



A FULLY SCULPTURED
70 mm PVC-U WINDOW
AND DOOR SYSTEM

www.aluplast.co.uk







#### Innovation

Constant development and innovation is the key to our success. Every year, aluplast proudly presents market-driven product innovations. We analyse current markets to create products that satisfy demand in order to meet our customers' expectations.

#### Partnership

Our customers, partners and the whole aluplast staff are the centrepiece and the driving force of our velocity. Close partnership and cooperation between the aluplast headquarters and our many different production plants and sales offices all over the world form a synergy beneficial to everyone.

#### Flexibility

Flexibility is our greatest strength! Short communication channels, flat hierarchies and lean structures allow us to respond rapidly and dynamically to customer demands and market requirements.

#### Compatibility

"Compatibility" is the magic word of our product policy. aluplast products are designed to match each other and can be combined with a wide range of auxilliary profiles.



aluplast is considered the technology trailblazer in the sector and can prevail against 500 competing applicants in the prestigious contest "Industriepreis 2011".

aluplast reaches the finals and thus ranks among the best three in the category "Research and Development" due to the remarkable uPVC window system energeto<sup>®</sup>.

In 2011, the company again is one of "Germany's Best" and the year after, the finalist of the "Entrepreneur of the Year 2012" contest.

Finally, in 2016, the window system provider from Karlsruhe in Southern Germany received the TOP 100 award for being one of the 100 most innovative medium-sized companies in Germany.



When you choose aluplast you get the best of both worlds: the kind of knowledge and attention to detail that can only be provided by a local specialist together with the backing of a leading international brand.







# IDEAL 70. The new generation PVC-U window and door system from aluplast.

EFFECTIVE SOLUTION FOR ANY BUILDING DETAIL

The system has been designed to 'tick all the boxes' for state of the art windows and doors and features advanced design and system engineering. IDEAL 70 is a fully integrated profile suite designed using the latest computer aided techniques combined with many years of experience.

The result is a window and door system which meets the requirements of today's challenging marketplace and which will continue to excel in the future.

IDEAL 70 is both attractive in appearance and effective in application. The fully sculptured profiles and matching glazing beads result in windows and doors with classic styling and tremendous appeal for consumers.

The system boasts many advanced design features, enabling simple and economic fabrication and installation.

Advanced design affords IDEAL 70 a considerable degree of future proofing, allowing the system to take in its stride current trends and potential future requirements of UK Building Regulations.

The fully integrated profile suite ensures that all IDEAL 70 product types harmonise beautifully on any elevation regardless of the style of property.

Three outer frame height options (50mm, 60mm and 75mm) and two mullion sizes (70mm and 80mm) provide for frame designs that can accommodate most wind load requirements and reveal details.



A comprehensive range of cills, couplings, frame extensions, bay connectors and ancillary profiles complements the IDEAL 70 main profile suite to provide effective solutions for almost any building detail.

## IDEAL 70 System provides for easy and cost effective fabrication of the following types:

- Outward opening Casement Windows with dedicated internally or externally glazed sashes.
- Inward opening Tilt and Turn windows
- Horn Sash
- Residential Doors inward or outward opening
- French Window or Double Casement Windows inward or outward opening
- French or Double Doors inward or outward opening
- Lift and Slide Patio Doors
- Multislide Patio Doors
- Stable Doors
- Bi Fold Door

The IDEAL 70 system is available in a beautiful white lustre finish (RAL 9016) and also in the following elegant coloured foiled finishes as a standard stock offer:

- Rosewood foil on one side on white base
- Rosewood foil on both sides on brown base
- Golden Oak foil on one side on white base
- Golden Oak foil on both sides on caramel base
- Palisander (black) foil on one side on white base
- Cream foil on one side on white base
- Anthracite on one side on white base

A comprehensive range of 27 coloured foil finishes and combinations for you to choose from.

70mm Thermally Efficient Five chamber profile

IDEAL 70 boasts five chambers (front to back) at the core of its design philosophy. Having two chambers either side of the reinforcement chamber greatly reduces thermal bridging and provides a superb thermal insulation performance.

Acoustic insulation or noise reduction is also much improved so windows manufactured from IDEAL 70 provide the householder with a greater level of all round comfort and well being. The five chamber construction and resulting thermal performance means that IDEAL 70 is well prepared for any changes to specifications or building regulations calling for enhanced thermal efficiency.

#### A+ WER BFRC

The use of a main profile depth of 70mm allows the easiest installation into most building details; enabling installers to fix back to the internal plaster line and still cover any remaining paint lines on the external substrate.

A profile depth of 70mm also allows for greater flexibility with regard to glazing thickness. IDEAL 70 permits glazing of 28mm or 24mm double and 36mm or 40mm triple glazed high performance units with the same consummate ease.

The profile design incorporates lugs to locate the reinforcement profiles. Orientation options are provided for steel reinforcements that allow optimum selection for economic production and facilitate insertion of reinforcement profiles prior to welding of the PVC-U sections.

The base design of IDEAL 70 outer frame sections provides compatibility with a wide range of aluplast ancillary profiles including cill sections, frame extensions, bay corner solutions and many other sections



## German design & technology.

#### 1. Matching bead and profile design

The bead shape mirrors the shape of the upstand to the glazing rebate to provide a beautiful balanced appearance with identical sightlines. The finished window looks identical viewed from inside or outside; simply stunning! While 28mm high performance double glazed sealed units have become the performance standard in the domestic sector, IDEAL 70 recognises the need for the option of 24mm glazing depth to meet a wider range of window and door specifications for other market sectors. Glazing beads for both 28mm and 24mm sealed units both offer a fully sculptured appearance that perfectly complements the sculptured profile detail. Triple glazing can easily be produced utilizing our 36 and 40 mm glazing beads.

#### 3. Single leg glazing bead

IDEAL 70 employs a secure single leg 'knock-in' or J-bead design. The single leg bead makes for faster, easier installation and provides the cleanest glazing platform. Installers love the way the single leg bead locates and the single leg format affords both stability and security while also easily accommodating normal glazing tolerances. aluplast' secure bead system passes Secure by Design and PAS24 with ease. Choose from either black or papyrus grey gasket

#### Equal V notching

Internally glazed casement windows have steadily grown in popularity and today enjoy market dominance in most sectors. To achieve an internal glazing detail in both opening and fixed light sections of the window requires 'reverse butt' welding of the outer frame profiles. IDEAL 70 has been cleverly designed to utilize equal V-notching for transoms and mullions resulting in a balanced appearance with equal length feature grooves that complement the stunning appearance of the IDEAL 70 window.

#### 2. Fully sculptured profiles

IDEAL 70's cleverly designed sculptured shape makes for simply stunning windows and doors. Beautiful both inside and out with a design focused on symmetry, IDEAL 70 windows and doors are perfect for replacing the replacements; an important development for the future of the industry. IDEAL 70 windows and doors are eminently desirable for the end user. IDEAL 70 is as easy to fabricate as it is stunning to look at. The positive stops at either extreme of the sculptured shape give defined datum points for modern window fabrication machinery and also make fabrication easier in more basic fabrication environments. IDEAL 70 combines stunning good looks with ease of fabrication.

#### 4. Co-extruded gaskets

IDEAL 70's co-extruded gaskets eliminate the need for the time consuming application of weather seals and gaskets to frames and sashes following the welding process as part of fabrication. The time saved will provide an increase in fabrication efficiency. Using IDEAL 70 with its co-extruded gaskets will also enable the fabricator to reduce stockholding. IDEAL 70 gaskets provide outstanding weather performance and complement the profiles' elegant sightlines. Co-extruded gaskets eliminate "the shrinking back" effect typical of old gasket systems and therefore prevent any gaps in corners. IDEAL 70 windows and doors are also easier to fit and come in two options of ether black or papyrus grey gasket.





## Sustainability and Eco-Management

An ecologically sound production process as well as a sustainable designed work place form a crucial part of the aluplast eco guidelines, which are reflected in our environment-friendly products and processes manufactured under strict European legislation.

## **Emphasis on Recycling**

The raw materials used for our window profiles are based on a calcium-organic chemical compound that is strictly lead-free. With this eco-friendly attitude and our involvement in VINYL 2010 Project, which promotes the use of recycled materials in our profiles. Aluplast offers window systems that can be fabricated and recycled in an ecologically managed system.

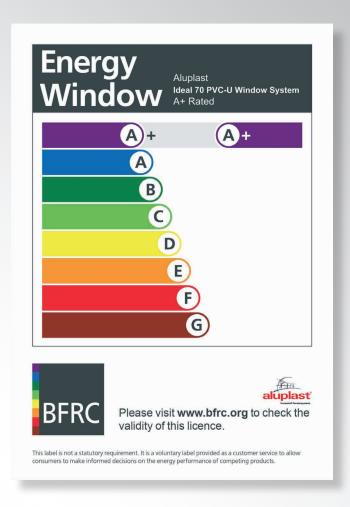
## Protecting the environment actively with PVC-U windows

aluplast PVC-U window systems live up to what they promise: An outstanding product quality and a long service life contribute actively to the conservation of the natural environment.

## Responsibility towards People and the Environment

aluplast assumes responsibility for people and the environment and, together with customers and partners, contributes actively to the protection of our natural environment!





## Ecotech 70

eco-tech 70 delivers a step-change in the use of recycled material and content in a new generation of sustainable and energy efficient PVC-U windows and doors.

We extrude recycled and virgin material simultaneously through a single die to create a single profile. This locks recycled material away from areas of the frame visible to the end-user or which perform a structural role.

It allows us to utilise a high percentage of recycled content but to guarantee surface appearance, finish, quality and depth of gloss. The surface is perfect – no pits, no extrusion lines.

With an A+ rating for material type from the Building Research Establishment in its Green Guide, it makes the eco-tech 70 among the UK's most sustainable window and door system options.



All aluplast coloured foil finishes feature innovative technology which improves performance characteristics providing a much longer life cycle of the surface finish. Our lamination foils utilise special patent-protected pigments which considerably reduce the surface temperature of coloured foil finished profiles. There is an extensive range of coloured foil finishes to choose from – some examples are shown on the right.

NOTE: The colour representation given here may vary from the actual foil colours used in the product due to the limitations of print technology.

#### Standard foil colours







Ap33 palisander



Ap49 cream



Ap56 rosewood



Ap40 anthracite grey

#### Custom foil colours



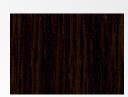
Ap01 oak special



Ap02 natural oak



Ap05 mahogany



Ap06 dark oak



Ap15 Oregon 111



Ap27 walnut



Ap28 walnut terra



Ap29 walnut amaretto



Ap30 dark green



Ap32 dark red



Ap34 grey



Ap41 steel blue



Ap43 green



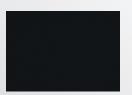
Ap44 White Woodgrain



Ap47 Brilliant Blue



Ap52 birch



Ap60 anthracite grey sanded



Ap61 grey sanded



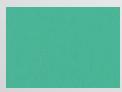
Ap62 basalt grey sanded



Ap63 aluminium brushed



Ap96 irish oak



Ap97 chartwell green

#### Glazing beads Main profiles 72 209001 209002 209009 259906 100819ы 100849 pw 100303 100304 Glazing → 28 mm 100817 ы 209005 100847 pw 75.5 Glazing -> 24 mm 100306 100307 120849 ы 120879 pw Glazing → 36 mm 209004 209016 209004 209004 \$ 56 140631 ы 140661 pw Glazing -> 40 mm 100309 100308 209003 209010 209015 8 100313 100312 100311 100314 Seals

449340 ы

447340 pw

449343 ы

447343 pw

449980 ы

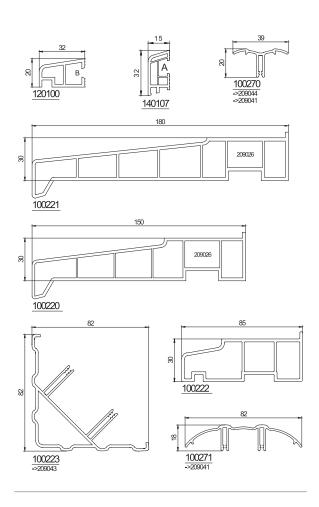
447980 pw

IX 409104<sub>gr</sub>

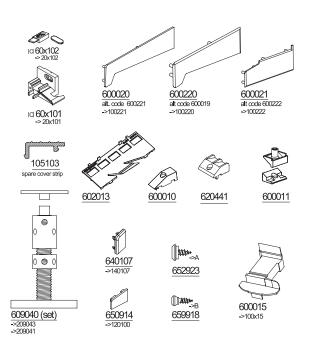
8

100315

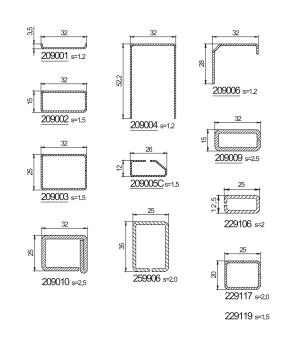
#### Additional profiles



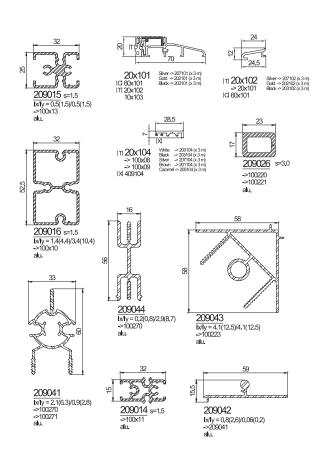
#### Equipment



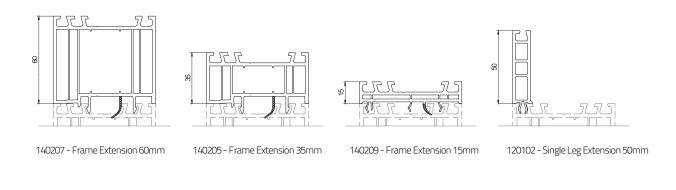
#### Reinforcements

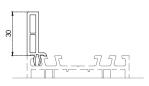


#### Aluminium profiles

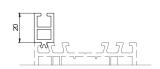


#### Outerframe extension profiles







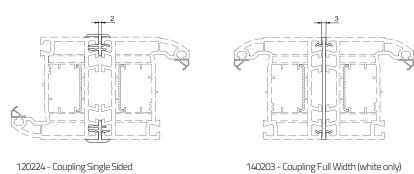


120106 - Single Leg Extension 20mm

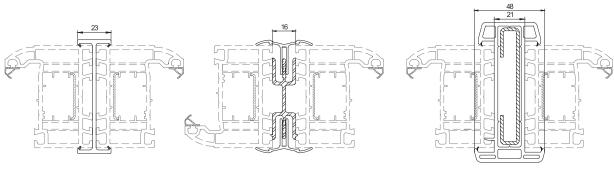


120236 - Single Leg Extension 15mm

#### Couplings



120224 - Coupling Single Sided

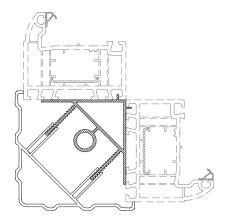


140267 - Coupling Full Width

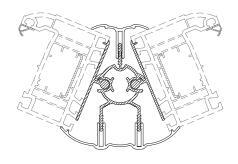
209044+2x 100270 - Multi Vista Coupler

140218 (229018) - Structural Coupling

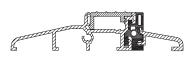
#### **Assemblies**



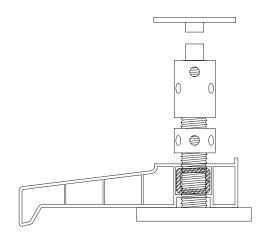
90° Aluminum Post (209043) + Decorative Cover (100223)



Variable Angle Bay Post (209041)+Adapters (209042) +covers (100270+100271)

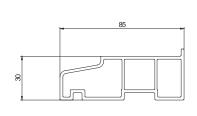


Residential door low threshold (20x101) +ramp 20x102

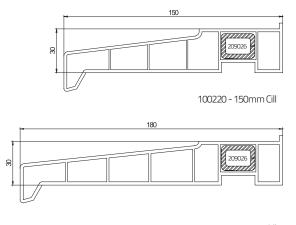


Jack (609040) for 209041 and 209043 - available for 100220 and 100221 only

#### Cills

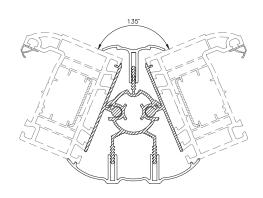


100222 - 85mm Stub Cill



100221 - 180mm Cill

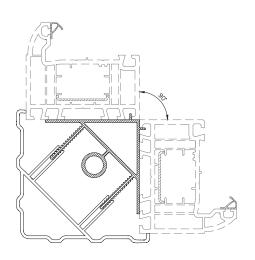
#### Bay & Angle Assemblies



#### 209041 / 209042 / 100270 / 100271

209041 - Variable Post (Aluminum) 209042 - Adapter ( Aluminum) 100270 - Internal Cover (PVC) 100271 - External Cover (PVC) -> 609040 - Jack

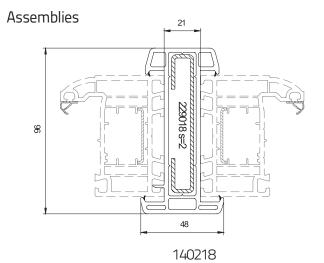
For load bearing solutions



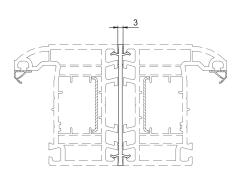
#### 209043 / 100223

209043 - 90 Degree Post (Aluminum) 100270 - External 90 Degree Cover (PVC) -> 609040 - Jack

For load bearing solutions

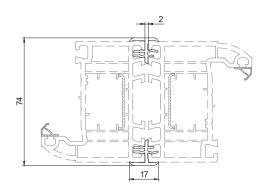


140218 - In line structural Coupler (PVC)



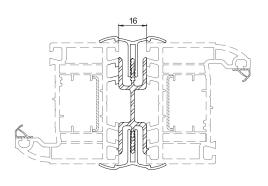
140203

140203 - In line Coupler (PVC) Available in white only



120236

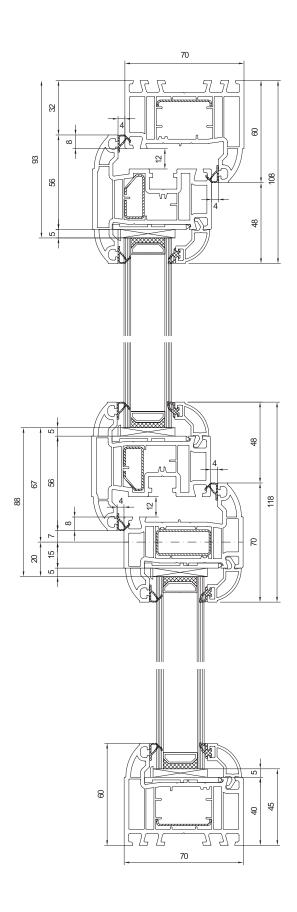
2x 120236 - In line Coupler (PVC)



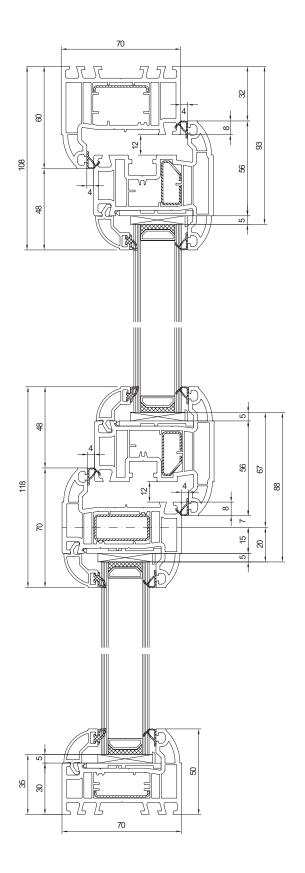
#### 209044 / 100270

209043 - In line Coupler (Aluminum) 2x 100270 - Internal Cover (PVC)

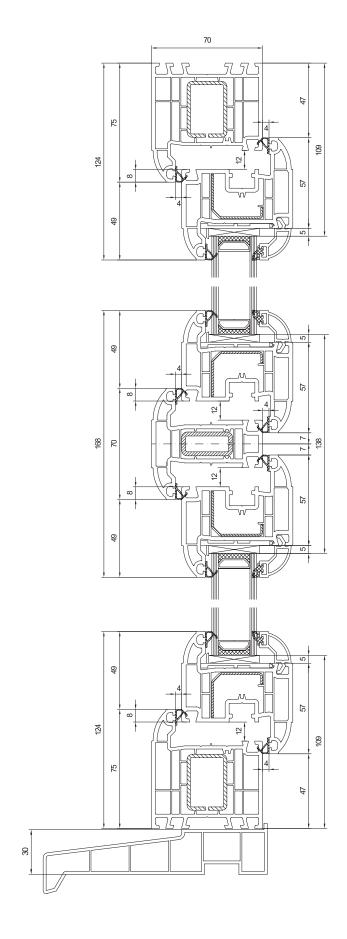
For non-load bearing solutions

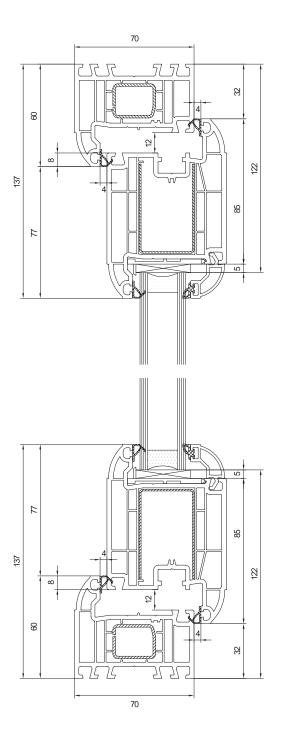


Internally glazed casement window



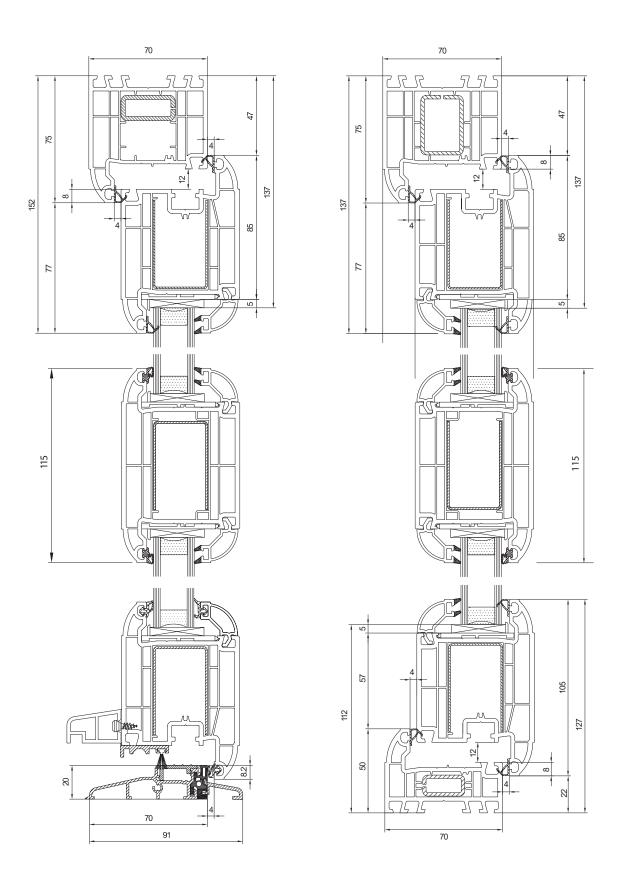
Externally glazed casement window





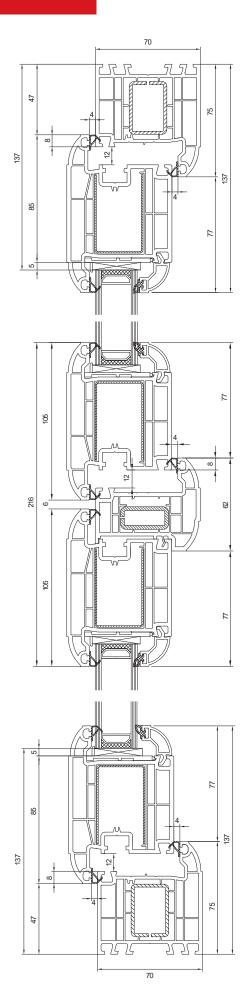
Tilt & turn window

Tilt & slide patio door

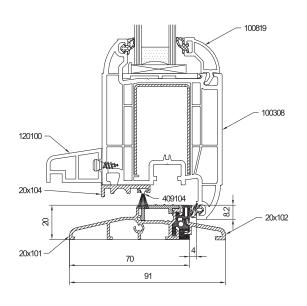


Inward opening residential door

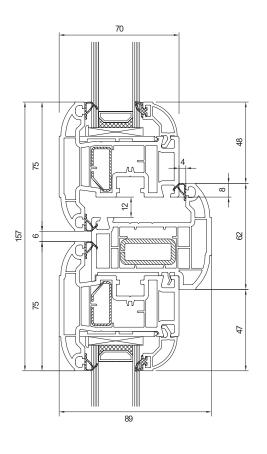
Outward opening residential door



French door fly mullion



Low threshold



French window

#### Accreditations

The Aluplast IDEAL 70 system conforms to the requirements of BS EN 12608:2003 unplasticised polyvinyl chloride (PVC-U) profiles for the fabrication of windows and doors – classification, requirements and test methods, certificate number KM 13468 and is extruded under BS EN ISO 90001 quality management system requirements certificate number FM10215.

Windows and doors have been manufactured and tested to the latest fabrication, weathering and security requirements and passed.

#### BS6375

All windows and doors are tested for weather performance, water ingress, air leakage and deflection including low threshold French doors and have passed.

#### PAS24:2012

Enhanced security performance requirements for door sets and windows in the UK. The latest PAS24 standard covers the security and testing requirements for all fenestration products. aluplast IDEAL 70 casement, tilt and turn windows and doors, including French doors have passed.

The stringent testing and successful outcome has resulted in the IDEAL 70 system Kitemark licence number KM 590706 in respect of BS EN 12608/PAS24 window system supplier and KM 590707 in respect of BS EN 12608/PAS24 door system supplier.

#### **Energy Ratings**

The IDEAL 70 system comfortably passes an A+ energy rating and with high performance sealed units can achieve an A++ energy rating.

#### Installation

aluplast recommends that all survey and installations are in accordance with BS 8213-4:2007 windows, doors and rooflights – Part 4; code of practice for the survey and installation of windows and external door sets.

#### **CE Marking**

The aluplast IDEAL 70 system, when fabricated using certified hardware, meets the requirements of BS EN 14351-1 windows and doors – product standard, performance characteristics – Part 1; windows and external pedestrian door sets without resistance to fire and / or smoke leakage characteristics, and with the appropriate FPC (Factory Production Control System) CE marking can be applied to the glazed fabricated product.

#### Secured by Design compliant

IDEAL 70 system is Secure by Design and Document Q compliant. Accreditation for both of these assessments is awarded to the fabricator upon submission and testing of a specific sample type. Further information available from aluplast offices in the UK.













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