

FRINORM®

Thermal insulation elements for window manufacturers





Since 1974, Frinorm AG has specialised in the manufacture of various thermal insulation elements for the construction industry. The focus is on a wide variety of thermal insulation elements for window construction.

Frinorm AG is defined by customer orientation, attention to quality and innovation. For decades, we have developed energy-efficient products and produced them in state-of-the-art manufacturing facilities. Computerised systems guarantee rational processes and flexible capacity with consistently high levels of precision.

Our customers benefit from a comprehensive range as well as a wide variety of material combinations and CNC processing options. The price per square metre includes four-sided counter profile work matching your frame or threshold profile for your window, balcony and lifting sliding doors. We manufacture thermal insulation elements that are preassembled, immediately ready for use, and custom-made according to the desired length, width and profile thickness – and always tailored to your requirements.

- The following services are included in the square metre price:
 - Preassembled, custom-made according to the desired length, width and profile thickness
 - Four-sided counter profile work, tailored to your frame or threshold profile
 - Circumferential solid edge band
 - Delivered picked to order
- No waste, machine, labour and storage costs
- Very good thermal insulation values
- Excellent sound insulation values
- Retain their shape and dimensions
- All types of real wood veneers available
- Various material combinations
- Various surface design options
- Edge banding possible
- Additional wood inserts freely selectable
- Special processing such as cut-outs, round and segment arches or surface finishing such as ventilation slots or surface grooves are also possible
- Special designs possible
- Problem-free surface finishing

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Iswood

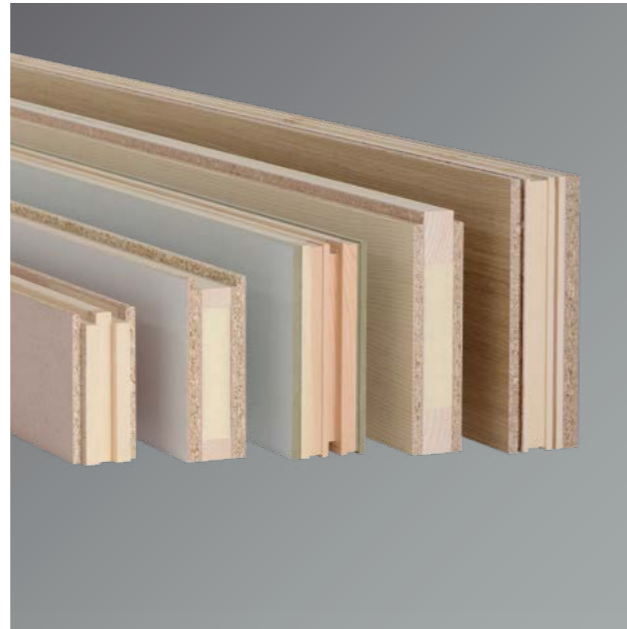
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Frame extension elements for wooden and wood-metal windows

Standard

- Thermal insulation values up to 0.2 W/m²K
- Airborne sound insulation values up to 33 dB
- All types of real wood veneers available
- Circumferential wooden edge band
- Good mounting options
- Retain their shape and dimensions
- Problem-free surface finishing

Surfaces	Untreated, priming film, real wood veneer
Cover panels	Chipboard P5, E1, MDF board P3, E1
Insulation	PUR rigid foam, 32 kg/m ³
Edge band	Spruce pine
Thickness	40 to 112 mm
Sizes	500 × 95 to 3588 × 1294 mm



Moisture-resistant

- Moisture-resistant
- Thermal insulation values up to 0.2 W/m²K
- Airborne sound insulation values up to 28 dB
- All types of real wood veneers available
- Circumferential wooden edge band
- Good mounting options
- Retain their shape and dimensions
- Problem-free surface finishing

Surfaces	Untreated, priming film, real wood veneer
Cover panels	Plywood panel AW100
Insulation	PUR rigid foam, 32 kg/m ³
Edge band	Spruce pine
Thickness	40 to 112 mm
Sizes	500 × 95 to 2988 × 1294 mm



Sound insulation

- Thermal insulation values up to 0.3 W/m²K
- Airborne sound insulation values up to 43 dB
- All types of real wood veneers available
- Circumferential wooden edge band
- Good mounting options
- Retain their shape and dimensions
- Problem-free surface finishing

Surfaces	Untreated, priming film, real wood veneer
Cover panels	Chipboard P5, E1, MDF board P3, E1
Insulation	Glass wool, 20 kg/m ³
Sound insulation	Heavy bitumen foil
Edge band	Spruce pine
Thickness	40 to 112 mm
Sizes	500 × 95 to 3588 × 1294 mm



Moisture-resistant Sound insulation

- Moisture-resistant
- Thermal insulation values up to 0.3 W/m²K
- Airborne sound insulation values up to 40 dB
- All types of real wood veneers available
- Circumferential wooden edge band
- Good mounting options
- Retain their shape and dimensions
- Problem-free surface finishing

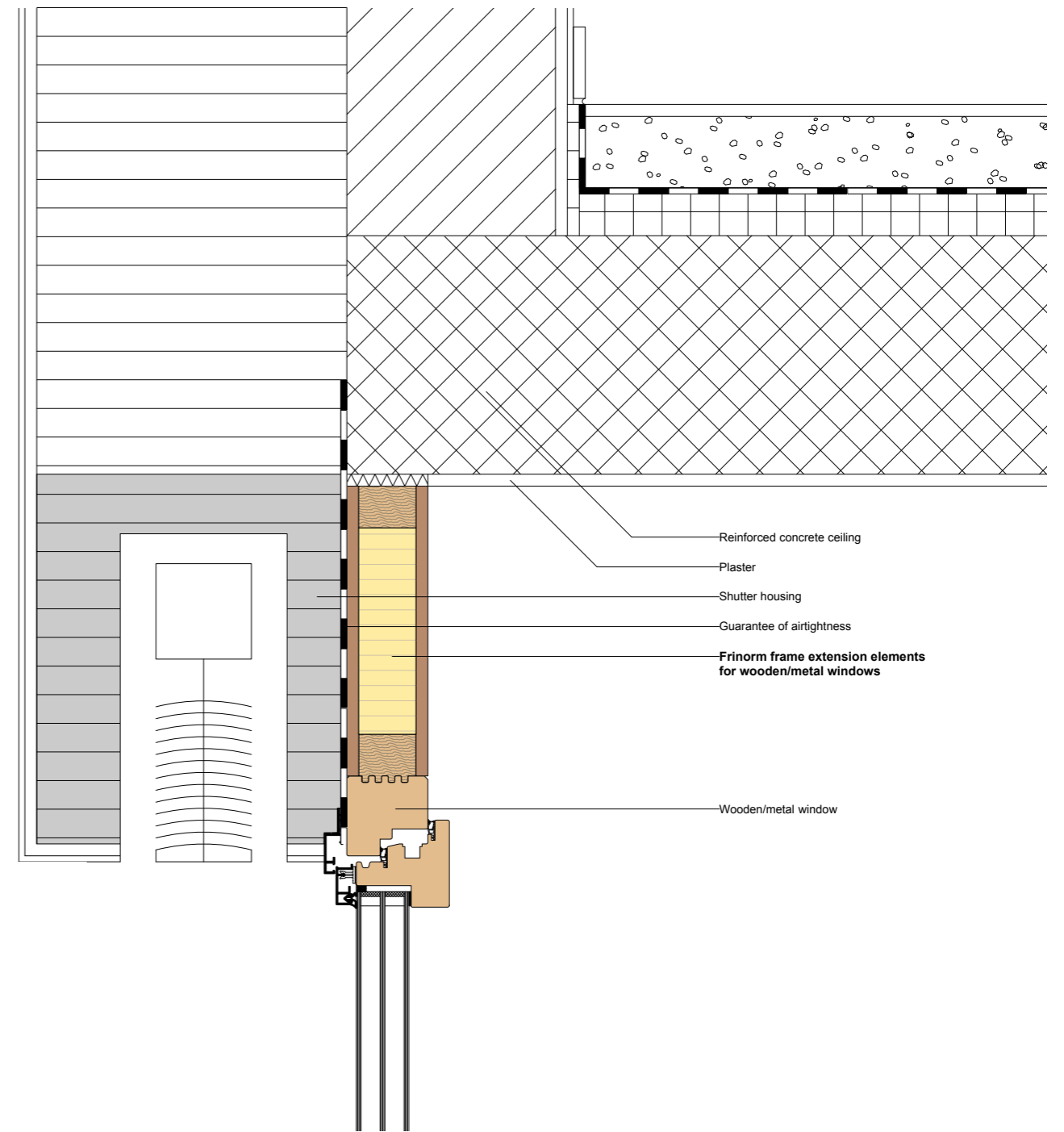
Surfaces	Untreated, priming film, real wood veneer
Cover panels	Plywood panel AW100
Insulation	Glass wool, 20 kg/m ³
Sound insulation	Heavy bitumen foil
Edge band	Spruce pine
Thickness	40 to 112 mm
Sizes	500 × 95 to 2988 × 1294 mm



Fire protection

- Fire protection requirements EI30
- Moisture-resistant
- Thermal insulation values up to 0.4 W/m²K
- Airborne sound insulation values up to 33 dB
- All types of real wood veneers available
- Circumferential hardwood edge band
- Good mounting options
- Retain their shape and dimensions
- Problem-free surface finishing

Surfaces	Untreated, real wood veneer
Cover panels	Cement-bonded chipboard classification A2-s1, d0
Insulation	Rock wool, 30 kg/m³
Edge band	Oak
Thickness	58 to 99 mm
Sizes	545 × 95 to 3088 × 1244 mm



Frame extension elements for wooden and wood-metal lifting sliding doors

Standard

- Thermal insulation values up to 0.1 W/m²K
- Airborne sound insulation values up to 26 dB
- All types of real wood veneers available
- Circumferential plywood edge band
- Good mounting options
- Retain their shape and dimensions
- Problem-free surface finishing

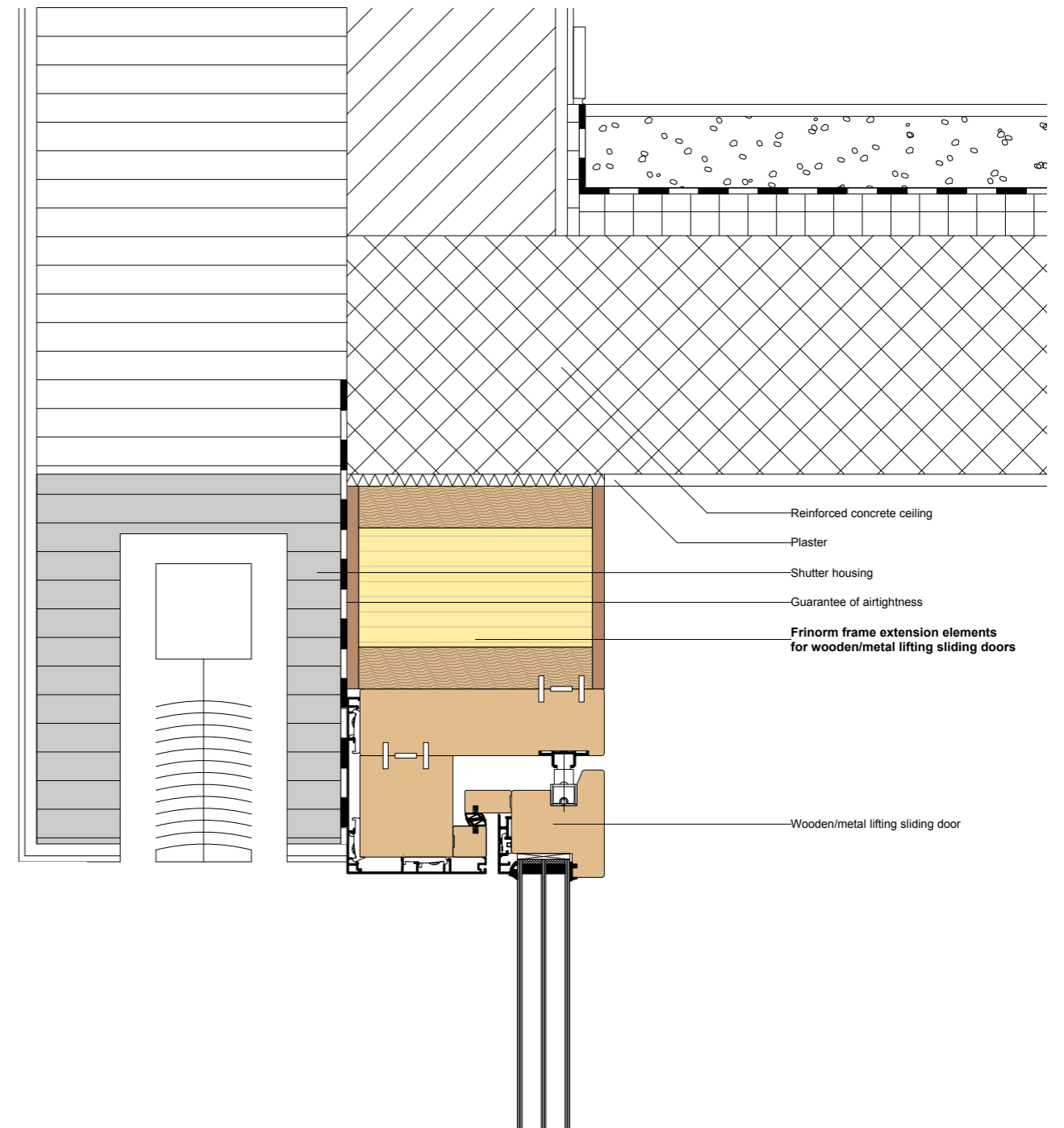
Surfaces	Untreated, priming film, real wood veneer
Cover panels	Chipboard P5, E1, MDF board P3, E1
Insulation	Expanded polystyrene rigid foam, 15 kg/m ³
Edge band	Plywood IW67
Thickness	113 to 220 mm
Sizes	500 × 95 to 3588 × 1294 mm



Sound insulation

- Thermal insulation values up to 0.1 W/m²K
- Airborne sound insulation values up to 46 dB
- All types of real wood veneers available
- Circumferential plywood edge band
- Good mounting options
- Retain their shape and dimensions
- Problem-free surface finishing

Surfaces	Untreated, priming film, real wood veneer
Cover panels	Chipboard P5, E1, MDF board P3, E1
Insulation	Glass wool, 20 kg/m ³
Sound insulation	Heavy bitumen foil
Edge band	Plywood IW67
Thickness	113 to 220 mm
Sizes	500 × 95 to 3588 × 1294 mm



Moisture-resistant

- Moisture-resistant
- Thermal insulation values up to 0.1 W/m²K
- Airborne sound insulation values up to 26 dB
- All types of real wood veneers available
- Circumferential plywood edge band
- Good mounting options
- Retain their shape and dimensions
- Problem-free surface finishing

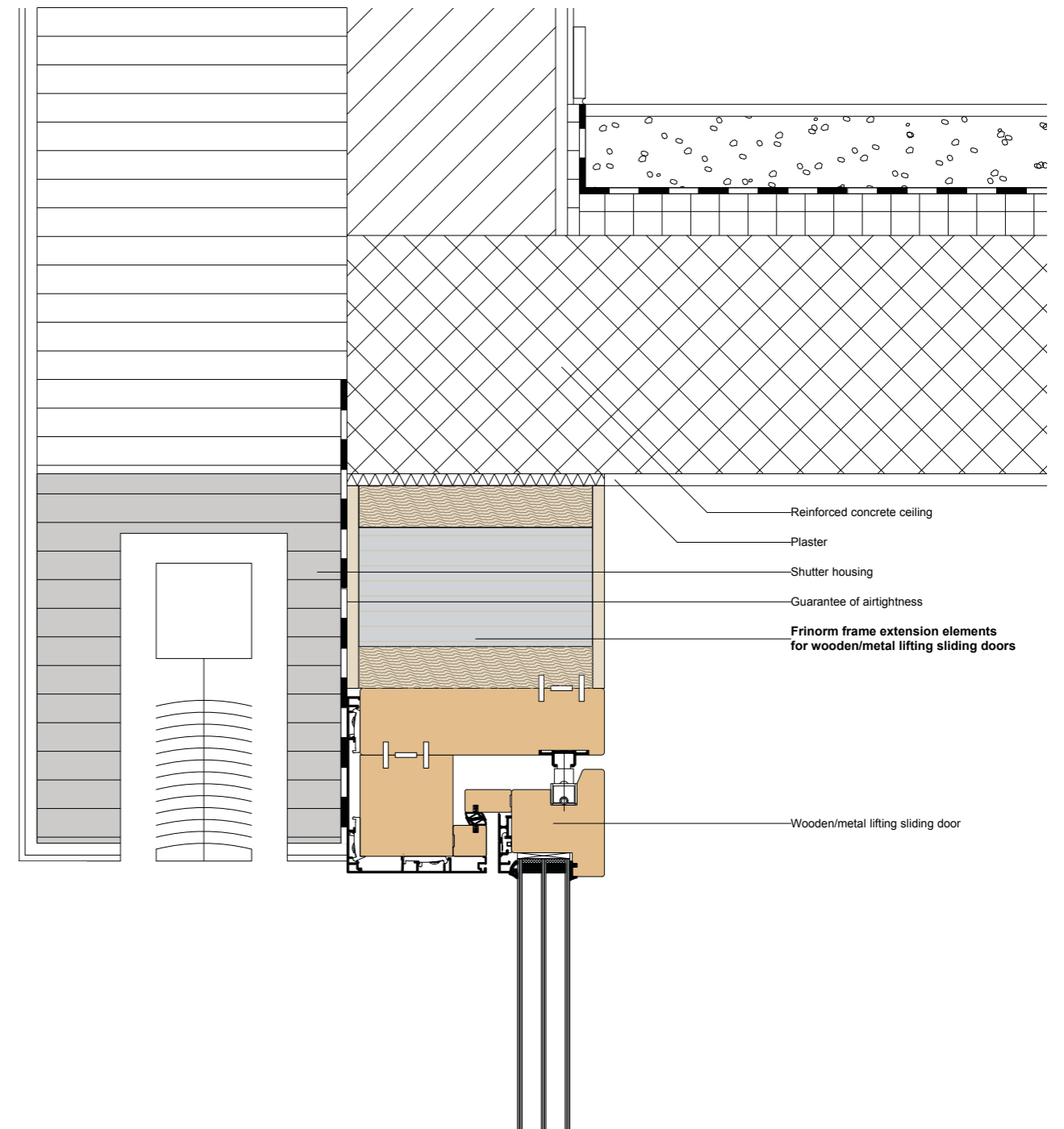
Surfaces	Untreated, priming film, real wood veneer
Cover panels	Plywood panel AW100
Insulation	Expanded polystyrene rigid foam, 15 kg/m ³
Edge band	Plywood IW67
Thickness	113 to 220 mm
Sizes	Polyurethane 500 × 95 bis 3588 × 1294 mm



Moisture-resistant Sound insulation

- Moisture-resistant
- Thermal insulation values up to 0.1 W/m²K
- Airborne sound insulation values up to 46 dB
- All types of real wood veneers available
- Circumferential plywood edge band
- Good mounting options
- Retain their shape and dimensions
- Problem-free surface finishing

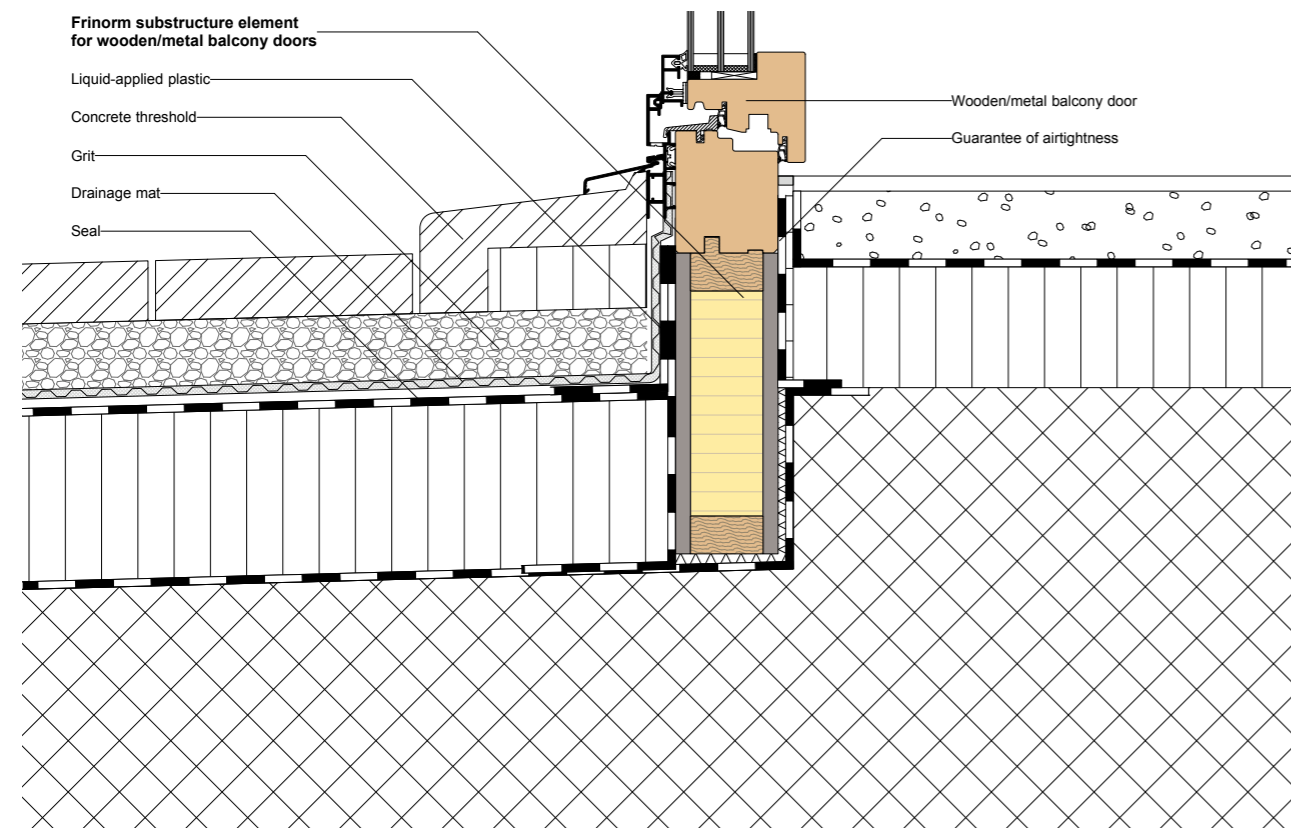
Surfaces	Untreated, priming film, real wood veneer
Cover panels	Plywood panel AW100
Insulation	Glass wool, 20 kg/m ³
Sound insulation	Heavy bitumen foil
Edge band	Plywood IW67
Thickness	113 to 220 mm
Sizes	Polyurethane 500 × 95 bis 3588 × 1294 mm



Substructure elements for wooden and wood-metal balcony doors

- Rot-resistant cover panel
- Thermal insulation values up to 0.3 W/m²K
- High load capacity
- Circumferential wooden edge band
- Good mounting options
- Retain their shape and dimensions

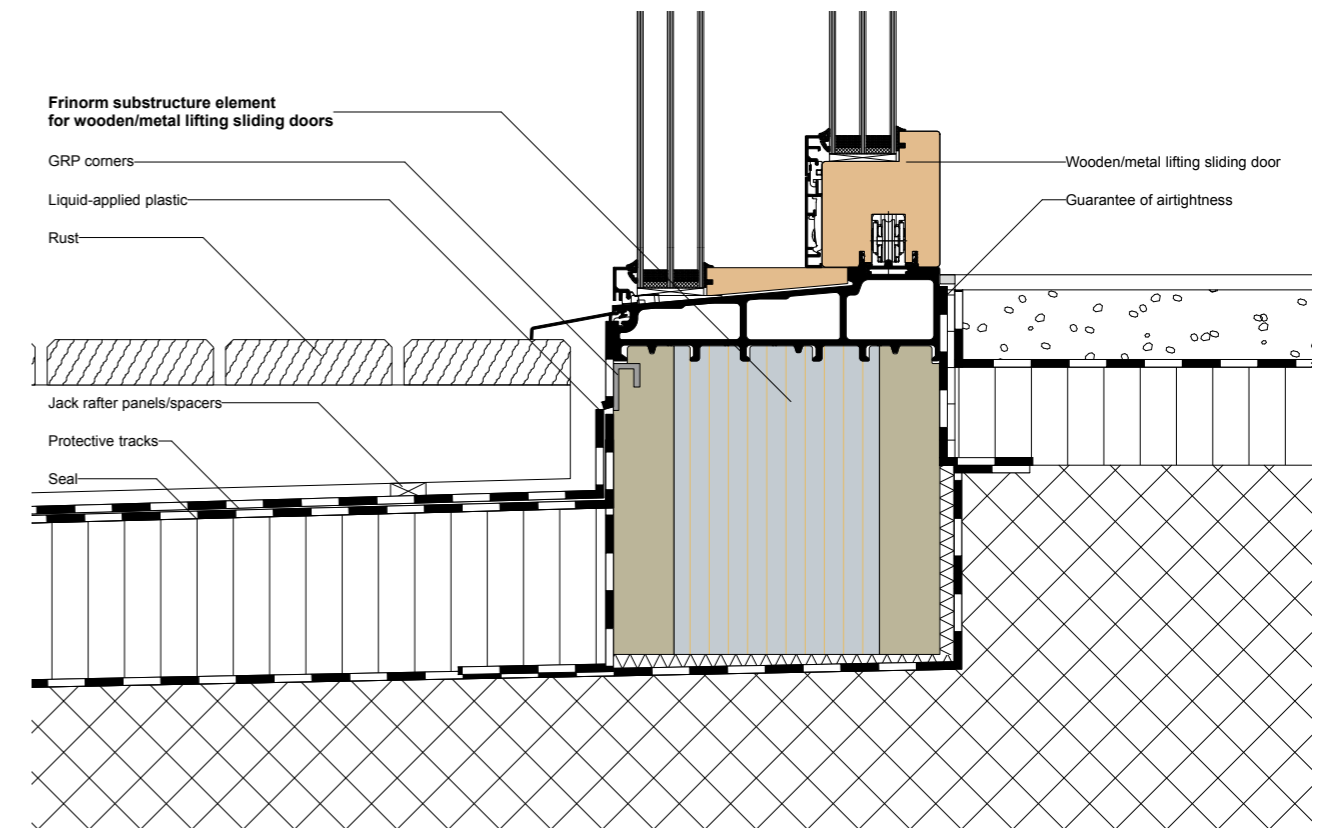
Surfaces	White primed
Cover panels	Cement-bonded chipboard
Insulation	Intensive expanded polystyrene rigid foam, 30 kg/m ³
Edge band	Spruce pine
Thickness	40 to 99 mm
Sizes	545 × 95 to 3338 × 1244 mm



Substructure elements for wooden and wood-metal lifting sliding doors

- Rot-resistant
- Thermal insulation values up to 0.1 W/m²K
- High load capacity
- Good mounting options
- Very good screw retention qualities
- Retain their shape and dimensions
- Seamless connection with dovetail connector

Surfaces	Untreated
Cover panels	Polyurethane panel, plywood panel IW67
Insulation	Polystyrene rigid foam, 30 kg/m ³
Thickness	100 to 240 mm
Sizes	Polyurethane 500 × 95 to 3588 × 1294 mm Plywood 500 × 95 to 2510 × 1294 mm



Infill elements for wooden and wood-metal windows

Standard

- Thermal insulation values up to 0.2 W/m²K
- Airborne sound insulation values up to 28 dB
- All types of real wood veneers available
- Circumferential wooden edge band
- Good mounting options
- Retain their shape and dimensions
- Problem-free surface finishing

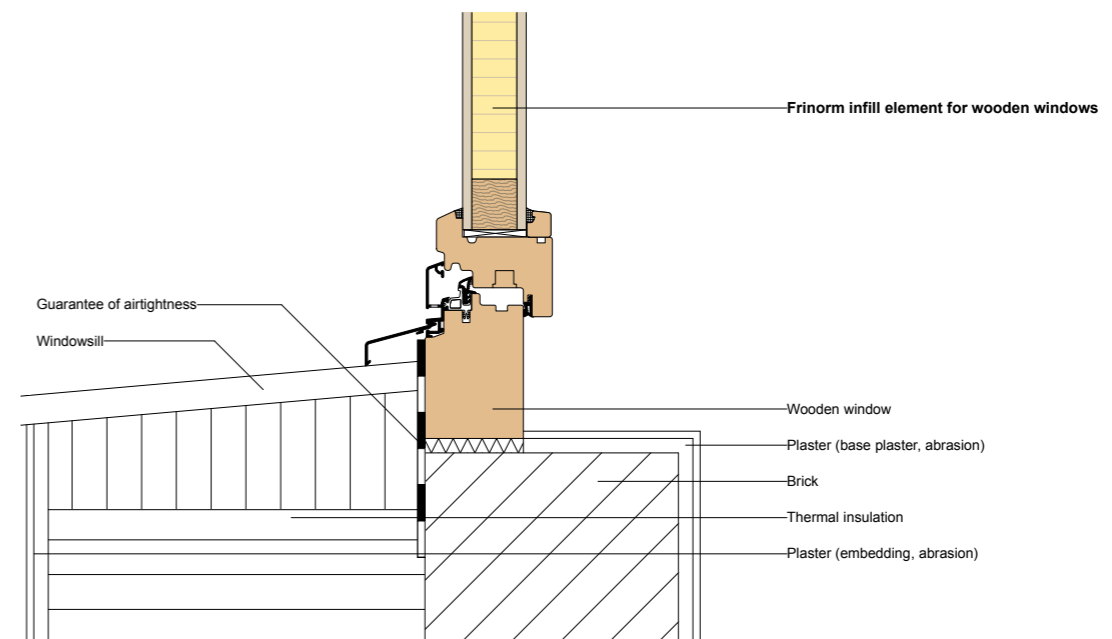
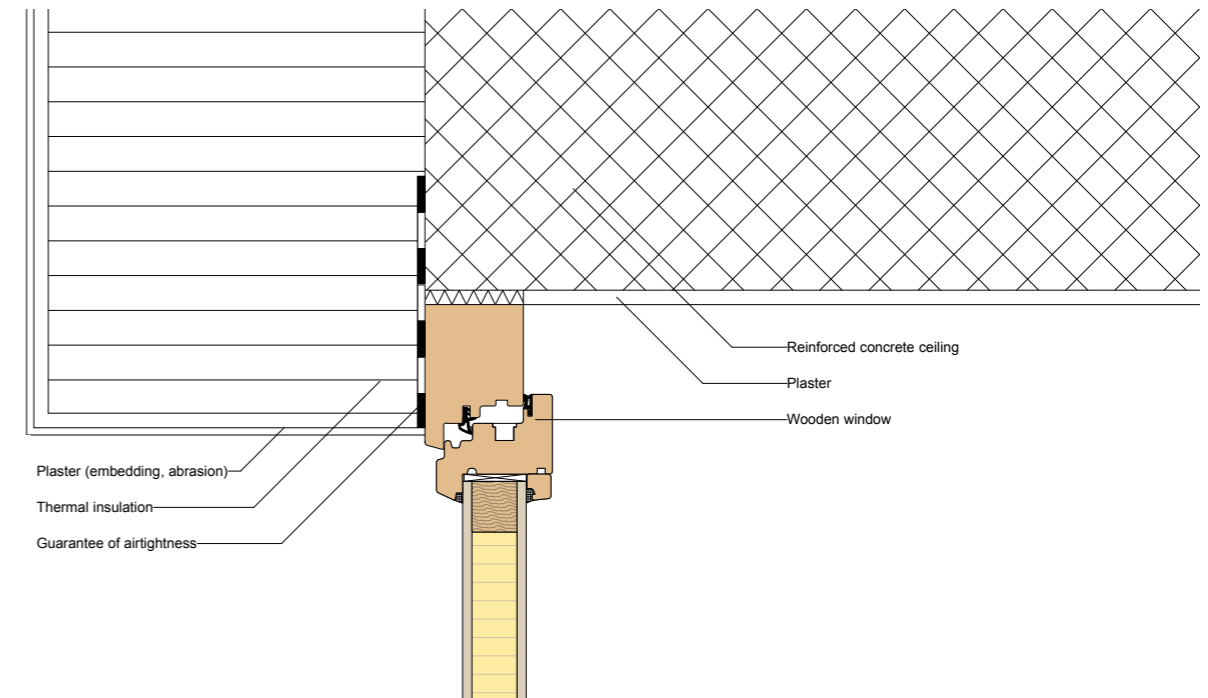
Surfaces	Untreated, priming foil, real wood veneer
Cover panels	Plywood panel AW100
Insulation	PUR rigid foam, 32 kg/m ³
Edge band	Spruce pine
Thickness	21 to 93 mm
Sizes	500 × 95 to 2988 × 1294 mm



Sound insulation

- Thermal insulation values up to 0.2 W/m²K
- Airborne sound insulation values up to 40 dB
- All types of real wood veneers available
- Circumferential wooden edge band
- Good mounting options
- Retain their shape and dimensions
- Problem-free surface finishing

Surfaces	Untreated, priming foil, real wood veneer
Cover panels	Plywood panel AW100
Insulation	Glass wool, 20 kg/m ³
Sound insulation	Heavy bitumen foil
Edge band	Spruce pine
Thickness	21 to 93 mm
Sizes	500 × 95 to 2988 × 1294 mm



Ventilation flaps for wooden and wood-metal windows

Standard

- Climate category 3c, 3d, 3e
- Thermal insulation values up to 0.2 W/m²K
- Airborne sound insulation values up to 34 dB
- All types of real wood veneers available
- All-round finger-jointed laminated wood edge band
- Various types of wood available
- Retain their shape and dimensions
- Good mounting options
- Problem-free surface finishing

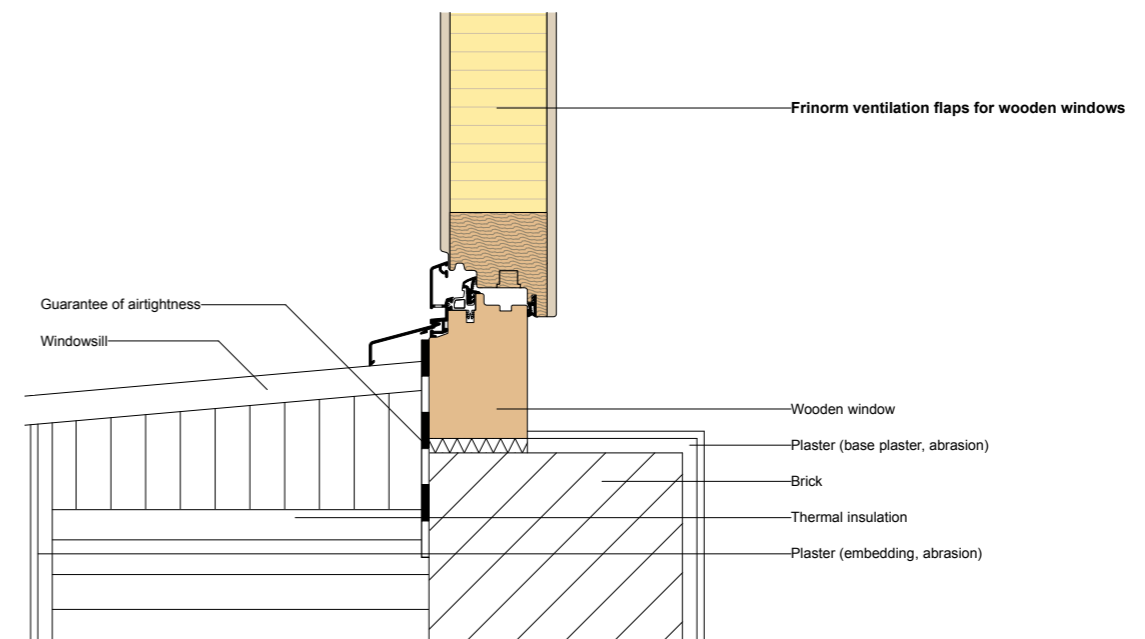
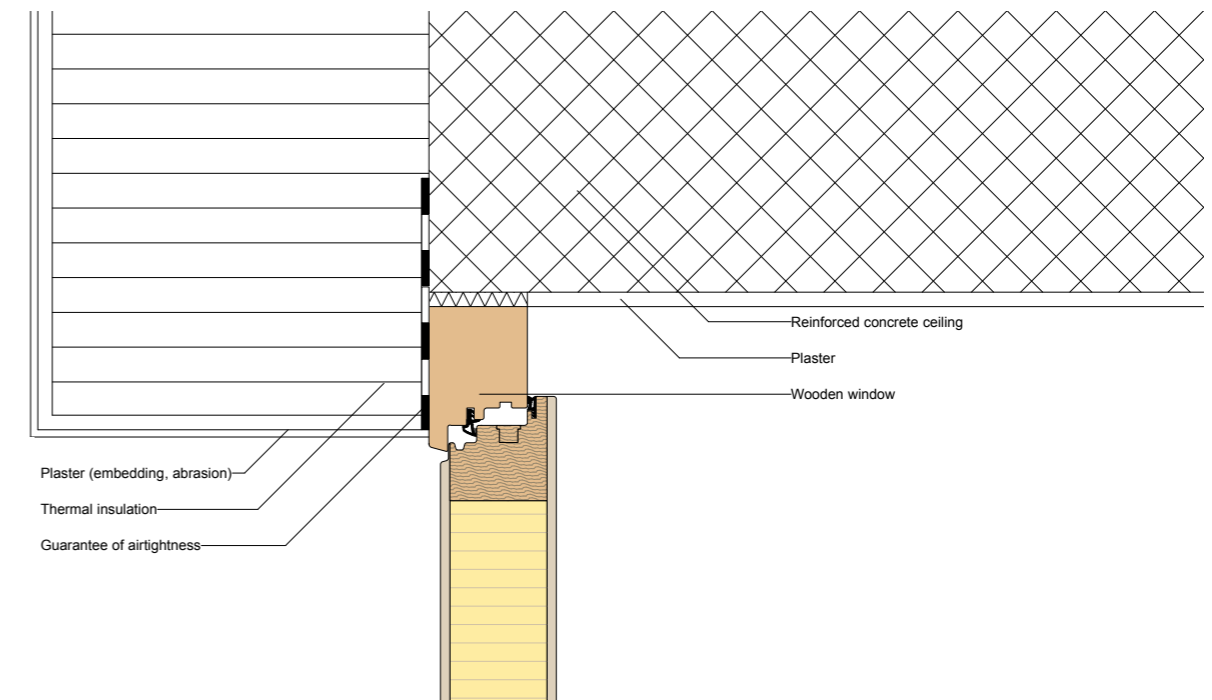
Surfaces	Untreated, priming foil, real wood veneer, primed
Cover panels	Plywood panel AW100, rockpanel
Insulation	PUR rigid foam, 32 kg/m ³
Edge band	Finger-jointed laminated wood
Thickness	40 to 112 mm
Sizes	Plywood: 500 × 200 to 2988 × 1294 mm Rockpanel: 500 × 200 to 3038 × 1194 mm



Sound insulation

- Climate category 3c, 3d, 3e
- Thermal insulation values up to 0.3 W/m²K
- Airborne sound insulation values up to 41 dB
- All types of real wood veneers available
- All-round finger-jointed laminated wood edge band
- Various types of wood available
- Retain their shape and dimensions
- Good mounting options
- Problem-free surface finishing

Surfaces	Untreated, priming foil, real wood veneer, primed
Cover panels	Plywood panel AW100, rockpanel
Insulation	Glass wool, 20 kg/m ³
Sound insulation	Heavy bitumen foil
Edge band	Finger-jointed laminated wood
Thickness	40 to 112 mm
Sizes	Plywood: 500 × 95 to 2988 × 1294 mm Rockpanel: 500 × 95 to 3038 × 1194 mm

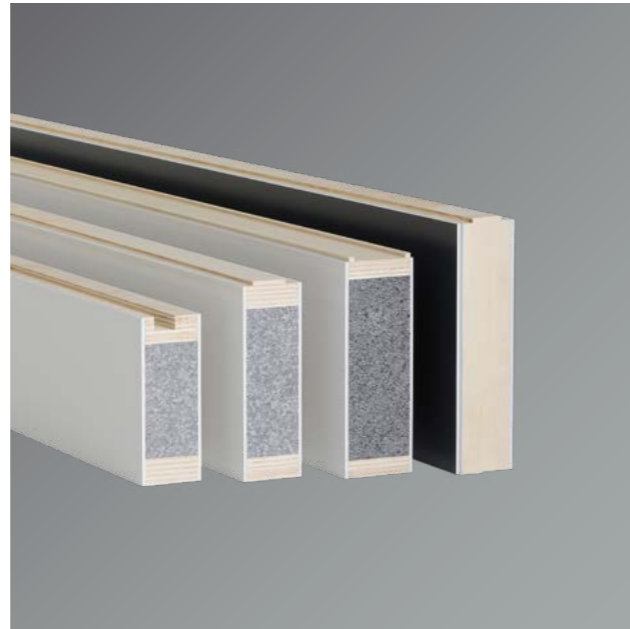


Frame extension elements for plastic windows

Standard

- Moisture-resistant
- Thermal insulation values up to 0.2 W/m²K
- Airborne sound insulation values up to 34 dB
- Perfect surface thanks to 4 mm thick rigid PVC
- Circumferential plywood edge band
- Excellent screw retention qualities
- Good mounting options
- Retain their shape and dimensions

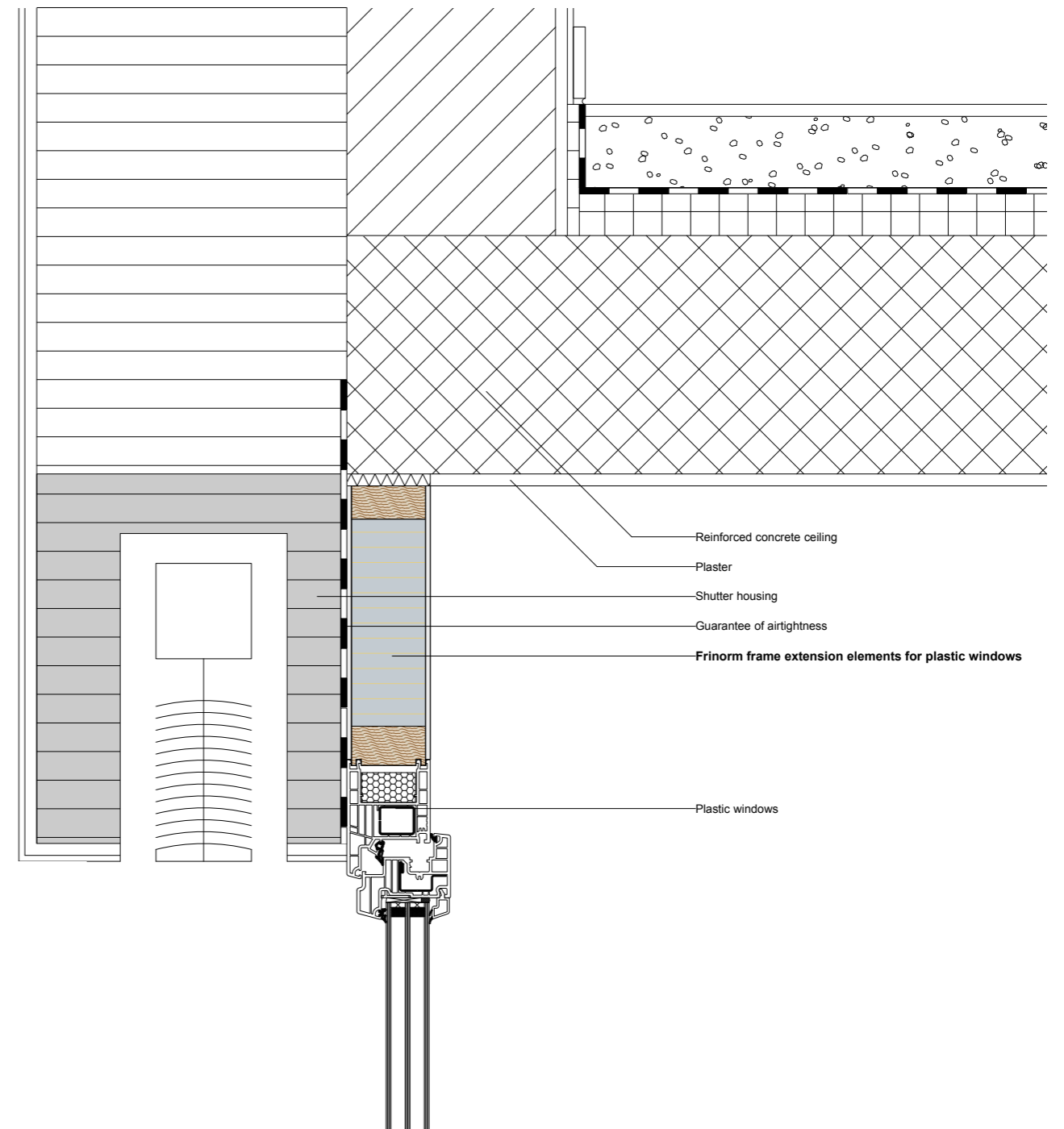
Surfaces	White (Veka, Kömmerling, Finstral), film laminated
Cover panels	Hard PVC panel, HPL decorative panel
Insulation	Expanded polystyrene rigid foam with graphite additive, 25 kg/m ³
Edge band	Plywood IW67
Thickness	40 to 112 mm
Sizes	White: 500 × 95 to 3588 × 1294 mm Film: 500 × 95 to 2988 × 1294 mm



Sound insulation

- Moisture-resistant
- Thermal insulation values up to 0.3 W/m²K
- Airborne sound insulation values up to 44 dB
- Perfect surface thanks to 4 mm thick rigid PVC
- Circumferential plywood edge band
- Excellent screw retention qualities
- Good mounting options
- Retain their shape and dimensions

Surfaces	White (Veka, Kömmerling, Finstral), film laminated
Cover panels	Hard PVC panel, HPL decorative panel
Insulation	Glass wool, 70 kg/m ³
Sound insulation	Heavy bitumen foil
Edge band	Plywood IW67
Thickness	40 to 112 mm
Sizes	White: 500 × 95 to 3588 × 1294 mm Film: 500 × 95 to 2988 × 1294 mm



Frame extension elements for plastic lifting sliding doors

Standard

- Moisture-resistant
- Thermal insulation values up to 0.1 W/m²K
- Airborne sound insulation values up to 29 dB
- Perfect surface thanks to 4 mm thick rigid PVC
- Circumferential plywood edge band
- Excellent screw retention qualities
- Good mounting options
- Retain their shape and dimensions

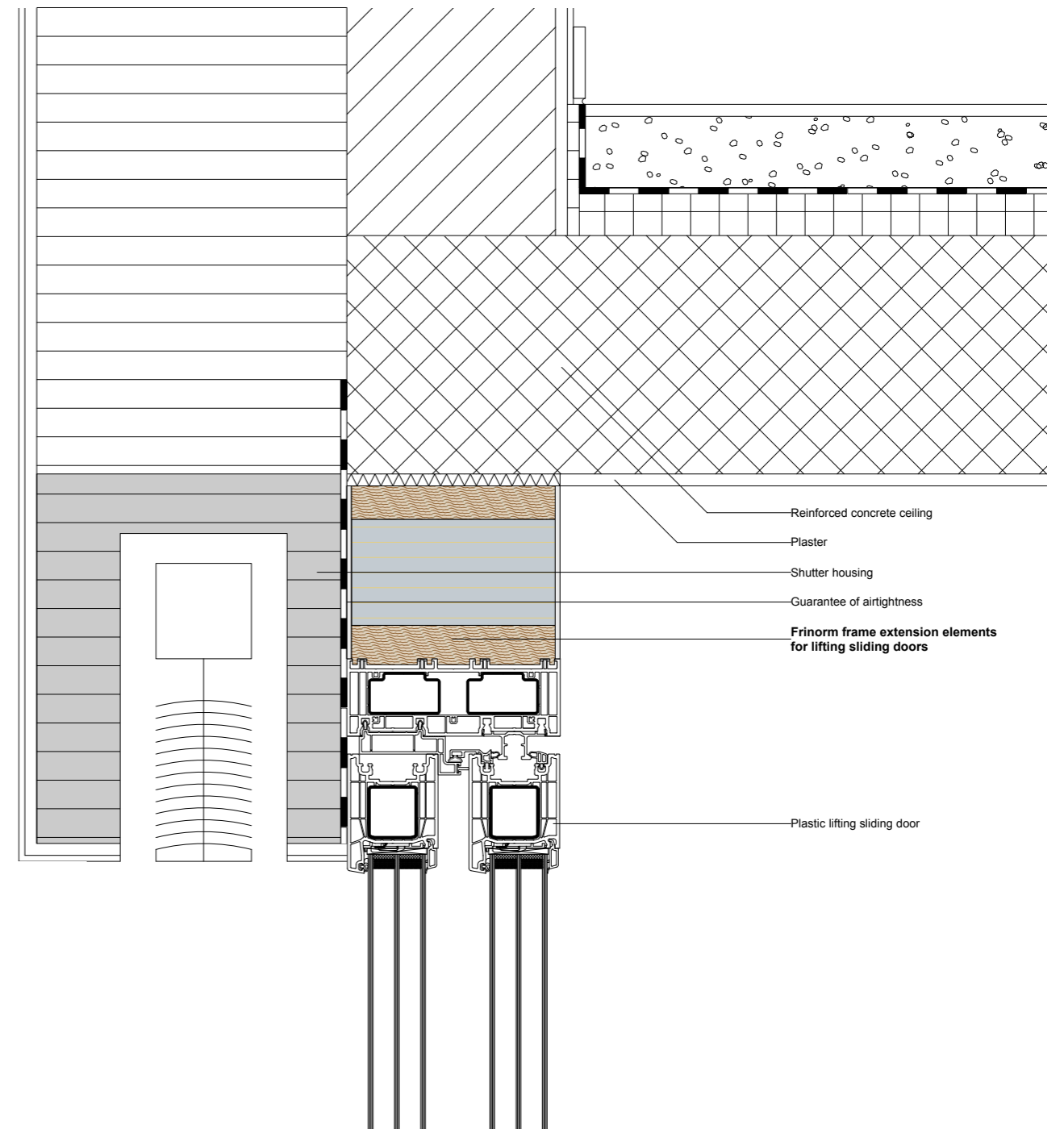
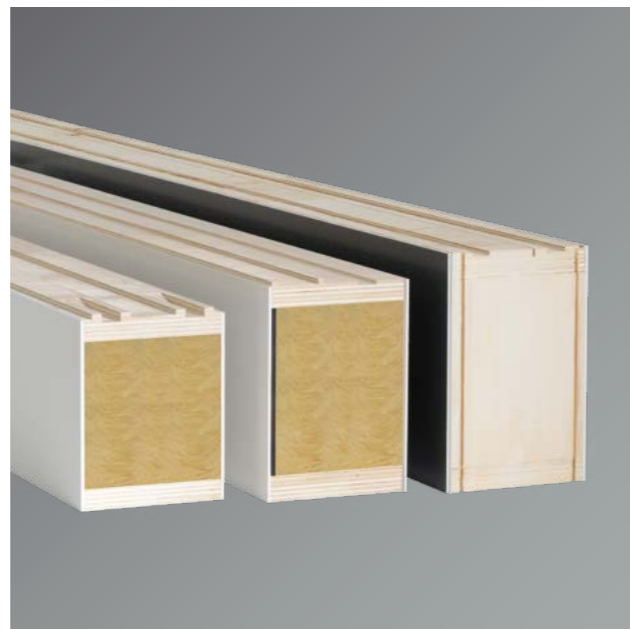
Surfaces	White (Veka, Kömmerling, Finstral), film laminated
Cover panels	Hard PVC panel, HPL decorative panel
Insulation	Expanded polystyrene rigid foam, 15 kg/m ³
Edge band	Plywood IW67
Thickness	113 to 220 mm
Sizes	White: 500 × 95 to 3588 × 1294 mm Film: 500 × 95 to 2988 × 1294 mm



Sound insulation

- Moisture-resistant
- Thermal insulation values up to 0.1 W/m²K
- Airborne sound insulation values up to 46 dB
- Perfect surface thanks to 4 mm thick rigid PVC
- Circumferential plywood edge band
- Excellent screw retention qualities
- Good mounting options
- Retain their shape and dimensions

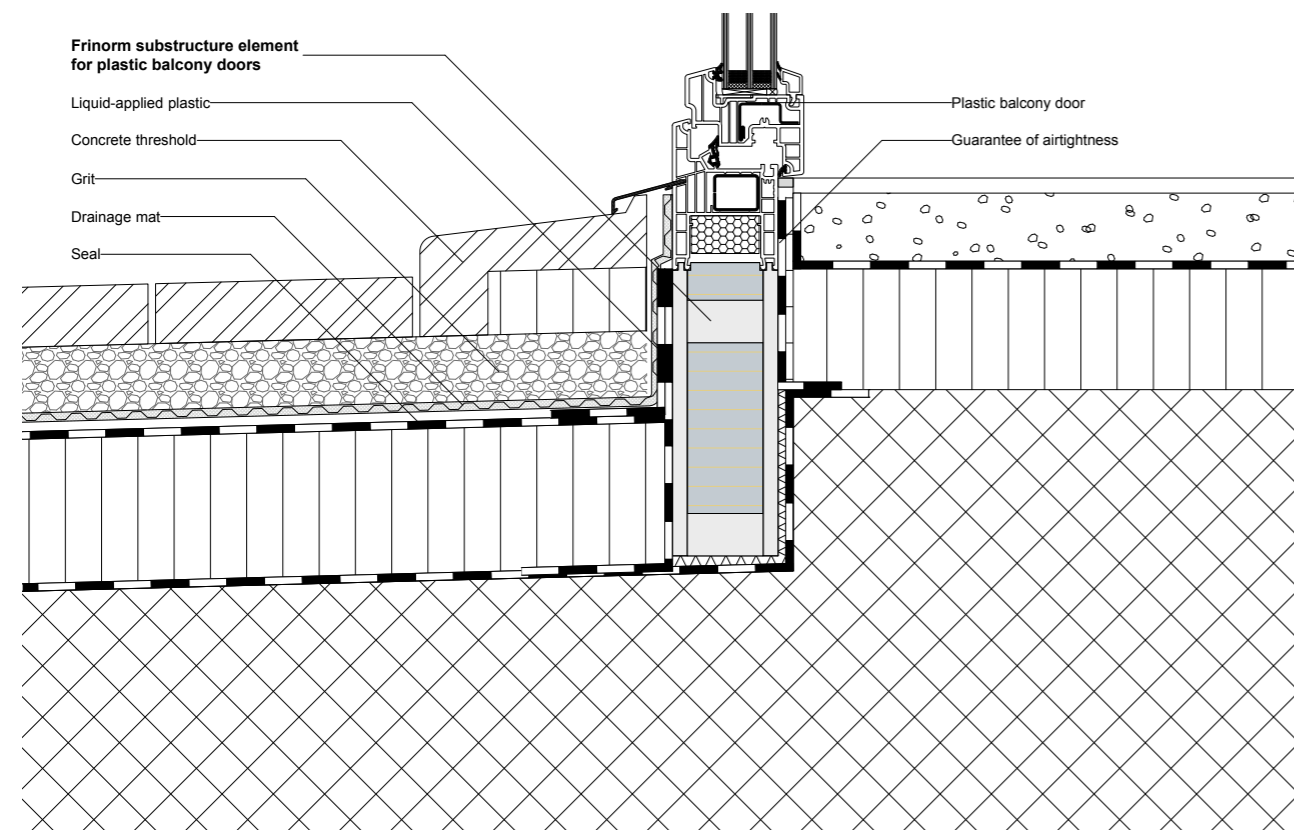
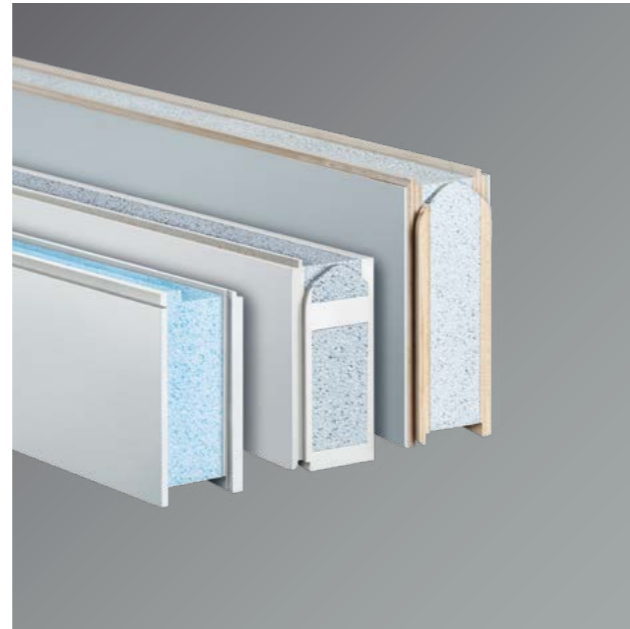
Surfaces	White (Veka, Kömmerling, Finstral), film laminated
Cover panels	Hard PVC panel, HPL decorative panel
Insulation	Glass wool, 70 kg/m ³
Sound insulation	Heavy bitumen foil
Edge band	Plywood IW67
Thickness	113 to 220 mm
Sizes	White: 500 × 95 to 3588 × 1294 mm Film: 500 × 95 to 2988 × 1294 mm



Substructure elements for plastic balcony doors

- Rot-resistant
- Thermal insulation values up to 0.3 W/m²K
- High load capacity
- Good mounting options
- Very good screw retention qualities
- Retain their shape and dimensions
- Seamless connection with integrated dovetail connector

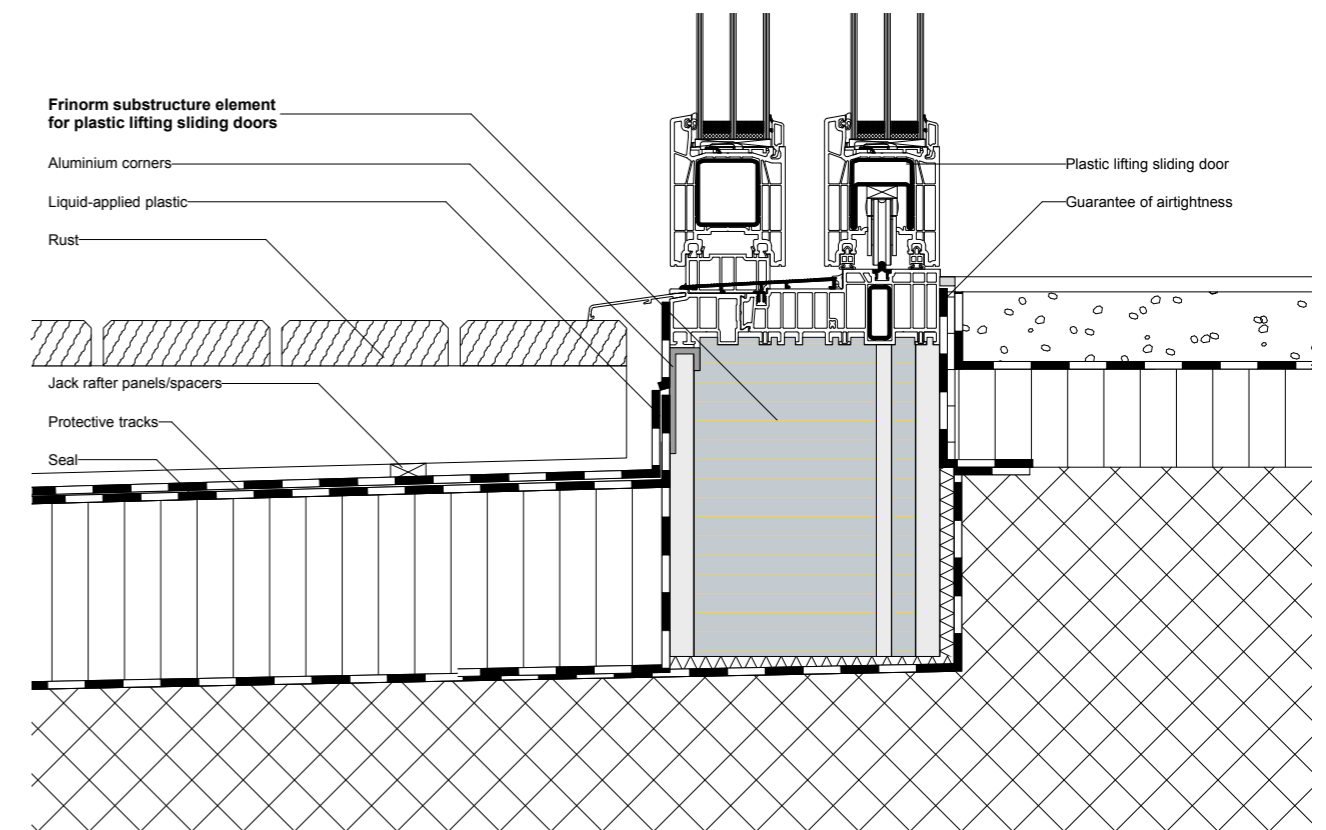
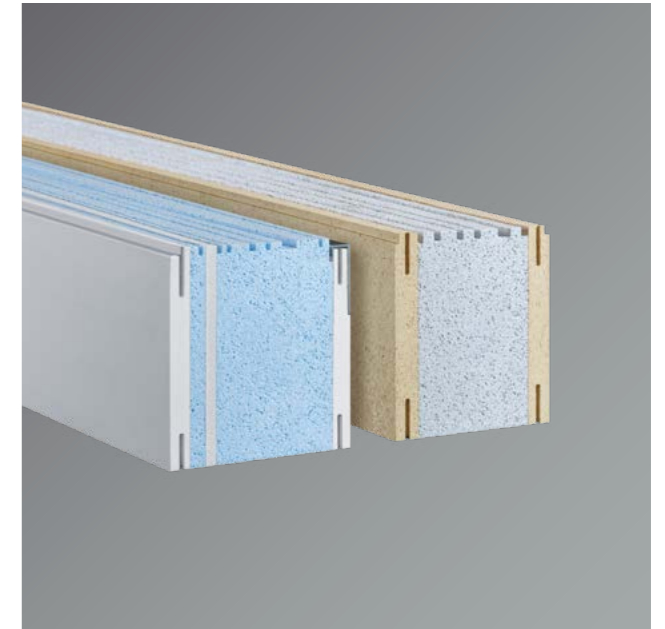
Surfaces	White
Cover panels	Integral foam board made of rigid PVC, plywood board IW67, covered with rigid PVC
Insulation	Intensive expanded polystyrene rigid foam, 30 kg/m ³
Thickness	40 to 99 mm
Formats	Integral foam: 500 × 95 to 2988 × 1294 mm Plywood: 500 × 95 to 3088 × 994 mm



Substructure elements for plastic lifting sliding doors

- Rot-resistant
- Very good thermal insulation values up to 0.1 W/m²K
- High load capacity
- Good mounting options
- Very good screw retention qualities
- Retain their shape and dimensions
- Seamless connection with dovetail connector

Surfaces	White, untreated
Cover panels	Integral foam board made of rigid PVC, polyurethane board
Insulation	Intensive expanded polystyrene rigid foam, 30 kg/m ³
Thickness	100 to 240 mm
Formats	Integral foam board: 500 × 95 to 2988 × 1294 mm Polyurethane: 500 × 95 to 3588 × 1294 mm

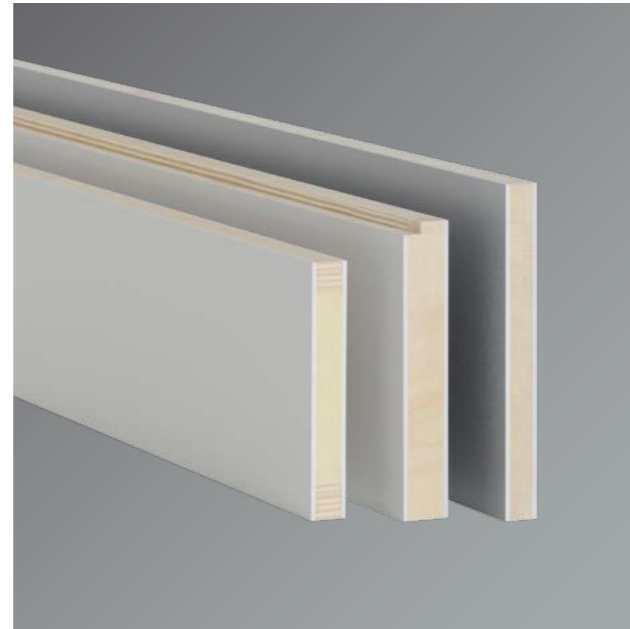


Infill elements for plastic windows

Standard

- Moisture-resistant
- Thermal insulation values up to 0.6 W/m²K
- Airborne sound insulation values up to 28 dB
- Perfect surface thanks to 4 mm thick rigid PVC
- Circumferential plywood edge band
- Excellent screw retention qualities
- Good mounting options
- Retain their shape and dimensions

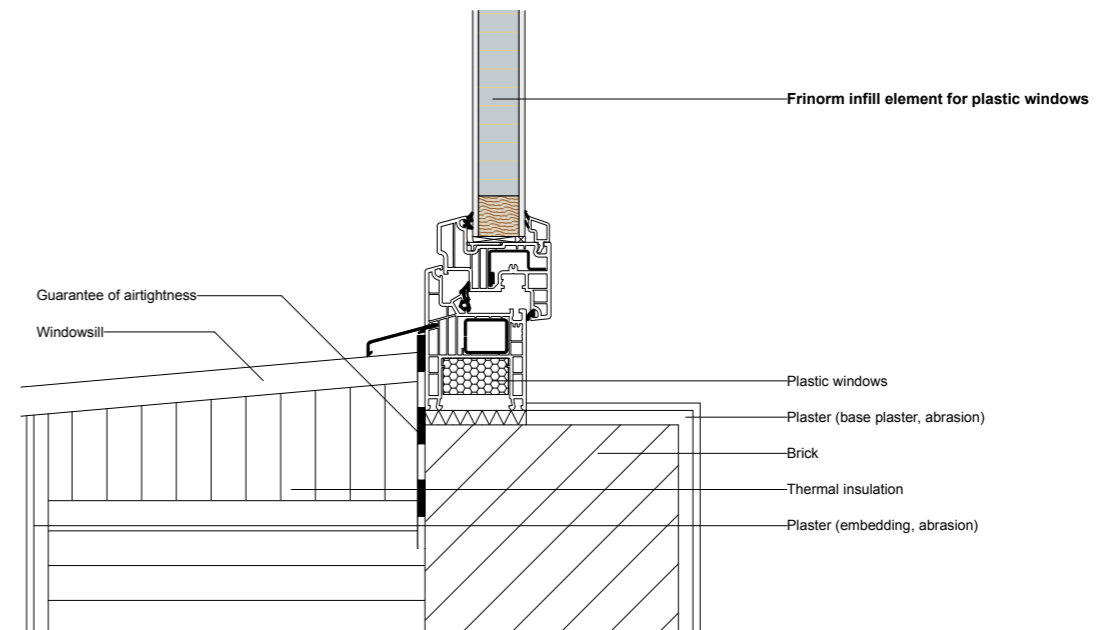
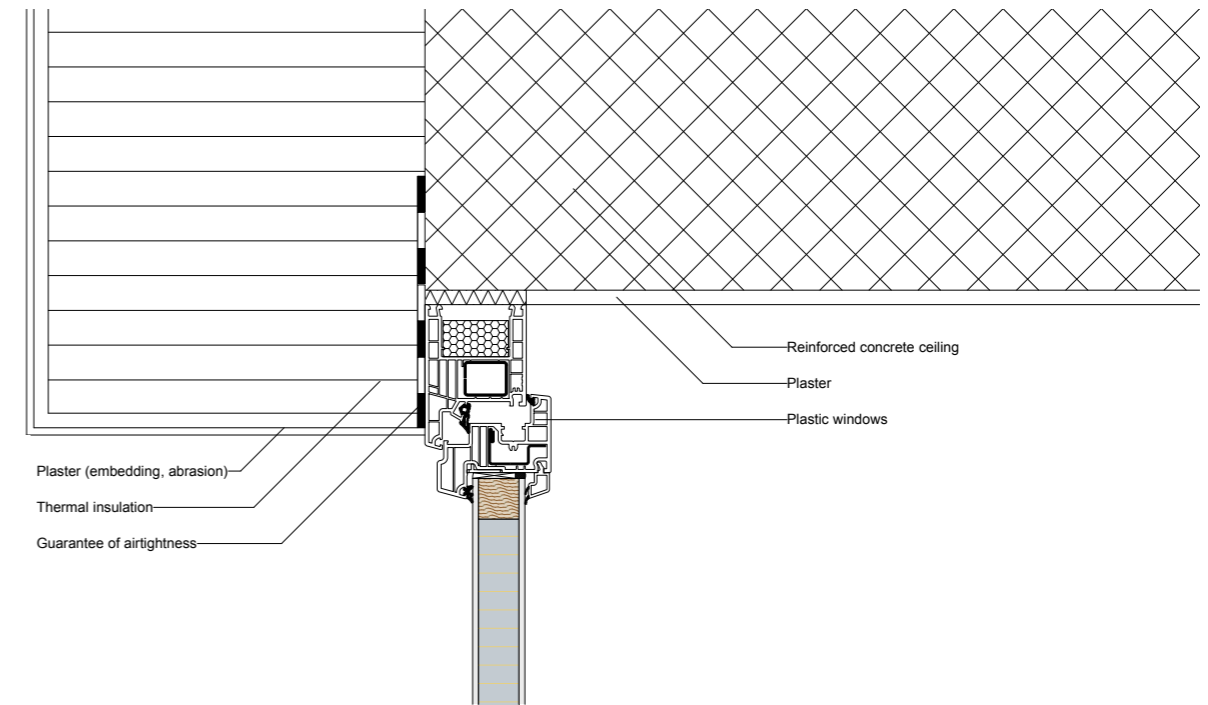
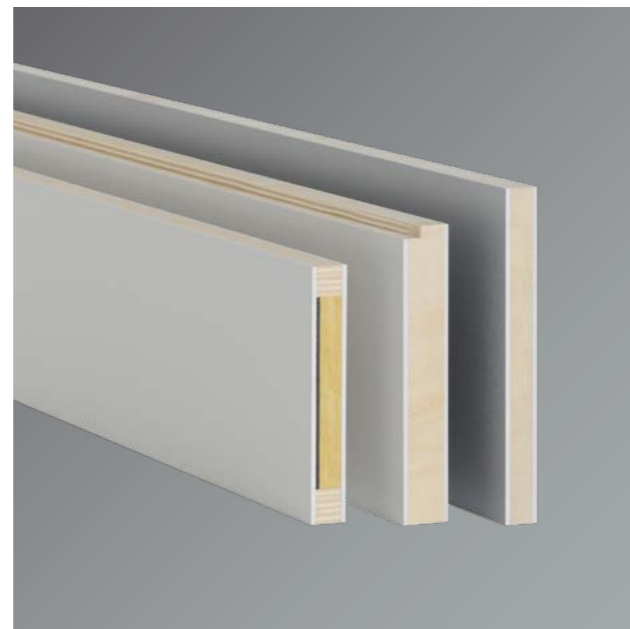
Surfaces	White (Veka, Kömmerling, Finstral), film laminated
Cover panels	Hard PVC panel, HPL decorative panel
Insulation	PUR rigid foam, 32 kg/m ³
Edge band	Plywood IW67
Thickness	20 to 39 mm
Sizes	White: 500 × 95 to 3588 × 1294 mm Film: 500 × 95 to 2988 × 1294 mm



Sound insulation

- Moisture-resistant
- Thermal insulation values up to 1.0 W/m²K
- Airborne sound insulation values up to 38 dB
- Perfect surface thanks to 4 mm thick rigid PVC
- Circumferential plywood edge band
- Excellent screw retention qualities
- Good mounting options
- Retain their shape and dimensions

Surfaces	White (Veka, Kömmerling, Finstral), film laminated
Cover panels	Hard PVC panel, HPL decorative panel
Insulation	Glass wool, 20 kg/m ³
Sound insulation	Heavy bitumen foil
Edge band	Plywood IW67
Thickness	25 to 39 mm
Sizes	White: 500 × 95 to 3588 × 1294 mm Film: 500 × 95 to 2988 × 1294 mm



Frame extension elements for aluminium windows

Standard

- Purely mechanical mounting
- Due to the high expansion coefficient of the aluminium, the aluminium shell is only clamped into the guide groove
- Aluminium shell available from Frinorm or on site
- Aluminium shell available for one or both sides
- All RAL and NCS colours available
- Thermal insulation transmission coefficients up to $0.2 \text{ W/m}^2\text{K}$
- Airborne sound insulation values up to 33 dB
- Retain their shape and dimensions

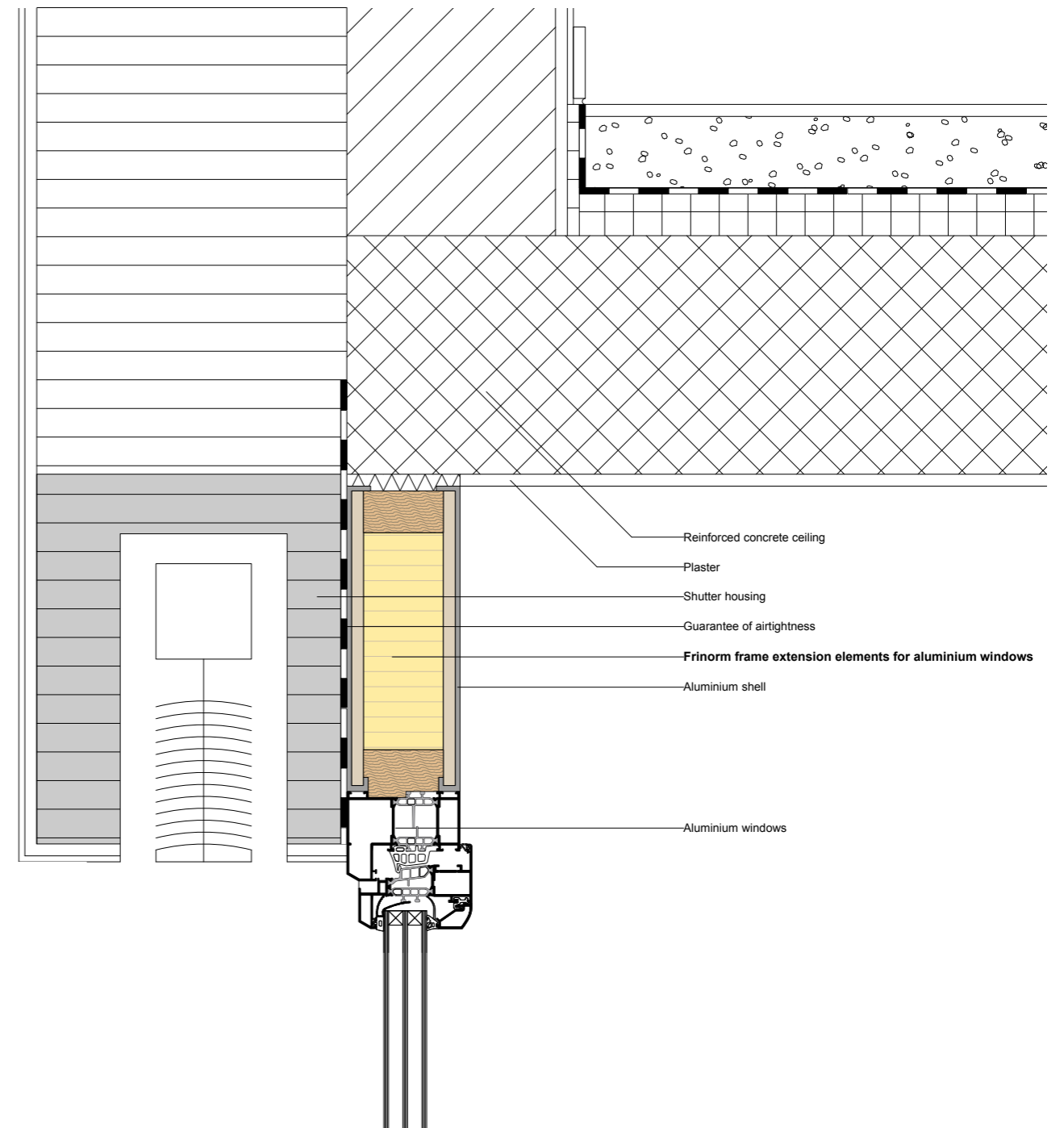
Surfaces	Aluminium shell
Cover panels	Chipboard P5, E1, plywood panel AW100
Insulation	PUR rigid foam, 32 kg/m^3
Edge band	Spruce pine
Thicknesses	40 to 112 mm
Sizes	500×95 to $3588 \times 1294 \text{ mm}$



Sound insulation

- Purely mechanical mounting
- Due to the high expansion coefficient of the aluminium, the aluminium shell is only clamped into the guide groove
- Aluminium shell available from Frinorm or on site
- Aluminium shell available for one or both sides
- All RAL and NCS colours available
- Thermal insulation transmission coefficients up to $0.3 \text{ W/m}^2\text{K}$
- Airborne sound insulation values up to 43 dB
- Retain their shape and dimensions

Surfaces	Aluminium shell
Cover panels	Chipboard P5, E1, plywood panel AW100
Insulation	Glass wool, 20 kg/m^3
Sound insulation	Heavy bitumen foil
Edge band	Spruce pine
Thickness	40 to 112 mm
Sizes	500×95 to $3588 \times 1294 \text{ mm}$



Frame extension elements for aluminium lifting sliding doors

Standard

- Purely mechanical mounting
- Due to the high expansion coefficient of the aluminium, the aluminium shell is only clamped into the guide groove
- Aluminium shell available from Frinorm or on site
- Aluminium shell available for one or both sides
- All RAL and NCS colours available
- Thermal insulation transmission coefficients up to $0.1 \text{ W/m}^2\text{K}$
- Airborne sound insulation values up to 26 dB
- Retain their shape and dimensions

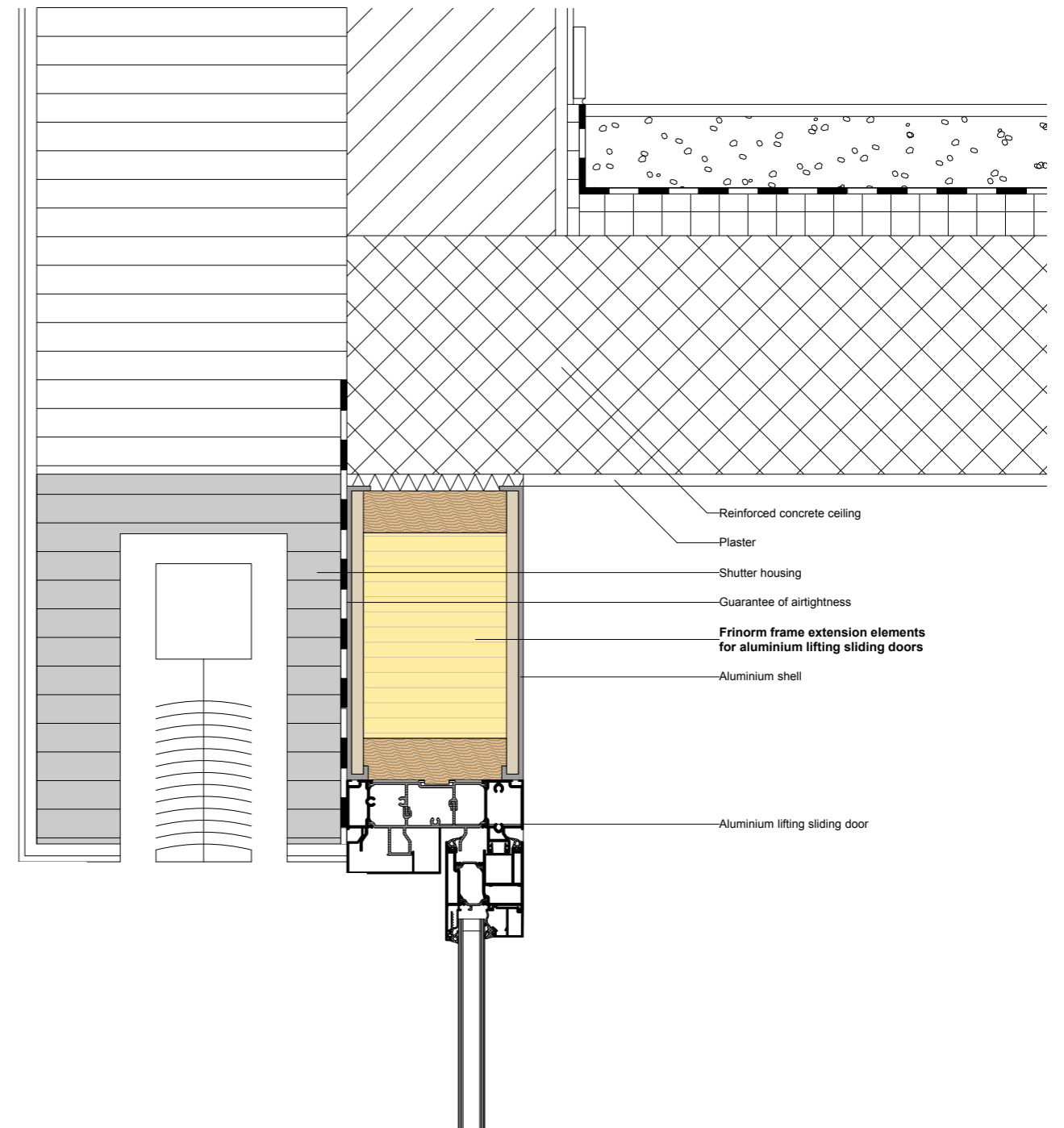


Surfaces	Aluminium shell
Cover panels	Chipboard P5, E1, plywood panel AW100
Insulation	Expanded polystyrene rigid foam, 15 kg/m^3
Edge band	Plywood IW67
Thickness	113 to 220 mm
Sizes	500×95 to $3588 \times 1294 \text{ mm}$

Sound insulation

- Purely mechanical mounting
- Due to the high expansion coefficient of the aluminium, the aluminium shell is only clamped into the guide groove
- Aluminium shell available from Frinorm or on site
- Aluminium shell available for one or both sides
- All RAL and NCS colours available
- Thermal insulation transmission coefficients up to $0.1 \text{ W/m}^2\text{K}$
- Airborne sound insulation values up to 46 dB
- Retain their shape and dimensions

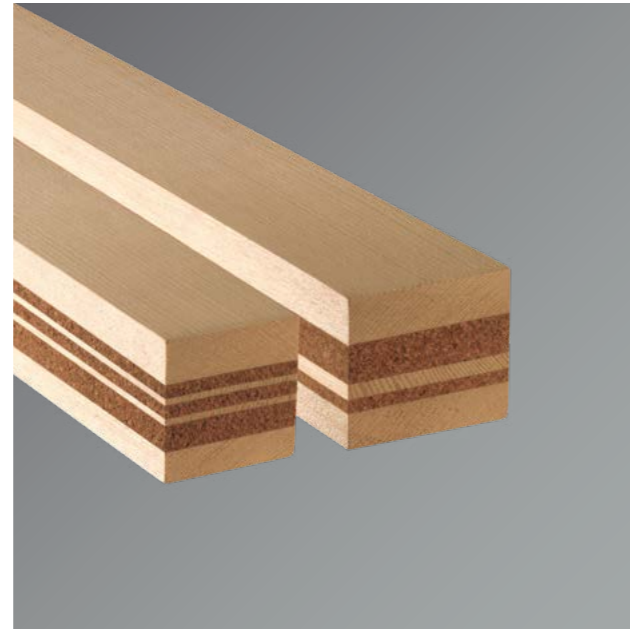
Surfaces	Aluminium shell
Cover panels	Chipboard P5, E1, plywood panel AW100
Insulation	Glass wool, 20 kg/m^3
Sound insulation	Heavy bitumen foil
Edge band	Plywood IW67
Thickness	113 to 220 mm
Sizes	500×95 to $3588 \times 1294 \text{ mm}$



Iswood® wood-cork window scantling

- Energy-optimised, suitable for Minergie and passive houses
- Thermal insulation values up to 0.7 W/m²K
- Variable multilayer construction
- Various types of wood can be combined
- Renewable materials of the highest quality and durability
- Further processing with standard woodworking machines and tools
- Conventional surface finishing
- No separation of production waste
- Commissioned mass production according to customer specifications

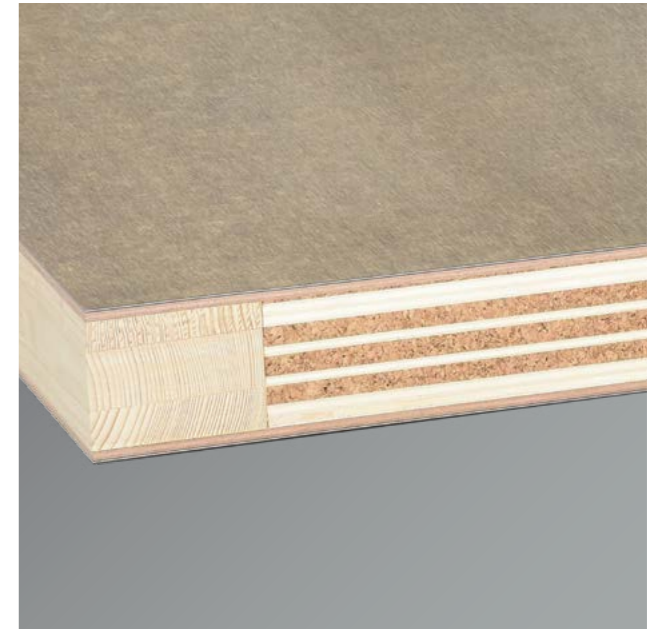
Wood	Wood slats, A/A quality, various types of wood available
Insulation	High-quality pressed cork, 300 kg/m³
Thickness	45 to 90 mm
Width	60 to 170 mm
Length	500 to 3588 mm



Iswood® door leaf blank

- Tested according to the highest climate category, achieves the highest classification (3c, 3d, 3e)
- Tested for general and local smoothness, reaches the highest tolerance category (4)
- Suitable for all areas of applications (a, b, c, d)
- Thermal insulation values up to 0.7 W/m²K
- Airborne sound insulation values up to 34 dB
- Excellent stability
- Low grammage
- Constructive build without metal stabilisers guarantees design freedom (e.g. light slots, infills, doubling)
- Aluphenol surface cover plate can be veneered, lacquered or coated
- Commissioned mass production according to customer specifications

Surface	Aluphenol, untreated or real wood veneered
Core	Multilayer sandwich panel made of poplar plywood and high-quality pressed cork, 300 kg/m³
Frame	Finger-jointed laminated wood, different types of wood available
Thickness	64 and 74 mm, other thicknesses on request
Sizes	Max. 2788 x 1288 mm



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Frinorm AG, Thermal insulation elements

Föhrenweg 12, FL-9496 Balzers, phone 00423 384 23 66, fax 00423 384 23 35, info@frinorm.com

