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Double glazing:

U-values from 1,32 W/m²K

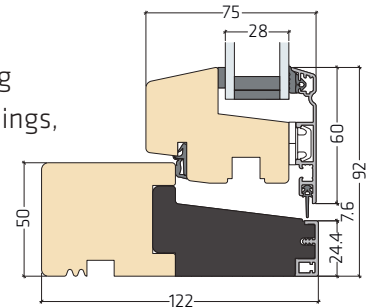


Frame IC

WOOD||ALUMINIUM with **idealcore™**

Traditional, low-maintenance design
...in a new energy construction

Frame IC has an external look-alike glazing bead and can be used for all types of buildings, new build as well as renovations and extensions.



Window Functions



Top Guided



Top Swing
Reversible



Side Hung



Side Guided



Glass to Glass
Corner



Fixed Light



Louvre Panel

Door Functions



Outward opening
entrance door



Inward opening
entrance door



Outward opening
terrace door



Inward opening
terrace door



Outward opening
stable door



Outward opening
flush door



Inward opening
flush door



Sliding Door
with low threshold

Triple glazing:

U-values from 0,77 W/m²K

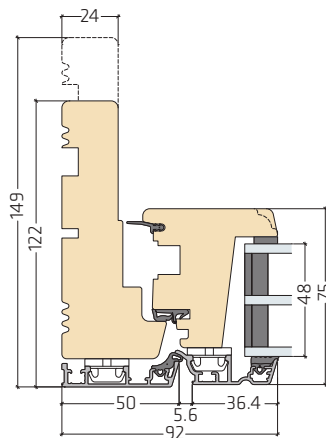
Frame I

WOOD|ALUMINIUM

Classic and inward opening
with look-alike glazing bead

Frame I is an inward opening wood-aluminium window with a look-alike glazing bead in the exterior profile.

Frame I has the same external dimensions as the outward opening Frame IC and can be combined without regards to opening functions.



Windows - Functions



Tilt/Turn



Turn/Tilt



Tilt



Turn



Fixed light

Doors - Functions



Tilt/Turn



Turn/tilt

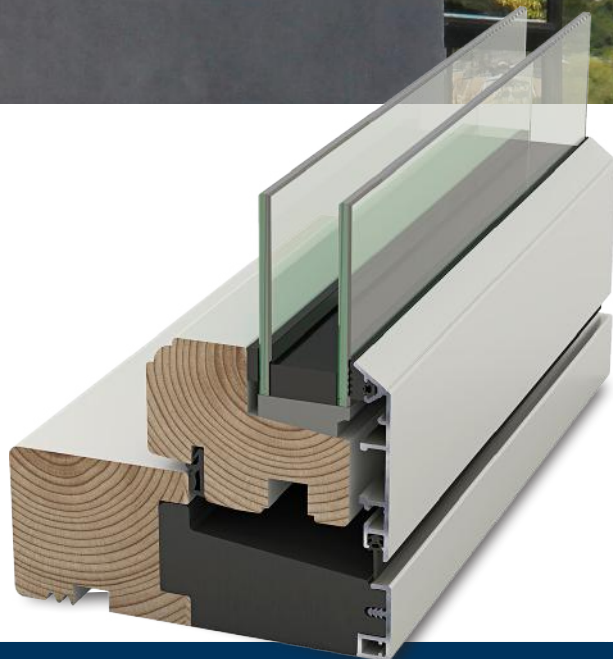


Turn





Triple glazing
... U-value from 0,82



Double glazing
U-value from 1,32

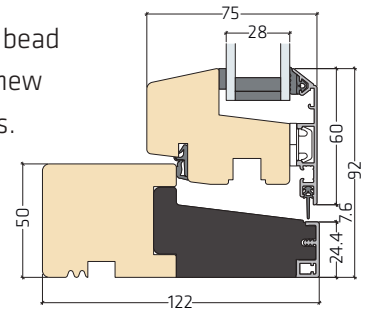


Nation IC

WOOD|ALUMINIUM with **idealcore™**

Traditional, sash/frame window
...in a new energy construction

Nation IC has an external look-alike putty bead and can be used for all types of buildings, new build as well as renovations and extensions.



Windows - Functions



Top Guided



Top Swing
Reversible



Side Hung



Side Guided



Glass to Glass
Corner



Fixed Light



Louvre Panel

Doors - Functions



Outward opening
entrance door



Inward opening
entrance door



Outward opening
terrace door



Inward opening
terrace door



Outward opening
stable door



Outward opening
flush door



Outward opening
flush door



Sliding Door
with low threshold

Triple glazing
U-value from 0,77

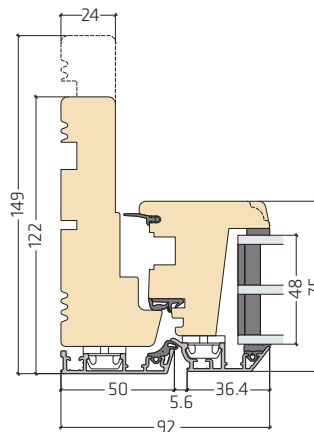
Nation I

WOOD|ALUMINIUM

Inward opening with look-alike putty bead

Nation I is an inward opening wood-aluminium window with a look-alike putty bead in the exterior alu profile.

Nation I has the same exterior dimensions as the outward opening Frame IC and can be combined regardless of opening functions.



Windows - Functions



Tilt/Turn



Turn/Tilt



Tilt



Turn



Fixed light

Doors - Functions



Tilt/Turn



Turn/Tilt



Turn



Triple glazing
U-value from 0,82



Double glazing:

U-values from 1,31 W/m²K

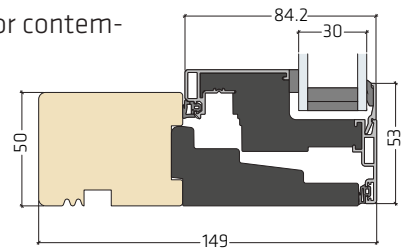


Futura+

WOOD|PUR|ALUMINIUM

Narrow frames
...high energy performance

Futura+ has an external 53 mm slim aluminium profile making it the perfect choice for contemporary commercial and domestic projects.



Window Functions



Top Guided



Top Swing
Reversible



Side Hung



Side Guided



Glass to Glass
Corner



Fixed Light



Louvre Panel



Acoustic window

Door Functions



Outward opening
terrace door



Sliding door



Double sliding door



Low threshold slid-
ing door

Triple glazing:

U-values from 0,74 W/m²K

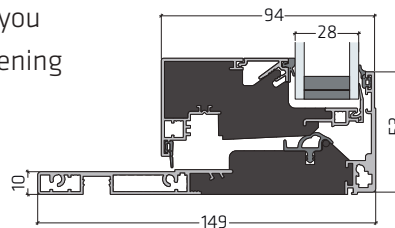


Futura+i

ALUMINIUM|ALUMINIUM with **idealcore™**

Elegant, narrow and inward opening
...minimal maintenance

Futura+i has the same 53mm slim external profile as Futura+, which means you can combine inward and outward opening windows in your project.



Window Functions



Tilt-Turn



Turn/Tilt



Tilt



Turn



Fixed light

Door Functions



Tilt-Turn
Terrace door



Turn-Tilt
Terrace door



Turn
Terrace door



Triple glazing:

U-values from 0,74 W/m²K



Double glazing:

m²K U-values from 1,38 W/m²K

About Idealcombi A/S

History

Founded in 1973 by two innovative brothers Bent and Henning Søgaaard, Idealcombi has experienced rapid growth in the last three decades. The milestones have been frequent and significant, and throughout the entire process, the brothers have stood at the helm with a hand in every detail of the development and with a solid understanding of the needs and movements of the market. From the early days in the barn on their ancestral farm until today when the high-tech company occupies more than 100,000 m² of premises in Northern Jutland, Idealcombi has been a hive of activity.

The next generation of the Søgaaard family, Martin and Mikael, have already stepped forward to take over the running of the company, thus ensuring the future of Idealcombi as a family-owned company. Today, Idealcombi is among the largest producers of windows and doors in Denmark and is established in the British market with a sales department in Milton Keynes. With agents also in Ireland, Iceland and in the Faroe Islands, export has become extremely important to Idealcombi.

Idealcombi

Idealcombi produces Denmark's widest range of products in facade solutions with windows and doors in timber|aluminium with **idealcore™**. Through our 6 individual product lines, we offer our customers high-quality facade solutions for all types of construction projects – primarily within renovation, construction of new buildings and extensions. Our product designs range from classical, simple and timeless styles to contemporary, slim and functional lines.

An innovative company

Innovation is at the core of our work at Idealcombi, and we continuously target our efforts to be at the forefront in terms of developing windows and doors that meet the requirements of the present and the future – our most important parameters are design and function, low energy consumption and the most environmentally friendly manufacturing processes possible.

At Idealcombi we use many resources to continuously develop windows and doors that meet the requirements of users and architects in terms of design and function. We regularly invest in high-tech production equipment that ensures both consistently high product quality and an effective production process using the most environmentally friendly manufacturing methods available.

Customers, employees and values

Our customers are the foundation of Idealcombi's business, and we base our advice to and dialogue with our customers on accessibility. Along with our customers, Idealcombi's employees are our most valuable asset. Ultimately, the motivation and high level of professionalism of our employees ensure that we supply products of the highest quality. It is thanks especially to the efforts of our employees that Idealcombi finds itself among the leading window manufacturers in Denmark.

Idealcombi has defined a set of values that form the basis for the culture which prevails in our company and which we wish to see expressed around us. These values include the concepts of | Quality | Innovation | Sincerity | Responsibility| and they are essential to Idealcombi, both as a workplace and a business partner.

Mikael Søgård
Chief Technical Officer, Owner

Martin Søgård
Chief Financial Officer, Owner



” *Idealcombi strive every day to develop and produce the best products on the market.*

Quality is at the core of everything we do

The basic purpose of a window is to allow light to enter from the outside, while the basic purpose of a door is to provide access between the inside and the outside. The two form the framework of our daily work at Idealcombi, and every day we strive to develop and produce the best products on the market. But windows and doors are much more than that.

Quality

Being an Idealcombi customer should be simple. Quality is at the core of everything we do, and we want to make sure our work processes, materials, advisory services, products and delivery are all characterised by this concept of quality. We want our customers to see us as a dependable and equal partner, and we do our utmost to offer the best products and the best advice. It's as simple as that.

Design

One of Idealcombi's clearly defined objectives is for the internal and external design of our products to always be consistent with the historical or futuristic architectural design of the building. We aim to create a broad enough range in terms of product design and options to enable us to match any project from rustic half-timbered houses to modern waterfront building projects.

Comfort and quality of life

Idealcombi's windows and doors must be user friendly and contribute to improved quality of life by minimising cold draughts from window panes and by requiring only minimal maintenance. A broad range of functions and operating options makes it possible for our customers to choose precisely the window or door that meets their individual requirements. Ventilation positions and easy-clean hinges not only ensure a healthy indoor climate and easy cleaning, but also make our windows and doors more resistant to intruders.

Naturally it is all about providing our customers with quality as well as simplicity.

Future generations and the environment

Environmental considerations are rightly gaining an increasingly prominent position in our society, legislation and consciousness. It is imperative for Idealcombi that we do our part to accept our common environmental responsibility for future generations in the workplace as well as in production.

Idealcombi is ISO 14001 certified and makes a concentrated effort to ensure that our production processes have the lowest possible impact on the environment – as you will see in our environmental folder, which details the specific areas in which we have defined our requirements for an environmentally friendly workplace and production facilities.





A strong team

Having quality products is an essential ingredient for the company but not the only ingredient. At Idealcombi we also pride ourselves on professionalism amongst our employees to ensure we fully understand our customers designs and requirements and give feedback/advice based on our market and construction knowledge ensuring best communication throughout. Our aim is to offer the best service with the best product.

A safe investment

Each partnership we enter into is about much more than windows. It is also about security, dependability and improved cost efficiency. We have therefore also chosen to focus on other parameters related to our products which play an important role for our customers in achieving the optimum benefit from their investment in our products.

We look at these parameters as a ring of conditions revolving round the actual product, which makes choosing Idealcombi a choice of partner rather than just a supplier.

The parameters include on time delivery and service, minimal maintenance, long product life, solid guarantees and energy-efficient constructions. These factors combine with our comprehensive range of six product series to ensure improved cost efficiency for our customers.

Giving customers best advice

We focus on all projects from single one-off houses through to major build developments and refurbishments. We are solution orientated and base our advice on profound know-how and a solid experience of several decades.

Idealcombi's products and employees are the key to your solution. Your expertise combined with our own constitute, a strong foundation of knowledge to be used to create the right solution to any project.

Claus Winther, COO



” *All Idealcombi product lines are built with a high level of security. The window and door fittings are extremely sturdy, giving a high level of protection against burglary*

Security as standard

If the thief wants in, he will find a way. Security features are therefore specifically about making it as difficult as possible for the thief. The more time-consuming, difficult and noisy it is to force a window or a door open, the higher the chance that he will give up. Safety measures are standard in all of Idealcombi's one-handle series.

Bolts and keeps

The mushroom bolts which are part of the espagnolette locking of the window and the keeps make sure that the element is tightly closed. Windows and terrace doors are equipped with adjustable mushroom bolts and solid security keeps while the entrance doors have solid forged hook bolts and adjustable security keeps. The security keeps for windows as well as doors are designed specifically for the bolts and are mounted with front screws as well as inclined screws in the frame which strengthens the keep against twists and strains. The bolts and keeps are continuously adjustable so the correct locking pressure can be found. This ensures an optimal tightness between sash and frame.

Three locking points in all doors

As standard, all of Idealcombi's entrance and terrace doors are equipped with an espagnolette lock and 3 locking points. The three-point locking seals the door and secures it effectively against burglary. The entrance doors are also equipped with a hook bolt in the middle of the espagnolette by the rebate in the lock case which makes it even harder to break open the door.

Secured by Design

Approved Document Q sets out the minimum standard for windows and doors being installed in all new dwellings and extensions. Windows installed which are easily accessible i.e. ground floor/basements, must meet or exceed the security requirements of PAS 24:2016. This requirement is designed to ensure windows and doors resist physical attack by a casual or opportunist burglar by being sufficiently robust and fitted with appropriate hardware. To ensure compliance, Idealcombi are members of the UK Police initiative 'Secure by Design', which ensure all tested products are third party accredited.





” *Entrance doors with raised and fielded panels now fully reflect the authentic timber panel door while offering all the added advantages of maintenance-free units*



Raised and fielded aluminium panels

Raised and fielded panels have traditionally been used in timber doors as a decorative panel where glass is not desired. For years it has been necessary to compromise this feature in the case of combined aluminium|timber doors and instead provide so-called pyramid panels or flat panels which do not reflect the original style of a raised and fielded timber panel.

Raised and fielded panels for combined aluminium|timber entrance doors are now available as a profiled aluminium board with a foam core and an internal raised, fielded and painted MDF board. Entrance doors with raised and fielded panels now fully reflect the authentic timber panel door while offering all the added advantages of maintenance-free units.

Raised and fielded aluminium panels are available in our 15 standard colours for the Frame IC and Nation IC product lines.

” *Idealcombi supplies windows and doors featuring built-in motorised window openers*

Natural ventilation

What is natural ventilation?

One of the most important ways to ensure a healthy indoor climate is through sufficient ventilation. Ventilation should take place with as little inconvenience as possible for the users of the building and with the lowest possible energy consumption. By utilising the natural forces created by temperature and pressure differences between outdoors and in, a highly energy-efficient mode of ventilation can be achieved which benefits both the operating economy of the building and the environment.

Automated regulation ensures a natural balance

Natural ventilation through windows is exploited most easily through automated regulation of the indoor climate. The system constantly monitors the indoor climate and intervenes by opening and closing windows using motorised openers, ensuring that the indoor climate meets the pre-defined needs. Today, automated ventilation systems are increasingly used in offices, institutions and other large buildings. Modern architecture can greatly benefit from natural ventilation in the design of spaces and with regard to today's higher comfort requirements and increasing focus on energy consumption.

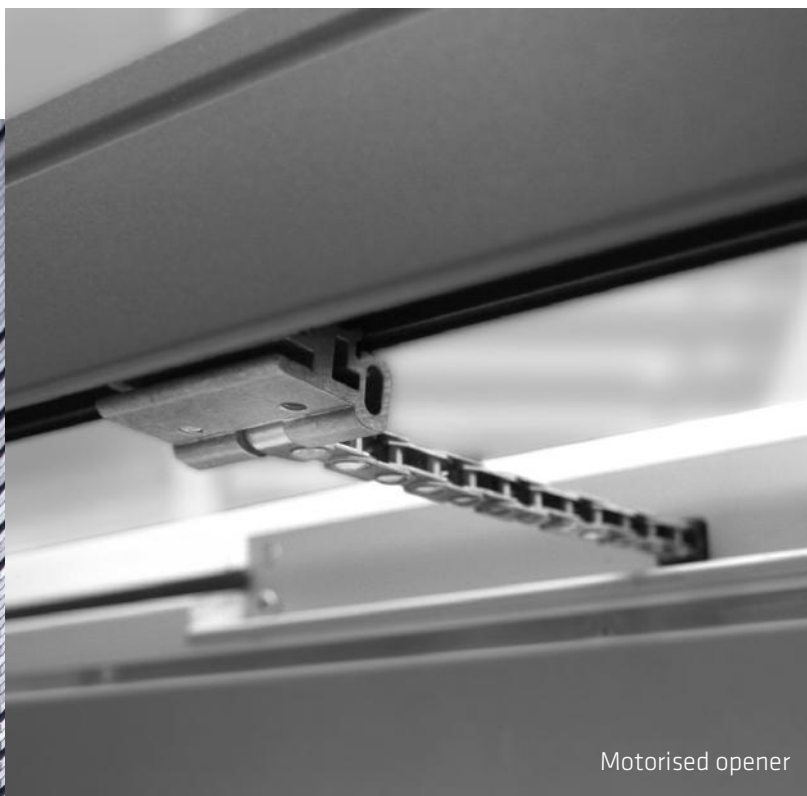
The natural solution from Idealcombi

Idealcombi supplies windows and doors featuring built-in motorised window openers, whereas the required control and installation are agreed between the customer and the supplier of the ventilation system or electrician. Natural ventilation is available for the product lines Frame IC, Frame I Nation IC, Nation I and Futura⁺. In practice, the system is constructed by mounting motorised window openers inside or on window or door frames. The window openers are subsequently attached to a control system according to the customer's requirements.

In the Futura⁺ range, the motorised opener is hidden within the frame. Thus the system is not visible from the outside or inside, making it possible to combine automatically controlled elements with ordinary fixed frames and sashes, or frames and sashes which can be opened manually, without any noticeable functional difference.

For Futura+i, Frame IC, Frame I, Nation IC and Nation I the motorised opener is mounted on the frame and therefore visible.





Motorised opener

Catalogue and web

Idealcombi's Architect Catalogue

Idealcombi's Architect catalogue is a toolbox and a source of inspiration for professionals who plan and implement projects in the building industry.

The catalogue includes Idealcombi's comprehensive standard programme of six product lines. It provides useful technical details on minimum/maximum measurements, fire escapes, accessories and standard measurements for individual types of windows and doors. You will also find functions, divisions and assembly instructions.

In addition, the catalogue gives you an introduction to spandrel elements, natural ventilation, colours, glass and much more, which we hope will be a source of inspiration.

Idealcombi supplies a wide range of solutions which contribute to creating architecturally beautiful and functional facades.

products.idealcombi.com

Idealcombi's product website is an electronic toolbox containing all the information which cannot be shown in the printed catalogue. The website and catalogue are similar in structure, making it easy for you to always find the exact information or drawing you require. The catalogue shows a wide and representative selection of the solutions offered by Idealcombi. On our website you will find them all. It is also possible to download REVIT files and cutaway drawings in DWG and PDF formats for use in your daily work.

Advise and dialogue

The employees in Idealcombi's sales departments are your partners and advisers. They all possess high professional expertise and competence within the building industry. Throughout the entire process, they are available with advice and professional solutions for both small and large-scale projects. You are always welcome to contact our sales departments with any questions you may have.

Sales department UK

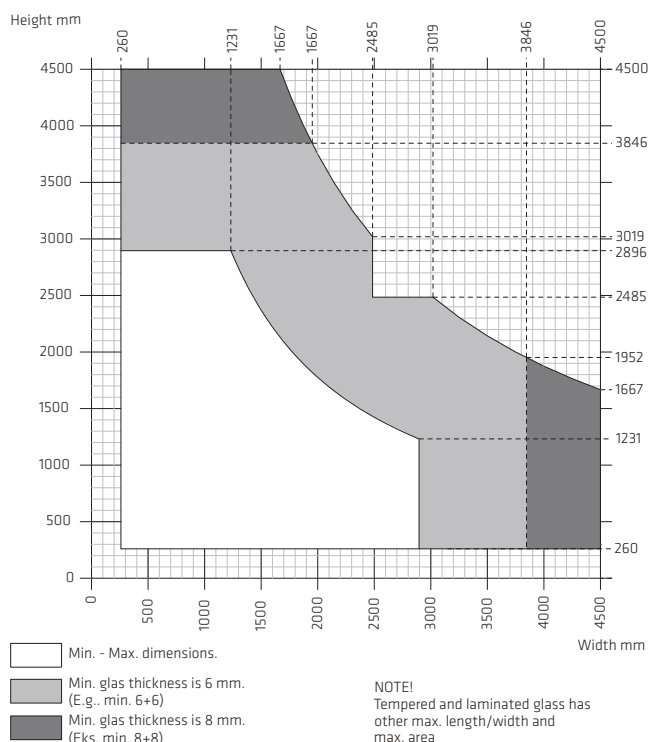
uk@idealcombi.com

Tel.: 01582 860 940

products.idealcombi.com

www.idealcombi.com

Concepts and diagrams



Minimum/maximum measurements

All Idealcombi products are supplied with diagrams indicating minimum and maximum measurements for the individual units.

For doors, clear opening calculations are indicated.

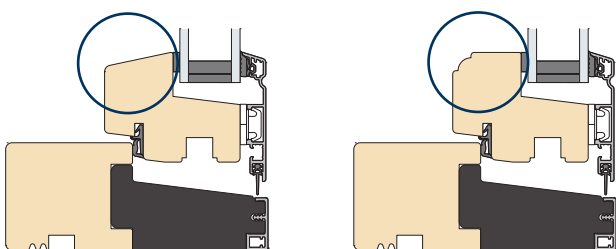
All diagrams can be downloaded for printing at products.idealcombi.com

Technical drawings

The technical drawings in the catalogue are not to scale. 1:1 scale drawings can be downloaded at products.idealcombi.com. All technical drawings are available in DWG and PDF file formats.

Profiling

In the Frame IC, Frame I, Nation IC and Nation I product lines, units are available with or without profile moulding. Below you can see the clean, simple and contemporary profiling and on the right the aesthetic, classic and traditional profiling (quarter round).



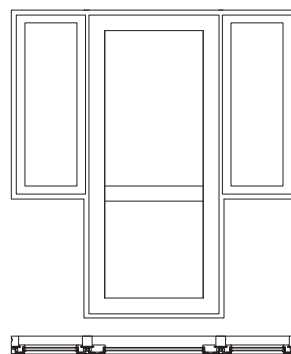
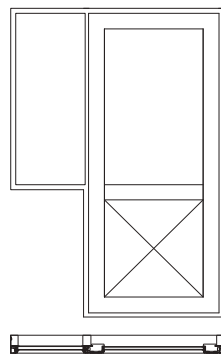
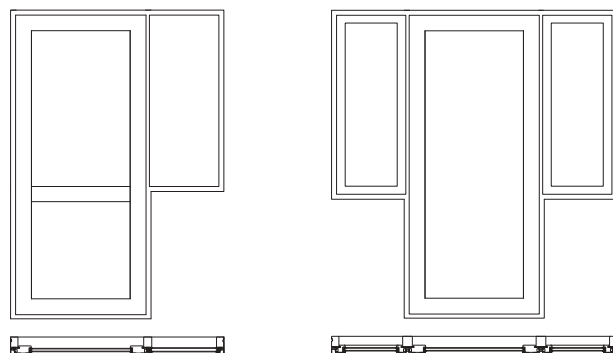
Front views

The front views on individual product pages are only a selection of the available options for unit proportioning. The front views are intended as a source of inspiration; a complete list is available at the back of the catalogue.

All units can be divided by mullions or transoms to create the desired architectural impression – there are many more possibilities than are shown in this catalogue as we produce units to individual order.

Inward opening doors with side/fan lights

We supply combined units with reversed rebate in-out and in a variety of heights.



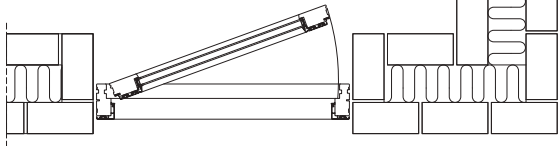
Standard accessories and fittings

The product pages show standard accessories and fittings for units. Additional accessories are shown in groups after each product line.

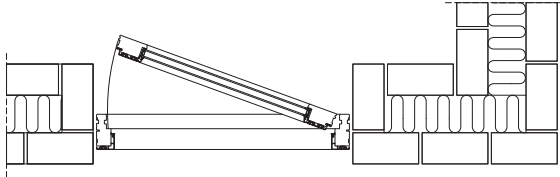
Hinges

When placing an order, it is important to specify whether the units are right or left hung. All drawings of Idealcombi product combinations show the view from outside.

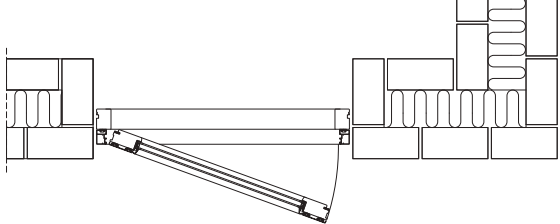
Right in



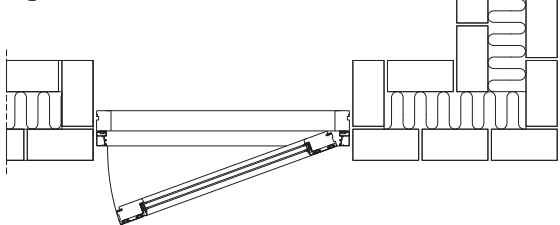
Left in



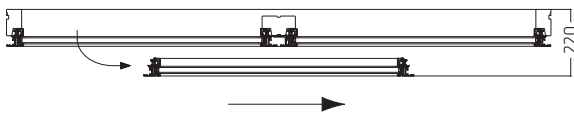
Left out



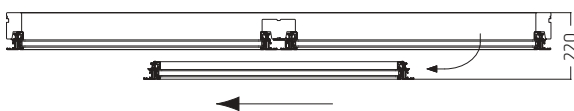
Right out



Futura⁺ sliding door opening right - seen from outside

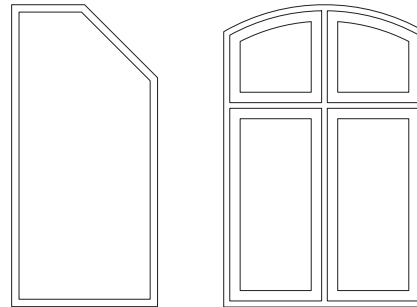


Futura⁺ sliding door opening left - seen from outside



Special units

We supply special units with slanted sections, curved heads or completely round windows.

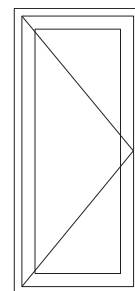


Note that not all units are available with opening sashes, but only as fixed windows.

Idealcombi Futura⁺ and Futura+i are not available as curved and circular windows.

Ordering

This is how a handle position is indicated in a front view when making enquiries or placing an order.



NOTE: The chevron points to the handle side of the sash

Unit positions are specified in numerical order from the lower left corner, moving right and up.



We are proud to be passionate

” *Therefore, it is nice to be part of an innovative company that helps to push the limits of the products, and obtain respect and recognition from the outside.*

As director with responsibilities of Sales, Marketing and Service in Idealcombi it is my job to be a good bridge between Idealcombi's external colleagues and our customers and partners. My primary task is to listen to them, understand them and thus help to create the structures and contexts, needed to achieve the best partnering experience. We employ passionate individuals across the entire organization, that go to work not only to offer the best windows and doors, but also the best advice and service for our partners.

Therefore, it is nice to be part of an innovative company that helps to push the limits of the products, and obtain respect and recognition from the outside.

Claus Winther, COO
Sales, Service and Marketing



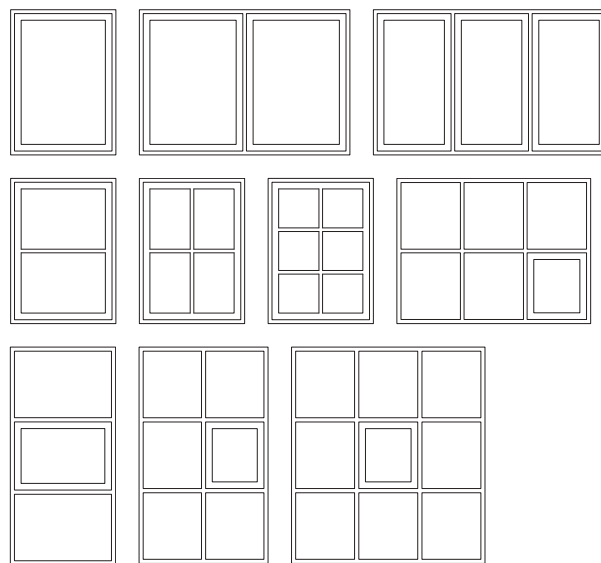




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Top Guided



Use

Top guided windows are mostly used on low rise buildings and multi-storey structures with balconies where the windows can be cleaned from outside and good ventilation is required.

Function

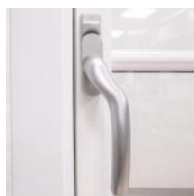
The opening mechanism in a top guided window is located in the window jambs.

Upon opening, the bottom of the sash moves outwards whilst the top is drawn downwards, thus producing better ventilation. The top guided window is equipped with safety keeps and espagnolette with adjustable mushroom bolts.

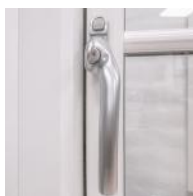
Standard ironmongery and accessories



Handle



Handle with safety catch



Locking handle



Mushroom bolt



Opening restrictor



Keep



PN safety catch with restrictor



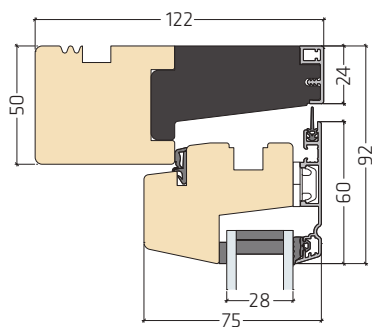
Trickle vent



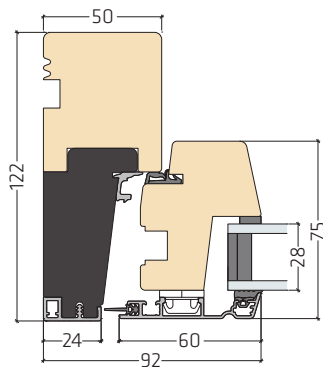
Safety catch

Minimum/maximum dimensions

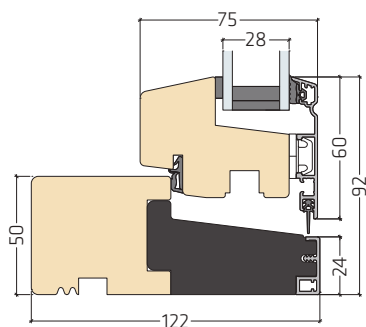
Head



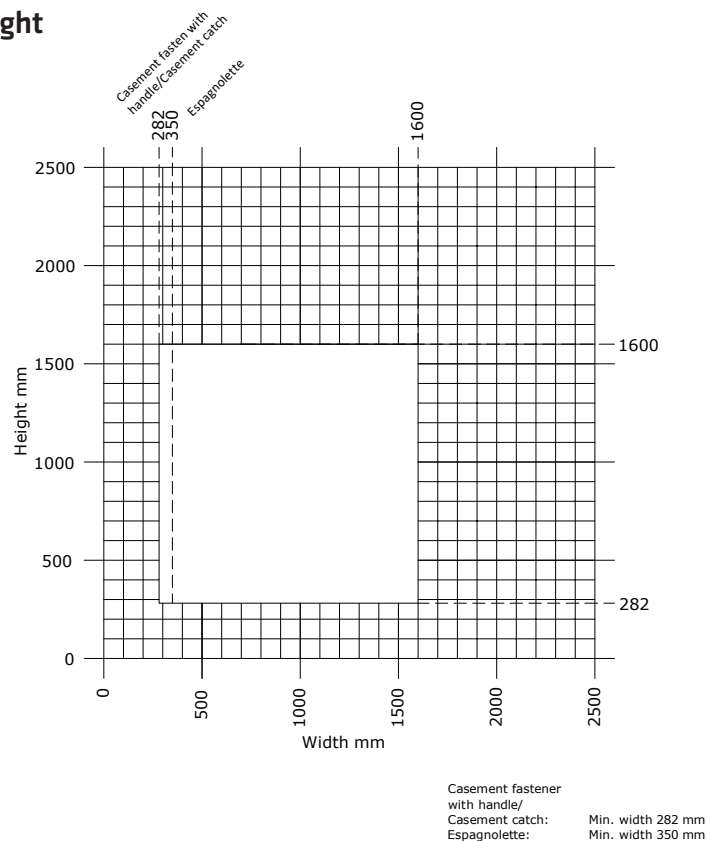
Jamb



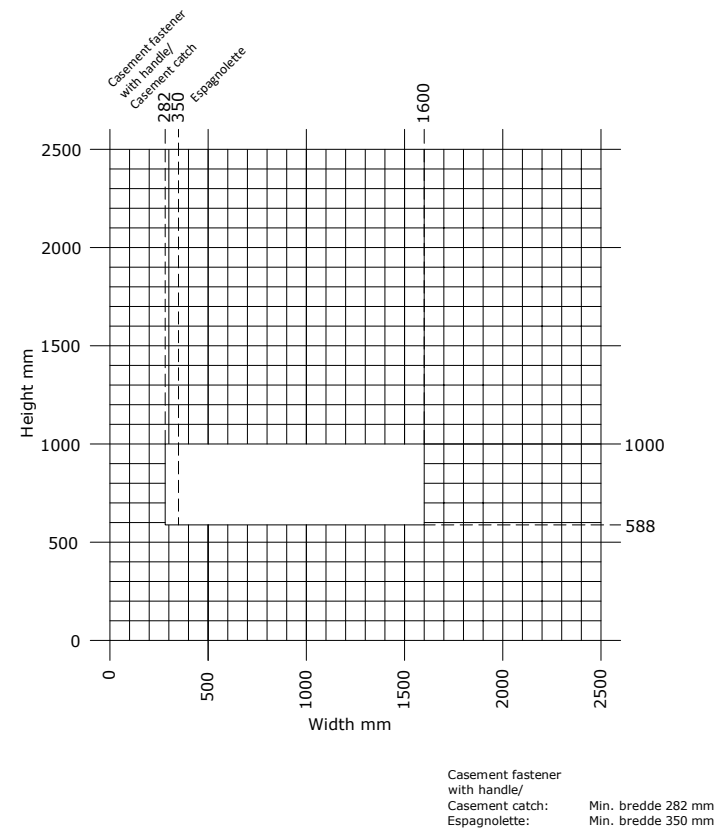
Sill



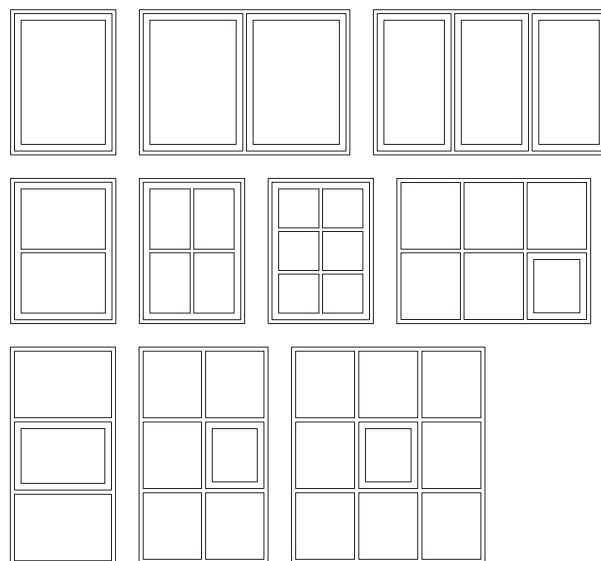
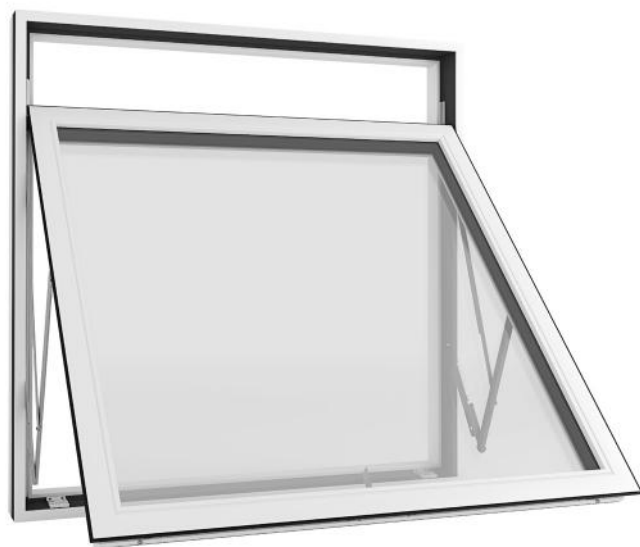
1-light



1-light with double friction



Top Swing Reversible



Use

Top swing windows are most commonly used in multi-storey structures and in single storey buildings where cleaning from the inside is necessary. By reversing the sash it makes this the safest and most useful type of window for cleaning from inside a building.

Window is equipped with a safety catch that restricts opening. The sash can be swung through about 170° and held in place securely in the reversed position so that the outside glass can be reached from the inside. The sash is held shut by a single handle that operates a multi locking point espagnolette with a night vent position.

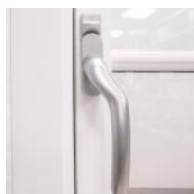
Function

Top swing windows are constructed with a top reversible hinge with the mechanism mounted in the jambs of the sash. The

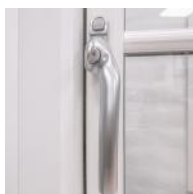
Standard ironmongery and accessories



Handle



Handle with safety catch



Locking handle



Mushroom bolts



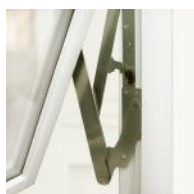
Trickle vent



Keep



PN safety catch with restrictor



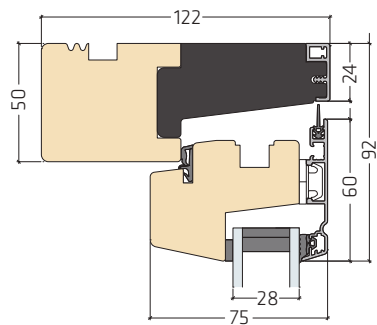
Reversible hinges



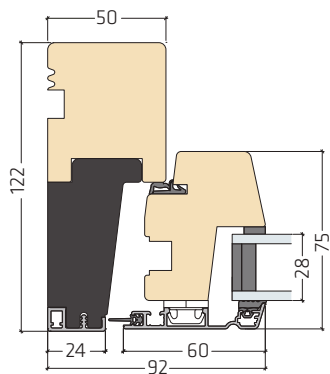
Easy clean hinges and restrictor

Minimum/maximum dimensions

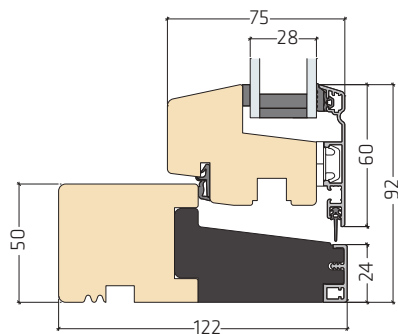
Head



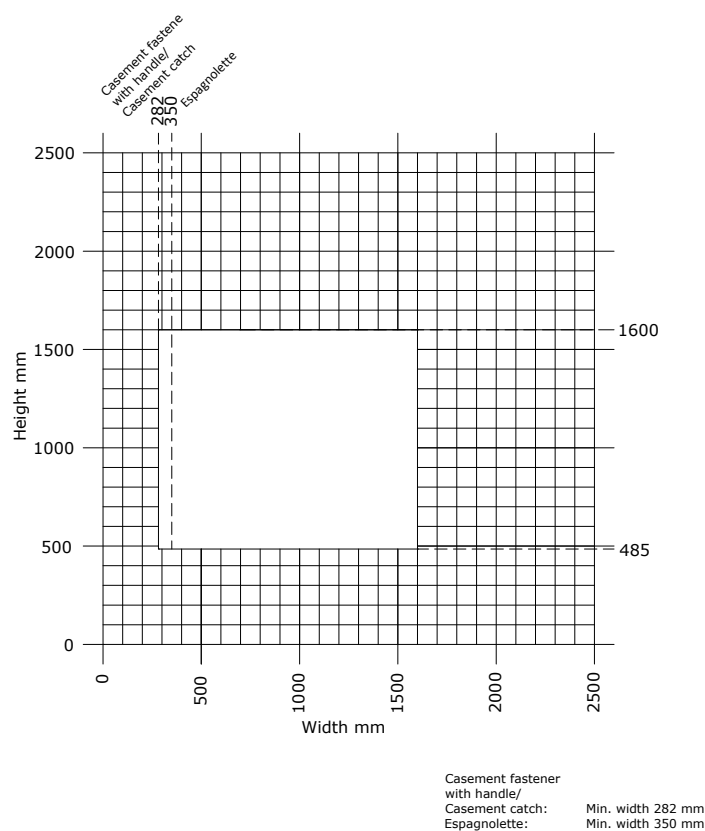
Jamb



Sill

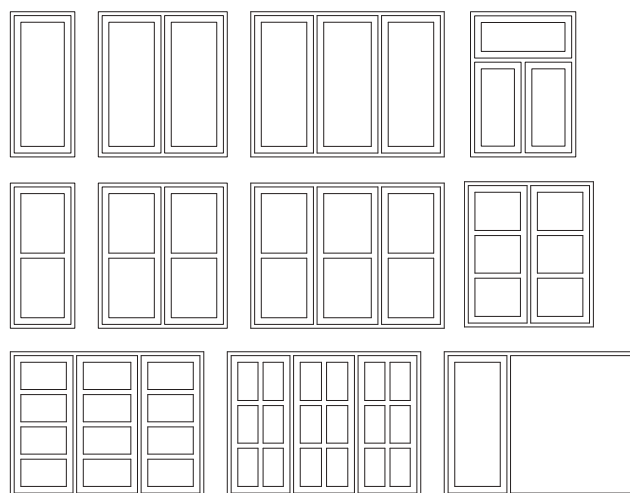


1 light



Min. - Max. dim

Side Hung



Use

Side hung windows are used in all types of building and are the most traditional opening method. Side hung opening is the most practical choice for escape windows.

Function

Side hung windows are hinged from the jamb using height adjustable butt hinges. The window is locked with a handle that operates a multi locking point hook bolt mechanism and has a

night vent position. The handle also operates a friction brake to hold the sash whilst in the open position. A floating mullion is available on windows with pair of side hung for one clear opening width. The master leaf is operated by a handle and the slave leaf is held by flush bolts.

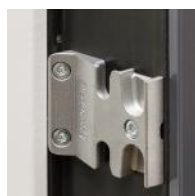
Standard ironmongery and accessories



Handle



Mushroom bolts



Keep



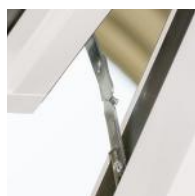
Locking handle



PN safety catch with restrictor



Trickle vent



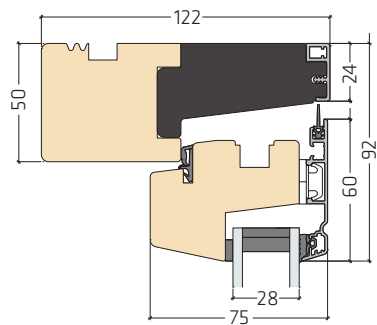
Opening restrictor



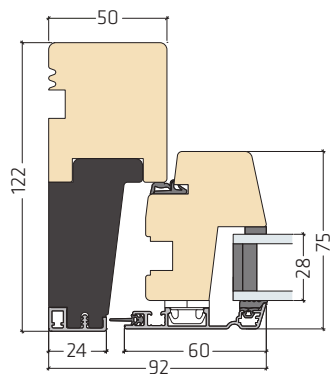
Flush bolt

Minimum/maximum dimensions

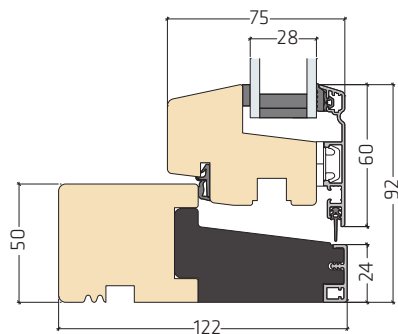
Head



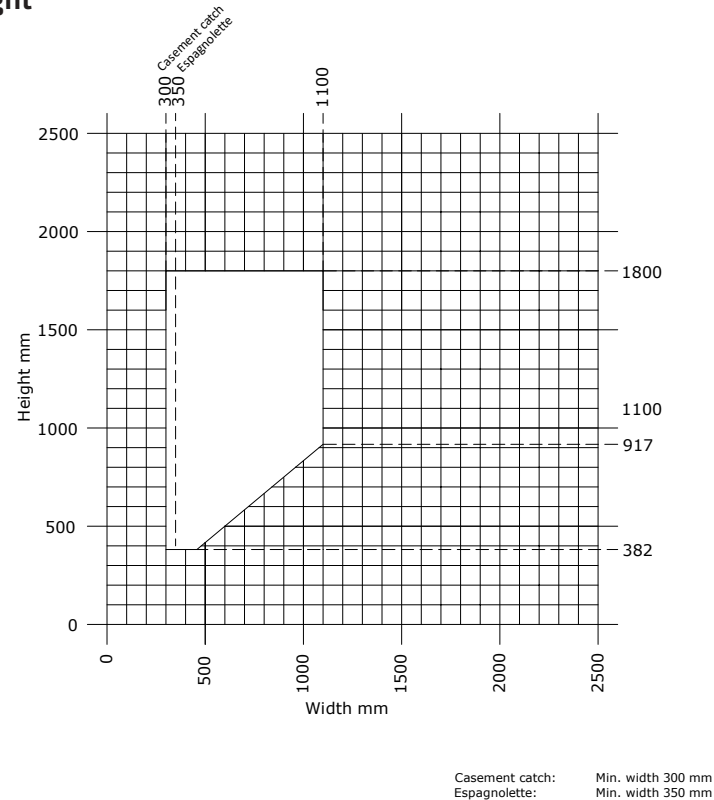
Jamb



Sill

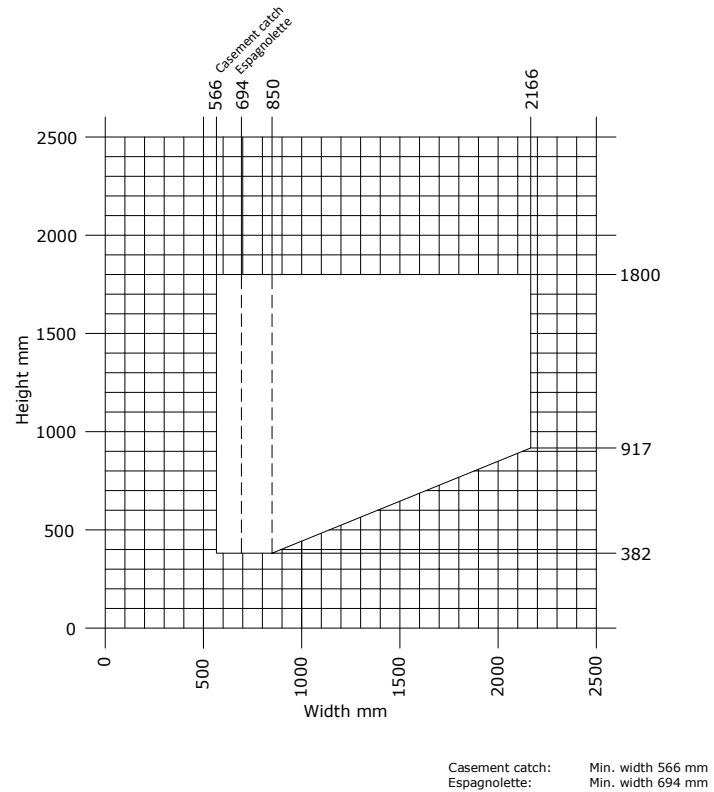


1 light



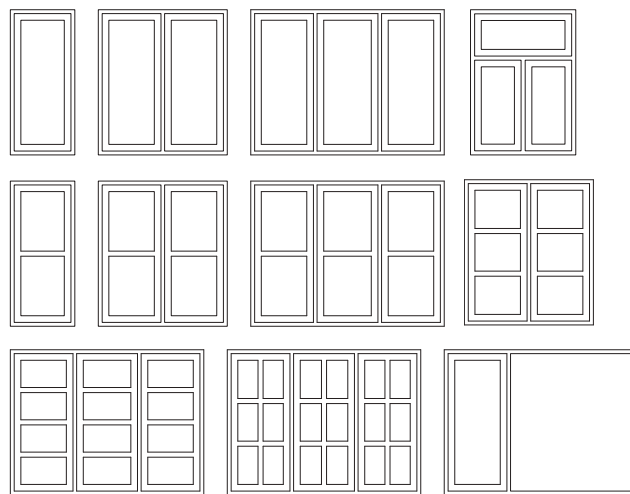
Min. - Max. dim

2 lights with floating mullion



Min. - Max. dim

Side Guided



Use

Side guided windows are used in all types of buildings but primarily in multi-story structures where cleaning can only be achieved from the inside of the building.

Function

The side guided hinges turn the sash through 90° drawing the hinge edge of the sash towards the middle of the frame. The 100 mm gap created allows cleaning from inside of the building. The sash is held shut by a single handle that operates a multi-locking

point hook bolt system with a night vent position. Friction slides in the head and sill maintains the open position. A floating mullion is available on windows used in pairs for maximum opening widths. The master leaf is operated by a handle and the slave leaf is held by flush bolts.

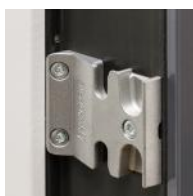
Standard ironmongery and accessories



Handle



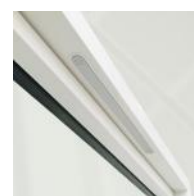
Mushroom bolts



Keep



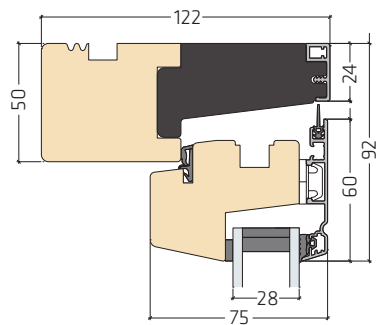
Locking handle



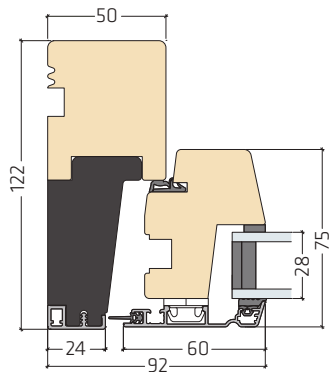
Trickle vent

Minimum/maximum dimensions

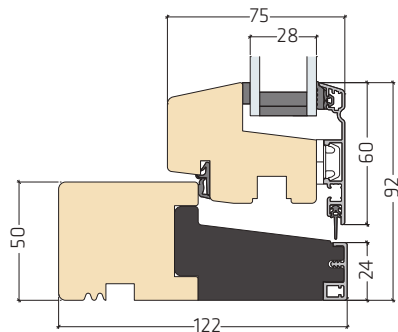
Head



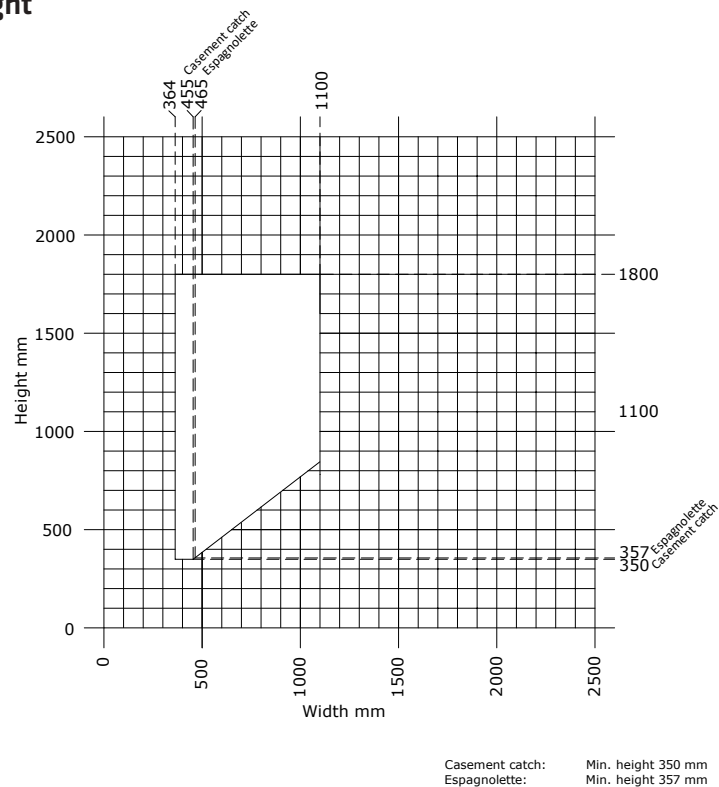
Jamb



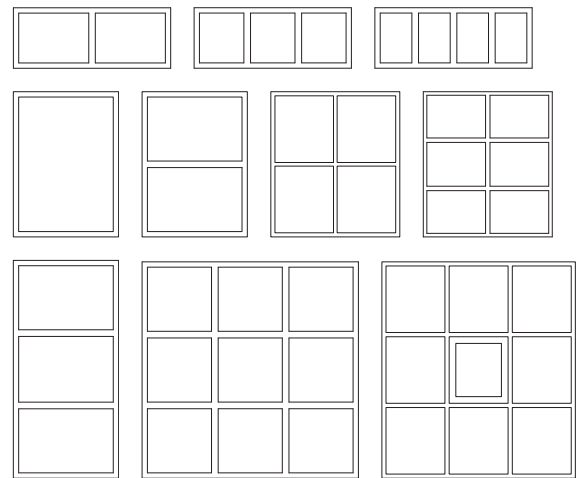
Sill



1 light



Fixed Light



Use

Fixed lights are often used in combination with opening sashes. The fixed light is only used as a light source in the fenestration of the building or as a spandrel panel with opaque glass to create a false window.

Function

Fixed lights consist of glazing mounted directly into the frame without any kind of opening function.

Standard ironmongery and accessories



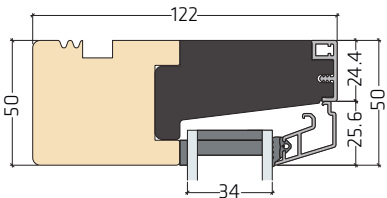
Trickle vent



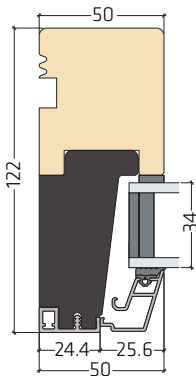
External canopy

Minimum/maximum dimensions

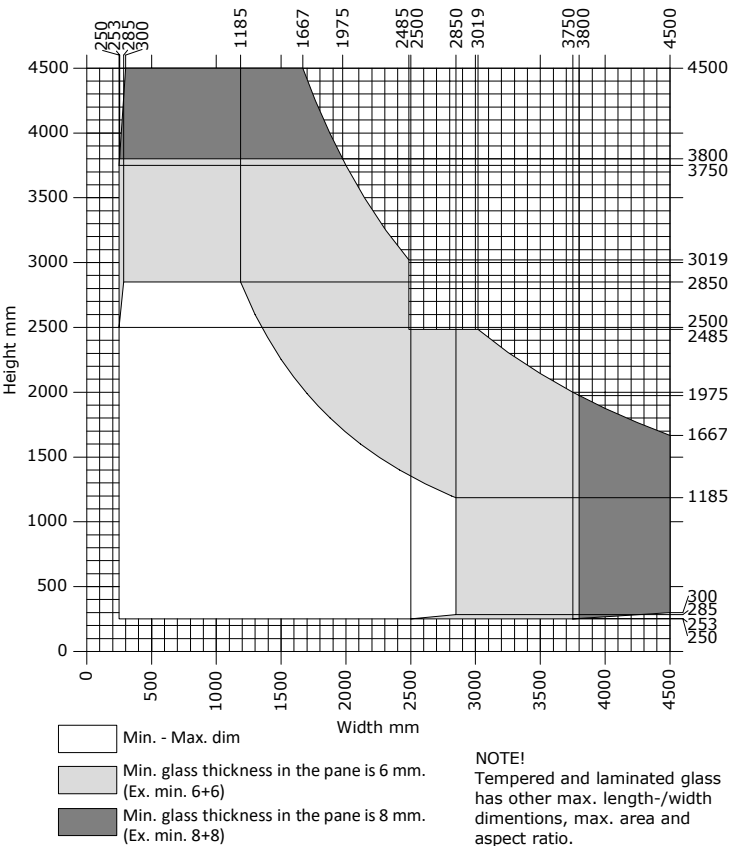
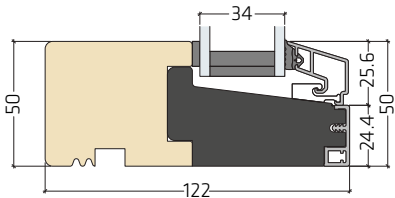
Head



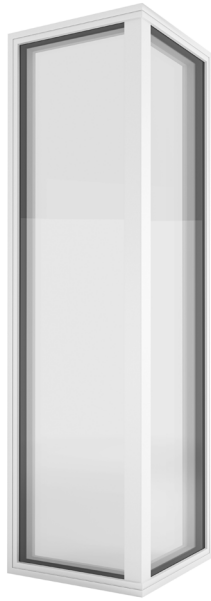
Jamb



Sill



Glass to Glass Corner



Use

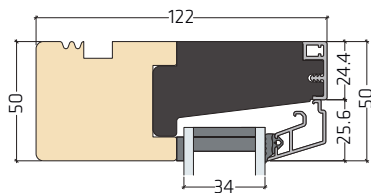
The glass to glass corner unit is used as an architectural feature where maximum light can penetrate the structure from two sides avoiding heavy looking profiles. This is essential for areas where the view from the building should be emphasised.

Function

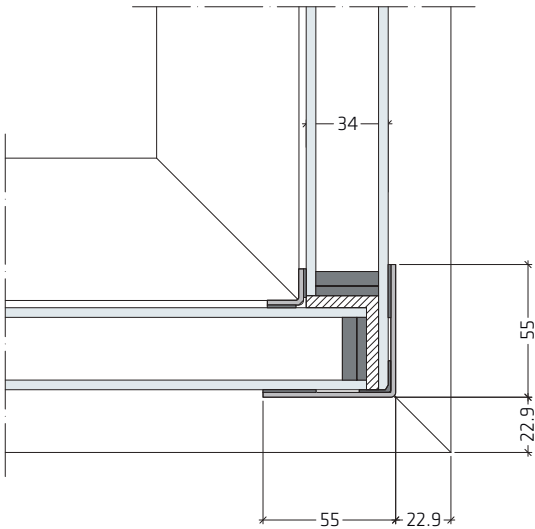
The glass to glass corner is essentially a fixed light with two panes of glass jointed vertically at 90° to each other. This is not a load bearing frame.

Minimum/maximum dimensions

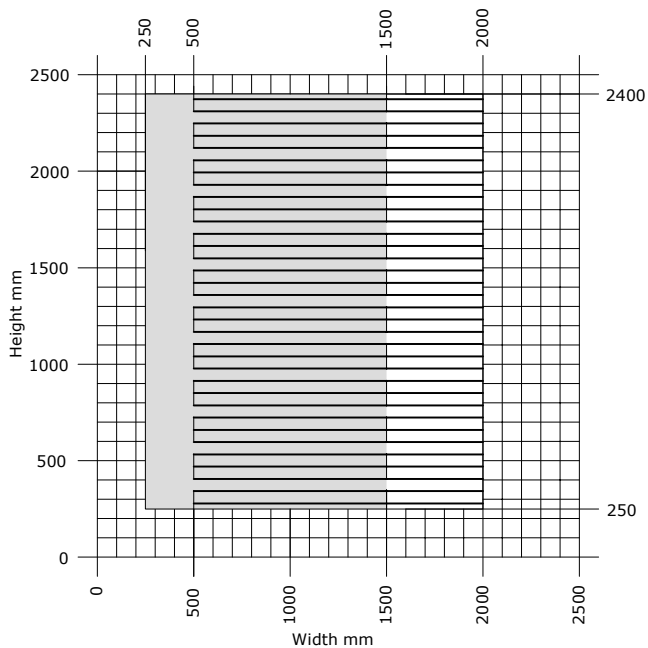
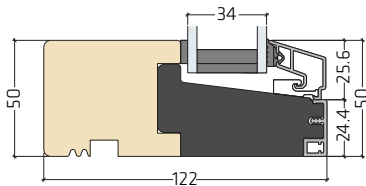
Head



Jamb



Sill



- Min. - Max. dim side 1
- Min. - Max. dim side 1+2

Louvre Shutter

Frame IC

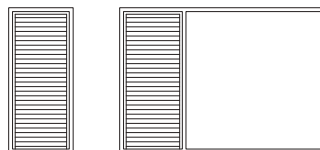
Frame I

Nation IC

Nation I

Futura+

Futura+i



Use

The Louvre shutter is an architectural element used in buildings where ventilation is required, but keeps the building secure from animals and intruders.

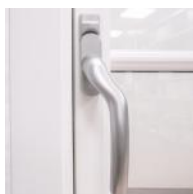
Function

Louvre shutters are fixed frames with a louvre cassette to the outside and an insulated inner hatch that opens from the inside. The inner hatch is side hung on height adjustable butt hinges and is secured by a handle that operates a multi-locking point mechanism. An insect mesh is built in behind the louvre as standard. The internal hatch can be omitted if required.

Standard ironmongery and accessories



Handle



Locking handle



Handle with safety catch



Hoppe handle



Louvre shutter - exterior



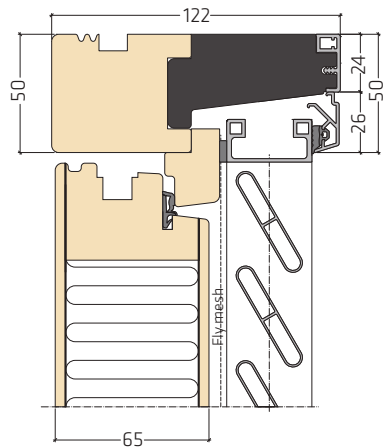
Insect mesh



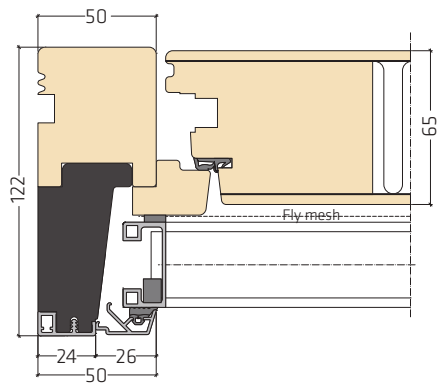
Hinge - Interior

Minimum/maximum dimensions

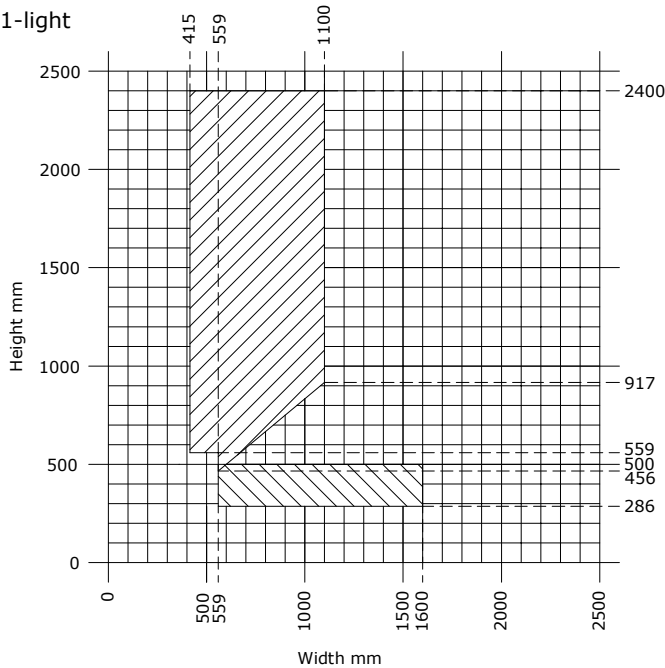
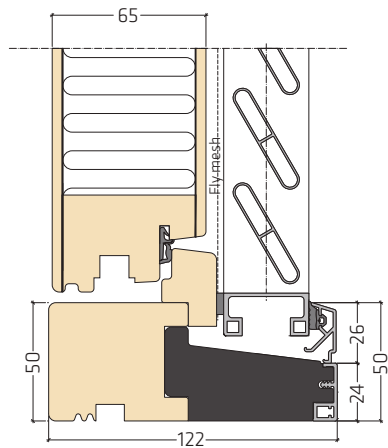
Head





Jamb



Sill



-  Sidehung hatch. Min. - Max. dim.
-  Bottomhung hatch. Min. - Max. dim.

Outward Opening Entrance and Stable Door

Frame IC

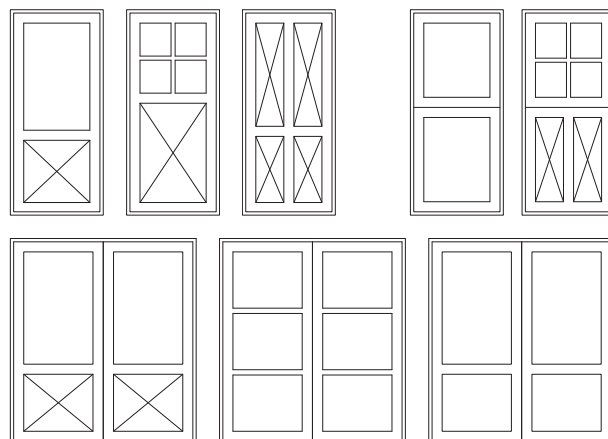
Frame I

Nation IC

Nation I

Futura+

Futura+i



Use

The outward opening entrance door is used for direct access to the outside from, for example, a utility room, hall or porch in buildings where the outside area permits this. It is suitable for a room with minimal space and is the preferred choice for fire exits with appropriate ironmongery. The stable door arrangement is an alternative choice and is used in the same way. The stable door offers additional ventilation, whilst keeping pets and children contained.

Function

The doors are side hung and are locked with a deadbolt, latch and multi-locking point hook bolt mechanism, which is operated by lever handles both internally and externally with lockable cylinders. A thumb turn may be chosen for the inside. Our doors are available with mid-rails, glazing bars, styling bars or panels as required. The single leaf entrance door is available with or without sidelights. Double doors have a French casement floating-mullion.

Standard ironmongery and accessories



Entrance door handle



Strike plate



Hook bolts and mushroom bolts



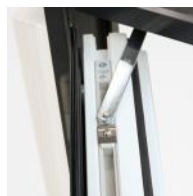
Hardwood threshold



Fibre threshold



Handle with internal thumbturn



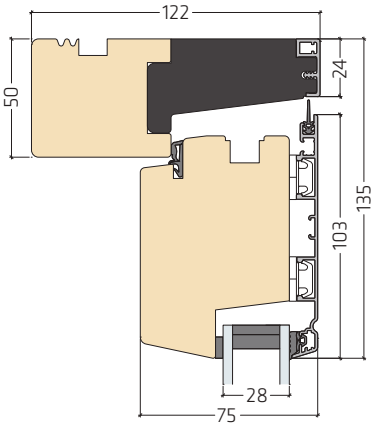
Friction brake



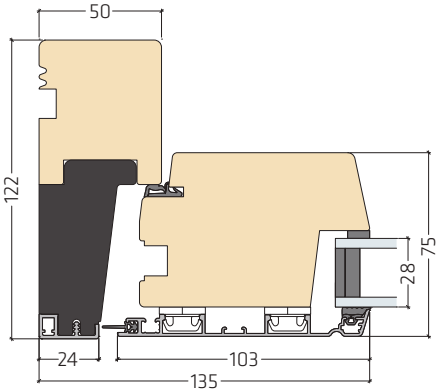
Letterplate

Entrance doors are delivered with handles supplied loose.

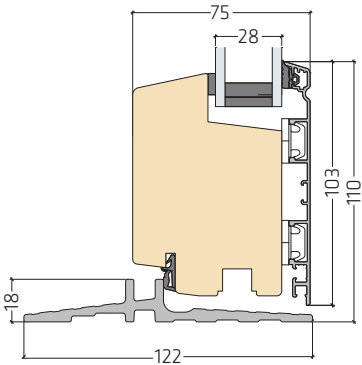
Head



Jamb

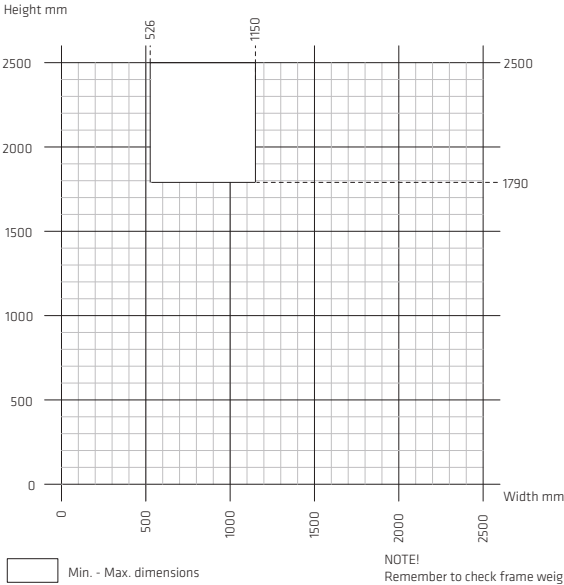


Sill



Minimum/maximum dimensions

Single door

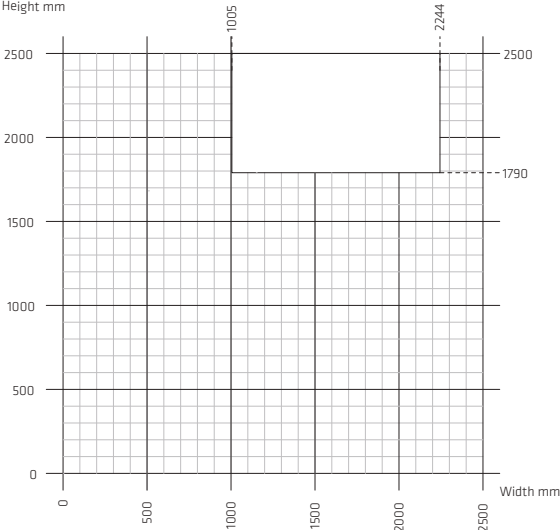


Min. - Max. dimensions

NOTE!
Remember to check frame weight

The clear opening at 90° without handle:
Frame/Frame: Frame width - 161 mm
Frame/66 mm mullion: (Frame/mid mullion) - 144 mm
Frame/76 mm mullion: (Frame/mid mullion) - 149 mm

Double door

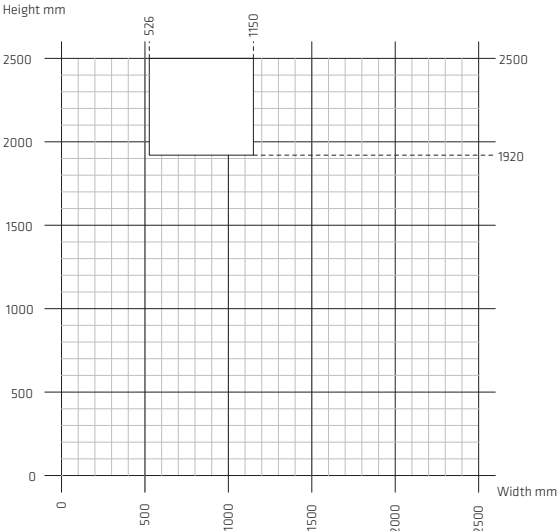


Min. - Max. dimensions

NOTE!
Remember to check frame weight

The clear opening at 90° without handle:
External frame dimension/2 - 133 mm (opening part)
External frame dimension - 224 mm (total clear opening)

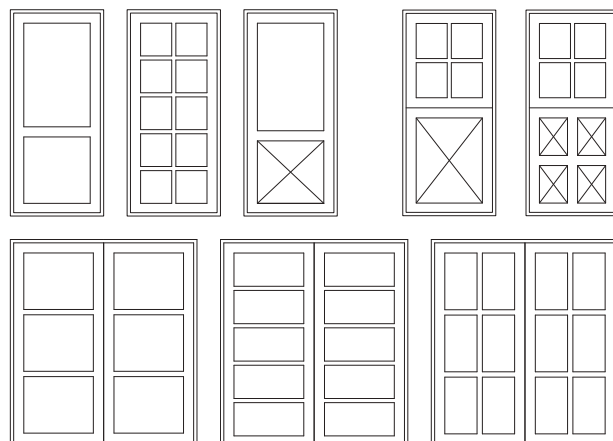
Stable door



Min. - Max. dimensions

NOTE!
Remember to check frame weight

Outward Opening Terrace Door



Use

The outward opening terrace door is used in all types of buildings to access a terrace, patio or spacious balcony. It is suitable for rooms with minimal space and is the preferred choice for fire exits with appropriate ironmongery.

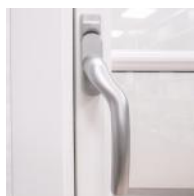
Function

The doors are side hung and are locked with a single handle on the inside that operates a multi-locking point hook bolt mechanism to secure it in the closed position. This also has a night vent position. A built-in friction brake holds the sash once opened. This works by returning the handle to the closed position whilst the door is open. Our doors are available with mid-rails, glazing bars, styling bars or panels as required. The single leaf terrace door is available with or without sidelights. Double doors have a French casement floating-mullion.

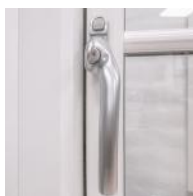
Standard ironmongery and accessories



Handle



Handle with safety catch



Locking handle



Hardwood threshold



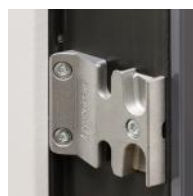
Fibre threshold



Friction brake



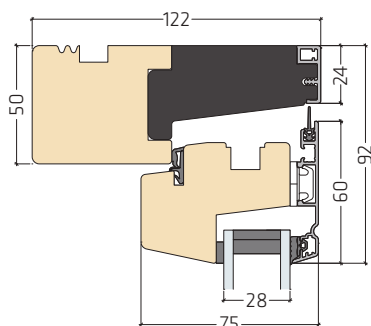
Mushroom bolts



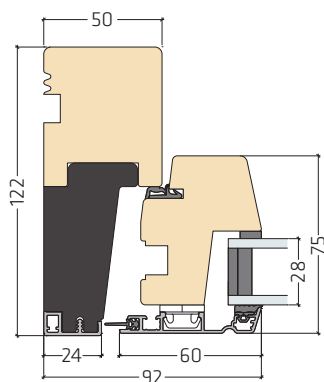
Keep

Minimum/maximum dimensions

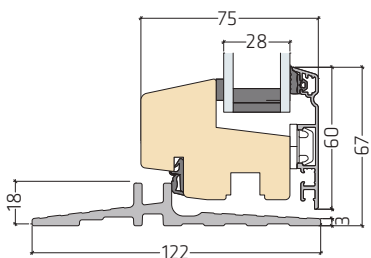
Head



Jamb

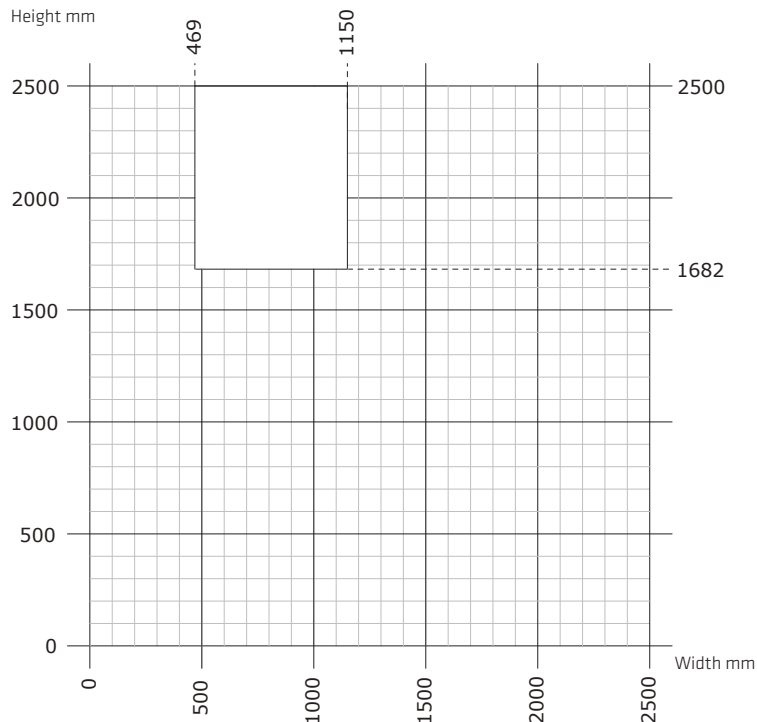


Sill



Single door

Height mm



Min. - Max. dimensions

NOTE!

Remember to check weight

The clear opening at 90° without handle:

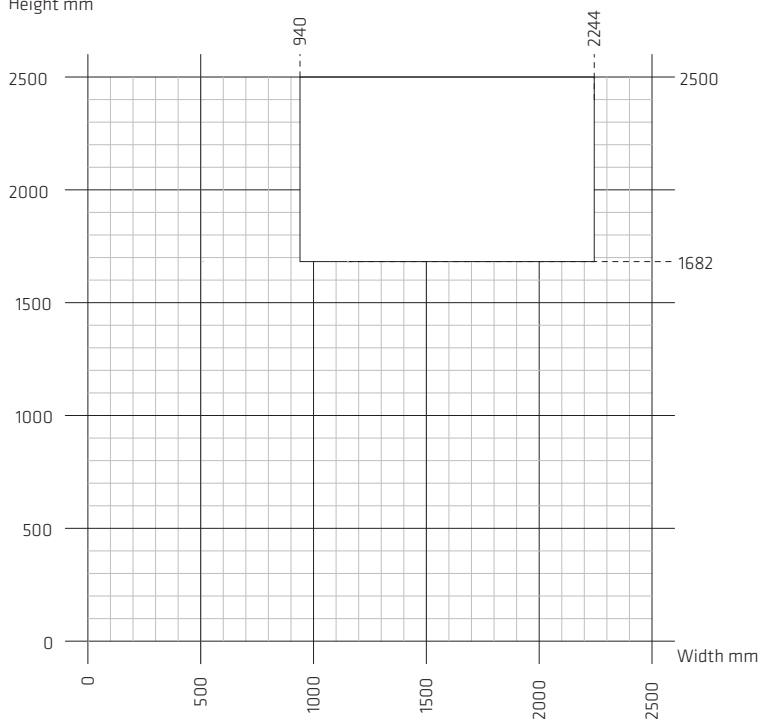
Frame/Frame: Frame width - 161 mm

Frame/66 mm mullion: (Frame/mid mullion) - 144 mm

Frame/76 mm mullion: (Frame/mid mullion) - 149 mm

Double door

Height mm



Min. - Max. dimensions

NOTE!

Remember to check frame weight

The clear opening at 90° without handle:

External frame dimension/2 - 133 mm (opening part)

External frame dimension - 224 mm (total clear opening)

Inward Opening Entrance Door

Frame IC

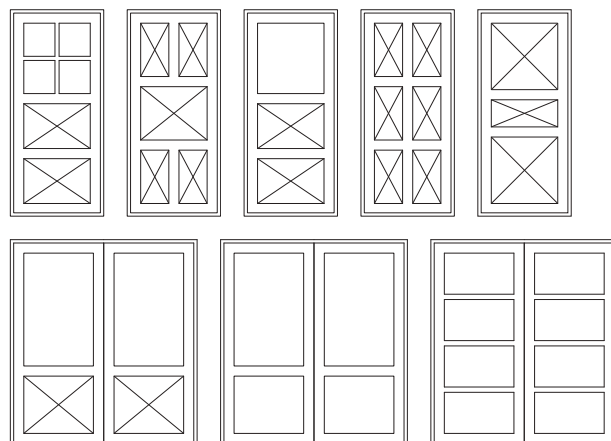
Frame I

Nation IC

Nation I

Futura+

Futura+i



Use

The inward opening entrance door is the most commonly used. They are used in all types of buildings which require direct access to the outside - for example, a stairway, utility room, hall or porch. The door allows passage to the external side, which is very advantageous in facades within densely built-up areas, onto walkways, pavements and circulation areas.

Function

The doors are side hung with powder coated and height adjustable hinges. All Idealcombi panel doors are supplied with a three point hook bolt espagnolette and safety keeps. Along with the two mushroom bolts at the top and bottom this makes the door very resistant to break-ins.

The entrance door comes as single door without side lights and as a double door.

Standard ironmongery and accessories



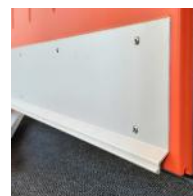
Entrance door handle



Strike plate



Hook bolts and mushroom bolts



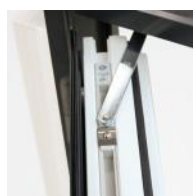
Drip sill



Fibre threshold



Handle with internal thumbturn



Friction brake

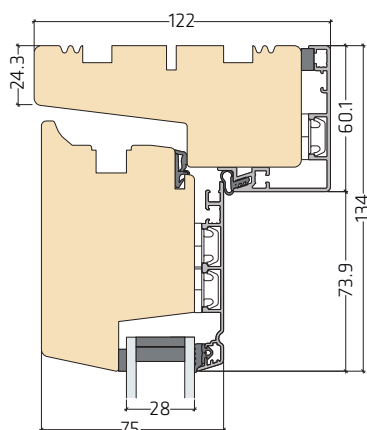


Letterplate

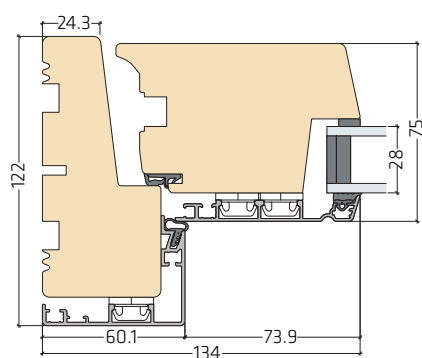
Entrance doors are delivered with handles supplied loose.

Minimum/maximum dimensions

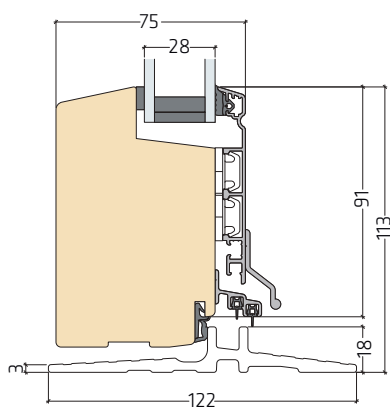
Head



Jamb

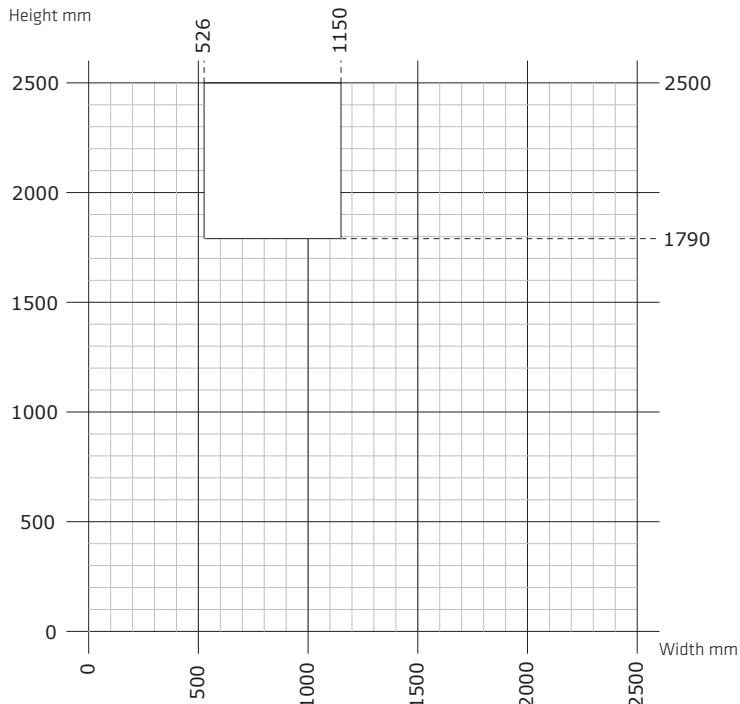


Sill



Single door

Height mm



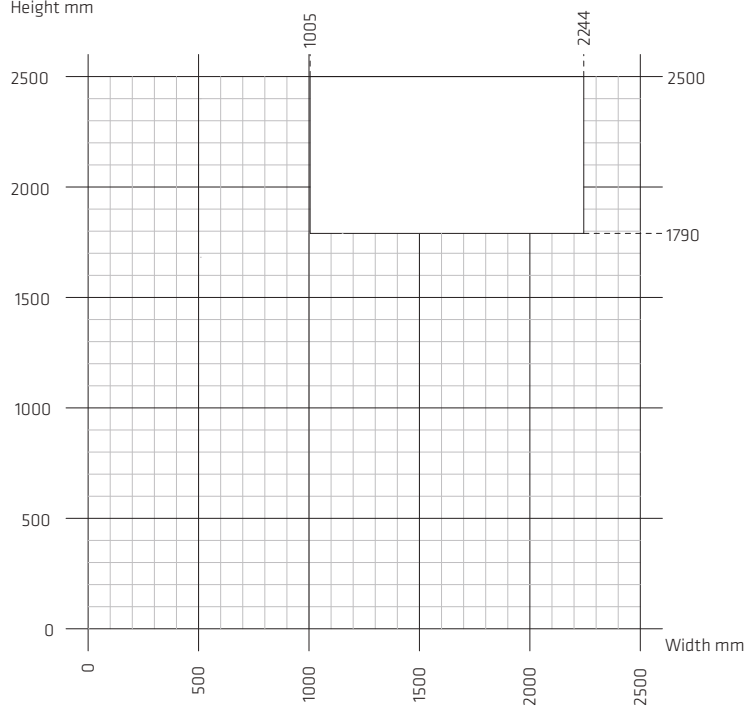
Min. - Max. dimensions

NOTE!
Remember to check frame weight

The clear opening at 90° without handle:
External frame width - 173 mm

Double door

Height mm



Min. - Max. dimensions

NOTE!
Remember to check frame weight

The clear opening at 90° without handle:
External frame width/2 - 146 mm (opening part)
External frame width - 237 mm (total clear opening)

Inward Opening Terrace Door

Frame IC

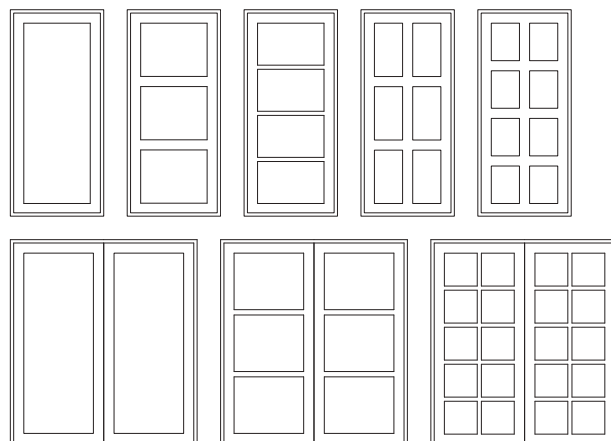
Frame I

Nation IC

Nation I

Futura+

Futura+i



Use

Inward opening terrace doors are used in all types of buildings to access terraces, patios and are essential for French balconies where space is limited. The door allows passage on the external side, which is very advantageous within facades onto walkways and circulation areas.

Function

The Idealcombi Frame IC terrace door is side hung with powder coated and height adjustable hinges. The door is equipped with safety keeps and espagnolette with adjustable mushroom bolts. The terrace door is operated with a single handle on the door leaf and can be locked in any open position for ventilation. Terrace doors are available as a single or double terrace doors.

Standard ironmongery and accessories



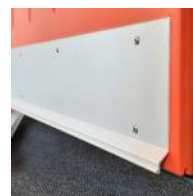
Entrance door handle



Strike plate



Hook bolts and mushroom bolts



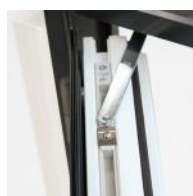
Drip sill



Fibre threshold



Handle with internal thumbturn



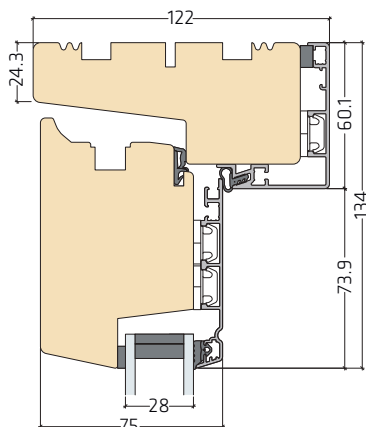
Friction brake



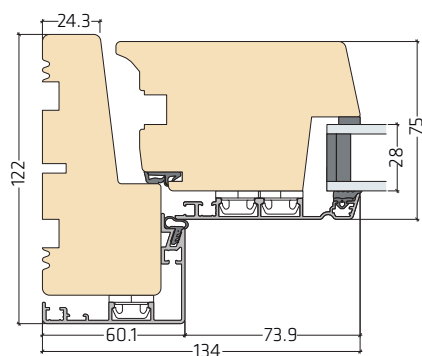
Letterplate

Minimum/maximum dimensions

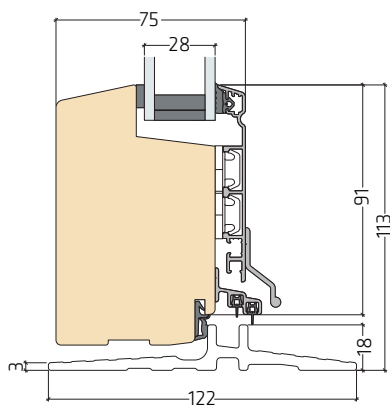
Head



Jamb

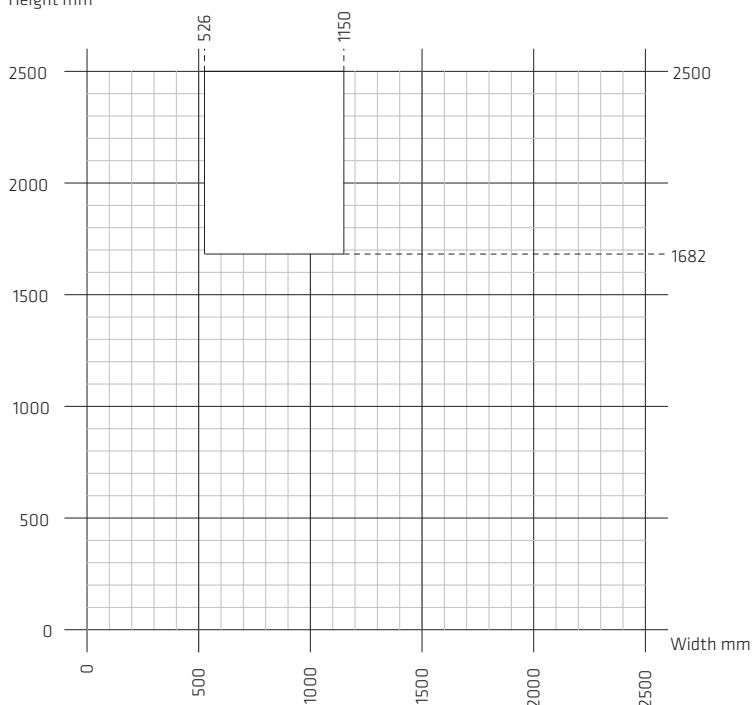


Sill



Single door

Height mm



Min. - Max. dimensions

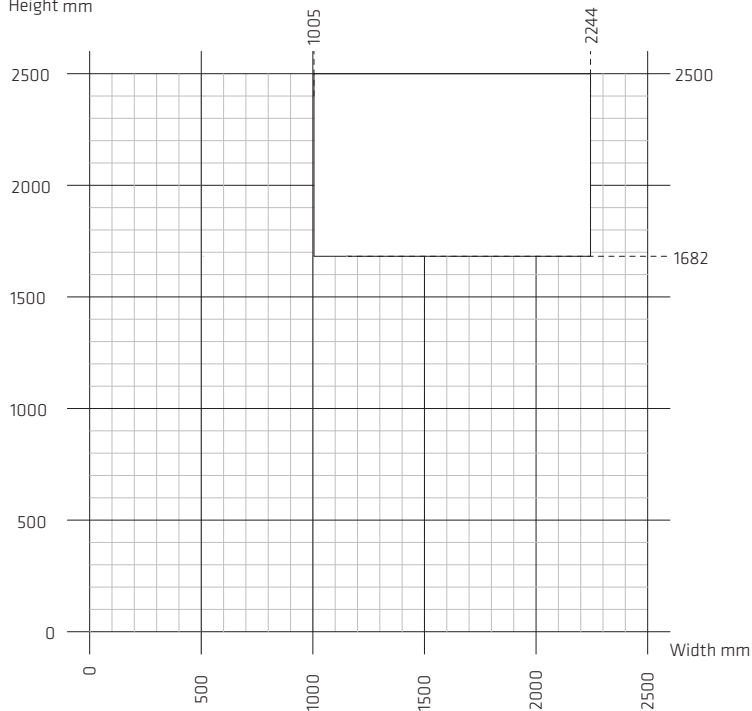
NOTE!

Remember to check frame weight

The clear opening at 90° without handle:
External frame width - 173 mm

Double door

Height mm



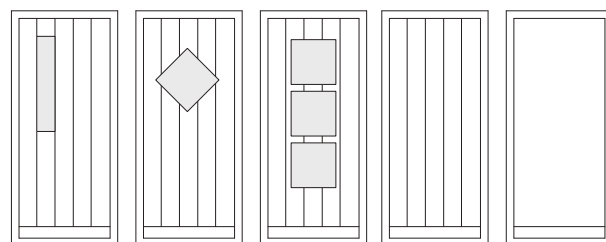
Min. - Max. dimensions

NOTE!

Remember to check frame weight

The clear opening at 90° without handle:
External frame width/2 - 146 mm (opening part)
External frame width - 237 mm (total clear opening)

Outward Opening Flush Door



Use

The outward opening flush entrance door is used for direct access to the outside from, for example, a utility room, hall or porch in buildings where the outside areas permits this and is the preferred choice for fire exits with appropriate ironmongery. Outward opening flush doors are typically used as entrance doors.

Function

Outward opening flush entrance doors are side hung and

available with a smooth door leaf or with grooves and/or vision panels in various shapes for glazing and comes with powder coated height adjustable hinges. Flush panel doors are available as single doors with or without side lights. Double doors are available with a French casement floating-mullion for maximum opening widths when required. A thumb turn may be chosen for the inside.

All Idealcombi flush panel doors comes with a three point espagnolette and safety keeps. Mushroom bolts at the top and bottom makes it easier to operate the door.

Standard ironmongery and accessories



Entrance door handle



Strike plate



Hook bolts and mushroom bolts



Hardwood threshold



Fibre threshold



Electrical strike plate



Kick plate

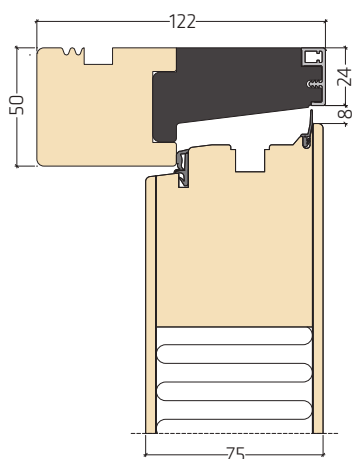


Letterplate

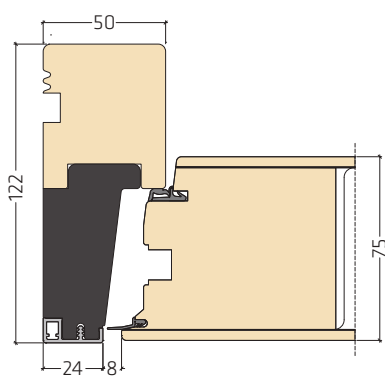
Entrance doors are delivered with handles supplied loose.

Minimum/maximum dimensions

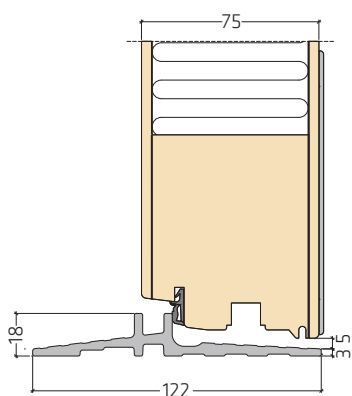
Head



Jamb

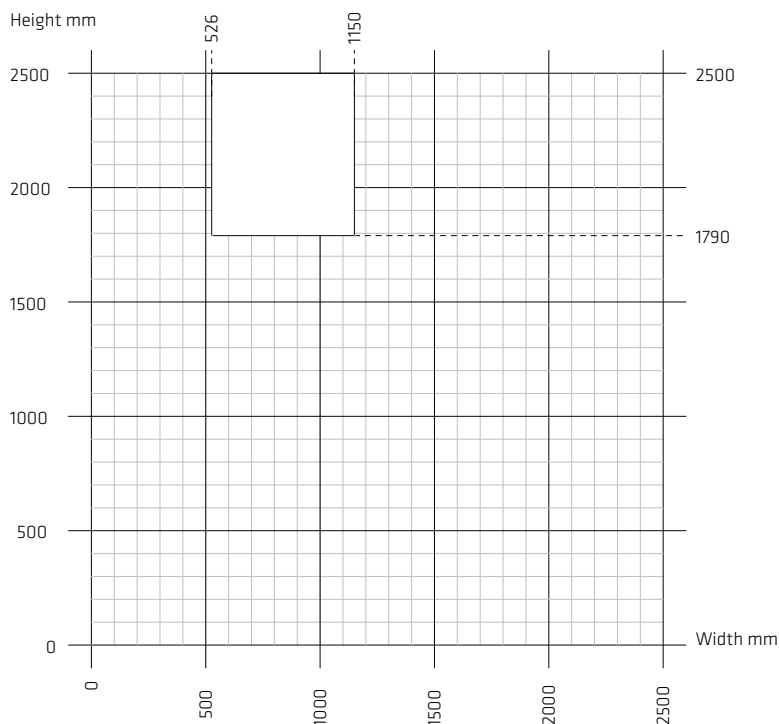


Sill



Single door

Height mm



Min. - Max. dimensions

The clear opening at 90° without handle:

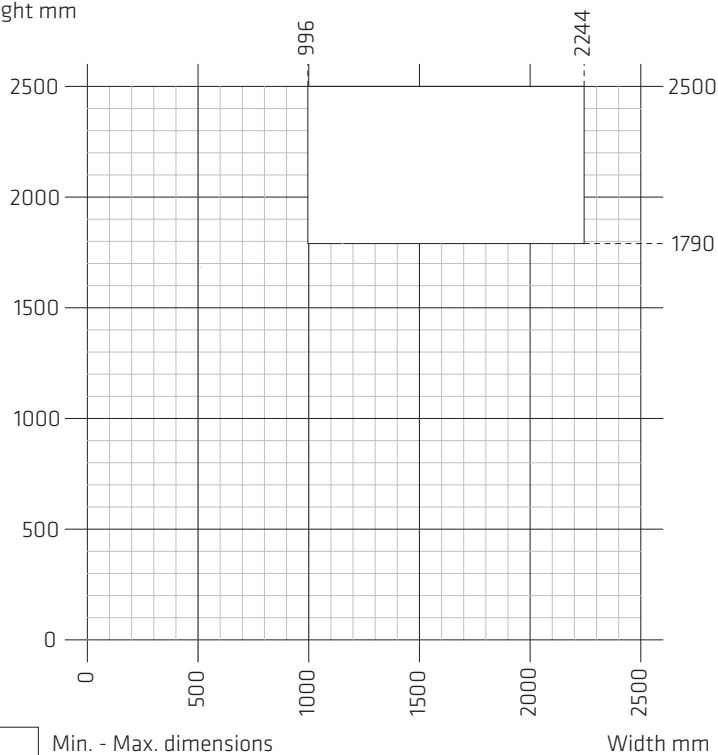
Frame/frame: Frame width - 161 mm

Frame/66 mm mullion: (Frame/mid mullion) - 144 mm

Frame/76 mm mullion: (Frame/mid mullion) - 149 mm

Double door

Height mm



Min. - Max. dimensions

The clear opening at 90° without handle:

External frame width/2 - 133 mm (opening part)

External frame width - 224 mm (total clear opening)

Inward Opening Flush Door

Frame IC

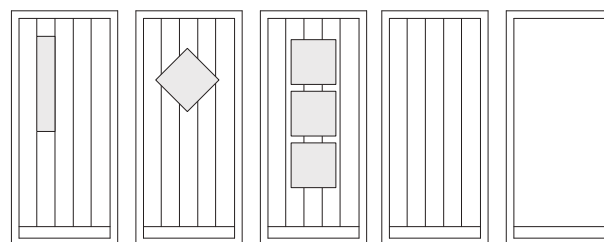
Frame I

Nation IC

Nation I

Futura+

Futura+i



Use

Inward opening flush doors are used in rooms with direct access to the outside from, for example, a stairway, utility room, hall or porch. The doors have the advantage of allowing people to pass by on the external side of the door, for example, used in facades in densely built-up areas facing pavements, stairs etc. Inward opening flush doors are typically used as entrance doors.

Function

Inward opening flush panel doors are available with a smooth door leaf or with grooves and/or vision panels in various shapes for vision panels. Flush panel doors comes with powder coated, height adjustable hinges and are available both as single doors with or without fixed sidelights and as double doors. All Idealcombi flush panel doors comes with a three point espagnolette and safety keeps. Mushroom bolts at the top and bottom makes it easier to operate the door.

Standard ironmongery and accessories



Entrance door handle



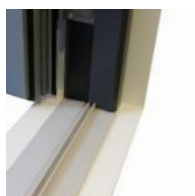
Strike plate



Hook bolts and mushroom bolts



Hardwood threshold



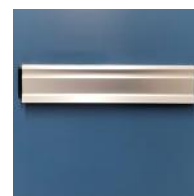
Fibre threshold



Electrical strike plate



Kick plate with drip sill

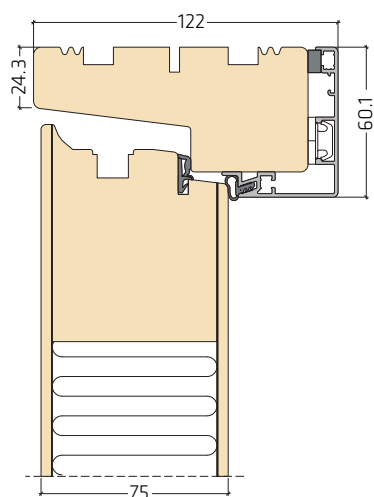


Letterplate

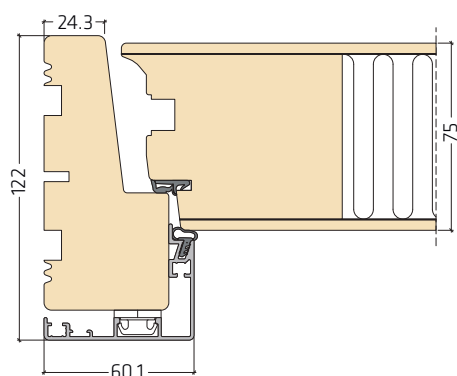
Entrance doors are delivered with handles supplied loose.

Minimum/maximum dimensions

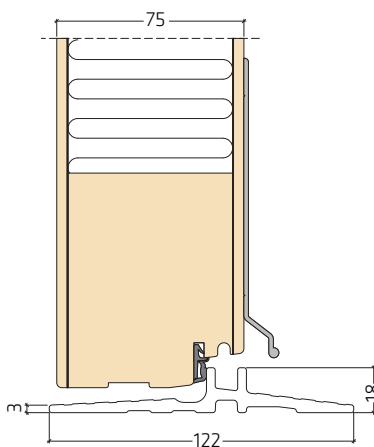
Head



Jamb

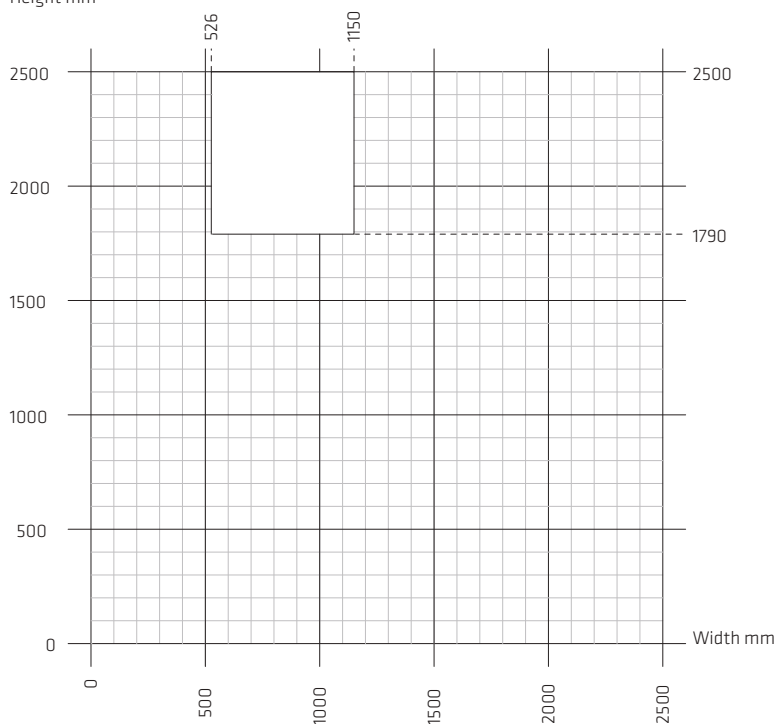


Sill



Single door

Height mm

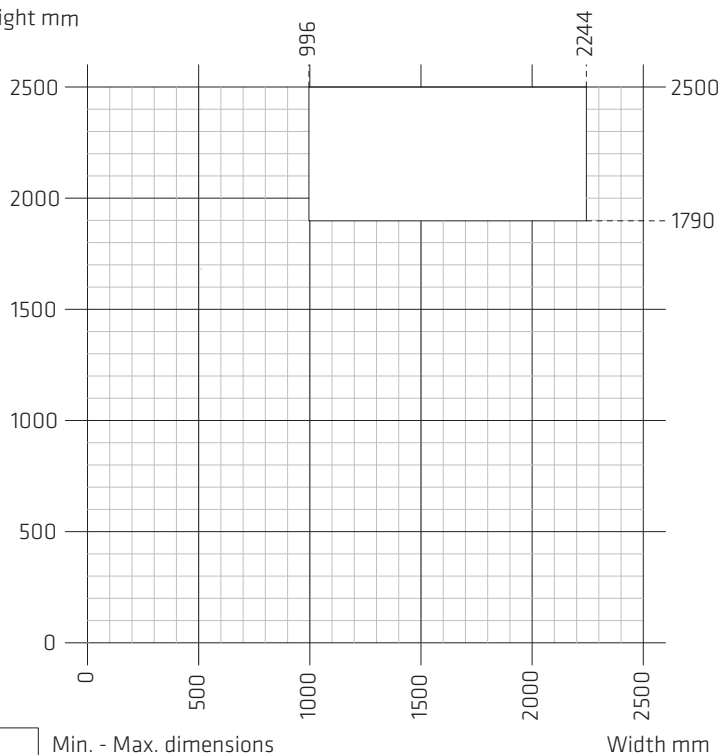


Min. - Max. dimensions

The clear opening at 90° without handle:
External frame width - 173 mm

Double door

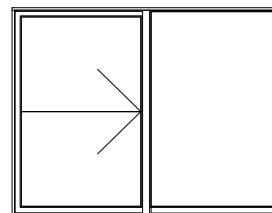
Height mm



Min. - Max. dimensions

The clear opening at 90° without handle:
External frame width/2 - 146 mm (opening part)
External frame width - 237 mm (total clear opening)

Sliding Door



Use

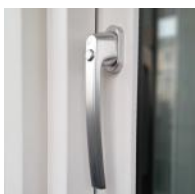
Sliding doors with low threshold are primarily used for access to terraces, patios, balconies and other places where low level access is required.

Function

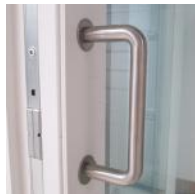
The sliding door consists of a fixed and a moving (sliding) part. The sliding part of the door always runs on the outside of the fixed light. To open the door, press safety button on the handle and turn 180° to release it from the frame - the sliding part will protrude 8mm out from the frame and slide across the fixed light. Provided with Randi Line pull handle externally.

An end stop is located at the top track, preventing the door from opening too far.

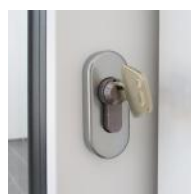
Standard ironmongery and accessories



Handle



D Handle



Locking Cylinder



External grip



Low threshold



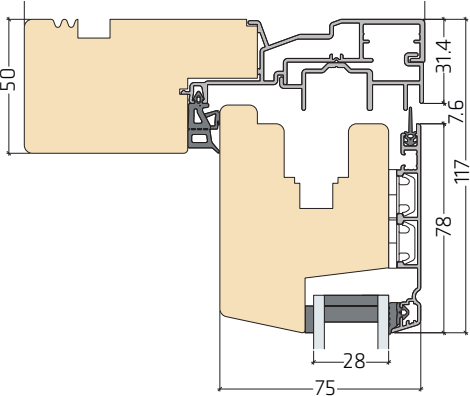
Espagnolette



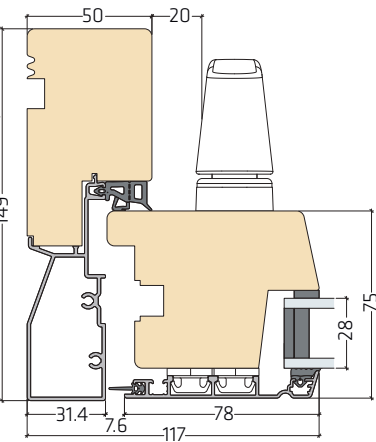
Keep

Minimum/maximum dimensions

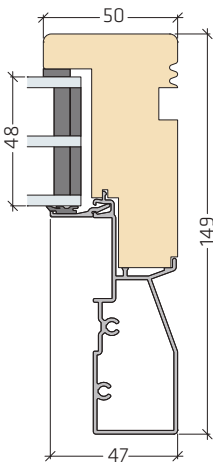
Head



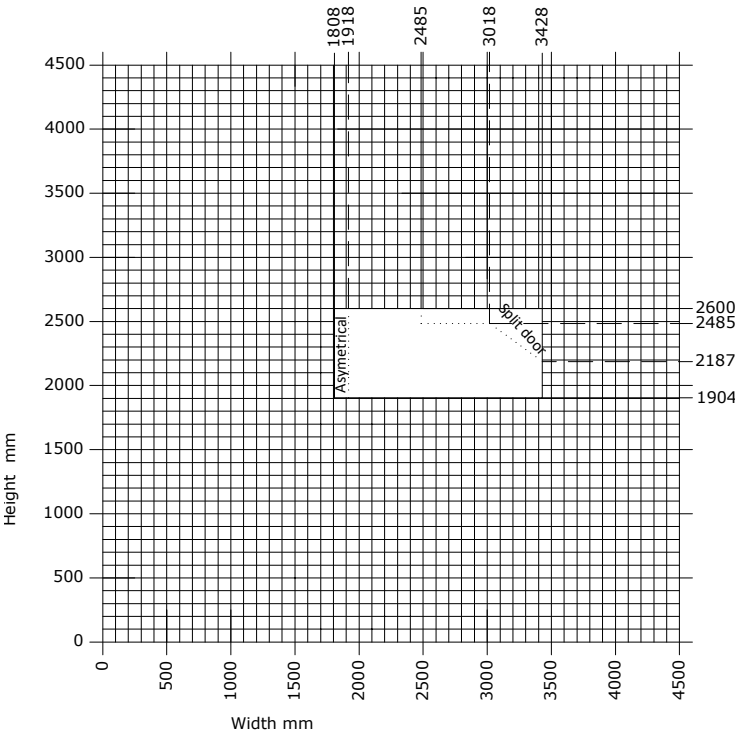
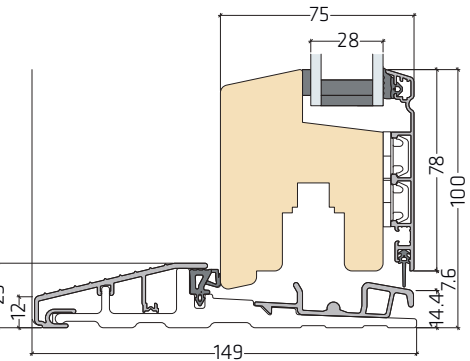
Jamb - sliding part



Jamb - fixed part

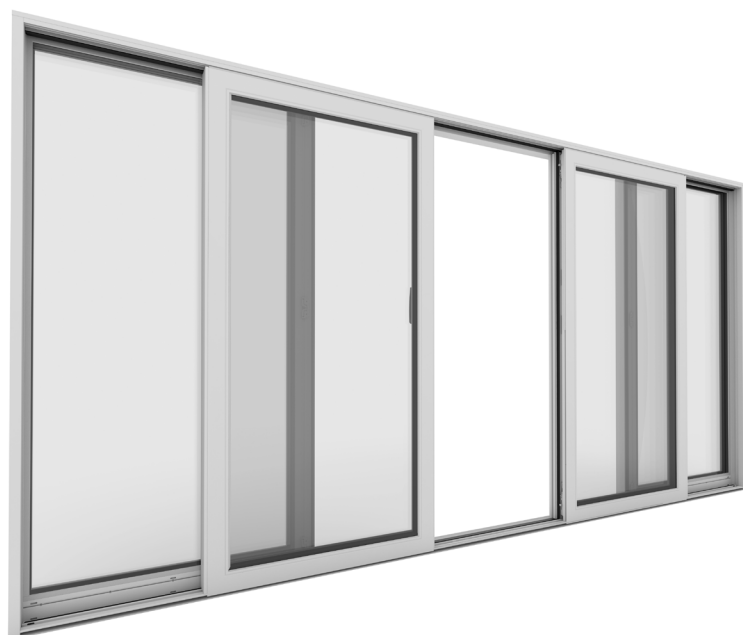


Sill



Note!
It is not always possible to reach max area due to max weight.
Max width sliding part: 1677 mm.

Double Sliding Door



Use

Sliding doors with low are primarily used for direct access to outside areas like balconies, patios, terraces and gardens where easy, low level access is wanted.

The middle sashes open in opposite directions moving in front of the fixed lights at either end. Both sliding parts are equipped with a handle that operate a multi-locking point mushroom bolt espagnolette allowing the doors to protrude 8mm before sliding.

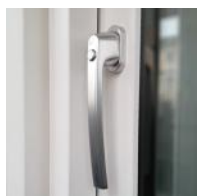
Function

The door consists of four parts; two fixed parts, one at each end and the two middle sliding sections.

When in the closed position all units are in line.

The door is delivered as three separate elements, one sliding door section and two side lights. Ready to be assembled on site.

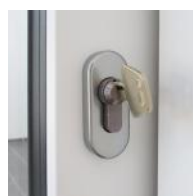
Standard ironmongery and accessories



Handle



D Handle



Locking Cylinder



External grip



Low threshold



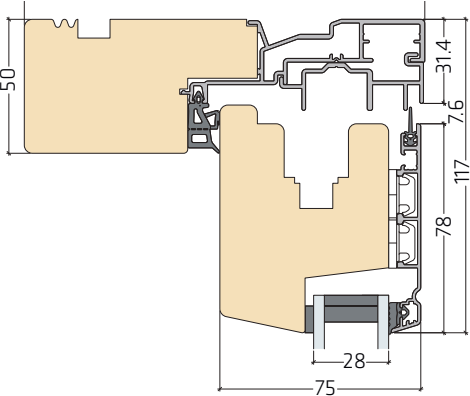
Espagnolette



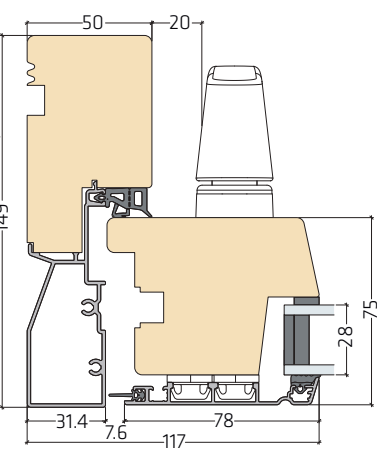
Keep

Minimum/maximum dimensions

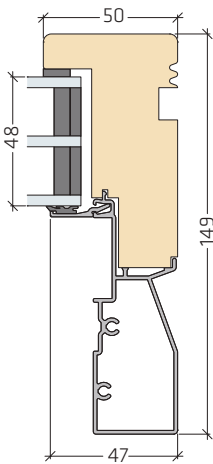
Head



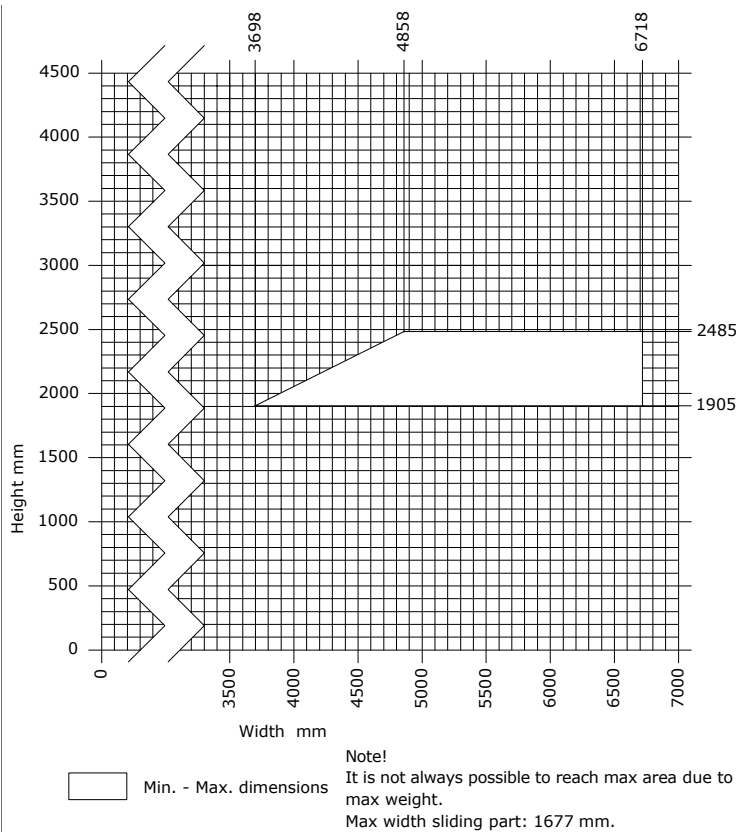
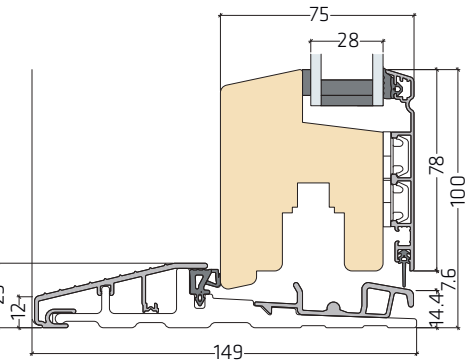
Jamb - sliding part



Jamb - Fixed part

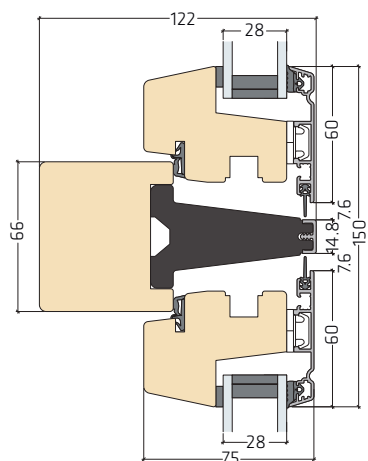


Sill

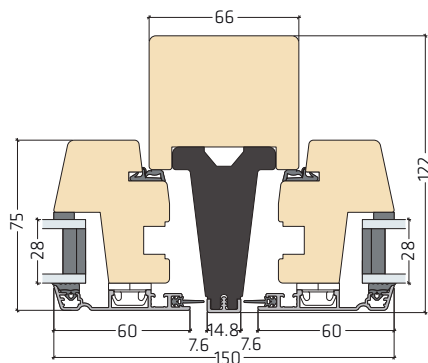


Mullions and Transoms

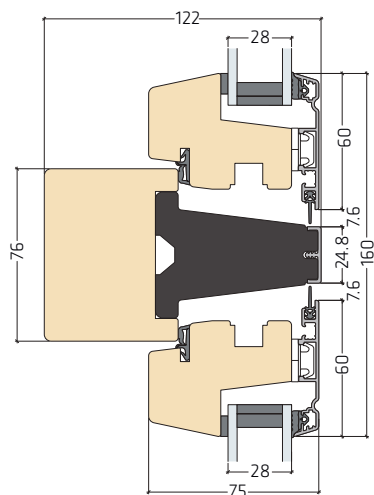
66 x 122 mm transom with sash | FRAic01-40L28



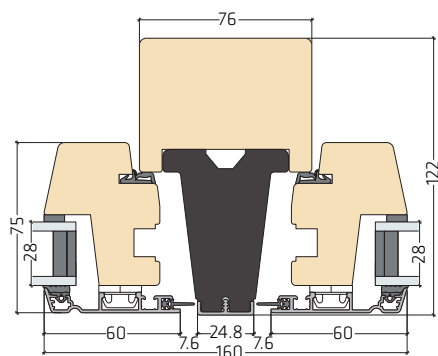
66 x 122 mm mullion with sash | FRAic01-50L28



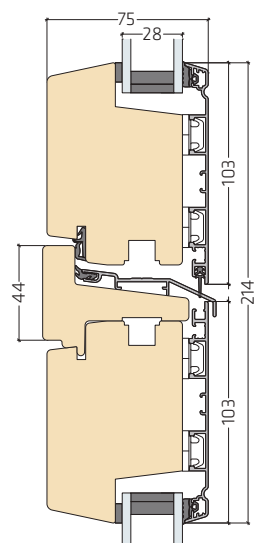
76 x 122 mm transom with sash | FRAic01-41L28



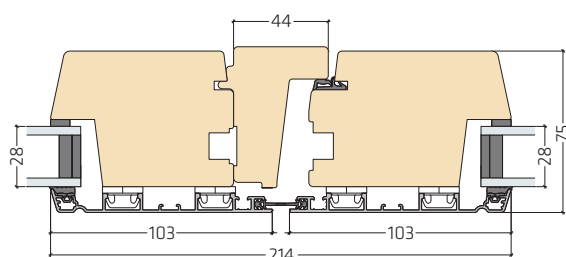
76 x 122 mm mullion with sash | FRAic01-51L28



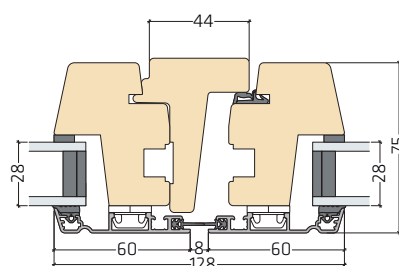
Stable door meeting rail | FRAic21-81L28



French casement stile, outward opening double door | FRAic01-80L28

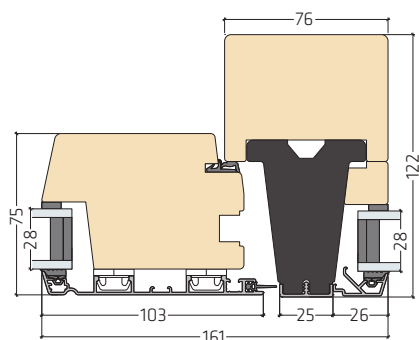


Meeting stiles, window | FRAic01-80L28



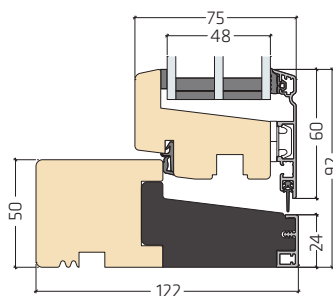
NOTE: All solutions in Frame IC are available with double and triple glazing and with or without internal bevelled profiling.

76 x 122 mm mullion, outward opening door, fixed light and door frame | FRAic21-50L28

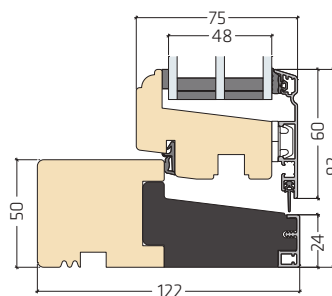


Alternative Frames and Sashes

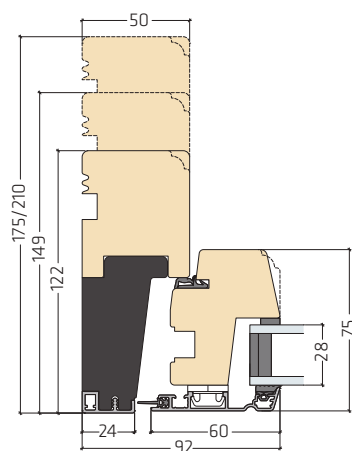
Triple glazed | FRAic01-10L48



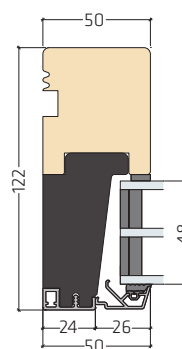
Bevelled profile with triple glazing unit | FRAic01-10P48



Alternative frame depth 50 x 149, 175 and 210 mm | FRAic01-30L28

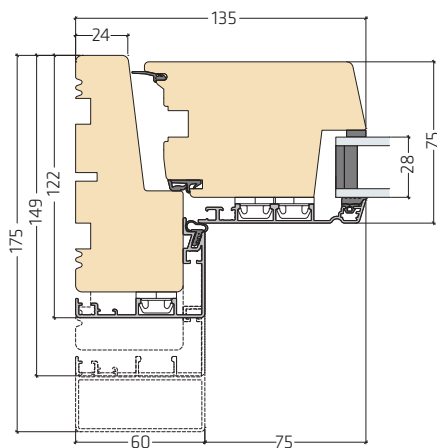


Fixed light with triple glazing unit | FRAic06-30L48

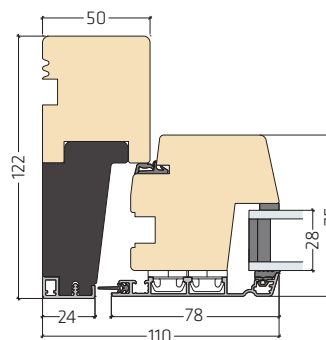


NOTE: All solutions in Frame IC are available with double and triple glazing and with or without internal bevelled profiling.

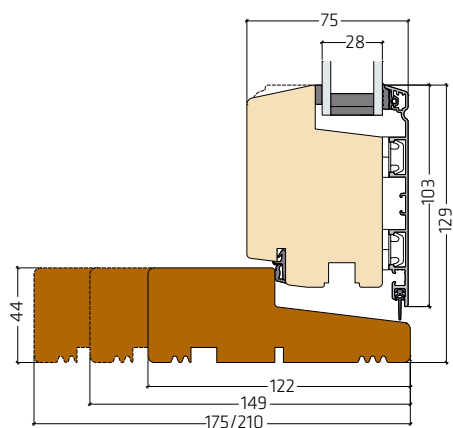
Alternative frame depth on inward opening door | FRAic22-30L28



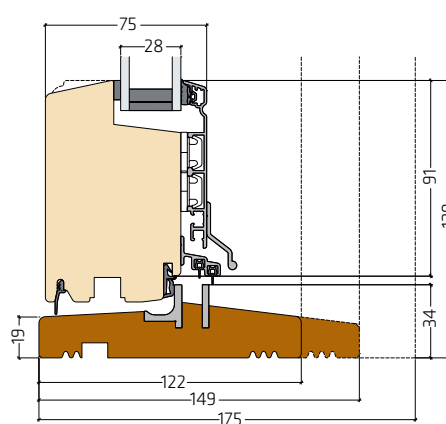
Outward opening terrace door 78 x 75 mm | FRAic20-31L28



Hardwood threshold, outward opening door | FRAic21-10L28

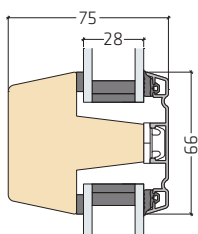


Hardwood threshold, inward opening door | FRAic22-10L28

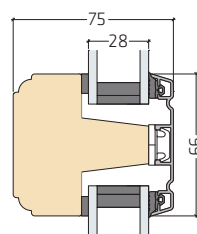


Glazing Bars

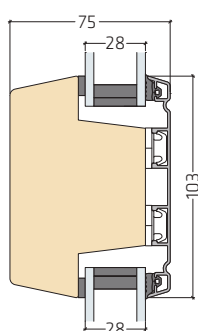
Horizontal glazing bar 66 mm without profile | FRAic12-60L28



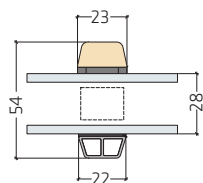
Horizontal glazing bar 66 mm with profile | FRAic12-60P28



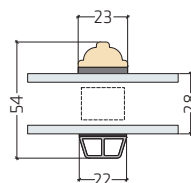
103 x 75 mm horizontal rail | FRAic21-60L28



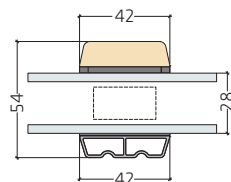
Low energy styling bar 22/23 mm without profile | FRAic12-80L28



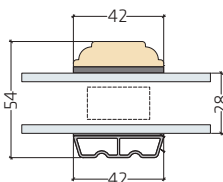
Low energy styling bar 22/23 mm with profile | FRAic12-80P28



Low energy styling bar 42 mm without profile | FRAic12-82L28

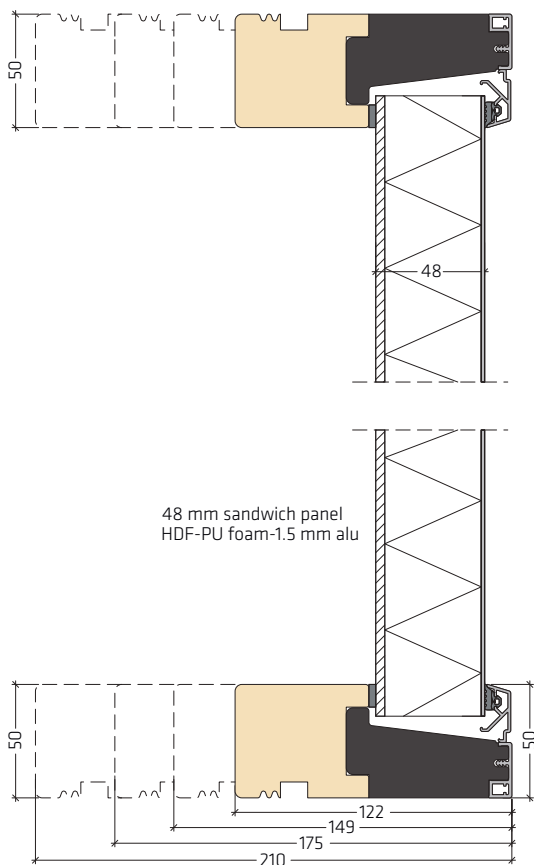


Low energy styling bar 42 mm with profile | FRAic12-82P28

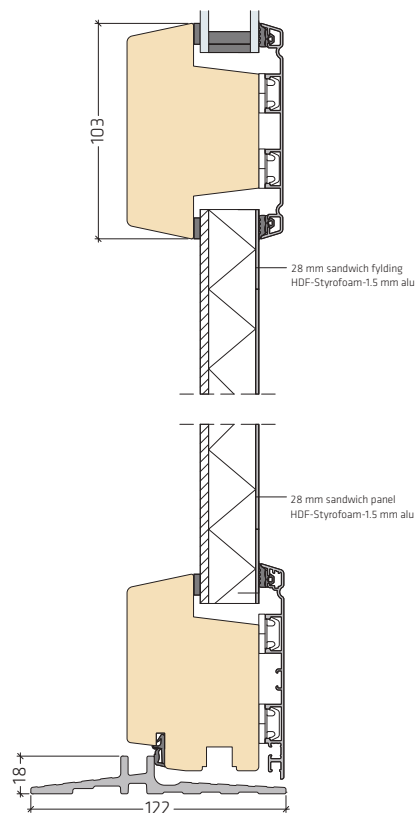


Panels

48 mm sandwich panel | FRAic-FYL002

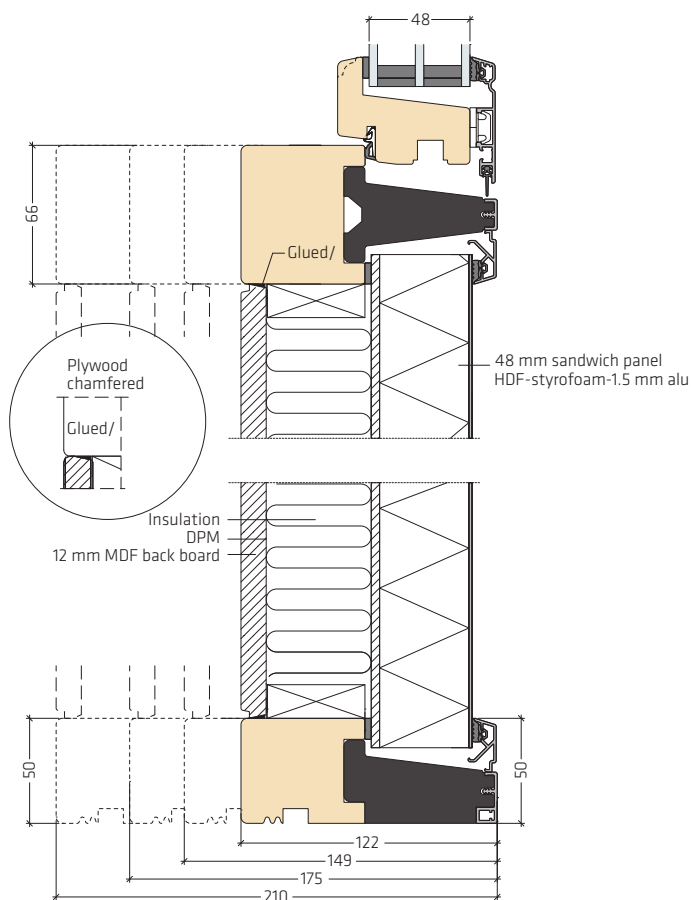


24 mm sandwich panel in door sash | FRAic-FYL007

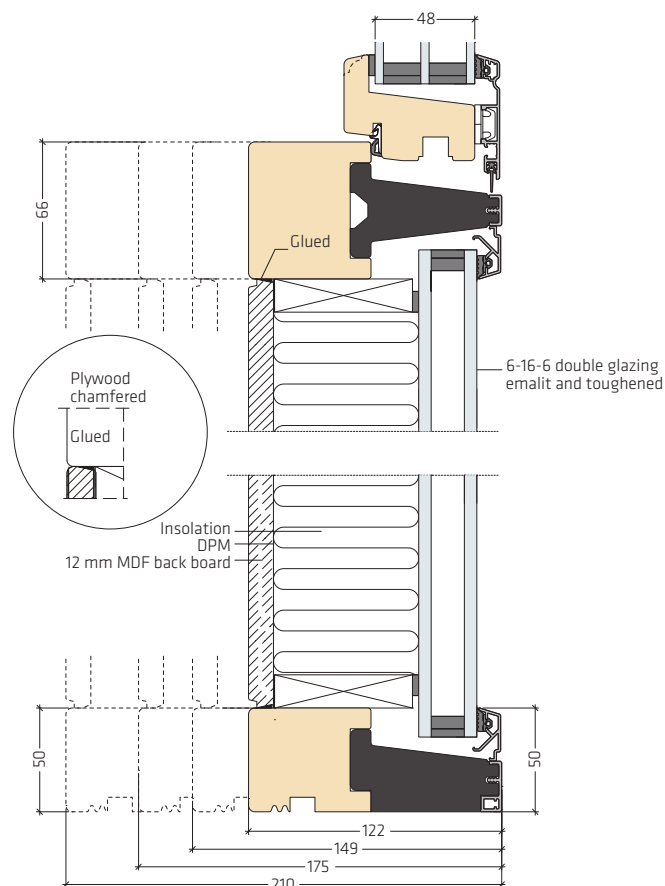


Spandrels

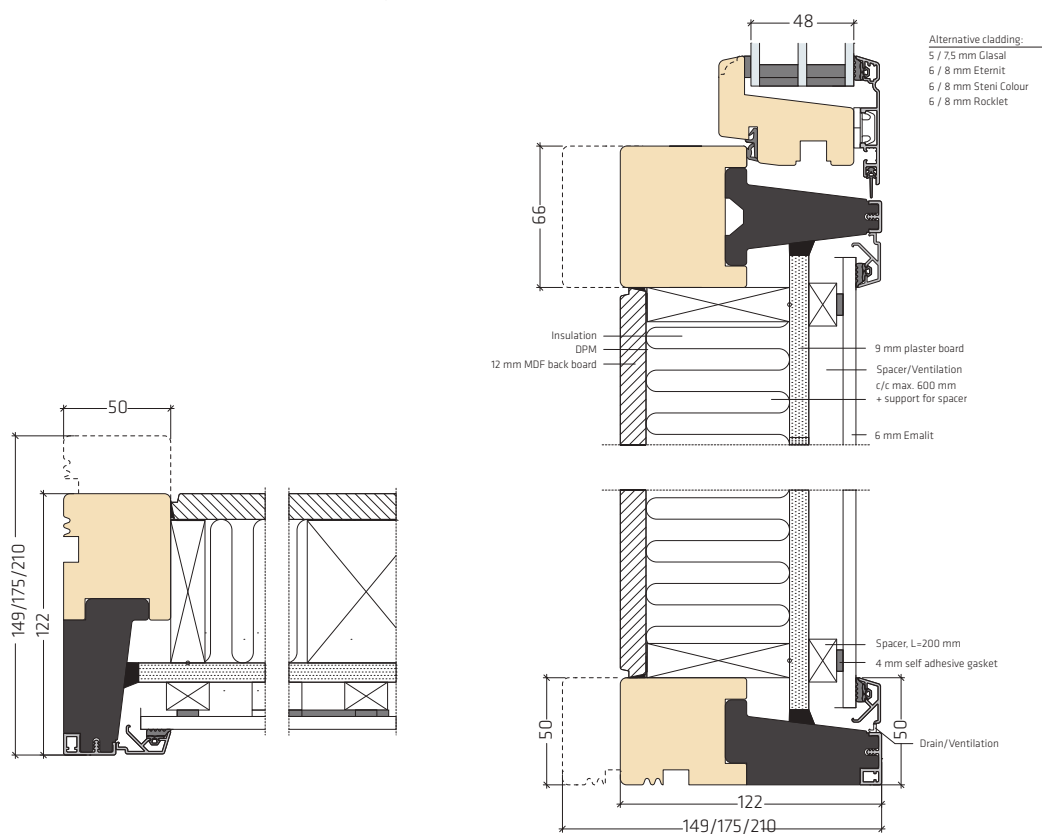
Fully insulated spandrel with sandwich panel | FRAic-FYL003



Fully insulated spandrel with emalit glass | FRAic-FYL004

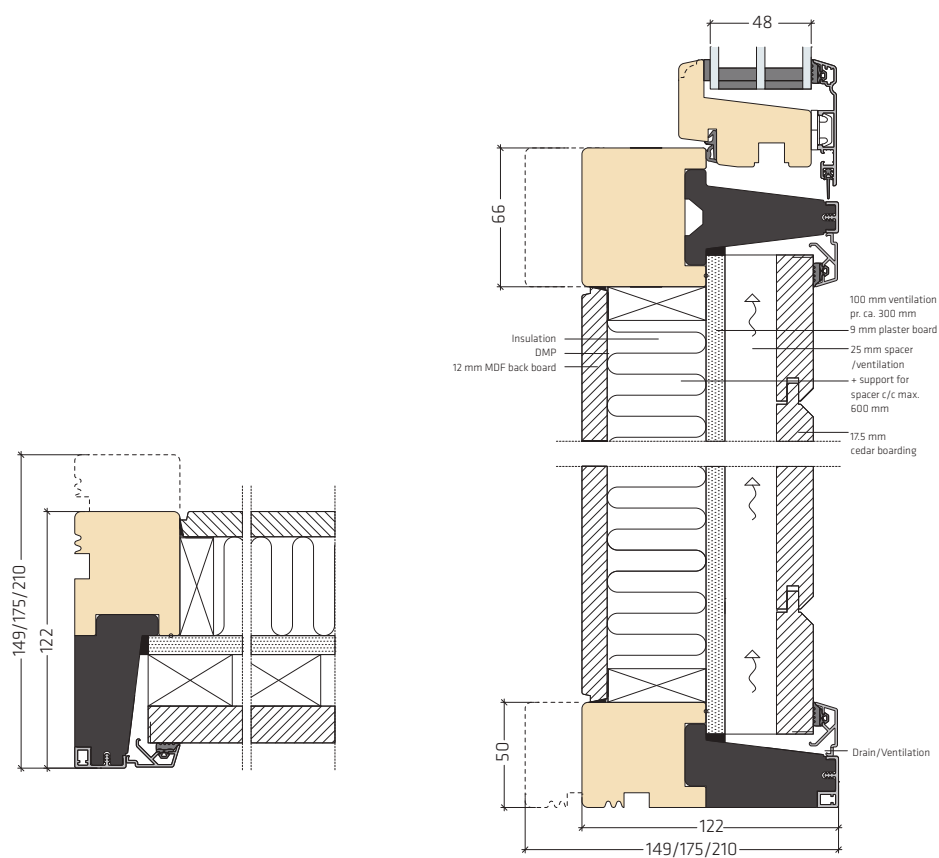


Ventilated and fully insulated spandrel | FRAic-FYL005



Backboard on insulated spandrels are loosely installed. Spandrels are supplied without insulation and DPM.

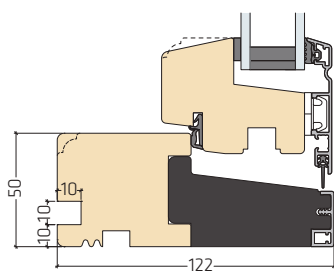
Ventilated spandrel with cedar boarding | FRAic-FYL006



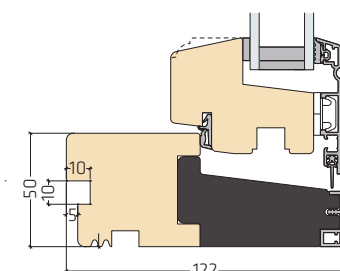
Backboard on insulated spandrels are loosely installed. Spandrels are supplied without insulation and DPM.

Grooves and Rebates

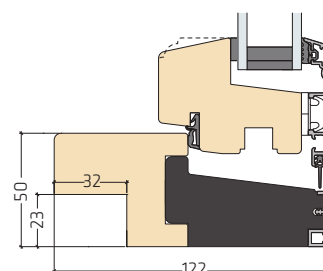
10 x 10 mm groove | FRAic-NOT001



10 x 10 mm groove and rebate for windows board | FRAic-NOT004

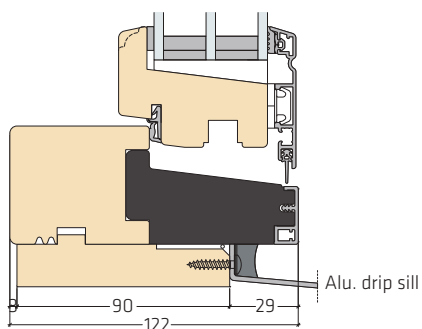


23 x 32 mm rebate | FRAic-NOT006

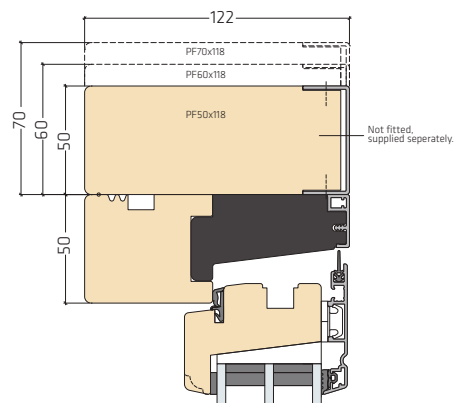


Packers

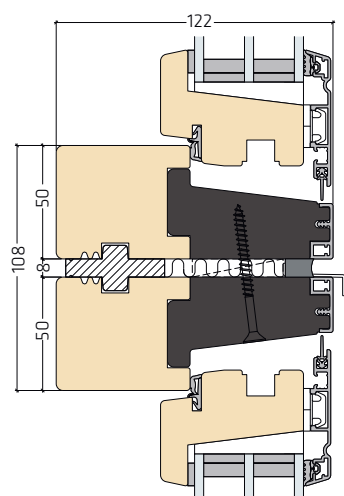
18 x 90 mm packer | FRAic-PF0001



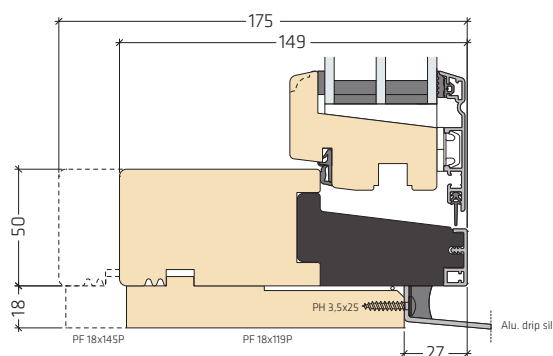
50 x 118 mm packer | FRAic-PF0004



10 x 44 mm timber spacer bar | FRAic-PF0006

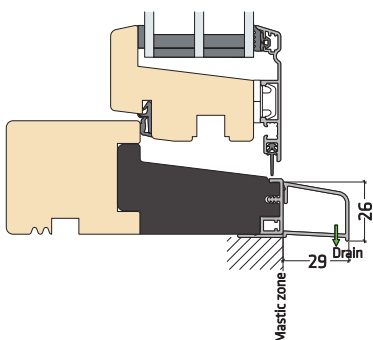


18 x 119 mm packer | FRAic-PF0003

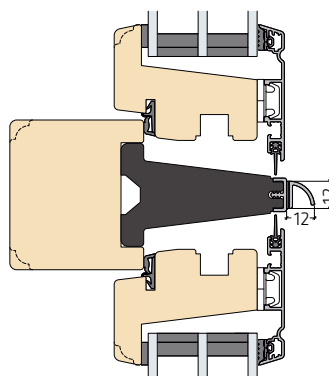


Drip Sills

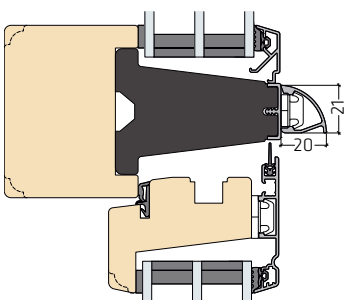
CBF 2607 on window sill | FRAic-VAN002



CBF 2608 on 66 mm transom | FRAic-VAN006

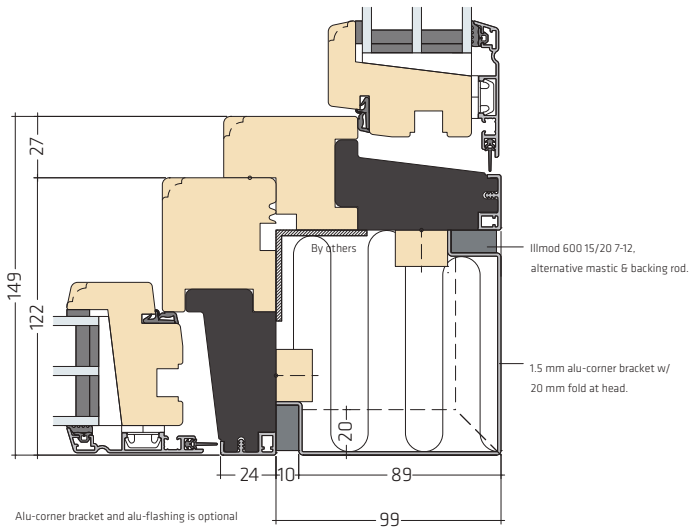


CBF 3174 on 76 mm transom | FRAic-VAN007

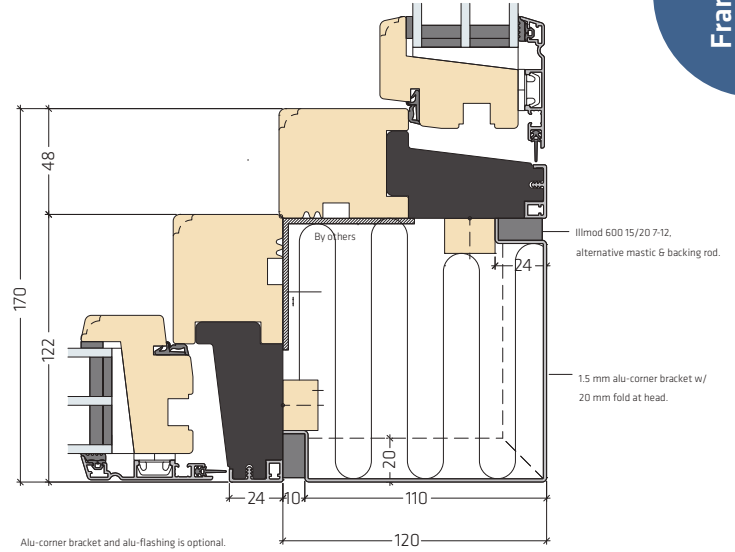


Corner Solutions

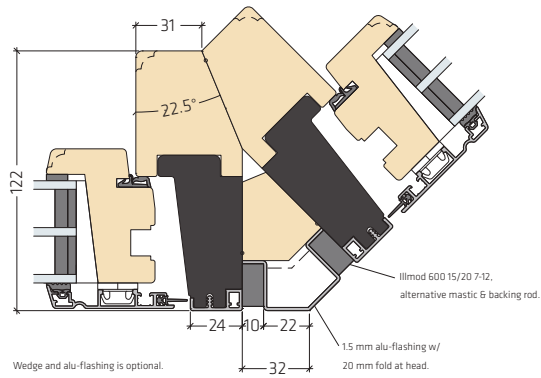
Corner solution 90° with rebate | FRAic-HJL001



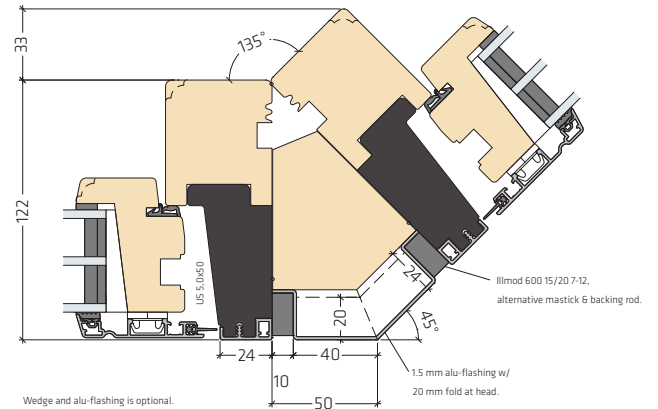
Corner solution 90° without rebate | FRAic-HJL005



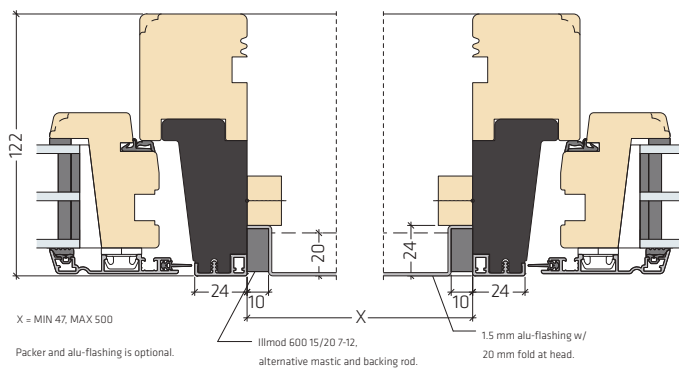
Corner solution 45° with angle cut | FRAic-HJL009



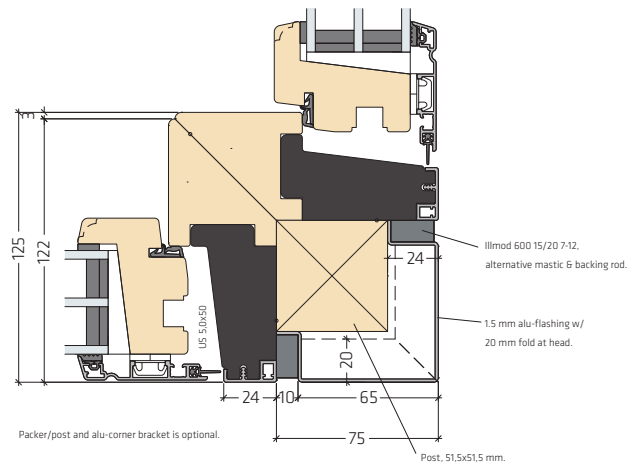
Corner solution 45° with wedge | FRAic-HJL013



Alu-cover on 180° solution | FRAic-HJL017



Corner solution 90° with angle cut | FRAic-HJL018

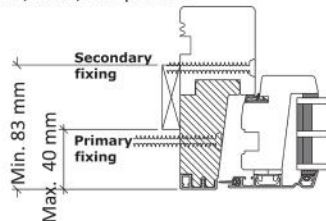


Installation - A quick overview

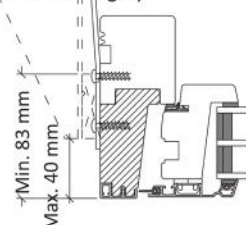
Outward opening windows

Packers must support both Idealcore™ and timber

Head/Jamb/Sill aperture



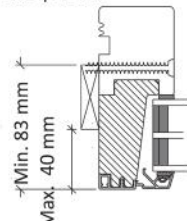
Head/Jamb/Sill ironmongery



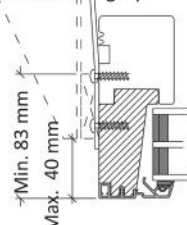
Fixed light (outward opening)

Packers must support both Idealcore™ and timber

Head/Jamb/Sill aperture

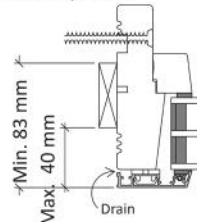


Head/Jamb/Sill ironmongery

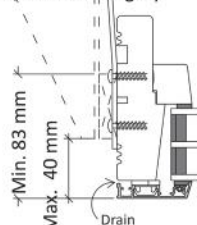


Fixed light (inward opening)

Head/Jamb/Sill aperture



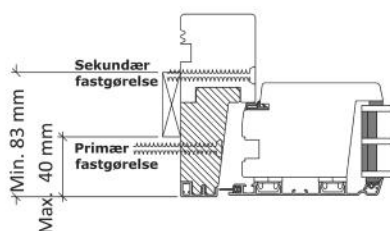
Head/Jamb/Sill ironmongery



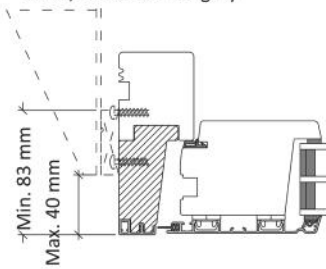
Outward opening doors

Packers must support both Idealcore™ and timber

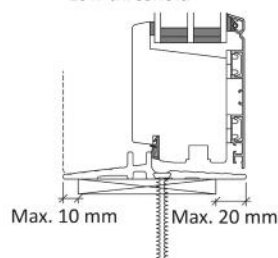
Head/Jamb aperture



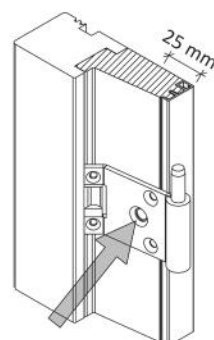
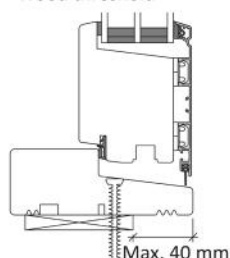
Head/Jamb ironmongery



Low threshold



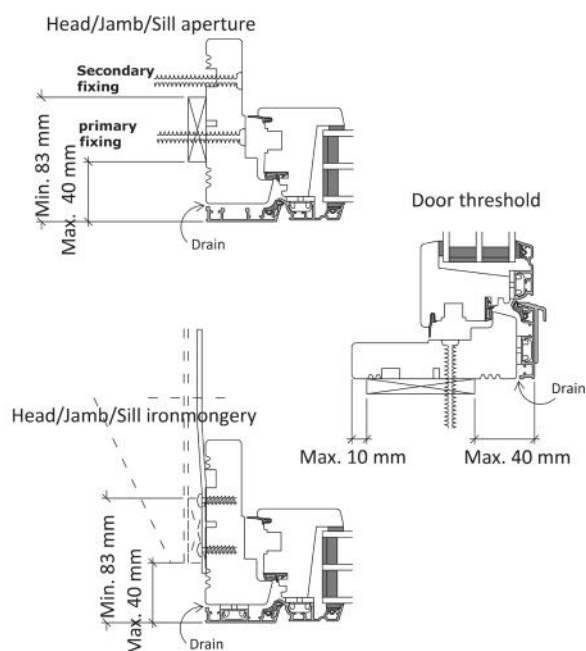
Wood threshold



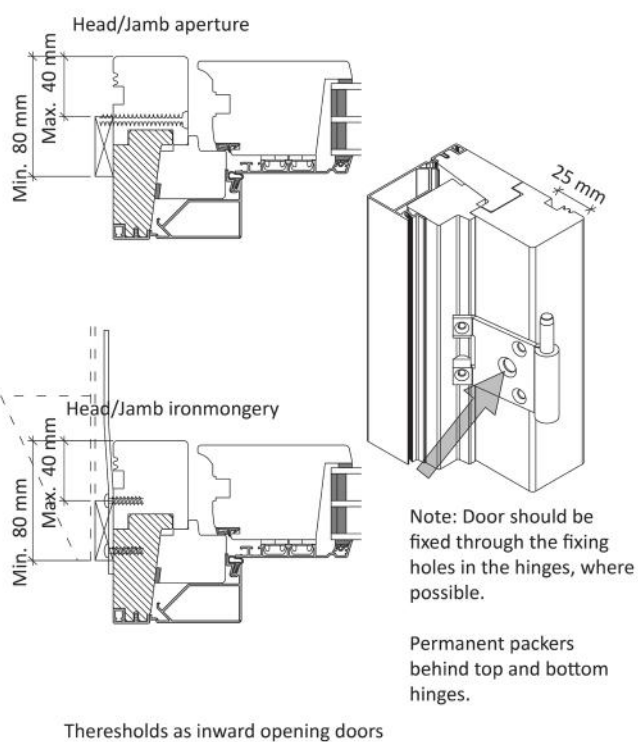
Note: Door should be fixed through the fixing holes in the hinges, where possible.

Permanent packers behind top and bottom hinges.

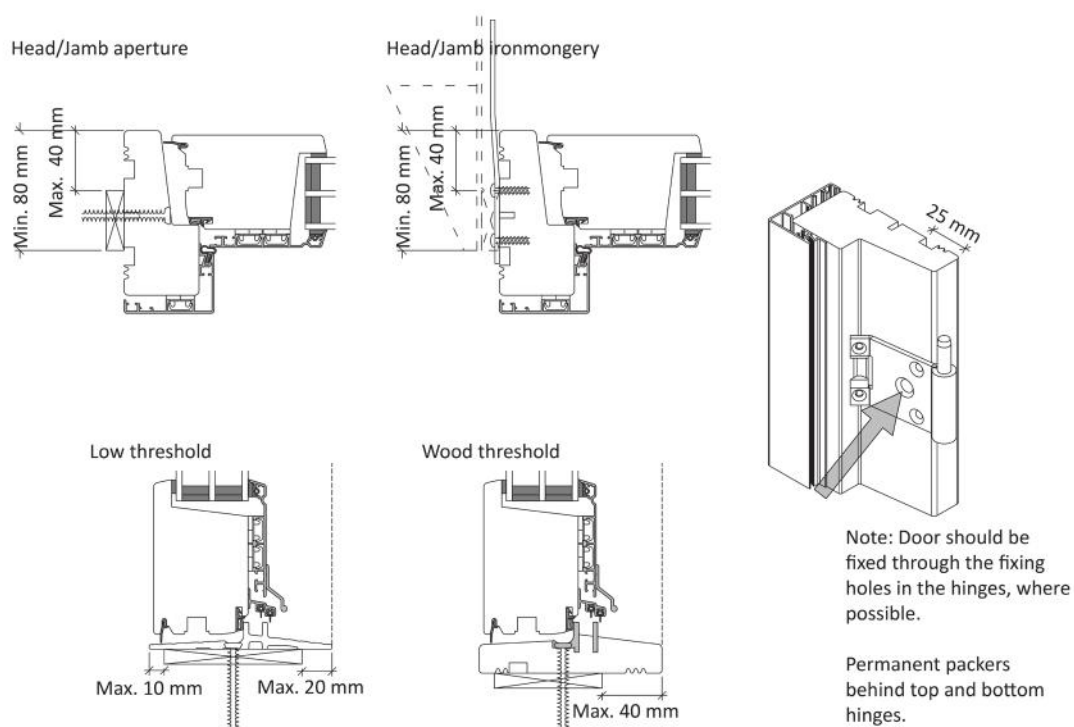
Inward opening windows/doors



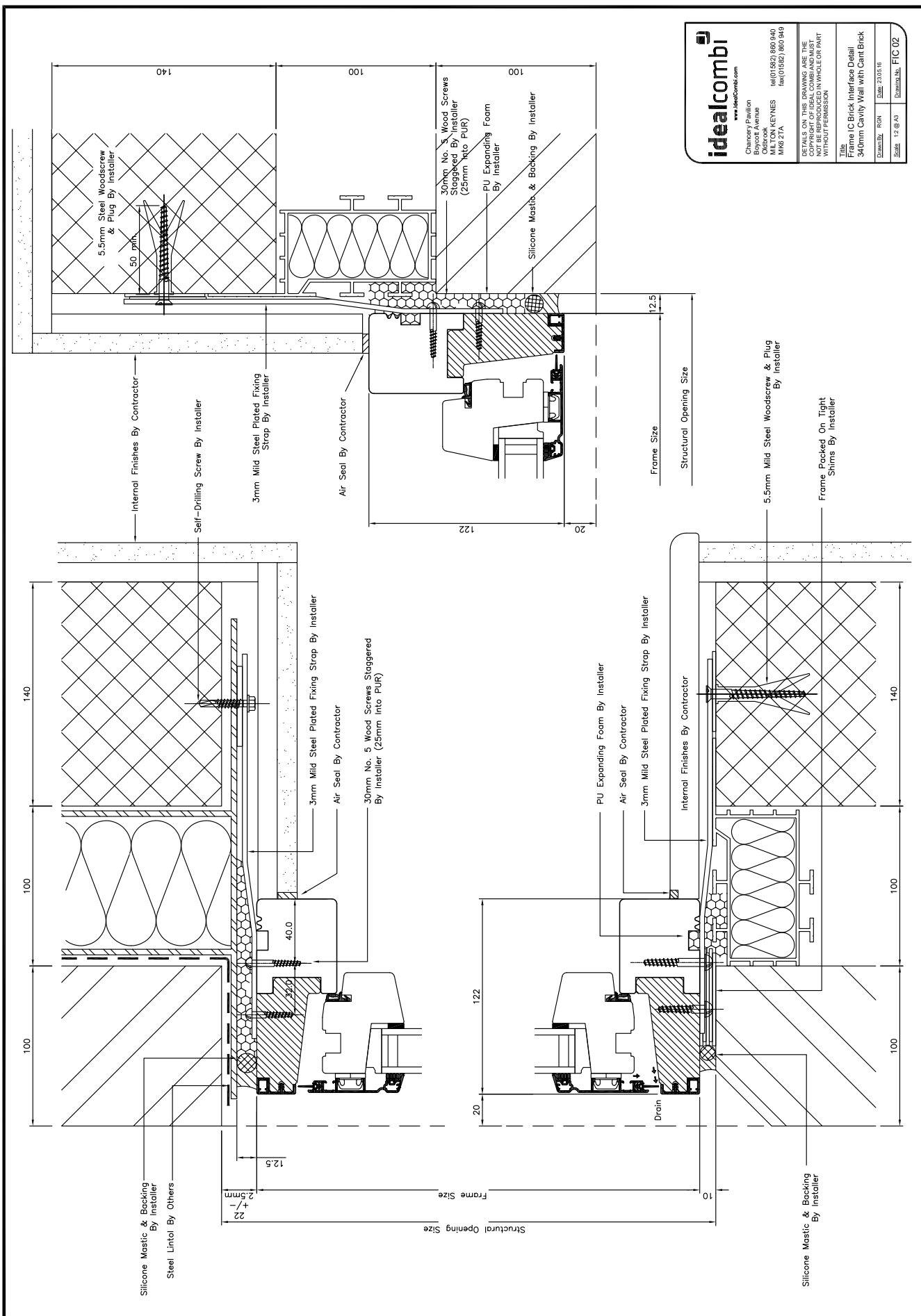
Inward opening doors with reversed rebate



Inward opening doors

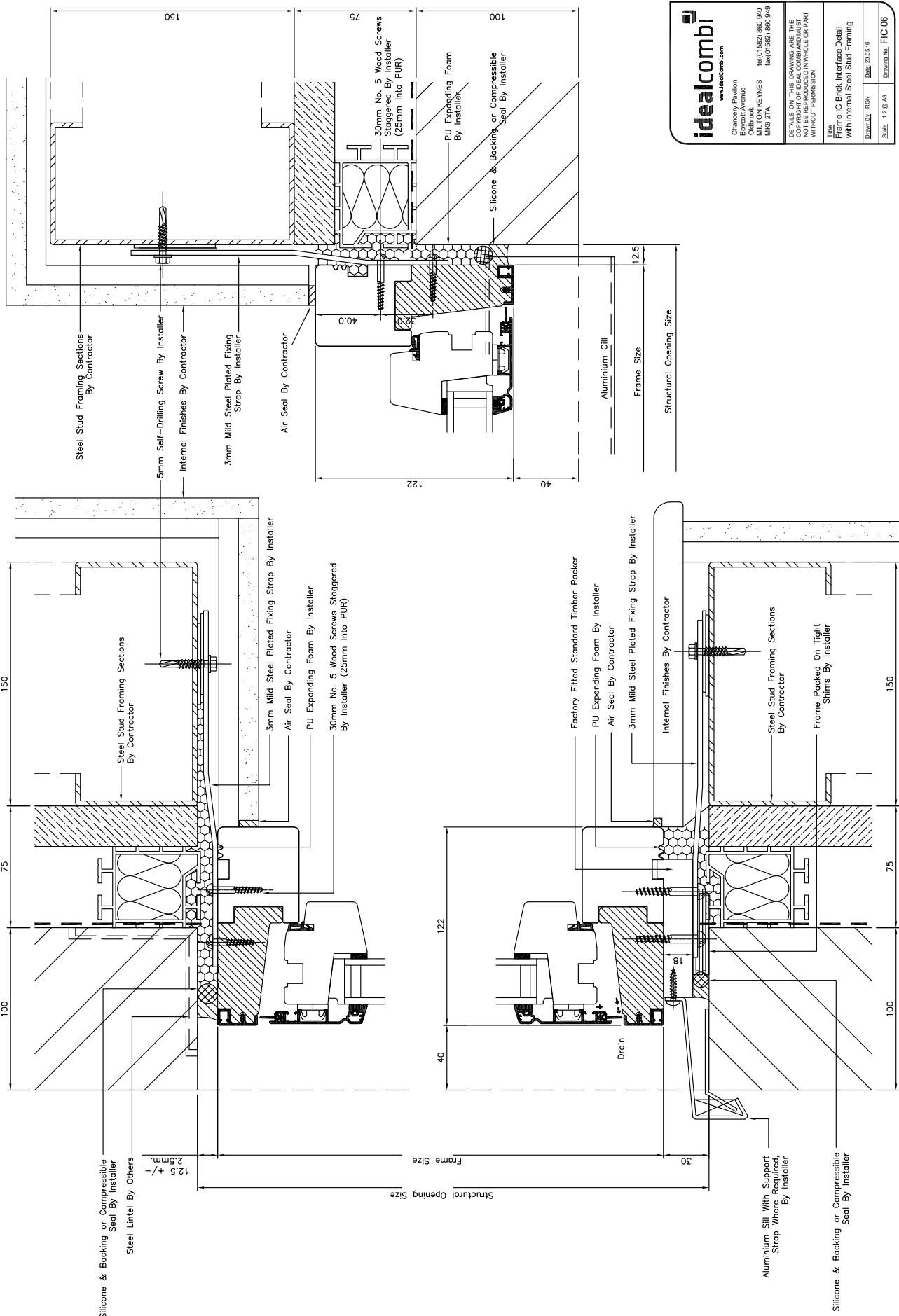


Installation Details - brick



See more details in the installation app or on install.idealcombi.com

Installation Details - brick | steel stud work



Chantry Pavilion
Boyett Avenue
Oldbrook
Widmore, WYOMING
WYOMING 82090
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WITHOUT PERMISSION

Title
Frame IC Brick Interface Detail
with Internal Steel Stud Framing

Drawn By: JCN Date: 23.05.19

Scale: 1:2 @ A3 Drawing No: FIC 06

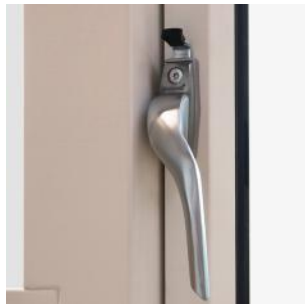
See more details in the installation app or on install.idealcombi.com



Accessories



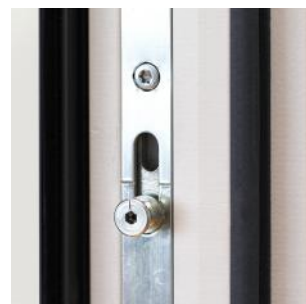
IC Design Handle
Windows and terrace doors



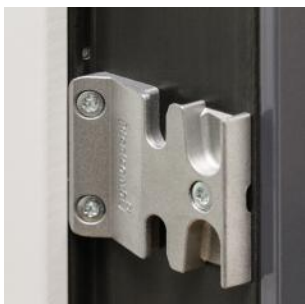
IC Design Handle with
safety catch



Locking IC Design Handle



Mushroom bolt



Keep



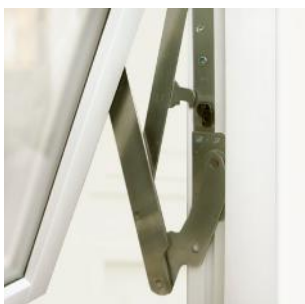
Alternative handle
Fix83



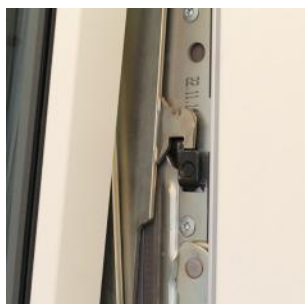
Alternative handle
Hoppe



PN safety catch with restrictor



Reversible hinge



Easy clean hinges & restrictor
Top swing reversible



Adjustable hinge
Terrace door



Opening restrictor



Spyhole



Fingerpull



Letter plate



Randi line handle



Flush bolt on floating mullion



Groove for window board



Trickle vent



Locking handle terrace door



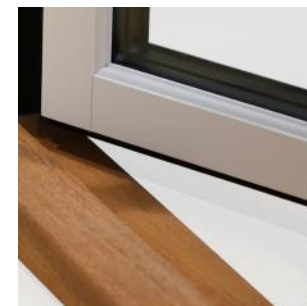
Fibre threshold
Outward opening door



Hardwood threshold
Inward opening door



Hardwood threshold
Outward opening door



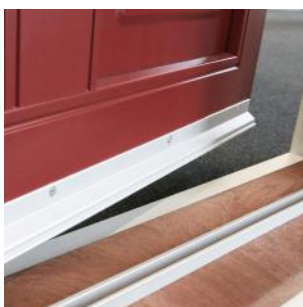
Hardwood threshold
Outward opening terrace door



Kick-plate
Inward opening door



Kick-plate
Outward opening door



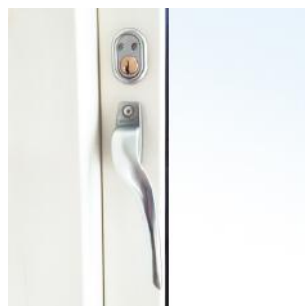
Drip sill
Inward opening door



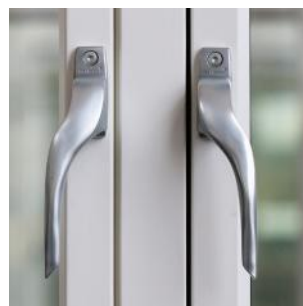
Strike plate
Entrance door



Entrance door handle



Internal cylinder terrace door
78 mm frame



Identical handle height
Outward opening terrace door



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udvikler vinduet

idealcom
udvikler vinduet



Frame I

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Tilt/Turn & Turn/Tilt window (inward opening)



Use

Tilt-turn windows are often used in multi-storey buildings or where external sun protection is installed. Frame I / Nation I (inward-opening) and Frame IC / Nation IC (outward-opening) have the same exterior frame height and can therefore be placed in the same facade, without there being much visual difference. The turning function is used primarily in connection with cleaning the outside of the window, while the tilting function is used for daily ventilation and venting. The turning function can also meet all the building regulations' requirements for rescue openings.

Function

Inward-opening window with both side- and bottom-hung function. Both opening functions are controlled by the fitting lever in the side frame. In the closed position, the handle faces vertically downwards and the turning function is triggered by turning the handle 90° to the horizontal position. The tilt function is triggered by turning the handle 180° in an upright vertical position. With tilt function, the upper edge of the frame moves approx. 14 cm inwards and gives a free opening of approx. 4 cm. The turn-tilt window can, as an option, be supplied with a handle operated brake. The brake can, in the turning function, hold the frame in any position above 18° opening.

Standard ironmongery & accessories



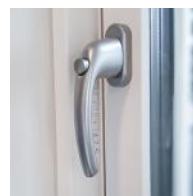
Handle



Locking handle



Handle operated brake



Handle with button



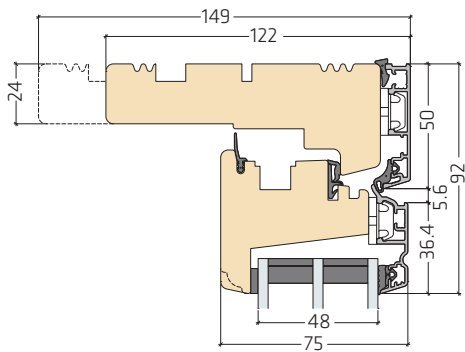
Trickle vent



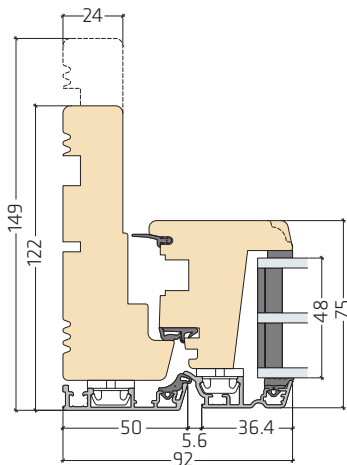
Motor

Maximum/minimum dimensions

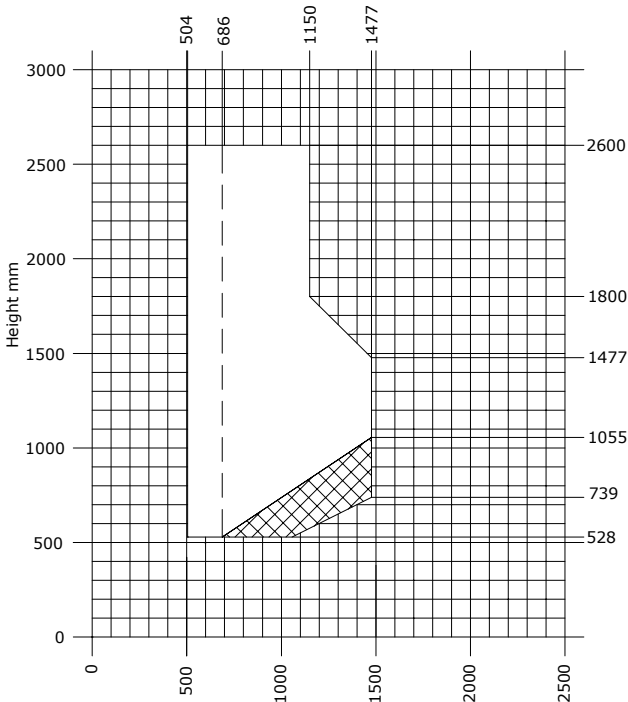
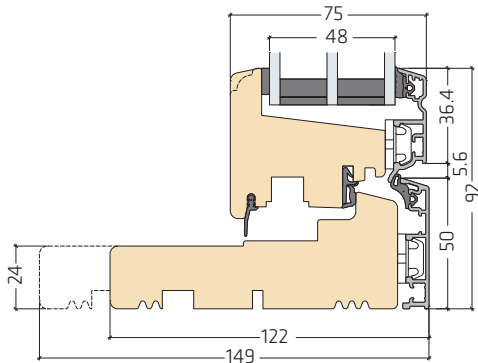
Head



Jamb



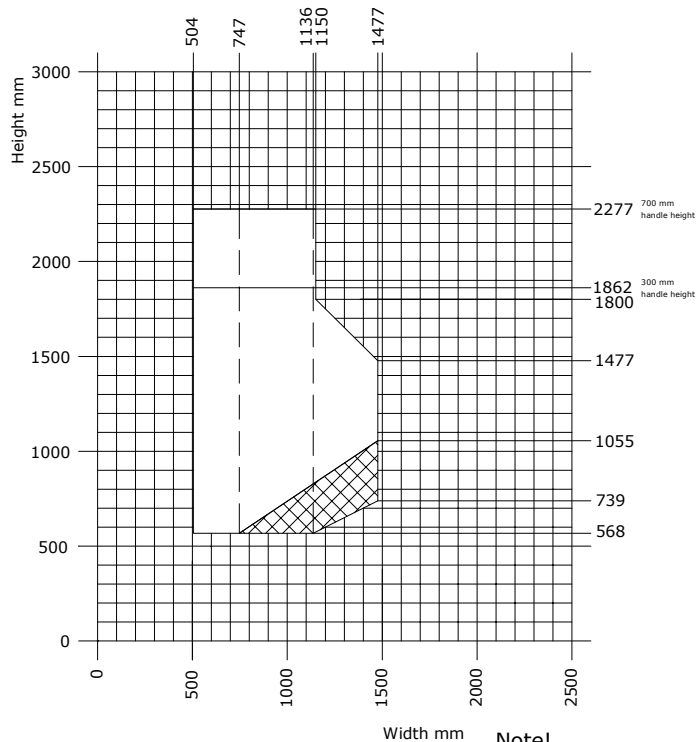
Sill



Width mm
Min. - Max. dim.
Side hung function can be used **only** when cleaning.

Note!
Remember to check sash weight!
Max. 80 kg.

With low handle



Width mm
Min. - Max. dim.
Side hung function can be used **only** when cleaning.

Note!
Remember to check sash weight!
Max. 80 kg.

Tilt window (inward opening)



Use

The tilt window is often used where the possibility of ventilation is desired, but where there are not necessarily requirements for passage, typically in basement or bathroom applications. Frame I / Nation I (inward opening) and Frame IC / Nation IC (outward opening) have the same outer sash-frame height and can therefore be placed in the same elevation, without there being much visual difference. The choice of tilt windows can allow for greater width of the opening.

Function

The tilt window is an inward opening window with a bottom-hung function. The opening function is controlled by a handle and espagnolette located in the side or top sash. In the closed position, the handle faces vertically downwards (or horizontally) and the tilt function is triggered by turning the handle 90°. With tilt function, the upper edge of the sash moves approx. 10 cm inwards and gives a free opening of approx. 2.5 cm.

Standard ironmongery & accessories



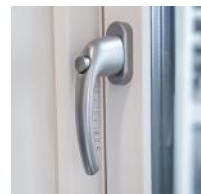
Handle



Locking handle



Handle operated brake



Handle with button



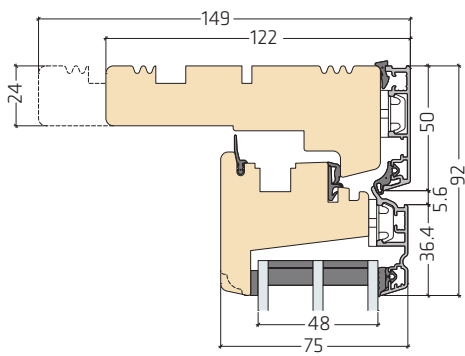
Trickle vent



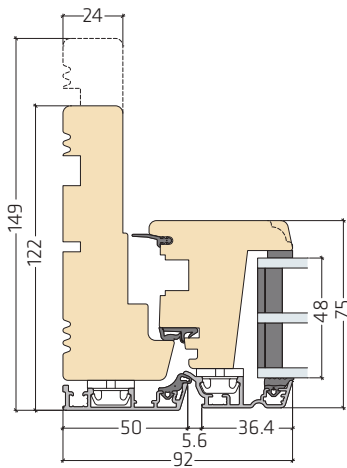
Motor

Maximum/minimum dimensions

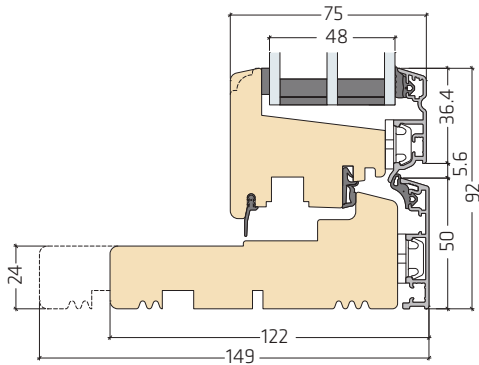
Head



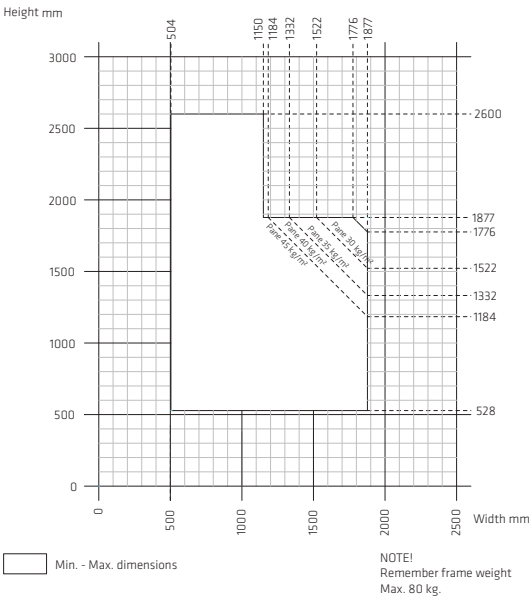
Jamb



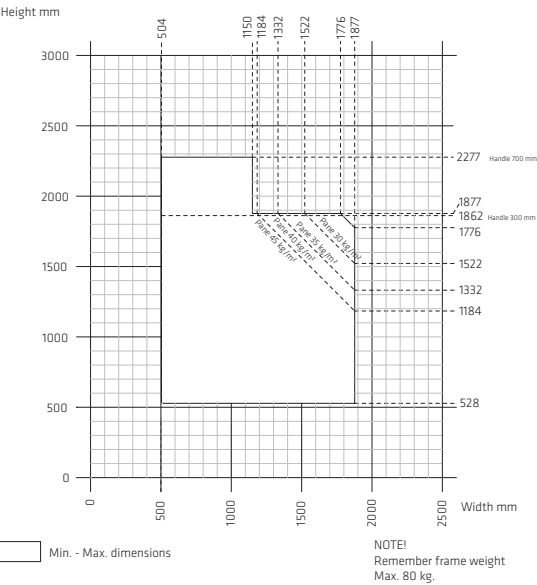
Sill



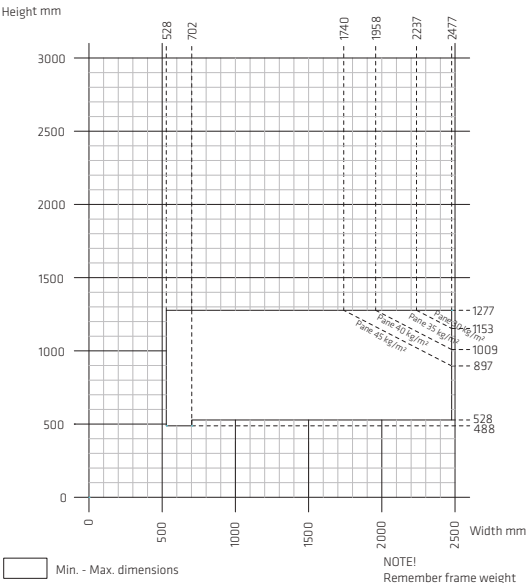
Tilt with side handle



Tilt with side handle - Low handle



Tilt with top handle



Turn window (inward opening)



Use

The Turn window has the most stable locking and is without risk of incorrect operation. Turn windows can typically be recommended for large openings. Frame I / Nation I (inward opening) and Frame IC / Nation IC (outward opening) have the same outer sash-frame height and can therefore be placed in the same elevation, without there being much visual difference. The revolving window can also meet all the building regulations' requirements for egress openings.

Function

Turn windows are inward opening windows with a side-hung function. The opening function is controlled by a lever handle operating an espagnolette in the side or bottom sash. In the closed position, the handle faces vertically downwards (or horizontally) and the turn function is triggered by turning the handle 90°. The Turn window can, as an option, be supplied with a handle-operated brake. The brake can, in the side hung function, hold the frame in any position above 18° opening.

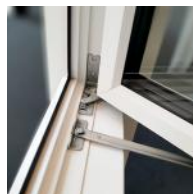
Standard ironmongery & accessories



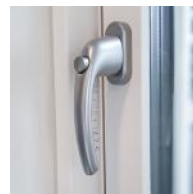
Handle



Locking handle



Handle operated brake



Handle with button



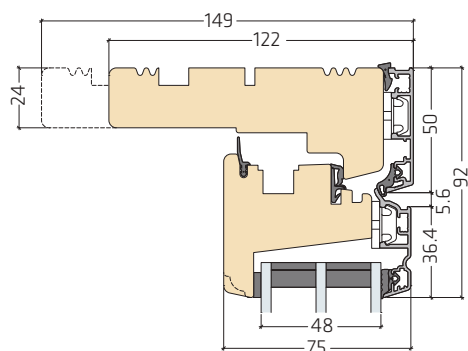
Trickle vent



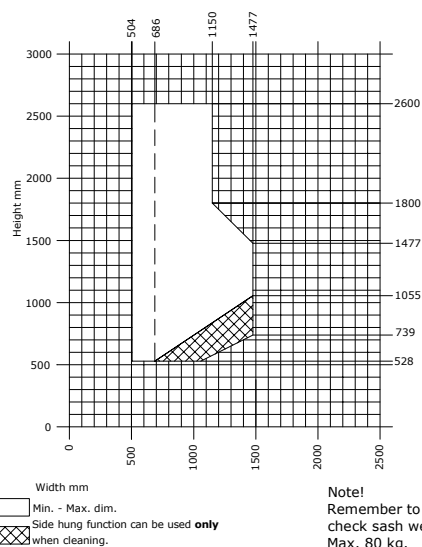
Motor

Maximum/minimum dimensions

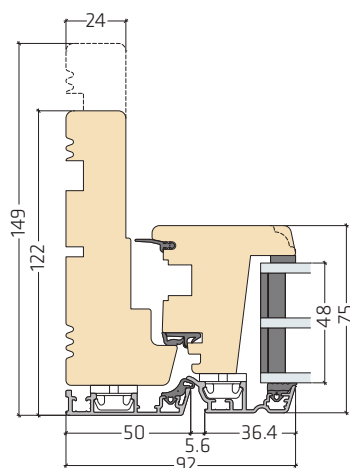
Head



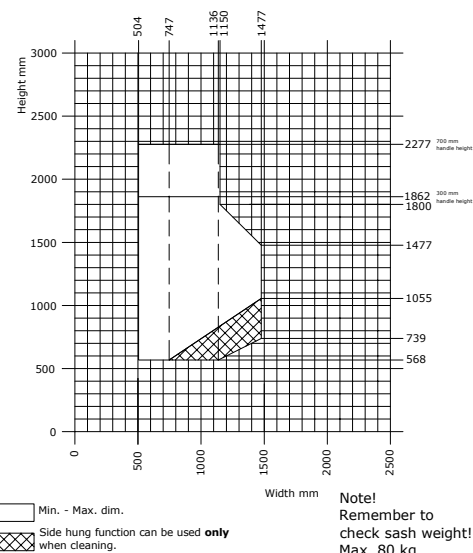
Turn with side handle



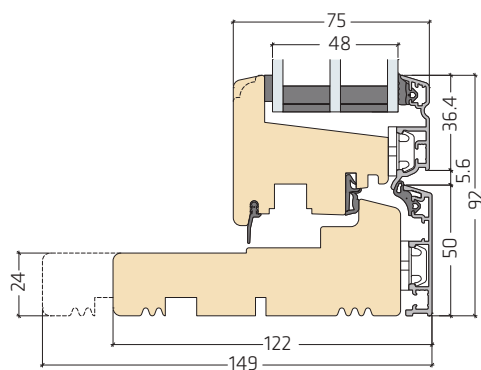
Jamb



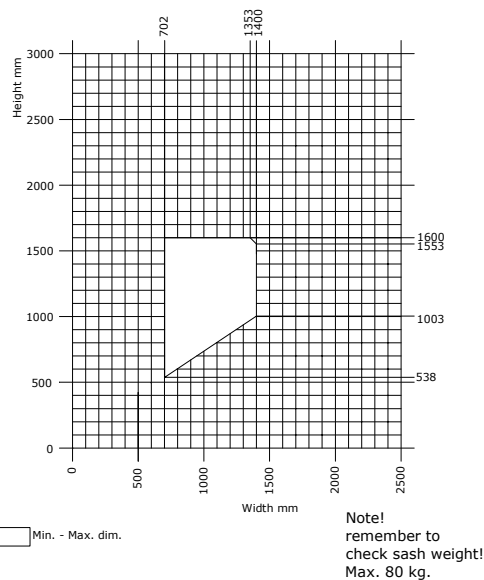
Turn with side handle - Low handle



Sill



Turn with bottom handle



Fixed light



Use

The Fixed frame is most often used in conjunction with other windows with opening sashes. The fixed frame is used only as a light source.

Function

The sash is permanently fitted within the frame and is without any kind of opening function.

These units are deglazed internally.

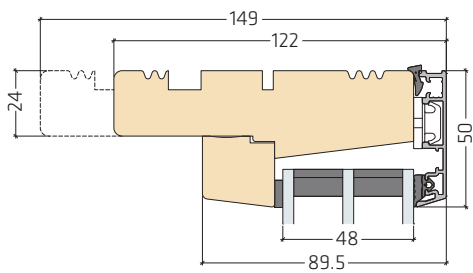
Standard ironmongery & accessories



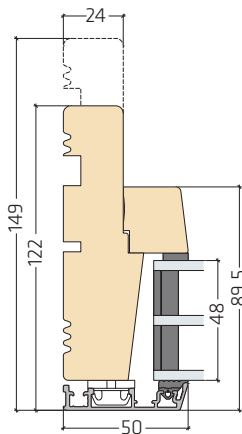
Trickle vent

Maximum/minimum dimensions

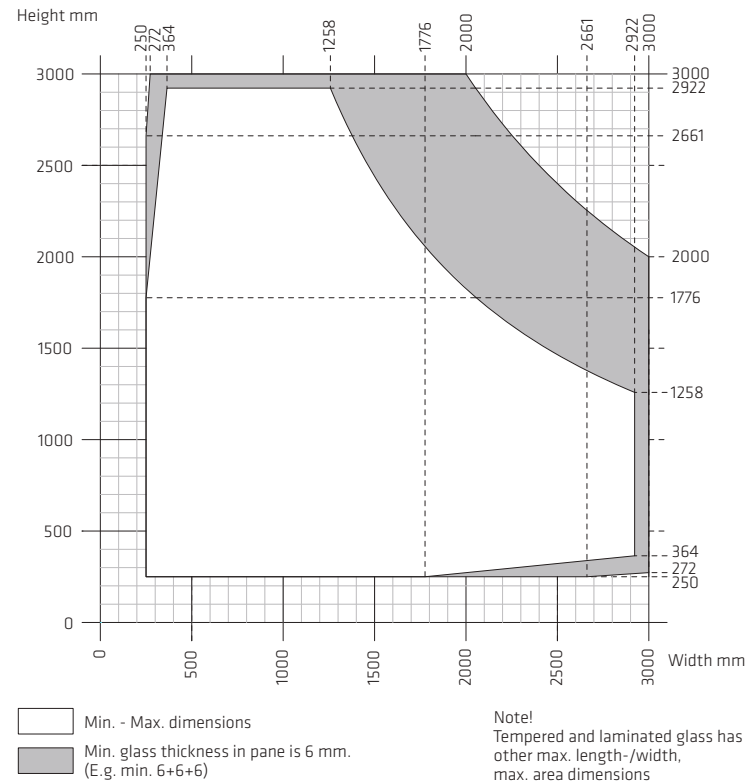
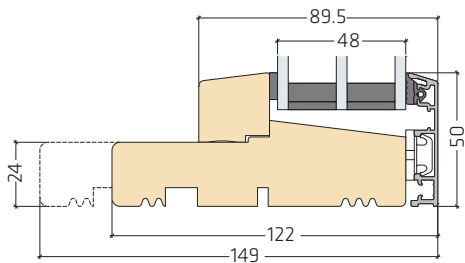
Head



Jamb



Sill



Tilt/Turn & Turn/Tilt door (inward opening)



Use

Used primarily as a direct exit to the terrace, balcony, balcony corridor or alternatively as a Juliet balcony. The tilt-turn door is chosen where the interior of the building provides space for the inward function or where an external sunshade is fitted. Frame I / Nation I (inward opening) and Frame IC / Nation IC (outward opening) have the same outer sash-frame height and can therefore be placed in the same elevation, without there being much visual difference. The door's tilt function provides optimal ventilation options and can be used to advantage in rooms with a higher requirement for ventilation, e.g. in bedrooms and kitchens. The turn function can also meet all the building regulations' requirements for egress openings.

Function

The turn door is an inward opening door with both side and bottom-hung function. Both opening functions are controlled by the handle and espagnolette in the sash jamb. In the closed position, the handle faces vertically downwards and the turn function is triggered by turning the handle 90 ° to the horizontal position. The tilt function is triggered by turning the handle 180 ° to an upright vertical position. With tilt function, the upper edge of the sash moves approx. 14 cm inwards and gives a free opening of approx. 4 cm. Turn-tilt doors can, as an option, be supplied with a handle-operated brake. The brake can, in the turn function, hold the sash in any position above 18 ° opening. The door is delivered as a single door or as a double door.

Standard ironmongery & accessories



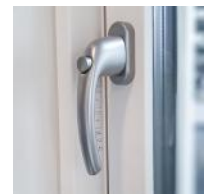
Handle



Locking handle



Handle operated brake



Handle with button



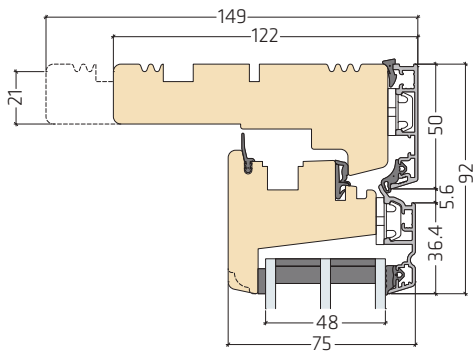
Trickle vent



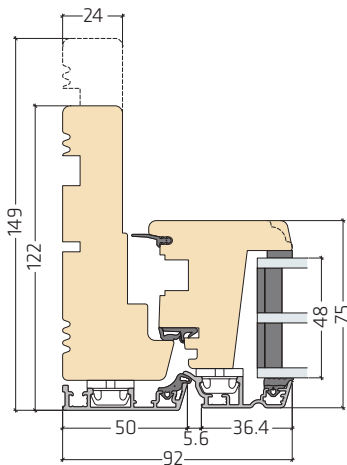
Motor

Maximum/minimum dimensions

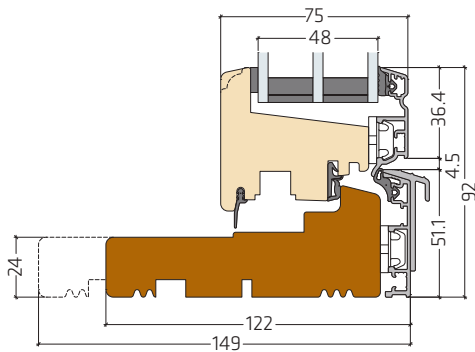
Head



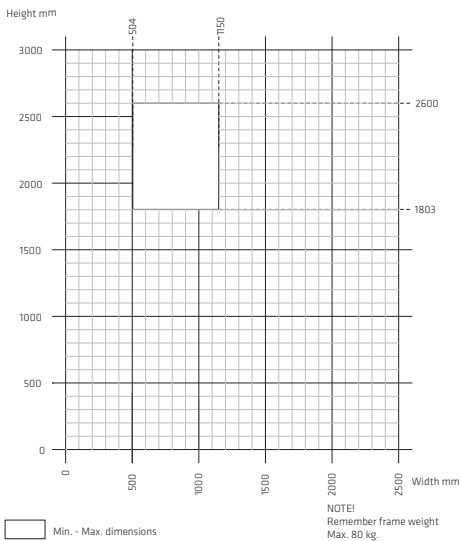
Jamb



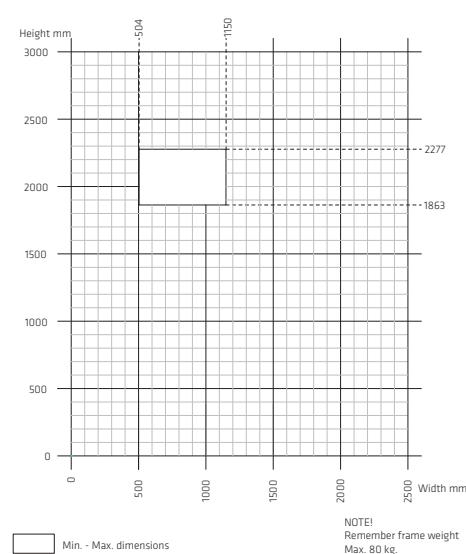
Sill



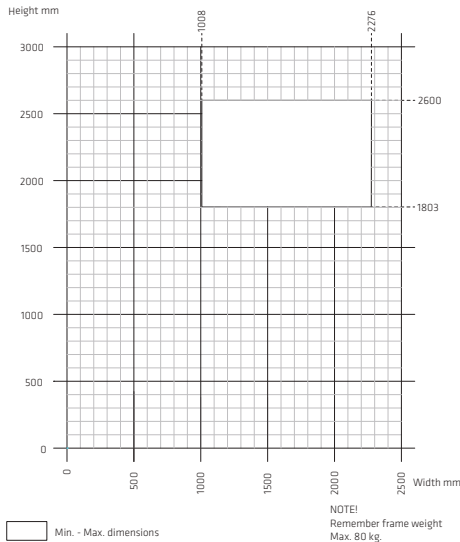
Terrace door



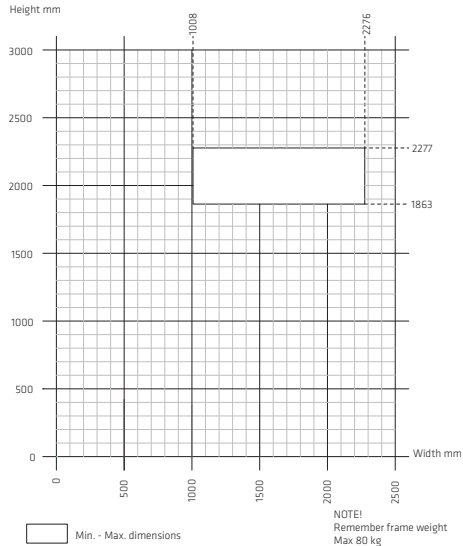
Terrace door w/low handle



Double terrace door



Double terrace door w/low handle



Turn door (inward opening)



Use

The Turn door has the most stable locking and is without risk of incorrect operation. Turn doors can be recommended where access is the primary use. Frame I / Nation I (inward opening) and Frame IC / Nation IC (outward opening) have the same outer sash-frame height and can therefore be placed in the same elevation, without there being much visual difference. Turn doors can also meet all the building regulations' requirements for egress openings.

Function

Turn doors are inward opening doors with side-hung function. The opening function is controlled by a lever handle operating an espagnolette in the sash jamb. In the closed position, the handle faces vertically downwards and the turn function is triggered by turning the handle 90°. Turn doors can, as an option, be supplied with a handle operated brake. The brake can, in the side hung function, hold the frame in any position above 18° opening. The door can be delivered as a single door or as a double door.

Standard ironmongery & accessories



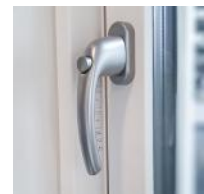
Handle



Locking handle



Handle operated brake



Handle with button



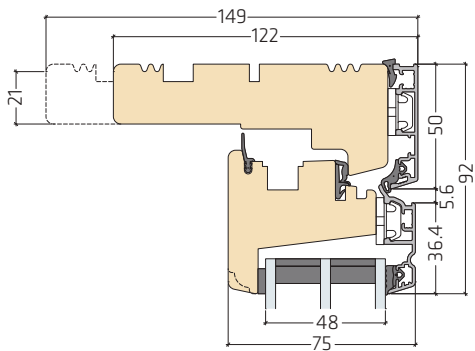
Trickle vent



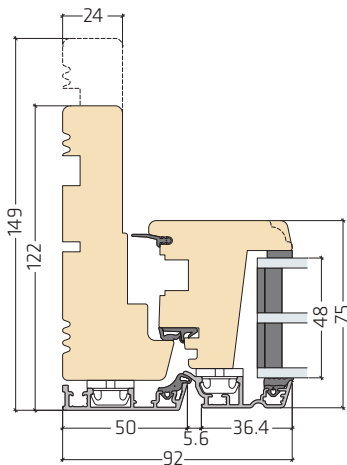
Motor

Maximum/minimum dimensions

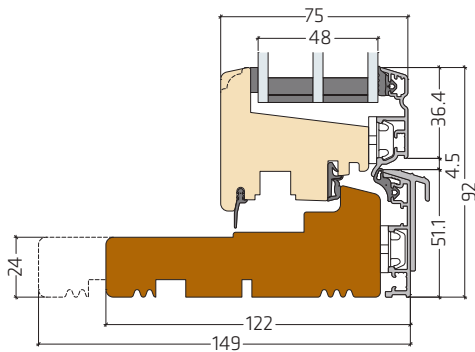
Head



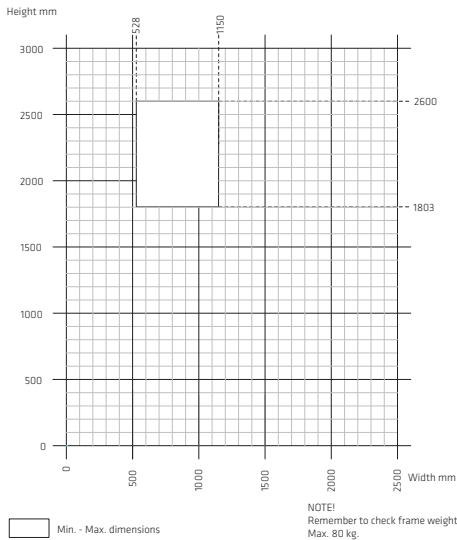
Jamb



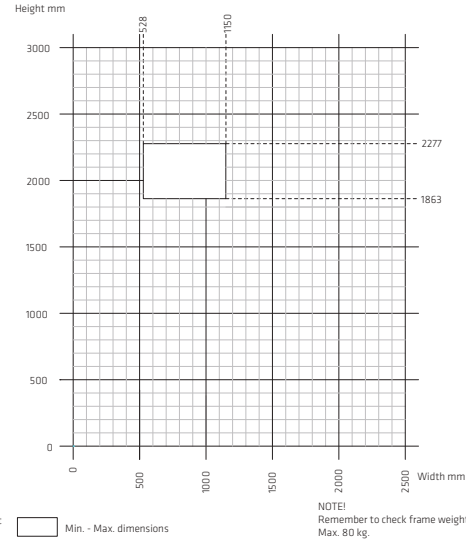
Sill



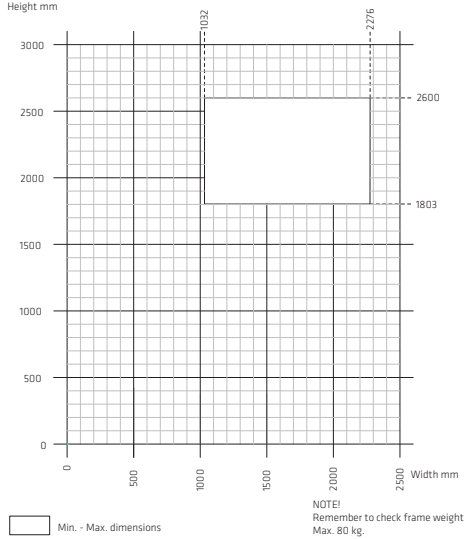
Terrace door



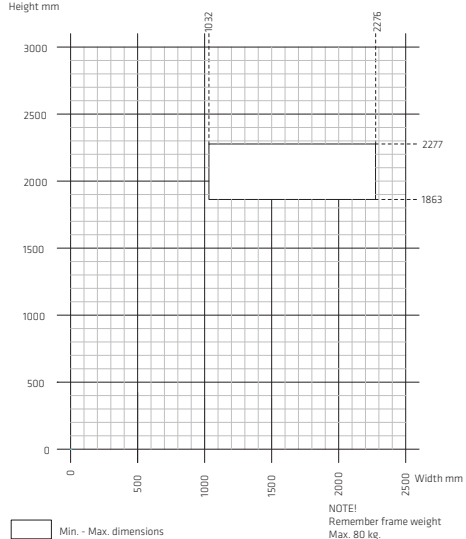
Terrace door w/low handle



Double terrace door

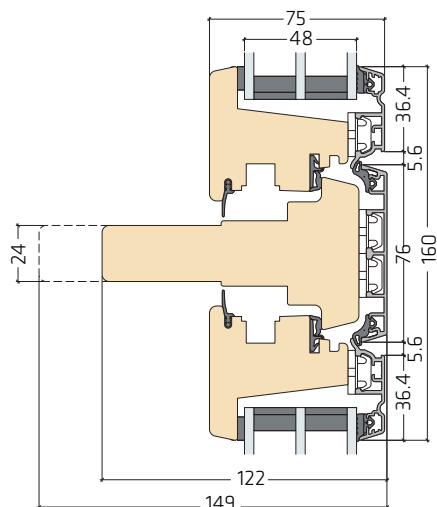


Double terrace door w/low handle

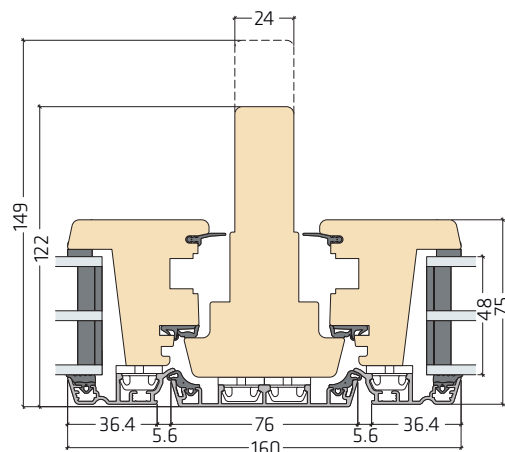


Mullions and Transoms

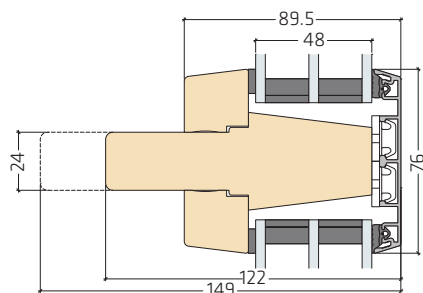
76 x 122 mm transom with sash | FRAic09-40L48



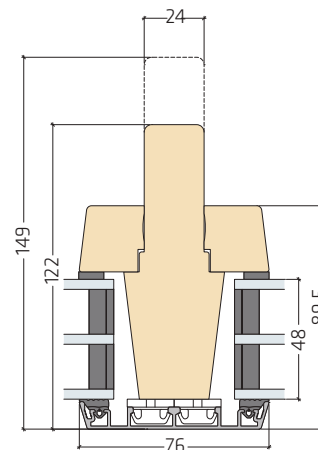
76 x 122 mm mullion with sash | FRAic09-50L48



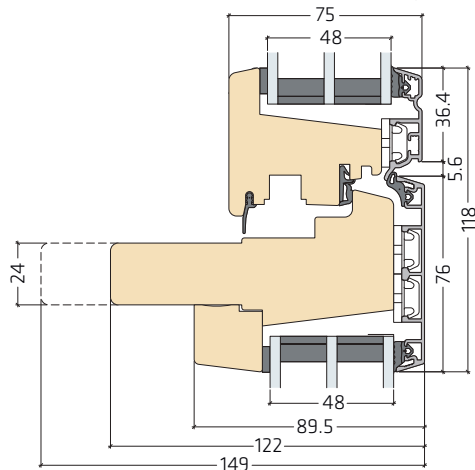
76 x 122 mm transom with fixed lights | FRAic09-41L48



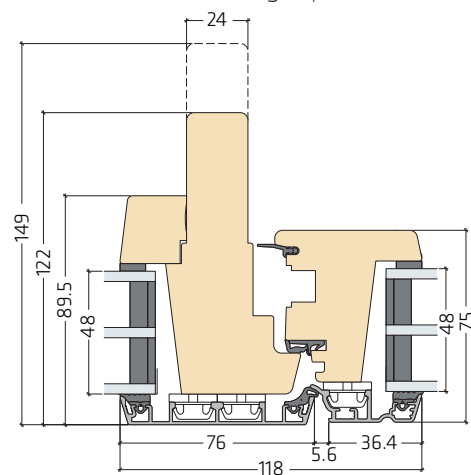
76 x 122 mm mullion with fixed lights | FRAic09-51L48



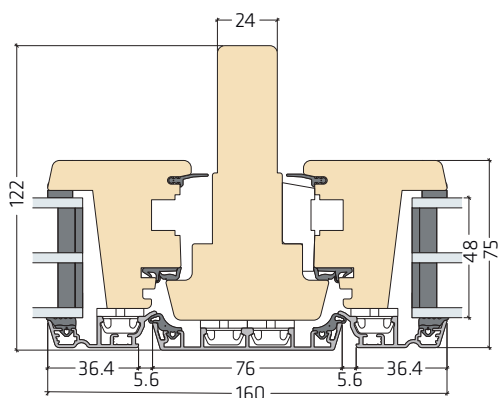
76 mm transom with sash and fixed light | FRAic09-42L48



76 mm mullion with sash and fixed light | FRAic09-52L48

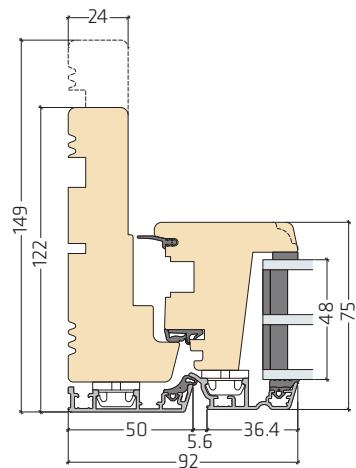


Meeting stiles | FRAic09-80L48

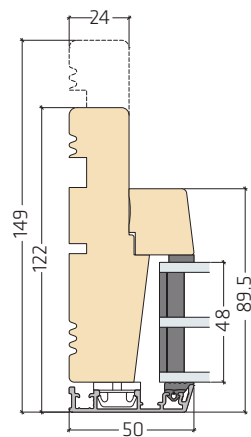


Alternative frames and sashes

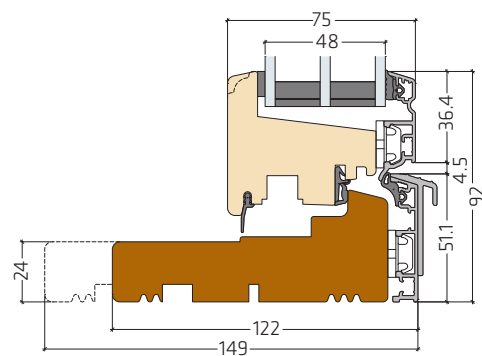
Jamb with sash 122 and 149 mm | FRAic09-30L48



Jamb fixed light | FRAic09-31L48

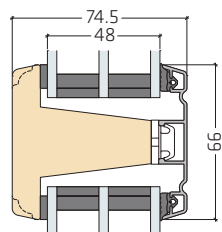


Sill with sash | FRAic28-10L48

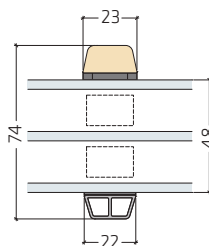


Glazing bars

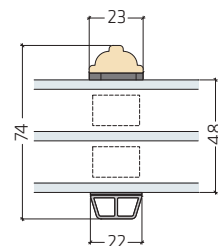
66 mm glazing bar | FRAic12-61L48



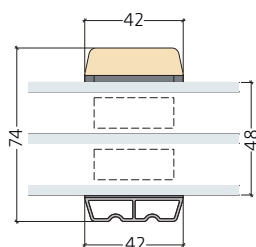
22 mm glazing bar | FRAic12-80L48



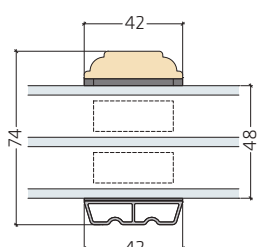
22 mm glazing bar with moulded profile | FRAic12-80P48



42 mm glazing bar | FRAic12-81L48

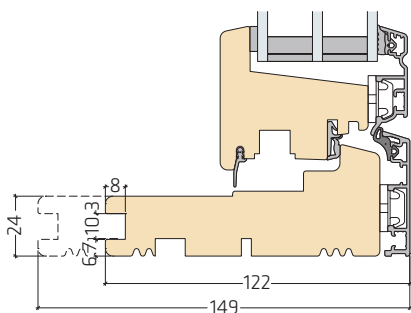


42 mm glazing bar with moulded profile | FRAic12-81P48

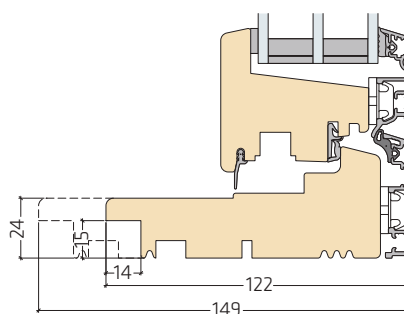


Grooves and rebates

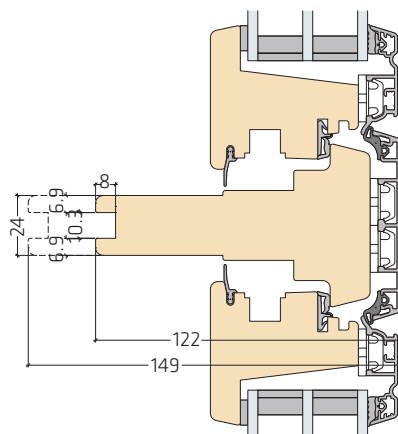
10,3 x 8 mm groove | FRAic-NOT016



15x14 mm rebate | FRAic-NOT017

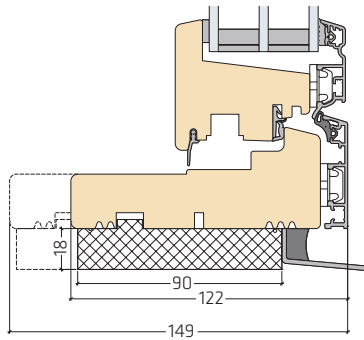


10,3x8 mm groove | FRAic-NOT018

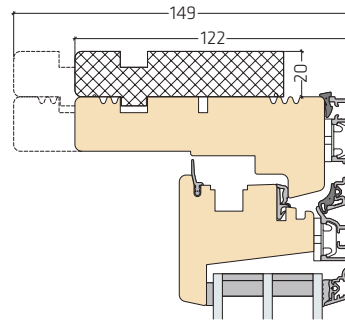


Packers and couplings

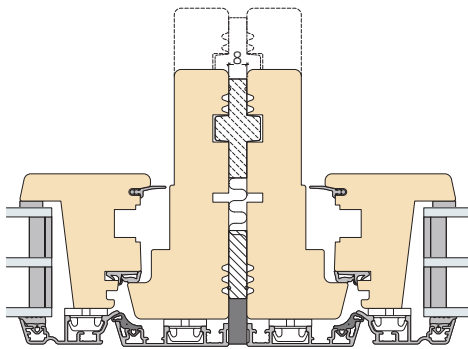
18x90/18x119 mm packer on sill | FRAic_PFO012



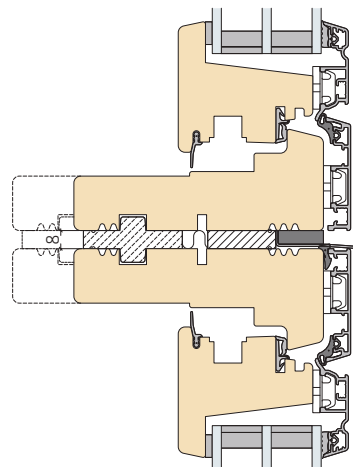
20 mm packer on head/jamb | FRAic_PFO013



Coupling with cross tongue - vertical | FRAic-PFO014



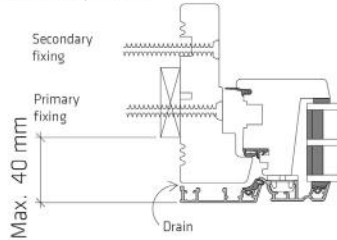
Coupling with cross tongue - horizontal | FRAic-PFO015



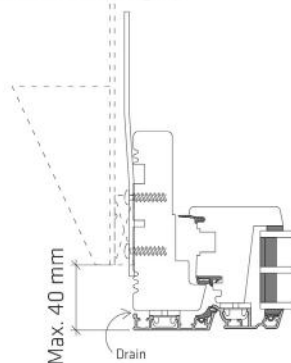
Installation details

Inward opening windows/doors

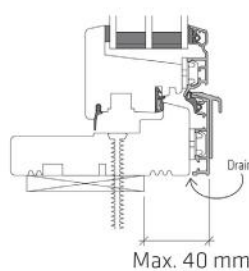
Head/Jamb aperture



Head/Jamb/Sill ironmongery

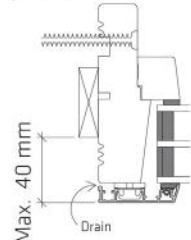


Door threshold

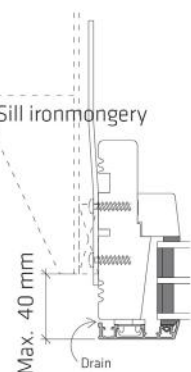


Fixed light (inward opening)

Head/Jamb aperture



Head/Jamb/Sill ironmongery



Idealcombi UK

” *At Idealcombi we give our customers a foundation of comfort through our knowledge of energy and windows.*



Lasse Sørensen, Commercial Regional Business Manager



Knowledge centre for windows

Showroom

Idealcombi's UK headquarters in Milton Keynes is our knowledge centre of energy performance, doors and windows in the UK. In our showroom customers have the opportunity to try our products and see/feel the quality close up and have a chat with our knowledgeable staff.

We prioritise to give everyone from the professional builder to the end user the best possible foundation for making the right decision when it comes to energy performance and choosing the right windows and doors.

At Idealcombi we are ready to help you with your project, no matter the size - from high rise apartment or office buildings to one off domestic houses.

Training and CPDs

We are continuously improving our products, which are at the very forefront of window design - therefore it is equally important that our customers and partners are aware of the benefits and qualities Idealcombi's products bring to the building industry.

We also make sure to update our approved installers so they know how to fit and adjust our doors and windows - giving you the maximum benefit of choosing Idealcombi products.

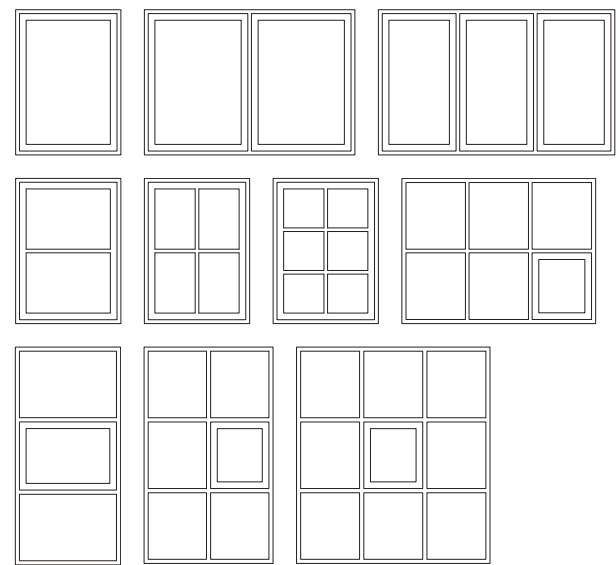


Nation IC

Top Guided	104
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We refer to Frame IC for solutions in Nation IC.

Top Guided



Use

Top guided windows are mostly used on low rise buildings and multi-storey structures with balconies where the windows can be cleaned from outside and good ventilation is required.

better ventilation. The top guided window is equipped with safety keeps and espagnolette with adjustable mushroom bolts. The window can be opened with the handle at the bottom of the sash to be secured in the ventilation position with a 10 mm gap.

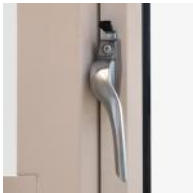
Function

The opening mechanism in a top guided window is located in the window jambs. Upon opening, the bottom of the sash moves outwards whilst the top is drawn downwards, thus producing

Standard ironmongery and accessories



Handle



Handle with safety catch



Locking handle



Mushroom bolts



Opening restrictor



Keep



PN safety catch with restrictor



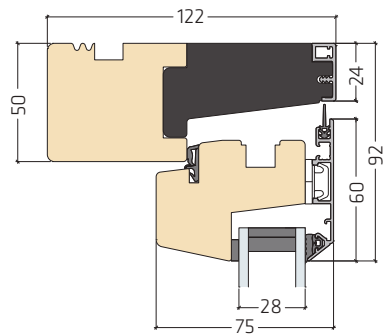
Trickle vent



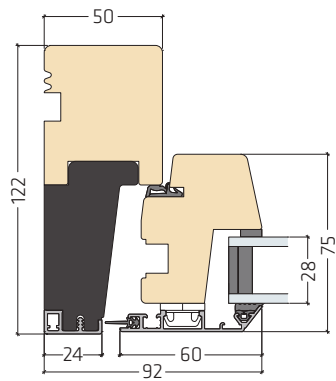
Safety catch

Minimum/maximum dimensions

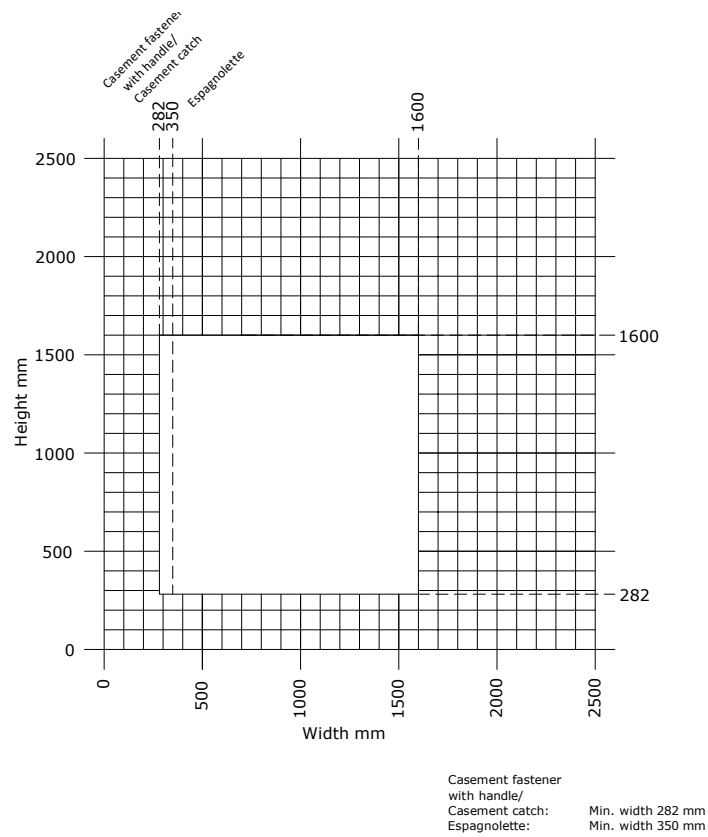
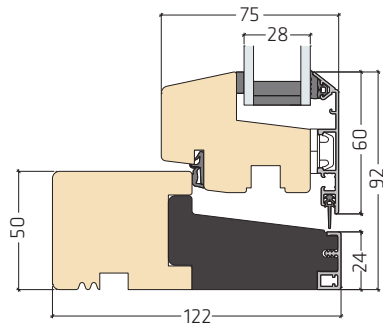
Head



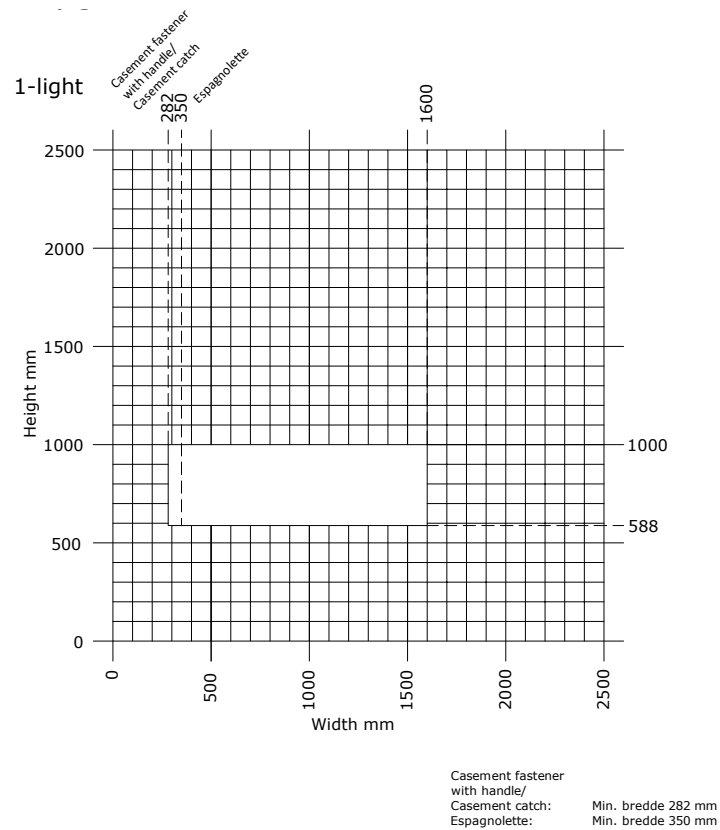
Jamb



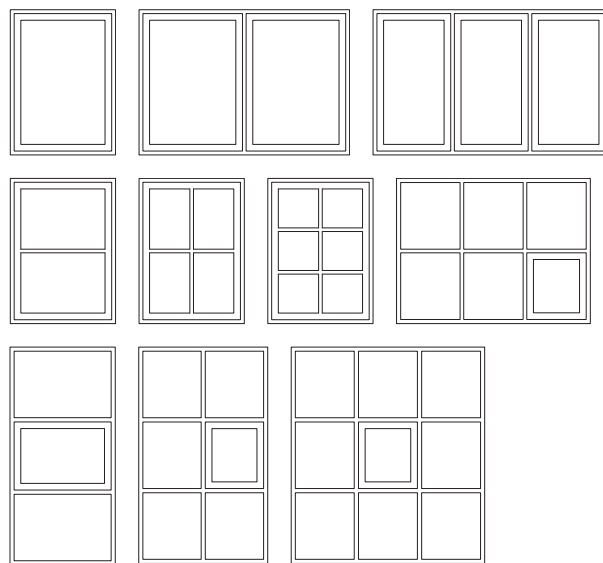
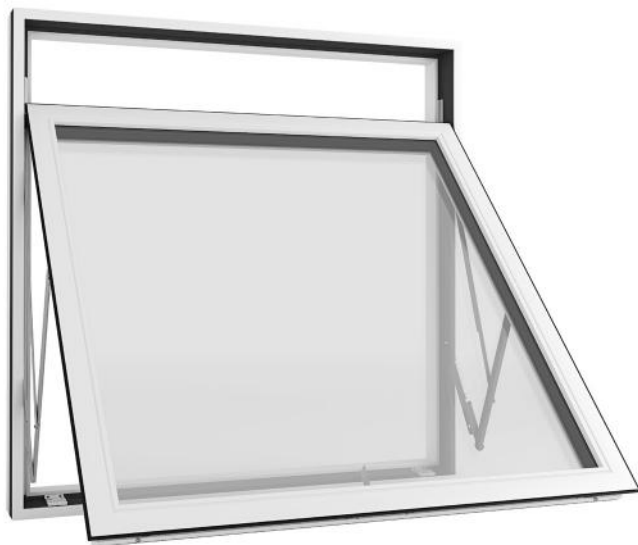
Sill



1-light with double friction



Top Swing Reversible



Use

The top swing window is the most commonly used in multi-storey structures and in single storey buildings where cleaning from the inside is necessary. By reversing the sash it makes this the safest and most useful type of window for cleaning from inside a building.

releasing the catch the sash can be swung through about 180° and held in place securely in the reversed position so that the outside glass can be cleaned from the inside.

The window can be opened with the handle at the bottom of the sash to be secured in the ventilation position with a 10 mm gap.

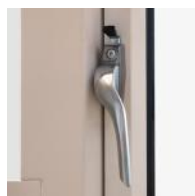
Function

Top swing windows are constructed with a top reversible hinge fitted in the jambs. A safety catch restricts opening to 10 cm. By

Standard ironmongery and accessories



Handle



Handle with safety catch



Locking handle



Mushroom bolts



Trickle vent



Keep



PN safety catch with restrictor



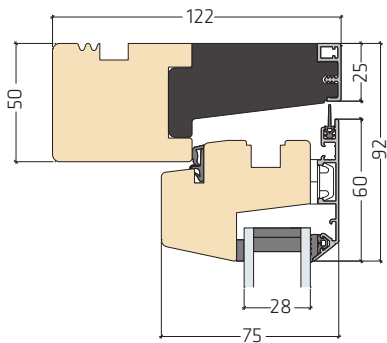
Reversible hinges



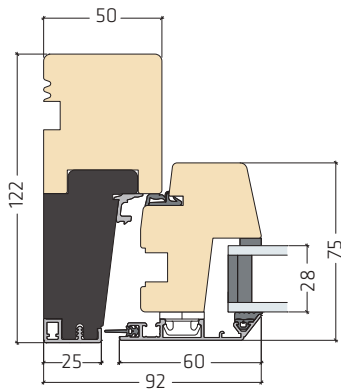
Easy clean hinges and restrictor

Minimum/maximum dimensions

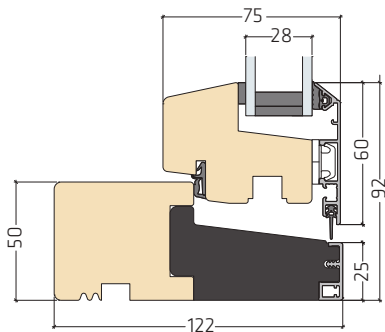
Head



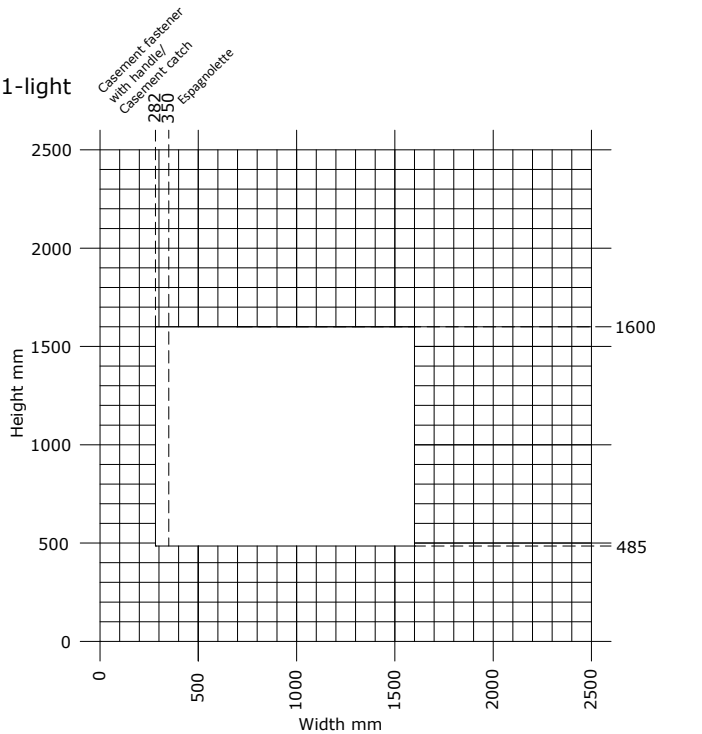
Jamb



Sill



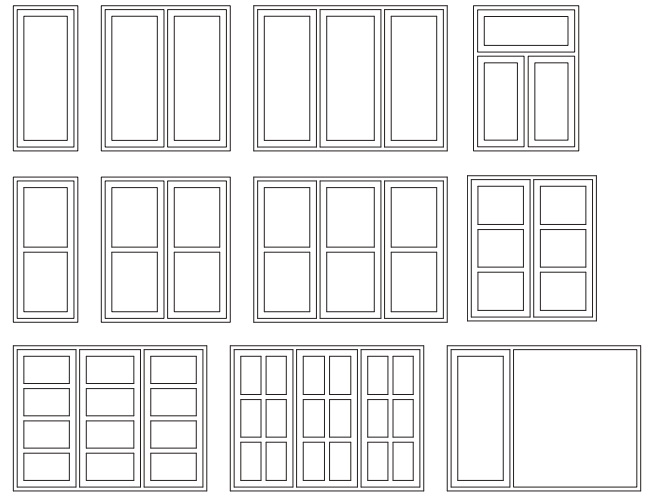
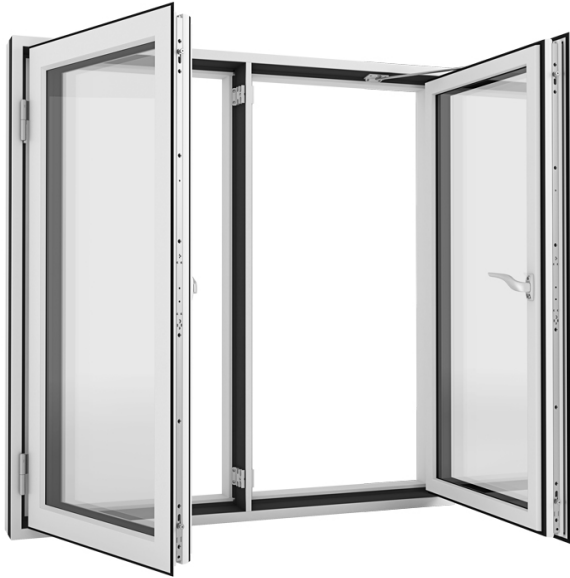
1-light



Min. - Max. dim

Casement fastener with handle/ Casement catch: Min. width 282 mm Espagnolette: Min. width 350 mm

Side Hung



Use

Side hung windows are used in all types of building and are the most traditional opening method. Side hung opening is the most practical choice for escape windows.

Function

Side hung windows are pivoted from the jamb using height adjustable butt hinges. The window is locked with a handle that operates a multi-locking point espagnolette with mushroom bolts and has a night vent position. The handle also operates a friction brake to hold the sash whilst in the open position. A floating mullion is available on windows used in pairs for maximum opening widths. The master leaf is operated by a handle and the slave leaf is held by flush bolts.

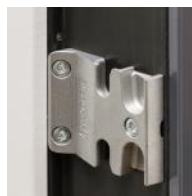
Standard ironmongery and accessories



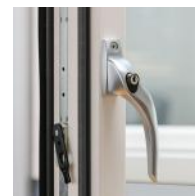
Handle



Mushroom bolts



Keep



Locking handle



PN safety catch with restrictor



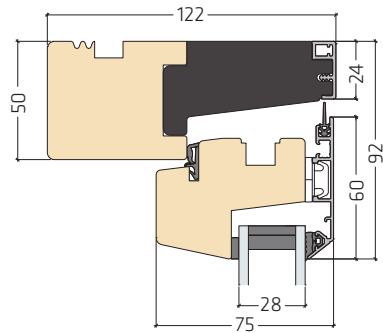
Trickle vent



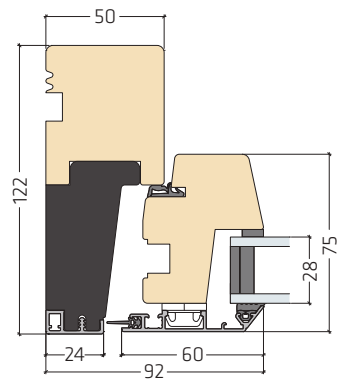
Flush bolt

Minimum/maximum dimensions

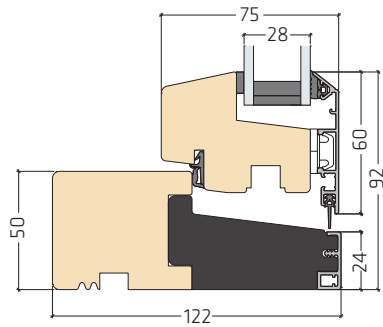
Head



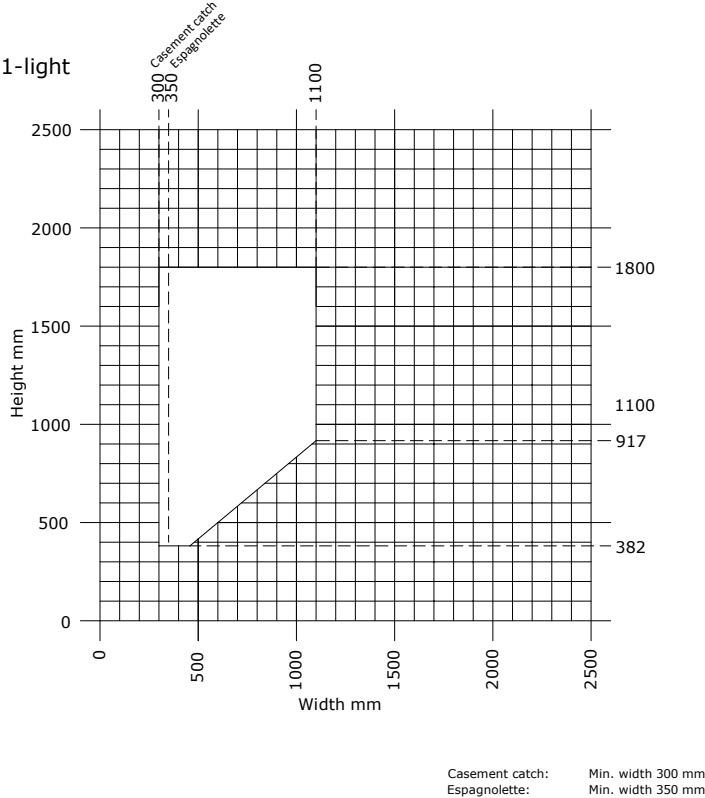
Jamb



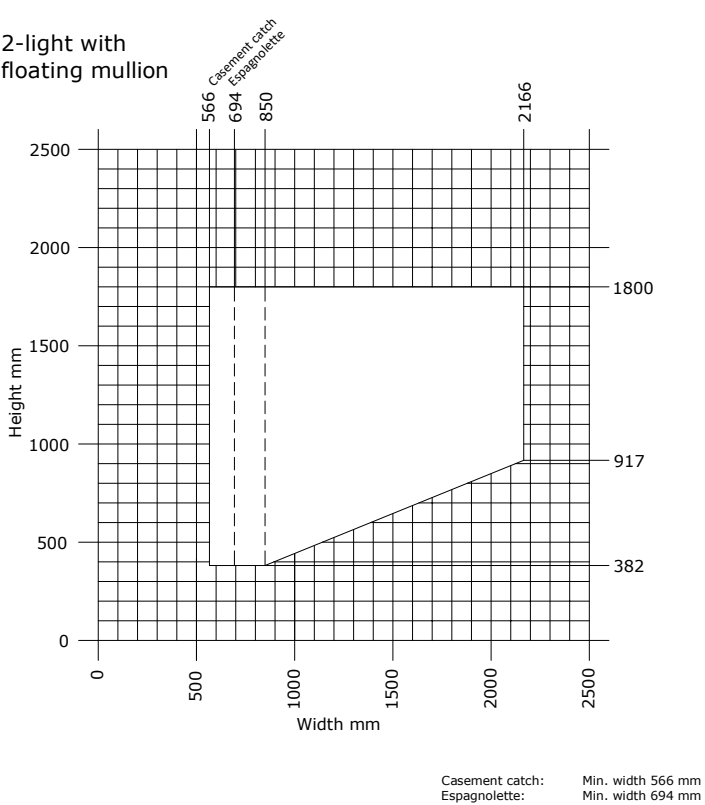
Sill



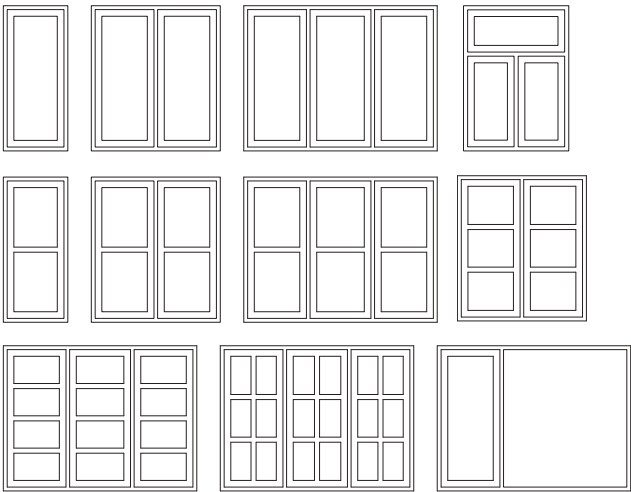
1-light



+10 mm parliament hinge



Side Guided



Use

Side guided windows are used in all types of buildings but primarily in multi-story structures where cleaning can only be achieved from the inside of the building.

Function

The side guided window is fitted with hinges that allows the hinged side of the sash to move toward the middle of the window leaving a gap of 100 mm on the hinged side when the sash is in a 90° position. This allows easy cleaning of the external window pane from inside the building.

The window is locked with a handle that operates a multi-locking point espagnolette with mushroom bolts and has a night vent position with a 10 mm gap.

Standard ironmongery and accessories



Handle



Mushroom bolts



Keep



Locking handle



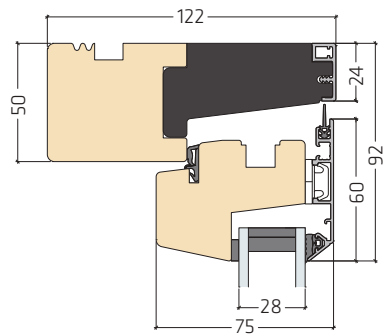
Trickle vent



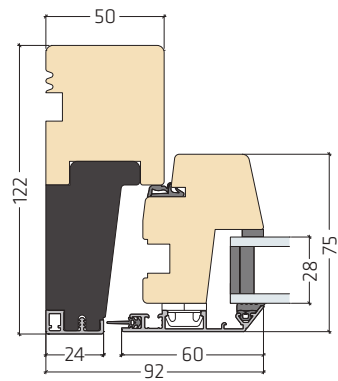
Opening restrictor

Minimum/maximum dimensions

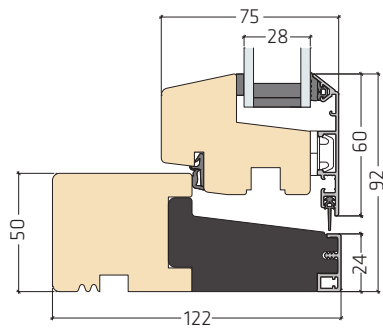
Head



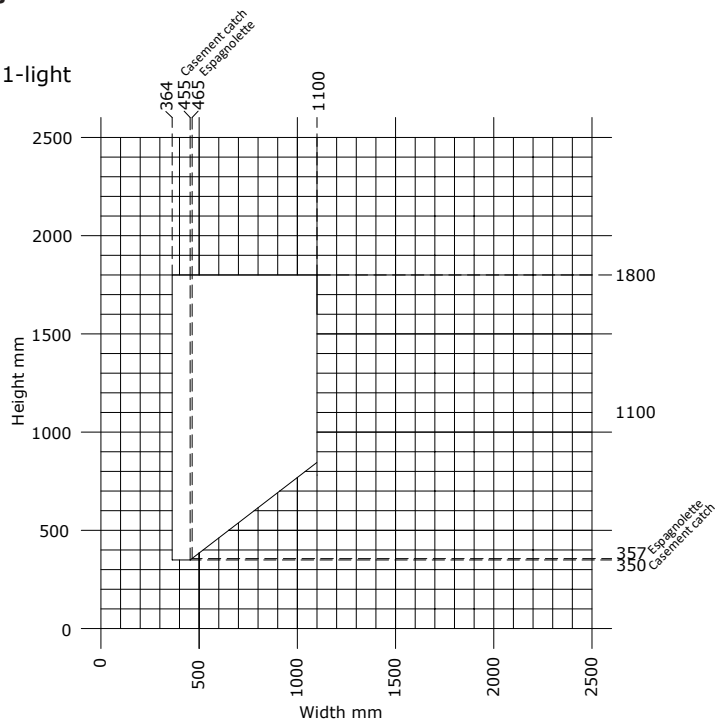
Jamb



Sill



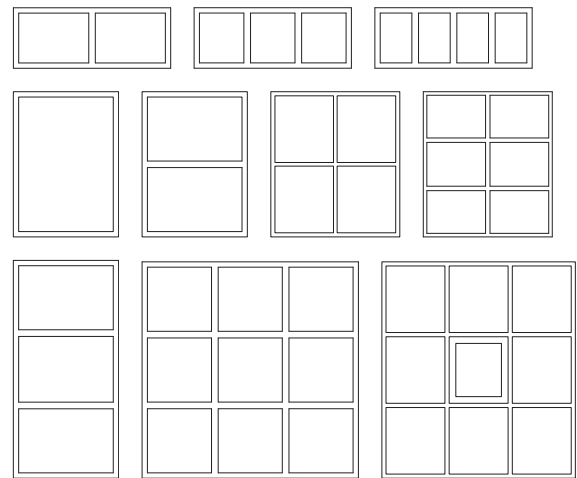
1-light



Casement catch: Min. height 350 mm
Espagnolette: Min. height 357 mm

Min. - Max. dim

Fixed Light



Use

Fixed lights are often used in combination with opening sashes. The fixed light is only used as a light source in the fenestration of the building or as a spandrel panel with opaque glass to create a false window.

Function

Fixed lights consist of glazing fitted directly into the frame without any kind of opening function.

Standard ironmongery and accessories



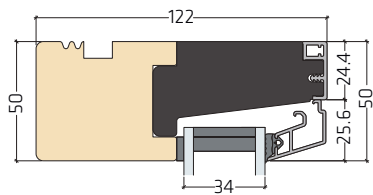
Trickle vent



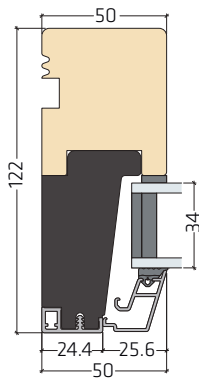
External canopy

Minimum/maximum dimensions

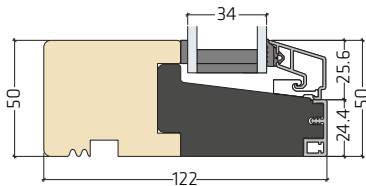
Head



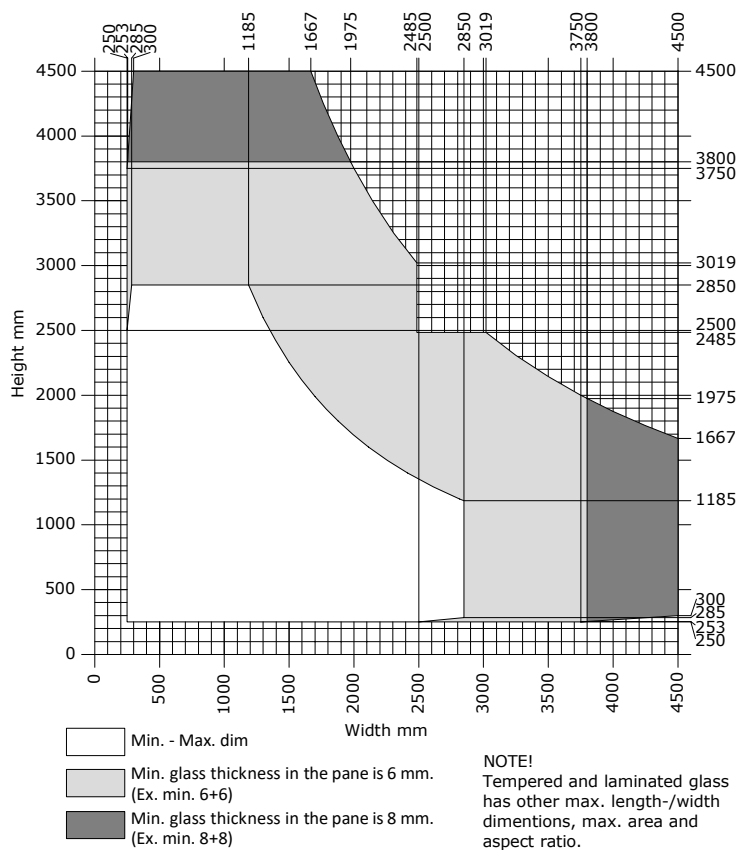
Jamb



Sill

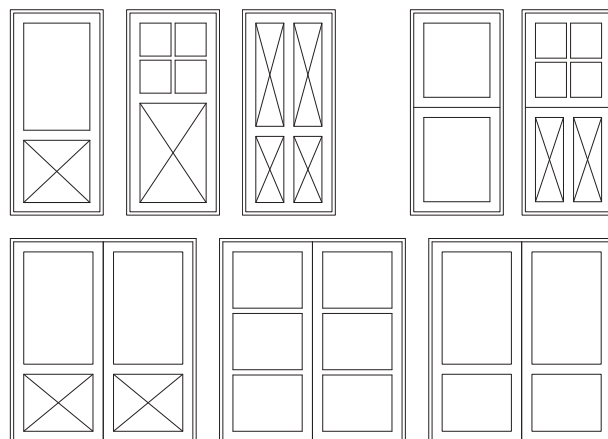


1-light



Note!
Because of the 230 kg element weight limit, it is not always possible to reach the max area.

Outward Opening Entrance and Stable Door



Use

The outward opening entrance door is used for direct access to the outside from, for example, a utility room, hall or porch in buildings where the outside area permits this. It is suitable for a room with minimal space and is the preferred choice for fire exits with appropriate ironmongery. The stable door arrangement is an alternative choice and is used in the same way. The stable door offers additional ventilation, whilst keeping pets and children contained.

Function

The door is side hung with powder coated and height adjustable hinges. A three-locking-point espagnolette with mushroom bolts lock into the safety keeps. An additional hook bolt at the middle by the lock box secures the door even further.

The door can be supplied with or without fixed light sidelights and as a double door. Stable doors are not available as double doors.

Standard ironmongery and accessories



Entrance door handle



Strike plate



Hook bolts and mushroom bolts



Hardwood threshold



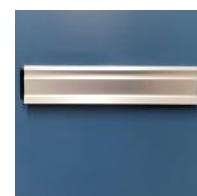
Fibre threshold



Handle with internal thumbturn



Friction brake

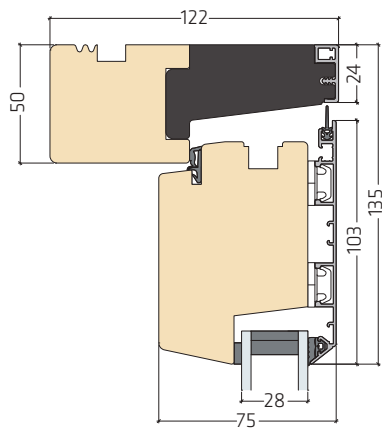


Letterplate

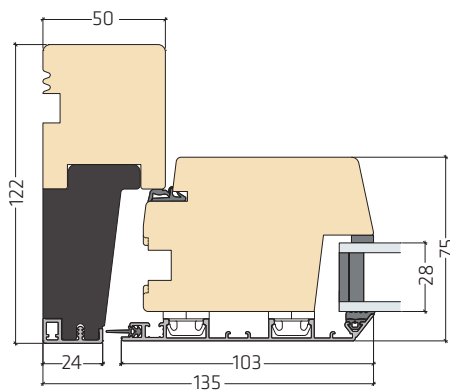
Entrance doors are delivered with handles supplied loose.

Minimum/maximum dimensions

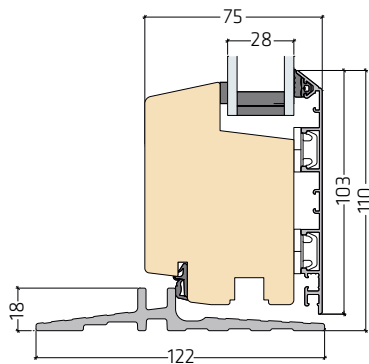
Head



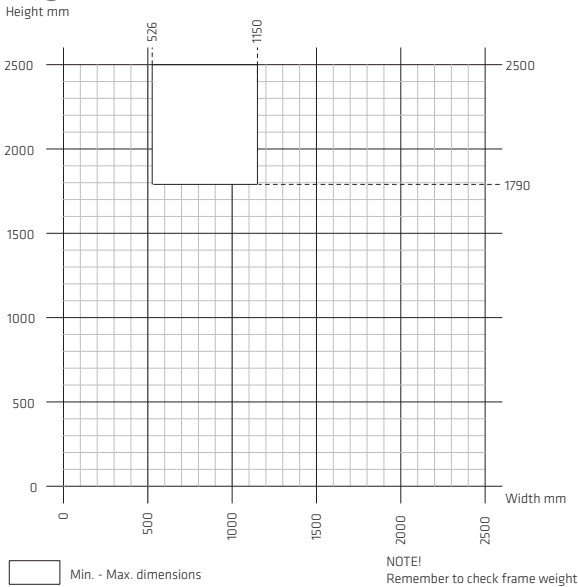
Jamb



Sill

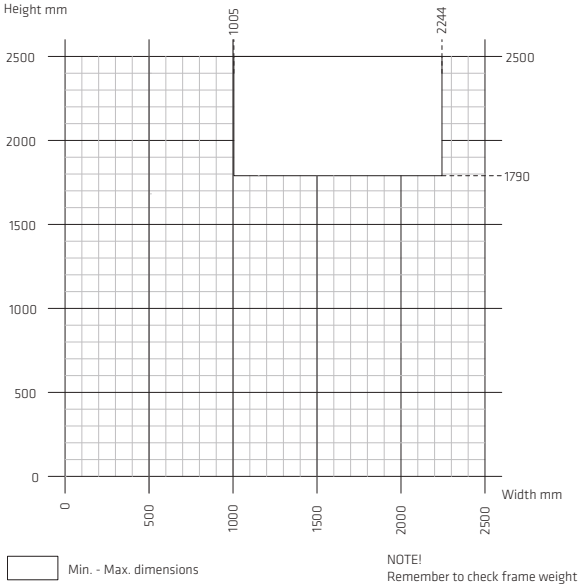


Single door



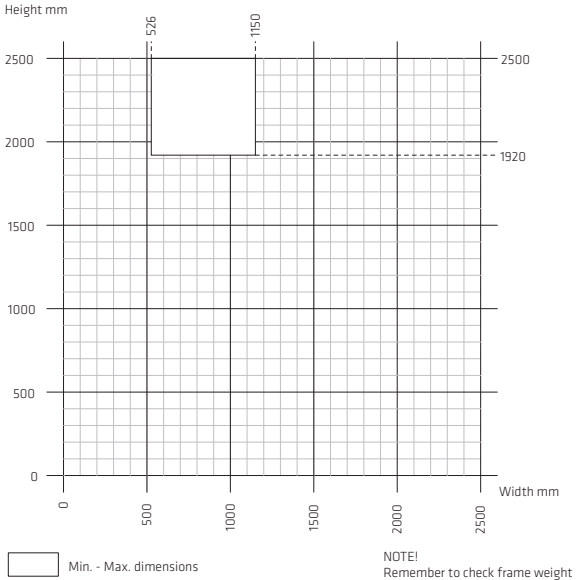
The clear opening at 90° without handle:
Frame/frame: Frame width - 161 mm
Frame/66 mm mullion: (Frame/mid mullion) - 144 mm
Frame/76 mm mullion: (Frame/mid mullion) - 149 mm

Double door

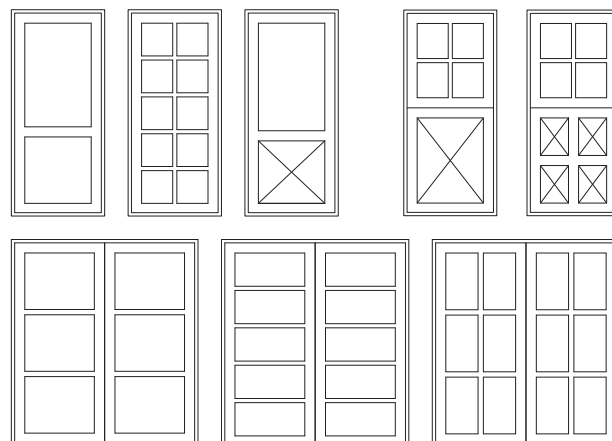


The clear opening at 90° without handle:
External frame width/2 - 133 mm (opening part)
External frame width - 224 mm (total clear opening)

Stable door



Outward Opening Terrace Door



Use

The outward opening terrace door is used in all types of buildings to access a terrace, patio or spacious balcony. It is suitable for rooms with minimal space and is the preferred choice for fire exits with appropriate ironmongery.

Function

The door is side hung with powder coated and height adjustable hinges. A three-locking-point espagnolette with mushroom bolts lock into the safety keeps.

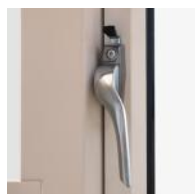
The terrace door is operated with the handle on the sash and can be locked in a night vent position with a 10 mm. gap. A handle operated brake can hold the door open in any position.

Supplied as single and double doors with and without fixed light side lights.

Standard ironmongery and accessories



Handle



Handle with safety catch



Locking handle



Hardwood threshold



Trickle vent



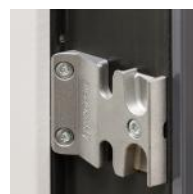
Fibre threshold



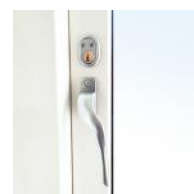
Friction brake



Mushroom bolts



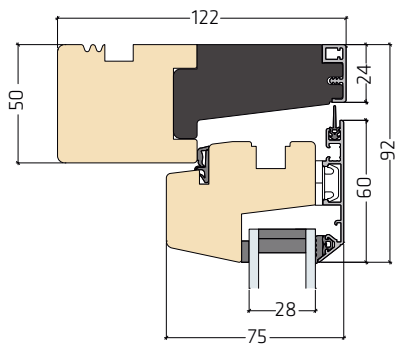
Keep



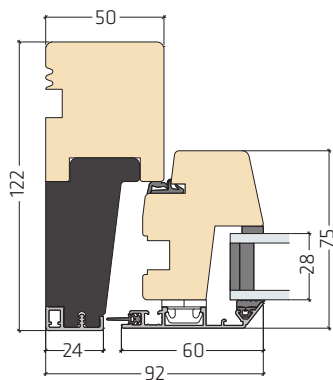
Internal locking cylinder, terrace door 78 mm frame

Minimum/maximum dimensions

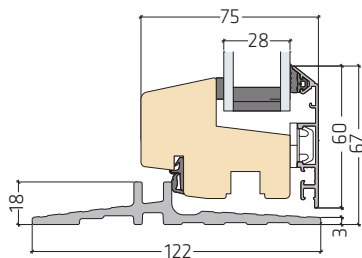
Head



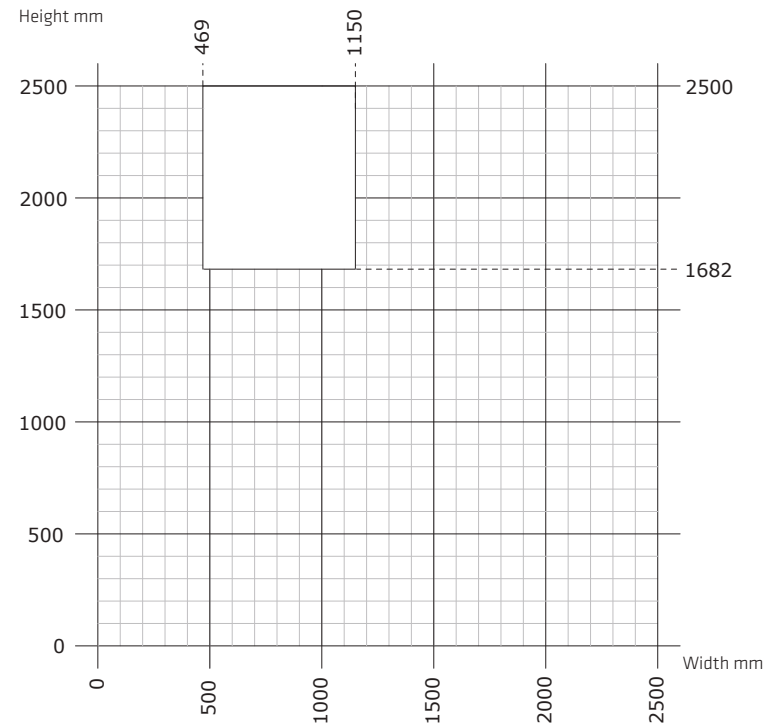
Jamb



Sill



Single door

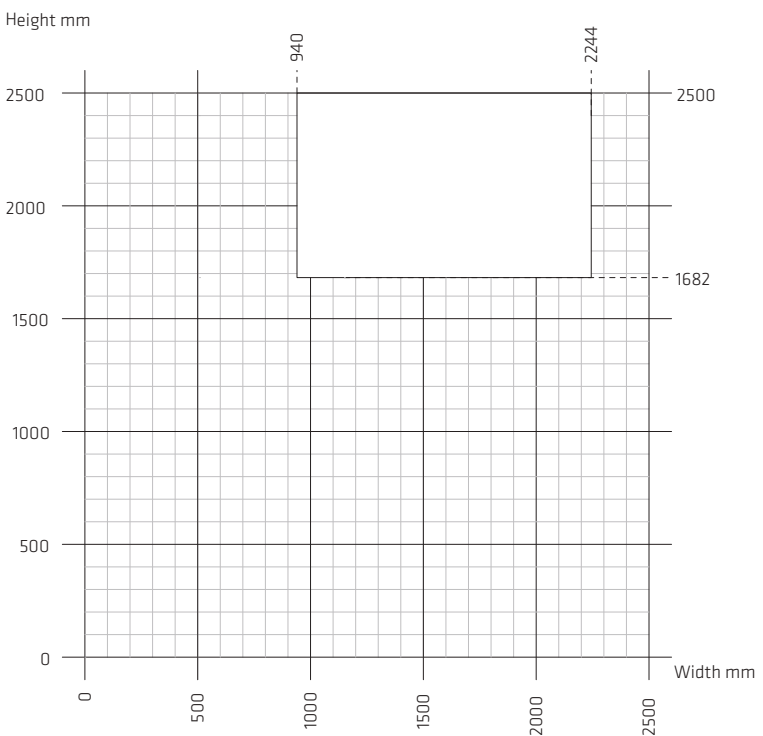


Min. - Max. dimensions

NOTE!
Remember to check weight

The clear opening at 90° without handle:
Frame/frame: Frame width - 163 mm
Frame/66 mm mullion: (Frame/mid mullion) - 144 mm
Frame/76 mm mullion: (Frame/mid mullion) - 149 mm

Double door

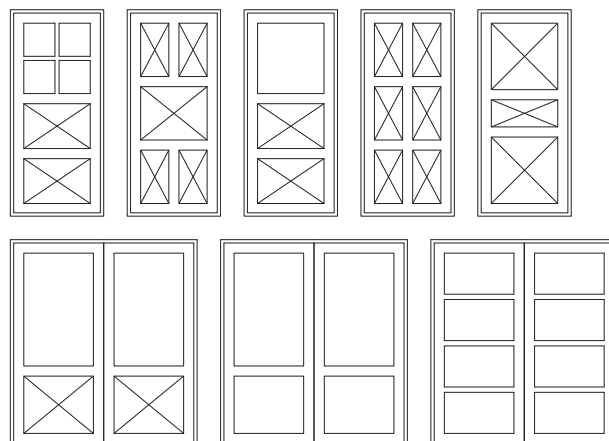


Min. - Max. dimensions

NOTE!
Remember to check frame weight

The clear opening at 90° without handle:
External frame width/2 - 133 mm (opening part)
External frame width - 224 mm (total clear opening)

Inward Opening Entrance Door



Use

The inward opening entrance door is the most commonly used. They are used in all types of buildings which require direct access to the outside - for example: a stairway, utility room, hall or porch. The door allows passage to the external side, which is very advantageous in facades within densely built-up areas, onto walkways, pavements and circulation areas.

Function

The door is side hung with powder coated and height adjustable hinges. A three-locking-point espagnolette with mushroom bolts lock into the safety keeps. An additional hook bolt at the middle by the lock box secures the door even further.

The entrance door can be supplied with or without fixed light sidelights and as a double door.

Standard ironmongery and accessories



Entrance door handle



Strike plate



Hook bolts and mushroom bolts



Hardwood threshold



Fibre threshold

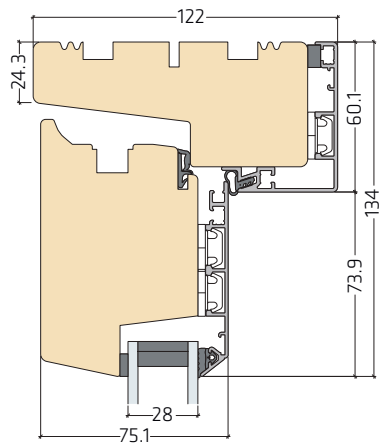


Handle with internal thumbturn

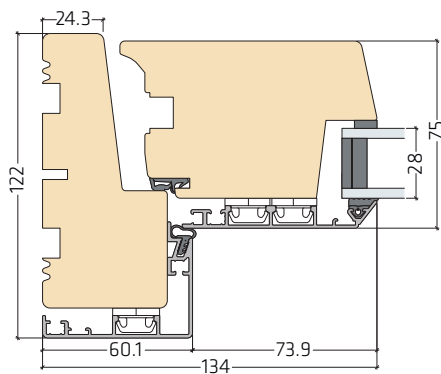
Entrance doors are delivered with handles supplied loose.

Minimum/maximum dimensions

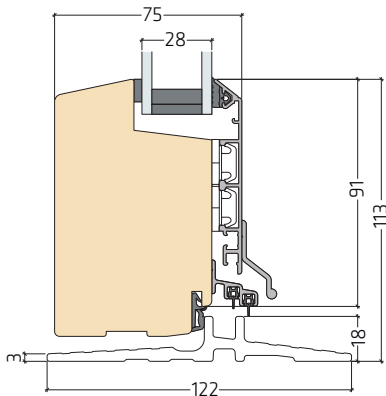
Head



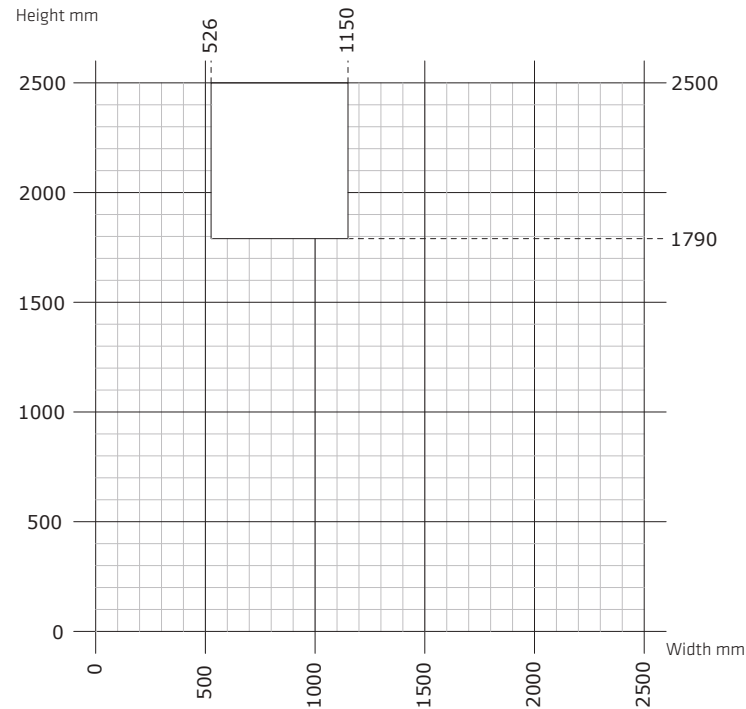
Jamb



Sill



Single door

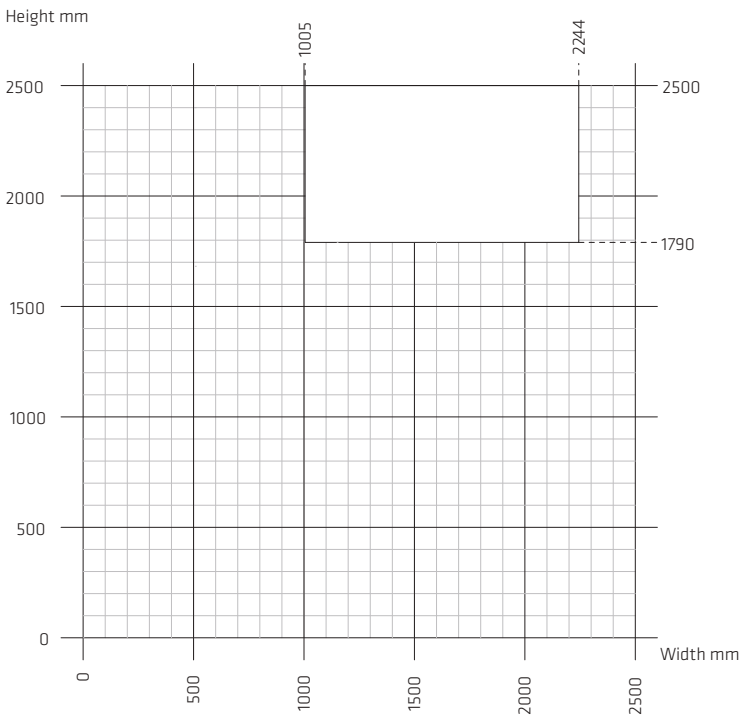


Min. - Max. dimensions

NOTE!
Remember to check frame weight

The clear opening at 90° without handle:
External frame width - 173 mm

Double door



Min. - Max. dimensions

NOTE!
Remember to check frame weight

The clear opening at 90° without handle:
External frame width/2 - 146 mm (opening part)
External frame width - 237 mm (total clear opening)

Inward Opening Terrace Door

Frame IC

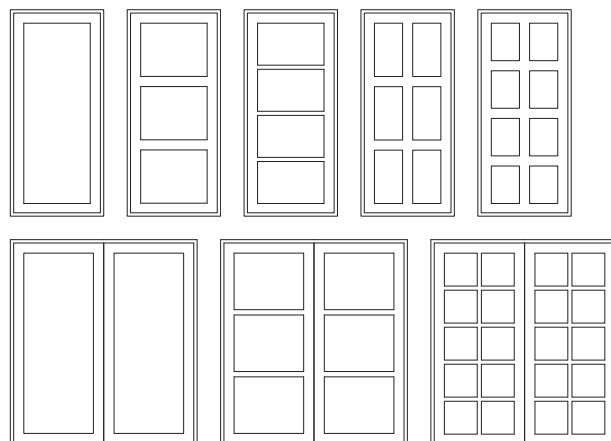
Frame I

Nation IC

Nation I

Futura+

Futura+i



Use

Inward opening terrace doors are used in all types of buildings to access terraces, patios and are essential for French balconies where space is limited. The door allows passage on the external side, which is very advantageous within facades onto walkways and circulation areas

Function

The door is side hung with powder coated and height adjustable hinges. A three-locking-point espagnolette with mushroom bolts lock into the safety keeps.

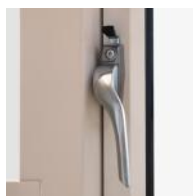
The terrace door is operated with the handle on the sash and can be locked in a night vent position with a 10 mm. gap. A handle operated brake can hold the door open in any position.

Supplied as single and double doors with and without fixed light side lights.

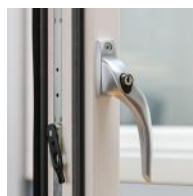
Standard ironmongery and accessories



Handle



Handle with safety catch



Locking handle



Drip sill



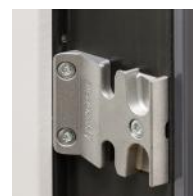
Fibre threshold



Friction brake



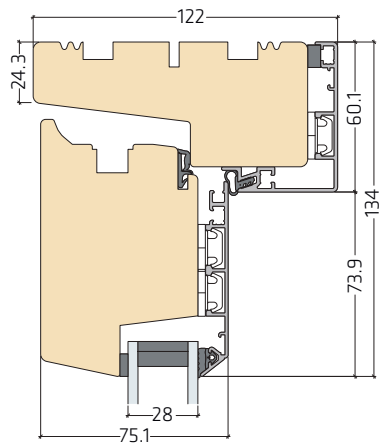
Mushroom bolts



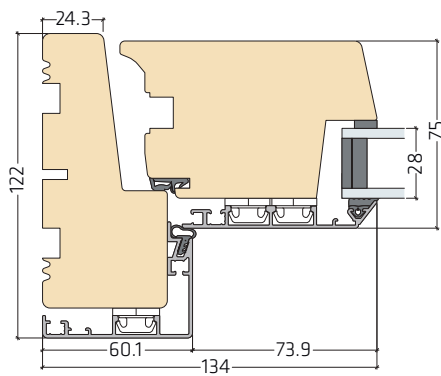
Keep

Minimum/maximum dimensions

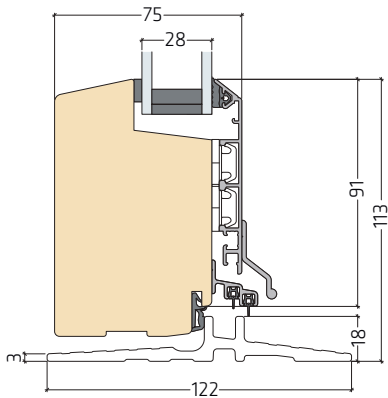
Head



Jamb

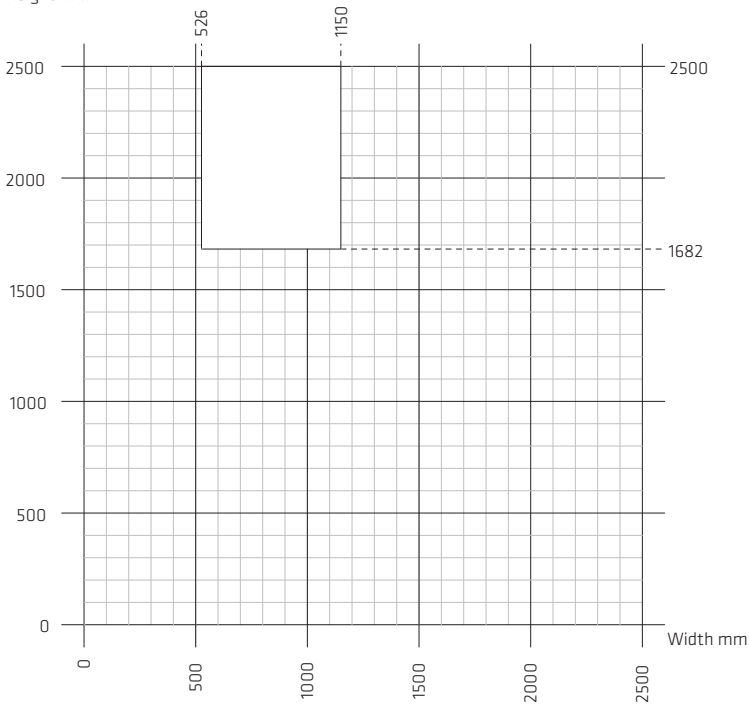


Sill



Single door

Height mm



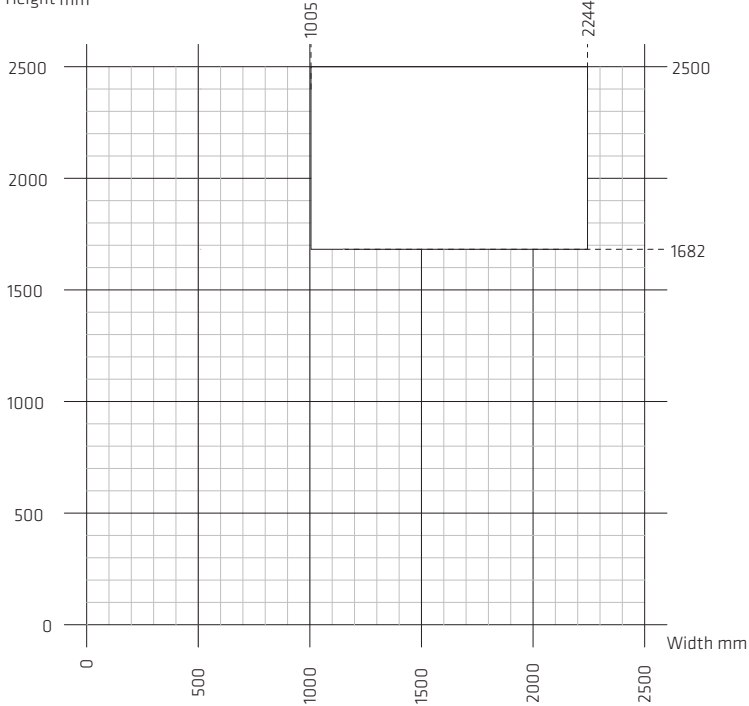
Min. - Max. dimensions

NOTE!
Remember to check frame weight

The clear opening at 90° without handle:
External frame width - 173 mm

Double door

Height mm

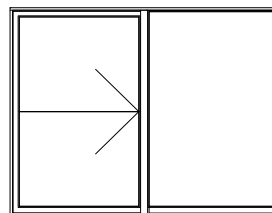


Min. - Max. dimensions

NOTE!
Remember to check frame weight

The clear opening at 90° without handle:
External frame width/2 - 146 mm (opening part)
External frame width - 237 mm (total clear opening)

Sliding Door



Use

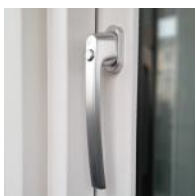
Sliding doors with low threshold are primarily used for access to terraces, patios, balconies and other places where low level access is required.

Function

The sliding door consists of a fixed and a moving (sliding) part. The sliding part of the door always runs on the outside of the fixed light. To open the door, press safety button on the handle and turn 180° to release it from the frame - the sliding part will protrude 8mm out from the frame and slide across the fixed light. Provided with Randi Line pull handle externally.

An end stop is located at the top track, preventing the door from opening too far.

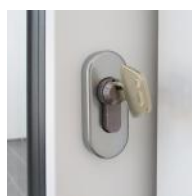
Standard ironmongery and accessories



Handle



D Handle



Locking Cylinder



External grip



Low threshold



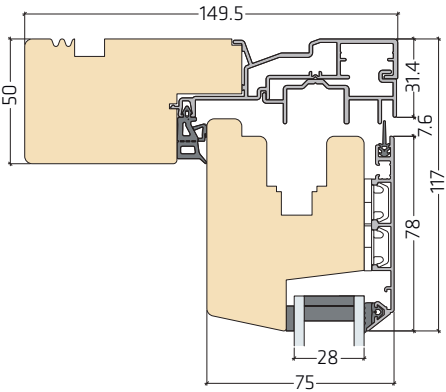
Espagnolette



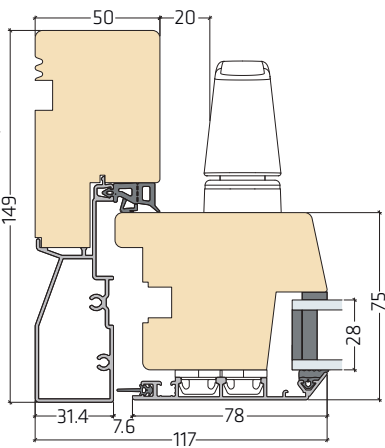
Keep

Minimum/maximum dimensions

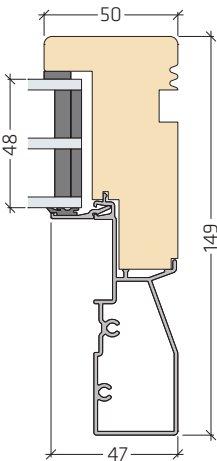
Head



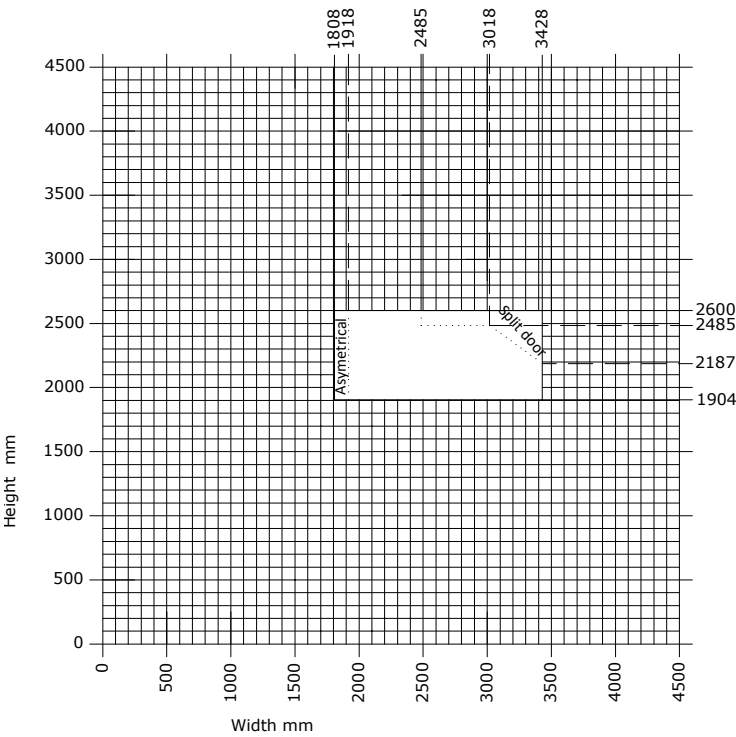
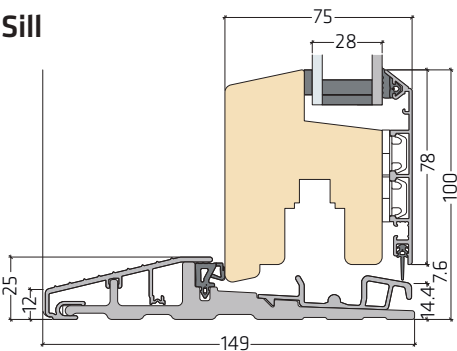
Jamb - sliding part



Jamb - fixed part

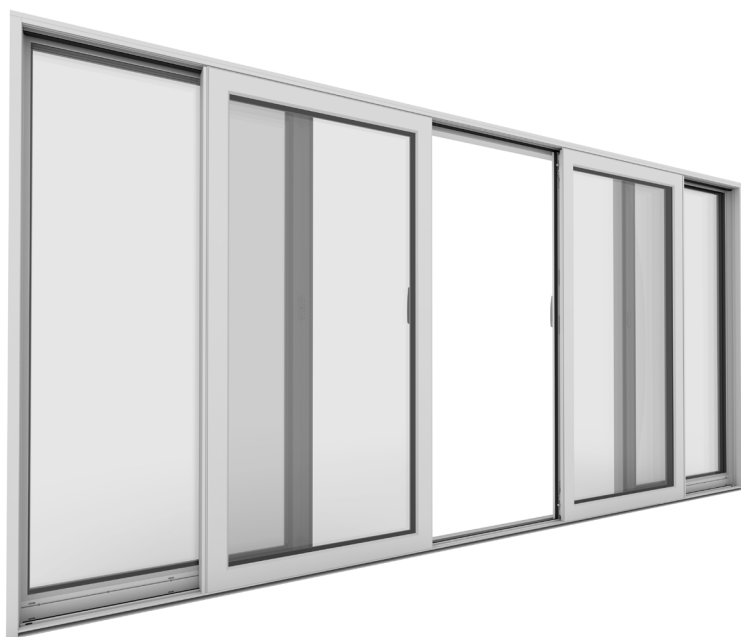


Sill



Note!
It is not always possible to reach max area due to max weight.
Max width sliding part: 1677 mm.

Double Sliding Door



Use

Sliding doors with low are primarily used for direct access to outside areas like balconies, patios, terraces and gardens where easy, low level access is wanted.

The middle sashes open in opposite directions moving in front of the fixed lights at either end. Both sliding parts are equipped with a handle that operate a multi-locking point mushroom bolt espagnolette allowing the doors to protrude 8mm before sliding.

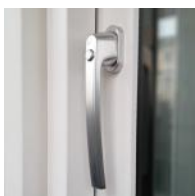
Function

The door consists of four parts; two fixed parts, one at each end and the two middle sliding sections.

When in the closed position all units are in line.

The door is delivered as three separate elements, one sliding door section and two side lights. Ready to be assembled on site.

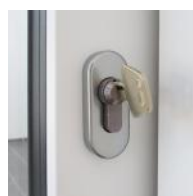
Standard ironmongery and accessories



Handle



D Handle



Locking Cylinder



External grip



Low threshold



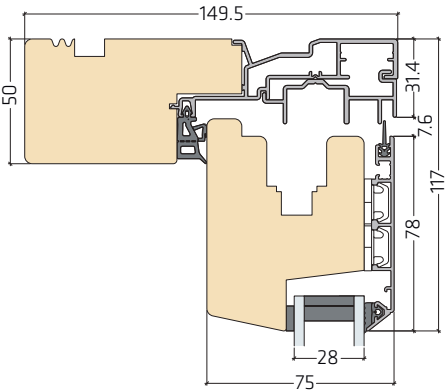
Espagnolette



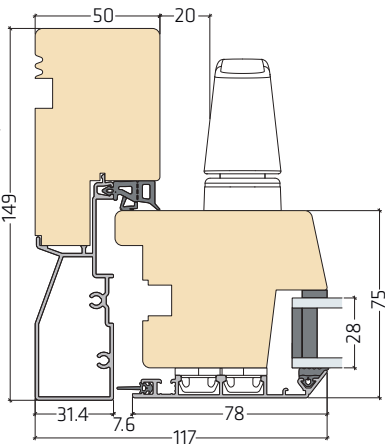
Keep

Minimum/maximum dimensions

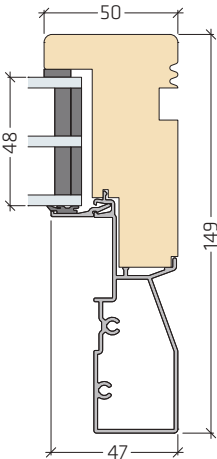
Head



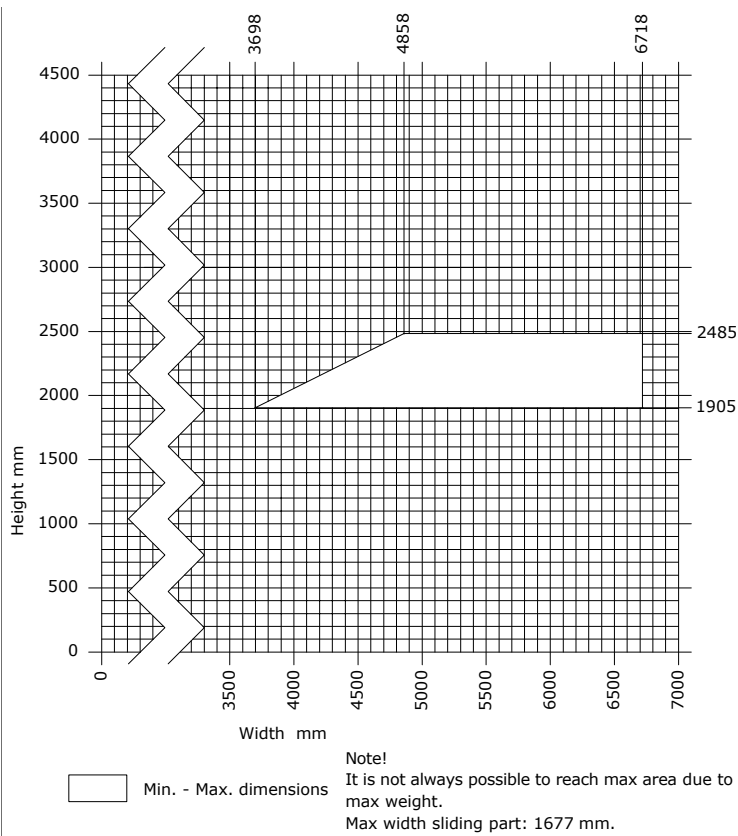
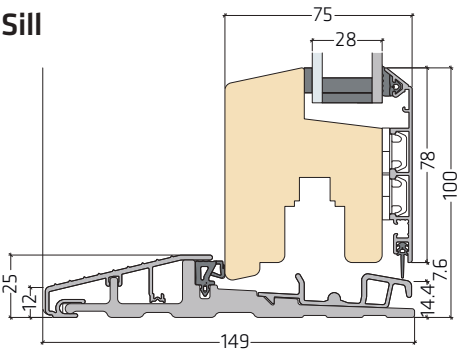
Jamb - sliding part



Jamb - Fixed part

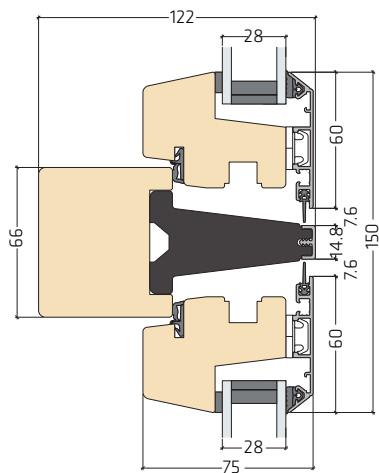


Sill

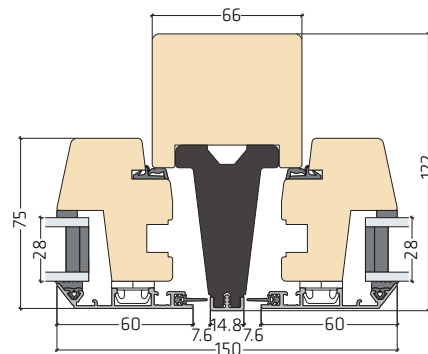


Mullions and Transoms

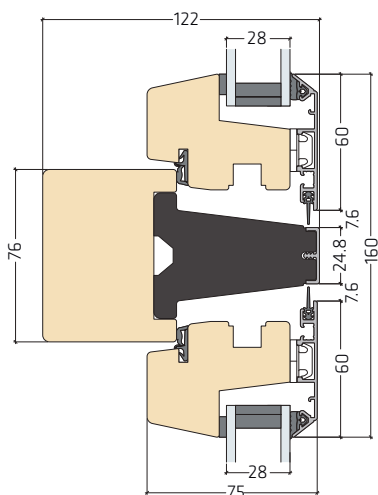
66 x 122 mm transom with sash | NATic01-40L28



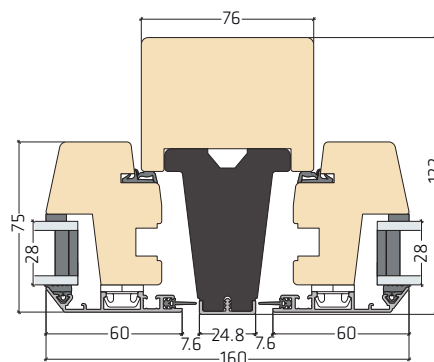
66 x 122 mm mullion with sash | NATic01-50L28



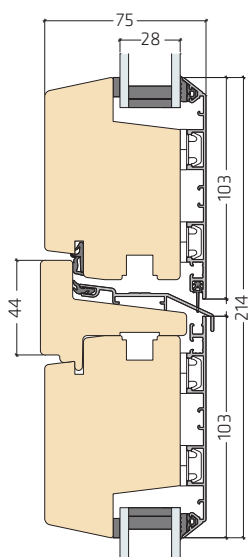
76 x 122 mm transom with sash | NATic01-41L28



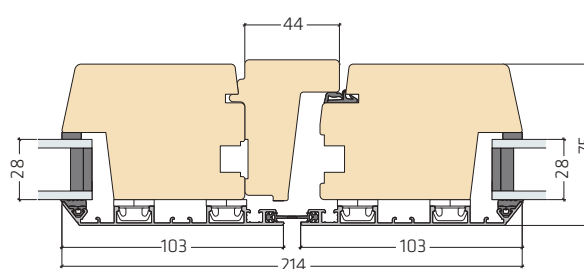
76 x 122 mm mullion with sash | NATic01-51L28



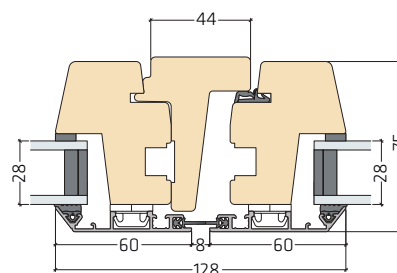
Horizontal meeting stiles in stable door | NATic21-81L28



Vertical meeting stiles in outward opening double door | NAT21-80L28

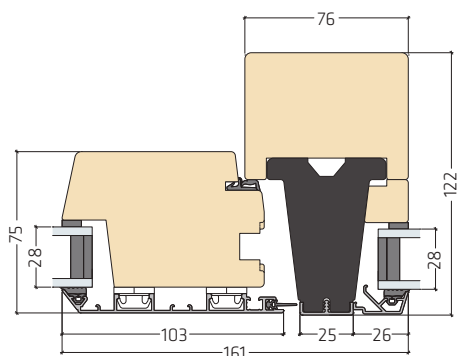


Meeting stiles in window | NATic01-80L28



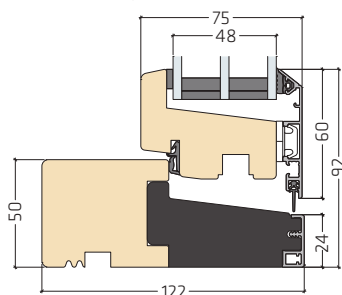
NOTE: All solutions in Nation IC are available with double and triple glazing and with or without internal bevelled profiling.

66 x 122 mm mullion in outward opening door with sash and fixed light | NAT21-51L32-28

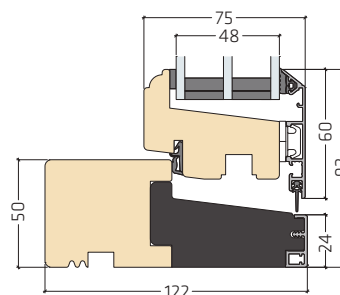


Alternative Frames and Sashes

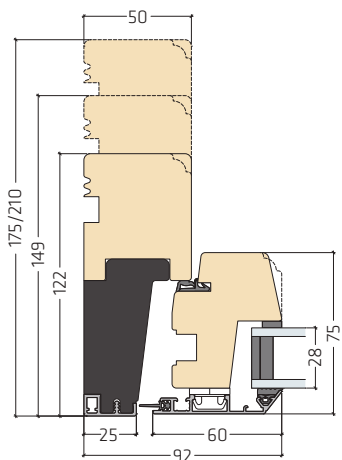
Triple glazed | NATic01-10L48



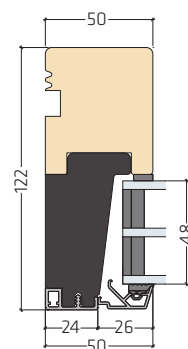
Bevelled profiling and triple glazed | FRAic01-10P48



Alternative frame depth 50 x 149, 175 and 210 mm | NATic01-30L28



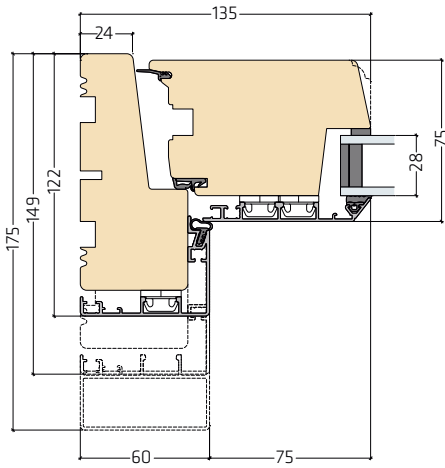
Fixed light with double glazing | FRAic06-30L48



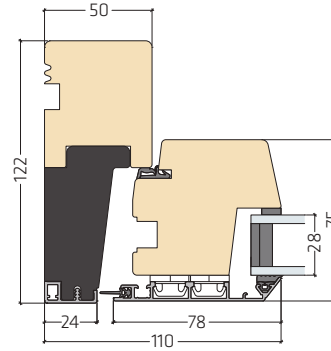
Identical with Frame IC

NOTE: All solutions in Nation IC are available with double and triple glazing and with or without internal bevelled profiling.

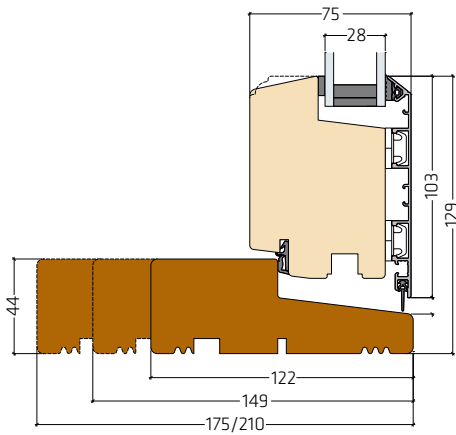
Alternative frame depth, inward opening door | NATic22-30L28



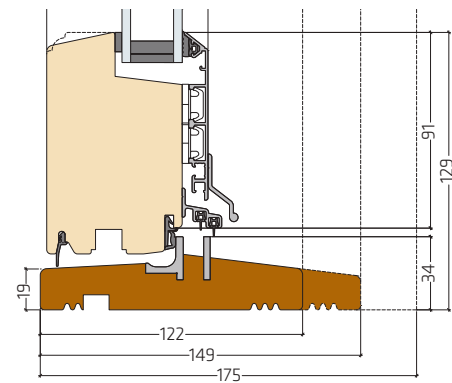
Sash outward opening terrace door 78 x 75 mm | NATic20-31L28



Hardwood threshold, outward opening door | NATic21-10L28

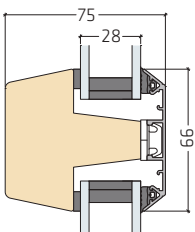


Hardwood threshold, inward opening door | NATic22-10L28

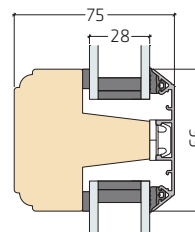


Glazing Bars

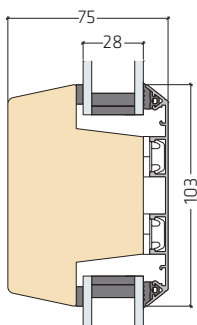
Horizontal glazing bar, 66 mm without profile | NATic12-60L28



Horizontal glazing bar, 66 mm with profile | NATic12-60P28

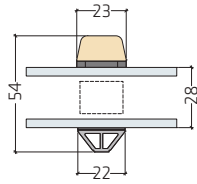


103 x 75 mm horizontal rail | NATic21-60L28

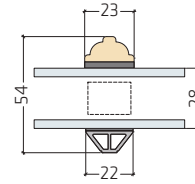


NOTE: All solutions in Nation IC are available with double and triple glazing and with or without internal bevelled profiling.

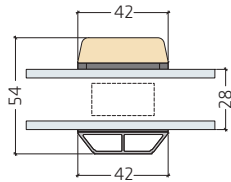
Low energy styling bar 22/23 mm without profile | NATic12-80L28



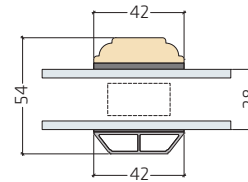
Low energy styling bar 22/23 mm with profile | NATic12-80P28



Low energy styling bar 42 mm without profile | NATic12-81L28



Low energy styling bar 42 mm with profile | NATic12-81P28



Solutions

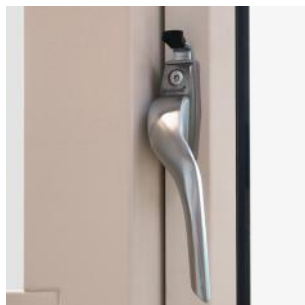
Refer to Frame IC for solutions - only difference is the external aluminium profile.

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Grooves and Rebates	71
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Functions and accessories



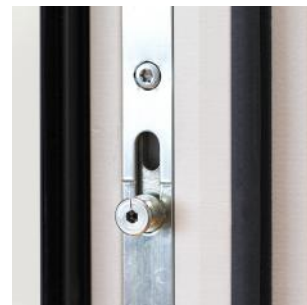
IC Design Handle
Windows and terrace doors



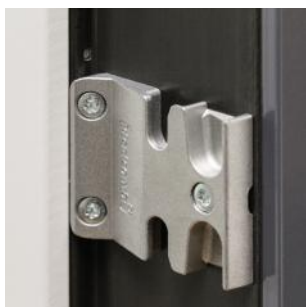
IC Design Handle with safety
catch



Locking IC Design handle



Mushroom bolt



Keep



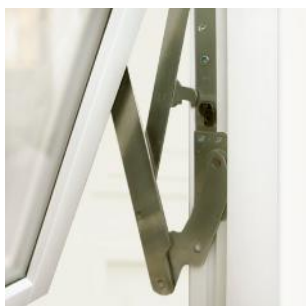
Alternative handle
Fix83



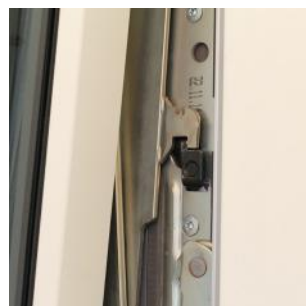
Alternative handle
Hoppe



PN safety catch with restrictor



Reversible hinges



Easy clean hinges and restrictor
Reversible



Adjustable hinge, terrace door



Opening restrictor



Flush bolt on floating mullion



Groove for window board



Trickle vent



Locking IC Design Handle terrace
door



Hardwood threshold
Inward opening door



Hardwood threshold
Outward opening door



Fibre threshold
Outward opening terrace door



Hardwood threshold
Outward opening terrace door



Kick plate
Inward opening door



Kick plate
Outward opening door



Drip sill
Inward opening door



Identical handle height
Outward opening double terrace door.



Electrical strike plate



Entrance door handle



Internal cylinder
terrace door 78 mm.



Letter plate



Spyhole



Fingerpull



Opening restrictor



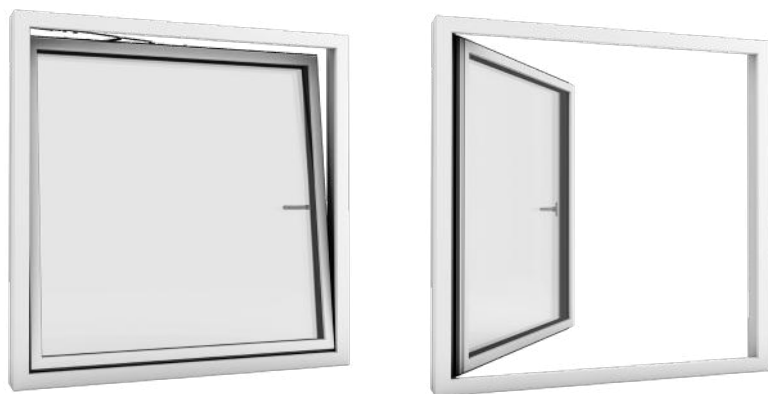
Nation I

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We refer to Frame I for solutions in Nation I.

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Tilt/Turn & Turn/Tilt window (inward opening)



Use

Tilt-turn windows are often used in multi-storey buildings or where external sun protection is installed. Frame I / Nation I (inward-opening) and Frame IC / Nation IC (outward-opening) have the same exterior frame height and can therefore be placed in the same facade, without there being much visual difference. The turning function is used primarily in connection with cleaning the outside of the window, while the tilting function is used for daily ventilation and venting. The turning function can also meet all the building regulations' requirements for rescue openings.

Function

Inward-opening window with both side- and bottom-hung function. Both opening functions are controlled by the fitting lever in the side frame. In the closed position, the handle faces vertically downwards and the turning function is triggered by turning the handle 90° to the horizontal position. The tilt function is triggered by turning the handle 180° in an upright vertical position. With tilt function, the upper edge of the frame moves approx. 14 cm inwards and gives a free opening of approx. 4 cm. The turn-tilt window can, as an option, be supplied with a handle operated brake. The brake can, in the turning function, hold the frame in any position above 18° opening.

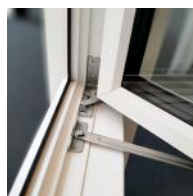
Standard ironmongery & accessories



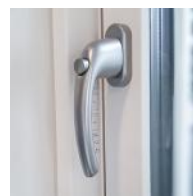
Handle



Locking handle



Handle operated brake



Handle with button



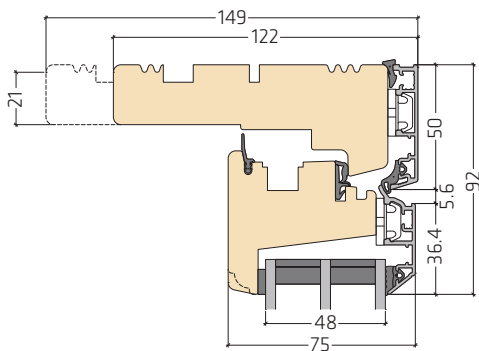
Trickle vent



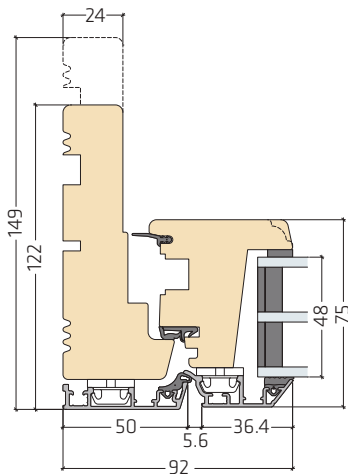
Motor

Maximum/minimum dimensions

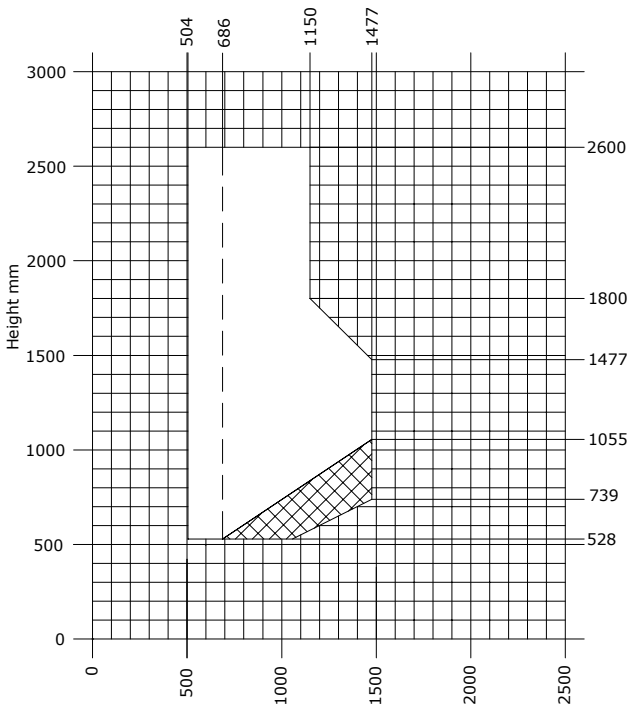
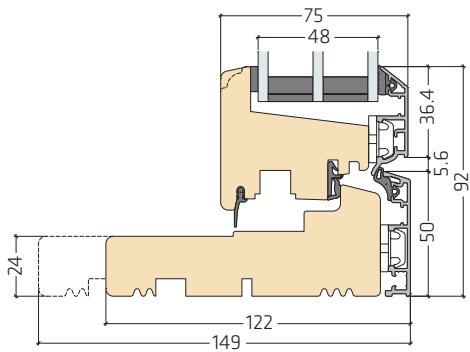
Head



Jamb



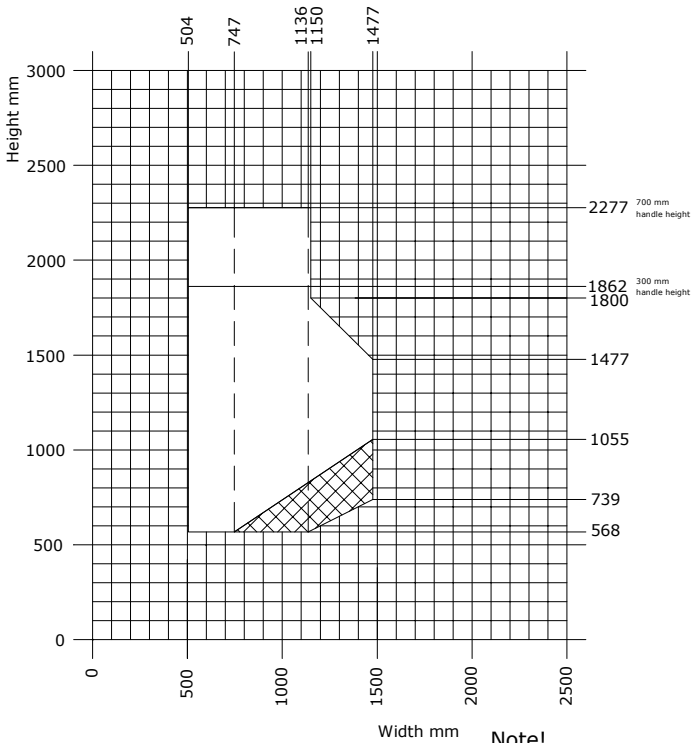
Sill



- Width mm
- Min. - Max. dim.
 - Side hung function can be used **only** when cleaning.

Note!
Remember to
check sash weight!
Max. 80 kg.

With low handle



- Width mm
- Min. - Max. dim.
 - Side hung function can be used **only** when cleaning.

Note!
Remember to
check sash weight!
Max. 80 kg.

Tilt window (inward opening)



Use

The tilt window is often used where the possibility of ventilation is desired, but where there are not necessarily requirements for passage, typically in basement or bathroom applications. Frame I / Nation I (inward opening) and Frame IC / Nation IC (outward opening) have the same outer sash-frame height and can therefore be placed in the same elevation, without there being much visual difference. The choice of tilt windows can allow for greater width of the opening.

Function

The tilt window is an inward opening window with a bottom-hung function. The opening function is controlled by a handle and espagnolette located in the side or top sash. In the closed position, the handle faces vertically downwards (or horizontally) and the tilt function is triggered by turning the handle 90°. With tilt function, the upper edge of the sash moves approx. 10 cm inwards and gives a free opening of approx. 2.5 cm.

Standard ironmongery & accessories



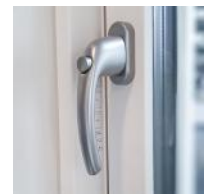
Handle



Locking handle



Handle operated brake



Handle with button



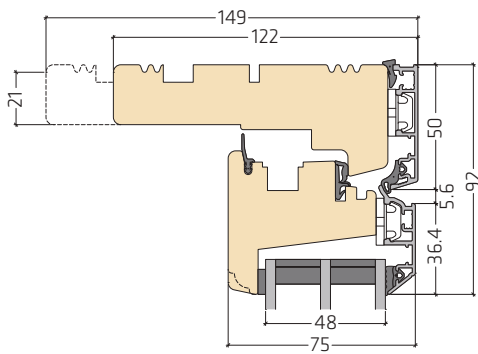
Trickle vent



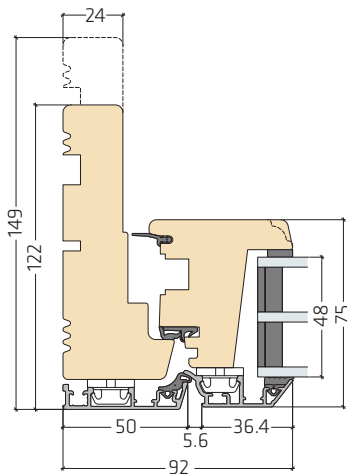
Motor

Maximum/minimum dimensions

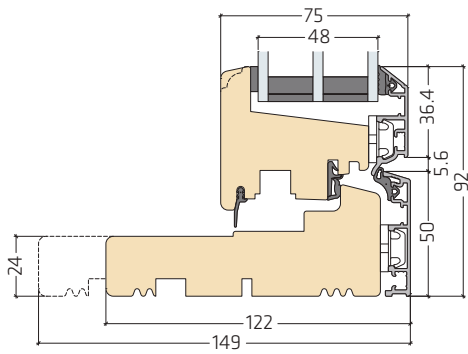
Head



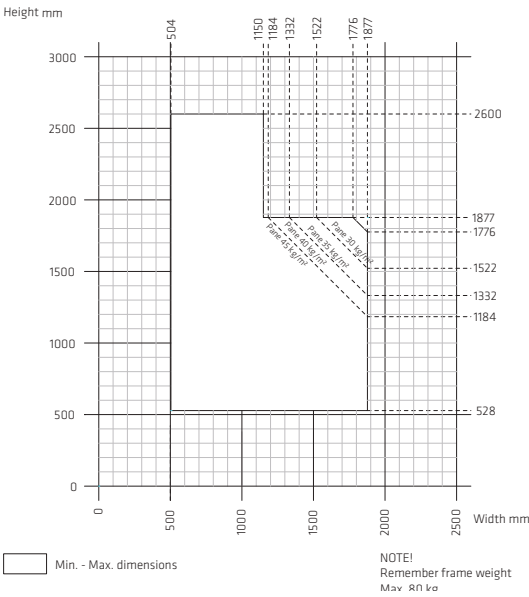
Jamb



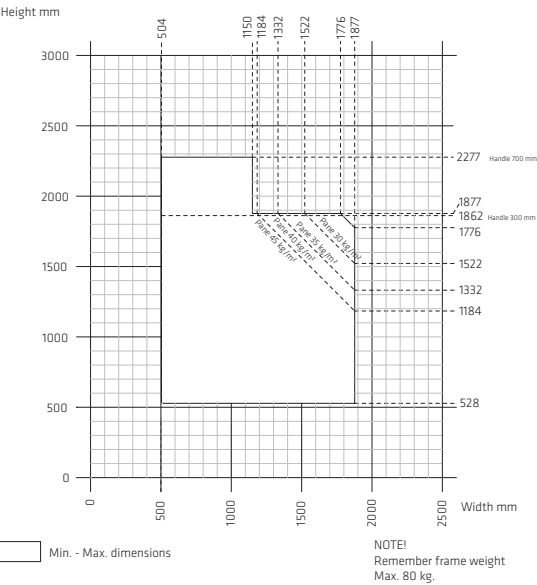
Sill



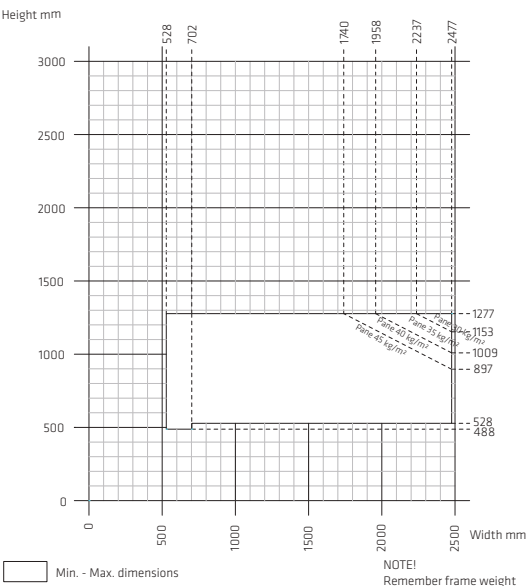
Tilt with side handle



Tilt with side handle - Low handle



Tilt with top handle



Turn window (inward opening)



Use

The Turn window has the most stable locking and is without risk of incorrect operation. Turn windows can typically be recommended for large openings. Frame I / Nation I (inward opening) and Frame IC / Nation IC (outward opening) have the same outer sash-frame height and can therefore be placed in the same elevation, without there being much visual difference. The revolving window can also meet all the building regulations' requirements for egress openings.

Function

Turn windows are inward opening windows with a side-hung function. The opening function is controlled by a lever handle operating an espagnolette in the side or bottom sash. In the closed position, the handle faces vertically downwards (or horizontally) and the turn function is triggered by turning the handle 90°. The Turn window can, as an option, be supplied with a handle-operated brake. The brake can, in the side hung function, hold the frame in any position above 18° opening.

Standard ironmongery & accessories



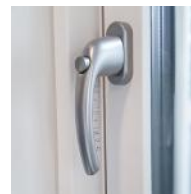
Handle



Locking handle



Handle operated brake



Handle with button



Trickle vent

Nation I

The drawing is a technical cross-section of a window frame. The vertical axis is labeled 'Height mm' and ranges from 0 to 3000 in increments of 500. The horizontal axis is labeled 'Width mm' and ranges from 0 to 2500 in increments of 500. The frame has a main vertical section on the left and a horizontal section at the top. A dashed line indicates a side-hung function area, which is a trapezoidal shape. The top horizontal edge of this area is at a height of 1800 mm, extending from a width of 1150 mm to 1477 mm. The bottom horizontal edge is at a height of 528 mm, extending from a width of 504 mm to 1477 mm. The side edges of the trapezoid are slanted. A hatched area is shown within the trapezoid, indicating where the side-hung function can be used. The hatching is diagonal, from bottom-left to top-right. The legend at the bottom left shows a box with a diagonal line for 'Min. - Max. dim.' and a hatched box for 'Side hung function can be used only when cleaning.'.

Height mm

3000

2500

2000

1500

1000

500

0

0

500

1000

1500

2000

2500

Width mm

504

686

1150

1477

1800

1477

1055

739

528

Min. - Max. dim.

Side hung function can be used **only** when cleaning.

Note!
Remember to check sash weight!
Max. 80 kg.

The diagram is a technical drawing of a window sash weight, plotted on a grid. The vertical axis represents Height in mm, ranging from 0 to 3000 with major grid lines every 500 mm and minor grid lines every 100 mm. The horizontal axis represents Width in mm, ranging from 0 to 2500 with major grid lines every 500 mm and minor grid lines every 100 mm. The sash weight profile is defined by the following dimensions:

- Top Width:** 504 mm (left edge), 747 mm (right edge).
- Right Edge Profile (from top to bottom):**
 - Vertical segment: 2277 mm (labeled as 700 mm handle height).
 - Diagonal segment: 1863 mm (labeled as 300 mm handle height).
 - Vertical segment: 1800 mm.
 - Vertical segment: 1477 mm.
 - Vertical segment: 1055 mm.
 - Vertical segment: 739 mm.
 - Vertical segment: 568 mm.
- Left Edge:** A vertical segment of 504 mm at the top, followed by a vertical segment of 568 mm at the bottom.
- Bottom Edge:** A horizontal segment of 504 mm on the left, followed by a diagonal segment connecting the bottom-left corner to the bottom-right corner, and a horizontal segment of 568 mm on the right.
- Internal Features:** A vertical dashed line is located at 1136 mm from the left edge. A horizontal dashed line is located at 1863 mm from the bottom edge. A cross-hatched area is located at the bottom-left corner, bounded by the bottom edge and the vertical dashed line.

Note!
Remember to check sash weight!
Max. 80 kg.

Legend:

- Min. - Max. dim.
- Side hung function can be used **only** when cleaning.

Height mm

3000

2500

2000

1500

1000

500

0

0

500

1000

1500

2000

2500

Width mm

538

1003

1553

1600

Note!
remember to
check sash weight!
Max. 80 kg.

Fixed light



Use

The Fixed frame is most often used in conjunction with other windows with opening sashes. The fixed frame is used only as a light source..

Function

The sash is permanently fitted within the frame and is without any kind of opening function.

These units are deglazed internally.

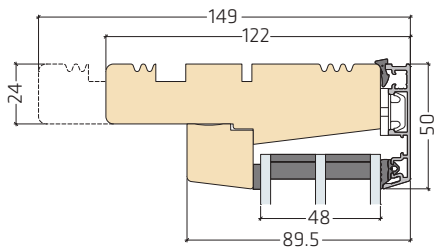
Standard ironmongery & accessories



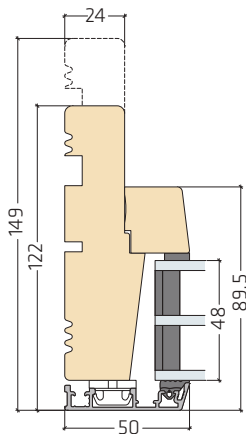
Trickle vent

Maximum/minimum dimensions

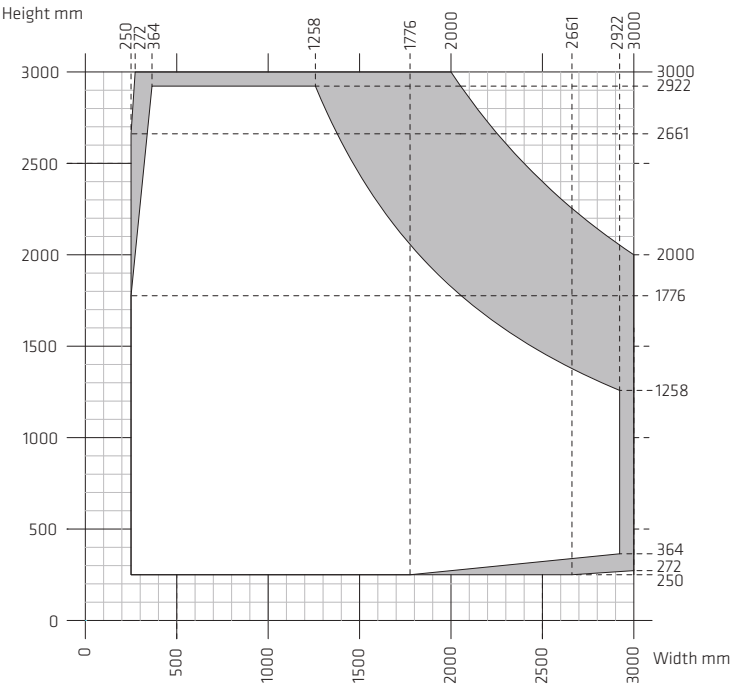
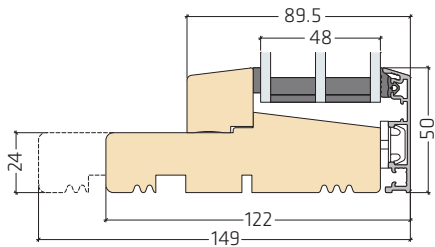
Head



Jamb



Sill



- Min. - Max. dimensions
- Min. glass thickness in pane is 6 mm. (E.g. min. 6+6+6)

Note!
Tempered and laminated glass has other max. length-/width, max. area dimensions

Tilt/Turn & Turn/Tilt door (inward opening)



Use

Used primarily as a direct exit to the terrace, balcony, balcony corridor or alternatively as a Juliet balcony. The tilt-turn door is chosen where the interior of the building provides space for the inward function or where an external sunshade is fitted. Frame I / Nation I (inward opening) and Frame IC / Nation IC (outward opening) have the same outer sash-frame height and can therefore be placed in the same elevation, without there being much visual difference. The door's tilt function provides optimal ventilation options and can be used to advantage in rooms with a higher requirement for ventilation, e.g. in bedrooms and kitchens. The turn function can also meet all the building regulations' requirements for egress openings..

Function

The turn door is an inward opening door with both side and bottom-hung function. Both opening functions are controlled by the handle and espagnolette in the sash jamb. In the closed position, the handle faces vertically downwards and the turn function is triggered by turning the handle 90 ° to the horizontal position. The tilt function is triggered by turning the handle 180 ° to an upright vertical position. With tilt function, the upper edge of the sash moves approx. 14 cm inwards and gives a free opening of approx. 4 cm. Turn-tilt doors can, as an option, be supplied with a handle-operated brake. The brake can, in the turn function, hold the sash in any position above 18 ° opening. The door is delivered as a single door or as a double door.

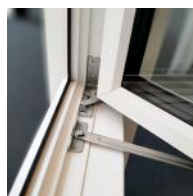
Standard ironmongery & accessories



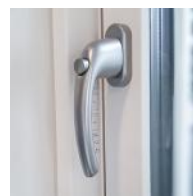
Handle



Locking handle



Handle operated brake



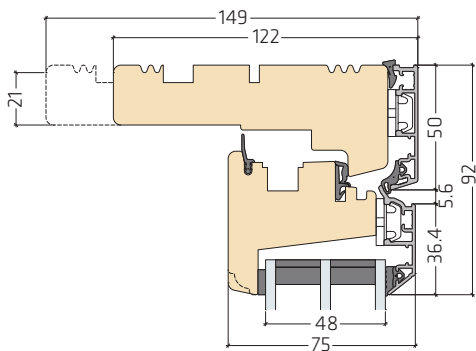
Handle with button



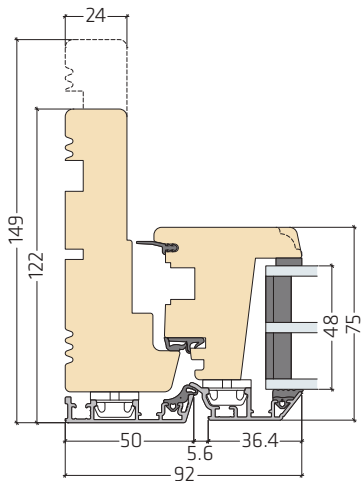
Trickle vent

Maximum/minimum dimensions

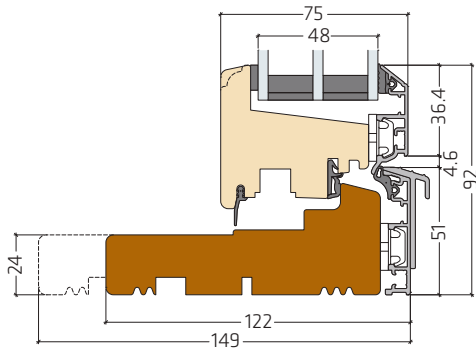
Head



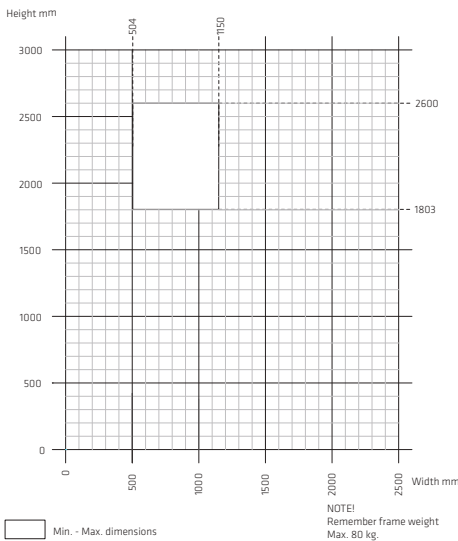
Jamb



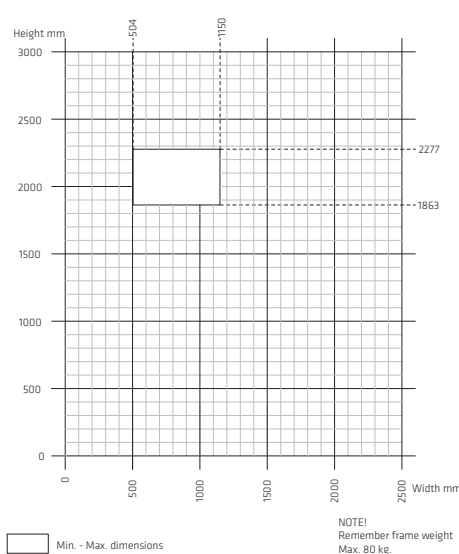
Sill



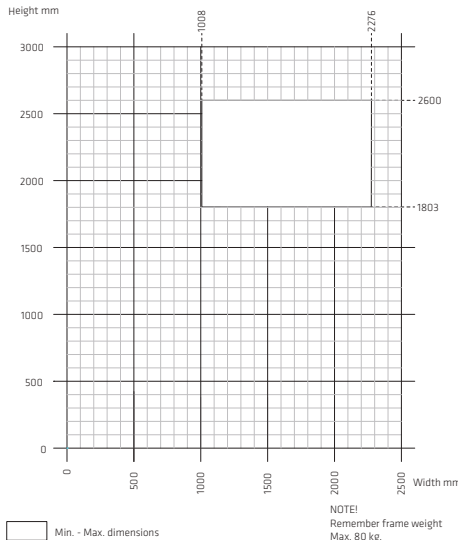
Terrace door



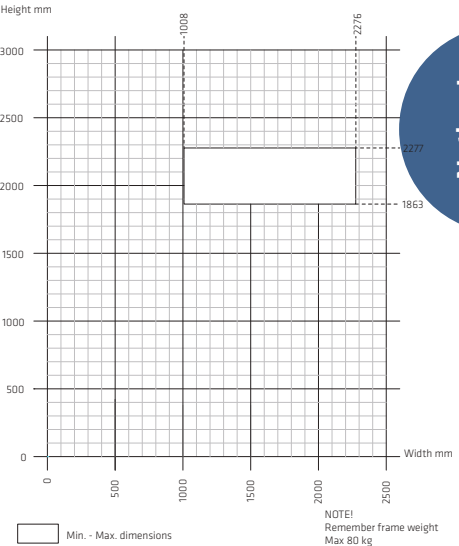
Terrace door w/low handle



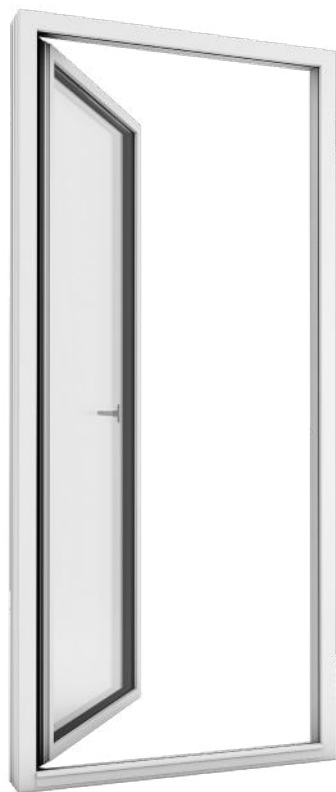
Double terrace door



Double terrace door w/low handle



Turn door (inward opening)



Use

The Turn door has the most stable locking and is without risk of incorrect operation. Turn doors can be recommended where access is the primary use. Frame I / Nation I (inward opening) and Frame IC / Nation IC (outward opening) have the same outer sash-frame height and can therefore be placed in the same elevation, without there being much visual difference. Turn doors can also meet all the building regulations' requirements for egress openings.

Function

Turn doors are inward opening doors with side-hung function. The opening function is controlled by a lever handle operating an espagnolette in the sash jamb. In the closed position, the handle faces vertically downwards and the turn function is triggered by turning the handle 90°. Turn doors can, as an option, be supplied with a handle operated brake. The brake can, in the side hung function, hold the frame in any position above 18° opening. The door can be delivered as a single door or as a double door.

Standard ironmongery & accessories



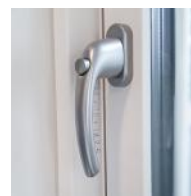
Handle



Locking handle



Handle operated brake



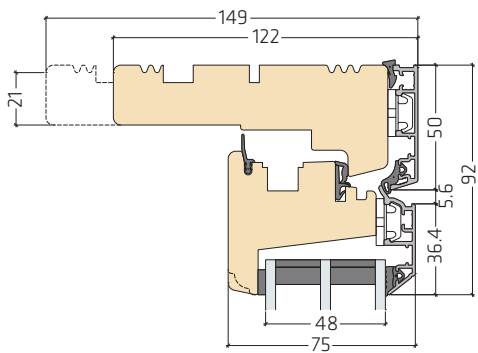
Handle with button



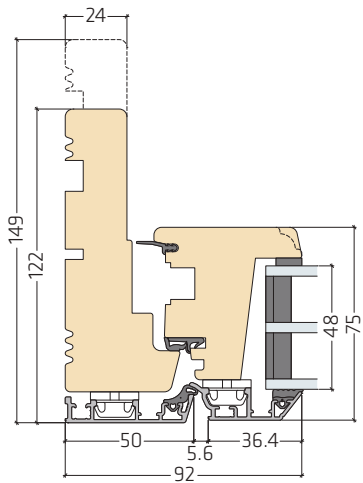
Trickle vent

Maximum/minimum dimensions

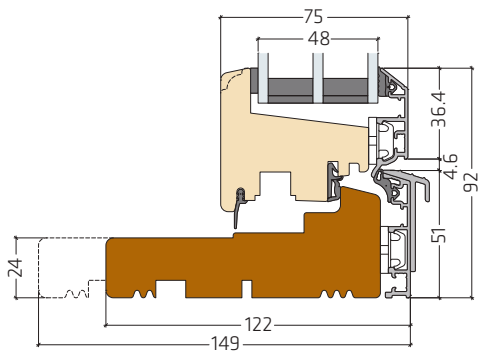
Head



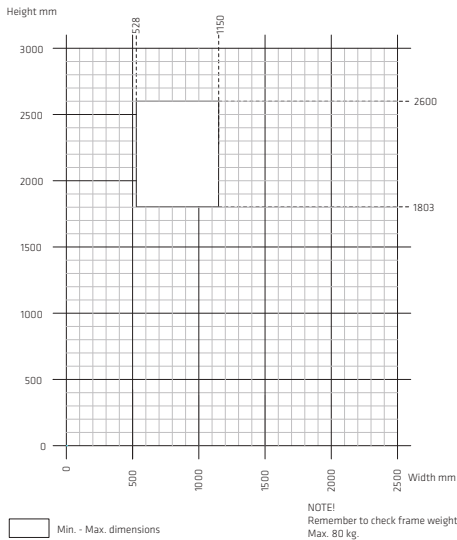
Jamb



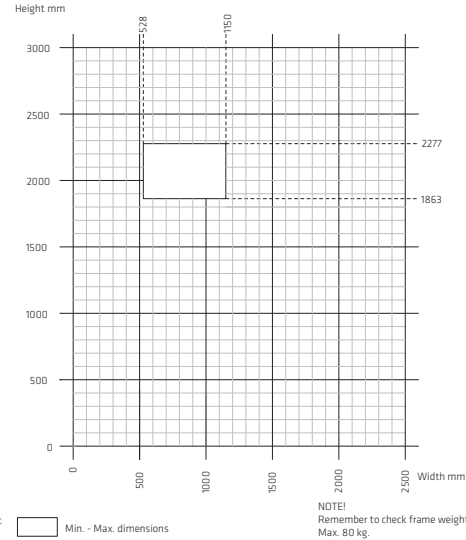
Sill



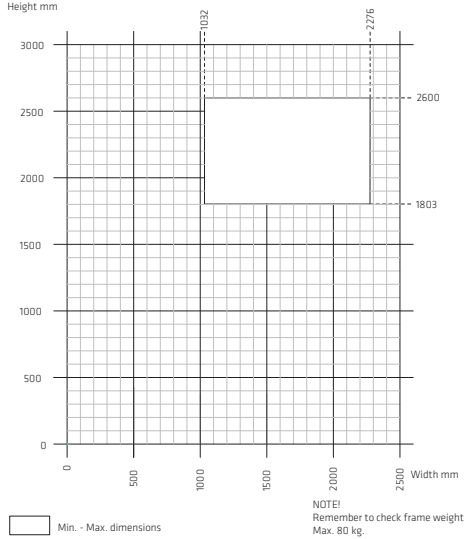
Terrace door



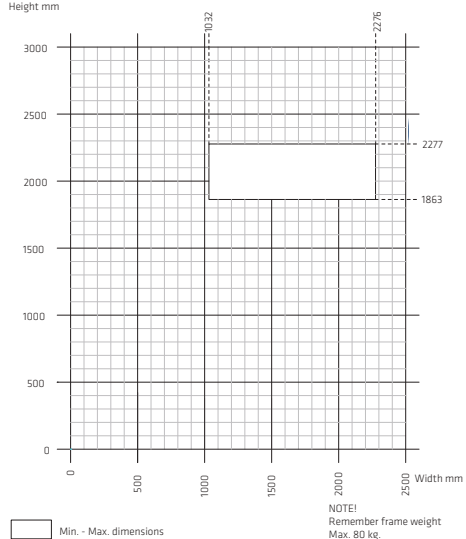
Terrace door w/low handle



Double terrace door

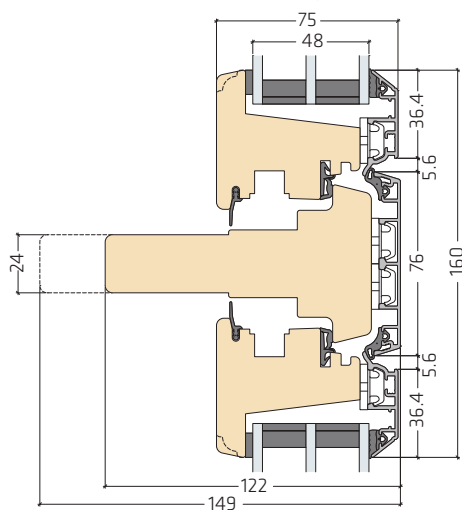


Double terrace door w/low handle

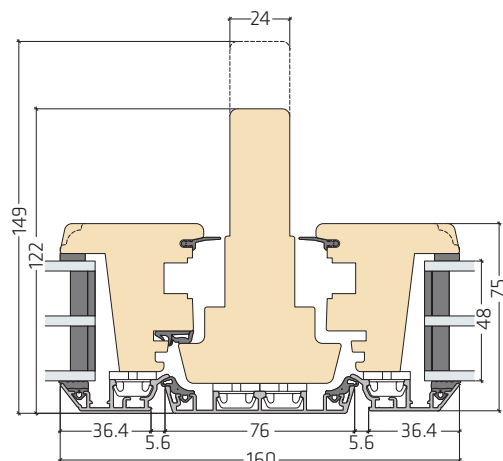


Mullions and transoms

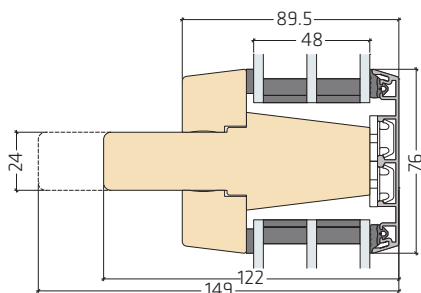
76 x 122 mm transom with sash | NATic09-40L48



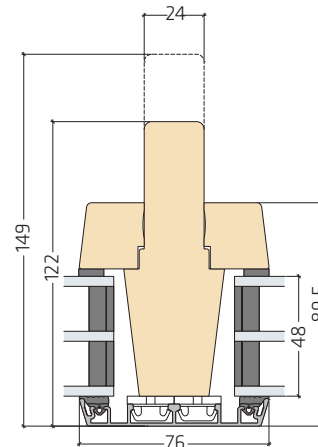
76 x 122 mm mullion with sash | NATic09-50L48



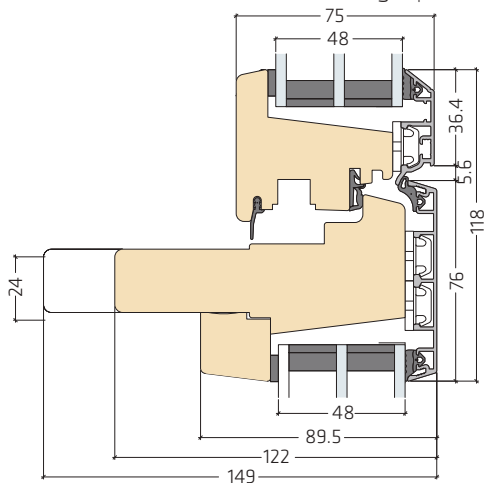
76 x 122 mm transom with fixed lights | NATic09-41L48



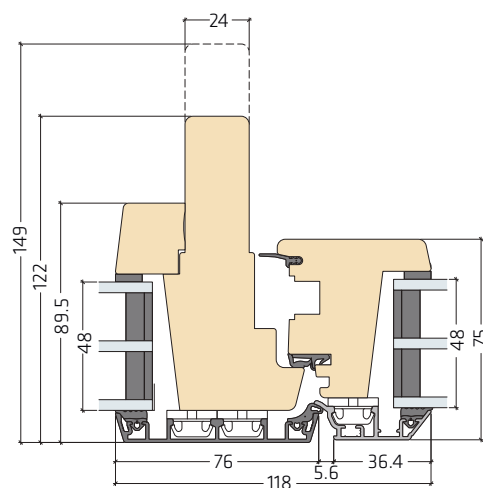
76 x 122 mm mullion with fixed lights | NATic09-51L48



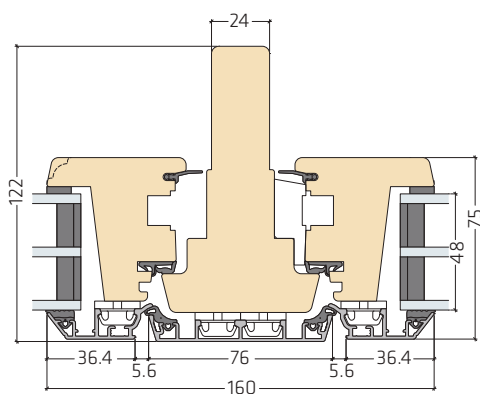
76 mm transom with sash and fixed light | NATic09-42L48



76 mm mullion with sash and fixed light | NATic09-52L48

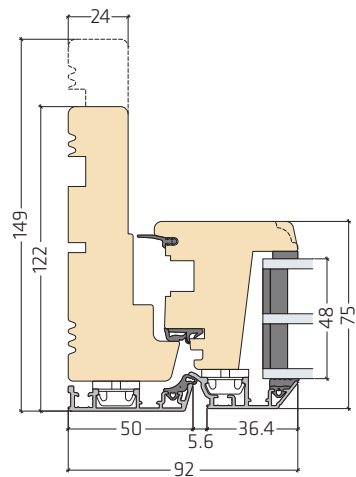


Meeting stiles | NATic09-80L48

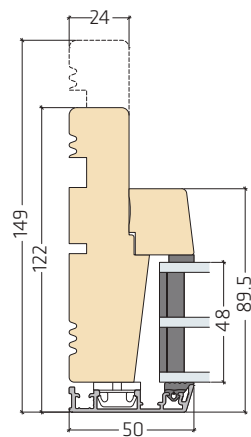


Alternative Frames and sashes

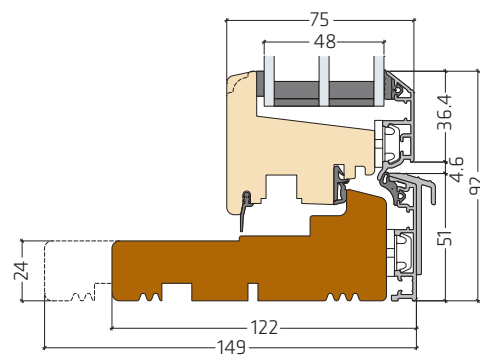
Jamb with sash 122 and 149 mm | NATic09-30L48



Jamb Fixed light| NATic09-31L48

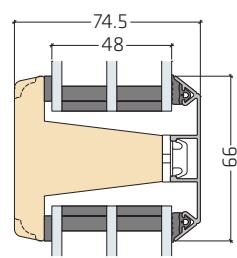


Sill with sash | NATic28-10L48

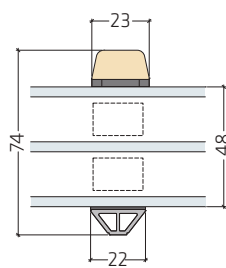


Glazing Bars

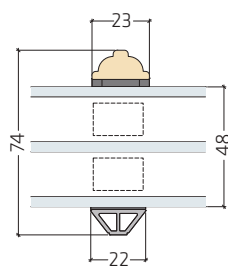
66 mm glazing bar | NATic12-61L48



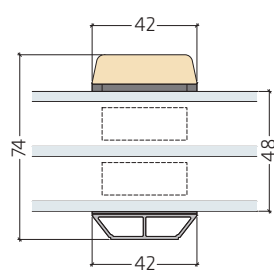
22 mm glazing bar | NATic12-80L48



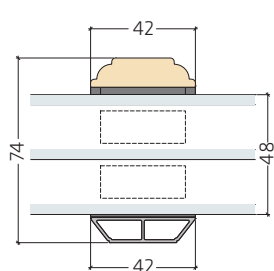
22 mm glazing bar with moulded profile | NATic12-80P48



42 mm glazing bar | NATic12-81L48



42 mm glazing bar with moulded profile | NATic12-81P48



Solutions

We refer to solutions in Frame I

Grooves and Rebates	98
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Advice and guidance is our work

” *In our sales departments it is our top priority to provide advice and guidance to our customers.*





Cooperation and advice is the key to a projects final quality - we strive to do this at what ever stage the customer is at. We always focus on the customers needs and ask the relevant questions to make sure neither function or aesthetics are compromised in the process of choosing the right windows and doors.

Our range of products offer unique possibilities to find the perfect solution for your project. This means we can offer the best choice of facade solutions in the industry. In all projects we see opportunities instead of limitations and we try to align the customers need and expectations before the final decision is made.

Idealcombi is constantly at the forefront of the development in the window industry - both with regards to current energy & building regulations along with trends in colours, materials and glass. All this along with my daily contact with many different types of customers makes my daily work as a Regional Business Manager both interesting, challenging and very special.

Peter Ward
Regional Business Manager



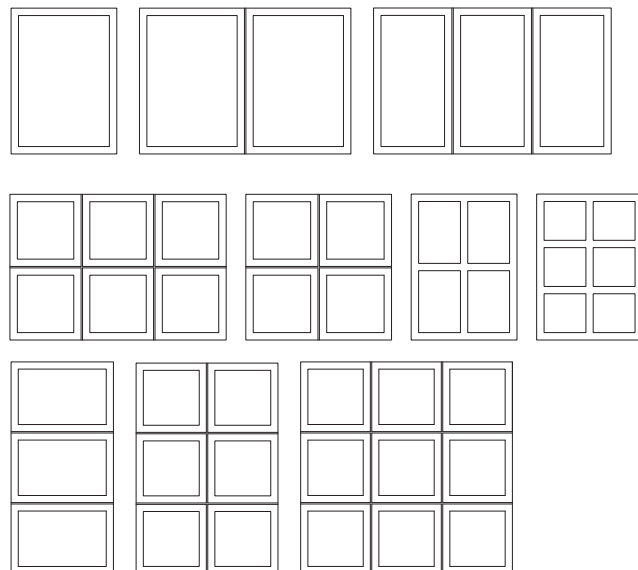
GreenGate, Manchester

Futura+

Outward opening system

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Top Guided



Use

Top guided windows are mostly used on low rise buildings and multi-storey structures with balconies where the windows can be cleaned from outside and good ventilation is required.

Function

The opening mechanism in a top guided window is located in the window jambs; friction brakes in the jambs maintain the open position.

Top guided windows are equipped with an espagnolette with mushroom bolts and safety keeps. The window is operated with a single handle on the bottom of the sash. When the handle is in a vertical position the window can be fully opened, lowering the top of the sash for improved ventilation.

The top guided window can be held in any open position by the friction brakes. The friction brake will not hold the window in an open position in strong or gusty winds.

Standard ironmongery and accessories



Handle



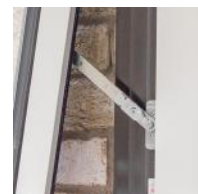
Locking cylinder



Espagnolette with mushroom bolts



Keep



Opening restrictor



Handle operated night latch



Trickle vent



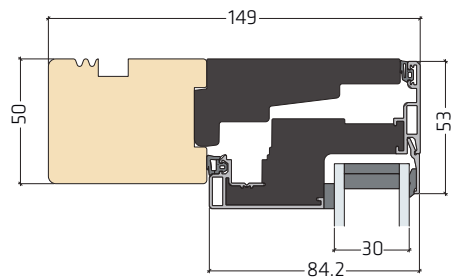
External canopy



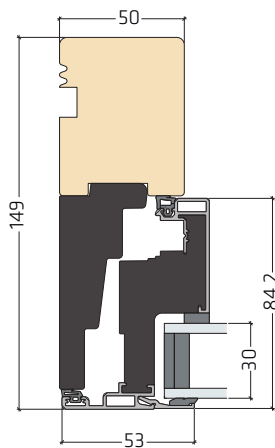
PN safety catch with restrictor

Minimum/maximum dimensions

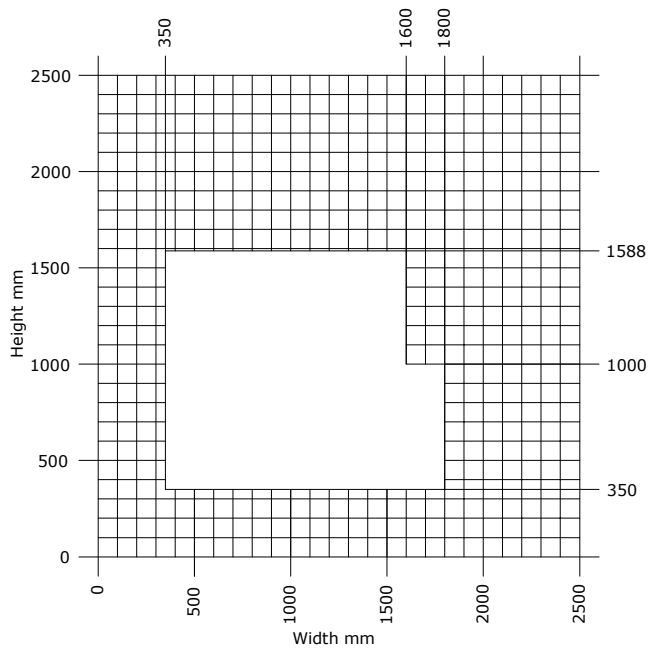
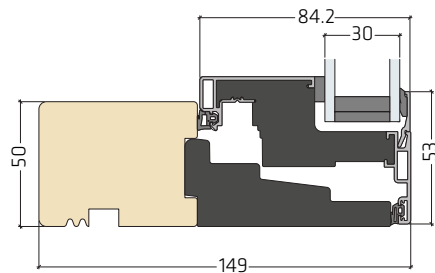
Head



Jamb



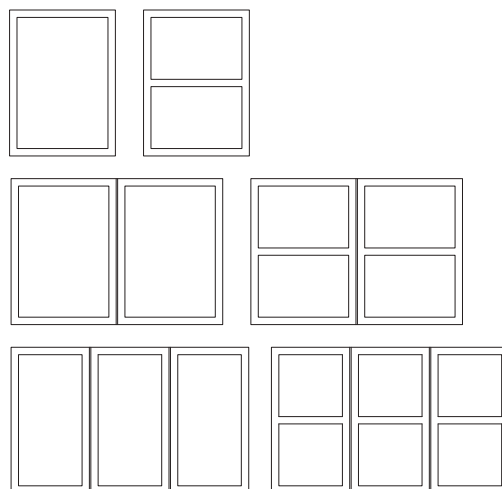
Sill



Min. - Max. dim.

NOTE!
Remember to
check sash weight!

Side Hung



Use

Side hung windows are used in all types of building and are the most traditional opening method. The side hung opening is the most practical choice for fire escape windows.

Function

Side hung windows are pivoted from the jamb using butt hinges. The window is fitted with a handle that operates a multi locking point espagnolette and has a night vent position. The handle also operates a friction brake to hold

the sash open in any position, up to 90°. The handle operated brake can not be expected to hold the window in strong or gusty winds.

A floating mullion is available on windows used in pairs for maximum opening widths, the master leaf is operated by a handle and the slave leaf is held by flush bolts.

300mm handle height can be offered.

Standard ironmongery and accessories



Handle



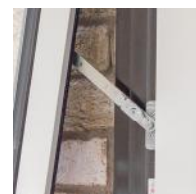
Locking cylinder



Espagnolette with mushroom bolts



Keep



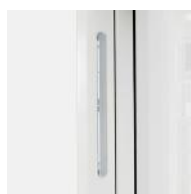
Opening restrictor



Handle operated night latch



Handle operated brake



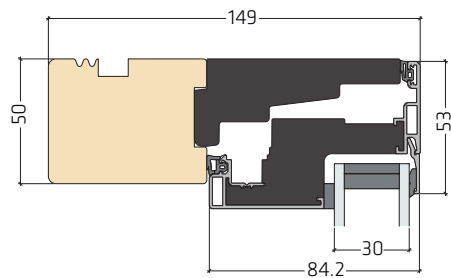
Trickle vent



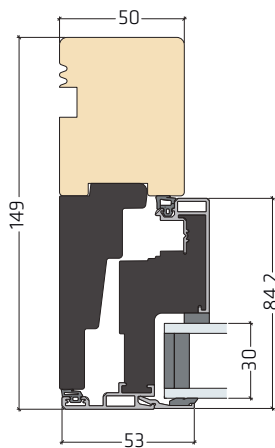
PN safety catch with restrictor

Minimum/maximum dimensions

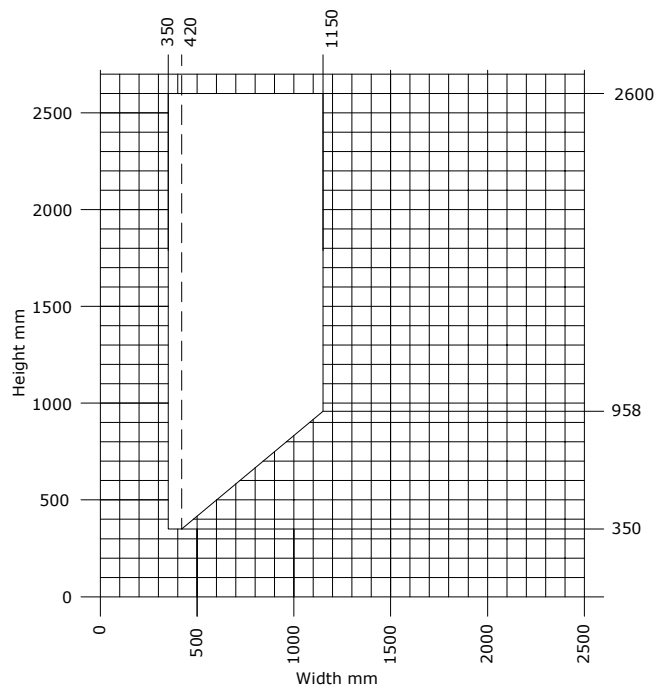
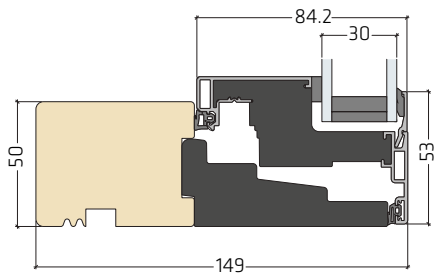
Head



Jamb

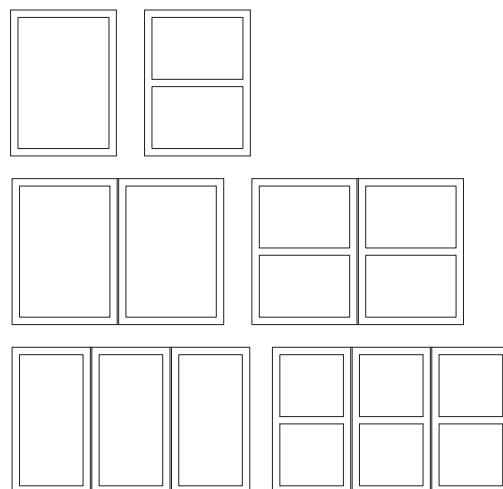


Sill



Min. - Max. dim.

Side Guided



Use

Side guided windows are used in all types of buildings but primarily in multi-storey structures where cleaning can only be achieved from the inside of the building.

Function

Side guided windows are fitted with projecting ironmongery to allow cleaning from the inside. The sash can be opened to 85° for 300-449 mm wide windows and 60° for 450-838 mm wide windows.

The handle operated espagnolette locks into the safety keeps with mushroom bolts. The handle on the side of the sash also operates the night latch allowing secure ventilation. When the window is opened the hinge side of the sash is drawn towards the opening, creating a gap for easy cleaning of the external glass.

A friction brake will hold the window open in any position, however it can not be expected to hold the window in strong or gusty winds.

300mm handle height can be offered.

Standard ironmongery and accessories



Handle



Locking cylinder



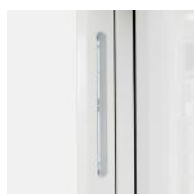
Espagnolette with mushroom bolts



Keep



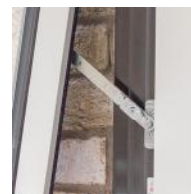
Handle operated night latch



Trickle vent



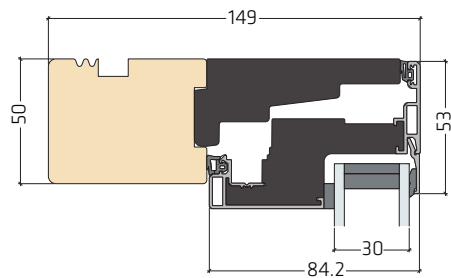
PN safety catch with restrictor



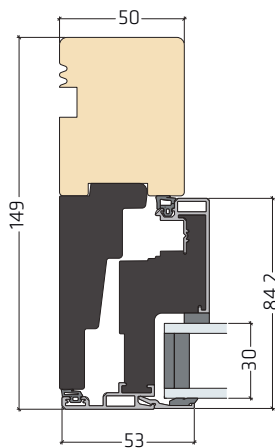
Opening restrictor

Minimum/maximum dimensions

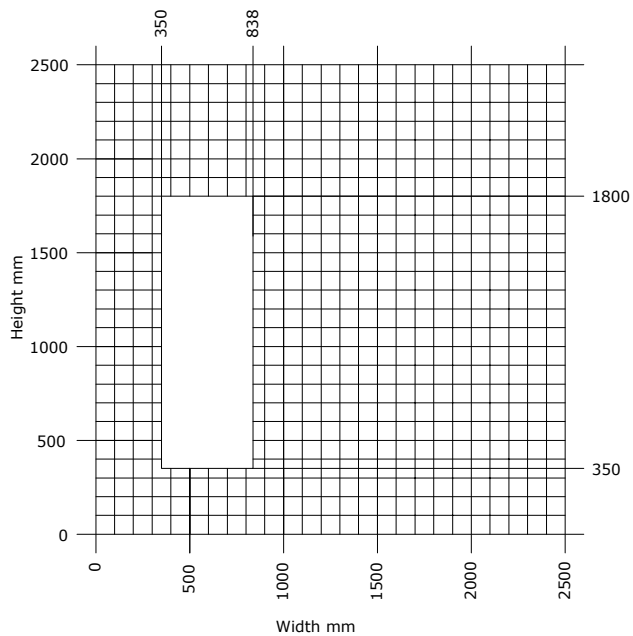
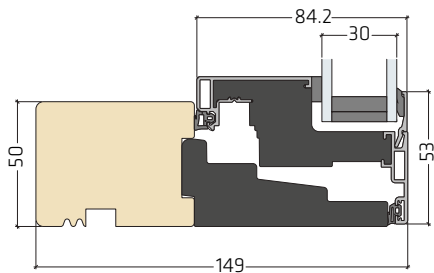
Head



Jamb

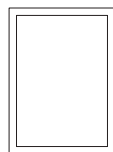


Sill



Min. - Max. dim.

Top Swing Reversible



Use

Top swing windows are most commonly used in multi-storey structures and in single storey buildings where cleaning from the inside is necessary. Reversing the sash enables safe and easy cleaning from inside the building.

The sash can be swung through nearly 180° and held in place securely in the reversed position so that the outside glass can be reached from the inside. The sash is held shut by a single handle positioned at the bottom of the sash, operating a multi locking point espagnolette with a night vent position.

Function

Top swing windows are constructed with a reversible hinge with the mechanism fitted in the jambs of the sash. The window is equipped with a safety catch that restricts opening to 10 cm.

Standard ironmongery and accessories



Handle



Locking cylinder



Espagnolette with mushroom bolts



Keep



Handle operated night latch



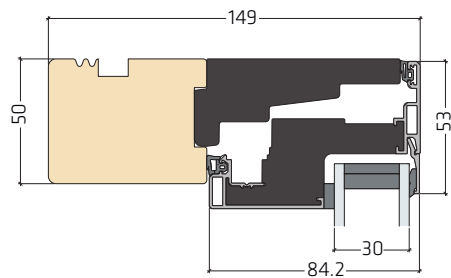
Trickle vent



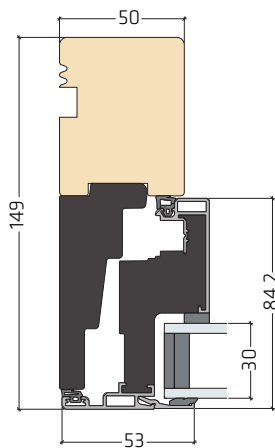
PN safety catch with restrictor

Minimum/maximum dimensions

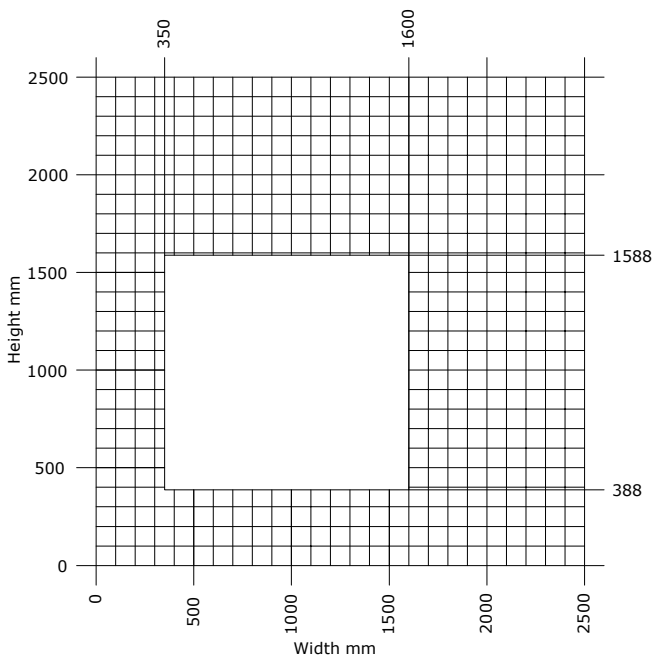
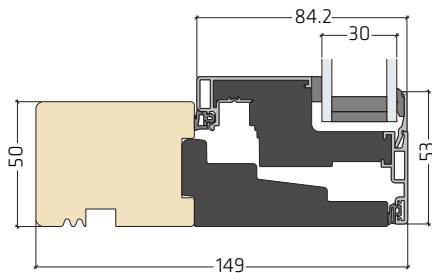
Head



Jamb

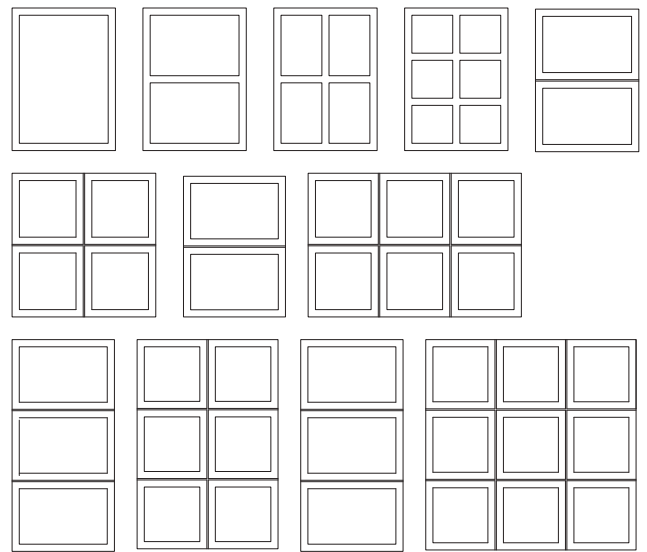


Sill



Min. - Max. dim.

Fixed Light



Use

Fixed lights are often used in combination with opening sashes. The fixed light is only used as a light source in the fenestration of the building or as a spandrel panel with opaque glass to create a false window.

Function

Fixed lights consist of glazing mounted directly into the frame without any kind of opening function.

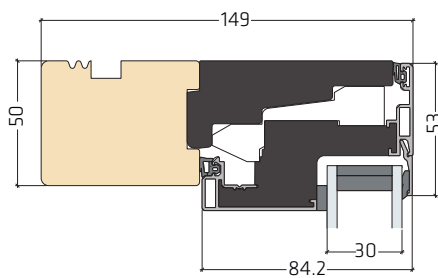
Standard ironmongery and accessories



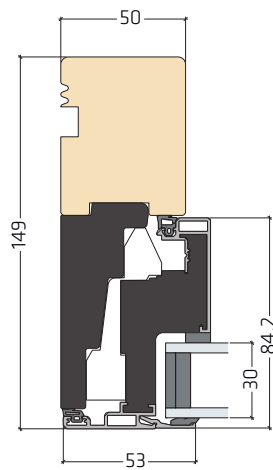
Trickle vent

Minimum/maximum dimensions

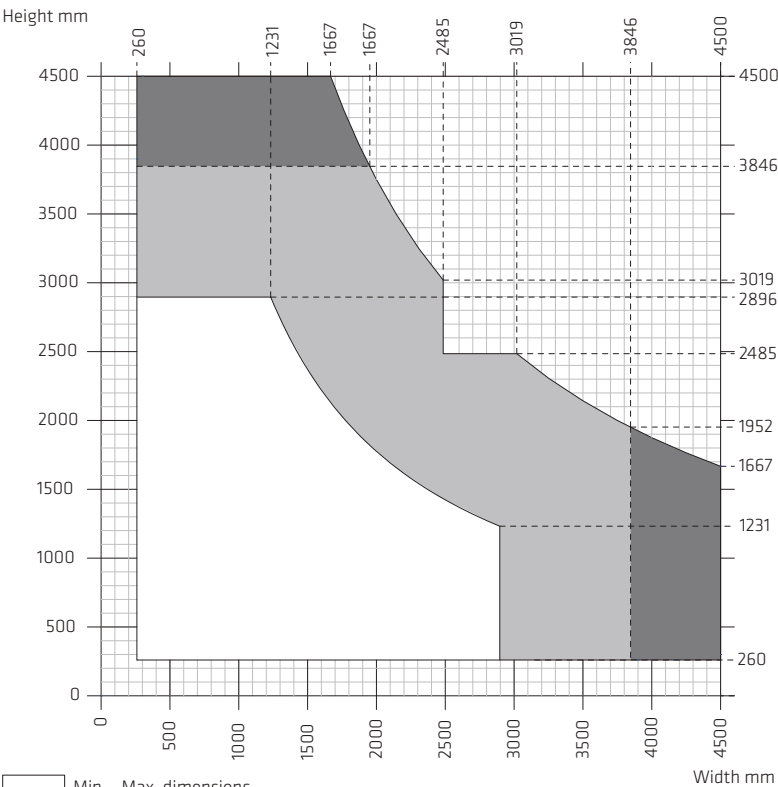
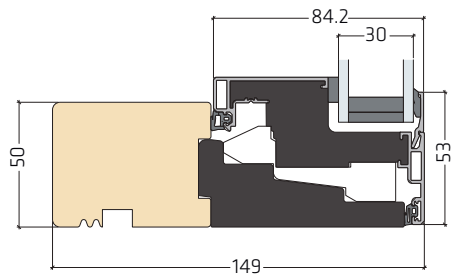
Head



Jamb



Sill



- Min. - Max. dimensions.
- Min. glas thickness is 6 mm. (E.g.. min. 6+6)
- Min. glas thickness is 8 mm. (Eks. min. 8+8)

NOTE!
Tempered and laminated glass has other max. length/width and max. area

Note! It is not always possible to reach max area due to max element weight 230 kg.

Glass to Glass Corner



Use

The glass to glass corner unit is used as an architectural feature where maximum light can penetrate the structure from two sides avoiding heavy looking profiles. This is essential for areas where the view from the building should be emphasised.

Function

The glass to glass corner is essentially a fixed light with two panes of glass jointed vertically at 90° to each other - with the joint hidden behind a black aluminium trim. This is not a load bearing frame.

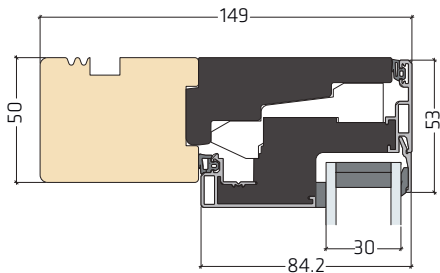
Standard ironmongery and accessories



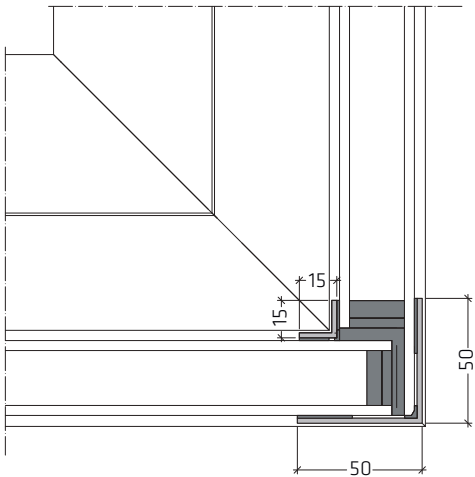
Trickle vent

Minimum/maximum dimensions

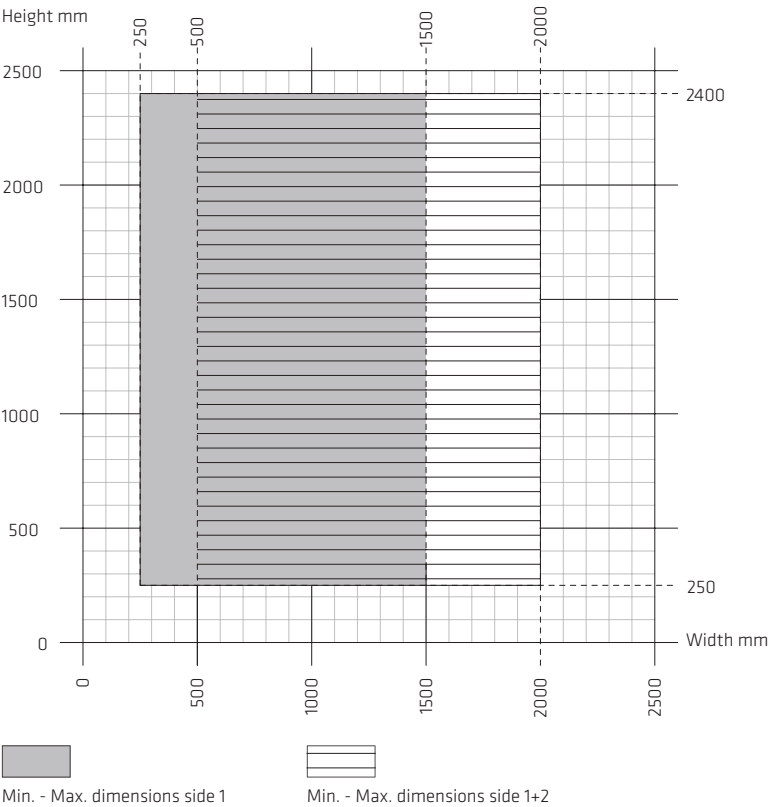
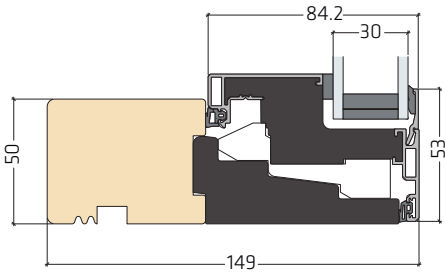
Head



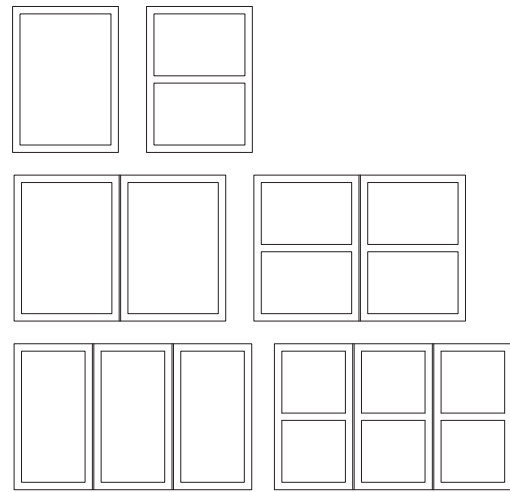
Jamb



Sill



Acoustic Window



Use

Acoustic windows are used in all types of buildings where noise reduction is required or desired, and which cannot be achieved with ordinary acoustic glass.

Function

Acoustic windows are constructed as top guided, side hung, side guided and fixed windows with an inward opening secondary sash. The external sash is locked with a handle that operates a

multi locking point espagnolette and has a night vent position. The handle also operates a friction brake to hold the sash whilst in the open position.

The secondary sash is operated with a small locking mechanism which holds the sash closed.

It cannot be expected that an open window will be held in place by a friction brake during strong or gusty winds.

Standard ironmongery and accessories



Handle



Locking cylinder



Espagnolette with mushroom bolts



Keep



Handle operated night latch



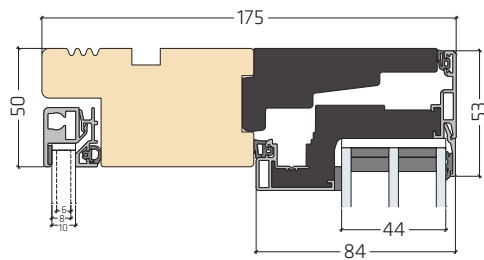
Handle operated brake



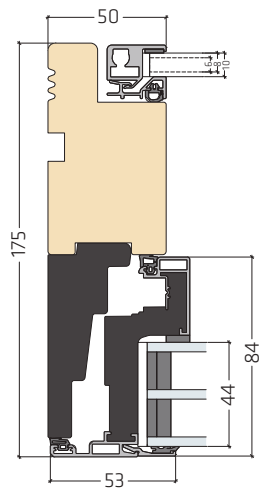
Secondary sash with handle

Minimum/maximum dimensions

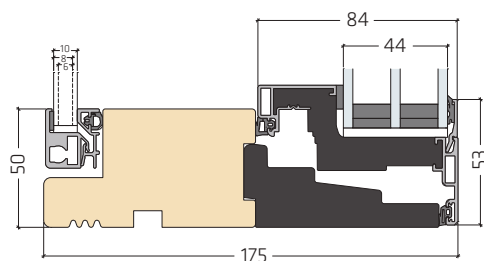
Head



Jamb

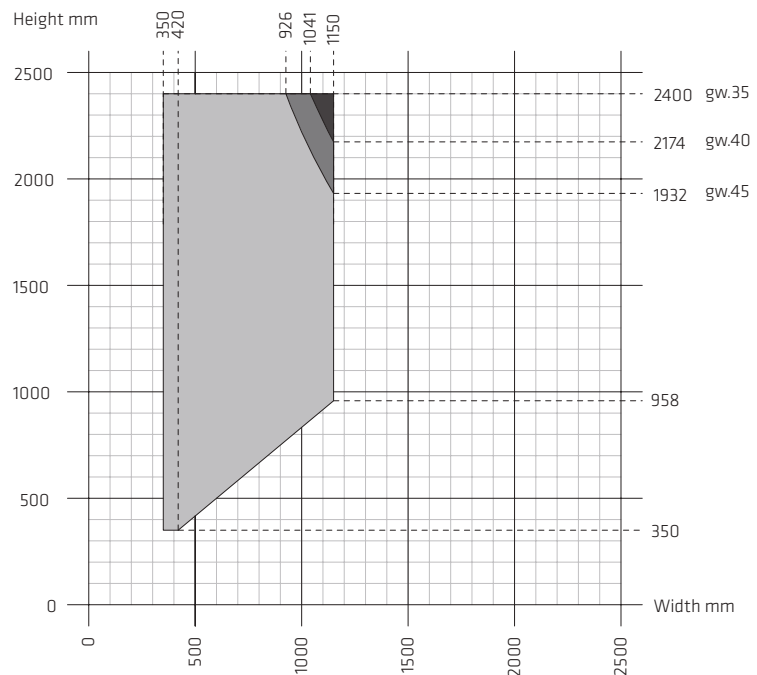


Sill



1-fag

Height mm



Min. - Max. dimensions

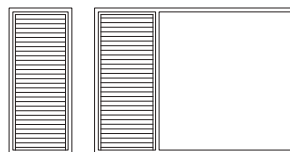
gw.35 Glass weight (gw) external frame:
Max. 35 kg/m²

gw.40 Glass weight (gw) external frame:
Max. 40 kg/m²

gw.45 Glass weight (gw) external frame:
Max. 45 kg/m²

Based on side hung external sash + side hung internal secondary sash.
Glass secondary sash: 6, 8 og 10 mm thickness.

Louvre Shutter



Use

The louvre shutter is an architectural element used in buildings, where ventilation is required, but keeps the building secure from animals and intruders.

The louvre shutter is normally used in conjunction with other windows.

Function

Louvre shutter are fixed frames with a louvre cassette to the outside and an insulated inner hatch that opens from the inside. The inner hatch is side hung and is secured by a handle that operates a multi-locking point espagnolette.

The side hung inner hatch has a handle operated friction brake to hold the hatch in any open position for ventilation.

An insect mesh is built in behind the louvre as standard. The internal hatch can be omitted if required.

Standard ironmongery and accessories



Handle operated brake



Handle



Hoppe Handle



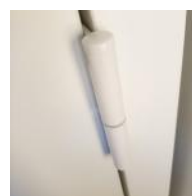
Handle with safety



Louvre shutter - exterior



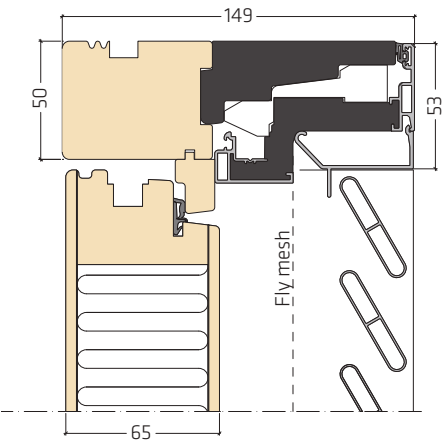
Insect mesh



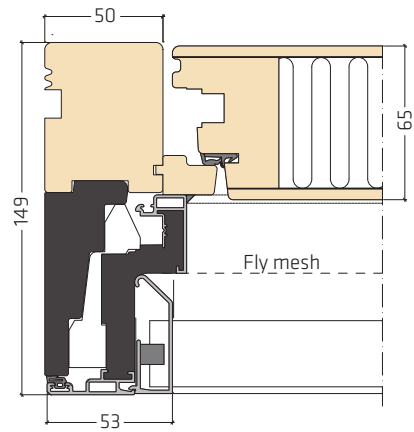
Hinge - Interior

Minimum/maximum dimensions

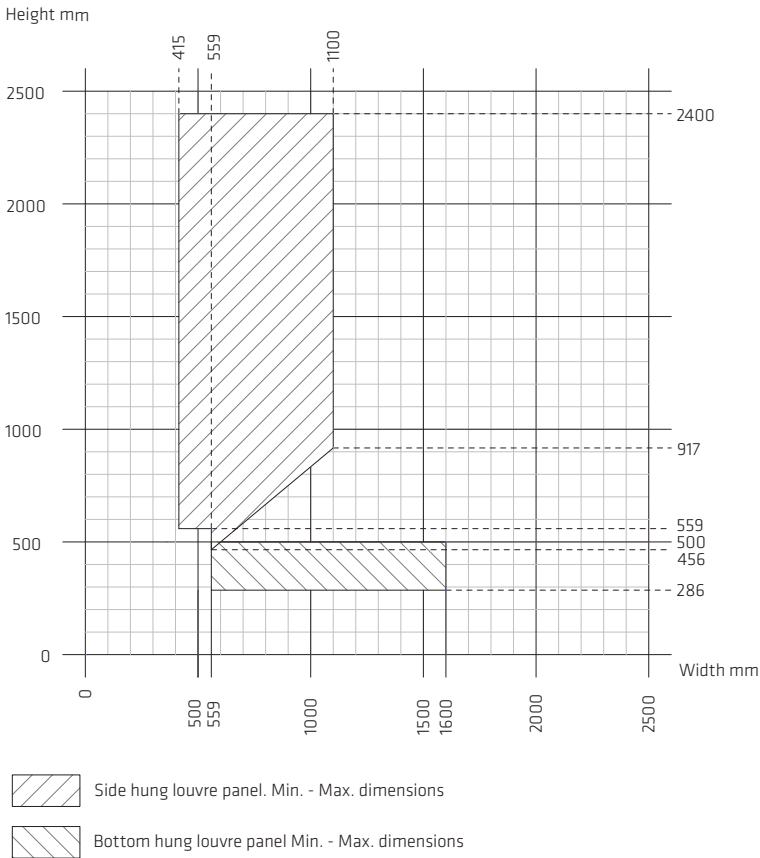
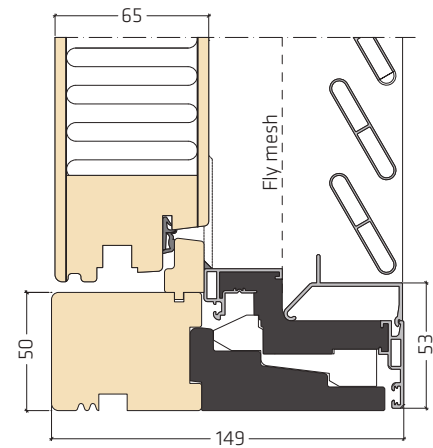
Head



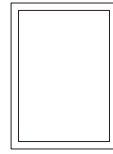
Jamb



Sill



Facade Panel



Use

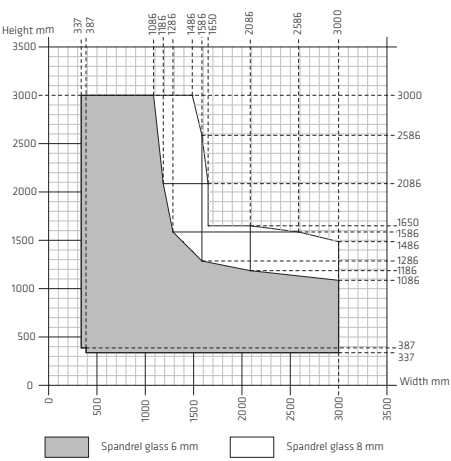
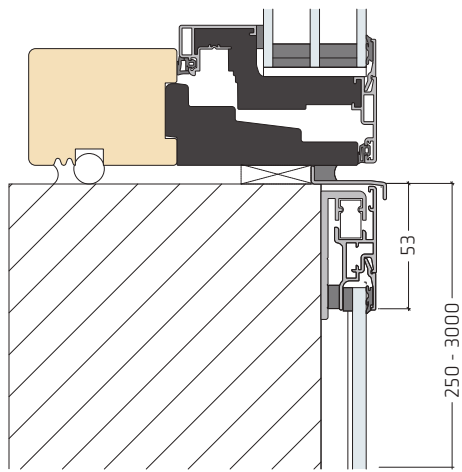
Facade panels are used for different purposes but primarily for concealing floor slabs and columns. Examples would be spandrel panels and cladding areas where a false window design keeps the appearance of the surrounding profile.

Function

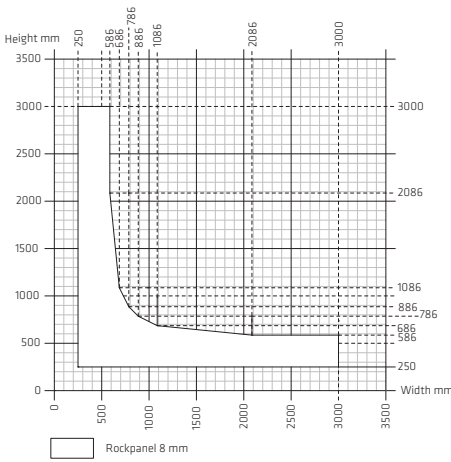
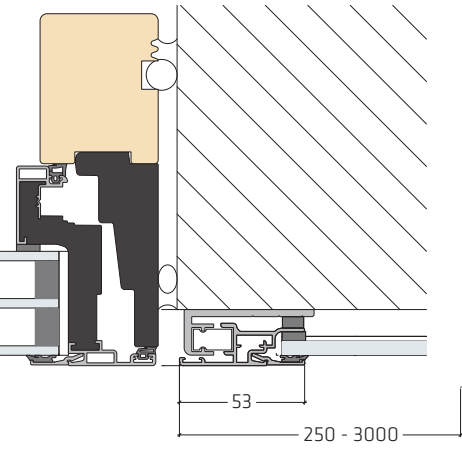
The facade panel is a frameless sash mounted using a bracket system onto the underlying structure. The sash can be glazed with a variety of opaque panels for example: enamelled glass, aluminium panels or a variety of other boarding options.

Minimum/maximum dimensions

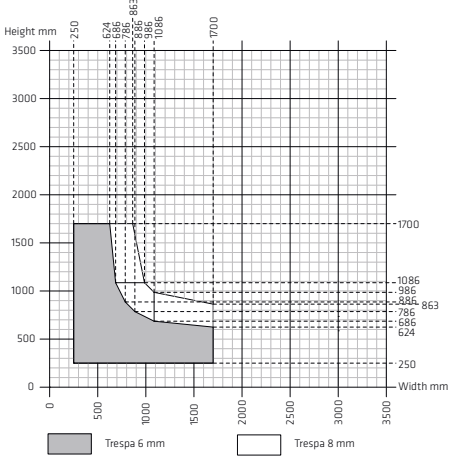
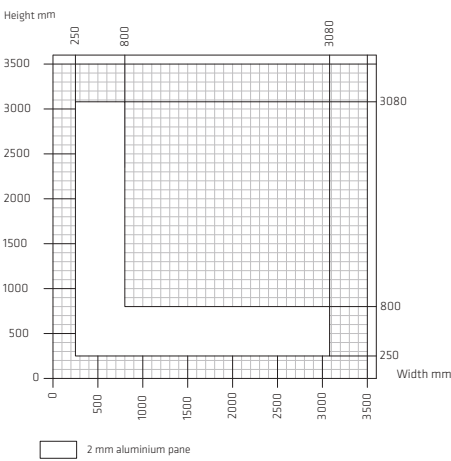
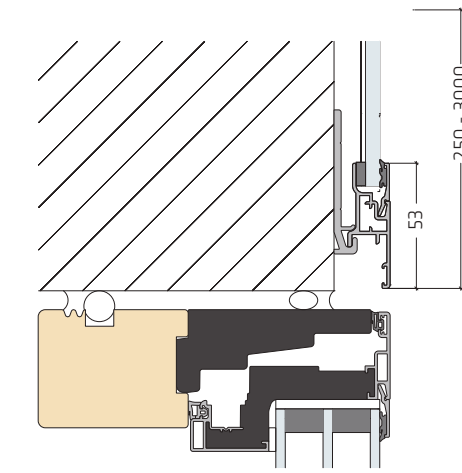
Head



Jamb



Sill



Flat Screen Panel



Use

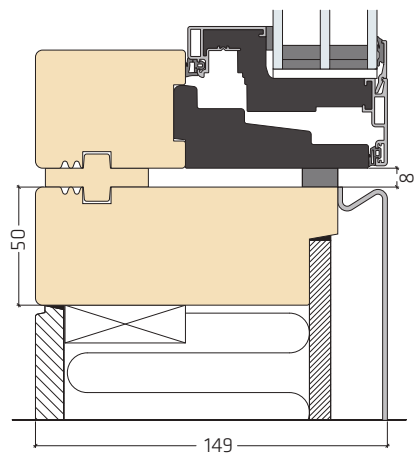
Flat screen panels are used in large facade solutions, for example spandrel panels and cladding areas where the a clean look is wanted.

Function

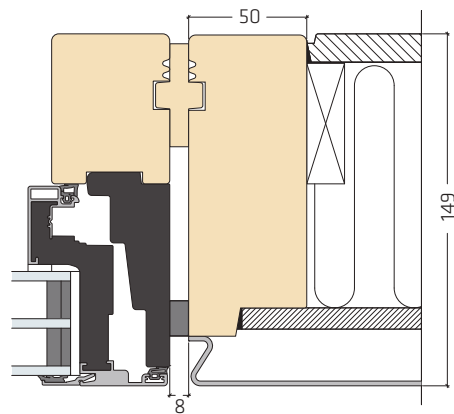
The flat screen panels are formed of aluminium panels, finished in a polyester powder coating and mounted on Futura+ wooden frames.

Minimum/maximum dimensions

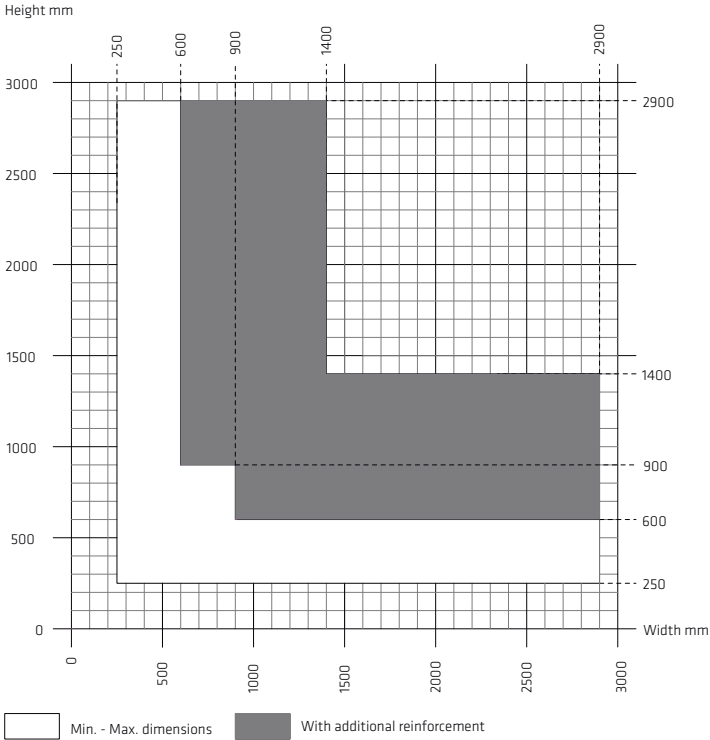
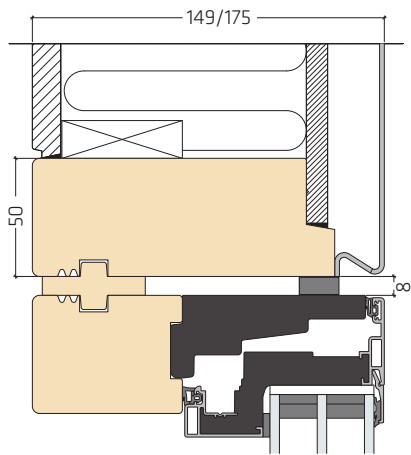
Head



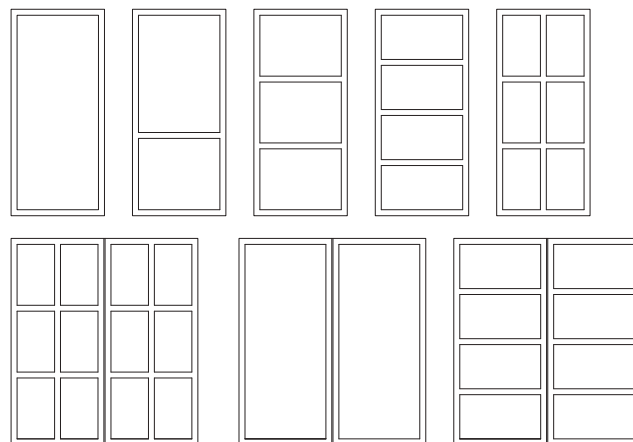
Jamb



Sill



Outward Opening Terrace Door



Use

The outward opening terrace door is used in all types of buildings to access a terrace, patio or spacious balcony. It is suitable for rooms with minimal space.

Function

The doors are side hung with hidden hinges and equipped with a three-point locking espagnolette with mushroom bolts and safety keeps. The door is equipped with a handle on the inside

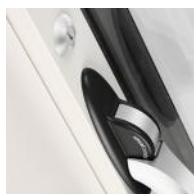
of the sash that also operates the handle operated brake. On opening the door can be locked in any position for ventilation. The terrace door is available as a double door and with or without fixed light sidelights. There is no external handle but a finger pull can be supplied.

The handle operated friction brake will not hold the door in strong or gusty winds.

Standard ironmongery and accessories



Handle



Locking cylinder



Espagnolette with mushroom bolts



Keep



PN safety catch with restrictor



Handle operated night latch



Handle operated brake



Trickle vent



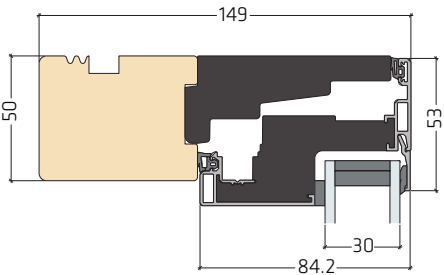
External finger pull



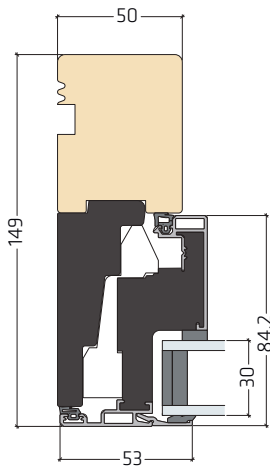
Randi D Handle - external

Minimum/maximum dimensions

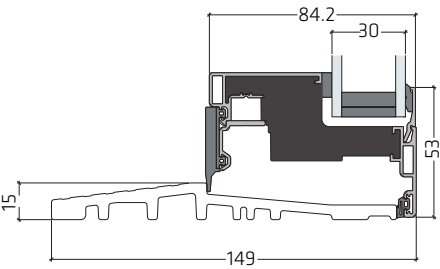
Head



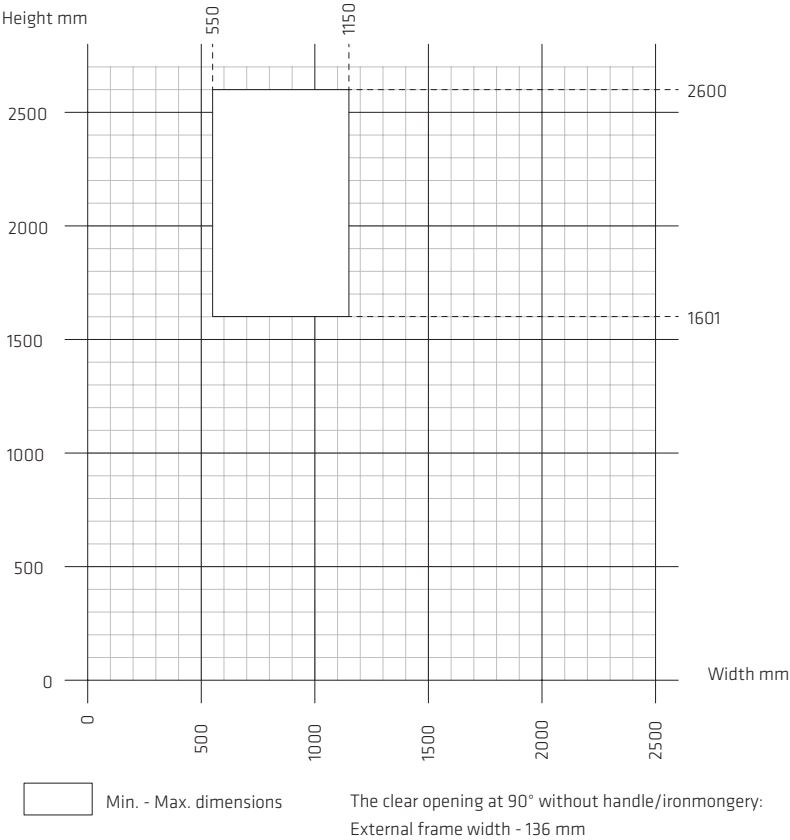
Jamb



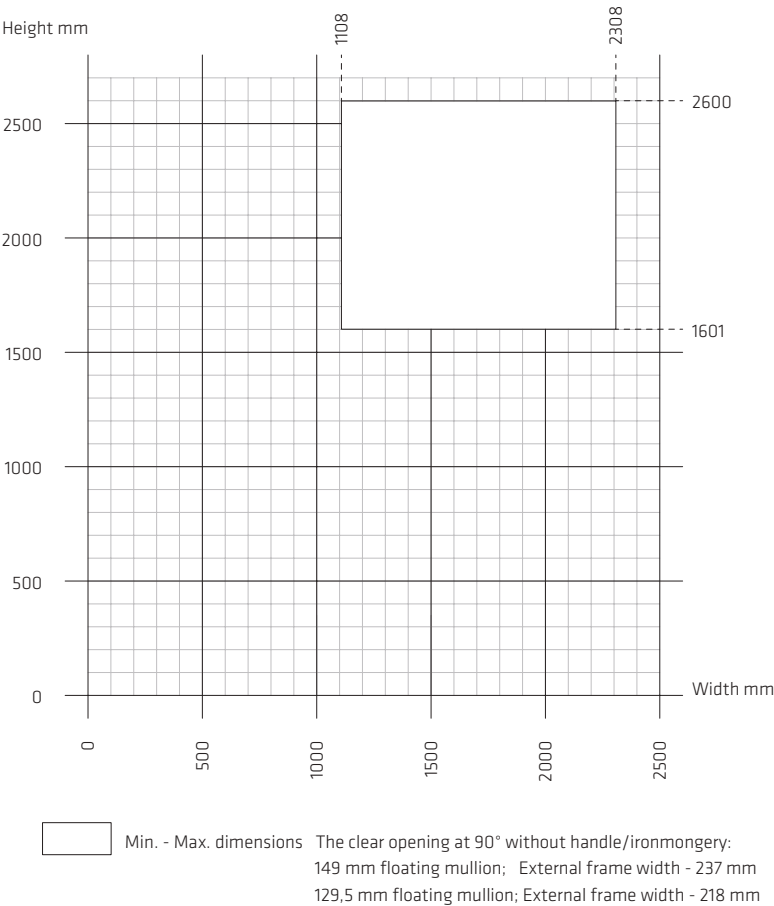
Sill



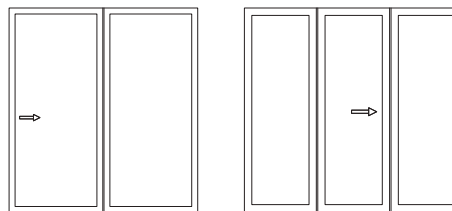
Single door



Double door



Sliding Door



Use

Sliding doors are primarily used to access terraces and patios but are essential for balconies where space is limited. They allow for maximum utilisation of space where required.

Function

The sliding door consists of two parts, a sliding part and a fixed part. When in the closed position both are in line. Upon opening, the sliding part moves outwards and then parallel across in front of the fixed part. The sliding part is equipped with 2 handles that operate a multi-locking point mushroom bolt espagnolette, with a night latch position.

Standard ironmongery and accessories



Handle



Locking cylinder



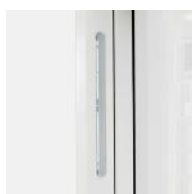
Espagnolette with mushroom bolts



Keep



Handle operated night latch



Trickle vent



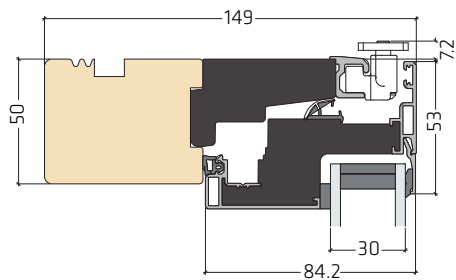
External finger pull



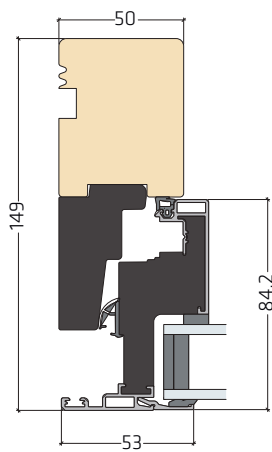
Randi D Handle - external

Minimum/maximum dimensions

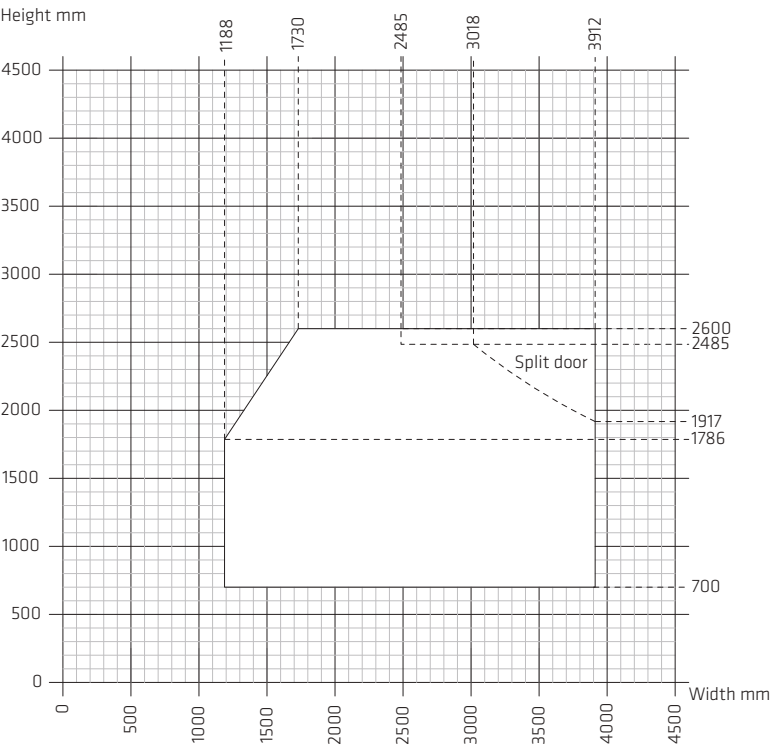
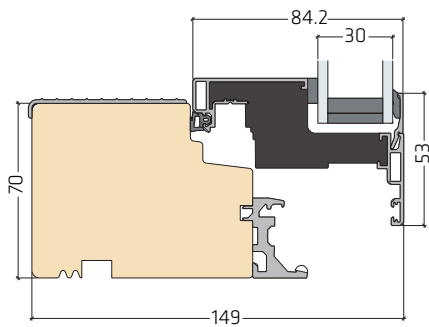
Head



Jamb

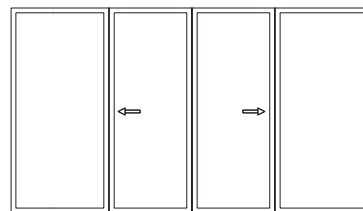


Sill



NOTE!
Max width on the sliding part is 1500 mm
It is not always possible to reach max area due to max element weight.

Double Sliding Door



Use

The double sliding door is primarily used to access terraces and patios but are essential for balconies where space is limited. It allow for maximum utilisation of space where required.

Function

The door consists of three parts; two fixed parts, one at each end and the middle sliding section. When in the closed position all three units are in line. The middle sashes open outwards in opposite directions moving in front of the fixed lights at either

end. Both sliding parts are equipped with two handles that operate a multi-locking point mushroom bolt espagnolette. The door is delivered as three separate elements, one sliding door and two side lights. Ready to be assembled on site. On opening the sliding door can be locked in a night latch position for ventilation.

Standard ironmongery and accessories



Handle



Locking cylinder



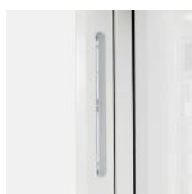
Espagnolette with mushroom bolts



Keep



Handle operated night latch



Trickle vent



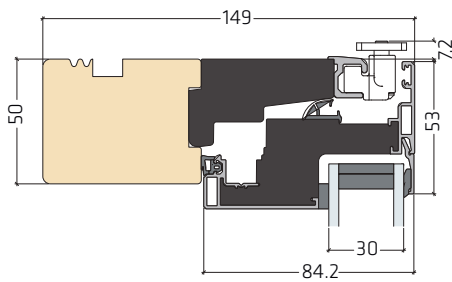
External finger pull



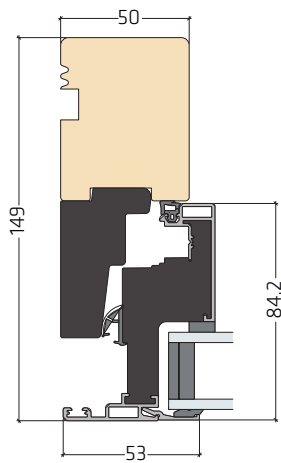
Randi D Handle - external

Minimum/maximum dimensions

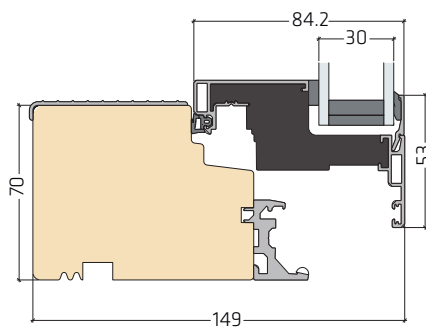
Head



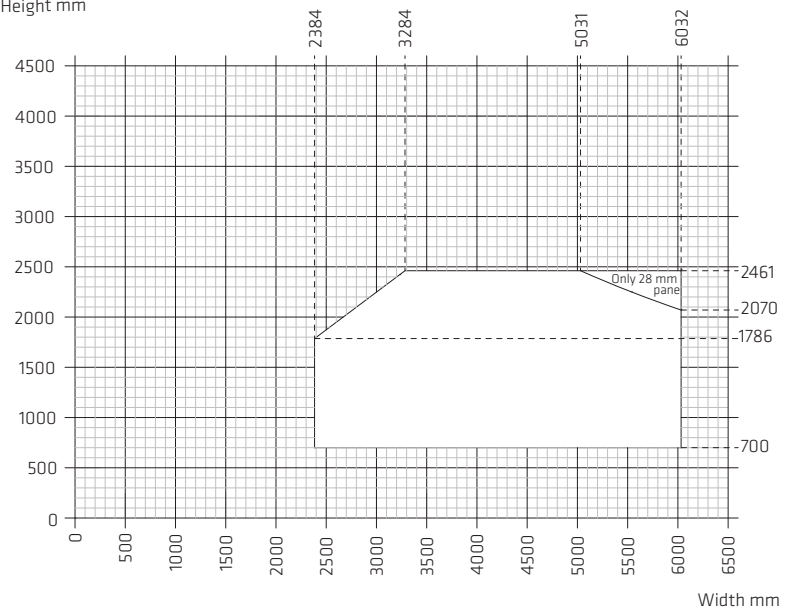
Jamb



Sill



Height mm



Min. - Max. dimensions

NOTE!

The diagram shows a symmetrically split sliding door.
It is not always possible to reach max area due to the max weight limit.

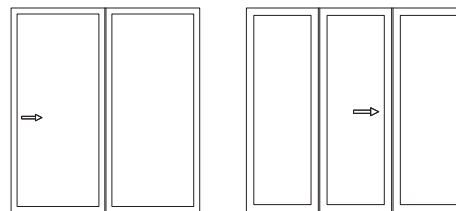
Note!

Max width on the sliding part is 1500 mm

Clear opening:

External frame width (without sidelights) - 409 mm

Sliding Door With Low Threshold



Use

Sliding doors with low thresholds are primarily used to access terraces and patios but are essential for French balconies where space is limited. They allow for maximum utilisation of space where required

Function

The sliding door consists of two parts, a sliding part and a fixed part. The sliding part moves on the external side of the door. A safety catch on the mullion must be activated before opening the

sliding part. The sliding door is then controlled by a single handle placed on the side of the sash. Upon opening, the sliding part moves approximately 6 mm outwards and then parallel across in front of the fixed part. An end stop is placed on the top rail to prevent the sliding part from sliding too far to the side. A stop is also placed on the jamb to prevent the sliding part from sliding into the keeps when closing the door.

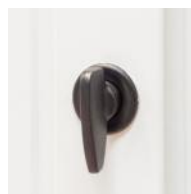
Standard ironmongery and accessories



Handle



Locking cylinder



Safety catch



Trickle vent



Espagnolette with mushroom bolts



Keep



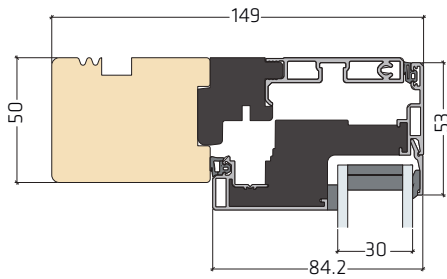
External finger pull



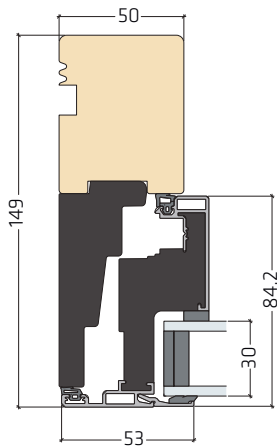
Randi D Handle - external

Minimum/maximum dimensions

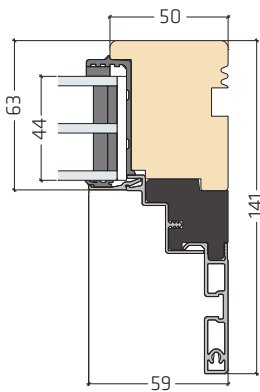
Head



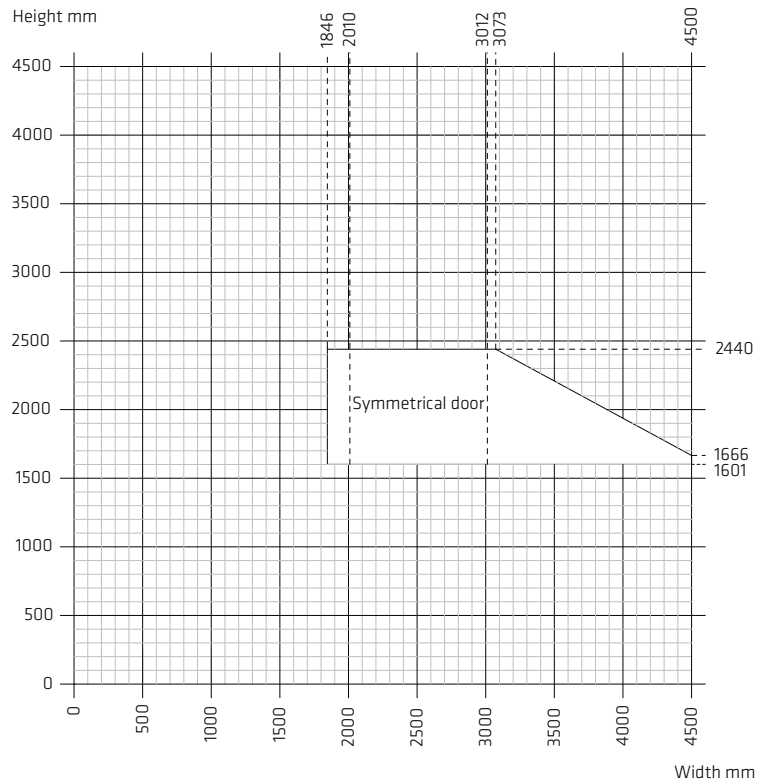
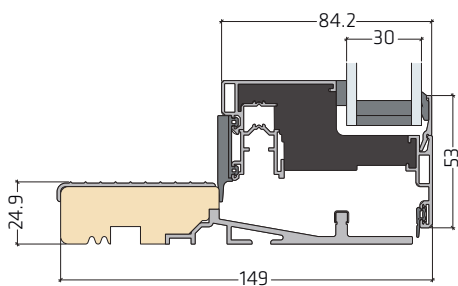
Jamb - sliding part



Jamb - Fixed part



Sill



Min. - Max. dimensions

NOTE!

Max width on the sliding part is 1500 mm.
It is not always possible to reach max area
due to max element weight

Note!

Max width on sliding part is 1500 mm.

Note! It is not always possible to reach max area due to max element weight 230 kg.

Clear opening:

External frame to mid mullion - 340 mm

IC Sliding Door with low threshold



Use

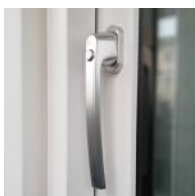
Sliding doors with low threshold are primarily used for access to terraces, patios, balconies and other places where low level access is required.

Function

The sliding door consists of a fixed and a moving (sliding) part. The sliding part of the door always runs on the outside of the fixed light. To open the door, press safety button on the handle and turn 180° to release it from the frame - the sliding part will protrude 8mm out from the frame and slide across the fixed light. Provided with Randi Line pull handle externally.

An end stop is located at the top track, preventing the door from opening too far.

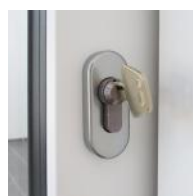
Standard ironmongery and accessories



Handle



D Handle



Locking Cylinder



External grip



Low threshold



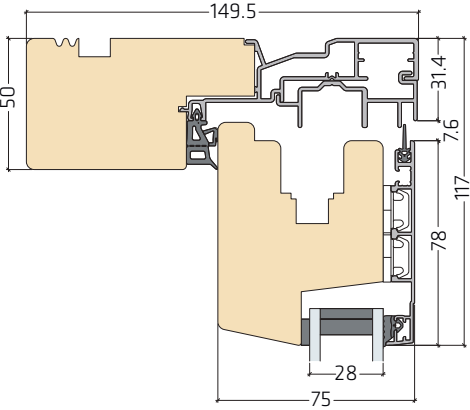
Espagnolette



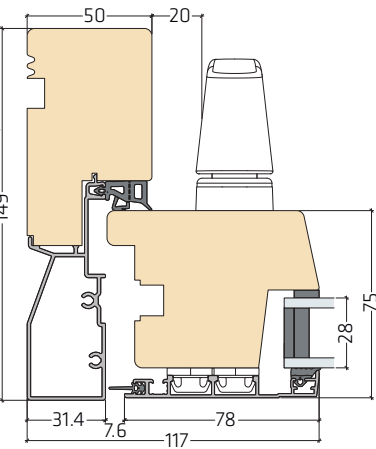
Keep

Minimum/maximum dimensions

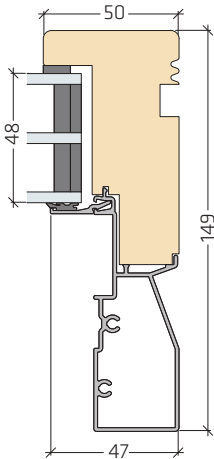
Head



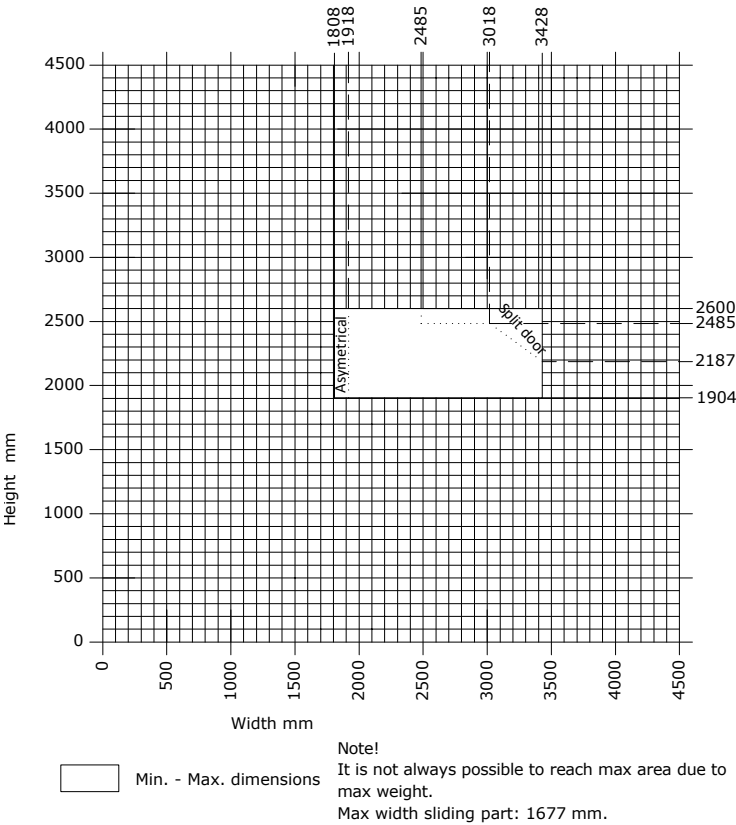
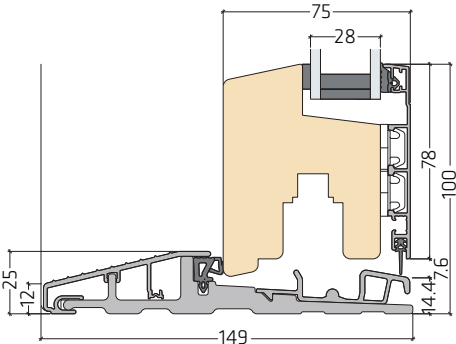
Jamb - sliding part



Jamb - Fixed part



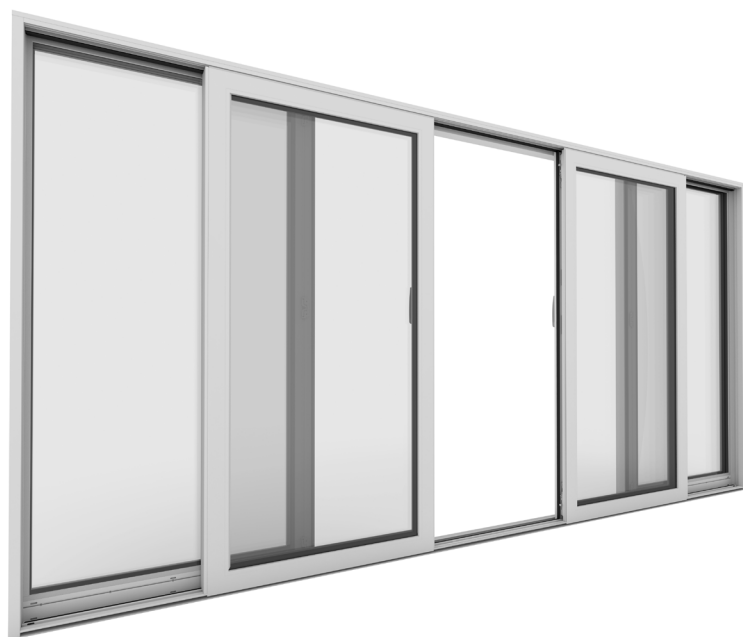
Sill



Note!!
Max width on sliding part is 1.677 mm

Clear opening:
External frame to mid mullion – 192 mm

IC Double Sliding Door with low threshold



Use:

Sliding doors with low are primarily used for direct access to outside areas like balconies, patios, terraces and gardens where easy, low level access is wanted.

The middle sashes open in opposite directions moving in front of the fixed lights at either end. Both sliding parts are equipped with a handle that operate a multi-locking point mushroom bolt espagnolette allowing the doors to protrude 8mm before sliding.

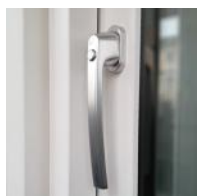
Function:

The door consists of four parts; two fixed parts, one at each end and the two middle sliding sections.

The door is delivered as three separate elements, one sliding door section and two side lights. Ready to be assembled on site.

When in the closed position all units are in line.

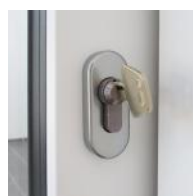
Standard ironmongery and accessories



Handle



D Handle



Locking Cylinder



External grip



Low threshold



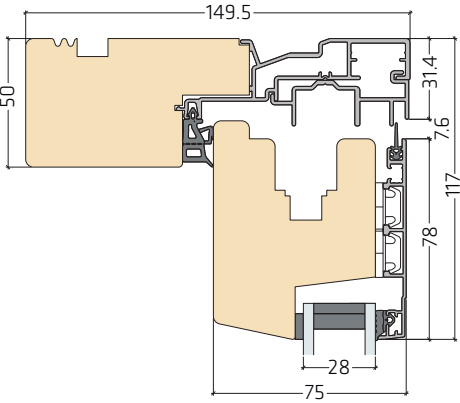
Espagnolette



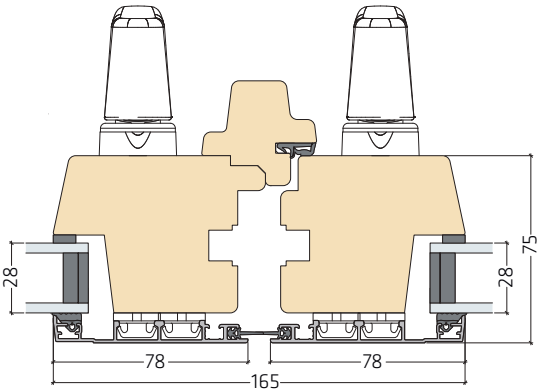
Keep

Minimum/maximum dimensions

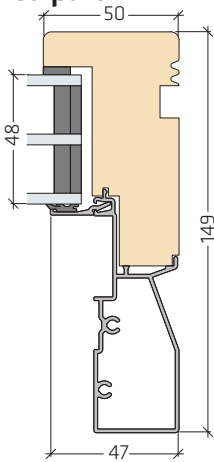
Head



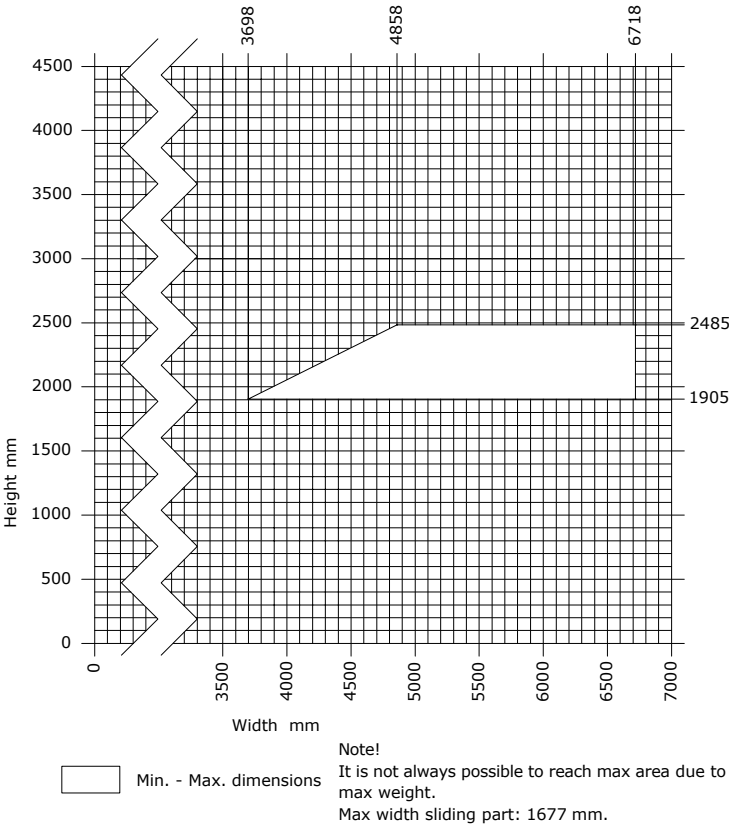
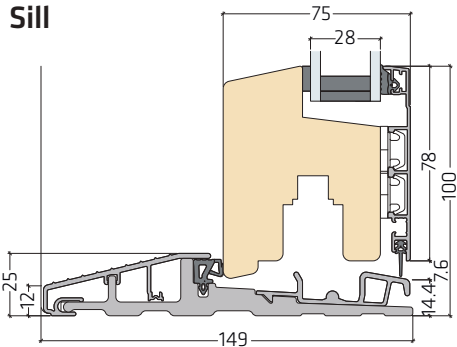
Jamb - sliding part



Jamb - Fixed part



Sill

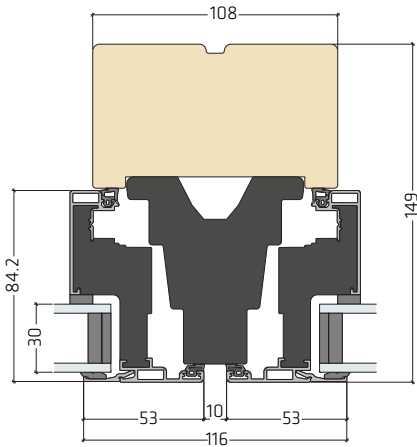


Note! Max width on sliding part is 1.677 mm

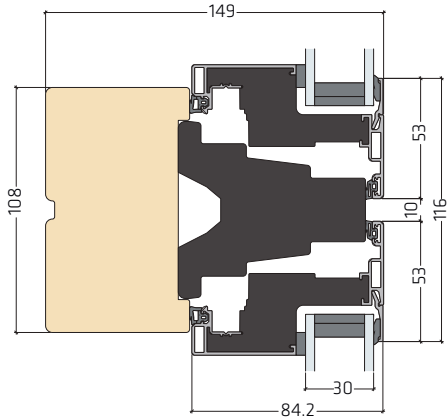
Clear opening:
Mid mullion to mid mullion - 297,5 mm

Mullions and Transoms

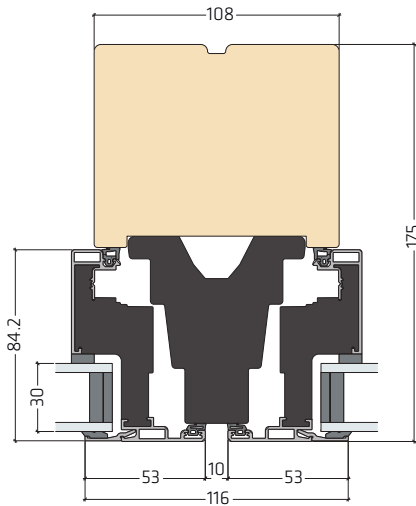
108 x 149 mm mullion with sash | PLU01-50L30



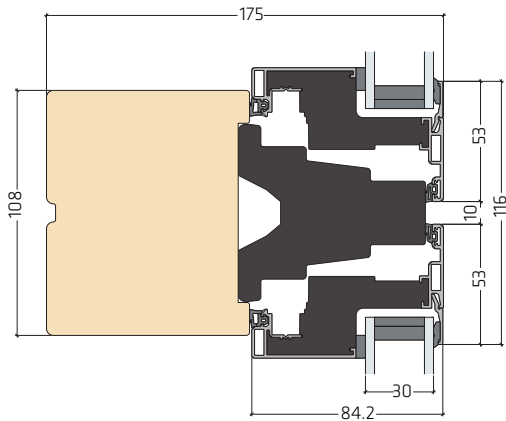
108 x 149 mm transom with sash | PLU01-40L



108 x 175 mm mullion with sash | PLU01-50L30

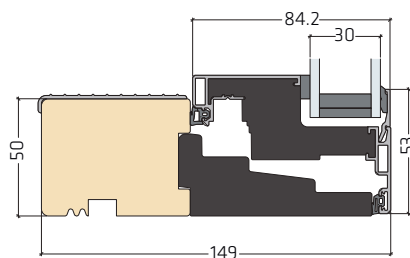


108 x 175 mm transom with sash | PLU01-40L30

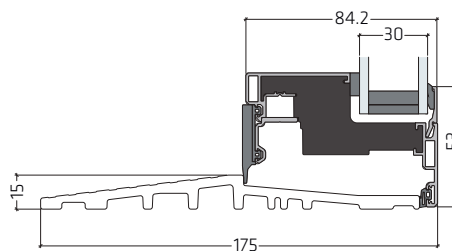


Alternative frames and sashes

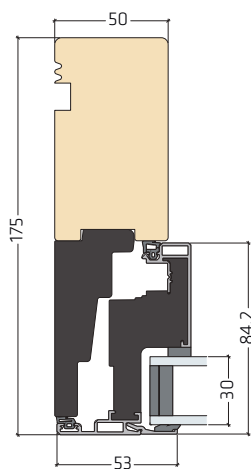
50 x 149 mm timber threshold with alu tread plate | PLU20-10L30



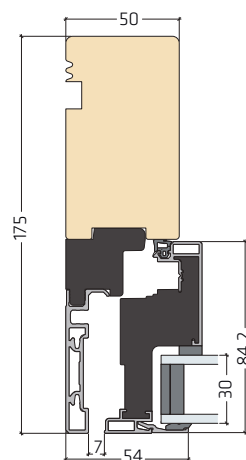
15 x 175 mm composite threshold | PLU20-11L30



Alternative frame depth 50 x 175 mm | PLU01-30L30

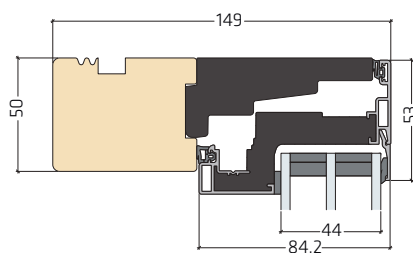


Alternative frame depth 50 x 175 mm, top swing reversible | PLU03-30L30

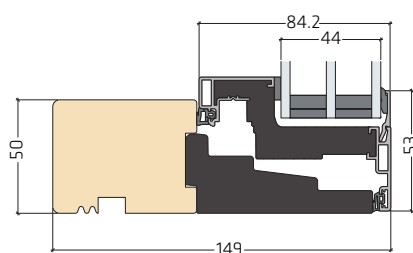


Triple glazing

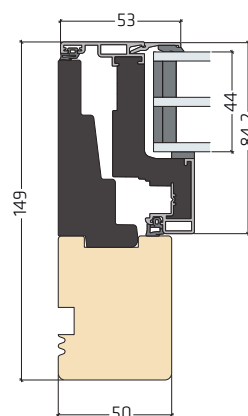
Head with triple glazing | PLU01-20L44



Sill with triple glazing | PLU01-10L44

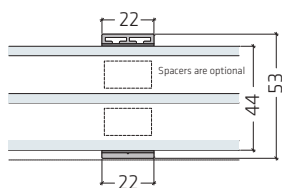


Jamb with triple glazing | PLU01-30L44

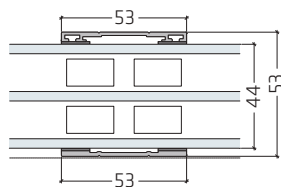


Glazing Bars

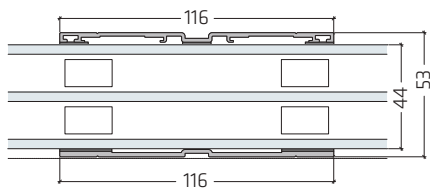
22 mm styling bar, 44 mm triple glazing | PLU12-80L44



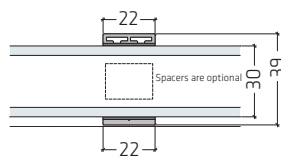
53 mm styling bar, 44 mm triple glazing | PLU12-81L44



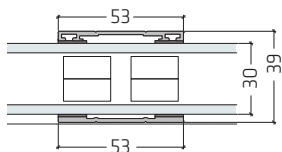
116 mm styling bar, 44 mm glazing | PLU12-82L44



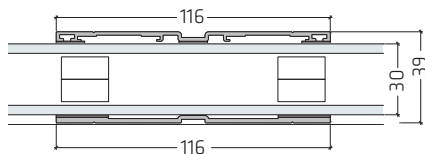
22 mm styling bar, 30 mm glazing | PLU12-80L30



53 mm styling bar, 30 mm glazing | PLU12-81L30

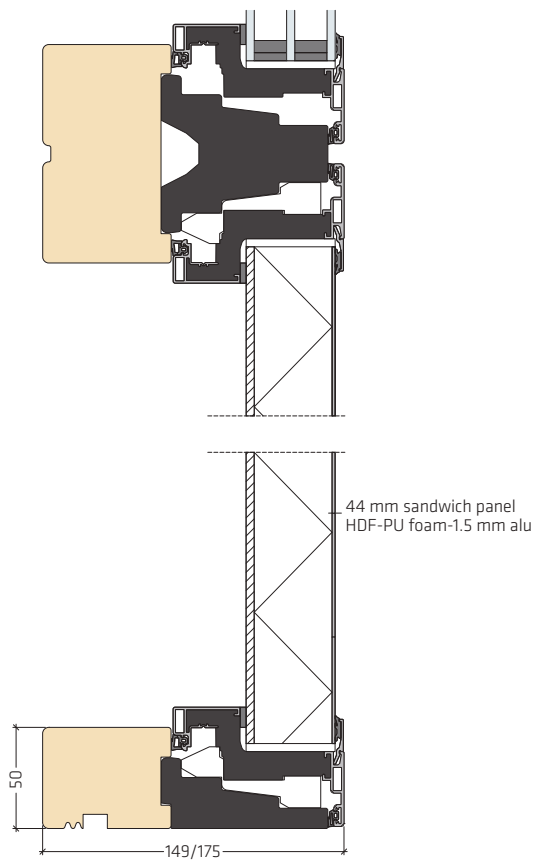


116 mm styling bar, 30 mm glazing | PLU12-82L30

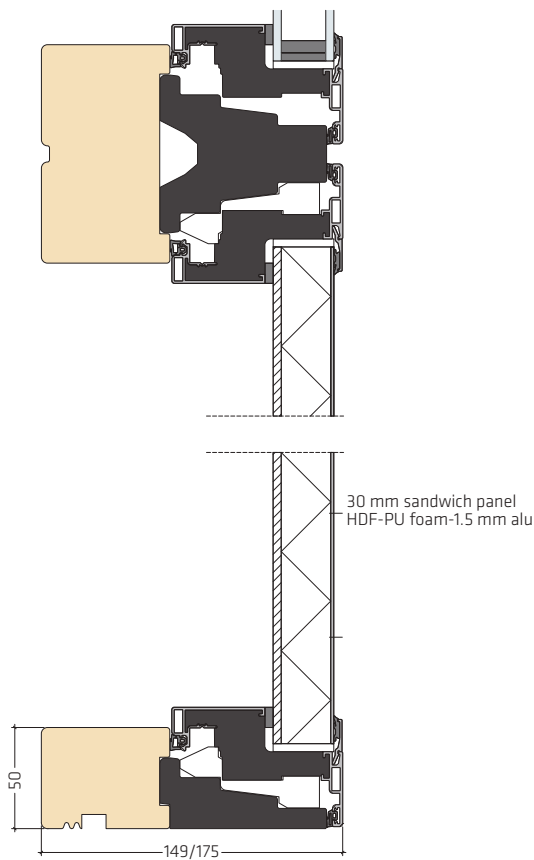


Panels and Spandrels

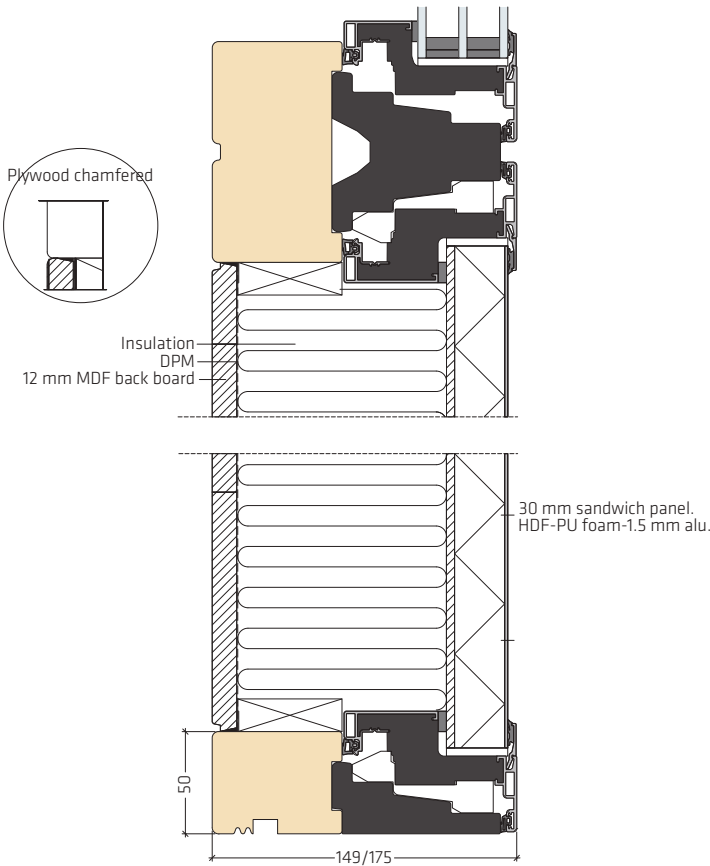
44 mm sandwich panel | PLU-FYL000



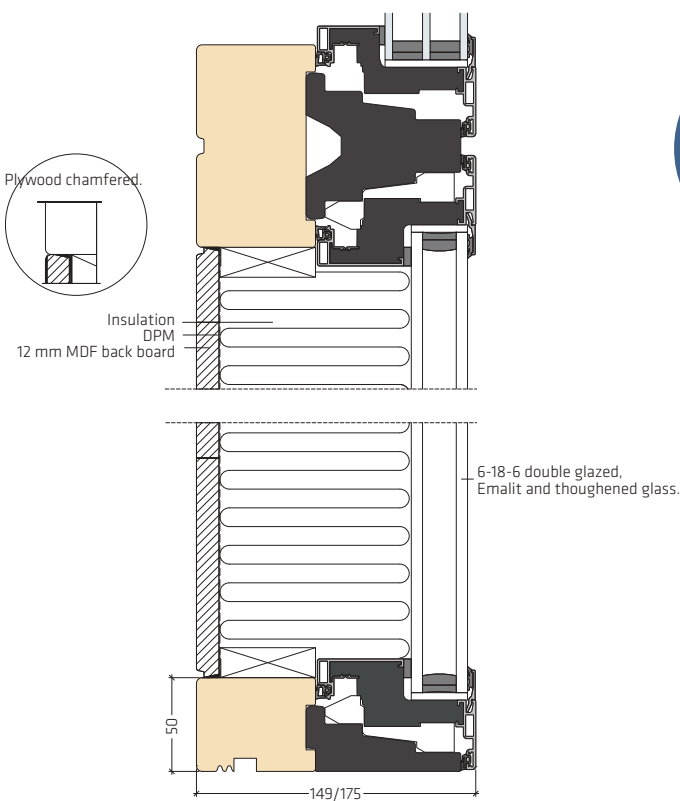
30 mm sandwich panel | PLU-FYL001



Fully insulated spandrel with sandwich panel | PLU-FYL020



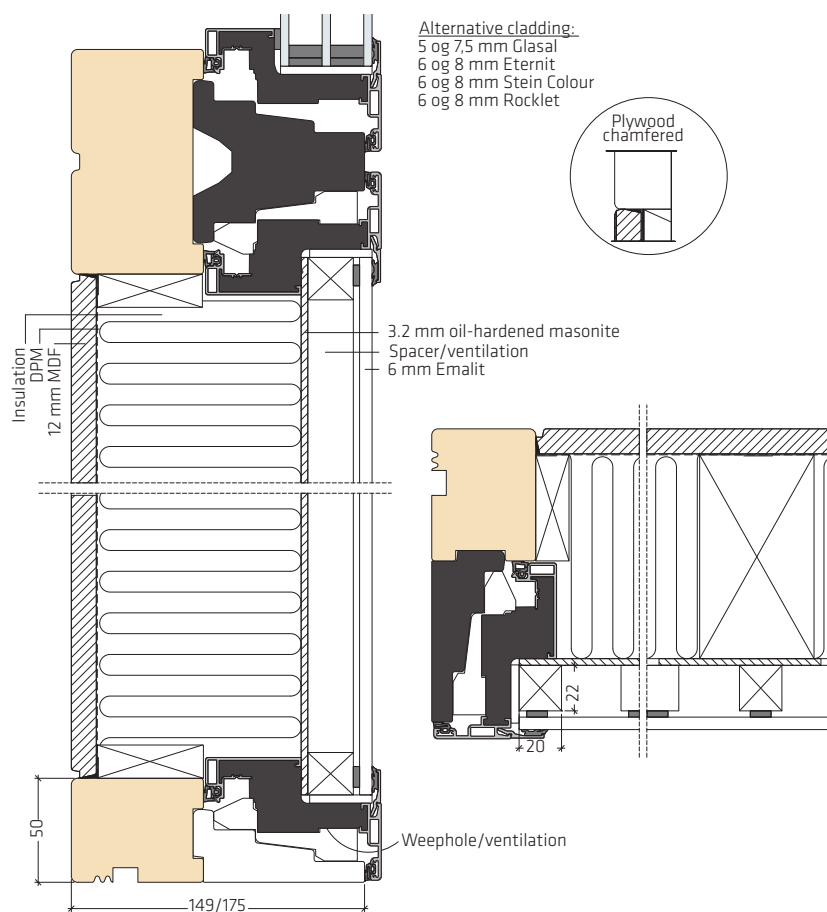
Fully insulated spandrel with double glazing | PLU-FYL030



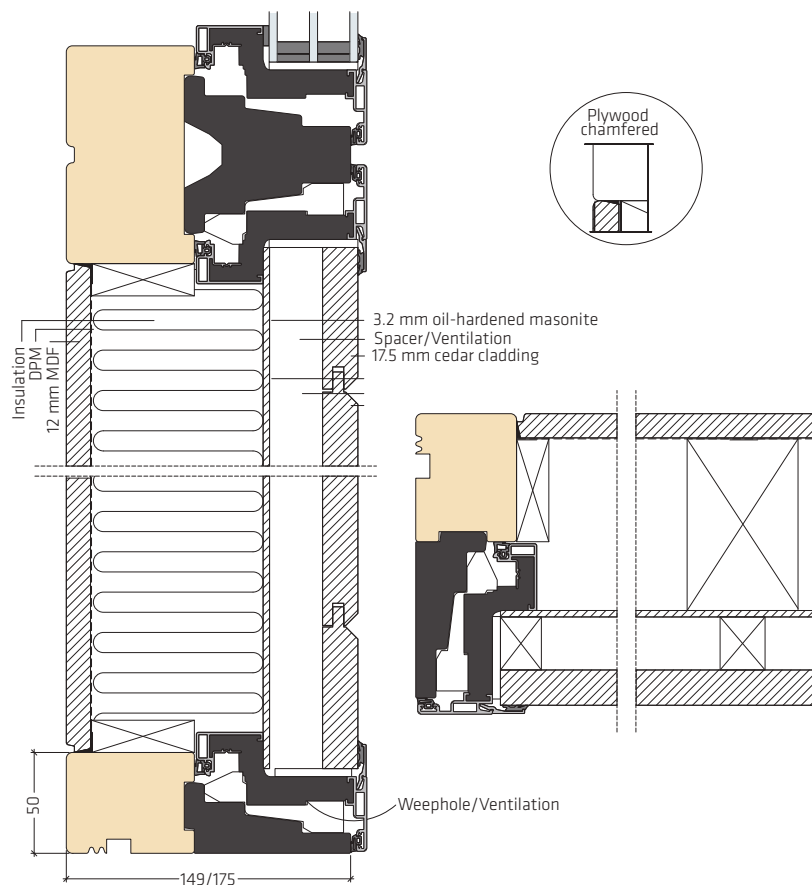
Back board on insulated spandrels are loosely installed. Spandrels are supplied without insulation and DPM

Spandrels

Ventilated and fully insulated spandrel | PLU-FYL040



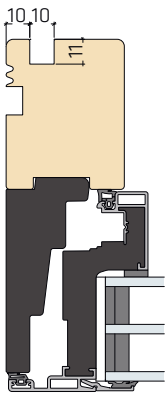
Fully insulated spandrel with cedar boarding | PLU-FYL050



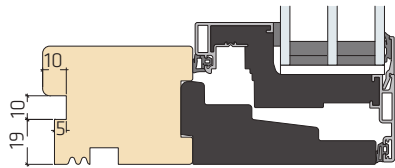
Back board on insulated spandrels are loosely installed. Spandrels are supplied without insulation and DPM

Grooves and Rebates

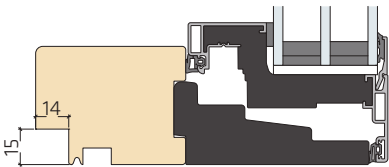
10 x 10 mm groove | PLU-NOT001



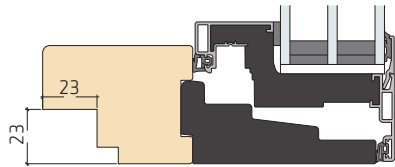
10 x 10 mm groove and rebate for window board | PLU-NOT002



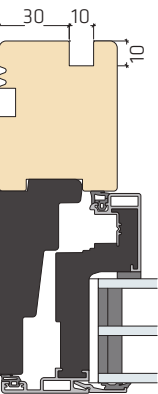
15 x 14 mm rebate for window board | PLU-NOT003



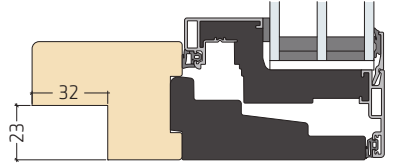
23 x 23 mm rebate for corner connection | PLU-NOT004



10 x 10 mm groove for lining | PLU-NOT005

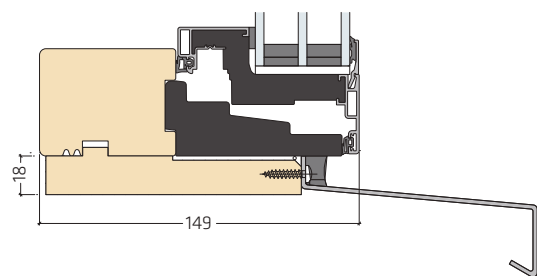


23 x 32 mm rebate for replacement | PLU-NOT006



Drip Sills and Packers

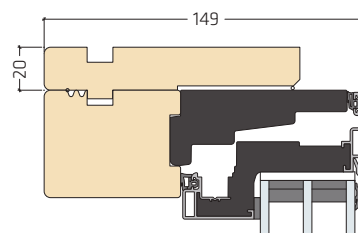
Packer for installation of drip sill | PLU-PF0001



• Sealant

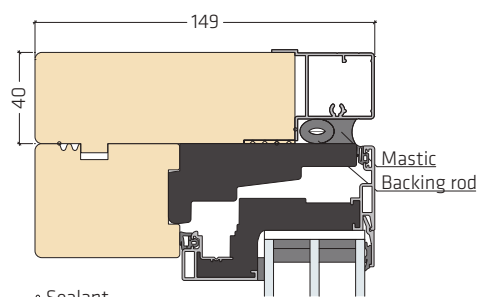
Alu-drip sill is an option

20 mm packer | PLU-PF0005



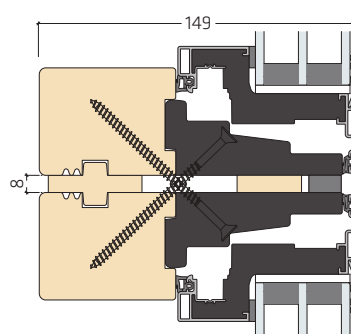
• Sealant

40 mm packer | PLU-PF0019



• Sealant

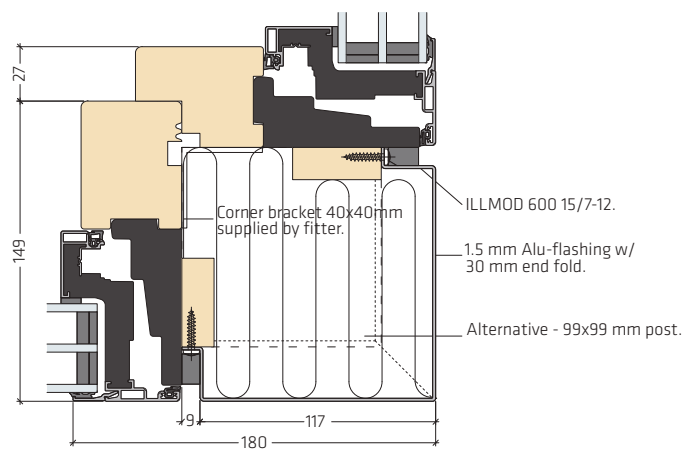
Timber packer/spacer bar | PLU-PF0021



• Sealant

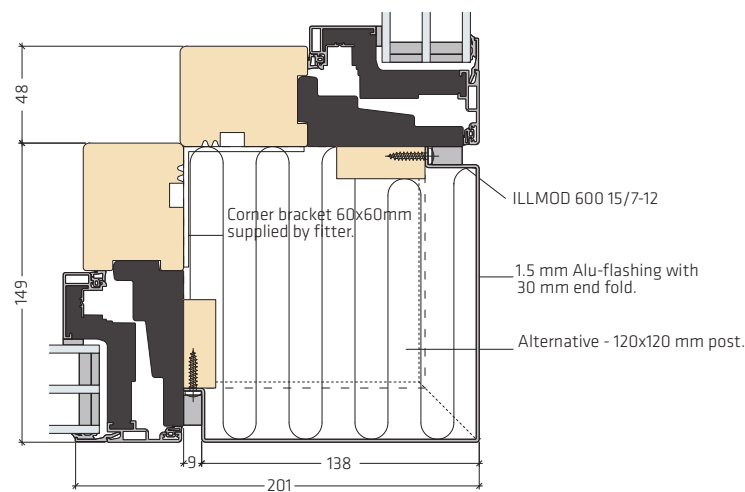
Corner Solutions

Corner solution 90° with rebate | PLU-HJL001



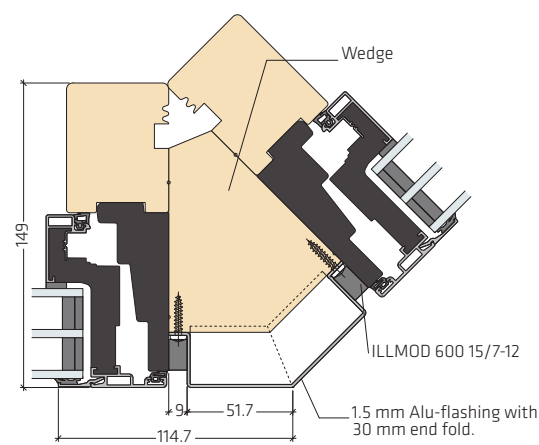
Posts and alu-flashing are options.

Corner solution 90° without rebate | PLU-HJL003



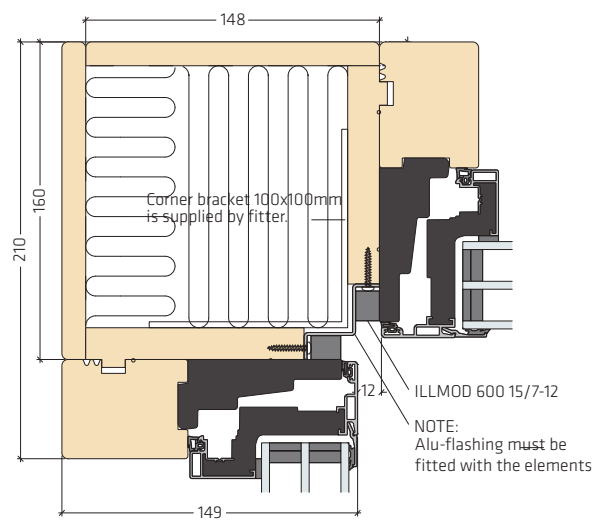
Posts and alu-flashing is optional.

Corner solutions 45° with wedge | PLU-HJL005



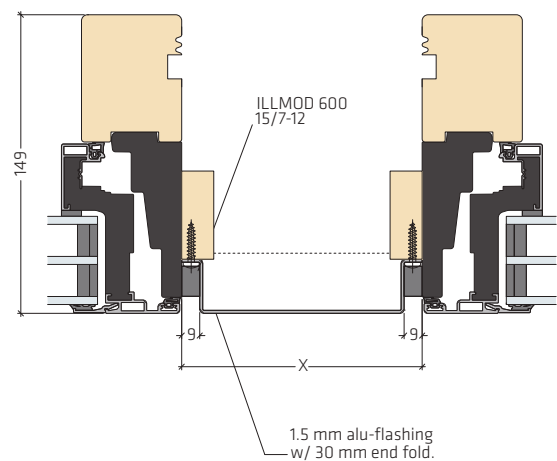
Wedge and alu-flashing are options.

Corner solution 90° with internal corner | PLU-HJL009

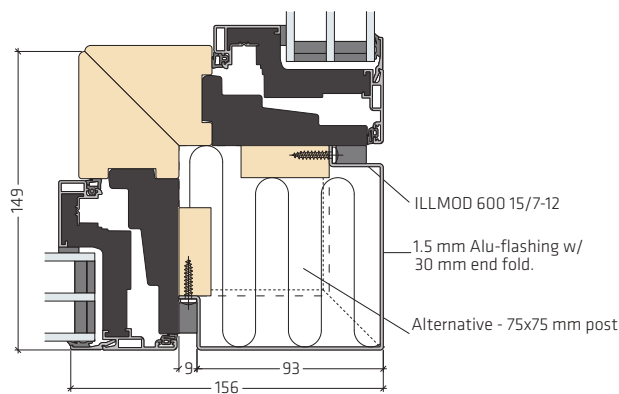


Supplied without corner bracket, insulation & DPM.

Corner solution 180° flashing | PLU-HJL011



Corner solution 90° with angle cut | PLU-HJL012

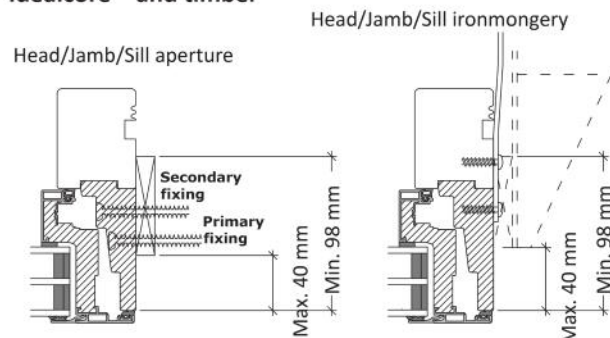


Posts and alu-flashings are options.

Installation - A quick overview

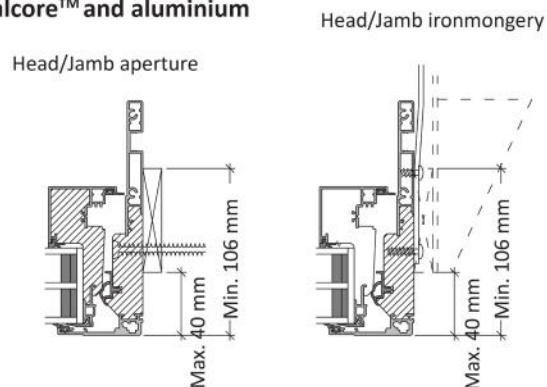
Top guided

Packers must support both Idealcore™ and timber



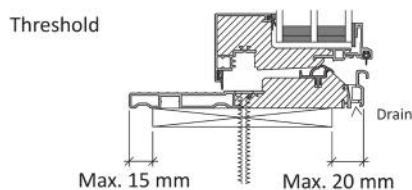
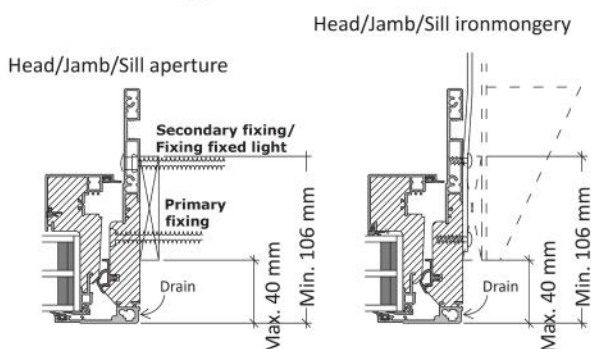
Tilt/turn door

Packers must support both Idealcore™ and aluminium



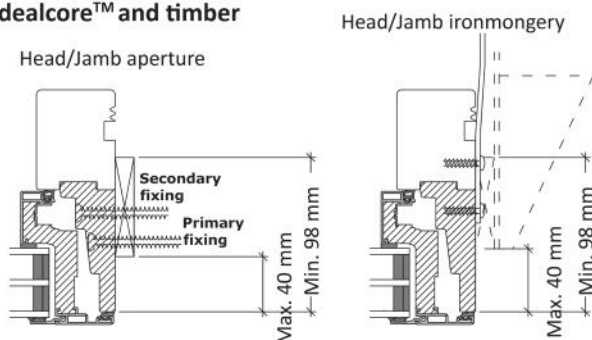
Tilt/turn

Packers must support both Idealcore™ and aluminium



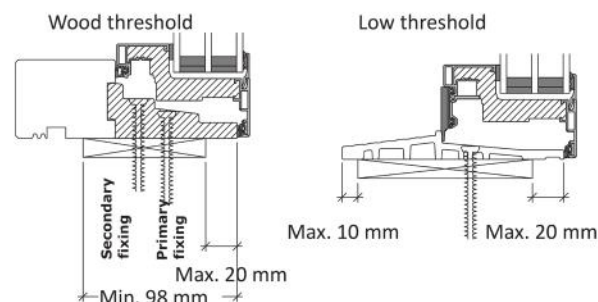
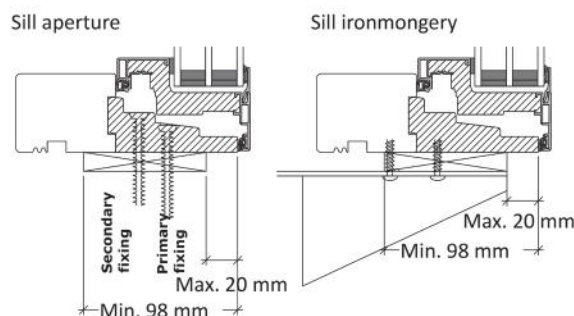
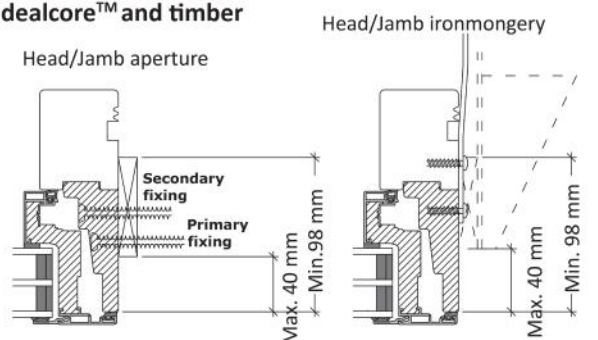
Side hung / Side guided

Packers must support both Idealcore™ and timber



Outward opening terrace door

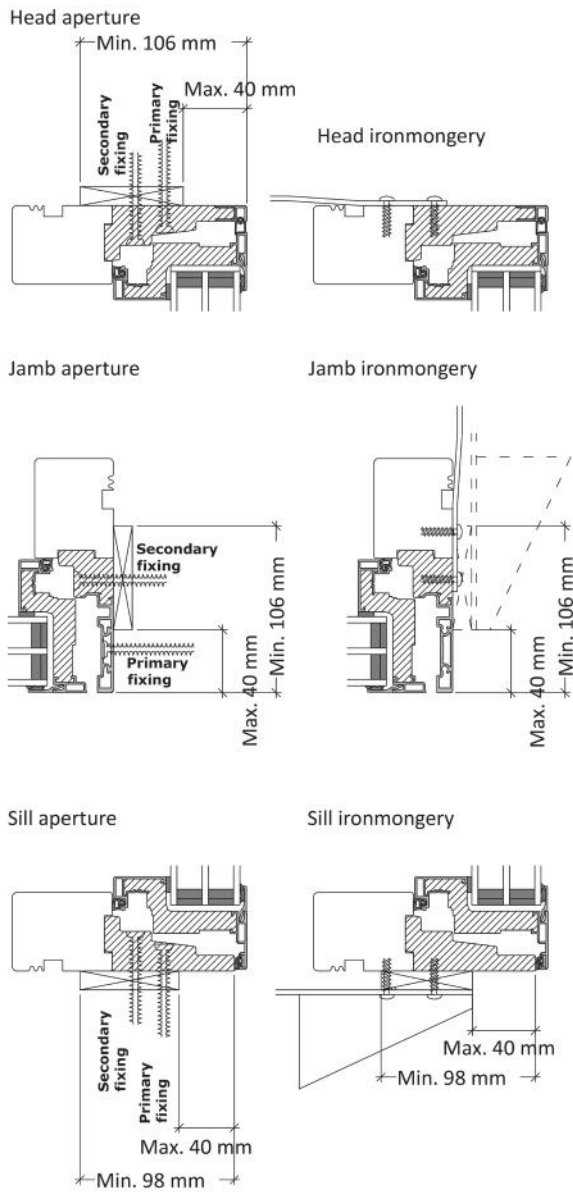
Packers must support both Idealcore™ and timber



See more details in the installation app or on install.idealcombi.com

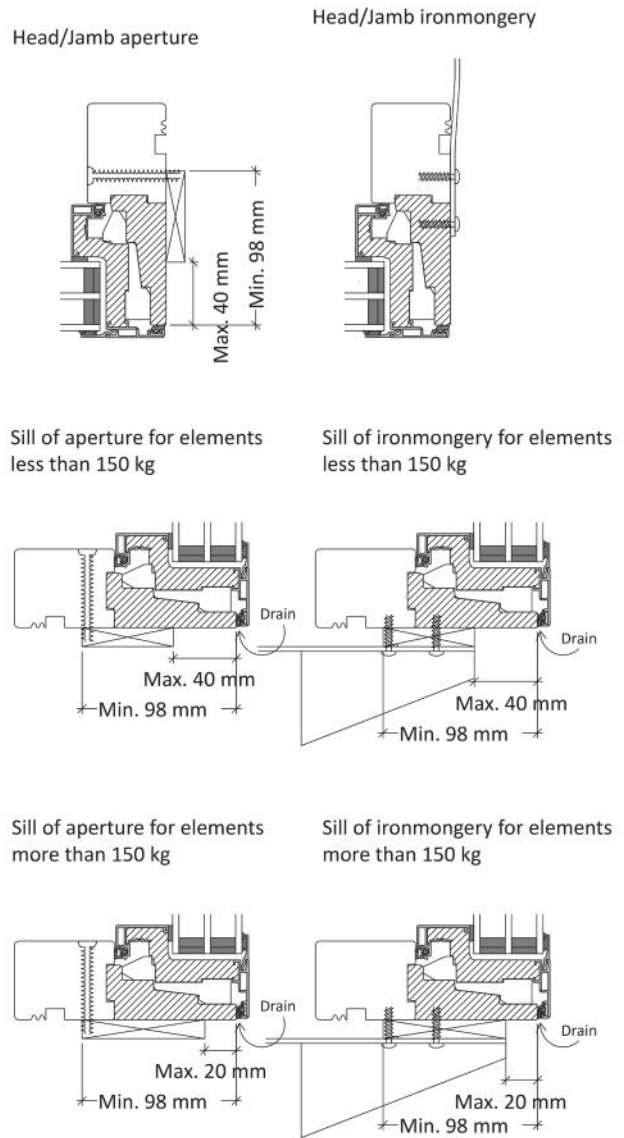
Top swing reversible

Packers must support both Idealcore™ and aluminium



Fixed light

Packers must support both Idealcore™ and timber

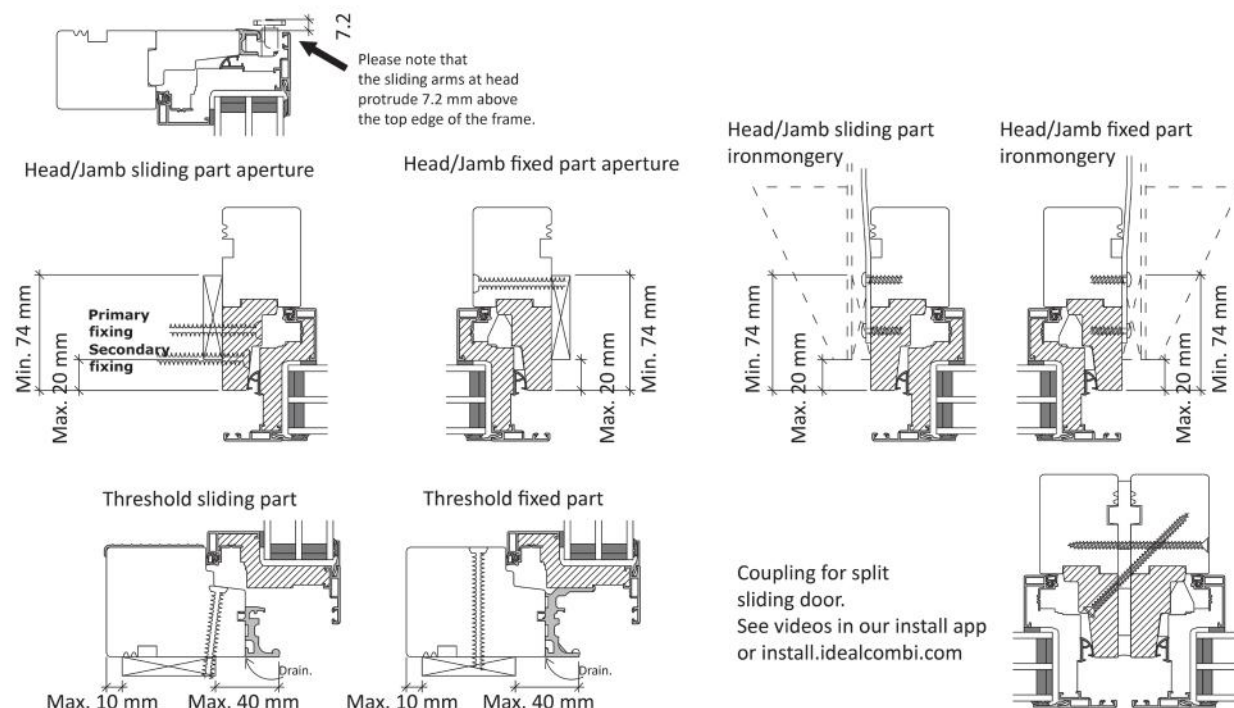


See more details in the installation app or on install.idealcombi.com

Installation - A quick overview

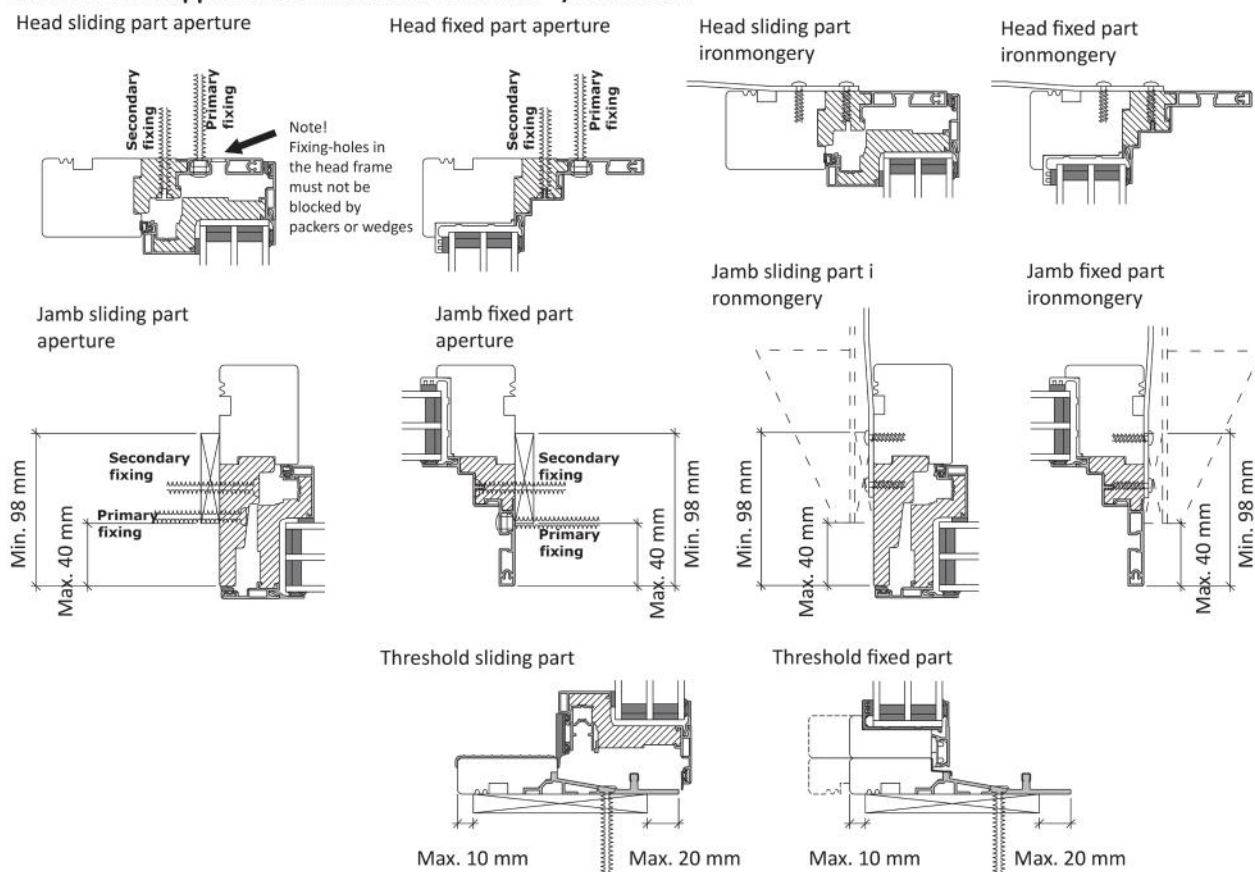
Futura+ sliding door with 70 mm threshold

Packers must support both timber and Idealcore™/aluminium



Futura+ sliding door with low threshold

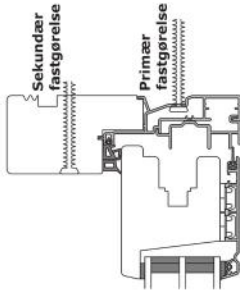
Packers must support both timber and Idealcore™/aluminium



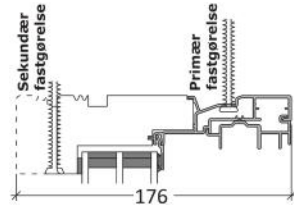
See more details in the installation app or on install.idealcombi.com

IC sliding door - Frame IC/Nation IC/ Futura+ look
Packers must support both timber and aluminium

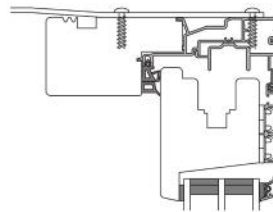
Head sliding part aperture



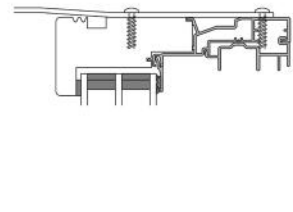
Head/Jamb fixed part aperture



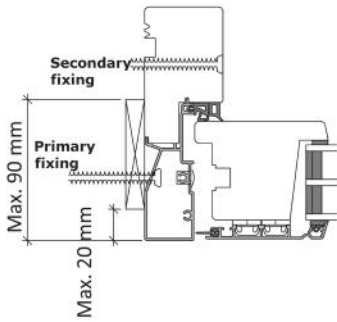
Head sliding part ironmongery



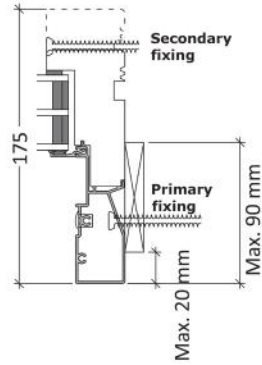
Jamb fixed part ironmongery



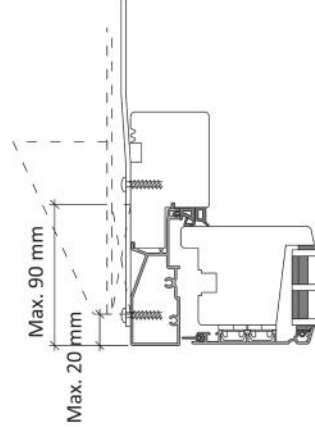
Jamb sliding part aperture



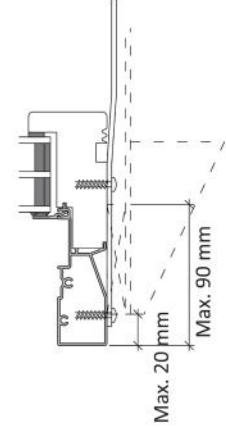
Jamb fixed part aperture



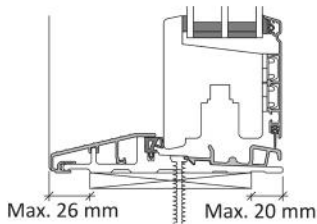
Jamb sliding part ironmongery



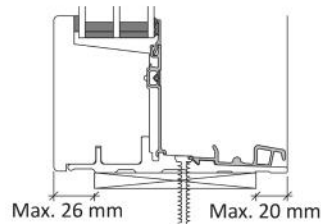
Jamb fixed part ironmongery



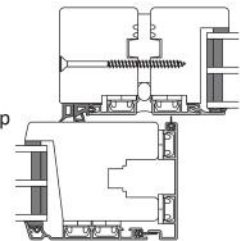
Threshold sliding part



Threshold fixed part



Coupling for split sliding door.
 See videos in our install app
 or install.idealcombi.com







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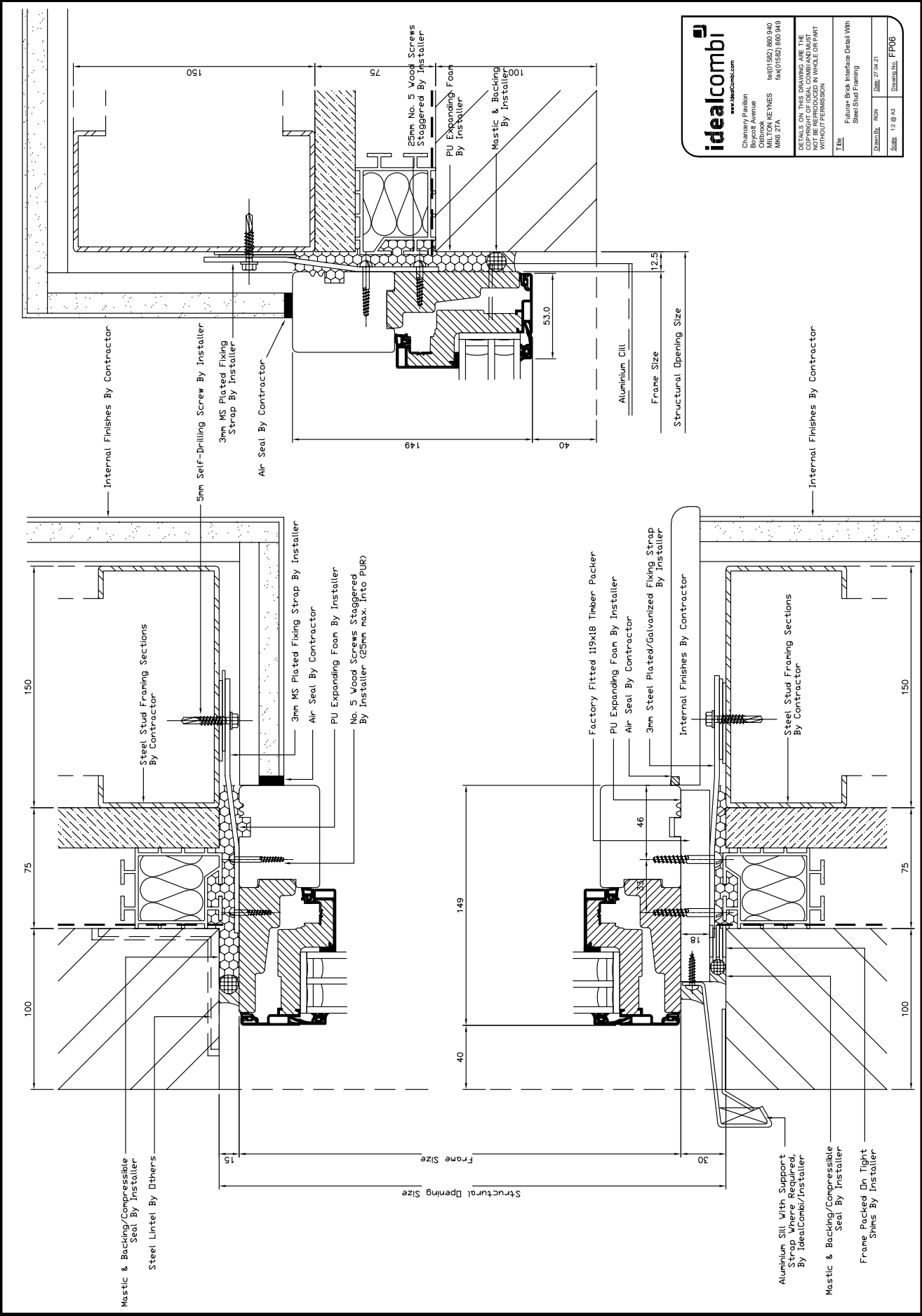
101

101

101

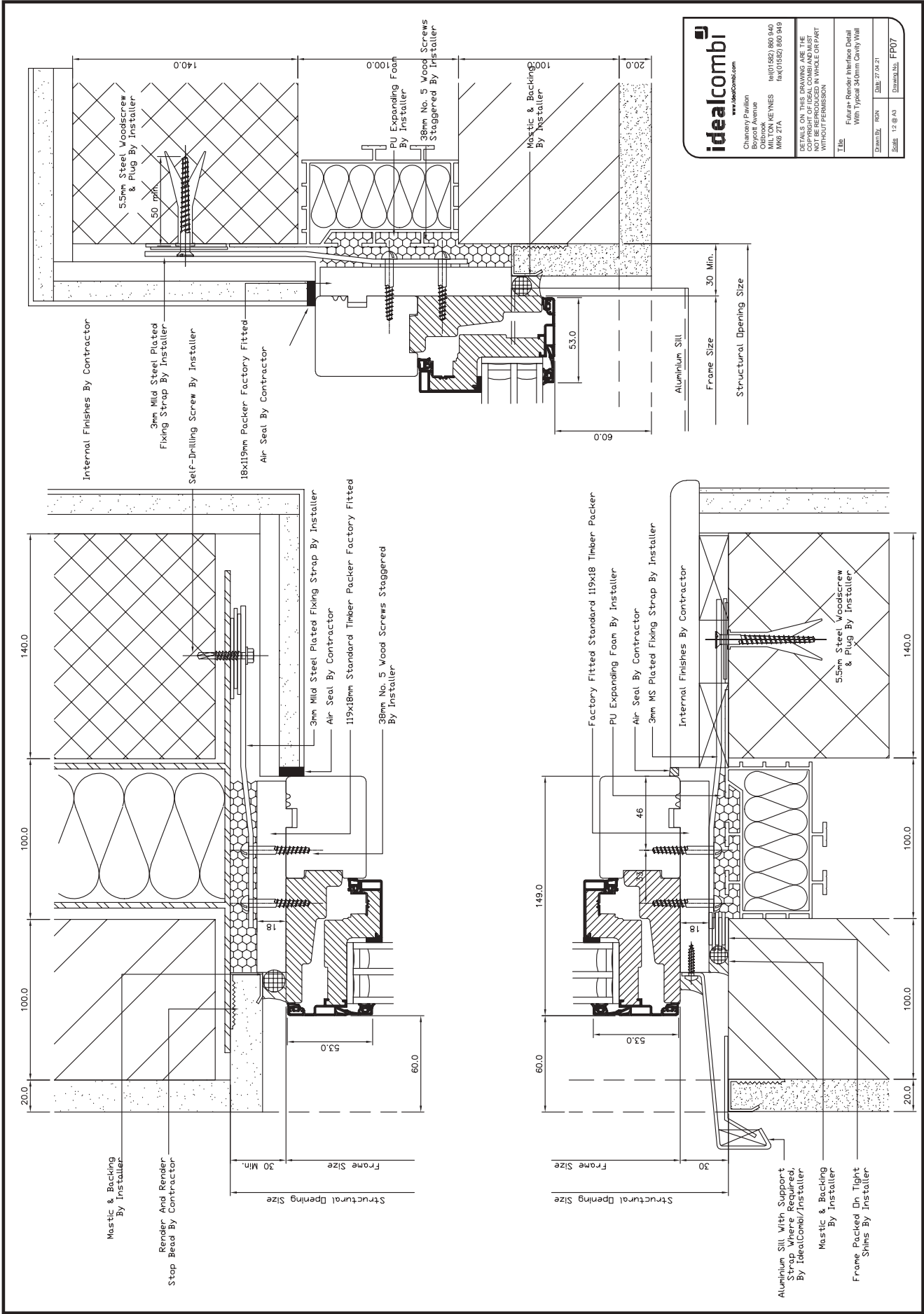


Installation Details - brick | steel stud work



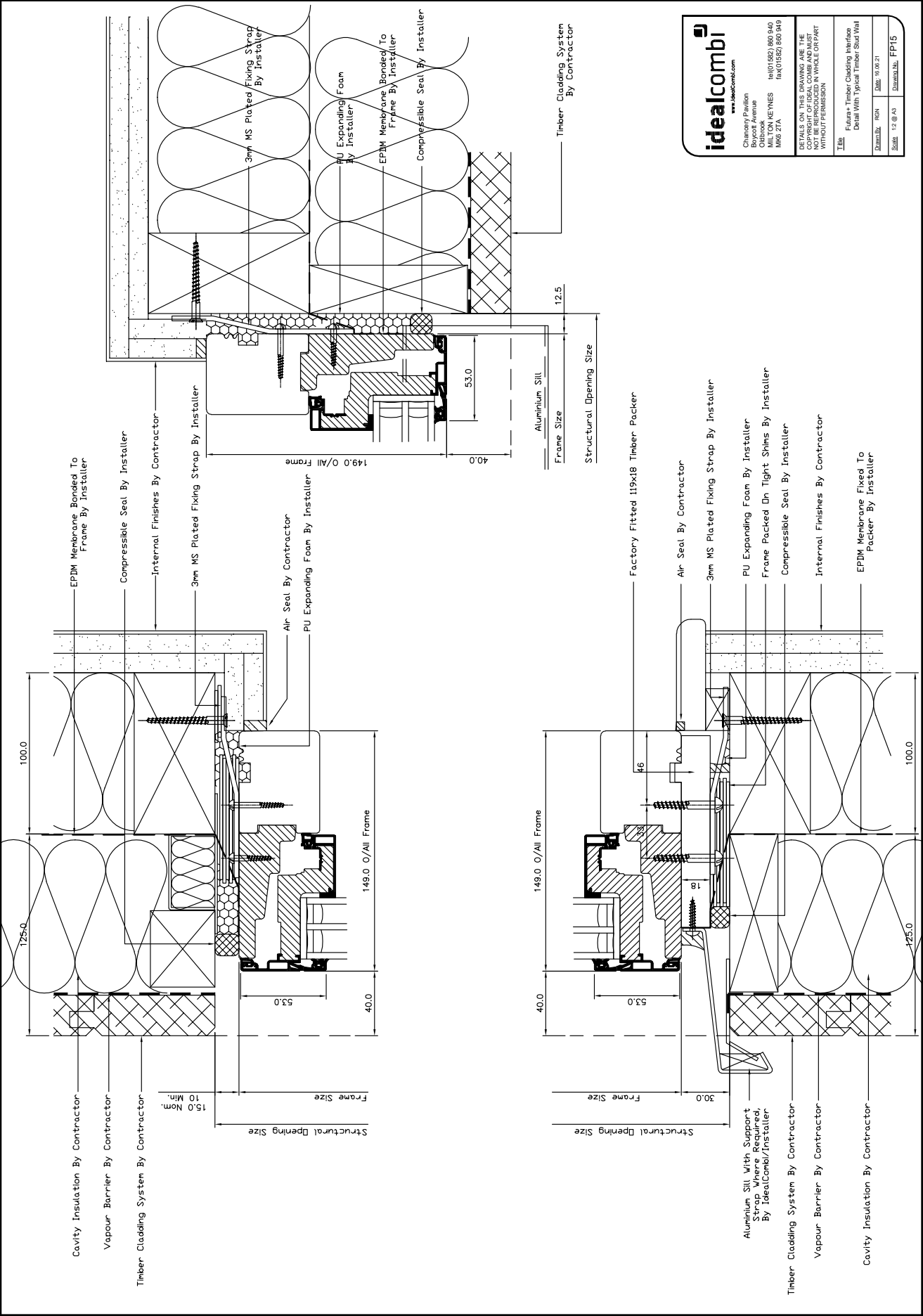
See more details in the installation app or on install.idealcombi.com

Installation Details - render



See more details in the installation app or on install.idealcombi.com

Installation Details - timber cladding



www.idealcombi.com

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NOT BE REPRODUCED IN WHOLE OR PART
WITHOUT PERMISSION

FP15

Futura+ Timber Cladding Interface
Detail With Typical Timber Stud Wall

Drawn By: RGA
Date: 16.08.21
Scale: 1:2 @ A3
Drawn By: FP15

See more details in the installation app or on install.idealcombi.com

Functions and Accessories



Handle



Locking cylinder



Espagnolette with mushroom bolts



Handle operated night latch



Handle operated brake



Keep



Trickle vent
Top guided



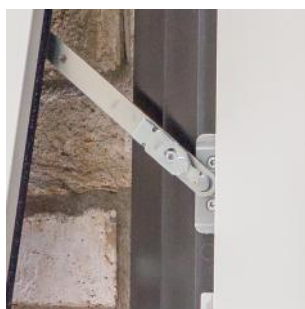
External canopy
Top guided



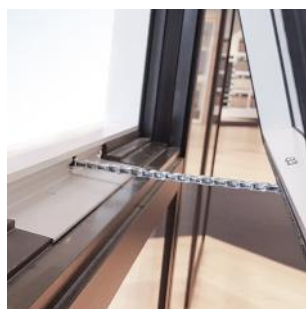
Trickle vent



PN safety catch with restrictor



Opening restrictor



Motorised opening



32

30

28

hoUse, prefab houses by SHEDKM

We never compromise on quality

” *Idealcombi never compromise on quality when procuring raw materials*



Jørgen Bonderup, Strategic purchase manager

Idealcombi is a member of the Association of Danish Window Manufacturers and is thus affiliated with Danish Window Verification (DVV), which checks that our products as a minimum fulfil the requirements of DVV's Technical Regulations. Our products meet the strictest market requirements which together with a joint guarantee scheme provide customers with the best possible product quality.

Idealcombi is ISO 9001:2000 and ISO 14001 certified which ensures that every procedure of the company meets these standards, for example, requirements for continuous improvements. ISO certification examines customer satisfaction, which helps ensure continued focus on customer-relevant business development.



The mark of
responsible forestry
FSC® C108592





It is important for us in the Purchasing Department to never compromise on quality when procuring raw materials. This applies equally to wood, aluminium and glass. Our demands are stringent, quality must be high and all energy requirements must be met. Our job is to find the very best suppliers of the high-quality materials we need. We also ensure correct timing of orders, a good supply flow and the availability of materials at all times. This is a serious responsibility – but a positive responsibility because we know that ultimately our customers will benefit from the work we do. We also appreciate that Idealcombi is continuously developing and that the organisation values our contributions to its development. And of course we cannot help feeling proud to be employed in a modern business which uses high-quality resources – from beginning to end.

Jørgen Bonderup, Strategic purchase manager
Purchasing Department



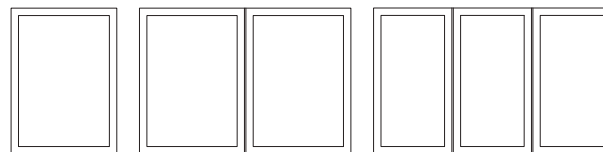


Futura+i

Inward opening system

Tilt-turn Window	210
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Tilt-turn Window



Use

The tilt before turn windows are primarily used in multi-storey structures including tower blocks due to their method of operation and durability. The tilt function allows for everyday ventilation whilst the turn function is used for cleaning of the outside glass from inside the building. This is one of the safest styles of window for cleaning. This window type is also available as tilt only, typical for basement windows and where the width exceeds the height by 20%.

Function

The tilt-turn window is inward opening with a side and bottom hung function. Both opening functions are controlled by the same espagnolette mechanism operated by a handle on the side of the sash. When closed, the handle is in the downwards position. The tilt (bottom hung) function is achieved by turning the handle 90° into the horizontal position and the side hung function by turning the handle to the 180° upright position. When in tilt function the top of the sash opens 100-150 mm inwards with an opening of approx. 20 mm depending on sash height. 290mm handle height can be offered.

Standard ironmongery and accessories



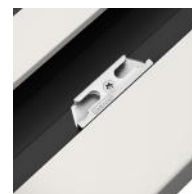
Handle



Locking cylinder



Espagnolette with mushroom bolts



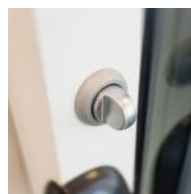
Keep



Trickle vent



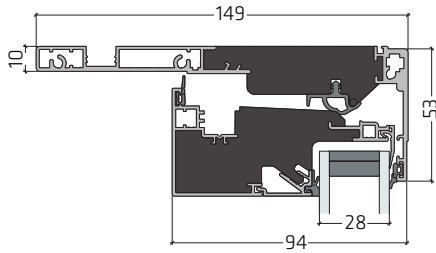
External canopy



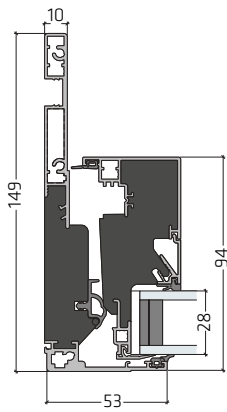
Thumbturn

Minimum/maximum dimensions

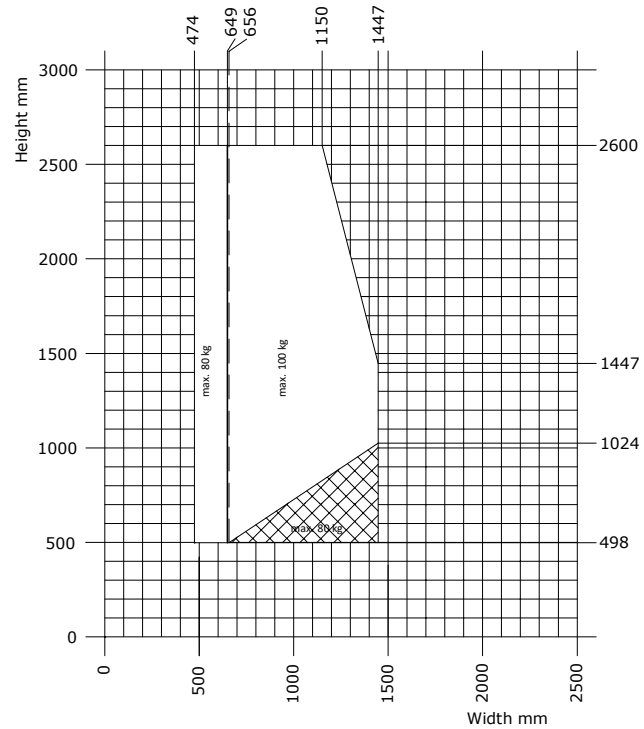
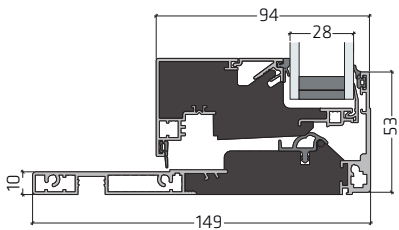
Head



Jamb

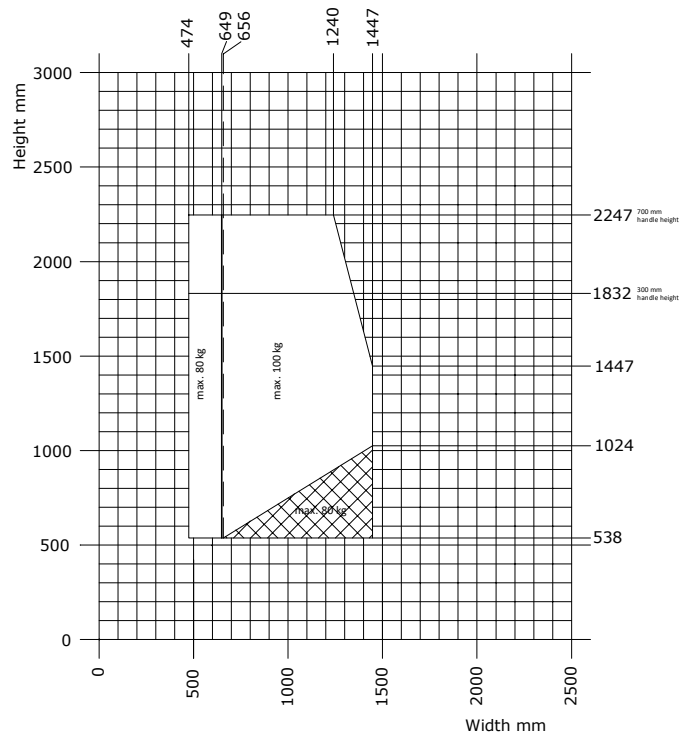


Sill



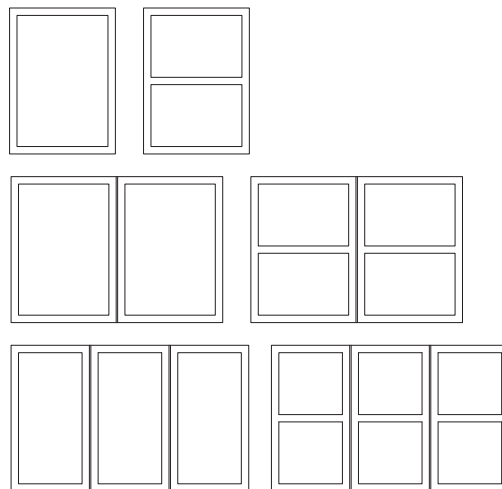
NOTE!
Remember to check sash weight!

Low handle



NOTE!
Remember to check

Tilt Window



Use

Tilt windows are typical for basement windows where passage is not necessarily a demand but still allows for everyday ventilation.

Function

The tilt window is inward opening with a bottom hung function. The function is controlled by an espagnolette mechanism controlled by a single handle on either the side or the top depending on the size of the sash. The tilt function is achieved by turning the handle 90°. The tilt function will normally open to approx. 20 mm free opening depending on the height of the sash.

Standard ironmongery and accessories



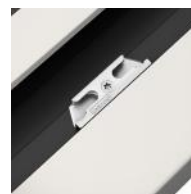
Handle



Locking cylinder



Espagnolette with mushroom bolts



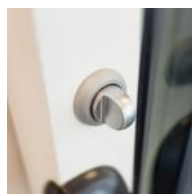
Keep



Trickle vent



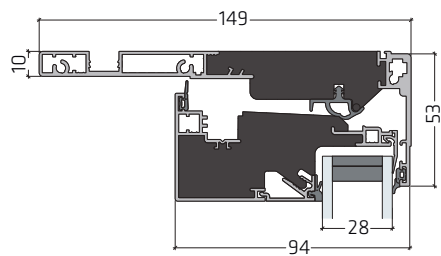
External canopy



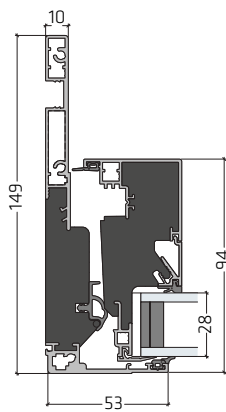
Thumbturn

Minimum/maximum dimensions

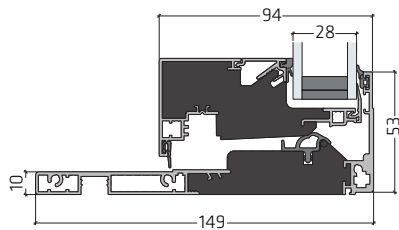
Head



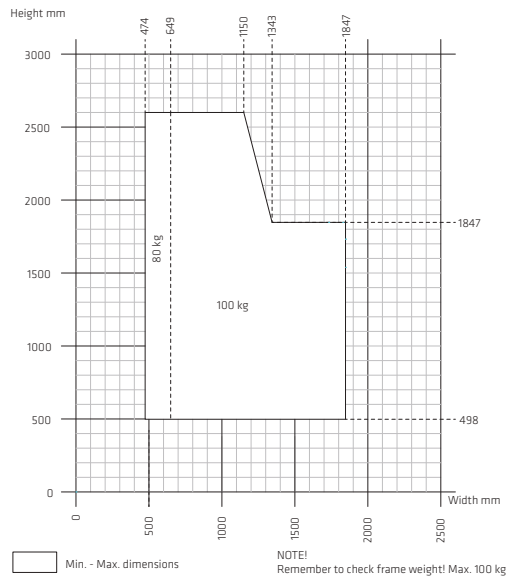
Jamb



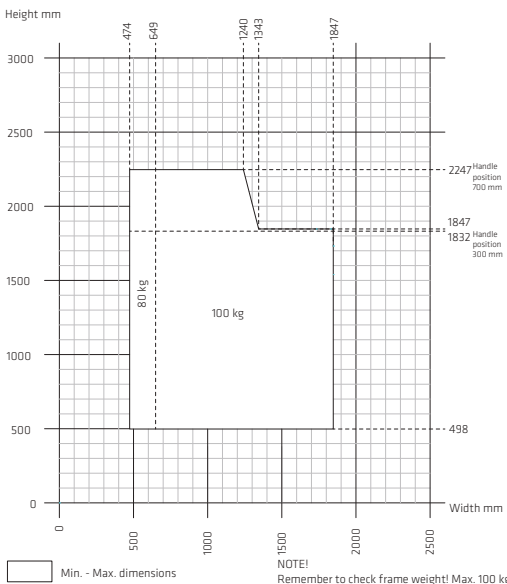
Sill



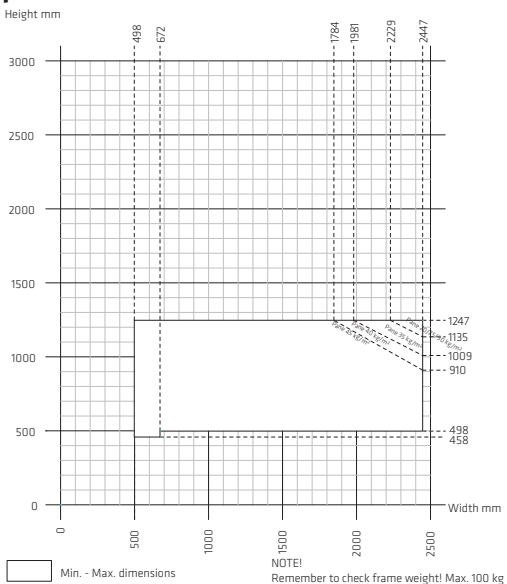
Side handle



Side Handle - Low

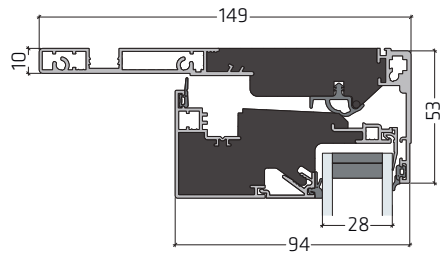


Top handle

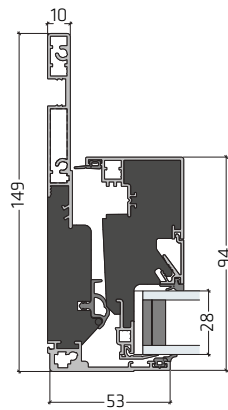


Minimum/maximum dimensions

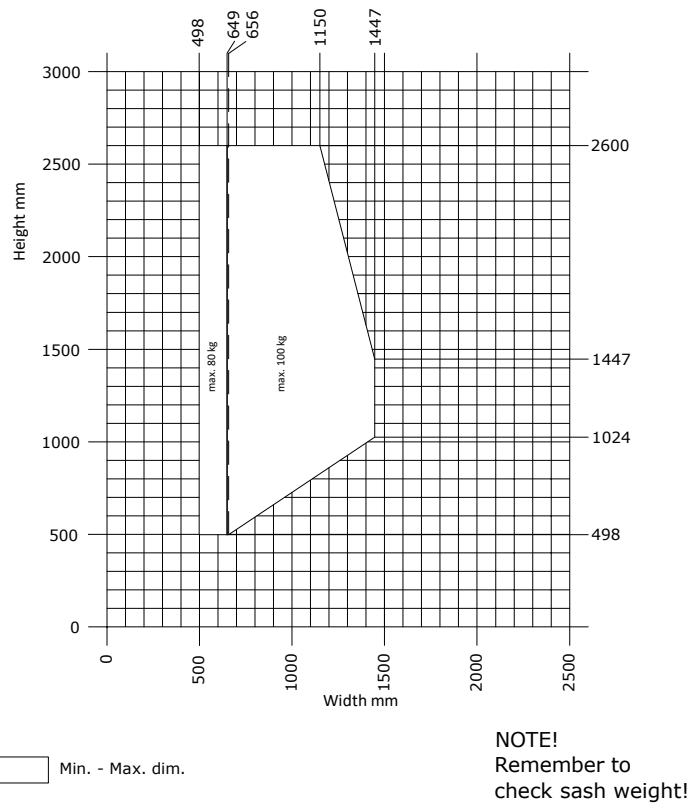
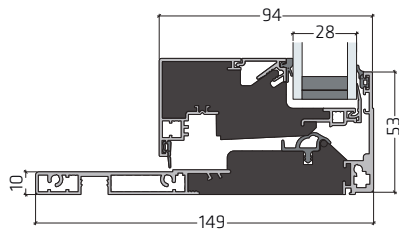
Head



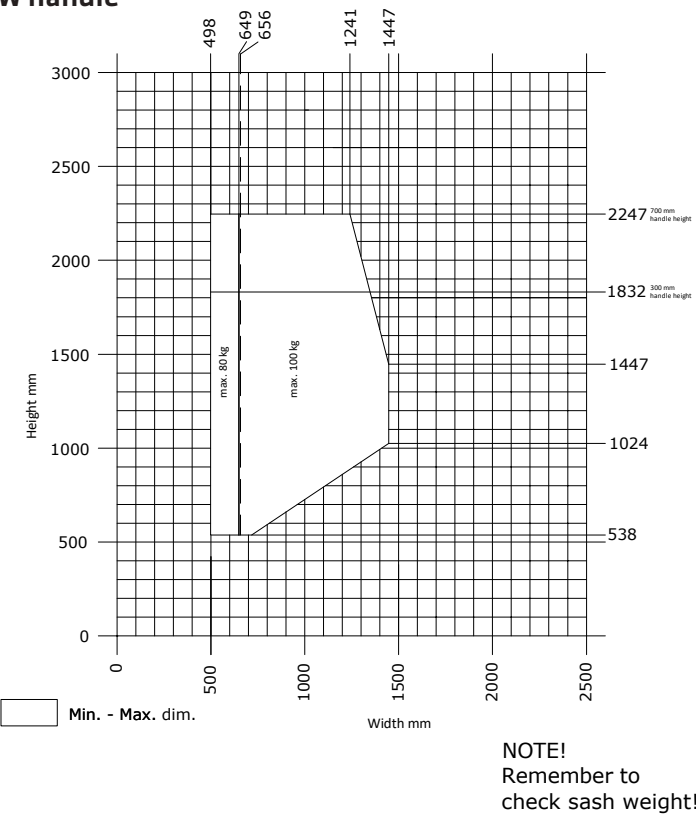
Jamb



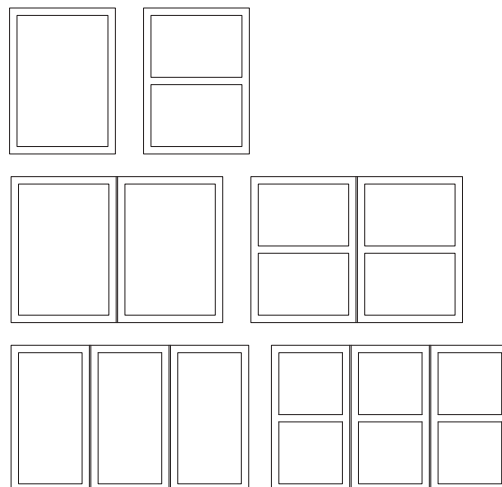
Sill



Low handle



Fixed Light



Use

Fixed lights are often used in combination with opening sashes. The fixed light is only used as a light source in the fenestration of the building or as a spandrel panel with opaque glass to create a false window.

Internally glazed.

Function

Fixed lights consist of glazing mounted directly into the frame without any kind of opening function.

Standard ironmongery and accessories



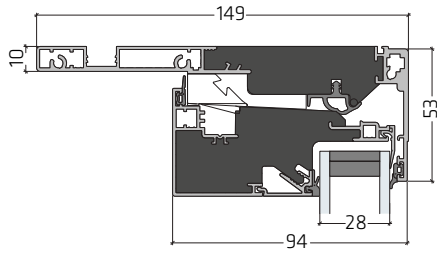
Trickle vent



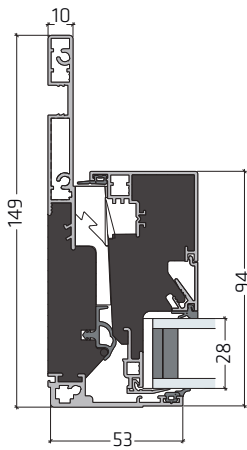
External canopy

Minimum/maximum dimensions

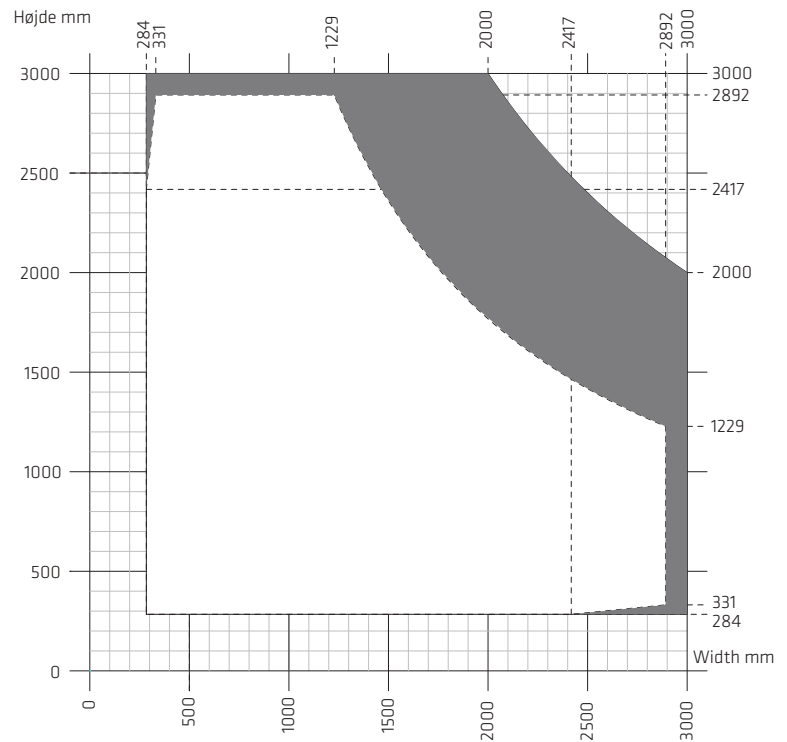
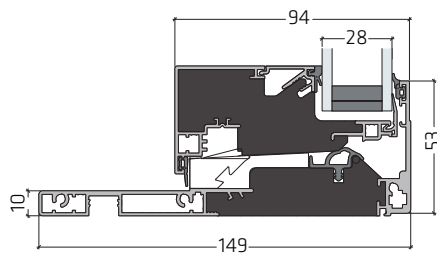
Head



Jamb



Sill



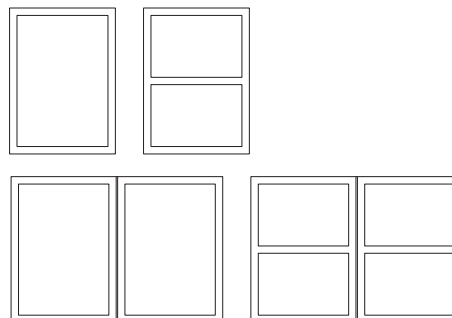
- Min. - Max. dimensions
- Min. glass thickness 6 mm.
(E.g. min. 6+6)

NOTE!
Tempered and laminated glass has other max length and width dimensions and max area

Note!

It is not always possible to reach max area due to max element weight 350 kg.

Turn/Tilt & Tilt/Turn Terrace Door



Use

Inward tilt before turn doors are for direct access to terraces, balconies and are essential for Juliet & French balconies where space is limited. The tilt function of the door allows for optimum ventilation, for example kitchens and bedrooms.

Function

The tilt-turn terrace door is inward opening with a side and bottom hung function. Both opening functions are controlled by the same espagnolette mechanism operated by a handle on the side of the sash. When closed, the handle is in the downwards position. The tilt (bottom hung) function is achieved by turning the handle 90° into the horizontal position and the side hung function by turning the handle to the 180° upright position. When in tilt function the top of the sash opens 10-15 cm inwards with an opening of approx. 20 mm depending on sash height.

Standard ironmongery and accessories



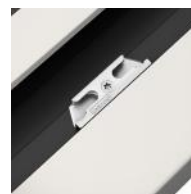
Handle



Locking cylinder



Espagnolette with mushroom bolts



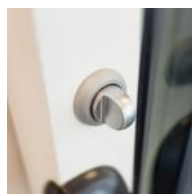
Keep



Trickle vent



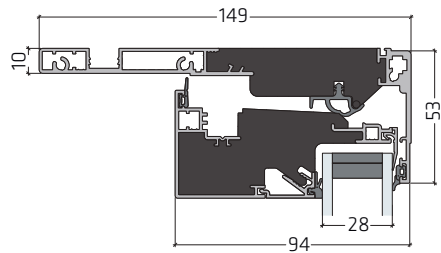
External canopy



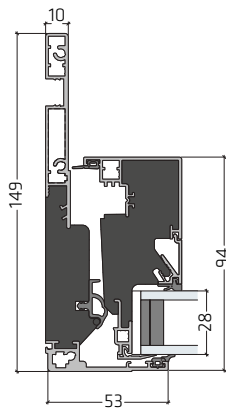
Thumbturn

Minimum/maximum dimensions

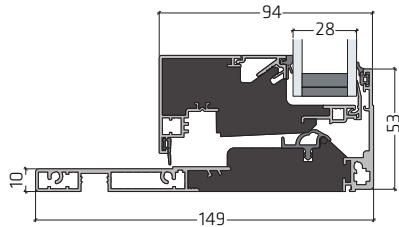
Head



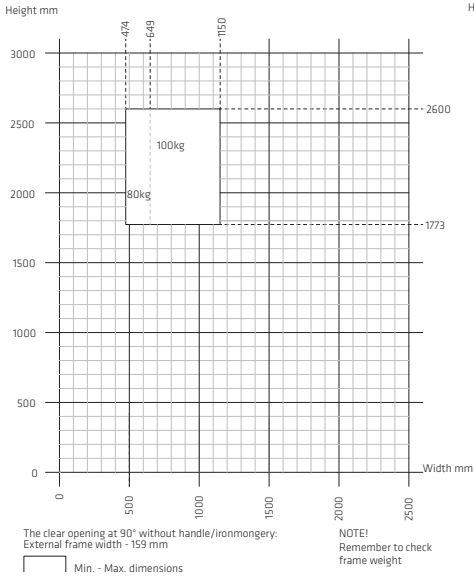
Jamb



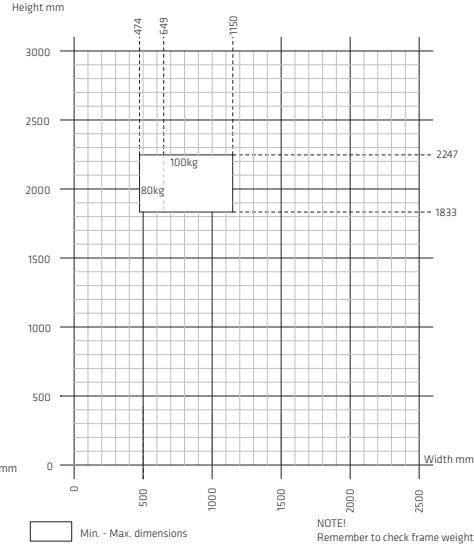
Sill



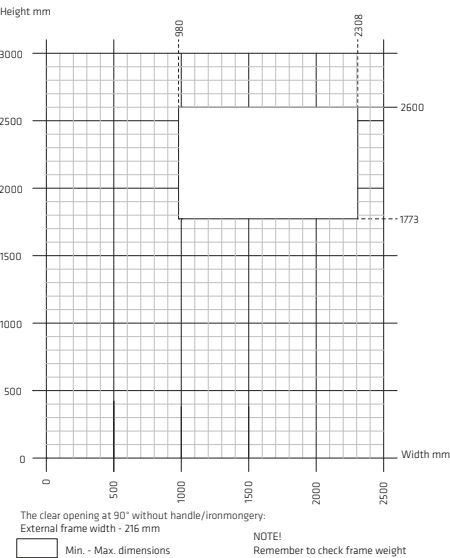
Terrace door



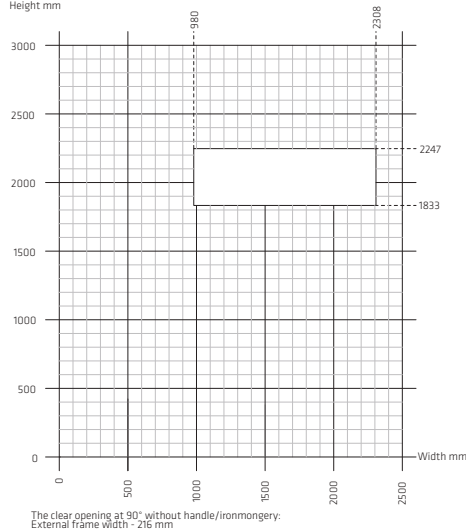
Terrace door w/low handle



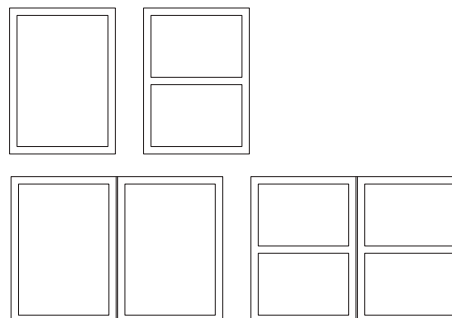
Double terrace door



Double terrace door w/low handle



Turn terrace door (inward opening)



Use

The Turn door has the most stable locking and is without risk of incorrect operation. Turn doors can be recommended where access is the primary use. Frame I / Nation I (inward opening) and Frame IC / Nation IC (outward opening) have the same outer sash-frame height and can therefore be placed in the same elevation, without there being much visual difference. Turn doors can also meet all the building regulations' requirements for egress openings.

Function

Turn doors are inward opening doors with side-hung function. The opening function is controlled by a lever handle operating an espagnolette in the sash jamb. In the closed position, the handle faces vertically downwards and the turn function is triggered by turning the handle 90°. Turn doors can, as an option, be supplied with a handle operated brake. The brake can, in the side hung function, hold the frame in any position above 18° opening. The door can be delivered as a single door or as a double door.

Standard ironmongery and accessories



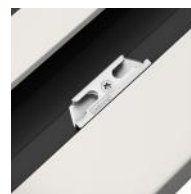
Handle



Locking cylinder



Espagnolette with mushroom bolts



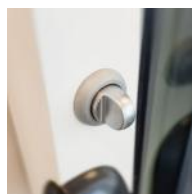
Keep



Trickle vent - Interior



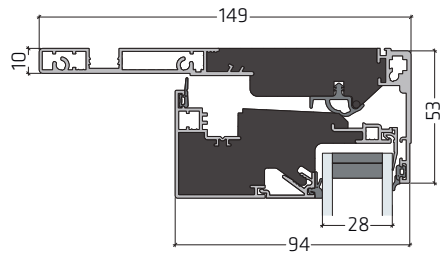
Trickle vent - Exterior



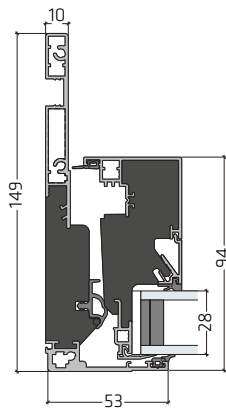
Thumbturn

Minimum/maximum dimensions

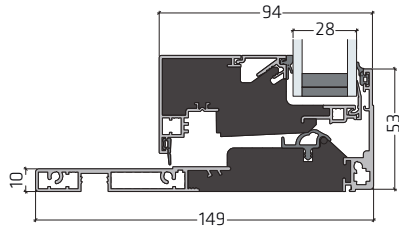
Head



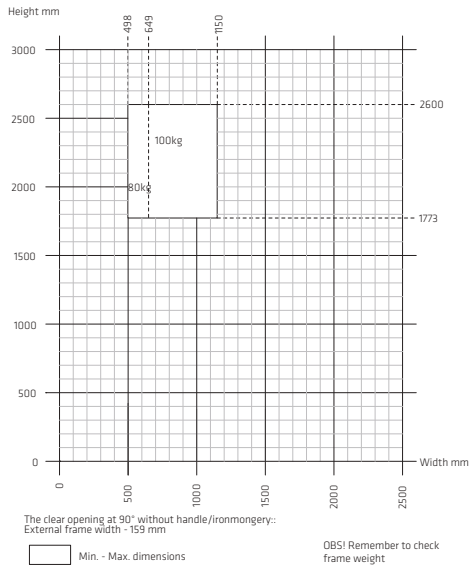
Jamb



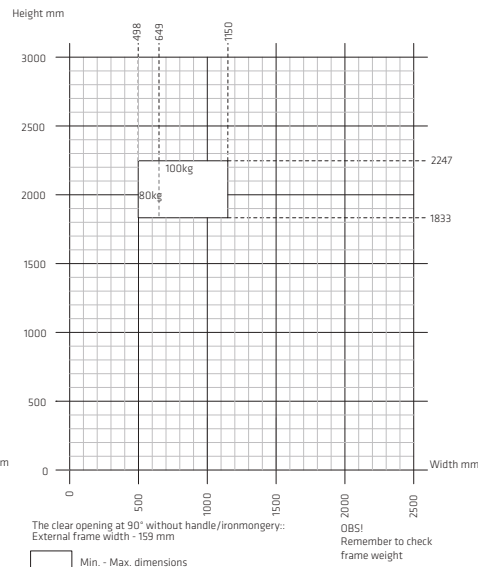
Sill



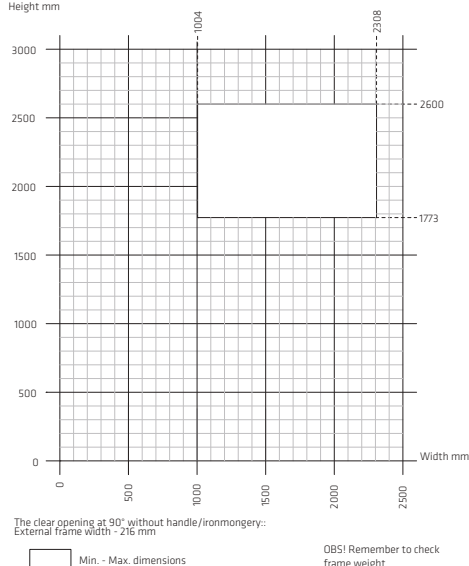
Terrace door



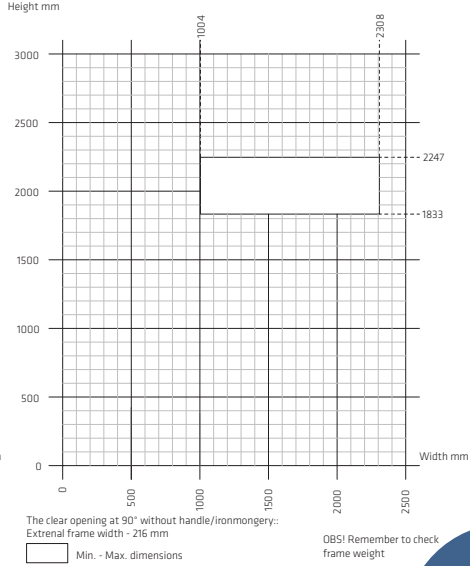
Terrace door w/low handle



Double terrace door

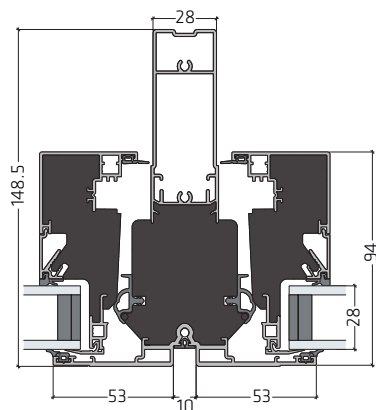


Double terrace door w/low handle

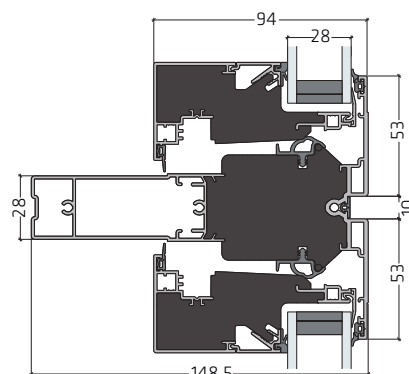


Mullions and Transoms

28 x 149 mm mullion with sash | PLU09-50L28

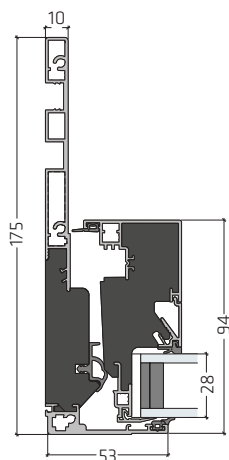


28 x 149 mm transom with sash | PLU09-40L28

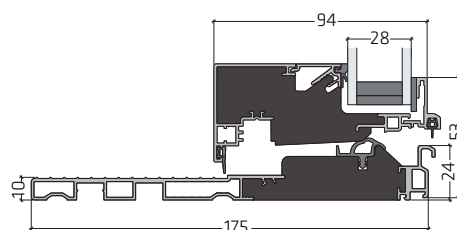


Alternative Frames and Sashes

Alternative frame depth 10 x 175 mm | PLU09-30L28

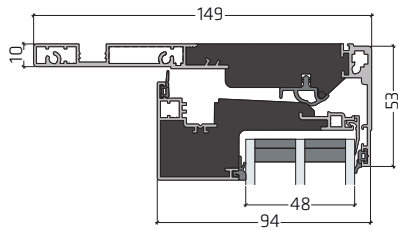


24 x 175 mm threshold with sash | PLU28-10L28

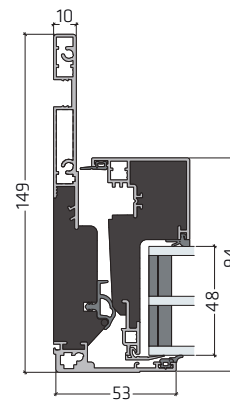


Triple Glazing

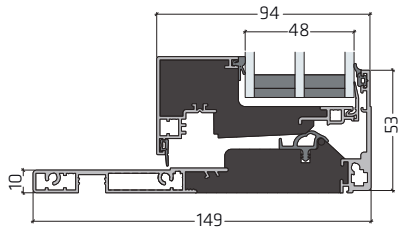
Head with triple glazing | PLU09-20L48



Jamb with triple glazing | PLU09-30L48

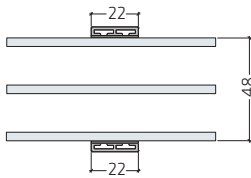


Sill with triple glazing | PLU09-10L48

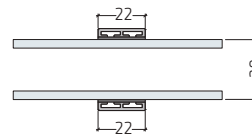


Glazing Bars

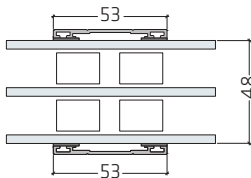
22 mm styling bar, 48 mm glazing | PLU12-83L48



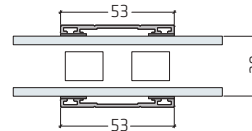
22 mm styling bar, 28 mm glazing | PLU12-83L28



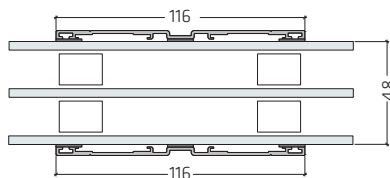
53 mm styling bar, 48 mm glazing | PLU12-84L48



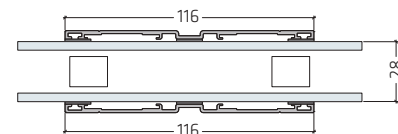
53 mm styling bar, 28 mm glazing | PLU12-84L28



116 mm styling bar, 48 mm glazing | PLU12-85L48

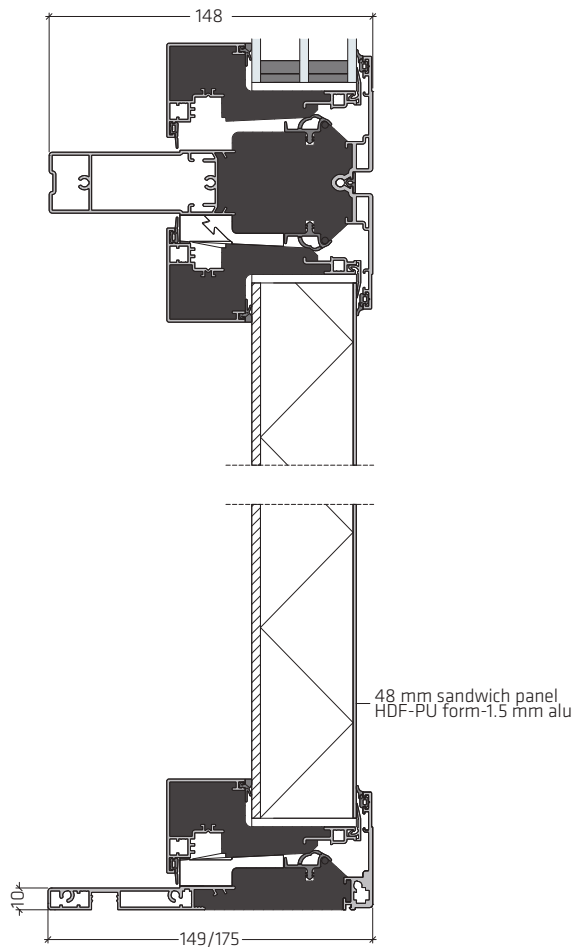


116 mm styling bar, 28 mm glazing | PLU12-85L28

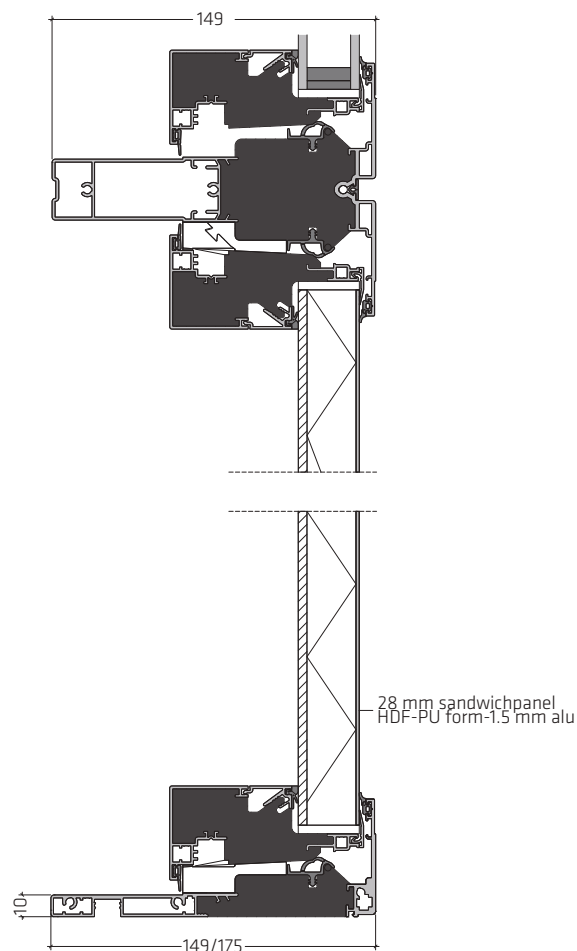


Panels

48 mm sandwich panel | PLU-FYL002

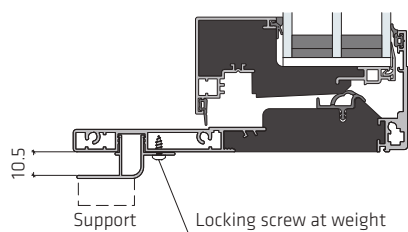


28 mm sandwich panel | PLU-FYL003



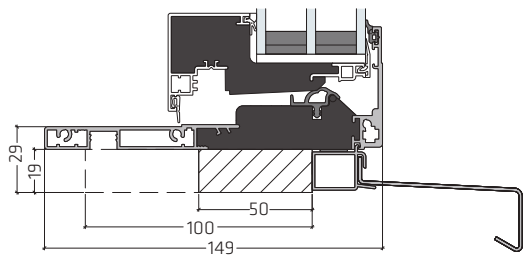
Grooves and Rebates

10 mm groove | PLU-NOT007



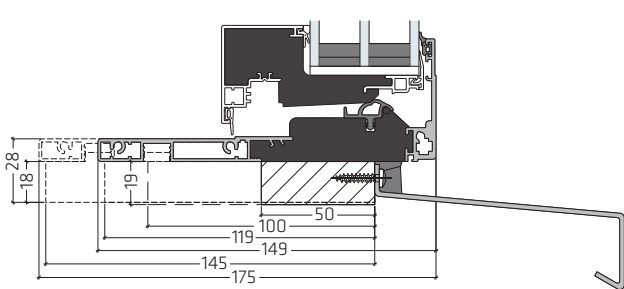
Drip Sills and Packers

Packer for installation of drip sill | PLU-PF0030



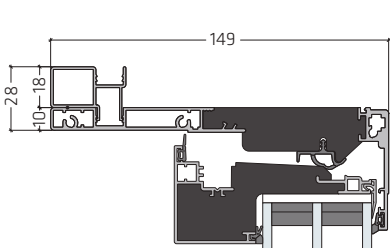
Alu-drip is optional

Packer for installation of drip sill | PLU-PF0039

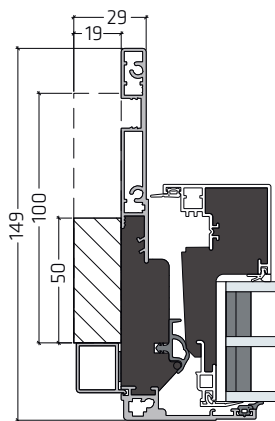


Alu-drip is optional

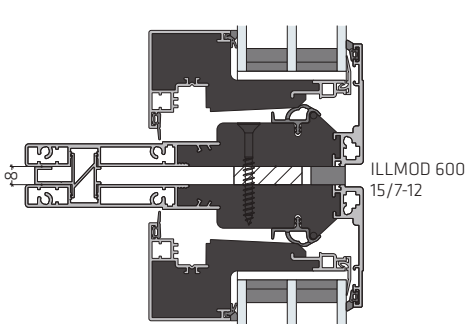
18 mm aluminium packer | PLU-PF0031



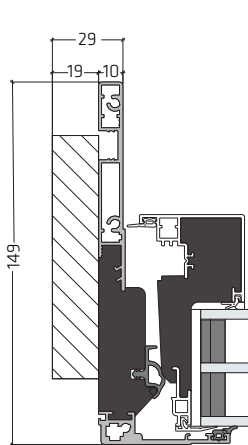
18 mm aluminium packer | PLU-PF0032



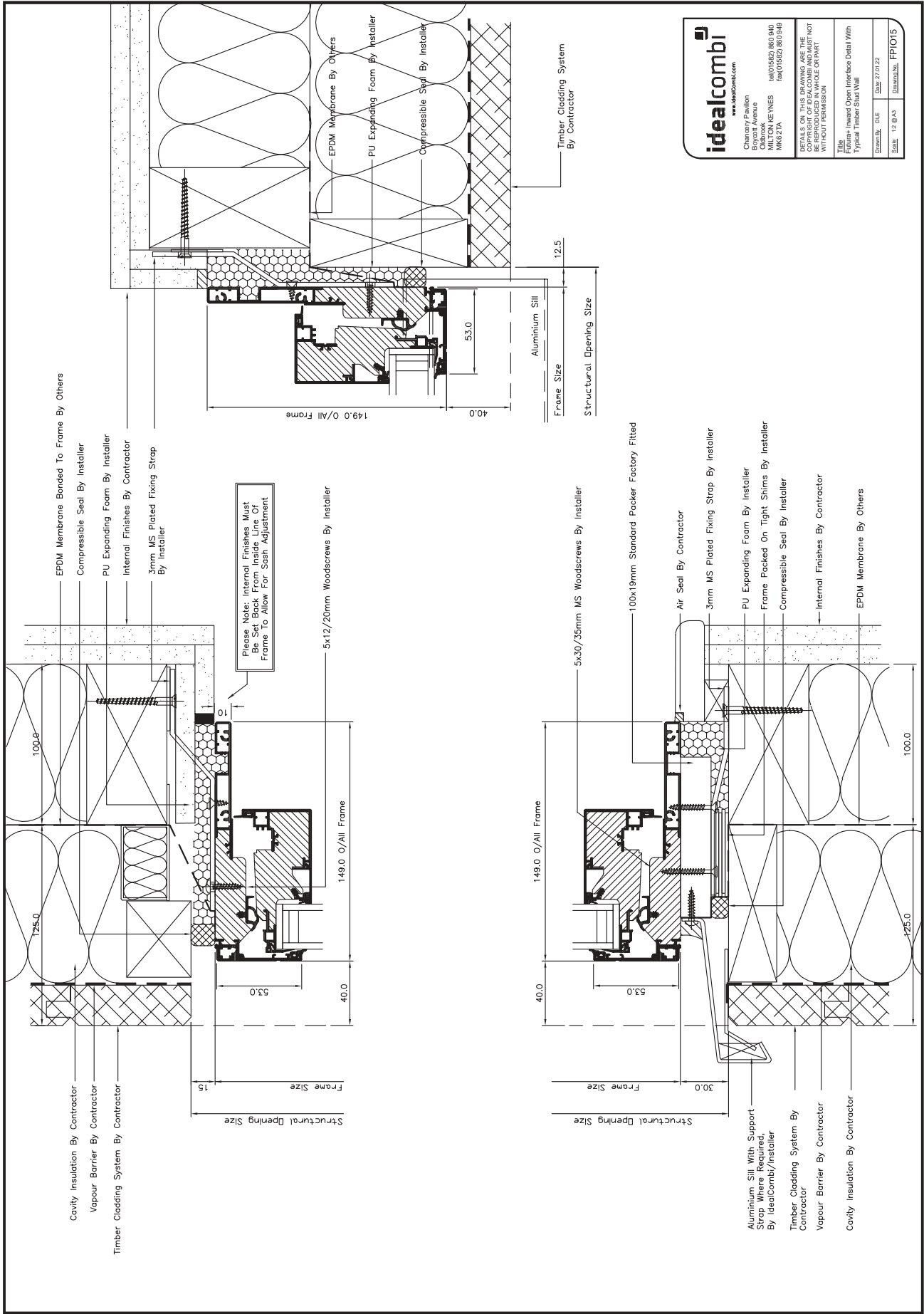
Standard connection | PLU-PF0033



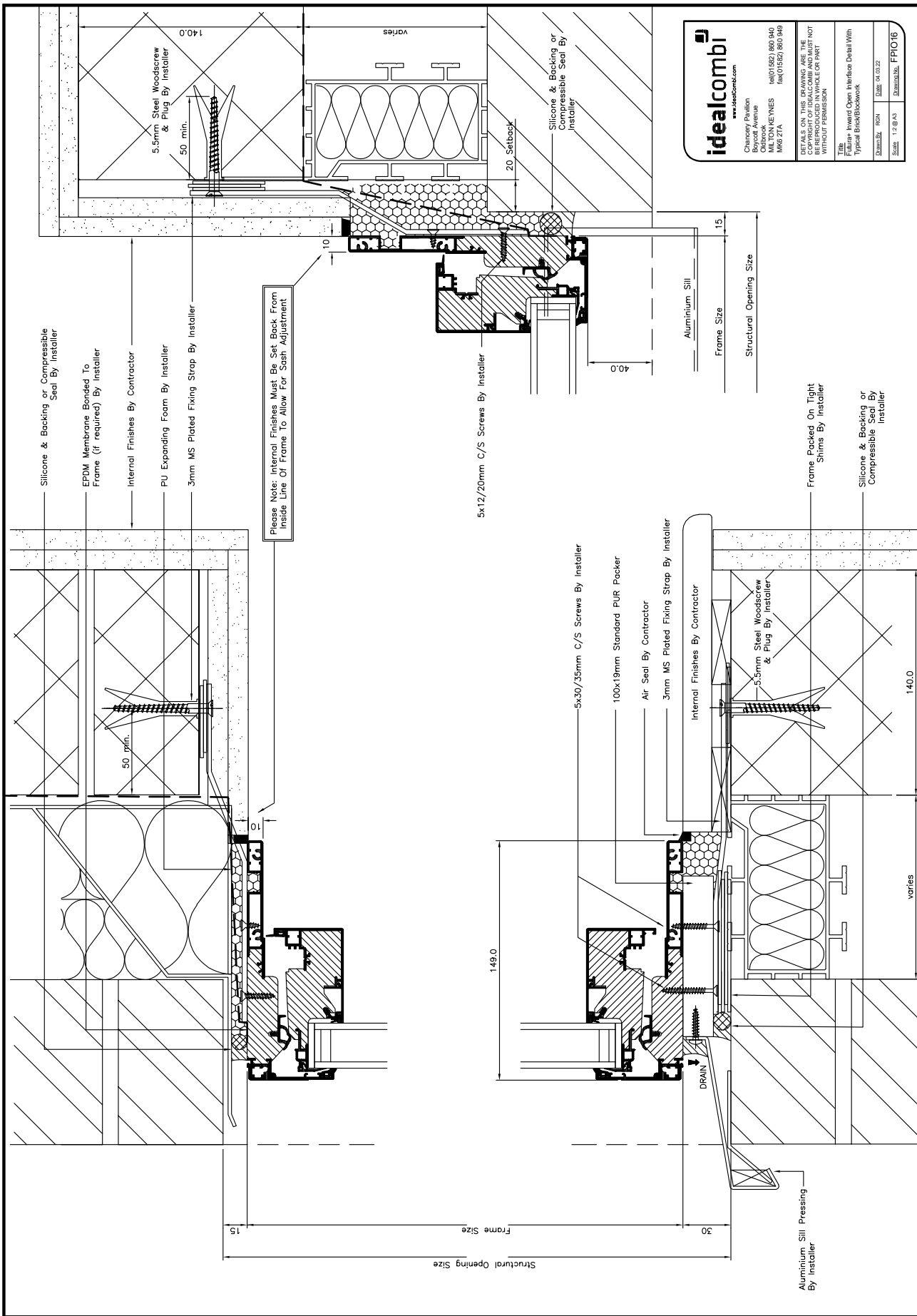
19 mm PUR Packer | PLU-PF0056



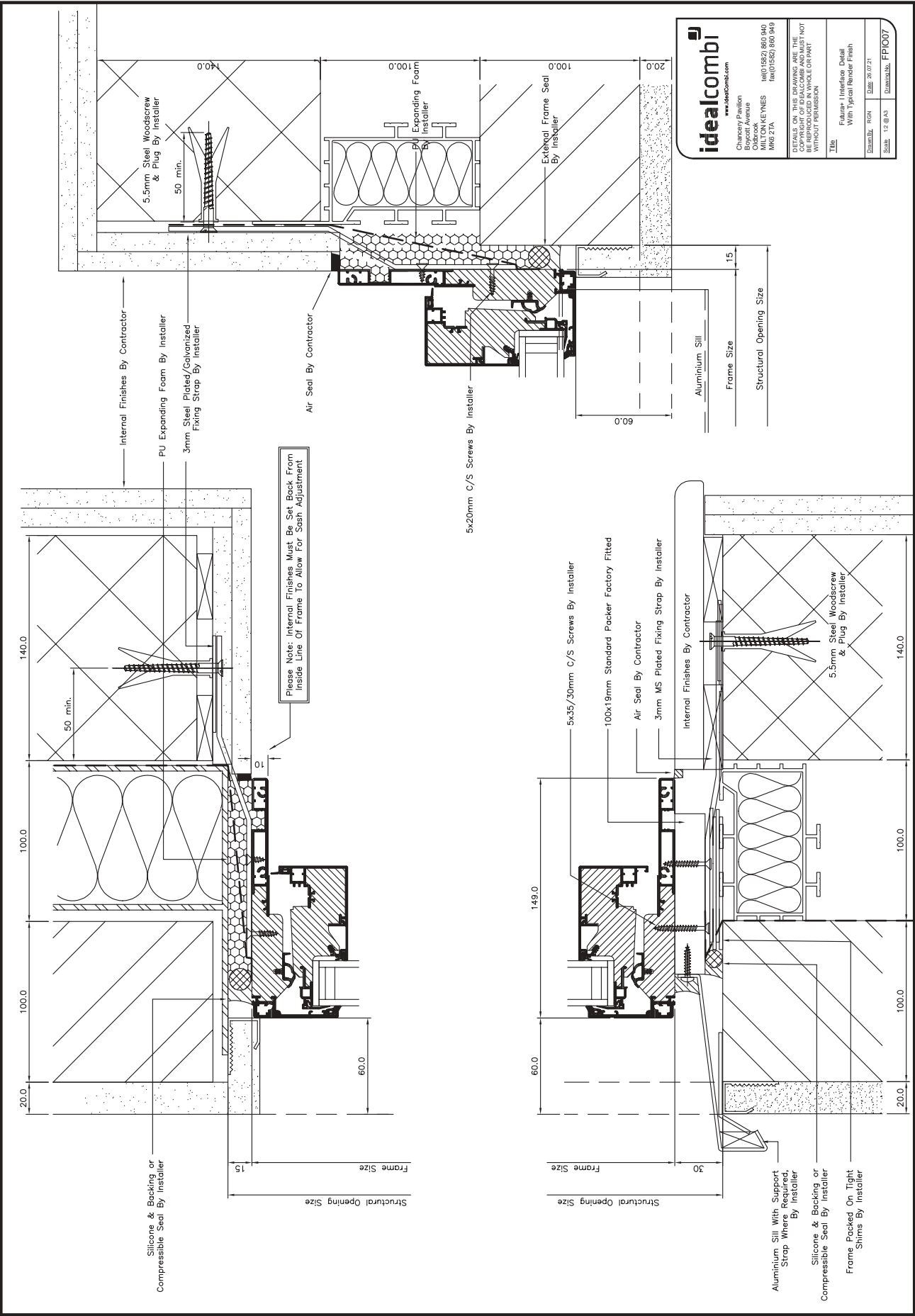
Installation Details - timber cladding



Installation Details - brick | steel stud work



Installation Details - render



See more details in the installation app or on install.idealcombi.com

Functions and Accessories



Handle



Locking cylinder



Espagnolette with mushroom bolts



Keep



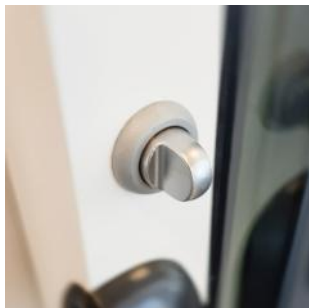
Trickle vent



External canopy



Motorised opening



Thumbturn

We develop the Danish way

” *Idealcombi is first to release
innovative new products*



Development and innovation

In the Development Department we are responsible for innovation and the development of new products. Here we test the products, set norms, standards and provide technical support in the event of any problems. Our daily contacts, both across the organisation and with external business partners, enable us to closely monitor the entire process – from beginning to end. We are involved from the moment the timber arrives and until the finished elements are delivered. This means that we can ensure the highest quality from the very beginning, and consequently the end user always receives a high-quality product. Idealcombi is usually first with new products, and today we have an extremely wide product range and high credibility. It is proof that it pays to preserve our values regarding product development and quality.

Jan Andersen, Development Engineer
Development Department

Quality in every step

The Production Department is a busy place where we continually have to learn new things to keep ahead. Our most important functions are to ensure constant high quality, optimise production and implement systematic procedures for consistent quality. This requires daily checks and detailed knowledge of production plans in order to avoid idle machine time.

Idealcombi is a well-organised and a safe workplace. Colleagues interact in a good tone and with mutual respect. This enables us to create a production process together that addresses the needs of both our customers and the company. We have a production process that allows customers to contact one location, receive a total product solution and be ready to go from the outset. We feel good when production is running perfectly according to schedule. When we have no back orders and everything is delivered on time. Then we can proudly say: "We produced that".

Martin Frank Pedersen, Production Manager

Allan Sørensen, Plant manager

Production



In-house test facilities

At Idealcombi we have always been focussing on quality and thorough testing of our products. With an investment in our in-house testing facilities we are always a step ahead of building regulations and technical test performed on-site. Our in-house testing does not replace the third party accredited tests. We continuously perform our tests as a part of developing the best products in the industry. In our test lab we perform different types of tests including wind and water tightness to ensure our Idealcombi windows and doors can withstand the toughest "Danish" weather conditions. Our products are also tested on durability and mechanical strength through opening and closing cycle tests - to evaluate wear, durability and safety.

We are not only using our test lab in development of new products, we are also ensuring that our manufacturing process delivers units of the best possible quality.

The in-house test facility means that Idealcombi always can optimise products and manufacturing processes and as such the facility is of great importance for the innovation and development of new products - meaning Idealcombi is always ahead of the development in windows and doors.

Keeping things running smoothly

” *We all take pride in correct and punctual delivery. We do this out of respect for our customers*



Idealcombi's transport department consists of a number of staff and drivers, who work together to create a framework that ensures our customers the best possible service. As manager of the transport department, I am responsible for tasks that include delivery planning, coordination, correct loading of vehicles and, not least, observance of delivery times. All these parts have to fit together to keep everything running smoothly. And we make sure of this – week after week. We all take pride in correct and punctual delivery. We do this out of respect for our customers.

Jacob Hangaard Christensen, Transport Manager
Transport Department



Our machinery runs perfectly

Fine workmanship can only be achieved with the best possible materials, machinery and not least cooperation – in every aspect. That is why it is great to be in a workplace which is at the cutting edge of developments – in terms of staff, products and production.

Idealcombi takes pride in utilising the latest equipment and tools, in making sure they function as perfectly as possible and, not least, in continually training employees in the use of these tools. The latter is achieved thanks to our job instructor, our internal quality manual and regular training courses. It is particularly satisfying to go home from work with the feeling that you have done a really good job. That you haven't compromised on quality in any aspect of your job. That you can trust that the machinery is running smoothly and that the products leaving the factory are of the very highest quality.

Hans Jensen
Production

Glass guide

Choosing the right glass

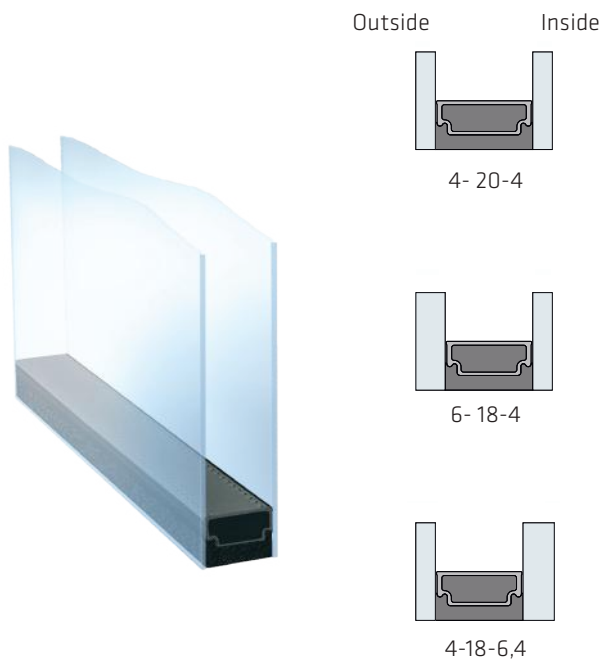
Today's glass and window units have become so advanced that in addition to basic functions such as offering protection against weather, daylight and unwanted views, they also protect against fire, noise, sunlight and much more

Unit structure

Double glazing units are made up of two pieces of glass with a spacer.

The definition 4-20-4 means that the double glazing unit consists of a 4 mm pane, a 20 mm spacer and a 4 mm pane. The first pane of glass is defined as glass layer 1 and is the exterior pane of glass, while the other pane is glass layer 2 and therefore the interior pane of glass (it follows that a three-layer triple glazing unit will have a third layer of glass).

Varying the thickness and number of panes, the width of the spacer, the types of coating/laminates and the type of air/gas in the cavity allows you to adjust the function of the glass. This makes it possible to create different types of glass which meet a variety of needs. It is also possible to combine specific features to create several functions in one unit



Energy units

The heat loss from the building to the external environment has a significant impact on energy consumption making the insulation properties of the units important. The insulation properties of a unit are described as its Ug-value.

Energy units offer good insulation properties and excellent light transmission. Energy units improve the indoor climate by reducing cold down-draughts and cold radiation which minimises the need for heating and contributes to reduced heating bills and a better environment.

Warm edge

The heat loss from the building to the external environment has a significant impact on energy consumption making the insulation properties of the units important. The insulation properties of a unit are described as its Ug-value.

Energy units offer good insulation properties and excellent light transmission. Energy units improve the indoor climate by reducing cold down-draughts and cold radiation which minimises the need for heating and contributes to reduced heating bills and a better environment.

Improved look

The dark edge of the warm edge spacer gives the window a more harmonious look and eliminates much of the light reflection in the windows created by the shiny surface of steel spacers.

Facts

Good insulation properties

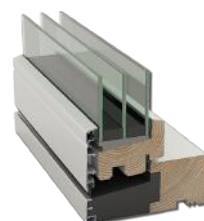
Lower Uw-value in the overall unit (whereas the Ug-value alone defines the insulation property of the glazing)

Higher temperatures on the inner edge of the glass eliminates the risk of condensation

More harmonious design

No extra cost for customers

Idealcombi A/S uses warm edge as its standard spacer.



Abbreviations

U_g-value - Insulation property

The U_g-value is measured in the centre of the unit and is referred to as the centre point value.

The value is stated as: W/m²K (Watt per m² x Kelvin). A low figure means that the unit offers good protection against heat loss.

LT-value - Light transmission

The value is stated in percent expressing the amount of light which is admitted through the glass.

A high figure indicates a high degree of light transmission.

g-value - TST

(Total Solar Energy Transmittance or Solar Energy Transmission)

The value is stated in percent expressing the amount of solar energy (thermal energy) which is admitted through the glass.

A high figure indicates a large admittance of solar energy

LR_{out} - Outward light reflection

Reflection is stated in percent as the part of the light which is reflected outward. (For comparison inward reflection is stated as LR_{in})

A high figure indicates major reflection when viewed from outside.

T_{uv} - Transmission of ultraviolet radiation

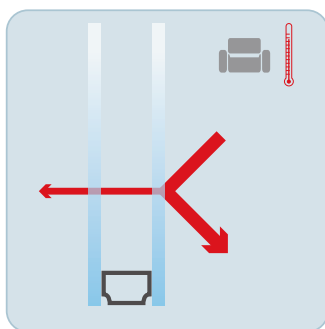
Transmission is stated in percent as the part of the sun's ultraviolet rays which is admitted through the glass.

A low figure indicates that the uv-rays have a low impact on objects inside the building which minimises fading

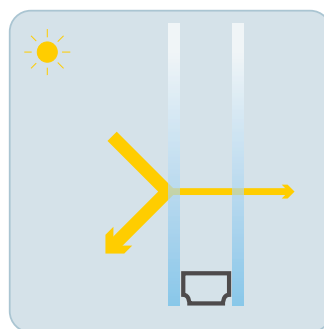
R_w dB - Sound reduction

Reduction is stated in decibel and describes the glass' ability to reduce discomforting noise.

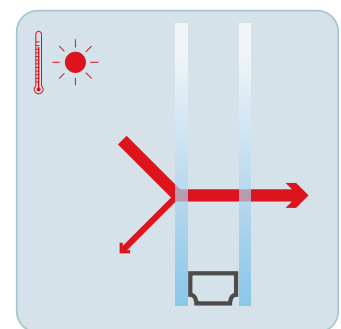
A high figure indicates a high degree of sound reduction. The figure is not calculated as a percentage reduction, but as a fixed figure in relation to the structure of the unit.



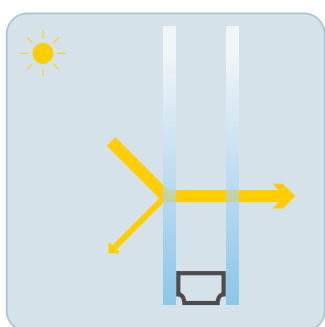
U_g-value



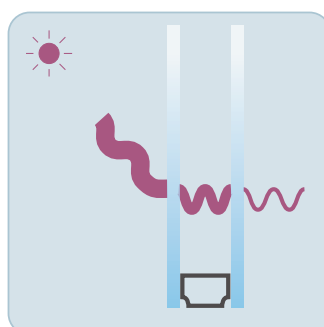
LT-value



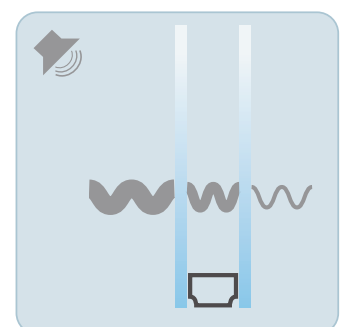
g-value



LR_{out}-value



T_{uv}-value



R_wdB-value

Glass guide

Solar reflective glass

Solar reflective glass reduces the amount of thermal energy and/or light which is admitted through the unit. This type of glass is often used for large surfaces where the aim is to make full use of the sunlight while at the same time keeping out the solar heat. In other cases both the sun and the heat is kept out.

The g-value is the amount of the sun's thermal energy which the glass allows to pass into a room. The transmission of daylight is called the LT-value.

Solar reflective glass is available in a variety of options; colour neutral, coloured and with various degrees of reflection. All these factors determine the amount of light and heat which is admitted through the glass. If you choose solar reflective glass for aesthetic reasons the design is entirely up to you. In all other cases it depends on how highly you value low solar energy transmission in relation to high light admittance.

Acoustic insulating glass

Acoustic insulating glass reduces uncomfortable noise from heavy traffic and regular city noise. It is the distance between the unit's individual glass panes and the panes' individual thickness that helps define the unit's acoustic insulating properties.

When selecting the right type of acoustic glass, it is important to determine the source of the noise you want to reduce.

The acoustic insulation of the unit is stated in decibel, R_w , as a sound reduction figure. The figure indicates by how many decibel the unit reduces external noise – depending on the source of the noise. It is also important to keep in mind that R_w is a weighted value representing the entire sound frequency spectrum. Different sounds represent different frequencies in the spectrum. The R_w -value is consequently a mere base for the calculation of the actual reduction of any given noise.

Facts

Solar reflective glass absorbs a lot of solar energy.

This is why the glass is toughened to eliminate the risk of thermal fractures.



Facts

The thicker the glass, the better the sound reduction.

Glass of various thicknesses improves sound reduction

The larger the distance between the panes, the better the sound reduction.

Here are some examples of noise levels:

Whisper	30 dB
Speech	40-60 dB
Vacuum cleaner	65-75 dB
Car	70-80 dB
Truck	80-90 dB
Air hammer drill	90-110 dB
Jet plane	110-130 dB

Obscured glass

Obscured glass can either be patterned, cast, clear or coloured with varying degrees of light transmission and vision control.

The texture or surface of design glass is created using techniques such as embossing, matt grinding, etching, sandblasting or matt lamination. Each of these methods create their own look. Matt grinding produces an effect similar to etching, yet avoids the use of environmentally harmful chemicals.

Obscured glass is suitable for uses where the blocking of visibility or unwanted views is desired and for creating special and decorative effects.

Idealcombi offers a wide range of obscured glass. Below you can see a selection of our most common glass types with different textures and patterns and visibility options.

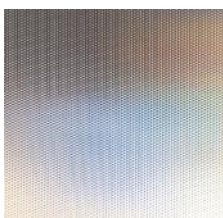
Cotswold



Clear Glass C



Masterpoint



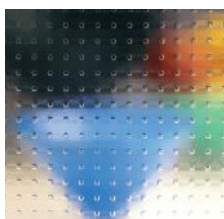
Satinato



Matt laminated



Mastercarre



Masterligne



Safety glass

Personal safety

Safety glass is intended to prevent or minimise the risk of injury in case of human impact.

In places where people can come into contact with both sides of the pane through accidental impact, the requirement for safety glass extends to both layers of glass.

Safety glass is available as laminated and toughened glass both providing increased impact protection.

The plastic film in laminated glass holds the glass pieces together thus preventing serious injury.

When toughened glass breaks, it shatters into many small blunt pieces which reduces the risk of serious injury.

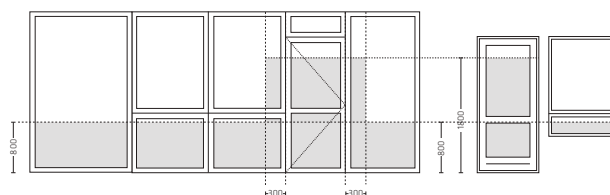
Laminated glass

Laminated glass is a combination of two or more layers of glass with an interlayer of plastic film. The glass is heated until the plastic film melts and bonds with the glass forming a transparent pane.

Toughened glass

Toughened glass is heated to very high temperatures creating compressive stress in the surface of the glass. The treatment makes the glass able to withstand severe impacts such as kicking or people tripping and hitting the glass.

Facts



Always choose personal safety glass if part of the unit is placed less than 1.50 metres above the floor in doors and door side-lights and access points.

The same applies to other risk areas where the unit is placed less than 0.8 metres above a particular surface.

Guidelines for safety glass are described in BS 6206:1981 and BS 6262-4:1994.



Glass guide

Security glass

Burglary and vandalism

Security glass is intended to prevent or delay passage through the unit following a physical attack.

Security glass can offer protection against vandalism committed using objects such as hammers, axes and bricks or falling material, against planned intrusion (such as burglary) and against gunfire attacks (bullet-proof glass).

Security glass is made from laminated glass or glass which is both laminated and toughened.

Whether you should choose laminated security glass or security glass which is both laminated and toughened depends on what the glass should protect against and how effective the protection should be.

The thickness and number of glass panes as well as the type of film used determine the resistance of the security glass. Several layers of glass with a thicker film provide higher breaking resistance.

Facade glass

Facade glass for spandrels is used for various purposes on large external surfaces. It can also be used between floors and on surfaces where a blocking of the view is required.

Idealcombi A/S can supply facade glass as single glazing units or as double glazing units for spandrels.

Facade glass can be divided into three visual functions:

- Matching facades
- Look-a-like facades
- Contrast facades

Matching facades, if you want a calm and harmonious relationship with facade materials such as windows and spandrels. Usually enamelled or silk-printed glass is used.

Look-a-like facades, if you want optimum similarity in the reflection of facade glass and double glazing units. Coated glass types are normally used for these types of facades.

Contrast facades, if you want to create a contrast between facade glass and double glazing units. This can be done using coloured glass in various combinations of colour for a mosaic effect. Enamelled glass is typically used here.

Facts

The requirements for security glass are always equal to laminated glass. The thicker the glass and film and the more layers, the more effective the protection.

Security glass against manual attack is classified in accordance with BS EN 356:2002

Security glass against bullet attack is classified in accordance with BS EN 1063:2000.



Facts

"Look-a-like" facades

In order to produce reflection, the area behind the glass must be darker than the area in front of the glass.

The greater the difference in light on the inside/outside, the greater the reflection in the windows.

Look-a-like therefore occurs in the daytime – in the evening light conditions change and the reflection is reduced or disappears.



Fire protective glass

Fire protective glass must provide efficient protection against flames and fumes. Certain types of fire protective glass can also reduce or stop the direct radiation heat and provide effective insulation. Idealcombi A/S' fire protective glass can do just that.

The more layers of fire protective material, the longer it takes for the fire to penetrate the glass and the slower the rise in temperature on the other side of the glass. This is why it is a good idea to choose fire protective glass with at least three interlayers of protective material. Particularly for situations where radiation heat may set material on the other side of the glass on fire, or in situations where you want to secure an escape route.

Facts

The fire penetration time is directly proportional to the number of fire protective interlayers.

Reducing radiation heat prolongs the clearance period, minimises the spread of the fire and the cost of fire damage.

Fire protective glass is classified in accordance with BS EN 357:2001.

The total glass/window structure, i.e. the glass, the glass fitting method, the frame/sash design and mounting system must be approved by proper authorities in order to meet the classification requirements in the various fire classes.



Glass guide

Clear demands on function

When choosing the right type of glass you will probably have to consider many – and perhaps even conflicting – requirements and wishes.

The most common requirements are for:

A low Ug-value, as it provides good insulation, reduced energy consumption and a high surface temperature resulting in less cold down-draughts and cold radiation.

Light transmission which is defined according to the need for admitting a lot of daylight or for keeping it out. You may either want a very natural light which also reduces the cost of artificial lighting or you may want to prevent reflections in for instance computer screens.

Solar energy transmission which is defined according to the need for a high thermal energy admittance versus a low thermal energy admittance. A high thermal energy admittance reduces heating costs while a low thermal energy admittance prevents for instance large offices from becoming too hot and also reduces air-conditioning costs.

Preferably, a window solution should be able to satisfy all three requirements, with the highest values possible while at the

same time considering the reflection, colour and appearance of the pane.

The checklist can give you an idea of your options and the requirements you may have for the glass when choosing a window.

Warranties on glass, see pages 276-277.

Define:

- ☐ Insulation properties, Ug-value
- ☐ Light transmission, LT-value
- ☐ Solar energy transmission, g-value
- ☐ Fire protection
- ☐ Noise control
- ☐ Personal safety
- ☐ Security glass
- ☐ Aesthetics



OUTWARD OPENING

Frame IC

Wood/aluminium with **idealcore™**



Double glazing*

E_{ref} = -13,2

U_w = 1,32

Triple glazing

E_{ref} = fra 16,9

U_w = fra 0,77



Nation IC

Wood/aluminium with **idealcore™**



Double glazing*

E_{ref} = -13,2

U_w = 1,32

Triple glazing

E_{ref} = fra 16,9

U_w = fra 0,77



Futura+

Wood/aluminium with **idealcore™**



Double glazing*

E_{ref} = +0,6

U_w = 1,31

Triple glazing

E_{ref} = fra 30,6

U_w = fra 0,74



INWARD OPENING

Frame I

Wood/aluminium



Triple glazing

E_{ref} = fra 13,3

U_w = fra 0,82



Nation I

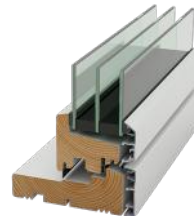
Wood/aluminium



Triple glazing

E_{ref} = fra 13,3

U_w = fra 0,82



Futura+i

Alu/alu with **idealcore™**



Double glazing*

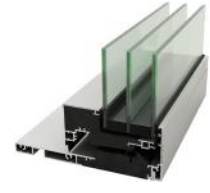
E_{ref} = -0,57

U_w = 1,38

Triple glazing

E_{ref} = fra 30,6

U_w = fra 0,74



Colours

Idealcombi supplies windows and doors in 15 standard colours carefully selected to match contemporary trends. All Idealcombi elements are supplied fully surface treated. The standard colours are included on the RAL scale and are available on all internal and external element surfaces.

Exterior aluminium surface treatment

Idealcombi offers three different types of surface treatment of exterior aluminium profiles:

Powder coating, a smooth and extremely durable surface, which is resistant to impact and weather.

Natural and bronze anodisation, which provides the surface with a raw metallic colour.

Granite textured finish, which provides the surface with a rustic, sandblasted texture in six different colours.

All product lines offer a choice of dual-coloured external and internal elements.

Clear coat

Similarly, it is possible to choose clear coat on internal wooden parts. Note, however, that if clear coat is applied, finger joints will be visible.

Powder-coated butt hinges

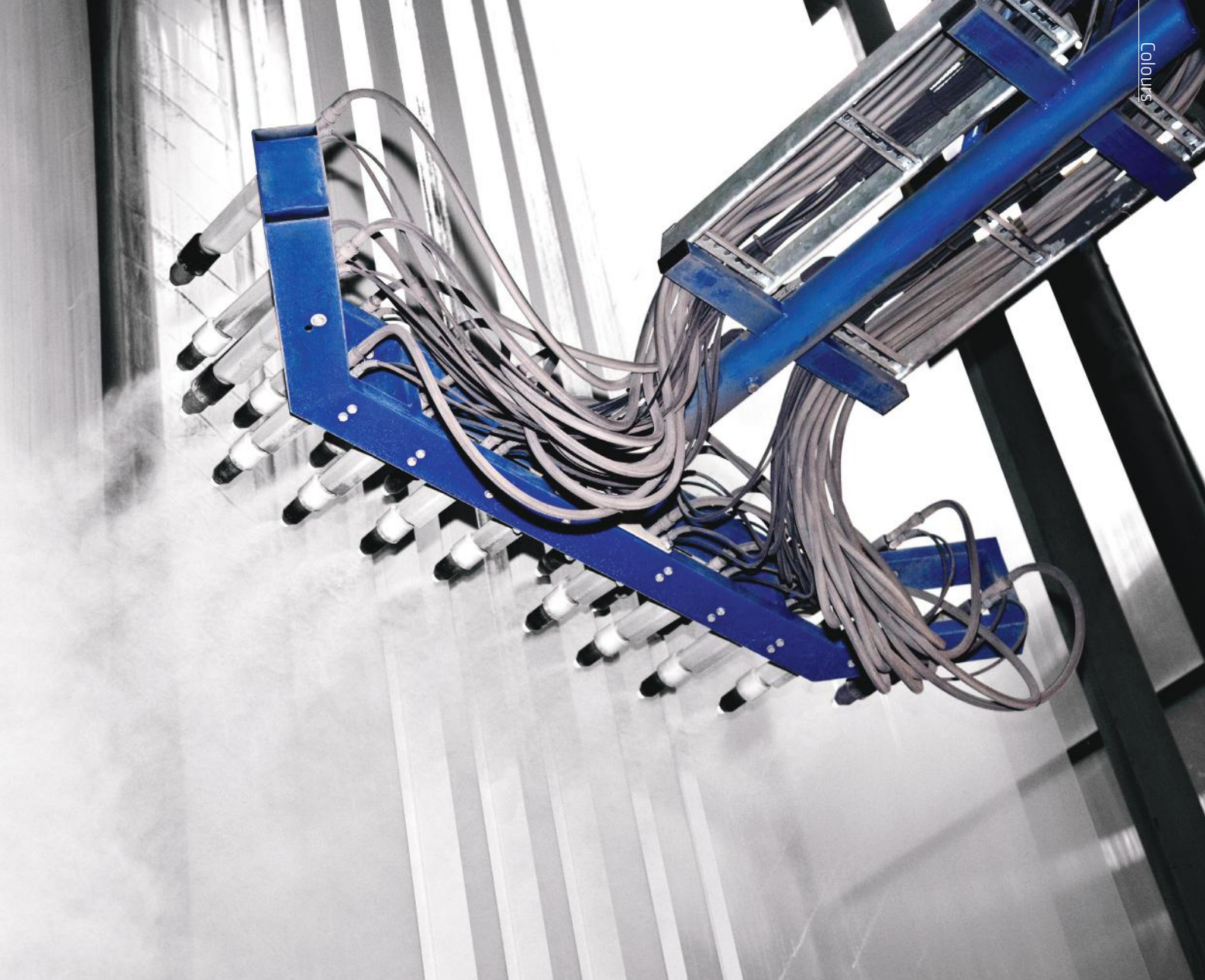
All butt hinges are available powder-coated in white or grey and are height adjustable.

15 contemporary standard colours

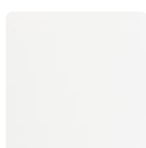
We have shown here our 15 standard colours – but please note that the colours in the catalogue are printed reproductions of the original RAL colours and should not be used as a basis for colour selection as they may deviate from the actual colours. The final choice of colour and finish should always be made using an authorised RAL colour card or a surface sample. For additional information, we refer to Appendix 14 of the Technical Regulations of the Association of Danish Window Manufacturers (DVV) concerning expected results of industrial surface treatment of wood elements.

15 contemporary standard colours from Idealcombi

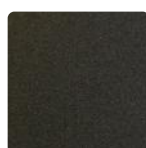
	Pure white RAL 9010		Basalt grey RAL 7012		Umbra grey RAL 7022		Bottle green RAL 6007
	Cream RAL 9001		Slate grey RAL 7015		Light grey RAL 7035		Mahogany brown RAL 8016
	Grey white RAL 9002		Antracite grey RAL 7016		Traffic grey A RAL 7042		Brown red RAL 3011
	Jet black RAL 9005		Black grey RAL 7021		Traffic grey B RAL 7043		



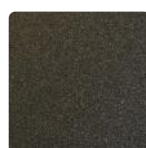
6 granite colours from Idealcombi



IC Granite 01
SAA10F



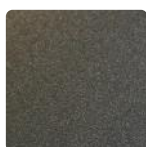
IC Granite 80
SN351F



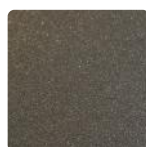
IC Granite 60
YW359



IC Granite 70
YW360



IC Granite 40
YW361



IC Granite 30
TW355





GENERAL

110 EVIDENCE OF PERFORMANCE

- Certification: Provide independently certified evidence that all incorporated components comply with specified performance requirements.

140 CONTROL SAMPLES

- Procedure:
 - Finalise component details.
 - Fabricate one of each of the following designated items as part of the quantity required for the project.
 - Obtain approval of appearance and quality before proceeding with manufacture of the remaining quantity.
- Designated items: _____

PRODUCTS

400A CO ALUMINIUM/TIMBER COMPOSITE EXTERNAL DOOR SETS

- Drawing reference(s): ()
- Manufacturer:
 - Idealcombi UK Ltd.,
 - Chancery Pavilion, Boycott Avenue, Oldbrook,
 - Milton Keynes, MK6 2TA
 - Telephone: 01582 860940
 - www.idealcombi.com
- Product reference: **FRAME IC** Inward or Outward Glazed opening sashes
- Materials:
 - Exterior frame/sash cladding: Aluminium/Polyurethane /Aluminium outward and inward opening sashes.
 - Finish: Polyester Powder Coated – Standard RAL colours (Matt or High gloss)
 - Interior frame / sash section: Redwood timber (Pinus species) supplied from a renewable and managed supply chain. Quality optimised finger jointed timber with 122mm (or 149mm) overall depth of frame.
 - Finish: Factory finished, 2 coat micro porous paint, selected from standard colour range.

- Exposure category classification requirements shall be indicated in conformance with:

DS/EN 12207 for air permeability
DS/EN 12208 for water tightness

PAS 24:2016 – SBD Certified

- Glazing details: 28mm double glazed unit to DS/EN1279, argon gas filled cavity and Low E glass coating with warm edge spacer

bar. Safety glass to BS 6206 below 1500mm above finished floor level and side lights within 300mm of doors.

To include: Aluminium drip sills (or aluminium folded sill pressings), aluminium ventilators, opening handles to operate a fully concealed multi-point locking hook bolt mechanism with night vent position. Restrictors required to all windows to limit the opening to approximately 100mm.

410A ALUMINIUM/TIMBER COMPOSITE EXTERNAL DOOR SETS

- Drawing reference(s): ()
- Manufacturer:
 - Idealcombi UK Lt.,
 - Chancery Pavilion, Boycott Avenue, Oldbrook,
 - Milton Keynes, MK6 2TA
 - Telephone: 01582 860940
 - www.idealcombi.com

Product reference: FRAME IC range of products

Inward opening Flush Door Panel (<https://products.idealcombi.com/en/product/frameic-inward-opening-flush-door/>)

- Materials:
 - Outer-frame: Aluminium / Polyurethane / Timber
 - Inward opening sashes/door leaf's will be solid flush panel ref: (Partas 60mm door leaf)
 - External finish to the mainframe to be PPC
 - Interior of main frame: Redwood timber (Pinus species) supplied from a renewable and managed supply chain. Quality optimised finger jointed timber with 149mm overall depth of frame.
 - Finish: Factory finished, 2 coat micro porous paint - PPC
- Exposure category classification requirements shall be indicated in conformance with:
 - DS/EN 12207 for air permeability
 - DS/EN 12208 for water tightness

- Glazing details if a vision panel required to be either 28mm (inward opening) double glazed unit to DS/EN1279, argon gas filled cavity and Low E glass coating with warm edge spacer bar. Safety glass to BS 6206 below 1500mm above finished floor level and side lights within 300mm of doors.

PAS 24:2016 SBD certified

- Ironmongery/ Accessories:
 - 18mm fibre mobility low threshold which can be easily ramped/

Windows & doors in wood-PUR-alu

detailed for Part M threshold. Fix 5035 security multi-point locking facility to all doors if appropriate with lockable cylinders internal and external. U shaped lever/lever handles with longplate and 120mm alu kick-plate

EXECUTION

710 PROTECTION OF COMPONENTS

- General: Do not deliver to site components that cannot be installed immediately or placed in clean, dry and covered storage.
- Stored components: Stack vertically or near vertically on level bearers, separated with spacers to prevent damage by and to projecting ironmongery, beads, etc.

750 BUILDING IN

- General: Not permitted unless indicated on drawings.
 - Brace and protect components to prevent distortion and damage during construction of adjacent structure.

765 WINDOW INSTALLATION GENERALLY

- Installation: Into prepared openings.
- Gap between frame edge and surrounding construction:
 - Minimum: 6mm
 - Maximum: 15mm
- Distortion: Install windows squarely without twist or diagonal racking.

770 DAMP PROOF COURSES IN PREPARED OPENINGS

- Location: Ensure correct positioning of DPC's, DPM's and/ or cavity closers in relation to window frames. Do not displace during fixing operation.

784 FIXING OF COMPOSITE FRAMES

- As section () using galvanized mild steel cramps or as otherwise recommended by Idealcombi.
- When not predrilled or specified otherwise, position fixing not more than 150 mm from each end of jamb, adjacent to each hanging point of openings lights, and at maximum 600 mm centres and in accordance with Idealcombi fixing instructions.
- Fasteners appropriate to surrounding structure.

810 SEALANT JOINTS:

- Sealant manufacturer and reference: Adshead Ratcliffe Arbo LM low modulus silicone sealant or

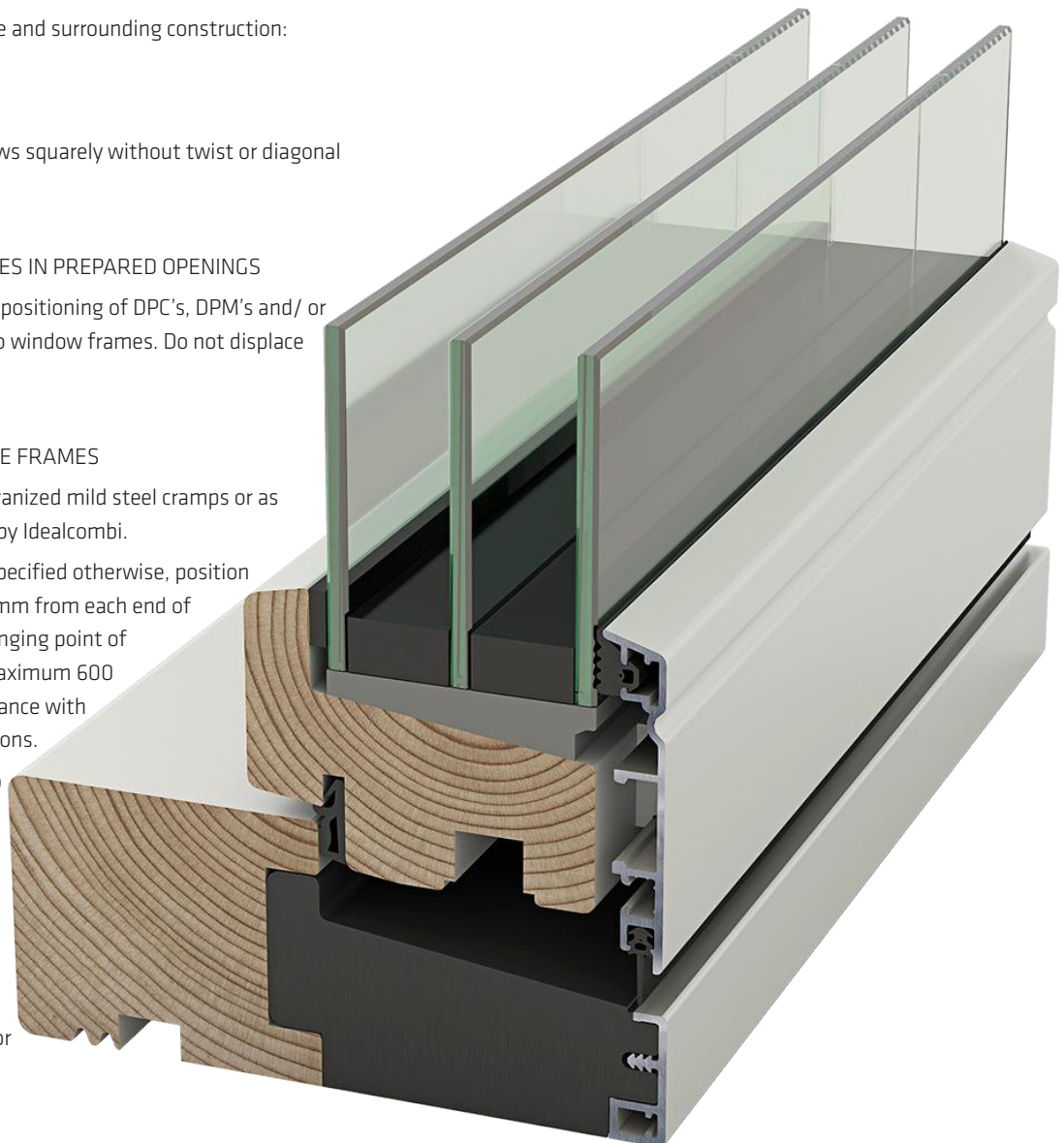
equivalent.

- Brush joints clean and free from all dust etc wipe the joint interface with an approved solvent wipe and allow for drying. Insert foam backing strip or bond breaker tape to back of joint. Apply the Arbo LM low modulus silicone mastic (joint size 6 to 10mm typically). Tool joint with a smooth stick to leave neat professional finish.

- Colour: To compliment or match window colour.

820 IRONMONGERY:

- Fixing: Assemble and fix carefully and accurately using fasteners with matching finish supplied by ironmongery manufacturer. Prevent damage to ironmongery and adjacent surfaces.
- Checking / adjusting / lubricating: At completion check, adjust and lubricate as necessary to ensure correct functioning.



NBS - Frame I

General

Inward opening windows and patio doors

The window construction must be made of the wood/aluminium combination. External aluminium profiles must be carried out in such a way that ventilation and drainage are intact in all locations.

The manufacturer must be connected to the window industry, the energy labelling scheme and the DVV. Windows and doors must be manufactured in Denmark.

The total external profile dimension must be 92 mm and be the same on the manufacturer's outward opening product.

The manufacturer's quality management system must be certified in accordance with DS/EN ISO 9001. The manufacturer's environmental management system must be certified in accordance with DS/EN ISO 14001.

Test

All products must be CE-marked, as well as tested and classified according to European standards. The manufacturer must be certified under the energy labelling scheme.

Energy requirements for reference size 1230 x 1480 mm: Windows with 3-layer glazing:

Eref +13.3 kWh/m²/year, and an internal surface temperature Toi of a minimum of 14.9°C. Certified A-mark.

The surface temperatures shall be calculated in accordance with DS/EN ISO 10077-2, subject to a room temperature of 20°C and an outside temperature of 0°C.

Design of frames

Frame is manufactured in quality-optimised finger-jointed core wood with an internal 24 mm visible wood part and externally positioned aluminium cap 50 mm wide.

The external powder-coated aluminium cladding is ventilated and attached to the timber profile with clips. Connections must be sealed with an epdm rubber profile, within the aluminium profile groove. Drainage is hidden within the bottom frame profile.

By default, the profile frame dimension is 24 x 122 mm. Alternatively, a frame depth of 149 mm can be specified.

Frame, including mullions and transoms, shall be made of quality-optimised finger jointed core wood.

Design of Sashes

Sashes are to be manufactured to a depth of 75 mm visible internally and externally.

Internal wooden frame 57.5 mm and external aluminum capping 36.4 mm.

Bottom cill shall be designed with a 7° slanted base with an external ventilated aluminium cladding fitted with clips.

Exterior aluminium cladding is designed to appear as a traditional window with glazing bead marking.

The external aluminium must not be possible to disassemble when the window is closed. The transition between the outer aluminium profile shall be intertuffed with a recessed sealing profile. Sealing strips against the pane shall be level with transitions on the inner sash and outer aluminium profile.

Wood

All wood must be FSC® certified. The core wood share must meet the requirements of the Window Industry's technical regulations Annex 10, i.e. min. 60 % core wood share in external rebate and surfaces.

All wood must be scanned for knots and wind cracks. In the subsequent optimization process, defects such as wind cracks and knots must be cut, minor knots towards wall must be allowed. The workpieces must be finger jointed and assembled in lengths of 6 meters with a curvature of max. 1 mm per lbm. The finger jointing must be in accordance with DIN 68140.

Surface treatment of wood

The wood parts must be surface treated in accordance with 2øko in accordance with DVV's technical regulations section 5.5.2. Basic treatment should be carried out with a water-dilutable fungicide-containing agent. The coating should be done with a water-dilutable, diffusion-open acrylic-based paint. The layer thickness shall be greater than 80µm (dry film) and the overall system shall have reached the grade 1 after testing in accordance with EN 152-1.

Wood is carried out with a surface in gloss 20.

Aluminium

Alloy assembly according to DS EN 573-3:2005. Alloy EN AW-6060 T6 (AlMgSi0,5).

Surface treatment of aluminium

Aluminium parts are base and surface treated before machining. For powder coating, environmentally and quality approved polyester powders must be used. The aluminium profiles are painted with a layer thickness of at least 80µm.

Aluminium is carried out with a matte or glossy surface (high gloss), as standard, in one of the manufacturer's standard colours or according to the RAL color chart.

Glass in 3-layer glazing:

Double-sealed insulation glazing certified in accordance with DS/EN 1279. The glazing comes in both opening sashes and fixed frames with 48 mm 3-layer glass, standard built, as 4-18-4-18-4

Windows and doors in wood/aluminium

mm, with warm edge profile. By default, the windows must have a minimum Ug value of 0.57 W/m²K and a minimum LT value of 0.75

Glass must be supplied glued in sashes and frames, for optimal density and safety.

Ironmongery

All ironmongery must be made of natural anodised aluminium, plastic, steel with a hot-plate or electro-zinc with a subsequent chromafixing treatment in a colourless/blue or yellow surface. Brackets can also be made of metal alloys such as zamak (zinc alloy) or stainless steel.

Trickle vents

The vents must have the design and function of the click vent, externally completed with visible vent grilles.

Sealing

Sealing must be done as 1-step or 2-step joint as advised in fso's joint manual. Outside joints can be placed smoothly with outer aluminum cladding at the side frame and top frame of the element, at the cill, the position of the seal must be in level with timber, so that drainage is maintained.

Features:

The product should be supplied with multifunctional functions.

- Turn / Tilt
- Tilt / Turn
- Turn
- Tilt
- Turn with built-in handle-activated brake
- Turn / Tilt with built-in handle-activated brake
- Fixed

Turn and turn/tilt

In the turn function, the sash must open side hung inwards and provide full opening.

For windows, the turn function can primarily be for window cleaning use.

The Turn function shall be capable of being supplemented by a handle-operated brake at >18° opening.

With the tilt function, the sash must be tilted about 14 cm inwards in the ventilation position.

Windows/doors shall be fitted with 3 unbroken black sealing levels. The primary seal must pass around the corner clip.

Tilt and tilt/turn

With the tilt function, the frame must be able to be tilted about

14 cm inwards into the ventilation position.

In the turn function, the sash operates side hung inwards and provide full opening.

For windows, the turn function can primarily be for window cleaning use.

Lockable handles must be able to be selected so that the turn function can be locked, but the tilt function can still be activated.

Windows/doors shall be fitted with 3 unbroken black sealing levels.

The primary seal must pass around the corner clip.

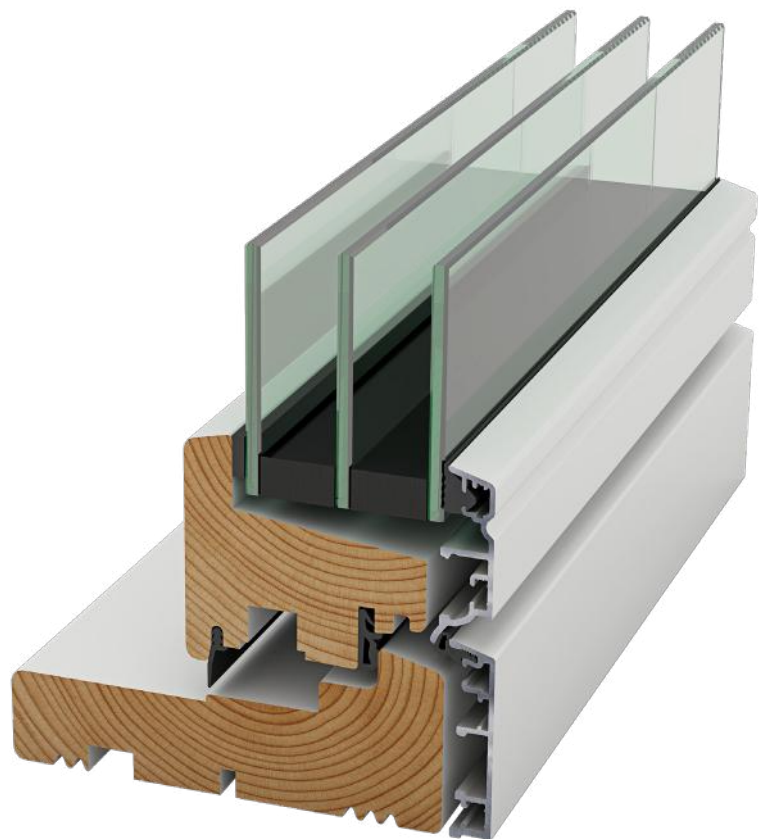
Fixed

Fixed Frames must be with glass mounted directly in the frame. Drains are made at the base of the aluminium profile.

By default, the window must be supplied with a click vent and externally placed vent grille.

Sandwich Panels

can be offered as a grooved sandwich panel, both inside and outside.







NBS - Nation IC

GENERAL

110 EVIDENCE OF PERFORMANCE

- Certification: Provide independently certified evidence that all incorporated components comply with specified performance requirements.

140 CONTROL SAMPLES

- Procedure:
 - Finalise component details.
 - Fabricate one of each of the following designated items as part of the quantity required for the project.
 - Obtain approval of appearance and quality before proceeding with manufacture of the remaining quantity.
- Designated items: _____

PRODUCTS

400A CO ALUMINIUM/TIMBER COMPOSITE EXTERNAL DOOR SETS

- Drawing reference(s): ()
- Manufacturer:

Idealcombi UK Ltd.,
Chancery Pavilion, Boycott Avenue, Oldbrook,
Milton Keynes, MK6 2TA
Telephone: 01582 860940
www.idealcombi.com
- Product reference: **NATION IC** Inward or Outward Glazed opening sashes
- Materials:
 - Exterior frame/sash cladding: Aluminium/Polyurethane /Aluminium outward and inward opening sashes.
Finish: Polyester Powder Coated – Standard RAL colours (Matt or High gloss)
 - Interior frame / sash section: Redwood timber (Pinus species) supplied from a renewable and managed supply chain. Quality optimised finger jointed timber with 122mm (or 149mm) overall depth of frame.
Finish: Factory finished, 2 coat micro porous paint, selected from standard colour range.

- Exposure category classification requirements shall be indicated in conformance with:

DS/EN 12207 for air permeability
DS/EN 12208 for water tightness

PAS 24:2016 – SBD Certified

- Glazing details: 28mm double glazed unit to DS/EN1279, argon gas filled cavity and Low E glass coating with warm edge spacer

bar. Safety glass to BS 6206 below 1500mm above finished floor level and side lights within 300mm of doors.

To include: Aluminium drip sills (or aluminium folded sill pressings), aluminium ventilators, opening handles to operate a fully concealed multi-point locking hook bolt mechanism with night vent position. Restrictors required to all windows to limit the opening to approximately 100mm.

410A ALUMINIUM/TIMBER COMPOSITE EXTERNAL DOOR SETS

- Drawing reference(s): ()
- Manufacturer:

Idealcombi UK Ltd.,
Chancery Pavilion, Boycott Avenue, Oldbrook,
Milton Keynes, MK6 2TA
Telephone: 01582 860940
www.idealcombi.com

Product reference: Nation IC range of products

Inward opening Flush Door Panel (<https://products.idealcombi.com/en/product/frameic-inward-opening-flush-door/>)

- Materials:
 - Outer-frame: Aluminium / Polyurethane / Timber
Inward opening sashes/door leaf's will be solid flush panel ref: (Partas 60mm door leaf)
External finish to the mainframe to be PPC
 - Interior of main frame: Redwood timber (Pinus species) supplied from a renewable and managed supply chain.
Quality optimised finger jointed timber with 149mm overall depth of frame.
Finish: Factory finished, 2 coat micro porous paint - PPC
- Exposure category classification requirements shall be indicated in conformance with:
 - DS/EN 12207 for air permeability
 - DS/EN 12208 for water tightness

- Glazing details if a vision panel required to be either 28mm (inward opening) double glazed unit to DS/EN1279, argon gas filled cavity and Low E glass coating with warm edge spacer bar. Safety glass to BS 6206 below 1500mm above finished floor level and side lights within 300mm of doors.

PAS 24:2016 SBD certified

- Ironmongery/ Accessories:
18mm fibre mobility low threshold which can be easily ramped/

Windows & doors in wood-PUR-alu

detailed for Part M threshold. Fix 5035 security multi-point locking facility to all doors if appropriate with lockable cylinders internal and external. U shaped lever/lever handles with longplate and 120mm alu kick-plate

EXECUTION

710 PROTECTION OF COMPONENTS

- General: Do not deliver to site components that cannot be installed immediately or placed in clean, dry and covered storage.
- Stored components: Stack vertically or near vertically on level bearers, separated with spacers to prevent damage by and to projecting ironmongery, beads, etc.

750 BUILDING IN

- General: Not permitted unless indicated on drawings.
 - Brace and protect components to prevent distortion and damage during construction of adjacent structure.

765 WINDOW INSTALLATION GENERALLY

- Installation: Into prepared openings.
- Gap between frame edge and surrounding construction:
 - Minimum: 6mm
 - Maximum: 15mm
- Distortion: Install windows squarely without twist or diagonal racking.

770 DAMP PROOF COURSES IN PREPARED OPENINGS

- Location: Ensure correct positioning of DPC's, DPM's and/ or cavity closers in relation to window frames. Do not displace during fixing operation.

784 FIXING OF COMPOSITE FRAMES

- As section () using galvanized mild steel cramps or as otherwise recommended by Idealcombi.
- When not predrilled or specified otherwise, position fixing not more than 150 mm from each end of jamb, adjacent to each hanging point of openings lights, and at maximum 600 mm centres and in accordance with Idealcombi fixing instructions.
- Fasteners appropriate to surrounding structure.

810 SEALANT JOINTS:

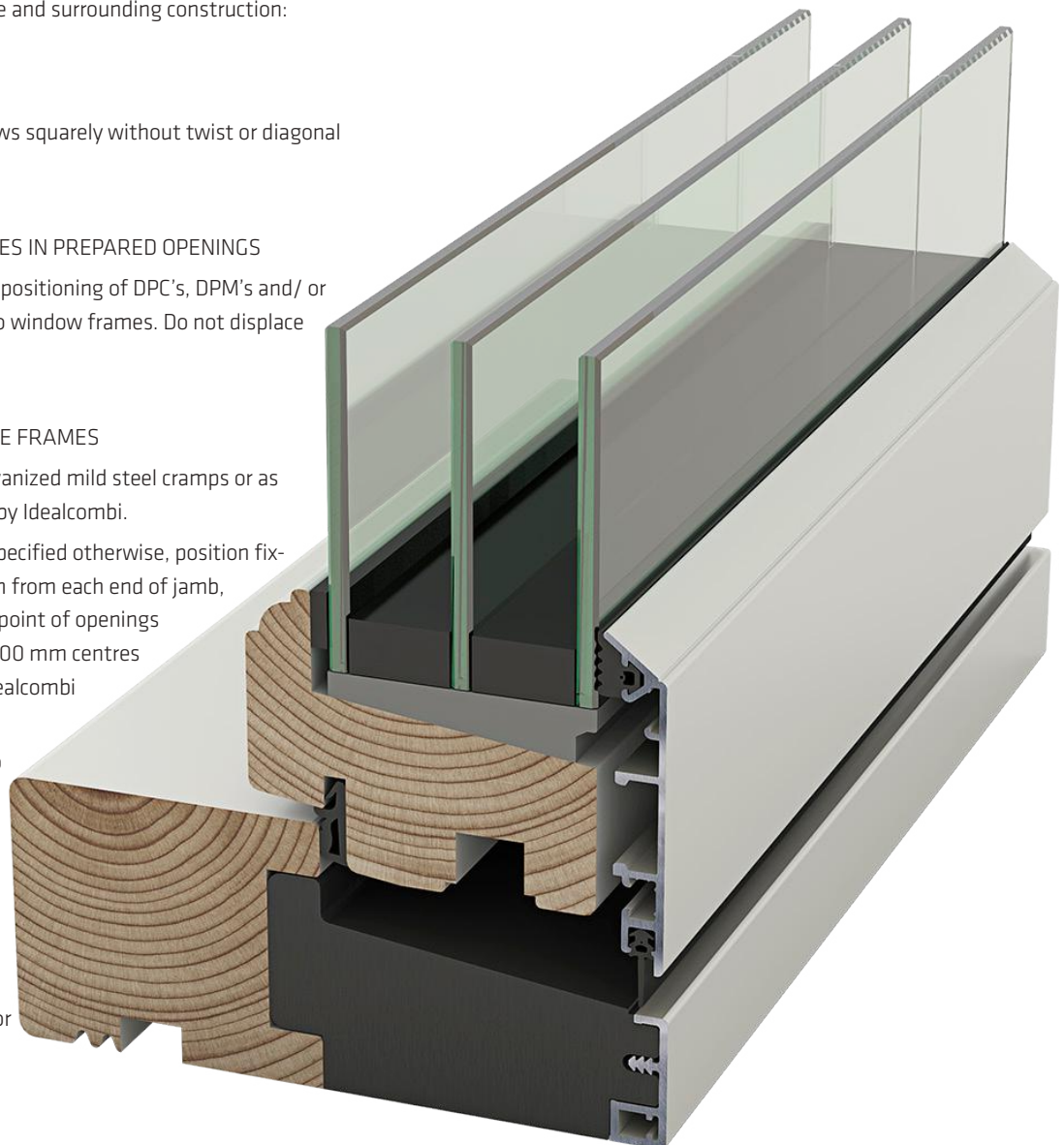
- Sealant manufacturer and reference: Adshead Ratcliffe Arbo LM low modulus silicone sealant or equivalent.

- Brush joints clean and free from all dust etc wipe the joint interface with an approved solvent wipe and allow for drying. Insert foam backing strip or bond breaker tape to back of joint. Apply the Arbo LM low modulus silicone mastic (joint size 6 to 10mm typically). Tool joint with a smooth stick to leave neat professional finish.

- Colour: To compliment or match window colour.

820 IRONMONGERY:

- Fixing: Assemble and fix carefully and accurately using fasteners with matching finish supplied by ironmongery manufacturer. Prevent damage to ironmongery and adjacent surfaces.
- Checking / adjusting / lubricating: At completion check, adjust and lubricate as necessary to ensure correct functioning.



NBS - Nation I

General

Inward opening windows and patio doors

The window construction must be made of the wood/aluminium combination. External aluminium profiles must be carried out in such a way that ventilation and drainage are intact in all locations.

The manufacturer must be connected to the window industry, the energy labelling scheme and the DVV. Windows and doors must be manufactured in Denmark.

The total external profile dimension must be 92 mm and be the same on the manufacturer's outward opening product.

The manufacturer's quality management system must be certified in accordance with DS/EN ISO 9001. The manufacturer's environmental management system must be certified in accordance with DS/EN ISO 14001.

Test

All products must be CE-marked, as well as tested and classified according to European standards. The manufacturer must be certified under the energy labelling scheme.

Energy requirements for reference size 1230 x 1480 mm: Windows with 3-layer glazing:

Eref +13.3 kWh/m²/year, and an internal surface temperature Toi of a minimum of 14.9°C. Certified A-mark.

The surface temperatures shall be calculated in accordance with DS/EN ISO 10077-2, subject to a room temperature of 20°C and an outside temperature of 0°C.

Design of frames

Frame is manufactured in quality-optimised finger-jointed core wood with an internal 24 mm visible wood part and externally positioned aluminium cap 50 mm wide.

The external powder-coated aluminium cladding is ventilated and attached to the timber profile with clips. Connections must be sealed with an epdm rubber profile, within the aluminium profile groove. Drainage is hidden within the bottom frame profile.

By default, the profile frame dimension is 24 x 122 mm. Alternatively, a frame depth of 149 mm can be specified.

Frame, including mullions and transoms, shall be made of quality-optimised finger jointed core wood.

Design of Sashes

Sashes are to be manufactured to a depth of 75 mm visible internally and externally.

Internal wooden frame 57.5 mm and external aluminum capping 36.4 mm.

Bottom cill shall be designed with a 7° slanted base with an external ventilated aluminium cladding fitted with clips.

Exterior aluminium cladding is designed to appear as a traditional window with putty bead.

The external aluminium must not be possible to disassemble when the window is closed. The transition between the outer aluminium profile shall be intertuffed with a recessed sealing profile. Sealing strips against the pane shall be level with transitions on the inner sash and outer aluminium profile.

Wood

All wood must be FSC® certified. The core wood share must meet the requirements of the Window Industry's technical regulations Annex 10, i.e. min. 60 % core wood share in external rebate and surfaces.

All wood must be scanned for knots and wind cracks. In the subsequent optimization process, defects such as wind cracks and knots must be cut, minor knots towards wall must be allowed. The workpieces must be finger jointed and assembled in lengths of 6 meters with a curvature of max. 1 mm per lbm. The finger jointing must be in accordance with DIN 68140.

Surface treatment of wood

The wood parts must be surface treated in accordance with 2øko in accordance with DVV's technical regulations section 5.5.2. Basic treatment should be carried out with a water-dilutable fungicide-containing agent. The coating should be done with a water-dilutable, diffusion-open acrylic-based paint. The layer thickness shall be greater than 80µm (dry film) and the overall system shall have reached the grade 1 after testing in accordance with EN 152-1.

Wood is carried out with a surface in gloss 20.

Aluminium

Alloy assembly according to DS EN 573-3:2005. Alloy EN AW-6060 T6 (AlMgSi0,5).

Surface treatment of aluminium

Aluminium parts are base and surface treated before machining. For powder coating, environmentally and quality approved polyester powders must be used. The aluminium profiles are painted with a layer thickness of at least 80µm.

Aluminium is carried out with a matte or glossy surface (high gloss), as standard, in one of the manufacturer's standard colours or according to the RAL color chart.

Glass in 3-layer glazing:

Double-sealed insulation glazing certified in accordance with DS/EN 1279. The glazing comes in both opening sashes and fixed frames with 48 mm 3-layer glass, standard built, as 4-18-4-18-4

Windows and doors in wood/aluminium

mm, with warm edge profile. By default, the windows must have a minimum Ug value of 0.57 W/m²K and a minimum LT value of 0.75

Glass must be supplied glued in sashes and frames, for optimal density and safety.

Ironmongery

All ironmongery must be made of natural anodised aluminium, plastic, steel with a hot-plate or electro-zinc with a subsequent chromafixing treatment in a colourless/blue or yellow surface. Brackets can also be made of metal alloys such as zamak (zinc alloy) or stainless steel.

Trickle vents

The vents must have the design and function of the click vent, externally completed with visible vent grilles.

Sealing

Sealing must be done as 1-step or 2-step joint as advised in fso's joint manual. Outside joints can be placed smoothly with outer aluminum cladding at the side frame and top frame of the element, at the cill, the position of the seal must be in level with timber, so that drainage is maintained.

Features:

The product should be supplied with multifunctional functions.

- Turn / Tilt
- Tilt / Turn
- Turn
- Tilt
- Turn with built-in handle-activated brake
- Turn / Tilt with built-in handle-activated brake
- Fixed

Turn and turn/tilt

In the turn function, the sash must open side hung inwards and provide full opening.

For windows, the turn function can primarily be for window cleaning use.

The Turn function shall be capable of being supplemented by a handle-operated brake at >18° opening.

With the tilt function, the sash must be tilted about 14 cm inwards in the ventilation position.

Windows/doors shall be fitted with 3 unbroken black sealing levels. The primary seal must pass around the corner clip.

Tilt and tilt/turn

With the tilt function, the frame must be able to be tilted about

14 cm inwards into the ventilation position.

In the turn function, the sash operates side hung inwards and provide full opening.

For windows, the turn function can primarily be for window cleaning use.

Lockable handles must be able to be selected so that the turn function can be locked, but the tilt function can still be activated.

Windows/doors shall be fitted with 3 unbroken black sealing levels.

The primary seal must pass around the corner clip.

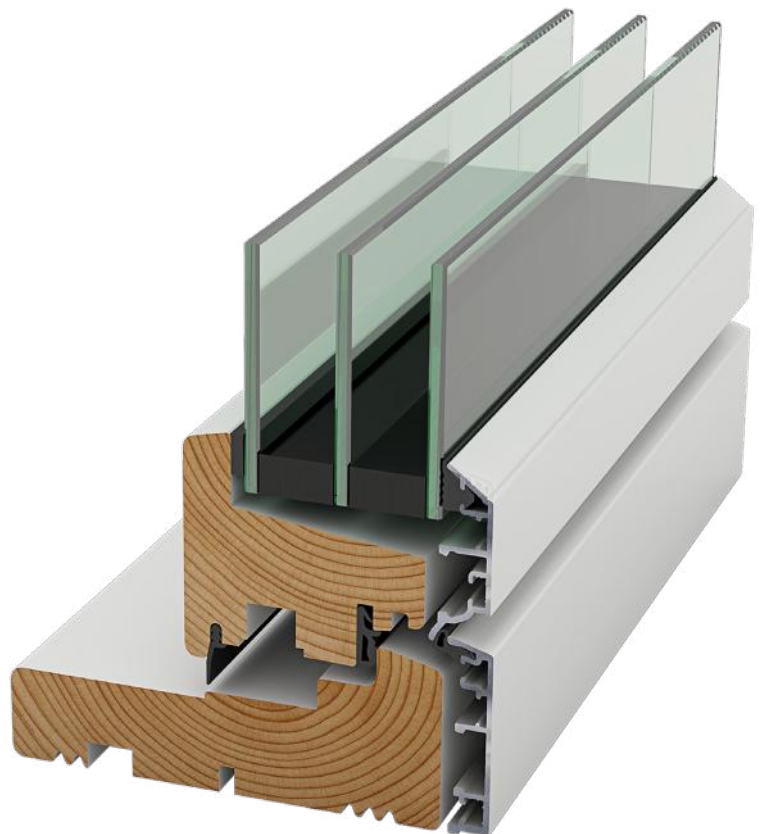
Fixed

Fixed Frames must be with glass mounted directly in the frame. Drains are made at the base of the aluminium profile.

By default, the window must be supplied with a click vent and externally placed vent grille.

Sandwich Panels

can be offered as a grooved sandwich panel, both inside and outside.







GENERAL

110 EVIDENCE OF PERFORMANCE

- Certification: Provide independently certified evidence that all incorporated components comply with specified performance requirements.

140 CONTROL SAMPLES

- Procedure:
 - Finalise component details.
 - Fabricate one of each of the following designated items as part of the quantity required for the project.
 - Obtain approval of appearance and quality before proceeding with manufacture of the remaining quantity.
 - Designated items: _____

PRODUCTS

400 COMPOSITE WINDOWS

- Drawing reference(s): ()
- Manufacturer:

Idealcombi UK Ltd.,
Chancery Pavilion,
Boycott Avenue, Oldbrook
Milton Keynes,
MK6 2TA
Telephone:- 01582 860940
www.idealcombi.com
- Product reference: FUTURA+ range of products
- Materials:
 - Exterior frame / sash cladding: Aluminium / Polyurethane / Aluminium outward opening sashes and fixed sashes.
Finish: Polyester Powder Coated – Standard RAL colours (Matt or High gloss)
 - Interior frame section: Redwood timber (Pinus species) supplied from a renewable and managed supply chain. Quality optimised finger jointed timber with 149mm (or 175mm) overall depth of frame.
Finish: Factory finished, 2 coat micro porous paint, or clear stain selected from standard colour range.
- Exposure category classification requirements shall be indicated in conformance with:
 - DS/EN 12207 for air permeability
 - DS/EN 12208 for water tightness
- Glazing details: To DS/EN 1279 with black warm edge spacers, safety glass to BS EN12600:2002, below 800 mm above finished floor level and below 1500mm within 300mm of doors.

30mm double glazed (High G): Glazing Ug 1.21 / Gg 0.73

[OR] 30mm double glazed (Medium G): Glazing Ug 1.14 / Gg 0.63

[OR] 44mm triple glazed (High G): Glazing Ug 0.74 / Gg 0.63

[OR] 44mm triple glazed (Medium G): Glazing Ug 0.67 / Gg 0.50

- Ironmongery/ Accessories:

To include: aluminium folded sill pressings, aluminium ventilators to achieve 2500mm² EA, opening handles to operate a fully concealed multi-point locking safety bolt mechanism with night vent position. Restrictors required to all windows to limit the opening to approximately 100mm.

520 SLIDING DOORS

- Manufacturer:

Idealcombi UK Ltd.,
Chancery Pavilion,
Boycott Avenue, Oldbrook
Milton Keynes,
MK6 2TA
Telephone:- 01582 860940
www.idealcombi.com
- Product reference: FUTURA+ range
 - Arrangement: Two part system - Sliding door sash and fixed light
 - Four part system – Bi-parting 2 opening sashes with 2 fixed lights
 - Exterior sash cladding: Aluminium / Polyurethane / Aluminium outward opening and fixed sashes.
Finish: Polyester Powder Coated – Standard RAL colours (Matt or High gloss)
 - Interior frame section: Redwood timber (Pinus species) supplied from a renewable and managed supply chain. Quality optimised finger jointed timber with 149mm (or 175mm) overall depth of frame.
Finish: Factory finished, 2 coat micro porous paint, or clear stain selected from standard colour range.
- Operation:
 - Two part system - Sliding door opens outwards then parallel across the front of the fixed light
 - Four part system - Middle sashes open outwards then in opposite directions parallel across the front of the fixed lights.
- Other requirements:
 - Glazing details: 30 mm double glazed unit to DS/EN 1279, Uw 1.21 and gg 0.73 or 44 mm triple glazed unit to DS/EN 1279, Uw 0.73 and gg 0.63 with black warm edge spacer bar. Safety glass to BS. Aluminium thread plate to sill of opening light.
 - Ironmongery/ Accessories:

Windows & doors in wood-PUR-alu

To include: aluminium folded sill pressings, aluminium ventilators to achieve 2500mm² EA to fixed light, 2 number opening handles to operate a fully concealed multi-point locking mechanism with night vent position.

EXECUTION

710 PROTECTION OF COMPONENTS

- General: Do not deliver to site components that cannot be installed immediately or placed in clean, dry and covered storage.
- Stored components: Stack vertically or near vertically on level bearers, separated with spacers to prevent damage by and to projecting ironmongery, beads, etc.

750 BUILDING IN

- General: Not permitted unless indicated on drawings.
- Brace and protect components to prevent distortion and damage during construction of adjacent structure.

765 WINDOW INSTALLATION GENERALLY

- Installation: Into prepared openings.
- Gap between frame edge and surrounding construction:
 - Minimum: 9mm
 - Maximum: 15mm
- Distortion: Install windows squarely without twist or diagonal racking.

770 DAMP PROOF COURSES IN PREPARED OPENINGS

- Location: Ensure correct positioning of DPC's, DPM's and/ or cavity closers in relation to window frames. Do not displace during fixing operation.

784 FIXING OF COMPOSITE FRAMES

- As section () using galvanized mild steel cramps or as otherwise recommended by the manufacturer.
- When not predrilled or specified otherwise, position fixing not more than 150 mm from each end of jamb, adjacent to each hanging point of openings lights, and at maximum 600 mm centres.
- Fasteners appropriate to surrounding structure.

810 SEALANT JOINTS:

- Sealant manufacturer and reference: Adshead Ratcliffe Arbo LM low modulus silicone sealant or equivalent.

- Brush joints clean and free from all dust etc wipe the joint interface with an approved solvent wipe and allow for drying. Insert a foam backing strip or bond breaker tape to back of joint. Apply the Arbo LM low modulus silicone mastic (joint size 10 to 15mm typically). Tool joint with a smooth stick to leave neat professional finish.

- Colour: To compliment or match window colour.

- External seal

- Manufacturer: Compriband

- Range: Ilmod 600 tape,

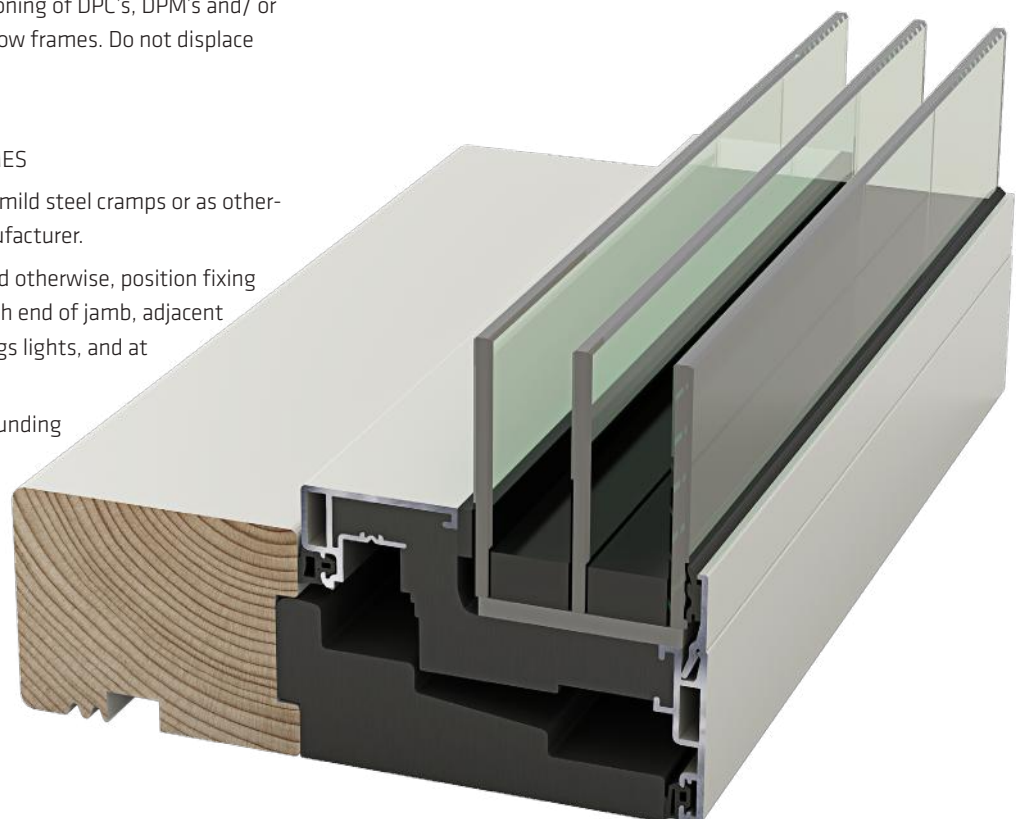
Colour: Anthracite/RAL7030 Grey or black

Certification: BBA 96/3309

Install windows into prepared opening, maintaining a 12mm +/- 4mm gap. Tape is to be placed between the wooden frame and window reveal. (Where there is a brick reveal the joint needs to be flush to ensure a suitable weather tight seal.)

820 IRONMONGERY:

- Fixing: Assemble and fix carefully and accurately using fasteners with matching finish supplied by ironmongery manufacturer. Prevent damage to ironmongery and adjacent surfaces.
- Checking / adjusting / lubricating: At completion check, adjust and lubricate as necessary to ensure correct functioning.



GENERAL

110 EVIDENCE OF PERFORMANCE

- Certification: Provide independently certified evidence that all incorporated components comply with specified performance requirements.

140 CONTROL SAMPLES

- Procedure:
 - Finalise component details.
 - Fabricate one of each of the following designated items as part of the quantity required for the project.
 - Obtain approval of appearance and quality before proceeding with manufacture of the remaining quantity.
- Designated items: _____

PRODUCTS

400 ALUMINIUM WINDOWS

- Drawing reference(s): ()
- Manufacturer:

Idealcombi UK Ltd.,
 Chancery Pavilion, Boycott Avenue,
 Oldbrook, Milton Keynes, MK6 2TA
 Telephone:- 01582 860940, www.idealcombi.com
- Product reference: FUTURA+ I - 53mm inward opening range of products
- Tilt & Turn / Tilt only or fixed - window
- Materials:
 - Exterior frame / sash cladding: Aluminium / Polyurethane / Aluminium inward opening sashes and fixed sashes.
 - External and Internal Finish: Polyester Powder Coated - Standard RAL colours (Matt or High gloss)
 - Interior frame section: Aluminium with 149mm (or 175mm) overall depth of frame.
- Exposure category classification requirements shall be indicated in conformance with:
 - DS/EN 12207 for air permeability
 - DS/EN 12208 for water tightness
 - DS/EN 12210 for wind load
- Glazing details: To DS/EN 1279 with black warm edge spacers, safety glass to BS EN12600:2002, below 800 mm above finished floor level and below 1500mm within 300mm of doors.
 - 28mm double glazed (High G): Glazing Ug 1.21 / Gg 0.73
 - [OR] 28mm double glazed (Medium G): Glazing Ug 1.14 / Gg 0.63
 - [OR] 48mm triple glazed (High G): Glazing Ug 0.61 / Gg 0.63
 - [OR] 48mm triple glazed (Medium G): Glazing Ug 0.52 / Gg 0.50
- Ironmongery/ Accessories:
 - To include: aluminium folded sill pressings, Futura + I inward opening window has a tilt & turn function.

Both opening functions are controlled by the same espagnolette handle in the locking jamb. In the closed position the handle is vertically downwards.

The tilt function is triggered by turning the handle 90° to the horizontal position.

The turn operation is triggered by turning the handle in the upright vertical position. The tilt function can be locked with a key and only opened as a Turn (side hung) function by using the key and turning the handle upwards.

EXECUTION

710 PROTECTION OF COMPONENTS

- General: Do not deliver to site components that cannot be installed immediately or placed in clean, dry and covered storage.
- Stored components: Stack vertically or near vertically on level bearers, separated with spacers to prevent damage by and to projecting ironmongery, beads, etc.

750 BUILDING IN

- General: Not permitted unless indicated on drawings.
- Brace and protect components to prevent distortion and damage during construction of adjacent structure.

765 WINDOW INSTALLATION GENERALLY

- Installation: Into prepared openings.
- Gap between frame edge and surrounding construction:
 - Minimum: 9mm
 - Maximum: 15mm
- Distortion: Install windows squarely without twist or diagonal racking.

770 DAMP PROOF COURSES IN PREPARED OPENINGS

- Location: Ensure correct positioning of DPC's, DPM's and/ or cavity closers in relation to window frames. Do not displace during fixing operation.

784 FIXING OF ALUMINIUM FRAMES

- As section () using galvanized mild steel cramps or as otherwise recommended by the manufacturer.
- When not predrilled or specified otherwise, position fixing not more than 150 mm from each end of jamb, adjacent to each hanging point of openings lights, and at maximum 600 mm centres.
- Fasteners appropriate to surrounding structure.

810 SEALANT JOINTS:

- Sealant manufacturer and reference: Adsheed Ratcliffe Arbo

Windows & doors in alu-PUR-alu

LM low modulus silicone sealant or equivalent.

- Brush joints clean and free from all dust etc wipe the joint interface with an approved solvent wipe and allow for drying. Insert a foam backing strip or bond breaker tape to back of joint. Apply the Arbo LM low modulus silicone mastic (joint size 10 to 15mm typically). Tool joint with a smooth stick to leave neat professional finish.

- Colour: To compliment or match window colour.

- External seal

- Manufacturer: Compriband

- Range: Ilmod 600 tape,

Colour: Anthracite/RAL7030 Grey or black

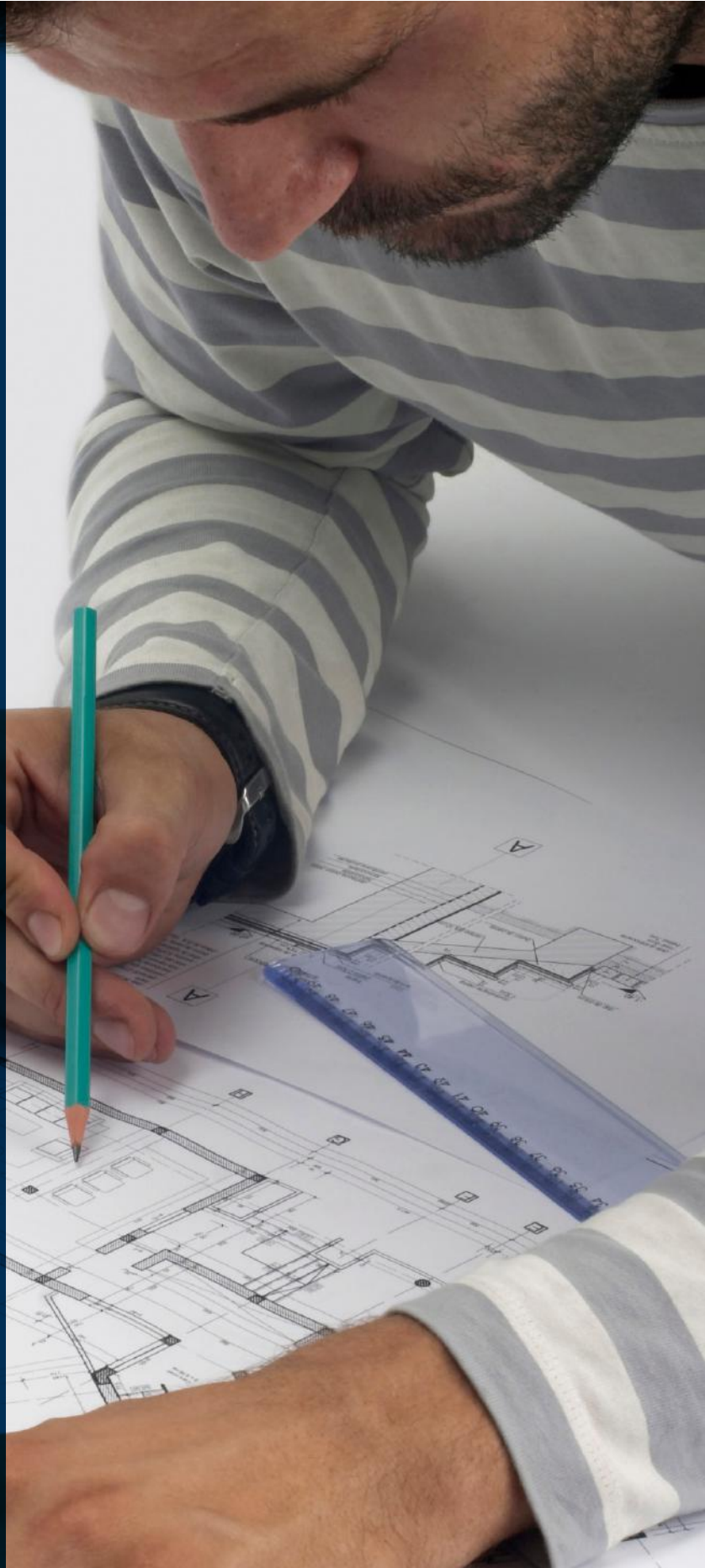
Certification: BBA 96/3309

Install windows into prepared opening, maintaining a 12mm +/- 4mm gap. Tape is to be placed between the wooden frame and window reveal. (Where there is a brick reveal the joint needs to be flush to ensure a suitable weather tight seal.)

820 IRONMONGERY:

- Fixing: Assemble and fix carefully and accurately using fasteners with matching finish supplied by ironmongery manufacturer. Prevent damage to ironmongery and adjacent surfaces.

- Checking / adjusting / lubricating: At completion check, adjust and lubricate as necessary to ensure correct functioning.



10 year warranty

Warranty for the aluminium|timber composite products from Idealcombi UK Ltd..

The following warranty conditions shall come into effect upon placing of an order. These conditions shall be valid from 1 June 2002.

1. WINDOWS AND DOORS

1. This warranty is given by Idealcombi UK Ltd.. It does not in any way restrict or change any of the rights you may otherwise have vis-à-vis your supplier/contractor or Idealcombi A/S as provided by a contract or general legislation.

2. If you, within a period of 10 years from Idealcombi's time of delivery, complain about any defects in manufacture or materials, this warranty shall give you the rights described in item 3 against Idealcombi UK Ltd.. The time of manufacture will appear from the label on the product. If requested, you will be responsible for providing documentation for the time of delivery.

3. Provided that you make a legitimate complaint about defects in manufacture or materials within the period mentioned under item 2, Idealcombi UK Ltd. shall be obliged to repair the defect or, if necessary, supply a new product at its own expense. Idealcombi UK Ltd. does not, however, under this warranty cover the costs of removing and installing, just as any subsequent works arising from such replacement of a product are not covered by this warranty. If the product is no longer in production when the complaint is made, Idealcombi UK Ltd. shall be entitled to supply another similar product instead. If a defect in manufacture or materials can be properly corrected by repair/partial replacement, Idealcombi UK Ltd. may choose this solution instead. In such case the repair work/partial replacement will be made at the expense of Idealcombi UK Ltd..

4. This warranty does not give you any rights other than those described under item 3.

5. If you wish to complain about defects in manufacture or materials, the complaint must be made within a reasonable period of time after the defect has been or should have been detected. Complaints can be made to Idealcombi UK Ltd. or to the contractor/dealer who has supplied the product.

6. This warranty does not apply in case the claimed defects in manufacture or materials are caused by faulty installation, missing or insufficient maintenance or faulty operation. Please see Idealcombi's Installation and user manual. As regards the window's wood components, which have received surface treatment at the factory, please take special notice of the Installation and user manual and "Expected outcome of surface-treated wood components" (Appendix 14 of the

technical regulations of The Danish Window Manufacturers' Association (DVV). You can order the regulations from Idealcombi UK Ltd.). It is important that the exterior window surfaces are washed twice a year to keep the properties of the surface-treatment. If you did not receive an Installation and user manual along with your consignment, you can order one from Idealcombi UK Ltd..

7. This warranty does not cover defects which are the result of circumstances other than normal application and use. Idealcombi A/S is not liable under this warranty for defects which are caused by faulty storage, transportation, installation, etc. by a dealer/contractor.

8. This guarantee applies solely to products purchased and installed in England, Wales, Scotland, Ireland, Isle of Man, Orkney and Shetland Isles, Channel Isles and Iceland.

9. A 10-year warranty is granted for sash doors – only a 5-year warranty for foam core flush doors.

2. DOUBLE GLAZING UNITS

For a period of 10 years calculated from the time of manufacturing (as stamped into the unit), Idealcombi UK Ltd. warrants that double glazing units mounted in doors/windows remain free of dust and mist inside the units. The warranty shall apply on the condition that:

- The unit is mounted at the factory or by one of Idealcombi's fitters
- The time of manufacture (month and year) appears from the unit's spacer bar
- The unit has been properly cleaned and protected during the construction period
- The glass has not been damaged on the outside by e.g. bumps, impacts, movements of adjacent constructions and the like
- There are no defects caused by frost bursts, other thermal impacts or chemical impacts on the glass
- The unit has not been subject to subsequent treatment upon delivery such as sanding, sandblasting, etching, painting, affixing or other forms of surface treatment
- Sash and frame have been subject to proper, regular maintenance.

3. ELECTRICAL EQUIPMENT

A 1-year warranty is granted for all electrical equipment.





” Summer Strand

The Futura + windows and sliding doors were selected for both aesthetic and practical reasons. The simple and consistent sight lines look great when viewed both externally and from within the spaces, especially when we have a combination of opening and fixed units.

Dan Lethbridge

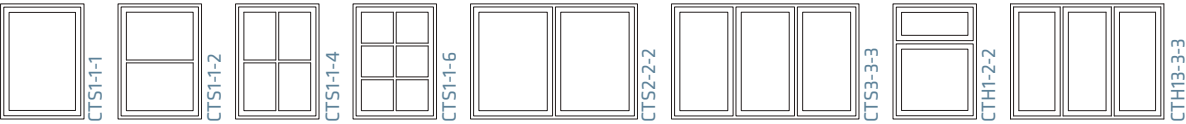
RIBA MRIAI

Dan Lethbridge Architects

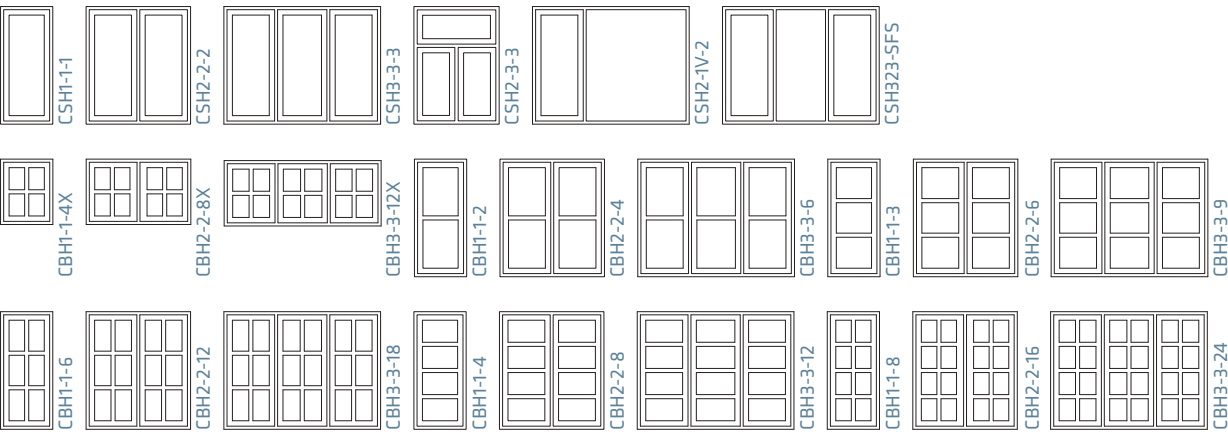


Elevations - Frame IC/Nation IC

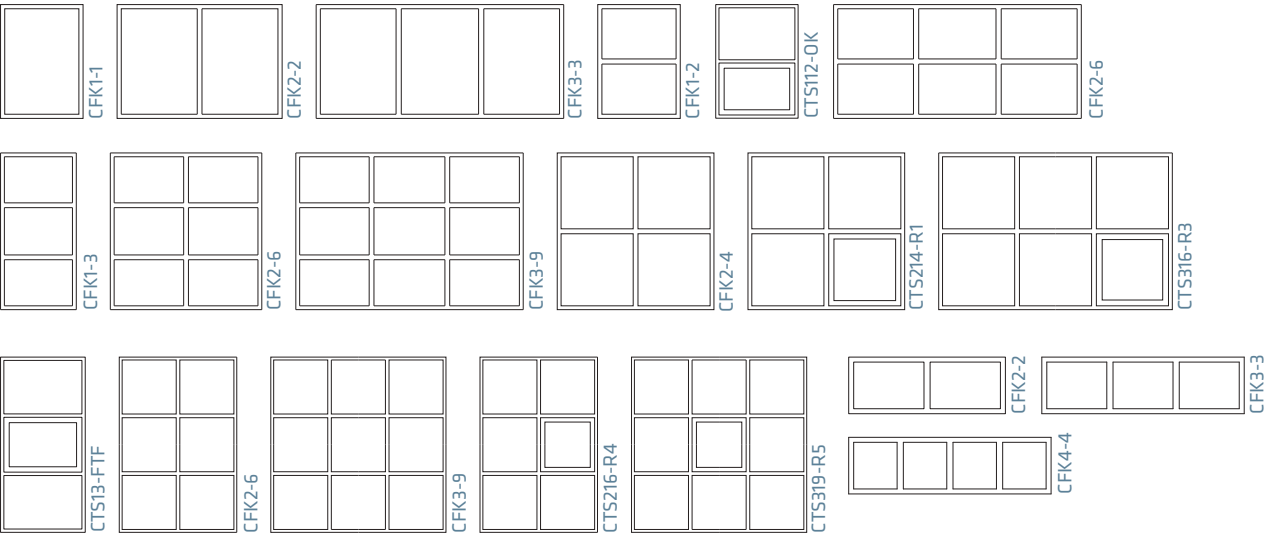
Top Guided | Top Swing



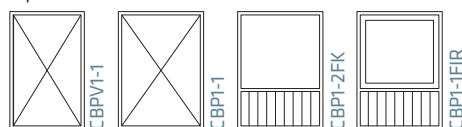
Side Hung | Side Guided



Fixed Light



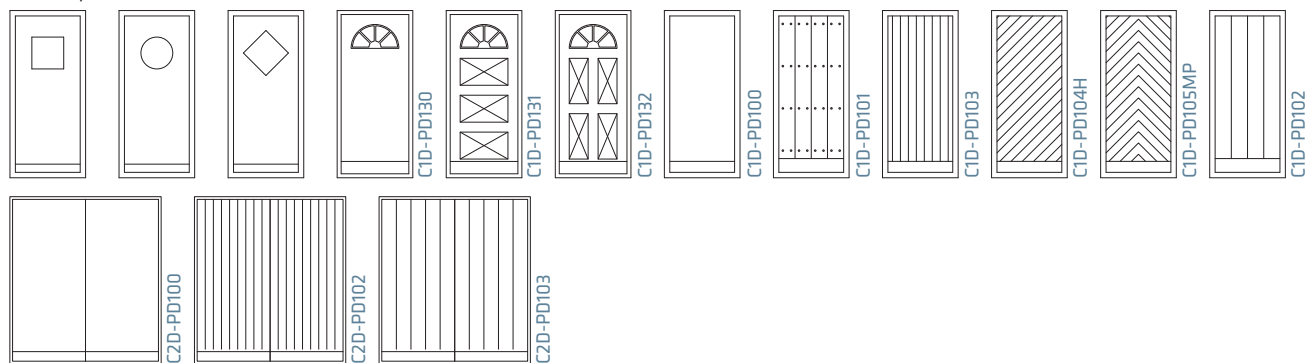
Spandrels



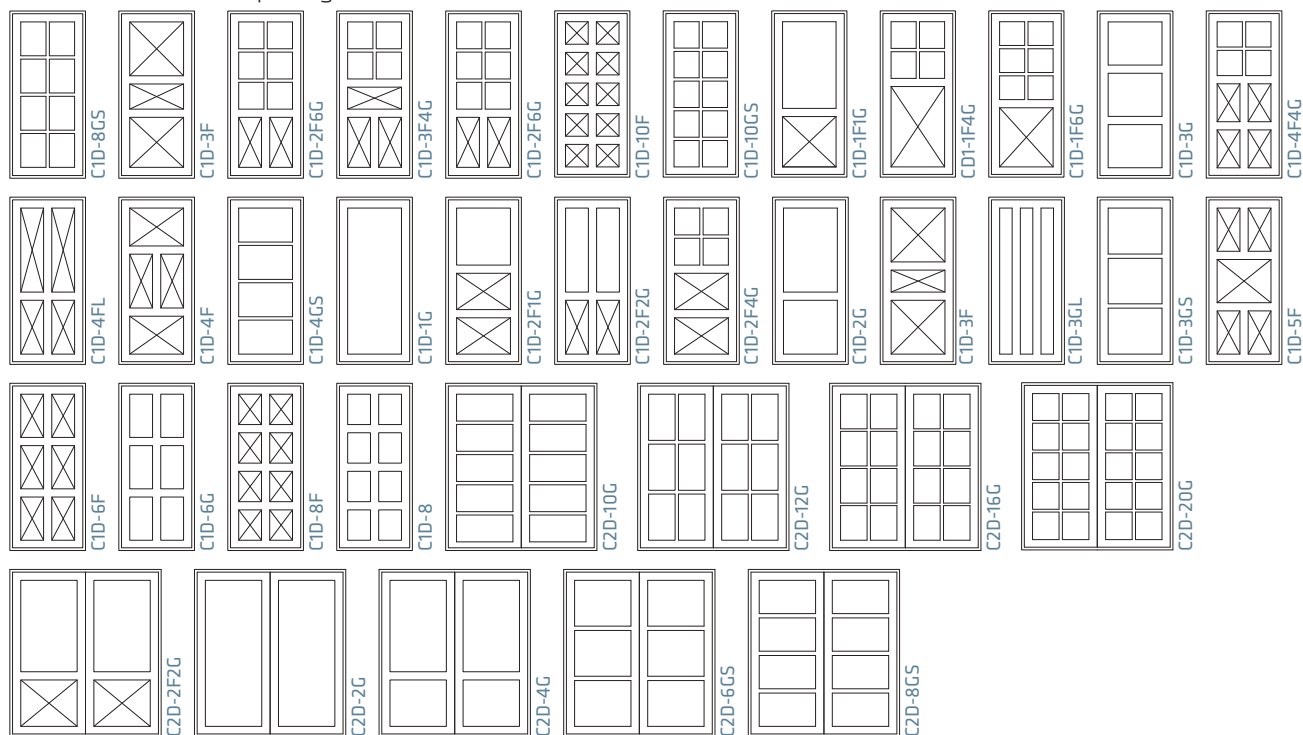
Louvre panels



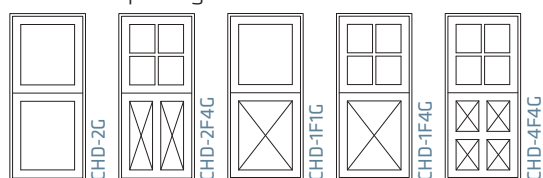
Flush panel doors



Inward and outward opening entrance and terrace doors



Outward opening stable doors

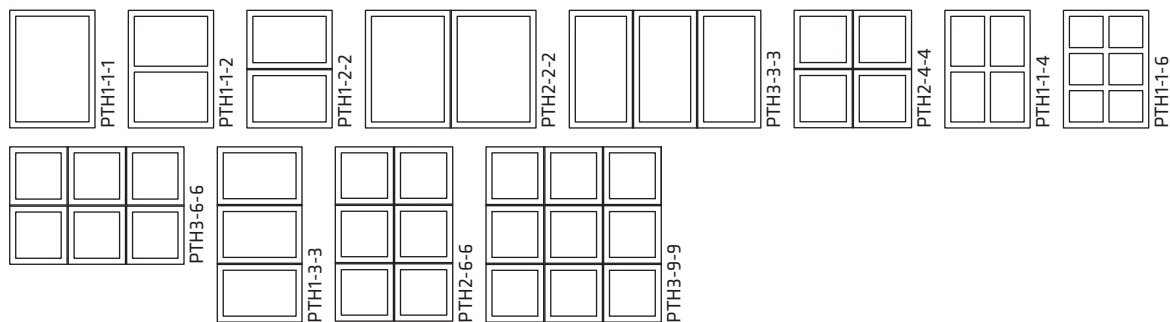


Side lights



Elevations - Futura+/Futura+i

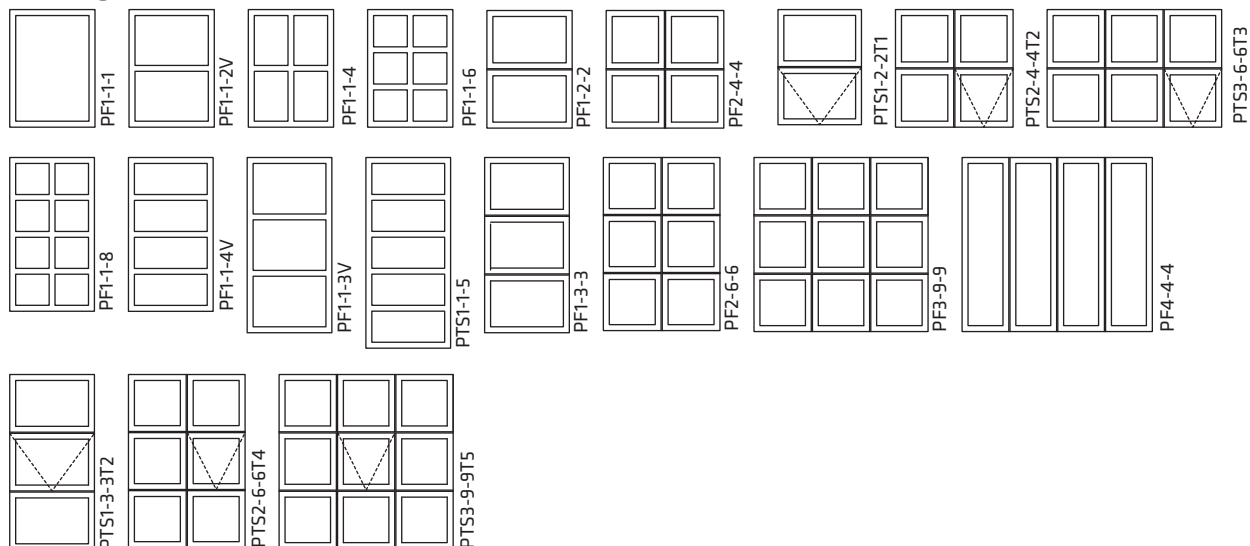
Top Guided



Side Hung | Side Guided



Fixed Light

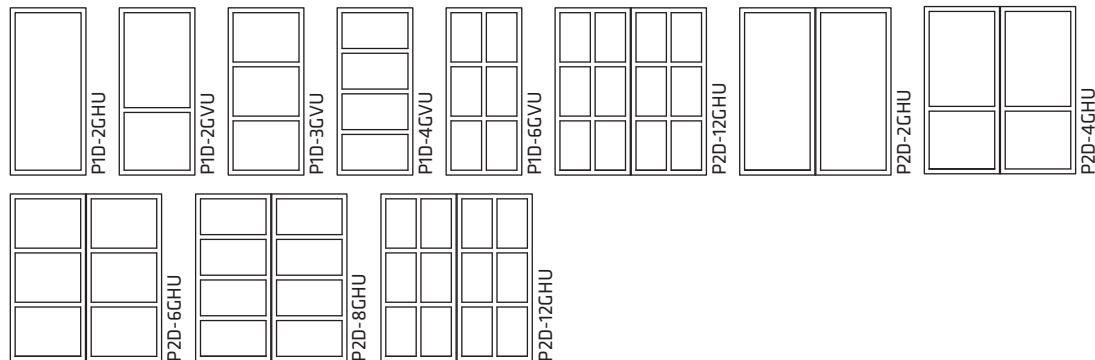


Top Swing

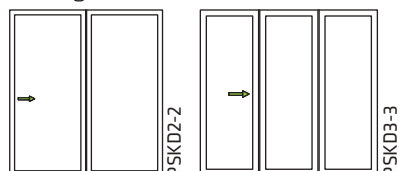


Louvre Panel

Outward Opening Terrace Door



Sliding Doors



Double Sliding Door









Standard conditions of sale and delivery

1. DEFINITIONS

- (a) The term 'Idealcombi' means Idealcombi UK Ltd., Chancery Pavilion, Boycott Avenue, Milton Keynes, MK6 2TA, United Kingdom.
- (b) The term 'Buyer' means the person, firm or company whose order is accepted by Idealcombi.
- (c) The 'Goods' shall be the items supplied by Idealcombi in accordance with the agreed order.

2. QUOTATIONS

Quotations are valid for a period of 30 days from the date of issue unless otherwise stated in the quotation. Delivery dates referred to in the quotation are for guidance only and upon receipt of an acceptable order Idealcombi will agree with the Buyer a mutual acceptable delivery schedule. Amendments after acceptance of the order will not be acceptable without adjustment to the price.

3. SPECIFICATIONS

It is the responsibility of the Buyer to provide any necessary specifications, drawings, designs and other information necessary for the production of the Goods in sufficient time to enable Idealcombi to meet any agreed delivery date or dates. A delay occurring in the provision of such information may lead to a delay in delivery. The Buyer hereby indemnifies Idealcombi in full against costs, expenses or damages arising from such delay. The Buyer shall be responsible for ensuring that any specifications, drawings, designs and the like are correct and sufficient for the Buyer's purpose. The Buyer will also indemnify Idealcombi against any claims, loss, damages and expenses awarded against Idealcombi for breach or infringement of any copyright, trademark or intellectual property rights of any third party arising from the manufacture of the Goods as a result of the specifications, drawings or designs supplied by the Buyer.

4. DESIGN

(a) Where Idealcombi are responsible for design of the Goods, Idealcombi shall in performance of such design exercise the reasonable skill and care to be expected of a competent professional designer, but Idealcombi shall not have any liability to the Buyer in respect of the design of the Goods except in so far as they have failed to exercise such reasonable skill and care.

(b) Idealcombi does not accept responsibility for the design, strength, stability or suitability including tolerances of the sub-structure to receive Idealcombi Goods nor for any adverse effects caused to its work by reason of latent defects, which may occur in sub-structure constructed by others.

5. DELIVERY

- (a) Time for delivery is not of the essence & Idealcombi shall not be liable for any loss or damage caused by late delivery or by non-delivery.
- (b) Unless otherwise agreed in writing, Idealcombi will package the Products as Idealcombi in its sole discretion considers appropriate in the light of the nature of the Products and method of transportation. Special packaging will be at the Buyer's expense and may delay delivery.
- (c) Goods shall be delivered to the Buyer's designated place or otherwise agreed site and the goods will be considered delivered upon arrival prior to off-loading. Where delivery is on a hiab driver off-load lorry, pallets will be lowered to the ground, adjacent to the lorry. It is the Buyer's responsibility to off-load the goods on articulated or flat bed lorries and for any damage caused whilst off-loading the goods. It is the Buyer's responsibility to inspect the goods for any damage or defects. It is the Buyer's responsibility whilst inspecting the goods to notify Idealcombi in writing and by marking the carrier's receipt with details of any damage or defects. If the Buyer fails to so notify Idealcombi of any damage or defects at the time then no claims will subsequently be accepted for damage or defect to the goods.
- (d) Should the Buyer fail to take delivery of the goods for any reason on the agreed date then the Buyer will reimburse Idealcombi for all costs or expenses in re-delivery and/or storage charges. Re-delivery and storage costs must be agreed in writing prior to re-delivery.
- (e) The time allowed for un-loading the delivery lorry is 2 hours for a full load and 1 hour for a part load. If this time is exceeded then waiting time (demurrage) will be charged.
- (f) Should the goods be damaged for any reason Idealcombi will not entertain any claim for consequential loss. (g) The Buyer shall notify Idealcombi in writing of any shortfall of Goods delivered, or any nondelivery of the Goods, within 3 Working Days of delivery or, in the event of non-delivery, of the Anticipated Delivery Date. Idealcombi shall be entitled to make good any shortage or non delivery of the Goods.

6. TERMS OF PAYMENT

Unless otherwise specifically agreed the following terms of payment will apply:

- (1) Invoices are submitted at the same time as the Goods and payment shall be 30 days from the date of the invoice. Payment shall be of the essence of the contract and no deductions can be made from the invoices submitted without the prior written approval of Idealcombi. The payment must be made free of all deductions, withholdings, set-offs etc.
- (2) If payment is not made in full when due then Idealcombi may, without prejudice to any other rights and remedies, suspend performance or delivery under this or any other contract with the Buyer. Idealcombi shall be entitled to interest on any overdue payments at a rate of 2% per month, on the balance outstanding until payment has been received in full by Idealcombi.

7. RETENTION OF TITLE

Until Idealcombi has been paid in full for the Goods supplied to the Buyer including any interest payable on late payments Idealcombi shall retain legal and beneficial title in the Goods. The ownership of the Goods will only pass to the Buyer when he has met all that is owing to Idealcombi no matter on what grounds. Until the date of payment of what the Buyer owes Idealcombi the Buyer shall keep the Goods in question for Idealcombi in the capacity of fiduciary owner and if required by Idealcombi shall store the Goods

separately and in such a way that they are clearly the property of Idealcombi and can be recognised as such until payment has been made in full. If Idealcombi so desires they shall be allowed to enter on the site and dismantle and remove Goods supplied pursuant to the contract and the Buyer hereby grants to Idealcombi an irrevocable licence to enter upon the site for this purpose.

8. WARRANTIES

Subject to payment in full for the Goods Idealcombi warrant that the Goods will correspond to their specification and will be free from defects in materials and workmanship for a period of ten years from the date of delivery. Provided that the Buyer has installed, maintained and transported the Goods in accordance with the directions of Idealcombi. Any defects must be notified to Idealcombi within 7 days of delivery or where the defect would not become apparent upon reasonable inspection, within a reasonable time after the discovery of the defect. No liability will be entertained for defects arising from fair wear and tear, neglect, misuse or improper adjustment of the Goods nor where the defect is a result of a specification or other information provided by the Buyer. Idealcombi must be given the opportunity to inspect any defects notified to them and if such inspection reveals that they are liable for the defect then Idealcombi may at their discretion either refund an appropriate amount of the purchase price, repair the Goods or provide replacement parts. When replacement Goods or parts are supplied the Buyer will be responsible for the cost of removing the defective Goods and installing the replacement Goods or parts.

9. NOTICES

All communications between the parties as required by these terms and conditions shall be by registered mail or delivered by hand to the other party's registered office or other office as may be notified from time to time. Notices shall be deemed to have been received 2 business days after posting if registered or by close of business on the day if delivered by hand.

10. TERMINATION

If the Buyer does not pay Idealcombi any amounts due under the contract or is otherwise in breach of any of the terms of this contract then Idealcombi may serve a notice on the Buyer specifying such failure or breach and requiring it to be remedied and if the Buyer fails to remedy the same within 7 days then the contract will be terminated forthwith. If the Buyer makes any arrangement with its creditors or being individual or firm commits any act of bankruptcy or goes into liquidation or has a receiver appointed then Idealcombi might upon the giving of a notice terminate the contract forthwith. Upon termination of the contract the Buyer shall pay to Idealcombi the total amount properly due them for Goods already supplied and for Goods being manufactured up to the date of determination. Such payment shall not prejudice Idealcombi's right to sue for and recover damages and/or loss and expense to which Idealcombi may additionally be entitled to.

11. PATENTS, TRADEMARKS, INTELLECTUAL PROPERTY RIGHTS

The Buyer shall indemnify Idealcombi against all damages, penalties, costs and expenses to which they may become liable as a result of work done in accordance with the Buyers specification, which involves infringement of a patent, design or copyright. All intellectual property rights in the Goods and drawings and other technical information whatsoever which is submitted to the Buyer by Idealcombi in connection with the contract shall belong to Idealcombi and must not be copied or given to any third party without the express permission of Idealcombi. This extends without limitation to any patents, trademarks, names, copyright, design rights and the like.

12. FORCE MAJEURE

Without prejudice to any other of these conditions Idealcombi shall not be liable to the Buyer or deemed to be in breach of contract by reason of any delay arising from matters beyond its reasonable control, including war, terrorism, government restrictions, fire, flood, storm, explosion, accident, civil disturbance, shortage or unavailability of labour or materials, industrial action or transportation delays.

13. CONTRACTS (RIGHTS OF THIRDPARTIES) ACT 1999

The parties to this contract hereby confirm that the contract and the conditions shall not confer on any third party any right or benefit and the provisions of the Contracts (Rights of Third Parties) Act 1999 are hereby excluded in full.

14. DISPUTE RESOLUTION

- (1) In the event of a dispute arising under the contract either party may give notice in writing to the other party detailing the dispute and the remedy sought. Within 28 days of the issuing of such a notice the parties will meet and use their best endeavours to settle the dispute between them.
- (2) In the event that the parties fail to resolve any dispute under item (1) either party may refer the matter to an adjudicator for a decision as detailed in Item (3) below. A decision given by an adjudicator shall be binding on the parties until a final resolution has been reached in a court of law.
- (3) Should a party wish to refer a dispute to adjudication then the parties will be bound by the rules and procedures laid down in the Housing Grants, Construction and Regeneration Act 1996 Sections 104 to 117 and the Scheme for Construction Contracts (England and Wales) Regulations 1998. It is agreed between the parties that Section 105 of the Construction Act is amended to include this contract and that Section 105 Sub-section (2)(d) is deleted.

15. GOVERNING LAW

These conditions and this contract shall be subject to and construed in accordance with English Law and the Buyer agrees to submit to the jurisdiction of the English courts. Any terms and conditions submitted by the Buyer will not be effective and these terms and conditions will prevail.

05.2021