRINORM®

Frame extension elements for wooden and wood-metal windows Standard

UNTREATED

Cover panel and surface	**Chipboard P5, E1, untreated, 10 mm** (PEFC-certified)
Thermal insulation	**PUR rigid foam, 32 kg/m³, 20–92 mm** Other types of thermal insulation like expanded rigid polystyrene foam with graphite additive (EPS lambda), glass wool, cork, etc., available
Bonding	Water-resistant D3 (EN 204-D3)
Edge band	**Spruce, circumferential or on the long 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 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 formats from 500 × 95 mm to 3588 × 1294 mm can be produced**

Element thicknesses from 40 mm to 112 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**	**104**	**112**
Thickness cover panel	**mm**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**
Thickness thermal insulation	mm	20	30	34	38	44	48	50	54	60	64	74	84	92
U-value	**W/m²K**	**0.846**	**0.619**	**0.559**	**0.509**	**0.449**	**0.417**	**0.402**	**0.376**	**0.342**	**0.323**	**0.283**	**0.252**	**0.232**
Airborne sound insulation	**28 dB,** element thickness: 54 mm; test surface: 2.3 m² (download test reports)													
Weight	kg/m²	15.4	15.7	15.9	16.0	16.2	16.3	16.4	16.5	16.7	16.8	17.1	17.5	17.7

Cover panel and surface	**Chipboard P5, E1, untreated, 16 mm** (PEFC-certified)
Thermal insulation	**PUR rigid foam, 32 kg/m³, 12–80 mm** Other types of thermal insulation like expanded rigid polystyrene foam with graphite additive (EPS lambda), glass wool, cork, etc., available
Bonding	Water-resistant D3 (EN 204-D3)
Edge band	**Spruce, circumferential or on the long 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 like cut-outs, round and segment arches or surface finishing like ventilation slots or surface grooves are also possible
Thicknesses	**Thicknesses from 44 mm to 112 mm can be produced** For thicknesses as from 113 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 3588 × 1294 mm can be produced**

Element thicknesses from 44 mm to 112 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**	**104**	**112**
Thickness cover panel	**mm**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**
Thickness thermal insulation	mm	12	18	22	26	32	36	38	42	48	52	62	72	80
U-value	**W/m²K**	**1.087**	**0.847**	**0.738**	**0.654**	**0.559**	**0.509**	**0.488**	**0.450**	**0.402**	**0.376**	**0.323**	**0.283**	**0.258**
Airborne sound insulation	**33 dB,** element thickness: 54 mm; test surface: 2.3 m² (download test reports)													
Weight	kg/m²	23.3	23.5	23.6	23.7	23.9	24.0	24.1	24.2	24.4	24.5	24.8	25.2	25.4

PRIMER FOIL

Cover panel and surface	**Chipboard P5, E1, with white primer foil, 10 mm** (PEFC-certified)
Thermal insulation	**PUR rigid foam, 32 kg/m³, 20–92 mm** Other types of thermal insulation like expanded rigid polystyrene foam with graphite additive (EPS lambda), glass wool, cork, etc., available
Bonding	Water-resistant D3 (EN 204-D3)
Edge band	**Spruce, circumferential or on the long 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 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 formats from 500 × 95 mm to 3588 × 1294 mm can be produced**

Element thicknesses from 40 mm to 112 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**	**104**	**112**
Thickness cover panel	**mm**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**
Thickness thermal insulation	mm	20	30	34	38	44	48	50	54	60	64	74	84	92
U-value	**W/m²K**	**0.846**	**0.619**	**0.559**	**0.509**	**0.449**	**0.417**	**0.402**	**0.376**	**0.342**	**0.323**	**0.283**	**0.252**	**0.232**
Airborne sound insulation	**28 dB,** element thickness: 54 mm; test surface: 2.3 m² (download test reports)													
Weight	kg/m²	15.4	15.7	15.9	16.0	16.2	16.3	16.4	16.5	16.7	16.8	17.1	17.5	17.7

Cover panel and surface	**Chipboard P5, E1, with white primer foil, 16 mm** (PEFC-certified)
Thermal insulation	**PUR rigid foam, 32 kg/m³, 12–80 mm** Other types of thermal insulation like expanded rigid polystyrene foam with graphite additive (EPS lambda), glass wool, cork, etc., available
Bonding	Water-resistant D3 (EN 204-D3)
Edge band	**Spruce, circumferential or on the long 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 like cut-outs, round and segment arches or surface finishing like ventilation slots or surface grooves are also possible
Thicknesses	**Thicknesses from 44 mm to 112 mm can be produced** For thicknesses as from 113 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 3588 × 1294 mm can be produced**

Element thicknesses from 44 mm to 112 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**	**104**	**112**
Thickness cover panel	**mm**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**	**16**
Thickness thermal insulation	mm	12	18	22	26	32	36	38	42	48	52	62	72	80
U-value	**W/m²K**	**1.087**	**0.847**	**0.738**	**0.654**	**0.559**	**0.509**	**0.488**	**0.450**	**0.402**	**0.376**	**0.323**	**0.283**	**0.258**
Airborne sound insulation	**33 dB,** element thickness: 54 mm; test surface: 2.3 m² (download test reports)													
Weight	kg/m²	23.3	23.5	23.6	23.7	23.9	24.0	24.1	24.2	24.4	24.5	24.8	25.2	25.4

Cover panel and surface	**Medium-density fibreboard (MDF) P3, E1, with white primer foil, 10 mm**
Thermal insulation	**PUR rigid foam, 32 kg/m³, 20–92 mm** Other types of thermal insulation like expanded rigid polystyrene foam with graphite additive (EPS lambda), glass wool, cork, etc., available
Bonding	Water-resistant D3 (EN 204-D3)
Edge band	**Spruce, circumferential or on the long 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 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 formats from 500 × 95 mm to 3588 × 1294 mm can be produced**

Element thicknesses from 40 mm to 112 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**	**104**	**112**
Thickness cover panel	**mm**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**	**10**
Thickness thermal insulation	mm	20	30	34	38	44	48	50	54	60	64	74	84	92
U-value	**W/m²K**	**0.806**	**0.597**	**0.541**	**0.495**	**0.438**	**0.407**	**0.393**	**0.368**	**0.336**	**0.317**	**0.279**	**0.249**	**0.229**
Airborne sound insulation	**28 dB,** element thickness: 54 mm; test surface: 2.3 m² (download test reports)													
Weight	kg/m²	16.0	16.4	16.5	16.6	16.8	16.9	17.0	17.1	17.3	17.4	17.7	18.1	18.3

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	**PUR rigid foam, 32 kg/m³, 18–90 mm** Other types of thermal insulation like expanded rigid polystyrene foam with graphite additive (EPS lambda), glass wool, cork, etc., available
Bonding	Water-resistant D3 (EN 204-D3)
Edge band	**Spruce, circumferential or on the long 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 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 formats from 500 × 95 mm to 3588 × 1294 mm can be produced**

Element thicknesses from 40 mm to 112 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**	**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	18	28	32	36	42	46	48	52	58	62	72	82	90
U-value	**W/m²K**	**0.902**	**0.648**	**0.582**	**0.529**	**0.465**	**0.430**	**0.414**	**0.387**	**0.351**	**0.331**	**0.289**	**0.257**	**0.236**
Airborne sound insulation	**28 dB,** element thickness: 54 mm; test surface: 2.3 m² (download test reports)													
Weight	kg/m²	16.7	17.2	17.2	17.3	17.5	17.6	17.7	17.8	18.0	18.1	18.4	18.8	19.0

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	**PUR rigid foam, 32 kg/m³, 18–78 mm** Other types of thermal insulation like expanded rigid polystyrene foam with graphite additive (EPS lambda), glass wool, cork, etc., available
Bonding	Water-resistant D3 (EN 204-D3)
Edge band	**Spruce, circumferential or on the long 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 like cut-outs, round and segment arches or surface finishing like ventilation slots or surface grooves are also possible
Thicknesses	**Thicknesses from 46 mm to 112 mm can be produced** For thicknesses as from 113 mm, see extension elements for wooden lifting sliding doors For thicknesses below 46 mm, see infill for wooden windows
Formats	**All formats from 500 mm × 95 mm to 3588 × 1294 mm can be produced**

Element thicknesses from 46 mm to 112 mm can be produced. For further U-value calculations, please contact our consultants.

Element thickness	**mm**	**46**	**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**	**16**
Veneer thickness	mm	1	1	1	1	1	1	1	1	1	1	1	1	1
Thickness thermal insulation	mm	12	16	20	24	30	34	36	40	46	50	60	70	78
U-value	**W/m²K**	**1.071**	**0.903**	**0.780**	**0.687**	**0.583**	**0.529**	**0.506**	**0.465**	**0.415**	**0.387**	**0.331**	**0.289**	**0.263**
Airborne sound insulation	**33 dB,** element thickness: 54 mm; test surface: 2.3 m² (download test reports)													
Weight	kg/m²	24.6	24.7	24.8	25.0	25.2	25.3	25.4	25.5	25.7	25.8	26.1	26.5	26.7

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